Strategic Energy Management for the Defense Industry

“The current strategic energy program has positioned us for rapid response to energy market changes, allowing us to realize favorable gas and electricity rates for our facilities located in Massachusetts, Pennsylvania and New Hampshire. We have also significantly reduced the cycle time and associated labor hours required for the generation of our periodic energy reports.”

Don Hill, Facilities Operations Manager for BAE Systems

The Electronics & Integrated Solutions (E&IS) operating group of BAE Systems is an industry leader in the production of aircraft self-protection systems and tactical surveillance and intelligence systems for both military and commercial applications. E&IS is headquartered in Nashua, N.H., employs 19,500 people at 50 major facilities in the United States and the U.K.

When it came to the effective and efficient energy use at their U.S. sites, the officials at BAE Systems’ E&IS group turned to Siemens Building Technologies, Inc. After four years, the Siemens’ energy team continues to provide professional, knowledgeable insight and expertise in cost reduction—through energy monitoring and competitive procurement—that has proven to be a winning combination for the company.

Client Objective

BAE Systems wanted to develop a multi-year strategic energy program that targeted significant cost savings by focusing on the energy supply needs for all sites in the division. All utility services that could be competitively bid—gas and electricity—were to be included, with the aim of a five percent system-wide cost reduction.

Building Technologies
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A secondary goal was to set up a universal reporting process that would incorporate all utility cost and usage information for the thirteen locations in the division. The system needed to be flexible and to provide extensive, enterprise-wide reporting capabilities with a clear and easy-to-use web-based user interface.

Siemens Solution

Siemens Building Technologies was selected by BAE Systems to develop a Strategic Energy Program (SEP) that included energy supply management and utility information services. A critical component of the solution includes identifying opportunities for the division to increase energy conservation and optimize their facilities. Siemens developed, and continues to manage, an aggressive energy procurement program for natural gas and electricity at many E&IS locations; reviews all competitive supplier purchase agreements; and has implemented a web-based program for utility bill management and cost reporting.

Client Results

The main goal of the program was to lower BAE Systems’ energy costs through aggressive management of energy supply contracts. During the first four years of the program, the BAE Systems/ Siemens partnership has delivered more than $1,200,000 in energy cost savings and cost avoidance through the competitive power purchase process. The cost savings are the result of strategic planning and implementation and aggressive negotiations with energy suppliers.

BAE Systems now has web-based access to all utility data—usage and cost data by location for all facilities within the division—providing timely and accurate information for site personnel and senior management. Utilities included on the web based reporting system include not only natural gas and electricity, but both water and sewer information as well. The system has proven to be a tremendous aid for management as they save hundreds of hours annually by having all utility data in one central database. Managers, facility staff and financial personnel can now easily track utility usage and cost data and can easily generate a variety of accurate and timely reports.

Siemens has also conducted several site visits to E&IS facilities at the request of BAE Systems personnel. Siemens energy team members work directly with facility on-site personnel to assess and identify opportunities for energy efficiency projects work that will further reduce BAE Systems’ energy costs.