

# New Push to Curb Industrial Demand

## DOE'S ENERGY AUDIT INITIATIVE

By Richard Korman

WITH HIGH ENERGY costs threatening to weigh down the economy, a year-old federal program is showing how some of the biggest industrial energy users in the U.S. can save natural gas and other fuels used for their steam and process heating systems. The Department of Energy has been paying for energy consultants to find the easiest savings at companies such as GlaxoSmithKline, Union Carbide and Kodak. Then it's up to the companies to flesh out the details and make the changes. As of July 13, the program had identified potential natural gas savings of 25 trillion British thermal units per year — enough gas for about 340,000 homes, according to DOE.

The department began deploying the energy consultants late last year to help businesses save in the months after hurricanes Katrina

and Rita disrupted portions of the energy infrastructure. Although the Bush administration's energy policy has often been criticized for emphasizing development of fossil fuel resources, DOE says the industrial energy savings assessments are part of a broad push for energy efficiency and environmentally friendly alternative sources to take price pressure off natural gas and other fuels.

The heart of the new industrial program consists of a free energy savings assessment offered to 200 of the most energy-intensive manufacturers. So far, 80 energy savings assessments have been completed and Department of Energy officials say they will keep going. "We are planning to leverage the existing outreach activities of suppliers, utilities and states to work with many more industrial companies," says Alexander Karsner, assistant secretary for energy efficiency and renewable energy. After the initial assessments are complete, the program will be expanded to include pumps, air compressors and fans, says Karsner.

The focus on low-hanging fruit is timely. High energy prices are crimping profits and are a burden when going up against overseas competitors with lower costs. The Energy Policy Act of 2005 includes \$2 billion of manufacturer and consumer tax incentives for advanced energy-saving technologies and practices, but many of the savings are not yet available. Utilities and other agencies implementing electricity-saving programs should gear their programs to these new tax incentives, suggests the American Council for an Energy-Efficient Economy, a nonprofit policy organization based in Washington, whose members include many utilities.

Public utility commissions in many states reward utilities for providing energy conservation incentives or discounts, especially in the Northeast and on the West Coast.

Several states have adopted laws and regulations requiring utilities to document efficiency in generation, transmission or use. Texas' electricity



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#### BRITISH EMBRACE NUCLEAR AND RENEWABLES

The British government has outlined plans to develop six nuclear power plants and increase renewable energy output fivefold.

The government is also considering blocking the sale of appliances that are not energy efficient. Also under consideration is the construction of a 10-mile-wide tidal barrier that could produce as much power as three nuclear plants during the next two centuries by channeling seawater through 200 turbines.

The government wants to increase the share of power generated by renewable sources from 4 percent of total demand to 20 percent in a bid to secure environmentalists' support for construction of new nuclear units, the *Daily Mail* reported.

restructuring law, for example, requires electric utilities to map out savings equal to 10 percent of end-use demand growth. Other states have similar programs or are planning for them, according to ACEEE.

Some utilities treat their energy-efficiency programs as extensions of residential and institutional programs and focus on lighting and heating, ventilation and air-conditioning systems, energy experts say. In areas where the utility has only two or three types of industrial customers, you can't expect it to field consultants capable of advising a chemical manufacturer on energy savings, they say.

DOE is ramping down some other energy assessment techniques in favor of the quick and in-depth look at the easiest savings in steam and process heating, energy experts say. DOE's program of plantwide audits, for example, was available to only a handful of companies each year and the costs were split between the company and DOE. The plantwide audits involved a weeklong plant review by a college professor and graduate students. The new energy savings assessment program is free and available with a quick-and-easy application. Frederick P. Fenton, distinguished engineer for energy systems and pollution abatement at Rohm and Hass Co., a Philadelphia, Pa.-based manufacturer of specialty materials, says the plantwide audits are better suited to small companies with no in-house energy-efficiency expertise.

In addition to the assessments, DOE is demonstrating and providing free use of its software tools for modeling energy use, the Process Heating Assessment and Survey and the Steam System Assessment Tools, says Karsner. ☐

**The reports on the assessments are visible on DOE's website at [www.eere.energy.gov/industry/saveenergynow/partners/results.cfm](http://www.eere.energy.gov/industry/saveenergynow/partners/results.cfm).**

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