

Innovative Products and Services

2007 CHALLENGE

- Develop innovative and economical energy efficient products and services

WHAT WE DID IN 2007

- Promoted energy efficiency as the “fifth fuel”
- Created the save-a-watt business model

2007 OPPORTUNITIES

- Build the smarter utility system (utility of the future)
- Ensure constructive rate treatment

WHAT WE DID IN 2007

- Pursued research for the best combination of technologies to bring the smart grid into operation
- Developed strategic plan to transform our power delivery system
- Began installing infrastructure for the smart grid and building smart utility labs in the Carolinas and Midwest to showcase the technology
- Filed for regulatory approval of the save-a-watt model in Ind., N.C., and S.C.; Ohio and Ky. planned for 2008
- Developed regulatory approaches for smart grid investments

Energy efficiency as the “fifth fuel”

Energy is the lifeline of our economy, and Duke Energy’s core business is meeting the electricity and gas needs of its customers. According to U.S. Department of Energy statistics, electricity demand is expected to increase by approximately 35 percent by 2030, even higher in fast growing regions like the Carolinas.

The traditional answer to rising electricity demand has been to increase supply – to build more power plants fueled by coal, natural gas, nuclear and renewables. We believe that energy efficiency can play an important role in reducing customer demand – becoming the “fifth fuel.” And, because the cleanest power plant is the one that is never built, we believe that energy efficiency is the greatest untapped resource in reducing greenhouse gases in the near term.

Of course, energy efficiency isn’t a new idea. Utilities have offered demand-side programs for years – with varied results. In 2007, Duke Energy worked with a number of stakeholders and industry peers to develop a different model – the save-a-watt model – so that energy efficiency can become an important bridge to a low-carbon future.

REAL-TIME ELECTRIC METERS MAY SHOW THE COST OF OPERATING DEVICES JUST AS SPEEDOMETERS SHOW ACTUAL SPEED. THIS CAPABILITY WILL BE FAR MORE USEFUL FOR ENERGY MANAGEMENT PURPOSES THAN THE MONTHLY “LOOK BACK” THAT CURRENT SYSTEMS PROVIDE.



“Saving energy should be as much a part of a utility’s mission as generating and delivering electricity.”

– Jim Rogers

How save-a-watt will work

The goal of Duke Energy’s save-a-watt model is to help our customers save energy – and money – and still earn a return for our investors. Under current regulations, utilities make money by earning a return on their investment in physical assets such as power plants, poles and wires, and by charging customers for each kilowatt-hour of electricity they use. Under the save-a-watt model, we would be allowed to earn a return on our investments that help customers save energy.

In essence, the save-a-watt model treats investments in energy efficiency just like investments in a new generating station – removing the regulatory incentive to build new power plants. It is a win for our customers, a win for the company and a win for the environment.

POTENTIAL SAVINGS

We are adding about 60,000 new customers per year in the Carolinas and our Midwest service areas. To meet that demand, we will require more than 6,000 megawatts of new capacity by 2012. Energy efficiency as our fifth fuel and the save-a-watt model are critical components to avoid building new, carbon-emitting generation.

REGULATORY STATUS

In 2007, we filed for regulatory approval of programs developed under the save-a-watt model in North Carolina, South Carolina, and Indiana. We are planning to file for similar energy efficiency programs in Ohio and Kentucky in 2008. We hope to receive regulatory approval for the save-a-watt model in 2008.



THE SAVE-A-WATT MODEL

Duke Energy’s save-a-watt model starts with a simple premise: the most efficient and environmentally sound plant is the one we don’t have to build.

The save-a-watt model proposes the following regulatory changes:

- We would earn a rate of return based on about 85 to 90 percent of what it would have cost to build and operate a plant to produce the amount of electricity the program saves. **Under this plan, all customers will receive an approximate 10 to 15 percent discount, even if they do not participate in an efficiency program.**
- Duke Energy will be rewarded only for energy savings actually realized by customers. Each year, an independent auditor will verify actual energy savings achieved through energy efficiency programs.

SAVE-A-WATT ENDORSEMENTS

Three national advocacy groups have reached agreement with Duke Energy to support the save-a-watt model. The Alliance to Save Energy, the American Council for an Energy-Efficient Economy and the Energy Future Coalition endorse the initiative as “an innovative and promising new direction for the company and its customers.” While supporting the save-a-watt model, the advocacy groups will look to regulators in each state to determine an appropriate and reasonable level of compensation.

“This (save-a-watt model) is a simple, brilliant idea. It has the ability to fundamentally change what we do in the United States.”

– Former President Bill Clinton

Energy efficiency: leading the way

Duke Energy is helping to lead energy efficiency efforts both nationally and internationally.

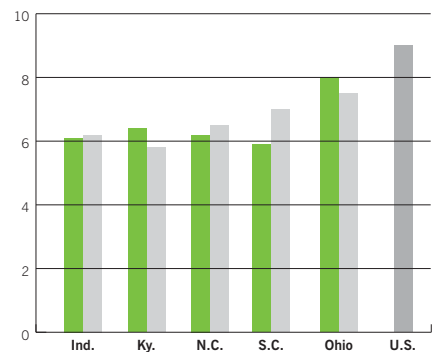
- **National Action Plan for Energy Efficiency (NAPEE)** – Jim Rogers serves as co-chair of this organization, which presents policy recommendations for an aggressive and sustainable national commitment to energy efficiency. Several other company leaders are involved in key components of the NAPEE process. <http://www.epa.gov/solar/energy-programs/napee/index.html>
- **Alliance to Save Energy** – Jim Rogers also serves as co-chair of this organization, which helps implement energy efficiency forums and legislative advocacy efforts in Washington. <http://www.ase.org/>
- **Electric Power Research Institute (EPRI) Energy Efficiency** – Duke Energy Vice President of Energy Efficiency Ted Schultz and Chief Technology Officer David Mohler serve on EPRI’s executive advisory committee for energy efficiency. They are leaders in the discussion on innovative services that are possible with a new business model and advanced technologies. <http://my.epri.com>

- **The Clinton Global Initiative** – In 2007, Duke Energy led a consortium of eight utilities committing to increase investments in energy efficiency to reduce greenhouse gas emissions, pending the approval of the save-a-watt model or similar regulatory action. Offered in conjunction with the Clinton Global Initiative, the utilities also spearheaded the creation of the Institute of Electric Efficiency to advance best practices in energy efficiency. The Edison Electric Institute is implementing the Institute of Electric Efficiency in 2008. <http://www.clintonglobalinitiative.org>

Keeping electric rates competitive

Electric rates and reliability remain the primary drivers of customer satisfaction. In 2007, our costs of service were below the national average and near or below statewide averages. However, the cost to produce energy is rising, and we are not immune to rising market prices. Worldwide demand for steel, cement, skilled labor and all other inputs to power plant construction, operation and maintenance have already forced us to raise cost estimates for major construction projects. We are working to stabilize prices and minimize impacts on customers through long-term contracts and other commitments with contractors and vendors.

Comparison of Average Electric Rates
(Cents per kilowatt-hour)



■ Duke Energy ■ Statewide ■ United States
Source: EEI Typical Bills and Average Rates Report, June 30, 2007

In Kentucky, we received permission from the Public Service Commission to raise annual revenues by approximately 20 percent, effective January 1, 2007. This was the first rate increase for Kentucky customers in 16 years. In Ohio, we received permission from the Public Utilities Commission to increase our revenues by over 10 percent through periodic riders. We will continue efforts there to address long-term rate and generation supply uncertainties.

It is occasionally appropriate to reduce rates and still be fiducially responsible to investors. In North Carolina, we reached an agreement to reduce annual revenues by 5.4 percent beginning in 2008 and by 7.6 percent beginning in 2009. The reduction in rate revenue is offset by a reduction in expenses resulting in an immaterial impact to earnings.

There were no specific rate actions in Indiana or South Carolina in 2007 other than the annual adjustments for items like fuel costs.

Providing customers with green power options

Duke Energy offers its customers special programs to purchase energy generated from renewable sources such as wind, solar, biomass and hydro.

NC GREENPOWER

Duke Energy participates in the NC GreenPower program, which was established to improve the state's environment through voluntary contributions toward renewable energy. Approximately 7,200 Duke Energy customers in North Carolina – less than 1 percent – participated in NC GreenPower in 2007, purchasing nearly 12,000 blocks of 100-kilowatt-hours each for an investment of over \$45,000.

In February 2008, Duke Energy filed its intent with the N.C. Utilities Commission to expand the existing GreenPower program to offer customers the opportunity to purchase carbon offsets. Funds collected through the program, if approved, could be used to support carbon-reducing projects such as renewable energy, energy efficiency and reforestation. We plan to pursue similar programs in all the states where we operate.

PALMETTO CLEAN ENERGY (PaCE)

South Carolina customers can now contribute to PaCE, a nonprofit organization that promotes renewable resources for electric generation, through their Duke Energy bills. Each \$4, whether by voluntary regular monthly additions to the bill or one-time contributions, will add a 100-kilowatt-hour block of renewable energy to the S.C. power supply.

GOGREEN POWER

Duke Energy customers in Ohio and Indiana may also purchase blocks of green power on a monthly basis. We are working to establish a program for Kentucky customers in 2008. For additional information on customer options, visit www.duke-energy.com.



SOLAR INSTALLATION PROJECTS ARE PART OF OUR ONGOING COMMITMENT TO STUDY SOLAR POWER AS A VIABLE RENEWABLE ENERGY SOURCE.

WATT A BRIGHT IDEA

Duke Energy customers in Ohio were the first to participate in a one-of-a-kind collaboration between Duke Energy, General Electric and Wal-Mart to make energy efficiency even more affordable. We provided our customers with coupons offering \$3 off three-packs of GE compact fluorescent light bulbs (CFLs) redeemable at Wal-Mart stores. Some 30,000 customers redeemed coupons to buy more than 225,000 CFLs during the promotion. Given the success of the offer, we have expanded our retail partnerships to include Sam's Club, The Home Depot and Lowe's.

OUR CUSTOMER SATISFACTION PLEDGE:

We will do it right the first time. We will take ownership.

We will follow through.



ENERGY AUDIT MAKES OPRAH WINFREY SHOW

Duke Energy's Home Energy House Call program was featured on the Oprah Winfrey Show's 2007 Earth Day special. The program provides a free in-home energy analysis to help customers determine the most cost-effective steps they can take in their homes to save energy. The TV episode, highlighting viewers who are living a "green lifestyle," featured a House Call field auditor helping a Northern Kentucky couple identify the steps they could take to reduce energy consumption. The audience members were given energy saving kits during the show.

WEATHERIZATION FOR LOW-INCOME CUSTOMERS

For more than 20 years, Duke Energy has collaborated with People Working Cooperatively (PWC) to provide free home weatherization improvements to eligible customers in the Greater Cincinnati and Northern Kentucky areas. PWC is a nonprofit organization that provides critical home repairs and services to low-income, elderly and disabled homeowners. Through our program, qualified customers receive a furnace or heat pump cleaning and tune-up, energy efficient light bulbs, a water heater wrap and weather stripping. The result is a more comfortable, energy efficient home with lower energy bills.

Customer satisfaction

We have work to do to achieve our goal of top quartile customer satisfaction in all markets we serve by 2012. Among business customers that spend between \$500 and \$50,000 monthly on electricity, we ranked in the second quartile in the South and the third quartile in the Midwest, according to the Feb. 2008 J.D. Power and Associates Electric Utility Business Customer Satisfaction Study.

The Key Accounts National Benchmark survey, conducted by TQS Research Inc., is based on interviews with each utility company's largest customers, which are usually major manufacturers and institutions. Duke Energy ranked fifth best overall in the U.S. in the August 2007 study. While the survey is based on the entire company, the results indicate that Duke Energy Carolinas would have ranked second in the South. Duke Energy Ohio/Kentucky and Duke Energy Indiana would have ranked second and third, respectively, in the Midwest.

Residential customer satisfaction results were mixed in 2007. In the July 2007 J.D. Power and Associates Electric Utility Residential Customer Satisfaction Study, Duke Energy ranked in the top quartile in the South and the third quartile in the Midwest.

We have several major initiatives to improve customer satisfaction.

- Improve service reliability for our customers: We plan to significantly increase our investments to modernize poorly performing distribution circuits. And, we plan to improve outage-related customer communications.
- Partner with customers to lower and manage their bills: From innovative partnerships with retailers, to expanding our energy saving product offerings, to new ways to engage customers, we are aggressively pursuing energy efficiency options to meet future growth and to increase the energy value delivered to our customers.
- Broaden our internal "I Can Help" program: Every employee now has access to telephone or e-mail resources to make sure he or she can quickly and satisfactorily address customer questions and needs.



Power reliability improved

Continued attention to power reliability in 2007 resulted in real improvement, with fewer outages per customer and shorter outages when they did occur. These results place us in the top quartile among peer electric utilities when compared to 2006, the most recent data available from the Southeastern Electric Exchange.

(PER CUSTOMER)	2006 ACTUAL	2007 GOAL	2007 ACTUAL
Average time without power*	164 min.	160 min.	133 min.
Average number of outages*	1.3	1.3	1.13

* Longer than five minutes

Smarter utility services

We've made good progress on the utility of the future strategy since we introduced the concept in last year's Sustainability Report.

We expect to invest almost \$1 billion through 2012 to transform our energy delivery system for the needs of the 21st century. Advanced digital technology will replace analog technology, enabling near-instantaneous communication between our customers and our distribution system. For example, we believe it will be possible to program refrigerators, freezers, and other high-use electrical appliances to reduce operations when demand on our generating stations is especially high. Customers will be able to adjust heating and air conditioning for high comfort at lower cost. Real-time electric meters may show the cost of operating devices just as speedometers show actual speed. This capability will be far more useful for energy management purposes than the monthly "look back" that current systems provide. When the smarter technology is fully implemented, every customer will have access to advanced energy efficiency measures that will run in the background of their home or business.

In addition to smart customer meters, smart grids – substations, transformers and line sensors – will operate and communicate together much like a computer network. Abrupt changes in electric flow, as monitored through the smart grid, will alert us to the approximate location of outages more quickly than present systems, allowing faster service restoration.

We filed information to support these system upgrades with the Public Utilities Commission of Ohio in 2007, and are planning to file in the other states we serve in 2008. We also joined the Gridwise Alliance to work with like-minded companies involved in this complex transformation of the nationwide electric system.

In 2007, we began projects in N.C. and S.C. to test different components of the smart grid technology. We are also opening public demonstration sites in N.C., S.C. and Ky. to provide a "hands-on" experience with the new technologies. More information will be available at www.duke-energy.com.



GRIDWISE

A Collaborative Venture of the U.S. Department of Energy and the GridWise Alliance. Duke Energy is a member of this consortium of public and private stakeholders who are aligned around a shared vision of an integrated electric system. Ideally, energy can be generated, distributed and consumed more efficiently and cost effectively to achieve a more resilient, secure and reliable system. www.gridwise.org

LED LIGHTING THE FUTURE

In October 2007, Duke Energy teamed with Cree Inc. and launched a project to evaluate the use of light-emitting diodes (LED) for widespread commercial purposes. Cree has installed 19 outdoor LED lights at the company's Durham, N.C., office to replace standard high-pressure sodium light fixtures. The project will provide data to evaluate the technology's energy efficiency and longevity. It also may demonstrate that LEDs are viable alternatives to existing commercial lighting.