EFFICIENT AND RENEWABLE ENERGY

Introduction and overview

Major strides were made in 2009 to increase energy efficiency and renewable energy programs for residential utility customers. These were a direct result of Ohio's 2008 electric energy law (Senate Bill 221) requiring utilities to meet annual benchmarks to increase electricity generated from renewable resources and to reduce the growing need for electricity by implementing energy efficiency programs.

By law, utilities were required to reduce electricity demand by 0.3 percent and ensure 0.25 percent of their total electricity sales came from renewable energy in 2009. These targets will increase each year until 2025 when electricity sales are reduced by 22.5 percent and renewable energy is 12.5 percent of each electric utility's energy portfolio.

The Office of the Ohio Consumers' Counsel (OCC) worked with utilities to create a variety of energy efficiency programs. The programs were aimed at providing consumers with opportunities to increase efficiencies in their homes which could possibly lower their monthly utility bills. Examples of the programs included:

- Offering comprehensive home energy audits to help identify areas that could produce the most cost-effective efficiency benefits; and
- Offering rebates for refrigerator recycling.

Also required by Ohio's electric energy law were the commitments utilities made to increase solar, wind and biomass energy production as part of their generation portfolios. Most significant was the breakthrough the OCC made with FirstEnergy to offer a renewable energy certificate program to its residential customers. A renewable energy certificate is a financial incentive for the installation and operation of renewable energy systems such as solar or wind power. This program will make it easier for Ohioans to invest in renewable energy and provide a source of revenue through the sale of unused energy to the utility. The OCC continues to work with American Electric Power (AEP) and to litigate with Duke Energy Ohio to create similar programs that will help their customers invest in renewable energy.

While the OCC was able to help make renewable energy a more affordable investment for residential consumers, it continued its efforts for some residential windmill owners who had difficulty establishing net metering and interconnection agreements with FirstEnergy. After having installed windmills subject to FirstEnergy's inspection, the owners faced claims that their windmills did not meet minimum standards, among other issues. This caused FirstEnergy to delay agreements with the owners that would allow them to offset the electricity they use with renewable energy. The OCC will continue to advocate for these consumers until a fair result can be achieved.

Smart grid: The future of energy delivery

A smart grid includes a series of upgrades to the distribution system that enable two-way communication between the electric utility and consumers. One feature of the smart grid is advanced metering. This type of meter will allow consumers, in the near future, to take advantage of a menu of voluntary pricing options. These options will allow consumers to make more informed decisions about when to use electricity, possibly saving money.

All electric utilities proposed plans to improve their distribution systems with efficient smart grid technology. These plans included a variety of improvements to electric transmission and distribution systems. The improvements are designed to produce a grid that is more efficient and reliable. However, each utility's smart grid plan includes costs which consumers will pay.

Efficient and Renewable Energy

Both Duke Energy and FirstEnergy were awarded federal grants to install smart grids. Duke was awarded $200 million to update its Midwest operations while FirstEnergy received $57.5 million for its Ohio and Pennsylvania utilities. The companies planned to add advanced meters and upgrade their distribution networks with smart grid technology.

FirstEnergy expects to spend up to $72.2 million for its Cleveland Electric Illuminating utility. The utility's smart grid proposal was submitted to the PUCO in November. It was closely analyzed by the OCC to ensure that residential consumers will benefit.

Duke Energy proposed a $1 billion project in Ohio, Kentucky and Indiana and had the first phase of its smart grid plan approved in November 2009. While supporting the concept of a smart grid, the OCC did not agree with Duke's plan, citing a lack of assurances about when consumers would benefit from the investment.

American Electric Power was awarded a $75 million federal demonstration grant and began installing smart meters in several central Ohio communities in December. The grant will offset half of the $119 million smart grid costs AEP will collect from customers through 2011.

Dayton Power and Light (DP&L) applied for, but did not win, a smart grid grant from the federal government. By the end of 2009, DP&L was still trying to build its business case for implementing smart grid technology in its service territory.

A house uses solar panels to supplement its electricity use.

Efficiencies developed to save AEP consumers energy

Improving efficiency for residential, commercial and industrial customers of American Electric Power (AEP) could produce enough energy savings through 2011 to power 70,000 homes, according to the utility.

After extensive consultation, the Office of the Ohio Consumers' Counsel (OCC), AEP and other organizations agreed on several programs that will expand the utility's energy efficiency portfolio.

The programs will help AEP meet its requirements to lower energy demand under the state's electric energy law. Approval of the agreement from the Public Utilities Commission of Ohio was still pending at the end of 2009.

The energy efficiency programs in the portfolio will cost $161.9 million. The residential portion will, if approved, cost the average customer in the Columbus Southern Power territory $2.24 per month and in the Ohio Power territory $2.30 per month through 2011.

The energy efficiency programs for residential consumers include:

- Energy Efficient Products: In-store or coupon incentives provided to customers to purchase lighting fixtures, ceiling fans, LED holiday lights, certain appliances, heat pumps and electric water heaters. AEP also will continue its compact fluorescent light bulb (CFL) markdown program that sold more than 1 million bulbs in 2009. These incentives will give consumers a variety of options for selecting products appropriate for them.
- Appliance Recycling Program: AEP will continue its refrigerator and freezer recycling program. Participating customers receive free pick-up of their inefficient appliance as well as a $25 cash incentive.
- Existing Home Retrofit Program: This three-phase program will include online and in-home walk-through energy audits and the national Home Performance with Energy Star program. A variety of incentives, such as low-cost energy conservation kits, CFLs, efficient showerheads and discounts for more expensive efficiency measures, are also included.
- Low-Income Program: Weatherization services will be made available to low-income customers.
- New Residential Construction Program: Incentives will be given to home builders for constructing new homes according to Energy Star building standards.

Case No. 09-1089-EL-POR

FirstEnergy wanted waiver of 2009 energy efficiency obligation

Investor-owned electric utilities were required in 2009 to meet energy efficiency and renewable energy benchmarks resulting from the state's electric energy law. Despite the requirements, FirstEnergy asked the Public Utilities Commission of Ohio (PUCO) to waive its energy efficiency obligations. The OCC with other members of the Ohio Consumer and Environmental Advocates (OCEA) asked the PUCO in November to protect customers by rejecting the utility's request.

The OCEA asserted FirstEnergy had more than a year and a half to design and develop energy efficiency programs to meet the law's requirements and, unlike the other Ohio utilities, delayed developing its plans. The OCEA said FirstEnergy should be held responsible for failing to meet the 2009 energy efficiency benchmarks. A decision on the waiver was pending at the end of the year.

Case Nos. 09-1004-EL-EEC, 09-1005-EL-EEC, 09-1006-EL-EEC

Timely consumer benefits not assured by Duke Energy Ohio plan

The Office of the Ohio Consumers' Counsel (OCC) did not sign a settlement with Duke Energy Ohio because it failed to provide assurances about when residential consumers would benefit from a smart grid plan. Duke reached a settlement in November with the staff of the Public Utilities Commission of Ohio (PUCO) and two organizations for collection of costs from customers for the first year of its five-year plan. The PUCO did not rule on the settlement in 2009.

In the settlement, Duke said it planned to add 190,000 automated electric meters and 130,000 automated natural gas meters in its Ohio service territory. The utility also planned to upgrade distribution lines, telecommunications and information technology equipment. But the settlement did not provide a timeline for installation of a more advanced billing system, which is critical to providing options for consumers to use electricity at different prices depending on the time of day. The more advanced billing system coupled with a menu of time-based pricing options are essential for customers to control their energy use and receive bill savings from smart grid improvements.

Duke proposed adding monthly charges – on average, 49 cents for electric and 12 cents for natural gas – to its customers' bills to pay for this phase of its smart grid.

The OCC did not agree with the settlement because smart grid investments must be useful to consumers within a reasonable period for Duke to justify recovering costs from its customers. Timely consumer benefits were not assured by Duke. The OCC also was concerned that Duke would not address how future financial benefits the utility would receive from smart grid investments, such as improved metering and reliability, would be shared with customers. The OCC emphasized two points to ensure consumers could directly benefit from the smart grid:

- Consumers must have the ability to receive information about their usage and have several rate options available to manage how they use electricity and take advantage of opportunities for savings; and

- Any savings Duke achieves from its smart grid investment must be rolled back to customers in the form of reduced rates.

Case Nos. 09-543-GE-UNC, 09-544-GE-ATA, 09-545-GE-AAM

New rules gave utilities instructions on Ohio's electric energy law

New rules approved by the Public Utilities Commission of Ohio (PUCO) following passage of Ohio's electric energy law went into effect in 2009 after review by the Joint Committee on Agency Rule Review (JCARR).

The three sets of rules took into account recommendations from the Office of the Ohio Consumers' Counsel (OCC) and other members of the Ohio Consumer and Environmental Advocates (OCEA). Much of the work on these rules was completed in 2008. The OCEA advocated for rules protecting residential consumers in the areas of standard service offers, electric service and safety standards, energy efficiency and renewable energy.

The accepted recommendations included:

- More public input to establish reliability targets for electric utilities;
- Third-party verification of energy efficiency savings;
- Long-term resource plans that ensure diversified energy portfolios;
- Rules that encourage and promote large-scale governmental aggregation; and
- Additional reporting requirements for companies that receive discounted rates.

The rules for electric service and safety standards became effective June 29 followed by the rules for electric security plans and market rate offers that became effective July 17.

The energy efficiency and renewable energy rules were the last to be approved. The OCC and OCEA had considerable involvement in this extensive process. The weakened rules were ultimately approved, however, some JCARR members said more changes were needed by the legislature to close loopholes in the law.

Case Nos. 06-653-EL-ORD, 08-777-EL-ORD, 08-888-EL-ORD

OCC successfully blocked FirstEnergy's attempt to bypass efficiency requirements

The Office of the Ohio Consumers' Counsel (OCC) blocked an attempt by FirstEnergy to bypass the state's energy efficiency requirements by seeking approval for projects completed before 2009.

FirstEnergy filed an application to include certain transmission and distribution projects, completed before Senate Bill 221 had even become law, toward its compliance with 2009 energy efficiency benchmarks. The OCC and others intervened and asked the Public Utilities Commission of Ohio (PUCO) to dismiss the application.

The OCC argued the application violated the law, which requires electric utilities to implement energy efficiency programs beginning in 2009.

According to the OCC, some of the past projects were not undertaken by FirstEnergy's electric utilities – Ohio Edison, Cleveland Electric Illuminating or Toledo Edison. The law does not permit an electric utility to count the activities of another company, whether affiliated with the electric utility or not, toward its energy efficiency benchmarks.

The PUCO agreed with the arguments of the OCC and others and dismissed FirstEnergy's application.

Case Nos. 09-384-EL-EEC, 09-385-EL-EEC, 09-386-EL-EEC

OCC BENEFITS FOR LOW-INCOME CONSUMERS IN 2009: After extensive consultation, the OCC, American Electric Power and other organizations agreed on programs to improve energy efficiency for residential consumers. Included in the programs were weatherization services for low-income customers.