



## Introduction and Overview

It proved to be a busy year for the Office of the Ohio Consumers' Counsel (OCC) in 2010 when it came to energy efficiency, smart grid and advanced energy. The OCC intervened in more than 100 cases to protect the rights of residential customers and the integrity of the state's energy efficiency and renewable energy requirements developed by the General Assembly in 2008. Among them:

- ▶ Utilities filed energy efficiency portfolio plans that were prepared with feedback from a collaborative process that included the OCC and other stakeholders;
- ▶ Residential programs were created through negotiations with utilities to buy renewable energy credits generated by customers who installed renewable energy devices, such as solar panels. The programs help the utilities meet their benchmarks and at the same time help defray some of the cost to customers;
- ▶ Smart grid improvements began to show up in communities throughout Ohio;
- ▶ Utilities sought to recover the costs associated with smart grid and energy efficiency programs;
- ▶ Utilities sought waivers from energy efficiency and renewable energy benchmarks required to fulfill Ohio's electric energy law; and
- ▶ Several businesses asked to be released from paying energy efficiency charges to utilities in exchange for committing to their own efficiency improvements.

The OCC provided expertise in these cases that improved utility proposals to ensure cost-effective programs were created that provided value to customers. The OCC also worked with stakeholders to create protocols that establish accountability and accurately measure the savings from energy efficiency programs.

## OCC saves Duke Energy customers \$35 million

The Office of the Ohio Consumers' Counsel (OCC) saved Duke Energy Ohio customers \$35 million after successfully arguing the utility improperly charged customers to recover revenues it lost from reduced electricity generation sales because of energy efficiency programs.

Ohio law only allows electric utilities to collect revenues lost as a result of energy efficiency programs to maintain their distribution systems, not their generation resources.

In addition to the charge being unlawful, the OCC said Duke could have been paid twice had it been allowed to continue to collect lost generation revenues – once from customers through its Save-a-Watt charge for energy efficiency and once through the sale of electricity on the wholesale market that had been freed by the utility's energy efficiency programs.

The OCC also supported the continuation of nine energy efficiency programs for Duke Energy's residential and non-residential customers, which the PUCO approved.

Case No.  
09-1999-EL-POR



*Photo at left: A contractor checks for furnace efficiency during a scheduled home energy audit.*

# Resource Planning



Linda Wallis Rominski

A central Ohio home with a recent solar installation featured during the Green Energy Ohio's fall 2010 Solar Tour.

## OCC achieves benefits for residential solar energy use

The Office of the Ohio Consumers' Counsel (OCC) successfully advocated on behalf of Duke Energy Ohio's residential customers to create a beneficial solar renewable energy credit (REC) program.

The OCC suggested a program that called for the utility to purchase RECs generated by residential customers who install solar panels and other forms of renewable energy for a 15-year period. A REC represents one megawatt-hour of electricity produced from renewable sources. Duke had agreed to create a program as part of its electric security plan. It only wanted to offer, however, a program for customers who purchase generation from Duke and only for three years, the term of its current rate plan.

The Public Utilities Commission of Ohio (PUCO) approved the program

that will help make solar energy more affordable for residential customers and develop the market for residential solar energy generation. Customers who install solar energy at their homes will be able to sell the created RECs to Duke Energy. This will help defray the costs of installing a residential renewable facility. Duke's residential customers will be able to enter into a REC purchase agreement through Dec. 31, 2012.

The owner of a solar electric generating system must have a net-metering and interconnection agreement with Duke, and be certified by the PUCO, before Duke will purchase RECs from a residential customer. In turn, Duke would use the RECs to meet part of its renewable energy requirements established in Ohio's electric energy law.

The OCC also sought to create meaningful programs with American Electric Power and Dayton Power and

Light for REC purchase agreements. Decisions on those cases were pending before the PUCO at the end of 2010.

*Case Nos. 09-834-EL-ACP, 09-1871-EL-ACP, 09-1872-EL-ACP, 09-1873-EL-ACP, 09-1874-EL-ACP, 10-262-EL-UNC*

## OCC helps introduce dynamic prices; increase smart meter's value for customers

The Office of the Ohio Consumers' Counsel (OCC) increased the value of smart meters for customers after it persuaded utilities to offer various dynamic pricing options in a timely manner for residential customers. These rate options are essential to making smart meter upgrades beneficial to customers and provide them more control over their electric consumption, which can result in lower energy costs.

Dynamic pricing ties the price of electricity at particular times to the actual cost of generating that electricity. The price signals help customers moderate usage during high peak, high cost times, thereby providing customers with the opportunity to save money and at the same time reducing the overall system costs.

The OCC worked with both American Electric Power (AEP) and Duke Energy Ohio to provide their customers with several pricing choices that were not possible before smart meters were introduced. AEP proposed two rates and Duke proposed four options. The offerings varied from time-of-day rates, which provide different electric prices throughout the day, to peak time rebates, which give customers rebates for reducing electric usage during periods when systemwide use is high.



Each of the rates is voluntary, a provision the OCC said was essential to promote customer acceptance. Customer education, training and support, alternative bill formats, provisions to return to standard rates and additional pricing options to meet customer needs also were important elements to enable customers to get the most out of the new rates.

For customers to benefit from the new rate offerings, they need to adjust their electric use or set preferences in home energy management systems that will automatically make changes for them.

*Case Nos. 10-42-EL-ATA, 10-424-EL-ATA, 10-455-EL-ATA, 10-979-EL-ATA, 10-2429-EL-ATA*

### **OCC keeps customer protections intact during remote disconnects**

The Office of the Ohio Consumers' Counsel (OCC) sought to keep basic protections for customers intact as utilities installed smart meters. Through 2010, Duke Energy Ohio and American Electric Power (AEP) had installed 273,000 smart meters.

Duke sought a waiver of electric rules that protect customers facing

a disconnection so it could notify customers with smart meters by e-mail or text message before disconnecting service. Smart meters give the utility the ability to disconnect customers remotely.

The OCC proposed an alternative that would allow smart-metered customers to be able to opt in to electronic notices while Duke continued traditional telephone and in-person notification. This would ensure customers are fully protected when faced with a disconnection. Because many customers in the Duke smart grid pilot may be low-income customers, they may not have access to e-mail or text messages and would need to be immediately notified by telephone or in person if a disconnection is imminent. The PUCO denied Duke's request for a waiver of the disconnection rule.

Although AEP did not seek exemption from the disconnection rules, the OCC expressed concerns about whether AEP's remote disconnection proposal meets the PUCO's rules for advanced notice. The OCC requested several important customer protections, including AEP's personal contact with the customer prior to disconnection, options for customers to make payments to avoid disconnection for nonpayment, and alternatives to disconnection. The PUCO required AEP to comply with the current disconnection rule, but did not place any additional requirements on the utility.

The OCC also proposed AEP eliminate fees for customer-initiated connections and disconnections where smart meters are installed, because these changes can be done remotely at no cost. Although the PUCO rejected

the OCC's proposal to eliminate the fee, it required AEP to file a report demonstrating its costs to disconnect and reconnect customers.

*Case Nos. 10-164-EL-RDR, 10-249-EL-WVR*

### **OCC files complaint to correct FirstEnergy's interconnection practices**

The Office of the Ohio Consumers' Counsel (OCC) filed a complaint in 2010 alleging FirstEnergy violated Ohio's net metering and interconnection laws. The utility's practices made it difficult, burdensome and costly for residential customers to interconnect their renewable energy distributed generation facilities onto FirstEnergy's distribution system, the OCC said.

Net metering is a required program offered by a utility company to customers who use renewable energy systems to generate their own electricity. Under a net metering agreement, any excess energy generated by the customer during a monthly billing cycle would be sold to the utility company and credited to the customer. Interconnection is the physical connection of a customer's electric generation to the local utility's distribution system.

In its complaint, the OCC asked the PUCO to:

- ▶ Rule FirstEnergy violated the law by providing inadequate service and facilities to its customers;
- ▶ Require the utility to revise its net metering and interconnection standards to comply with Ohio law and all other applicable rules, orders and policies;

# Resource Planning

- ▶ Order FirstEnergy to stop imposing extra net metering and interconnection requirements and costs for residential customers;
- ▶ Stop FirstEnergy from requiring customers to pay to replace meters that meet PUCO net metering requirements and thus do not need to be replaced;
- ▶ Refund all costs collected from customers because of unnecessary requirements; and
- ▶ Penalize the utility with a forfeiture of up to \$10,000 per day for each violation.

Since at least 2007, some FirstEnergy customers have faced difficulty getting their renewable energy generators connected to the utility's distribution system. The OCC claimed FirstEnergy discouraged these customers from generating their own electricity by improperly limiting available credits for the energy they produced, violating net metering and interconnection statutes and rules, and threatening to disconnect customer systems from FirstEnergy's distribution system, among other issues. Some customer complaints have taken as long as three years to resolve before the PUCO.

The complaint was pending before the PUCO at the end of 2010.

*Case No. 10-1128-EL-CSS*

## **AEP energy efficiency programs approved**

The Office of the Ohio Consumers' Counsel (OCC) came to an agreement with American Electric Power (AEP) in 2010 on the utility's energy efficiency programs that will help participating customers better control their monthly electric costs.



*Members of OCC's Resource Planning Team discuss initiatives for Ohio's energy future. Left to right: Gina Brigner, Wilson Gonzalez and Daniel Sawmiller.*

The OCC and other members of the Ohio Consumer and Environmental Advocates negotiated program and cost-recovery details that resulted in a kilowatt-hour charge for several energy efficiency programs that have benefited residential customers since 2009. The agreement was approved by the Public Utilities Commission of Ohio in May 2010.

The OCC signed the agreement because the benefits of the energy efficiency programs, such as a compact fluorescent light bulb (CFL) discount, can more than offset the costs to customers. For AEP customers, replacing four 60-watt incandescent light bulbs with four 14-watt CFLs can save about \$4 per month when used for six hours per day.

Energy efficiency is the cheapest alternative to building new generating plants. Current figures from a Lazard analysis, a financial advisory and asset management firm, shows a new coal plant with carbon capture and a new

nuclear plant costs 14 times and 21 times, respectively, more than energy efficiency programs.

Additionally, AEP reported its energy efficiency programs could save enough energy to power 70,000 homes through 2011 if customers fully participate. The programs were projected to result in 3,000 new jobs through 2011 and substantially reduce power plant emissions.

The programs help AEP meet its energy efficiency and peak demand reduction requirements in Ohio's electric energy law.

*Case Nos. 09-1089-EL-POR, 09-1090-EL-POR*

## **OCC argues against unneeded costs, elements in FirstEnergy efficiency programs**

Residential customers should not pay for more than \$1 million in costs FirstEnergy included in its proposed

energy efficiency programs portfolio, the Office of the Ohio Consumers' Counsel (OCC) said in 2010.

FirstEnergy proposed eight energy efficiency programs for residential customers, but included several elements in its portfolio that would improperly compensate the utility for system improvements unrelated to energy efficiency.

The OCC and other members of the Ohio Environmental and Consumer Advocates recommended that \$390,000 in warehousing costs and lost revenues from the utility's compact fluorescent light bulb (CFL) program should not be recovered from customers. Specific decisions made by FirstEnergy delayed a ready-to-launch program in late 2009. Additionally, the advocates claimed the utility sought to recover \$427,000 for marketing of a previously failed CFL program and \$225,000 in administrative costs that should be rejected because they provided no tangible benefits to FirstEnergy's customers.

The advocates also disagreed with a FirstEnergy shared savings proposal that would reward the utility for exceeding the state's annual energy efficiency benchmarks. FirstEnergy provided no support for the proposal and sought incentives for transmission and distribution upgrades not allowed by the rules of the Public Utilities Commission of Ohio (PUCO). The OCC contended any rewards for exceeding energy efficiency benchmarks should only be for a utility's direct actions that lead to electricity savings.

FirstEnergy's proposal in December 2009 that included: discounted CFLs, direct load control, appliance turn-

in, energy efficient products, efficient new homes, comprehensive residential retrofit, online audit and online efficient products.

The PUCO had not reached a decision about the energy efficiency portfolio in 2010. FirstEnergy was the only investor-owned electric utility in Ohio not to offer energy efficiency programs consistent with Ohio law.

*Case Nos. 09-1947-EL-POR, 09-1948-EL-POR, 09-1949-EL-POR*

### **Energy efficiency, solar requirements waived for 2009**

The Ohio Consumer and Environmental Advocates, of which the Office of the Ohio Consumers' Counsel (OCC) is a member, asked the Public Utilities Commission of Ohio (PUCO) to reject FirstEnergy's request to waive its 2009 requirements to increase the energy efficiency in its service territories.

The OCC argued FirstEnergy delayed planning and implementing its energy efficiency programs. FirstEnergy also failed to provide appropriate customer education about its programs. Finally, FirstEnergy sought to count measures toward its compliance benchmark that were not recognized as appropriate under Ohio law. The PUCO, however, accepted the utility's arguments in January 2010 and waived FirstEnergy's 2009 energy efficiency requirements.

According to the PUCO's order, FirstEnergy had to make up its 2009 deficiency from 2010 – 2012, in addition to meeting its annual requirements in each of the three years. The PUCO said it would determine what the additional requirements would be each year when it decides FirstEnergy's pending comprehensive energy efficiency portfolio.

In March 2010, the PUCO also waived FirstEnergy's solar energy requirement for 2009. American Electric Power and Dayton Power and Light also were granted waivers for their 2009 solar energy requirements in 2010. They all were required to make up the deficit in 2010.

*Case Nos. 09-987-EL-EEC, 09-988-EL-EEC, 09-1004-EL-EEC, 09-1005-EL-EEC, 09-1006-EL-EEC, 09-1922-EL-ACP, 09-1989-EL-ACP*



*Aerial view of Dayton Power & Light's 1.1-megawatt solar array in Washington Township, Montgomery County, Ohio.*

Photo courtesy of Dayton Power & Light