



Office of the Ohio Consumers' Counsel

March 14, 2017

Name
Address
Address

Re: Legislative Notebook for Utility Issues Affecting Constituents

Dear _____ :

For your convenience, enclosed is a notebook with information and consumer perspectives about issues that may affect your constituents regarding their electric, natural gas, telephone and water utility services. This notebook is also available at <http://www.occ.ohio.gov/legislative-notebook>. The Ohio Consumers' Counsel is the state agency whose mission is to represent and educate residential utility consumers. Please contact the agency if we may assist with your constituent inquiries. Also, the Consumers' Counsel has expertise to assist you and your staff with utility-related legislation affecting consumers.

As Chair of the Consumers' Counsel Governing Board (and a former legislator), I appreciate the needs of Members for information about legislative issues affecting millions of Ohioans. My Board colleagues and I have been appointed by the Ohio Attorney General to serve the interests of residential utility consumers. Our appointee, Consumers' Counsel Bruce Weston, serves as the agency's director and is available to assist you. Bruce may be called anytime at (614) 387-2969.

Thank you for your time and public service to Ohioans.

Sincerely,

Gene Krebs
Chair, Ohio Consumers' Counsel Governing Board

Utility Issues Affecting Constituents

Prepared for Members of the Ohio General Assembly

By

The Office of the Ohio Consumers' Counsel

March 14, 2017



This document is available online at the following link:

<http://www.occ.ohio.gov/legislative-notebook>

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I. OVERVIEW OF THE OFFICE OF THE OHIO CONSUMERS' COUNSEL



Ohio Attorney General Mike DeWine administers the oath of office to Ohio Consumers' Counsel Bruce Weston.

The Ohio General Assembly created the Office of the Ohio Consumers' Counsel (OCC or Agency) in 1976 to represent and educate the millions of Ohio residential consumers who receive services from investor-owned public utilities. The bipartisan Consumers' Counsel Governing Board, which oversees the Agency, has nine members. The Board members are appointed by the Ohio Attorney General. The Board Chair (former legislator Gene Krebs) also serves on the PUCO Nominating Council. The Vice-Chair is Michael Watkins. The other Board members are Fred Cooke, Sally Hughes, Kelly Moore, Roland "Butch" Taylor, David Wondolowski, Fred Yoder, and Stuart Young.

The Board appoints the Ohio Consumers' Counsel (Bruce Weston) and the Deputy Consumers' Counsel (Larry Sauer). The Agency's vision is for "informed consumers able to choose among a variety of affordable, quality utility services with options to control and customize their utility usage." The Agency's website is <http://www.occ.ohio.gov> and Twitter handle is @OhioUtilityUser.



Gene Krebs,
Board Chair

A. Board Report on Electric Consumer Issues: "*Everyone Is Unhappy*"

In 2015, the Governing Board performed a year-long assessment of electric utility issues affecting Ohio consumers. In January 2016, the Governing Board issued its report entitled "*Everyone is Unhappy.*" In the report, the Board expressed concern for residential consumers who were paying higher rates for electric service, on average, than consumers in 32 other states, based on 2014 data. The Board recommended a "Legislative Task Force to Study Reforms in Electric Utility Law in the State." The Board's Report is Attachment 1 to this document. The Report is also available at: <http://www.occ.ohio.gov/boardreport>.



Michael Watkins,
Board Vice-Chair

II. REGULATION OF UTILITIES FOR CONSUMER PROTECTION

A. What is a Public Utility?

The General Assembly has provided for regulation of public utilities by the Public Utilities Commission of Ohio (PUCO). The utilities provide electric, natural gas, telephone, and water services to Ohioans. Under Ohio regulation utility service must have reasonable rates and adequate quality for customers. Public utility companies are defined in Ohio law, including at ORC 4905.03.

B. State Regulation and Markets for Utility Services

1. Electric Distribution Service

There are approximately 4.8 million electric distribution customers in Ohio. The General Assembly established standards many years ago for regulating electric distribution (wires) service to customers under ORC Chapter 4909. Electric distribution service refers to the delivery of electricity (and not the electricity itself) to customers, as primarily a monopoly service. The PUCO regulates this service. Utilities are allowed to charge for the expenses of serving their customers and allowed an opportunity to earn a profit on their investment and to collect the costs of their investment from customers. Under ORC 4909.15, the profit and costs cannot be charged to customers unless an investment is “used and useful” in providing utility service to customers. The 2008 energy law (S.B. 221) allowed electric utilities more ways to propose rate increases for distribution customers to pay. And the 2008 law created mandates for renewable energy and energy efficiency. Ohio’s electric policy is stated in ORC 4928.02.

2. Electric Generation Service

The General Assembly deregulated electric generation (power plants) in 1999 (S.B. 3). The 2008 energy law (S.B. 221) was a step back from the market approach in the 1999 law, allowing more regulation of generation prices. And the law allowed more ways for utilities to propose rate increases for consumers to pay. The 1999 and 2008 energy laws are found in ORC Chapter 4928.

3. Natural Gas Service

There are approximately 3.3 million natural gas customers in Ohio. The General Assembly has provided for PUCO regulation of natural gas services to customers under ORC Chapter 4909 and ORC Chapter 4929. The regulation under this latter law is referred to as alternative regulation, which replaced some of the more traditional forms of regulation that protected customers. Customers are allowed to make choices for their suppliers of the natural gas commodity that flows through the utilities’ pipelines. Ohio’s natural gas policy is stated in ORC 4929.02.

4. Telephone Service

There are approximately 2.3 million standard landlines providing voice service for customers in Ohio. The General Assembly replaced traditional regulation of wireline telephone service with ORC Chapter 4927. Telephone service has largely been deregulated. In 2015, the General Assembly created a collaborative body to address consumer protection during any transition of Ohioans' wireline telephone service to an internet-based service. The General Assembly named the Consumers' Counsel as one of the members of the collaborative. Other collaborative members designated by the General Assembly include the PUCO, competitive local exchange carriers, incumbent local exchange carriers, members of the General Assembly and other interested parties (when invited). Ohio's telephone policy is stated in ORC 4927.02.

5. Water Service

There are approximately 166,161 customers receiving water and wastewater service from an investor-owned utility in Ohio. The majority of Ohio water customers are served by municipal water service companies, which are not regulated by the PUCO. The General Assembly established regulation of water service to customers many years ago under ORC Chapter 4909. There is one major water company, Aqua Ohio, under regulation by the PUCO.

III. STATE AND FEDERAL RELIANCE ON COMPETITIVE MARKETS FOR PROTECTION OF ELECTRIC CONSUMERS



A. Ohio Legislative History

1. Senate Bill 3

In this 1999 law, the Ohio General Assembly “restructured” electricity markets. Under the restructuring law, electric generation was deregulated. The distribution system (the wires service) remained regulated as a monopoly service. Retail customers have at least two competitive options for their generation service: the utility’s standard offer (which results from supplier bids in a competitive auction) and offers from marketers such as in door-to-door sales and telemarketing calls. Government aggregation service is also available to some customers.

There is a recent study by The Ohio State University and Cleveland State University. They found (pages 8-9) that consumers receive the most competitive benefits from the standard offer – nearly \$12 billion in savings between 2011 and 2015 and nearly another \$12 billion in savings projected for 2016-2020. The study is available at this web link: https://www.nopecinfo.org/wp-content/uploads/2017/01/16NOP212-WhtPpr_r1_NC_HI-1.pdf

2. Senate Bill 221

In this 2008 law, the General Assembly again addressed electric issues affecting consumers. This law added mandates for renewable energy and energy efficiency. And the law was a step back from markets by allowing more government involvement in setting prices for the electric generation service that was deregulated in 1999. The 2008 law allowed utilities to propose setting the price of their standard service offer for customers in one of two ways: either through a market offering or a regulated offering (called an electric security plan). The law’s option for the market offering has never been fully implemented. The more regulatory electric security plan has been used repeatedly by the electric utilities. A consequence of the 2008 law has been more opportunities for electric utilities to propose charges (including subsidies) for consumers to pay above the market price of electricity.

B. Recommendations for Consumer Protection

S.B. 221 (in 2008) unfortunately took some steps back from markets under the 1999 law and increased the role of regulators. Some regulatory terms in the 2008 law tilt the balance of ratemaking against Ohio electric customers and in favor of electric utilities. The Ohio Consumers’ Counsel and the Ohio Manufacturers’ Association have proposed changing or repealing parts of the ratemaking terms in the 2008 law to give Ohioans more of the benefits of deregulation (including lower prices) under the 1999 law. The Consumers’ Counsel/Ohio Manufacturers’ Association list of proposals is Attachment 2 to this document.

1. Repeal Most of the 2008 Law Allowing Electric Security Plans

Proposals for customers to pay their utilities subsidies above market prices have typically occurred in electric security plans (enabled by the 2008 law). The statute allowing the electric security plans should be largely repealed (while preserving the competitively bid standard offer for consumers). The electric security plan has been used by utilities to propose regulatory charges above market prices, including to subsidize uneconomic power plants. Electric security plans should end, in favor of market pricing.

2. Eliminate Subsidies

Consumers should be given the benefits of competition, without government-imposed subsidies layered on top of competitive market prices. The attached “Subsidy Scorecard” is a summary of the subsidies paid by Ohio customers to their electric utilities since 2000. The Subsidy Scorecard is Attachment 3. To date, the electric utilities have been authorized to charge Ohioans about \$14.7 billion in subsidies.

3. Limit Single-Issue Ratemaking (The So-Called “Riders”)

S.B. 221 allows “single-issue” ratemaking. The result is that electric utilities can “cherry-pick” charges to propose for consumers to pay. In traditional ratemaking, the utilities’ total operations (all expenses and revenues) are reviewed together instead of allowing utilities to propose single issues for price increases. The traditional approach to ratemaking allows the potential for offsets (higher and lower) among various charges.

The single-issue charges find their way to customers’ monthly bills through so-called “riders.” The 2008 law has led to a proliferation of utility riders allowed on Ohioans’ electric bills:

Utility	Number of Riders
FirstEnergy - Cleveland Electric Illuminating	32
FirstEnergy - Ohio Edison	30
FirstEnergy - Toledo Edison	30
American Electric Power Ohio	25
Duke Energy	17
Dayton Power and Light	12

To protect customers, single-issue ratemaking should be rescinded from the law.

4. Prohibit Charges to Consumers for Excessive Utility Profits

Traditionally, utilities were provided the opportunity to earn profits at a level determined to be reasonable for the utility to charge and for monopoly customers to pay. Under S.B. 221, an electric utility is allowed to charge Ohioans for profits in excess of that reasonable level. The 2008 law allows utilities to charge consumers these excessive profits, and only protects consumers from paying profits that are described as “significantly” excessive. To protect customers, the law should be changed to the more traditional protection for customers that utilities are not entitled to charge customers for excessive profits.

5. Enable Refunds to Customers

Utilities, including electric utilities, have been allowed to keep what they collect from customers even when the Supreme Court of Ohio (or the PUCO) later finds the charges to be unlawful or unreasonable. This situation has cost Ohioans hundreds of millions of dollars in unrefunded charges from utilities when rates were determined to be unlawful or unreasonable. Instead, utilities should give refunds to Ohio consumers when the Supreme Court or another authority finds that the charges consumers paid were inappropriate. The law should be changed to give customers refunds of charges they paid to utilities that were later determined to be unlawful or unreasonable.

C. Federal Reliance on Competitive Electric Markets for Consumer Protection

1. Federal Energy Regulatory Commission (FERC)

FERC states on its website that, concerning interstate electric regulation, its core responsibility is to “guard the customer from exploitation by non-competitive electric power companies.” FERC also has oversight of the operations of PJM Interconnection, which is a regional electric grid manager for Ohio and other states. In 2016, FERC protected millions of Ohio consumers from paying billions of dollars in above-market subsidies to FirstEnergy and AEP for power purchase agreements.

2. PJM

PJM is responsible for ensuring reliability of the interstate electric grid for a region that includes Ohio and 12 other states and the District of Columbia. PJM also arranges for competitive prices in the wholesale electric markets by managing the electric transmission network and the competitive wholesale markets for electricity generation (capacity, energy, and ancillary services). The days of Ohio controlling the reliability of generation service for customers and power plant prices are in the past. PJM controls those matters on a regional basis under the jurisdiction of FERC.

PJM’s most recent auction for power plant capacity (for delivery in 2019/2020) resulted in a region-wide reserve margin of 22.4 percent for reliability. That level is well above the reserve margin of 16.5 percent that PJM accepted as an adequate margin for power plant availability in

the PJM region. The days of the PUCO establishing a state reserve margin for power plant availability are in the past. Similarly, the level of diversity of fuel sources for power plants is a matter for PJM under FERC's jurisdiction, not a matter for Ohio to resolve on a state-specific basis.

IV. OTHER POTENTIAL LEGISLATIVE ISSUES AFFECTING ELECTRIC CONSUMERS

A. Distribution Infrastructure (Electric Grid)

Utilities are proposing massive investments to upgrade the electric grid, for approval by government regulators. These upgrades have the potential to benefit customers, utilities and third parties. But the price to consumers, which could be steep, and the timing of benefits are also important considerations for consumer protection.

It has been said that customers' future use of the electric grid will be similar to the advancements in the use of the telephone network after the antitrust divestiture of AT&T in 1984. These advancements for telephone customers, that the electric grid may mirror, included the proliferation of connected devices and two-way interactivity. As example of this is the relation of the emerging "Internet of Things" to the electric grid that consumers will use. It should be emphasized that, since 1984, many of the advancements regarding new telephone-related services and products were market-driven and unregulated after divestiture of the AT&T monopoly.

Thus, one policy consideration is to allow markets to work for the electric grid and the consumers who use it, where competition is effective. Utility monopoly approaches and government regulation should not necessarily be the assumed solution.

Second, utility grid upgrades can come at a significant cost to captive customers. Infrastructure spending by the monopoly utility results in charges to consumers for the associated costs and utility profits. Consumers should be protected from paying for grid investments before they provide a clear and material benefit and are documented to be cost-effective for consumers. That is a way regulation should simulate the disciplines of the market. The longstanding balancing test for assessing whether utility investment is appropriate for charging to consumers is whether the investment is "used and useful" by utility consumers for their utility service. That standard is in ORC 4909.15. The standard is durable over time and for different technologies, and it is a key consumer protection involving charges for monopoly utility investments.

The PUCO's authority regarding future upgrades of the electric grid is currently under consideration in the as-introduced version of House Bill 49 (2017) at: Lines 69904 to 69909; Lines 106180 to 106196; and Lines 1655 to 1704.

B. Net Metering

Net metering is a method of metering for electric service when customers generate a portion of their own electricity on their property. It is also a term that is used to reference broader electric policy issues that arise as a result of the net metering of distributed generation.

When customers generate their own electricity (*e.g.*, using rooftop solar), electricity is transmitted from the customer to the utility's electric grid. This customer generation is known as distributed generation, as contrasted with the longstanding central station generation by large power plants. Customers can obtain credits on their utility bills, at the generation rate, for the surplus electricity they produced during the monthly billing period. That is, the customer would be charged for the "net" amount of usage shown on the meter, which is the electricity used minus electricity generated. Net metering customers should be compensated fairly for the electricity they generate and should be charged fairly for their use of the grid.

Net metering policy considerations include enabling a fair market for consumer-generators to receive compensation for their surplus power, while ensuring that consumer-generators are adequately paying their fair share of costs for the utility's grid. Net metering was addressed in the as-introduced version of S.B. 320 (2016), which was not enacted.

V. FUTURE OF DEREGULATED MARKETS FOR ELECTRICITY

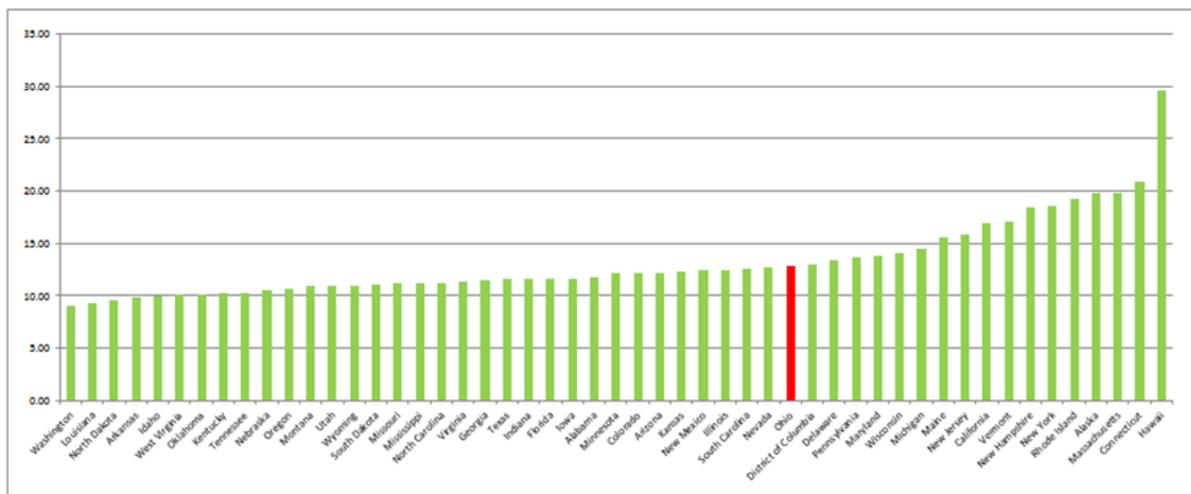
Electric utilities have expressed interest in changing Ohio law to re-regulate or re-structure electric generation service. The proposals would be a step back from the deregulation in the 1999 legislation (S.B. 3) that features competitive markets for consumer benefits. The Ohio Consumers’ Counsel looks forward to working with legislators to address these issues for the benefit of Ohioans. Ohio should stay the course on the benefits of competitive markets. If anything, Ohio’s commitment to benefiting consumers through competitive markets should be strengthened, not weakened. Various of the regulations allowing above-market regulatory charges in the 2008 energy law (S.B. 221) should be repealed.

In this regard, Ohioans should be protected from paying any more subsidies to electric utilities. Since 2000, electric consumers have paid Ohio electric utilities about \$14.7 billion in subsidies above the market price of electricity. These subsidy payments to the utilities are shown on the “Subsidy Scorecard” in Attachment 3. Those charges have increased what Ohioans pay for electricity.

Ohio consumers are benefiting from the relative low-cost natural gas generation in the region. Further, these new power plants have the potential to operate in tandem with Ohio’s natural gas reserves to burn low-priced Ohio natural gas for producing electricity. And Ohio is benefiting from new investment by non-utilities in power plant construction, as enabled by the 1999 law.

Retail Price Comparison: Data as of 2016 from the U.S. Energy Information Administration show Ohio residential customers paid higher rates on average than consumers in 33 other states:

Average Retail Price of Electricity to Ultimate Customers by End-Sector, by State, Year-to-Date through December 2016
Source: U.S. Energy Information Administration



Comparison of Incremental Price Changes: Also, among fourteen restructured states, data from the U.S. Energy Information Administration show that Ohio’s price increases for residential electric consumers rank the second highest for 2008 through 2016. Here is a chart showing how the price changes in Ohio compare to other restructured states:



Source: U.S. Energy Information Administration

Standard Service Offer: Market pricing should include utilities continuing to offer consumers a standard offer. The standard offer results from a wholesale auction among suppliers that provides consumers with a competitive option for their generation service. While larger commercial and industrial customers have access to expertise for analyzing offers from energy marketers, residential consumers generally do not. The standard offer gives Ohioans the benefit of a competitive service without their having to commit what may be limited available time to continually monitor marketers’ changing prices or contend with marketers’ door-to-door sales, telemarketing calls, promotional or “teaser” rates, automatic contract renewals at higher prices, and so on. As noted, a recent study by The Ohio State University and Cleveland State University found that electric consumers in Ohio receive the most competitive benefits from the utilities’ standard offer – nearly \$12 billion in savings between 2011 and 2015 and nearly another \$12 billion in savings projected for 2016-2020.

In January 2013, the Ohio Consumers’ Counsel Governing Board issued a resolution recommending that the Consumers’ Counsel act to preserve the standard offer as a choice for residential customers in their purchases of electricity and natural gas. A copy of the Board’s resolution is Attachment 4 to this document. A link to the resolution is provided below:

<http://www.occ.ohio.gov/about/resolutions/2013/january.pdf>

VI. ENERGY MANDATES

A. Legislative History

Senate Bill 221: This 2008 law required achieving mandated levels of renewable energy and energy efficiency for electric consumers through utility-run programs. Of course, Ohioans can also practice energy efficiency on their own without utility-run programs by shopping in the marketplace for efficient light bulbs, thermostats, etc. In utility-run programs, the electric utilities charge consumers for the costs of the programs and for profit on the programs. In those programs, some customers (program participants) obtain rebates or discounts on energy efficiency measures that are funded by all customers.

Senate Bill 310: This 2014 law placed a two-year freeze on the energy standards enacted in 2008 under Senate Bill 221. The two-year freeze expired on December 31, 2016. The General Assembly's Energy Mandates Study Committee evaluated the mandates and made recommendations in a report dated September 30, 2015. There was also a minority position for the Committee's report, issued in September 2015.

House Bill 554: In 2016, S.B. 320 and H.B. 554 were introduced to address the expiration of the freeze under S.B. 310 and to determine the future of the renewable energy and energy efficiency requirements. In December 2016, H.B. 554 was passed by the General Assembly and sent to Governor Kasich. The Governor then vetoed the legislation, with a statement that included: "The Administration stands ready to work with the General Assembly to advance strategies for helping ensure competitive energy costs."

Utility-run energy efficiency programs can save money for consumers, particularly for consumers who participate in the programs. While the Consumers' Counsel has supported the existence of utility programs, concerns by the Agency and others include that too much of Ohioans' payment for utility energy efficiency programs is for utility profits (instead of for energy efficiency measures that actually produce savings). In 2015, Ohio electric customers paid one of their electric utilities a dollar in profit for every two dollars consumers paid for the utility's energy efficiency programs.

Here is a chart showing the high amount of profits that Ohio consumers (and businesses) have paid to their electric utilities for energy efficiency programs. (Duke is not listed because it signed a settlement that jointly resolved the amount of profit it would make from energy efficiency programs for 2013, 2014, 2015, and 2016.) Program costs refers to the amount paid by Ohio consumers for the energy efficiency program. Profit (shared savings) refers to the additional money the utility collects from customers based on the energy that the programs saved.

Utility	2015 Program Costs	2015 Profit (Shared Savings)	2015 Profit as % of Program Costs
AEP	\$65.1 million	\$31.1 million	47.8%
DP&L	\$18.0 million	\$7.0 million	38.9%
FirstEnergy	\$27.3 million	\$15.6 million	57.0%

House Bill 114: This bill was introduced on March 6, 2017, to address requirements for renewable energy and energy efficiency. It would, among other things, expand the opportunity for certain non-residential customers to opt out of the utility-run energy efficiency programs and related charges. But the bill does not include residential consumers among those that may opt out of the utility energy efficiency programs.

B. Recommendations for Consumer Protection

The Consumers’ Counsel has legislative recommendations for consumer protection regarding the energy efficiency standards. These recommendations include establishing, through legislation, a percentage limit on the utility program costs that can be charged to consumers for energy efficiency. There should also be a percentage limit on profits (so-called “shared savings”) that the utilities may charge to consumers for energy efficiency programs. These and other consumer protections should be imposed regardless of whether the programs are mandated or voluntary. Further, residential consumers should be allowed to opt out of the utilities’ energy efficiency programs and related charges, as some non-residential customers are allowed to do. The Consumers’ Counsel should be designated as having the authority to opt out residential consumers.

Copies of the Consumers’ Counsel’s testimonies on energy mandates in November and December 2016 are available on the Agency’s website.

VII. SUBMETERING (RESELLING) OF UTILITY SERVICES TO CONSUMERS

Submetering refers to a practice where utility services are resold to consumers by middlemen, sometimes at higher or much higher prices than the local utility's price. Submetering largely affects consumers in apartments, condominiums, and manufactured housing developments. Submetering companies can buy utility service (electric and water) from the public utility and then resell it to the consumer at a higher price. In addition to potentially charging Ohioans higher prices than the local utility's rate, submetering companies have asserted that they are not subject to other consumer protections that Ohio law and the PUCO apply to consumers, such as protection against unreasonable disconnection of service. Consumers of submeterers lack both the protection of government regulation and the protection of competitive markets, meaning they lack the protections available for Ohioans served by public utilities.

This consumer problem was highlighted in a series of investigative news stories by the Columbus Dispatch, in October 2013. These news stories are Attachment 6 to this document. It was reported that reselling had inflated some customers' utility bills by as much as 40 percent.

There are four cases pending at the PUCO that involve submetering issues. Those cases include a complaint filed by the Consumers' Counsel on behalf of submetered residential customers (Case No. 16-0872-EL-CSS), two complaints by individual customers (Case Nos. 15-697-EL-CSS and 16-2401-EL-CSS), and a PUCO-ordered investigation (Case No. 15-1594-AU-COI).

In the PUCO investigation case, both consumer representatives and utilities have recommended protecting Ohioans from submetering. In December 2016, the PUCO determined that certain submetering companies may be regulated by the PUCO under some circumstances. This decision is a step toward limiting charges to tenants, condominium residents and other customers of middlemen who resell utility service. A further decision of the PUCO is expected. It is not clear yet if the PUCO's approach will solve the problem for consumers.

There have been a number of Ohio House and Senate bills on the subject of submetering, master-metering, and the reselling of public utility service. The House legislation addressing these matters are House Bills 422, 545, 568, 589, and 662. The Senate Bills are SB 164 and 348. A consumer protection law has yet to pass for customers of submeterers.

The Consumers' Counsel recommends legislation on submetering. Legislation should give Ohioans protection from unreasonable prices. And legislation should guarantee for submetered consumers the same protections for quality of service that consumers of utilities have for these services, such as standards for disconnection of service.

In July 2015, the Consumers' Counsel Governing Board adopted a resolution to protect submetered customers. The Governing Board recommends that the Ohio General Assembly and the PUCO institute price protections and other protections for Ohioans who are charged for public utility services through a master meter and/or submeter by their property owner, condominium association, or other third party connected with their housing. A copy of the Board's Resolution is Attachment 5 to this document. A link to the resolution is provided below:
http://www.occ.ohio.gov/about/resolutions/2015/Resolution%2015-1_Submetering.pdf

VIII. NATURAL GAS CONSUMER ISSUES

There are approximately 3.1 million customers of the four major natural gas utilities in Ohio: Columbia Gas of Ohio, Dominion East Ohio, Duke Energy Ohio and Vectren Energy Delivery of Ohio. The PUCO also regulates several smaller natural gas companies who serve fewer than 15,000 Ohioans.



The General Assembly has provided for regulation of the natural gas distribution function (the pipelines, etc.) of these utilities by the PUCO under ORC Chapter 4909. That law features “traditional ratemaking.” However, under ORC Chapter 4929, the General Assembly established alternative ratemaking, including single-issue ratemaking, that allows riders to increase charges to residential consumers for the natural gas rates that they pay. Some of the consumer issues with natural gas are as follows.

A. Standard Choice Offer

Natural gas utilities should continue to offer residential consumers a standard offer. Similar to the standard offer for electric consumers, the standard offer results from an auction among suppliers that provides consumers with a competitive option for their natural gas service. Duke has an earlier version of service whereby it offers natural gas to consumers through its own procurement, without profit charged to consumers. Unlike under the electric standard offer, consumers who have the natural gas standard offer are randomly assigned to various marketers who must charge the rate determined by the auction.

While larger commercial and industrial customers have access to expertise for analyzing offers from energy marketers, residential consumers generally do not. The standard offer gives Ohioans the benefit of a competitive service without their having to commit what may be their limited available time to continually monitor a marketer’s changing prices or contend with marketers’ door-to-door sales, telemarketing calls, promotional or “teaser” rates, automatic contract renewals at higher prices, and so on.

In this regard, the Columbus Dispatch periodically writes stories on how consumers fare in the natural gas energy market. Its April 5, 2016 front-page story, entitled “Loss leader, customers are losing big on unregulated natural gas plans,” included a calculation that, since 1997, customers who chose marketer offers paid \$1.36 billion more than customers who remained with the utility’s offer. The story is available at this web link (or can be found by using the above story title for a search): <http://www.dispatch.com/content/stories/business/2016/04/05/1-customers-losing-big-on-unregulated-natural-gas-plans.html>

B. Defunct Manufactured Gas Plants

In 2013, the utilities supported legislation (H.B. 59) to enable charges to consumers for clean-up of long-defunct and polluted manufactured gas plants dating back to the 1800's. The legislation was enacted, and then that part of the bill was vetoed by the Governor.

Meanwhile, the PUCO allowed Duke to charge business and residential consumers for clean-up of manufactured gas plants. The business and residential consumers then appealed the PUCO's decision to the Supreme Court of Ohio, where the appeal is pending. In the case on appeal, Duke's charges will cost each of its residential consumers on average about \$100, with more charges awaiting PUCO authorization.

In June 2013, the Consumers' Counsel Governing Board adopted a resolution that supported, among other things, protecting natural gas customers from being charged for the clean-up expenses of manufactured gas plants that are not used for providing current utility service to customers. A copy of the Board's Resolution is Attachment 7 to this document. A link to the resolution is provided below:

<http://www.occ.ohio.gov/about/resolutions/2013/2013-06-04-ng.pdf>

C. Energy Efficiency Charges

Unlike for electric utilities and customers, there are no mandates requiring that natural gas utilities run energy efficiency programs. However, the PUCO recently approved a settlement containing Columbia's request to charge consumers \$210 million over six years for energy efficiency. That amount is about \$150 per customer, on average. The Consumers' Counsel recommended that the PUCO phase out Columbia's program and subsidy charges, except for the low-income programs. Electric energy efficiency programs can benefit all consumers, including non-participants, by deferring the cost of building power plants. But natural gas programs do not provide such benefits to all customers. Consumers of natural gas utilities should not be made to subsidize the programs. Of course, consumers can shop on their own for energy efficiency measures in the marketplace.

D. Costs of Infrastructure Replacement

The natural gas utilities have proposed various programs to replace infrastructure, with charges on consumers' gas bills. Infrastructure replacement can be costly. Typically, the natural gas utilities want accelerated payment of costs by consumers. These issues should be considered on a case-by-case basis by the PUCO, with an objective of minimizing charges to consumers.

IX. TELEPHONE CONSUMER ISSUES

A. State Consumer Issues

House Bill 64, enacted in 2015, allowed local telephone companies to withdraw basic local exchange service (“basic service”) under certain conditions including approval by the FCC. House Bill 64 also mandated that a Telecommunications Network Transition Collaborative (“Collaborative”) be established by the PUCO. The purpose of the Collaborative is to evaluate the availability of reasonable and comparatively priced alternatives to consumers’ basic service, to identify Ohioans who may be without phone service if they lose access to basic service, and to develop expectations for consumer education. The General Assembly named the Consumers’ Counsel to be a participating



member on the Collaborative. Other collaborative members designated by the General Assembly include the PUCO, competitive local exchange carriers, incumbent local exchange carriers, members of the General Assembly and other interested parties (when invited).

To fulfill the General Assembly’s assignment of the Consumers’ Counsel to the Collaborative, it is our goal to ensure that Ohioans continue to have basic service until a reasonably priced comparative service is made available to them. In June 2013, the Consumers’ Counsel Governing Board adopted a Resolution that supports, among other things, maintaining the most basic telephone service with price and quality protections for consumers. A copy of the Board’s Resolution is Attachment 8 to this document. A link to the Resolution is provided below:

<http://www.occ.ohio.gov/about/resolutions/2013/2013-06-04-t.pdf>

B. Federal Consumer Issues – Access to Broadband

The FCC is responsible for regulating telephone service as it relates to interstate communications. The FCC is involved in the historic transition of the nation’s communications services from a goal of universal service for voice telephone service to universal service for broadband. One of the FCC’s initiatives is to bring broadband to all Americans. The FCC states that broadband has gone from being a luxury to a necessity for full participation in our economy and society. For that reason, the FCC is transforming its Universal Service Fund to a new “Connect America Fund” that will accelerate broadband build-out to the millions of Americans who lack access to infrastructure capable of providing high-speed (10 Mbps) broadband. The Connect America Fund is being used to assist telephone companies in building broadband infrastructure in rural areas where construction has been cost-prohibitive and to provide assistance for broadband access by low-income consumers. To date, the Connect America Fund has distributed more than \$6.5 million to Ohio telephone companies to bring broadband to nearly 10,000 homes and businesses that have no broadband access.

The Rural Utilities Service of the U.S. Department of Agriculture provides a variety of loans and grants to build and expand broadband networks. The National Telecommunications and Information Administration developed “BroadbandUSA” to provide assistance to communities that want to expand their broadband capacity and promote broadband adoption.

X. WATER CONSUMER ISSUES

Under Ohio law, the PUCO regulates price and service quality for the investor-owned water and wastewater companies that provide utility service to consumers. Many water utilities in Ohio are operated by local governments, which the PUCO does not regulate. Aqua Ohio is the major water utility regulated by the PUCO. Aqua serves approximately 157,664 customers and approximately 6,600 wastewater customers. The PUCO also regulates six smaller water companies and six smaller wastewater companies, each serving fewer than 2,500 customers. The setting of the rates consumers pay for water and wastewater service is regulated by the PUCO under traditional ratemaking standards found in ORC Chapter 4909.



Over the years, consumer issues in some areas have included the quality issue of too much water hardness and the rate issue of charges to resolve water hardness. Efforts to resolve the water hardness issue in recent years seem to be working toward resolution for consumers.

Another issue that can affect water rates and quality of service for consumers is the cost of infrastructure replacement. This issue may become increasingly significant for consumers in coming years. Related issues could include how infrastructure replacement will be regulated for the protection of monopoly customers of water utilities.

XI. OTHER CONSUMER ISSUES AFFECTING LOW-INCOME CONSTITUENTS

There are programs to assist low-income Ohioans with affording their utility services. These programs have been created by state and federal laws and administrative rules. These programs particularly provide assistance for low-income customers of electric, natural gas and telephone services. If a constituent needs help with paying utility bills, the Ohio Consumers' Counsel can provide information on how to obtain assistance. Several programs offer payment arrangements for eligible Ohioans.

The following information and web links provide more details about the location of consumers with food insecurity and poverty in Ohio.

A. Food Insecurity

Ohioans have a relatively high level of food insecurity within the United States. That is, 45 states on average have households with a more reliable source for daily access to enough food.

According to recent resources from the Health Policy Institute of Ohio, 17 percent of Ohioans were living in food-insecure households. That figure includes nearly a quarter of children and more than 17 percent of seniors.

This web link provides access to research by the Health Policy Institute of Ohio:

http://www.healthpolicyohio.org/wp-content/uploads/2016/11/FoodInsecurityEvidenceSummary_NewHeader-1.pdf

This web link provides access to food insecurity data for Ohio counties:

http://www.feedingamerica.org/hunger-in-america/our-research/map-the-meal-gap/2014/OH_AllCounties_CDs_MMG_2014.pdf

These documents may also be found in Attachment 9 to this document.

B. Poverty

According to the Ohio Poverty Report, February 2017, an estimated 1.78 million or 15.8 percent of people in Ohio are poor. (See attachment 9 to this document.) 17.8 percent of the people in Appalachian Ohio were poor. Appalachian Ohio is a band of 32 counties stretching across the eastern and southern regions of the state. The poverty rate for the rest of Ohio averaged 15.3 percent.

Thirty-nine of Ohio's 88 counties and the vast majority of Ohio's larger cities had significantly higher poverty rates than the national average.

The following web link provides access to the Ohio Poverty Report, February 2017:

<https://www.development.ohio.gov/files/research/p7005.pdf>. The Poverty Report includes an Ohio map showing poverty by county, and that map is in Attachment 9 to this document.

XII. LEGISLATIVE RESOURCES FROM THE OHIO CONSUMERS' COUNSEL

The Ohio Consumers' Counsel is available to help legislators, their staffs and their constituents regarding utility consumer issues. The Consumers' Counsel has information to assist constituents on topics regarding their utility services. And the Consumers' Counsel has expertise to provide assistance to Members regarding consumer perspectives on legislation.

The Consumers' Counsel's web site is at www.occ.ohio.gov. We can be contacted at (614) 466-9495 or at OCC@occ.ohio.gov. The Ohio Consumers' Counsel can be followed on Twitter at @OhioUtilityUser. We have YouTube videos at www.occ.ohio.gov/education/videos.shtml on making wise choices for purchasing electricity and natural gas. There is a periodic newsletter. We have fact sheets with consumer information available on a variety of utility topics.

XIII. UTILITY SERVICE AREA MAPS

Attached are PUCO maps of utility service areas. The maps show the utilities that operate in the areas of the state where your constituents reside. These maps are Attachment 10 to this document. The maps can be viewed at the following links:

- Electric Service Map
http://www.puco.ohio.gov/emplibrary/files/Util/GIS/Electric_Maps/Ohio_Electric_Service_Areas_Size_A.pdf
- Natural Gas Distribution Companies
http://www.puco.ohio.gov/emplibrary/files/Util/GIS/Gas_Maps/Natural_Gas_Distribution_Companies.pdf
- Telephone Maps
http://www.puco.ohio.gov/emplibrary/files/Util/GIS/Telephone_Maps/Ohio_ILECs_and_Exchanges_Size_A.pdf
- Regulated Water Service Areas
<http://www.puco.ohio.gov/puco/index.cfm/linkservid/CDF5DE50-E39F-B5C2-B6303B309A60A7CA/showMeta/0/>

XIV. FACT SHEETS

Below are links to fact sheets that may be useful to your office and constituents.

- Utility Programs For Military Families
http://www.occ.ohio.gov/publications/assistance_programs/Utility_Programs_for_Military_Families.pdf
- Comparing Your Electric Choices
http://www.occ.ohio.gov/publications/electric/Comparing_Your_Electric_Choices.pdf
- Energy Choice
http://www.occ.ohio.gov/publications/electric/Energy_Choice_101.pdf
- Smart Energy Tips
http://www.occ.ohio.gov/publications/energy_efficiency/Smart_Energy_Tips.pdf
- Power Outage: Safety Tips and Customer Rights
http://www.occ.ohio.gov/publications/electric/Power_Outages_Safety_Tips_and_Rights.pdf
- Listing of all Fact Sheets
<http://www.occ.ohio.gov/publications/factsheet-master-list.shtml>

XV. GOVERNMENT PHONE NUMBERS FOR CONSUMER ASSISTANCE

Organization	Types of Issues	Phone Number
Attorney General	Concerns about consumer sales practices, contracts, agreements and scams	(800) 282-0515
Department of Commerce	Complaints involving cable services	(800) 686-7826
Federal Communications Commission	Inquiries about telephone, internet, slamming and cramming	(888) 225-5322
Federal Trade Commission	Complaints about companies, wireless or landline phone service, unwanted marketing, unfair business practices, scams. Slamming, credit and collection matters, Do Not Call Registry	(877) 382-4357 Do Not Call Registry – (888) 382-1222
Ohio Consumers' Counsel	Residential Utility Consumer Issues	(614) 466-9495
Ohio Development Services Agency	Inquiries about low-income assistance programs including the Home Energy Assistance Program (HEAP)	(800) 282-0880
Ohio Legal Aid Society	Low-income and elderly legal assistance	Cincinnati – (513) 241-9400 Cleveland – (216) 861-5500 Columbus – (614) 224-8374
Public Utilities Commission of Ohio	Complaints or inquiries involving utility services	(800) 686-7826

GLOSSARY

Aggregator: Any marketer, broker, public agency, city, county, or special district that combines the loads of multiple end-use customers in negotiating the purchase of electricity, the transmission of electricity, and other related services for these customers.

Alternative Regulation: A form of regulation other than traditional rate-of-return regulation. Examples include price cap regulation (where the prices of services are regulated but not the earnings or profit a company makes).

Basic Local Exchange Service: As defined by Ohio Revised Code Section 4927.01, the following services comprise basic local exchange service over the customer's primary line: local dial tone, touch tone, 9-1-1, operator and directory services, telephone directory and one listing in that directory, per call-Caller ID blocking, telecommunications relay service and access to a long distance provider.

British thermal unit: The quantity of heat required to raise the temperature of 1 pound of liquid water by 1 degree Fahrenheit at the temperature at which water has its greatest density (approximately 39 degrees Fahrenheit).

Broadband: Broadband is a descriptive term for evolving digital technologies that provide consumers a signal switched facility offering integrated access to voice, high-speed data service, video-demand services, and interactive delivery services.

Capacity charge: An element in a two-part pricing method used in capacity transactions (energy charge is the other element). The capacity charge, sometimes called Demand Charge, is assessed on the amount of capacity being purchased.

Citygate: A point or measuring station at which a distributing gas utility receives gas from a natural gas pipeline company or transmission system.

Common Carrier: In the telecommunications arena, the term used to describe a telephone company.

Competitive transition charge: A non-bypassable charge levied on each customer of the distribution utility, including those who are served under contracts with nonutility suppliers, for recovery of the utility's stranded costs that develop because of competition.

Cost-of-service regulation: A traditional electric utility regulation under which a utility is allowed to set rates based on the cost of providing service to customers and the right to earn a limited profit.

Customer choice: The right of customers to purchase energy from a supplier other than their traditional supplier or from more than one seller in the retail market.

Demand-side management (DSM): A utility action that reduces or curtails end-use equipment or processes. DSM is often used in order to reduce customer load during peak demand and/or in times of supply constraint. DSM includes programs that are focused, deep, and immediate such

as the brief curtailment of energy-intensive processes used by a utility's most demanding industrial customers, and programs that are broad, shallow, and less immediate such as the promotion of energy-efficient equipment in residential and commercial sectors.

Distribution: The delivery of energy to retail customers.

Electricity generation: The process of producing electric energy or the amount of electric energy produced by transforming other forms of energy, commonly expressed in kilowatthours(kWh) or megawatthours (MWh); i.e., One megawatt is enough power to supply roughly 1,000 homes.

Energy Efficiency: A ratio of service provided to energy input (e.g., lumens to watts in the case of light bulbs). Services provided can include buildings-sector end uses such as lighting, refrigeration, and heating; industrial processes; or vehicle transportation. Unlike conservation, which involves some reduction of service, energy efficiency provides energy reductions without sacrifice of service. May also refer to the use of technology to reduce the energy needed for a given purpose or service.

Federal Communications Commission (FCC): The federal agency empowered to regulate interstate and international communication services, including the charges, terms and conditions relating to these services.

Federal Energy Regulatory Commission (FERC): The Federal agency with jurisdiction over interstate electricity sales, wholesale electric rates, hydroelectric licensing, natural gas pricing, oil pipeline rates, and gas pipeline certification. FERC is an independent regulatory agency within the Department of Energy and is the successor to the Federal Power Commission.

Generation: The process of producing electric energy by transforming other forms of energy; also, the amount of electric energy produced, expressed in kilowatthours.

Ground Water: The water that systems pump and treat from aquifers

Interconnection: The connection needed to the local utility's system by customers producing some of their own electricity. An interconnection is needed to supplement the electricity produced by customers and to participate in net metering.

Kilowatt (kW): One thousand watts.

Kilowatthour (kWh): A measure of electricity defined as a unit of work or energy, measured as 1 kilowatt (1,000watts) of power expended for 1 hour. One kWh is equivalent to 3,412 Btu.

Liquefied natural gas (LNG): Natural gas (primarily methane) that has been liquefied by reducing its temperature to -260 degrees Fahrenheit at atmospheric pressure.

Megawatt (MW): One million watts of electricity.

Megawatthour (MWh): One thousand kilowatt-hours or 1 million watt-hours.

Manufactured gas: A gas obtained by destructive distillation of coal or by the thermal decomposition of oil, or by the reaction of steam passing through a bed of heated coal or coke.

Natural gas: A gaseous mixture of hydrocarbon compounds, the primary one being methane.

Natural gas marketer: A company that arranges purchases and sales of natural gas. Unlike pipeline companies or local distribution companies, a marketer does not own physical assets commonly used in the supply of natural gas, such as pipelines or storage fields. A marketer may be an affiliate of another company, such as a local distribution company, natural gas pipeline, or producer, but it operates independently of other segments of the company. In States with residential choice programs, marketers serve as alternative suppliers to residential users of natural gas, which is delivered by a local distribution company.

Net Metering: Customers generating their own electricity receive credits to their monthly bill for energy they sell back to the utility. The “net” result of how much energy is provided to or used from the utility is applied to a customer’s bill.

Open access (electric): Federal Energy Regulatory Commission Order No. 888 requires public utilities to provide non-discriminatory transmission service over their transmission facilities to third parties to move bulk power from one point to another on a nondiscriminatory basis for a cost-based fee. Order 890 expanded Open Access to cover the methodology for calculating available transmission transfer capability; improvements that opened a coordinated transmission planning processes; standardization of energy and generation imbalance charges; and other reforms regarding the designation and undesignation of transmission network resources.

Peak demand: The maximum load during a specified period of time.

Pipeline (natural gas): A continuous pipe conduit, complete with such equipment as valves, compressor stations, communications systems, and meters for transporting natural and/or supplemental gas from one point to another, usually from a point in or beyond the producing field or processing plant to another pipeline or to points of utilization. Also refers to a company operating such facilities.

Power marketers: Business entities engaged in buying and selling electricity. Power marketers do not usually own generating or transmission facilities. Power marketers, as opposed to brokers, take ownership of the electricity and are involved in interstate trade. These entities file with the Federal Energy Regulatory Commission (FERC) for status as a power marketer.

Rate base: The value of property upon which a utility is permitted to earn a specified rate of return as established by a regulatory authority. The rate base generally represents the value of property used by the utility in providing service and may be calculated by any one or a combination of the following accounting methods: fair value, prudent investment, reproduction cost, or original cost. Depending on which method is used, the rate base includes cash, working capital, materials and supplies, deductions for accumulated provisions for depreciation, contributions in aid of construction, customer advances for construction, accumulated deferred income taxes, and accumulated deferred investment tax credits.

Restructuring: The process of replacing a monopoly system of electric utilities with competing sellers, allowing individual retail customers to choose their electricity supplier but still receive delivery over the power lines of the local utility. It includes the reconfiguration of the vertically-integrated electric utility.

Shale Gas: Natural gas produced from wells that are open to shale formations. Shale is a fine-grained, sedimentary rock composed of mud from flakes of clay minerals and tiny fragments (silt-sized particles) of other materials. The shale acts as both the source and the reservoir for the natural gas. See natural gas.

Tariff: A published volume of rate schedules and general terms and conditions under which a product or service will be supplied.

Therm: One hundred thousand (100,000) Btu.

Transmission (electric): An interconnected group of lines and associated equipment for the movement or transfer of electric energy between points of supply and points at which it is transformed for delivery to customers or is delivered to other electric systems.

Unbundling: Separating vertically integrated monopoly functions into their component parts for the purpose of separate service offerings.

Utility distribution companies: The entities that will continue to provide regulated services for the distribution of electricity to customers and serve customers who do not choose direct access. Regardless of where a consumer chooses to purchase power, the customer's current utility, also known as the utility distribution company, will deliver the power to the consumer.

Wellhead: The point at which the crude (and/or natural gas) exits the ground. Following historical precedent, the volume and price for crude oil production are labeled as "wellhead," even though the cost and volume are now generally measured at the lease boundary. In the context of domestic crude price data, the term "wellhead" is the generic term used to reference the production site or lease property.

Wholesale competition: A system whereby a distributor of power would have the option to buy its power from a variety of power producers, and the power producers would be able to compete to sell their power to a variety of distribution companies.

Wholesale power market: The purchase and sale of electricity from generators to resellers (who sell to retail customers), along with the ancillary services needed to maintain reliability and power quality at the transmission level.

Sources include U.S. Energy Information Administration:

<https://www.eia.gov/tools/glossary/index.cfm>

Attachment 1

Board Report: "*Everyone is Unhappy*"



Everyone is Unhappy

A Report by the Board of the Ohio Consumers' Counsel

January 19, 2016

We now live in the Age of Electricity. In a manner similar to the previous Ages of Mankind, Stone, Bronze, Iron and Industrial, electricity is a key aspect of all our lives. It keeps us warm in the winter (even natural gas furnaces require a blower to distribute the air), makes the latitudes below the 35th parallel north habitable in the summer, and provides the current to keep our communications current. But increasingly all across Ohio, and indeed America, many are unhappy with the electrical system. Consumers, businesses, industrial users and even the investor owned utilities (IOUs) and their shareholders are unhappy.

For the past year, the Governing Board of the Ohio Consumers' Counsel has been looking at the state of the investor-owned utilities' (IOUs) electrical system for serving Ohioans. Nothing has been pre-conceived, and nothing has been off the table. The following report is a starting point for further discussion.

The mood of the country is anything but upbeat right now. And that mood is reflected in how the state of Ohio's investor-owned electrical industry is viewed by customers and by the industry itself and others.

First to the customers: thirty-two states have cheaper electricity for residential consumers than Ohio. Some of these are understandable, such as Washington and Idaho, as they have far more options for less expensive hydroelectric power where the infrastructure was developed and has been paid for decades ago. See Chart 1.

Yet, other states that rely on their fossil fuel resources, like Ohio, manage to have significantly less expensive electricity for their consumers than Ohio. As shown in

Chart 1, West Virginia's 9.33 cents and Louisiana's 9.49 cents per kilowatt hour (Kwh) are nearly 25 percent less expensive than Ohio's 12.38 average cents/Kwh for consumers.

Some may suggest that pressures to increase the share of electricity generated by renewable sources are responsible for Ohio's higher costs. However, solar and wind generation currently produce less than two percent of Ohio's electricity. Iowa, Colorado and North Dakota are heavily dependent on coal, like Ohio. Those states generate 29 percent, 11.5 percent and 17 percent respectively from wind, solar and related renewable resources, and all have cheaper electricity for consumers than Ohio. (See Copy of EIA-Net Generation by State by Energy Source Summary 2014.xls in the Addendum.)

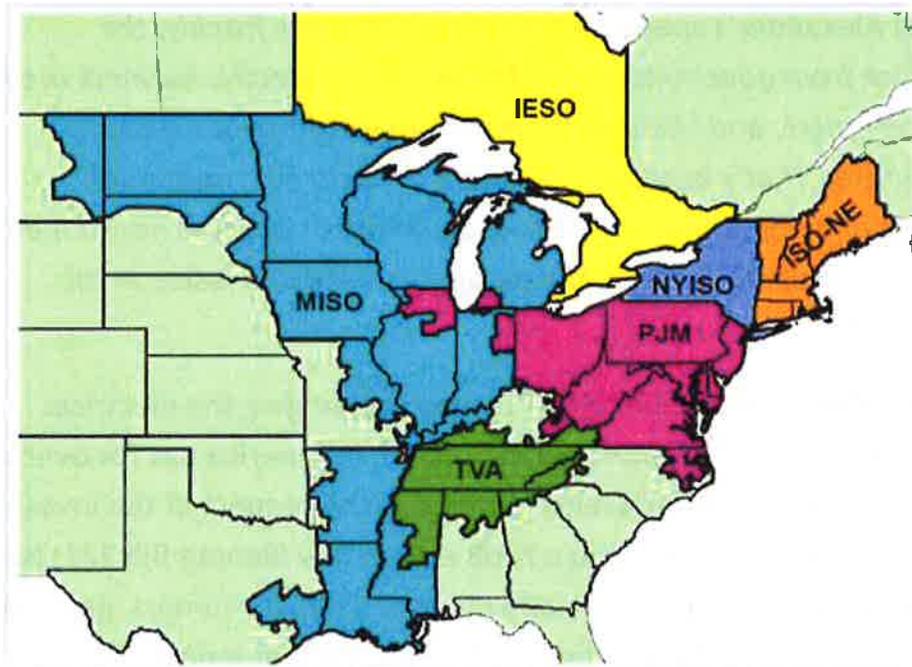
It is fair to point out that the considerable variation in the electric generation fuel profiles among the states yield interesting data regarding the impact of various fuels. For example, Hawaii's extraordinarily high costs reflect their high import costs for the petroleum and coal on which they depend. And Texas, with its relatively large natural gas resources significantly reducing its need for coal, has costs about 10 percent below Ohio's. See

http://apps1.eere.energy.gov/states/renewable_energy.cfm/state=IA#wind

<http://www.puco.ohio.gov/puco/?LinkServID=07FEA955-9818-B02E-9006A6E6834F7BA6#sthash.ZfveQbUM.iKWk6VVX.dpbs>

Clearly, factors other than fuel sources and costs affect the prices consumers pay. Some states, such as Texas, operate under a single state regional system. This limits its ability to respond to sudden needs or slowdowns in electrical demand. Ohio, along with all or parts of 12 other states and the District of Columbia, operates under the auspices of PJM Interconnection, L.L.C., a regional transmission organization, combining the various generation capabilities of 32 electric distribution utility companies. Stretching from the Chesapeake Bay to Lake Michigan and the border of

Iowa, PJM's multiple suppliers, differing weather patterns and even time zones should moderate and even-out electrical usage and costs.



So, what is going on here? Let's take a look at Chart 2, which shows the rate of increase of electrical rates in those states that have adopted some form of deregulation. Of all the states, our rate of cost increase stands alone as the highest.

Chart 3 is attached, showing AEP's own data placing Ohio consumers at the highest electric rate and profit for AEP in the states in AEP's territory. Could it be that AEP has Ohioans potentially subsidizing the citizens of other states? What does this mean for Ohio consumers in the near future as these trends continue?

How unhappy are the investor-owned utilities, the IOUs? Seemingly very unhappy; the previous head of FirstEnergy gave a speech a couple of years ago bemoaning the new era he found himself in; longing for the good old days of regulation. It was a full-throated roar for the previous status quo.

https://www.firstenergycorp.com/content/fecorp/newsroom/featured_stories/AJA-Chamber-Speech.html

One quote from Tony Alexander's speech stands out: "But quite frankly, the challenges we now face from government interference in the electric business are far more intrusive and disruptive, and I believe far more significant to our industry's future, and to your future. That's because whether it impacts our traditional regulated business or our competitive operations, government policy is now aimed at stifling the growth and use of electricity – and picking winners and losers in the competitive marketplace."

This statement ignores the role technology has played in changing the electrical landscape, and the very structure of the electrical system in America has for over a hundred years had governmental interference, largely at the request of the investor-owned electric utilities. In this regard, Ohio's 2008 energy law (Senate Bill 221) has ratemaking terms that favor electric utilities and disfavor Ohio consumers, resulting in higher electric rates. Remember, it was a hundred years ago that independent generators and distributors would service a city, having lines crisscrossing and zigzagging around town, with costs high and customer satisfaction low. What has been lost is the perspective that the IOUs were formed to have a regulated monopoly and to serve the citizens and their businesses; they were not formed to serve themselves.

The tradeoffs for the electric utilities involved the granting of a monopoly subject to economic regulation, with a set return for profit on investments, and the duty to serve consumers. There has been no free market for electricity in America for over a hundred years. If the utilities were really free market companies they would be seeking to open up territories for distribution competition; they are not. Even in Ohio, in a modestly free market environment, that option has never been on the table.

But what is the free market saying about the investor-owned electric utilities and their service to consumers? In a famous article in the Wall Street Journal it forecast the utilities marching toward a "Death Spiral" that once begun, like the event horizon surrounding a black hole, cannot be escaped.

What is this death spiral? In short, current costs are spread around throughout the whole electrical system. Utilities have incurred debt to finance very expensive generating plants, wires, poles, transformers and the like to create and move electrons. As Einstein did, let's play an imaginative mind game. Just pretend that residents and companies that comprise the service territory of an investor-owned electrical company decide one morning to institute efficiencies and other subtle changes. Everyone trades in incandescent light bulbs for LEDs. In 2012, about 49 million LEDs were installed in the U.S., saving about \$675 million in annual energy costs. If everyone changed to LEDs over the next two decades, this could save the U.S. \$250 billion in energy costs and reduce electric consumption for lighting by nearly 50%. Now multiply that by the commercial and industrial sector looking for cost savings. (Industry, commercial and residential uses all tend to cluster at about a third each.) http://apps1.eere.energy.gov/states/electricity_generation.cfm/state=OH

This will put more pressure on the utilities to raise their rates to consumers, so they have the income to pay debt. In turn this means more push by consumers for cost savings. If this continues, and as a variation of Moore's Law applies to renewable energy technology costs, more companies and then consumers begin to engage in distributed generation, either through solar cells, wind, waste heat recovery or on site natural gas driven generation combined with various forms of new electric storage technologies. As less electricity is used, then of course the price goes up for the remaining customers to pay for already incurred fixed costs. At some point in time, according to speculation by some industry watchers, the IOUs might not be able

to keep up, and go into the aforementioned death spiral, of higher prices driving more users to alternative means. The electric grid could be placed under considerable stress; this is not a good thing as those lowest on the economic food chain will be the last and least able to adapt.

Forbes Magazine has covered this story

<http://www.forbes.com/sites/jeffmcmahon/2014/02/04/utilities-want-regulatory-rescue-from-death-spiral/> , and Morning Star Investments has issued warnings to investors to be cautious with many electric IOUs.

<http://www.morningstar.com/cover/videocenter.aspx?id=641194>

However, there is not universal acclaim for the death spiral theory

<http://www.forbes.com/sites/jeffmcmahon/2014/02/04/utilities-want-regulatory-rescue-from-death-spiral/> The claim can be made that the industry has faced changes before, as in the replacement of natural gas street lamps with electric street lights almost a century ago. But, at least for Ohio, this overlooks the fact that natural gas is surprisingly non-fungible; it can only be moved through a rather limited number of pipelines. Currently, and projected for a generation to come, Ohio will be producing much more natural gas than needed. While some environmentalists view the idea of a sea of solar panels bringing the investor-owned utilities to bankruptcy as a golden era, it is much more likely that in the near term, on-site generation, especially during peak times, by natural gas powered generators and capturing waste heat is the more likely scenario.

As a result of this uncertainty, the investor-owned electric utilities are experiencing drops in stock prices. <http://money.cnn.com/data/markets/dowutil/>



This decline in stock price makes it more difficult for IOUs to gain financing for changes and reforms. In turn, the IOUs are seeking bail-outs subsidized by consumers, or to paraphrase Milton Friedman, “rent seeking,” through devices such as power purchase agreements, or PPAs. This rent seeking leads to increasing their wealth but without increasing the GDP. That is, the electric utilities are taking money from the consumer by seeking various schemes at the PUCO to increase their solvency in the short term (including by asking government to layer regulatory charges above market prices). Perhaps the utilities do this under the belief there is no long term in their industry. Whether or not that belief is founded, it is, in the words of one industry watcher from the fossil fuel industry, the “eight hundred pound gorilla in the room no one wants to talk about.”

So what to do? Consumers have grounds to be unhappy, commerce and business have grounds to be unhappy, and utility executives and stockholders have grounds to be unhappy. In fact, they all might have grounds to be very unhappy in the future, if some analysts are correct and the IOUs plunge into a death spiral.

Where is the Governor’s office? It seems to be watching the trends carefully, but making no sudden moves.

Where is the General Assembly? Growing increasingly concerned, but unsure of what is actually happening and who the main actors are, or villains, or heroes, if any, and at the urging of IOU lobbyists, going after the renewable industry, which is a minor player in this kabuki dance.

In addition, there are now a variety of energy marketers and other free market energy jobbers who are jabbing at the IOUs, sometimes offering electrons to consumers for less money, and undercutting the business model that stood for a hundred years. "Smart metering" is on the horizon where various technologies may have an impact on demand.

So, why can't this problem be fixed readily?

Much of the problem is perceptual blindness. In short, this just can't be happening.

The story goes that when Captain Cook arrived on the shores of Australia in 1770, the natives simply could not see the ship anchored in the bay. The ship was so far removed from their understanding, it was not until a shaman, by pointing at the ship's reflection on the water, created a situation where the Aborigines could look up and actually see the vessel.

This is called perceptual blindness. It occurs when what is happening in front of people is so outside their realm of everyday life and possibility, that they simply reject it.

Perceptual blindness is happening right now regarding the investor-owned electric utilities.

So how to fix it, including for consumers? First, there has to be a recognition of a problem; the problem is how we currently regulate this industry. There can be no other explanation as to why consumers' electric costs are so very high when compared to all the gifts Ohio has inherited.

How to get to a solution? Unfortunately the best tool in this case is yet another task force, but this time, the mere creation of it is an affirmation of the existence of the problem. In Ohio, this is progress.

How much time do we have? Experts believe the system will start to show serious stresses by 2017, 2018 by the latest, so time is of the essence.

Either we can take action or consumers will end up about as well off as the Aborigines did after Cook sailed to Australia.

The proposed task force will not directly fix anything, but it will begin the process to get everyone to the table to at least admit there is a problem, and the problem should be solved jointly.

SECTION 1. (A) There is hereby created the Legislative Task Force to Study Reforms in Electric Utility Law in the State. The Task Force shall consist of the following fifteen members:

(1) Three members of the House of Representatives, appointed by the Speaker of the House of Representatives in consultation with the Minority Leader of the House of Representatives. The Speaker of the House of Representatives shall designate one of the members the Speaker appoints to serve as co-chairperson of the Task Force.

(2) Three members of the Senate, appointed by the President of the Senate in consultation with the Minority Leader of the Senate. The President of the Senate shall designate one of the members the President appoints to serve as co-chairperson of the Task Force.

(3) The Chair of the Public Utilities Commission of Ohio;

(4) One member representing the agricultural industry in the state appointed by the Speaker of the House;

(5) One member representing large utility users appointed by the President of the Senate;

(6) One member representing electric utilities in the state, appointed by the Governor;

(7) One member representing the publicly owned utilities in the state, appointed by the Governor;

(10) One member who shall be a professor who is knowledgeable on the issues confronting the Task Force, appointed by the Chancellor of the Board of Regents;

(11) The Ohio Consumers' Counsel;

(12) The Director of the Development Services Agency or the Director's designee;

(13) One member representing the Attorney General of Ohio;

(B) Appointments to the Task Force shall be made not later than thirty days after the effective date of this section. Any vacancy in the membership of the Task Force shall be filled in the same manner as the original appointment. Members of the Task Force shall serve without compensation.

(C)(1) The Task Force shall study each of the following:

(a) The current state of electric utility law in Ohio and any reforms needed;

(b) How the changes in technology have impacted electric consumers and electric utilities for serving the public good in Ohio and to consider reforms if needed;

(c) The overall impact of state laws governing the electric utilities on economic development, consumers, and governments in Ohio.

(2) The Task Force shall prepare and submit to the General Assembly

by not later than December 15, 2016, a report that shall include the findings of its study and recommendations concerning electric utilities and electric utility consumers in Ohio. On submission of the report due not later than December 15, 2016, the Task Force shall cease to exist.

(D) The Legislative Service Commission shall provide any technical, professional, and clerical employees that are necessary for the Task Force to perform its duties.

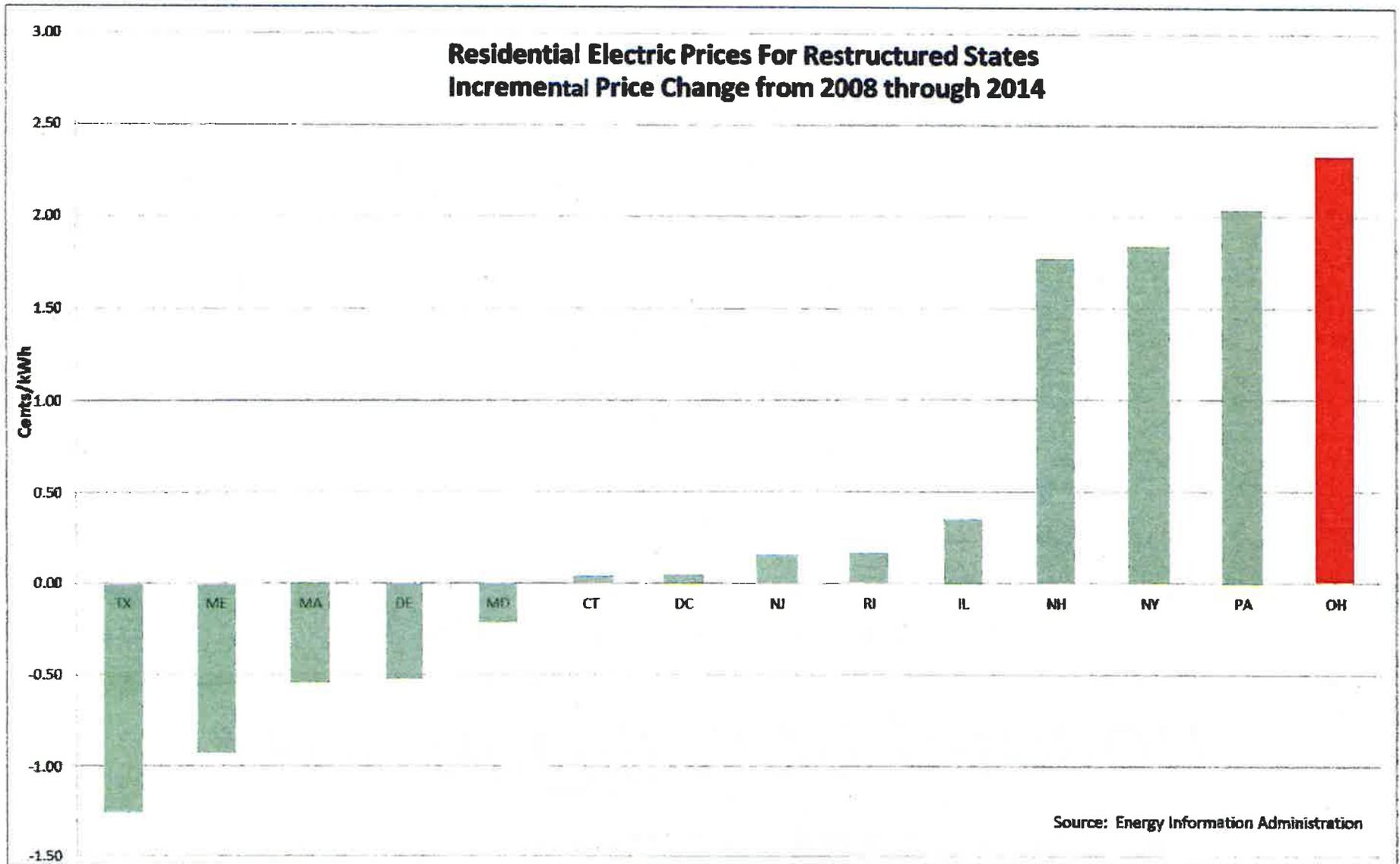
(E) All meetings of the Task Force are declared to be public meetings open to the public at all times. A member of the Task Force shall be present in person at a meeting that is open to the public in order to be considered present or to vote at the meeting and for the purposes of determining whether a quorum is present. The Task Force shall promptly prepare and maintain the minutes of its meetings, which shall be public records under section 149.43 of the Revised Code. The Task Force shall give reasonable notice of its meetings so that any person may determine the time and place of all scheduled meetings. The Task Force shall not hold a meeting unless it gives at least three days of advance notification to the news media organizations and others that have requested such notification.

2014 RESIDENTIAL ELECTRIC RATES by STATE

Chart 1

	State	December 2014 YTD Cents/Kwh		State	December 2014 YTD Cents/Kwh
1	Washington	8.71	27	Arizona	11.98
2	North Dakota	9.25	28	Kansas	12.13
3	West Virginia	9.33	29	Minnesota	12.14
4	Arkansas	9.49	30	Colorado	12.18
5	Louisiana	9.49	31	South Carolina	12.27
6	Idaho	9.76	32	New Mexico	12.33
7	Oklahoma	9.96	33	Ohio	12.38
8	Kentucky	10.05	34	Dist. of Columbia	12.78
9	Montana	10.26	35	Nevada	12.88
10	Tennessee	10.33	36	Pennsylvania	13.34
11	Nebraska	10.44	37	Delaware	13.37
12	Oregon	10.47	38	Maryland	13.62
13	South Dakota	10.51	39	Wisconsin	13.89
14	Wyoming	10.53	40	Michigan	14.50
15	Missouri	10.59	41	Maine	15.32
16	Utah	10.73	42	New Jersey	15.80
17	North Carolina	11.12	43	California	16.29
18	Virginia	11.19	44	Massachusetts	17.40
19	Indiana	11.25	45	Vermont	17.50
20	Iowa	11.35	46	New Hampshire	17.54
21	Mississippi	11.37	47	Rhode Island	17.56
22	Illinois	11.41	48	Alaska	19.31
23	Alabama	11.52	49	Connecticut	19.59
24	Georgia	11.57	50	New York	20.05
25	Texas	11.82	51	Hawaii	37.34
26	Florida	11.98		U.S. Total	12.50

Source: U.S. Energy Information Administration (EIA Table 5.6.B. Average Retail Price of Electricity to Ultimate Customers by End-Use Sector, by State, Year-to-Date through December 2014 (Cents per Kilowatthour)

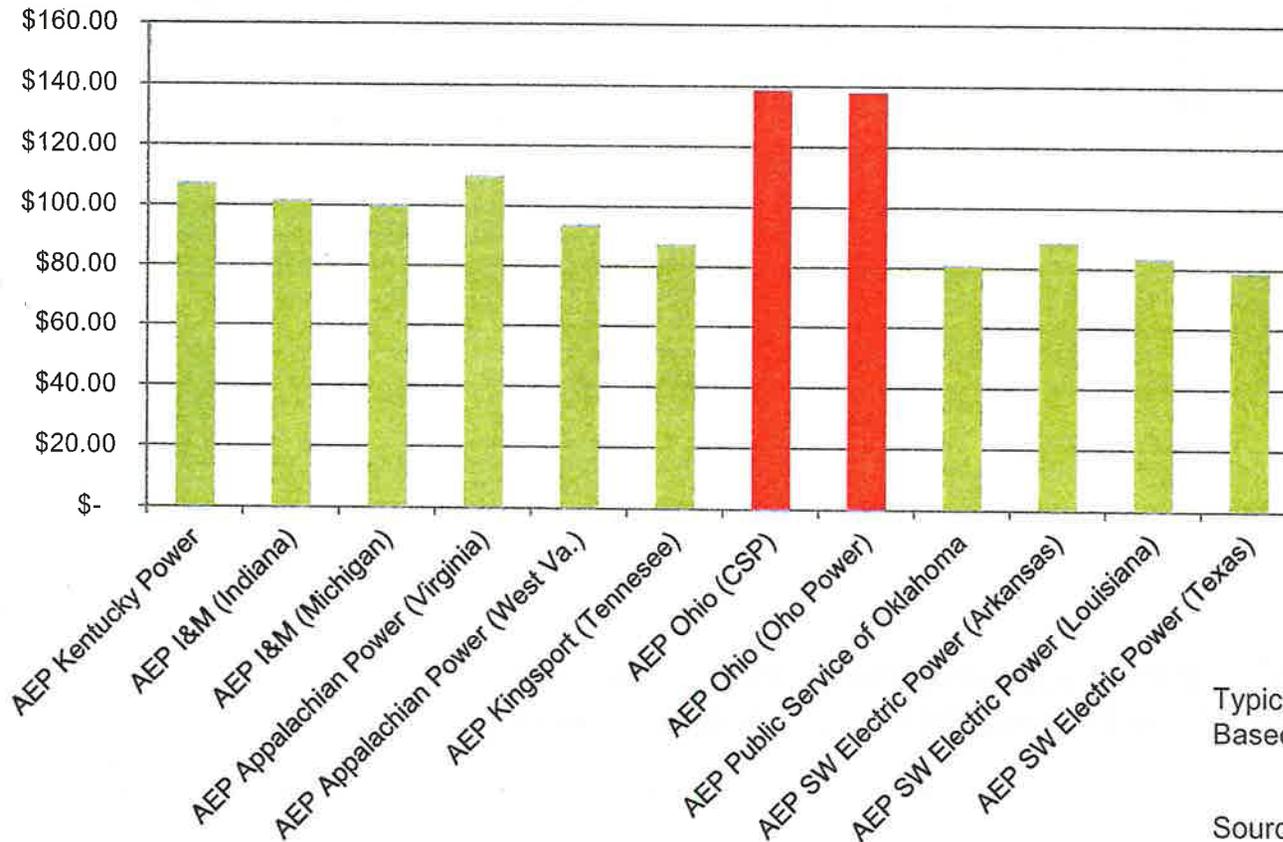


AEP Companies

Typical Bill Comparison

Chart 3

Typical Bill Comparison (\$/Month)

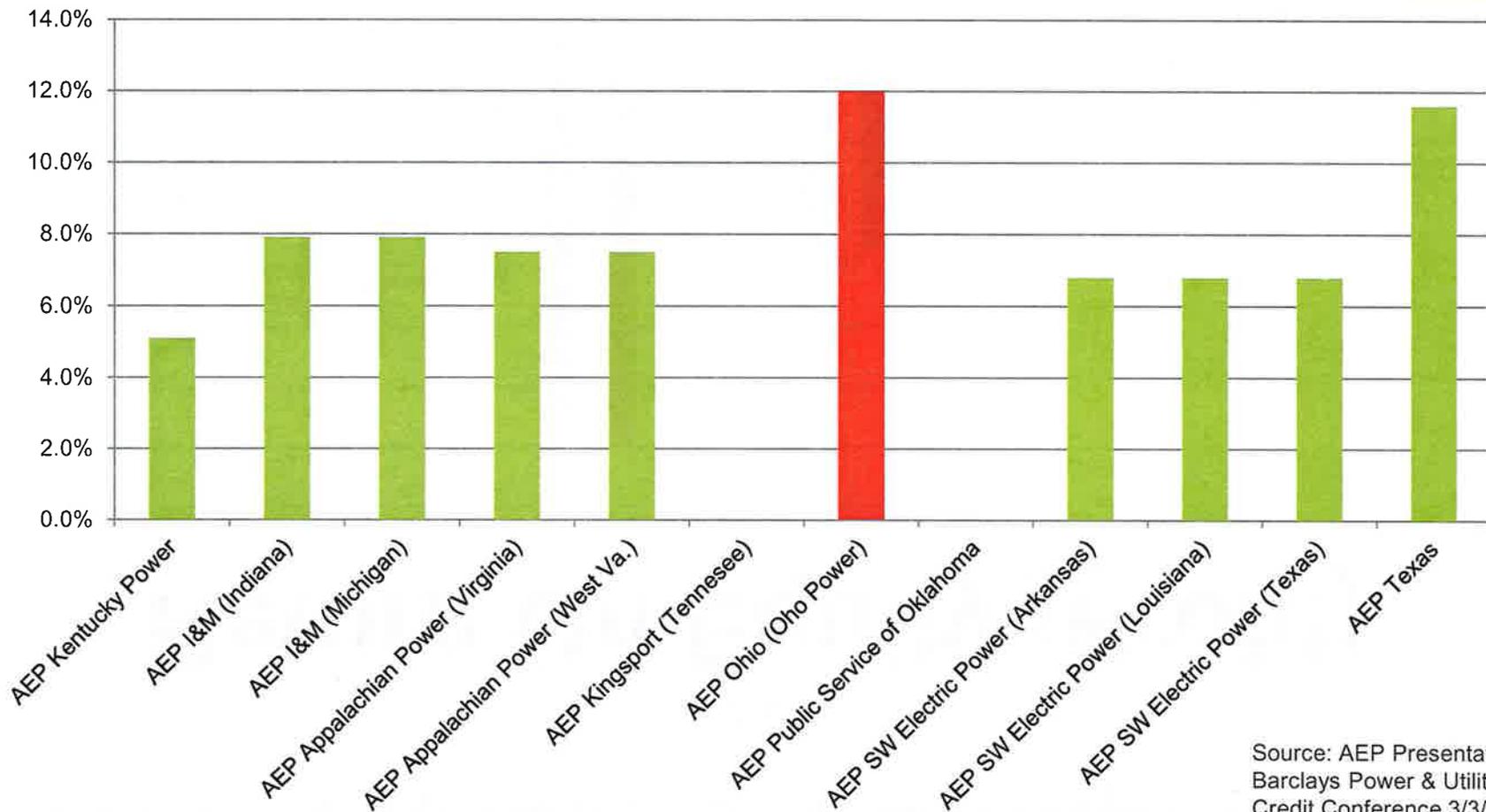


Typical Bills are displayed in \$/month,
Based on 1,000 kWh usage.

Source: 2014 AEP Fact Book

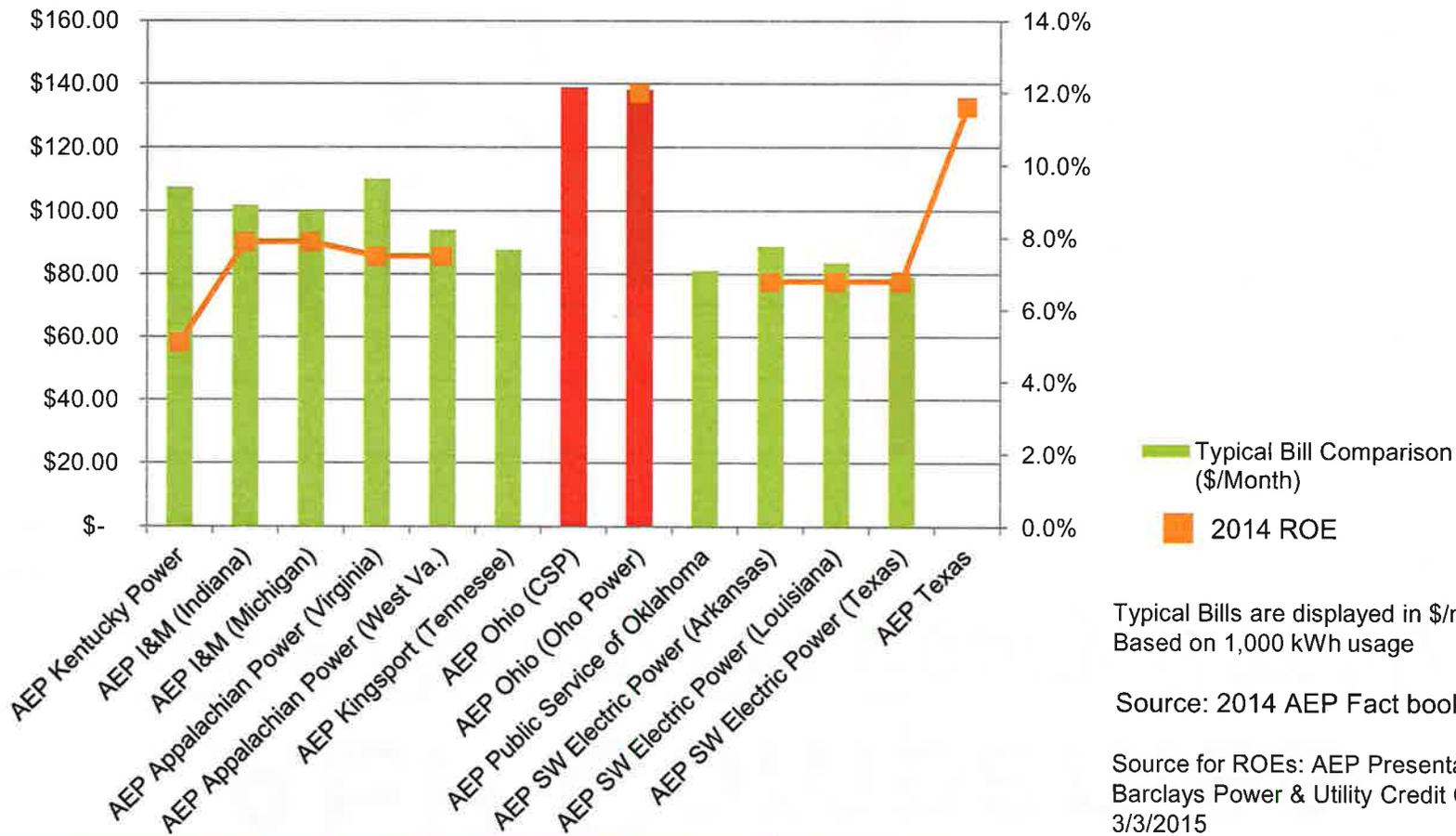
AEP Companies

2014 Return On Equity (Profit)



Source: AEP Presentation at
Barclays Power & Utility
Credit Conference 3/3/2015

AEP Typical Bill Comparison VS Return On Equity (Profit)



Typical Bills are displayed in \$/month, Based on 1,000 kWh usage

Source: 2014 AEP Fact book

Source for ROEs: AEP Presentation at Barclays Power & Utility Credit Conference 3/3/2015



Pro-forma 2015 Regulated ROE's

Expected Earned ROE's (Operating Earnings*)



Expected Regulated Operations ROE of 9.5%
Pro-forma 2015

** operating adjusts GAAP results by eliminating any material non operating items and is not weather normalized*

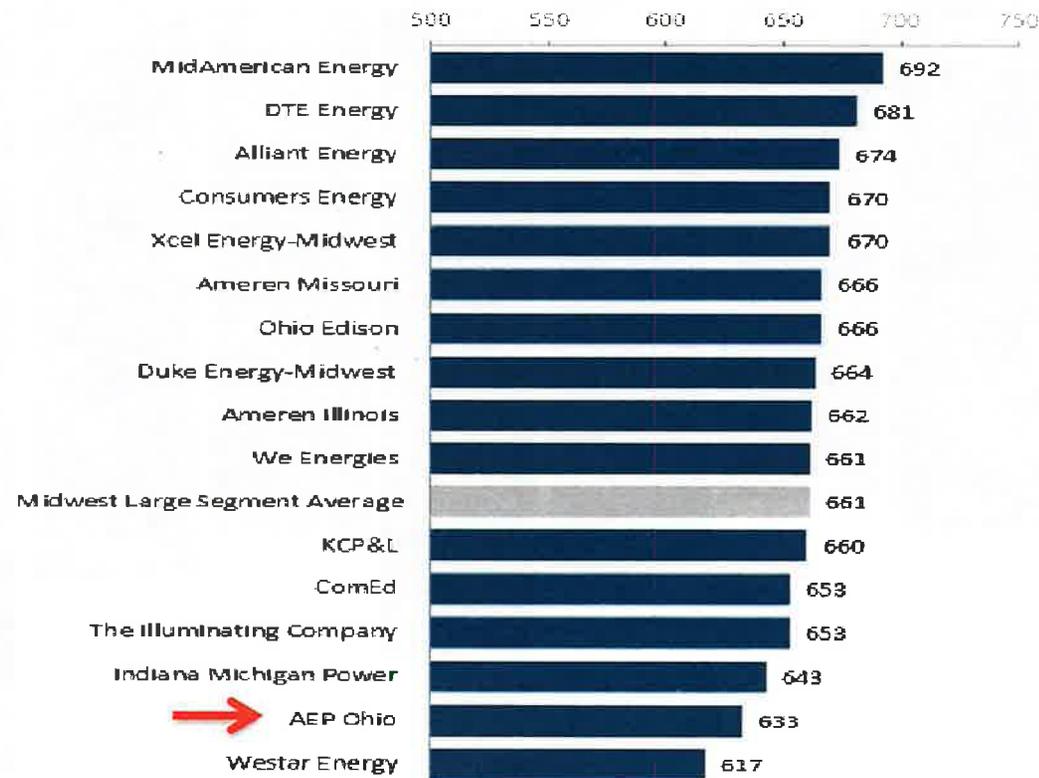
Source: 2015 Evercore ISI Utility CEO Retreat, Palm Beach, FL Jan. 8-9, 2015

Consumer Satisfaction Survey

J.D. Power
2015 Electric Utility Residential Customer Satisfaction StudySM

Midwest Region: Large Segment Customer Satisfaction Index Ranking

(Based on a 1,000-point scale)



Source: J.D. Power 2015 Electric Utility Residential Customer Satisfaction StudySM

Charts and graphs extracted from this press release for use by the media must be accompanied by a statement identifying J.D. Power as the publisher and the study from which it originated as the source. Rankings are based on numerical scores, and not necessarily on statistical significance. No advertising or other promotional use can be made of the information in this release or J.D. Power survey results without the express prior written consent of J.D. Power.

EIA-Net Generation by State, Type of Producer and Energy Source

State Historical Tables for 2014

Released: October 2015 (Revised: November 2015)

Next Update: November 2016

YEAR	STATE	TYPE OF PRODUCER	ENERGY SOURCE	GENERATION (Megawatthours)	% of Total
2014	AK	Total Electric Power Industry	Total	6,042,830	
2014	AK	Total Electric Power Industry	Coal	558,292	9.2%
2014	AK	Total Electric Power Industry	Hydroelectric Conventional	1,538,738	25.5%
2014	AK	Total Electric Power Industry	Natural Gas	3,288,022	54.4%
2014	AK	Total Electric Power Industry	Other	-2,313	0.0%
2014	AK	Total Electric Power Industry	Petroleum	445,621	7.4%
2014	AK	Total Electric Power Industry	Other Biomass	62,512	1.0%
2014	AK	Total Electric Power Industry	Wind	151,957	2.5%
2014	AK	Total Electric Power Industry	Wood and Wood Derived Fuels	0	0.0%
2014	AL	Total Electric Power Industry	Total	149,340,447	
2014	AL	Total Electric Power Industry	Coal	47,301,626	31.7%
2014	AL	Total Electric Power Industry	Hydroelectric Conventional	9,466,872	6.3%
2014	AL	Total Electric Power Industry	Natural Gas	48,270,074	32.3%
2014	AL	Total Electric Power Industry	Nuclear	41,243,689	27.6%
2014	AL	Total Electric Power Industry	Other Gases	180,403	0.1%
2014	AL	Total Electric Power Industry	Other	661	0.0%
2014	AL	Total Electric Power Industry	Petroleum	98,100	0.1%
2014	AL	Total Electric Power Industry	Other Biomass	46,937	0.0%
2014	AL	Total Electric Power Industry	Wood and Wood Derived Fuels	2,732,084	1.8%
2014	AR	Total Electric Power Industry	Total	61,592,137	
2014	AR	Total Electric Power Industry	Coal	33,220,755	53.9%
2014	AR	Total Electric Power Industry	Pumped Storage	67,070	0.1%
2014	AR	Total Electric Power Industry	Hydroelectric Conventional	2,639,776	4.3%
2014	AR	Total Electric Power Industry	Natural Gas	9,613,708	15.6%
2014	AR	Total Electric Power Industry	Nuclear	14,478,259	23.5%
2014	AR	Total Electric Power Industry	Other	13,078	0.0%
2014	AR	Total Electric Power Industry	Petroleum	29,274	0.0%
2014	AR	Total Electric Power Industry	Other Biomass	102,274	0.2%
2014	AR	Total Electric Power Industry	Wood and Wood Derived Fuels	1,427,943	2.3%
2014	AZ	Total Electric Power Industry	Total	112,257,187	
2014	AZ	Total Electric Power Industry	Coal	42,665,011	38.0%

EIA-Net Generation by State, Type of Producer and Energy Source

YEAR	STATE	TYPE OF PRODUCER	ENERGY SOURCE	GENERATION (Megawatthours)	% of Total
2014	AZ	Total Electric Power Industry	Pumped Storage	13,892	0.0%
2014	AZ	Total Electric Power Industry	Hydroelectric Conventional	6,118,261	5.5%
2014	AZ	Total Electric Power Industry	Natural Gas	27,241,879	24.3%
2014	AZ	Total Electric Power Industry	Nuclear	32,320,917	28.8%
2014	AZ	Total Electric Power Industry	Other	0	0.0%
2014	AZ	Total Electric Power Industry	Petroleum	56,862	0.1%
2014	AZ	Total Electric Power Industry	Solar Thermal and Photovoltaic	3,141,508	2.8%
2014	AZ	Total Electric Power Industry	Other Biomass	61,053	0.1%
2014	AZ	Total Electric Power Industry	Wind	468,115	0.4%
2014	AZ	Total Electric Power Industry	Wood and Wood Derived Fuels	169,690	0.2%
2014	CA	Total Electric Power Industry	Total	198,807,622	
2014	CA	Total Electric Power Industry	Coal	804,760	0.4%
2014	CA	Total Electric Power Industry	Geothermal	12,101,728	6.1%
2014	CA	Total Electric Power Industry	Pumped Storage	-104,740	-0.1%
2014	CA	Total Electric Power Industry	Hydroelectric Conventional	16,531,340	8.3%
2014	CA	Total Electric Power Industry	Natural Gas	120,426,435	60.6%
2014	CA	Total Electric Power Industry	Nuclear	16,985,978	8.5%
2014	CA	Total Electric Power Industry	Other Gases	1,332,951	0.7%
2014	CA	Total Electric Power Industry	Other	847,835	0.4%
2014	CA	Total Electric Power Industry	Petroleum	66,305	0.0%
2014	CA	Total Electric Power Industry	Solar Thermal and Photovoltaic	9,931,815	5.0%
2014	CA	Total Electric Power Industry	Other Biomass	2,913,292	1.5%
2014	CA	Total Electric Power Industry	Wind	12,992,498	6.5%
2014	CA	Total Electric Power Industry	Wood and Wood Derived Fuels	3,977,425	2.0%
2014	CO	Total Electric Power Industry	Total	53,847,386	
2014	CO	Total Electric Power Industry	Coal	32,544,849	60.4%
2014	CO	Total Electric Power Industry	Pumped Storage	-225,264	-0.4%
2014	CO	Total Electric Power Industry	Hydroelectric Conventional	1,769,801	3.3%
2014	CO	Total Electric Power Industry	Natural Gas	11,953,808	22.2%
2014	CO	Total Electric Power Industry	Other	46,874	0.1%
2014	CO	Total Electric Power Industry	Petroleum	9,932	0.0%
2014	CO	Total Electric Power Industry	Solar Thermal and Photovoltaic	253,065	0.5%
2014	CO	Total Electric Power Industry	Other Biomass	79,074	0.1%
2014	CO	Total Electric Power Industry	Wind	7,368,614	13.7%
2014	CO	Total Electric Power Industry	Wood and Wood Derived Fuels	46,633	0.1%

EIA-Net Generation by State, Type of Producer and Energy Source

YEAR	STATE	TYPE OF PRODUCER	ENERGY SOURCE	GENERATION (Megawatthours)	% of Total
2014	CT	Total Electric Power Industry	Total	33,676,980	
2014	CT	Total Electric Power Industry	Coal	824,948	2.4%
2014	CT	Total Electric Power Industry	Pumped Storage	6,782	0.0%
2014	CT	Total Electric Power Industry	Hydroelectric Conventional	433,960	1.3%
2014	CT	Total Electric Power Industry	Natural Gas	14,683,905	43.6%
2014	CT	Total Electric Power Industry	Nuclear	15,840,619	47.0%
2014	CT	Total Electric Power Industry	Other	604,506	1.8%
2014	CT	Total Electric Power Industry	Petroleum	513,414	1.5%
2014	CT	Total Electric Power Industry	Solar Thermal and Photovoltaic	11,706	0.0%
2014	CT	Total Electric Power Industry	Other Biomass	650,102	1.9%
2014	CT	Total Electric Power Industry	Wood and Wood Derived Fuels	107,038	0.3%
2014	DC	Total Electric Power Industry	Total	67,612	
2014	DC	Total Electric Power Industry	Natural Gas	67,612	100.0%
2014	DC	Total Electric Power Industry	Petroleum	0	0.0%
2014	DE	Total Electric Power Industry	Total	7,703,584	
2014	DE	Total Electric Power Industry	Coal	865,384	11.2%
2014	DE	Total Electric Power Industry	Natural Gas	6,297,458	81.7%
2014	DE	Total Electric Power Industry	Other Gases	226,379	2.9%
2014	DE	Total Electric Power Industry	Petroleum	183,282	2.4%
2014	DE	Total Electric Power Industry	Solar Thermal and Photovoltaic	49,530	0.6%
2014	DE	Total Electric Power Industry	Other Biomass	76,499	1.0%
2014	DE	Total Electric Power Industry	Wind	5,051	0.1%
2014	FL	Total Electric Power Industry	Total	230,015,937	
2014	FL	Total Electric Power Industry	Coal	52,053,689	22.6%
2014	FL	Total Electric Power Industry	Hydroelectric Conventional	211,388	0.1%
2014	FL	Total Electric Power Industry	Natural Gas	140,034,070	60.9%
2014	FL	Total Electric Power Industry	Nuclear	27,868,270	12.1%
2014	FL	Total Electric Power Industry	Other Gases	6,669	0.0%
2014	FL	Total Electric Power Industry	Other	2,890,816	1.3%
2014	FL	Total Electric Power Industry	Petroleum	1,877,927	0.8%
2014	FL	Total Electric Power Industry	Solar Thermal and Photovoltaic	241,684	0.1%
2014	FL	Total Electric Power Industry	Other Biomass	2,291,816	1.0%
2014	FL	Total Electric Power Industry	Wood and Wood Derived Fuels	2,539,608	1.1%
2014	GA	Total Electric Power Industry	Total	125,837,224	

EIA-Net Generation by State, Type of Producer and Energy Source

YEAR	STATE	TYPE OF PRODUCER	ENERGY SOURCE	GENERATION (Megawatthours)	% of Total
2014	GA	Total Electric Power Industry	Coal	45,295,113	36.0%
2014	GA	Total Electric Power Industry	Pumped Storage	-780,633	-0.6%
2014	GA	Total Electric Power Industry	Hydroelectric Conventional	3,064,347	2.4%
2014	GA	Total Electric Power Industry	Natural Gas	40,960,798	32.6%
2014	GA	Total Electric Power Industry	Nuclear	32,570,182	25.9%
2014	GA	Total Electric Power Industry	Other	66,997	0.1%
2014	GA	Total Electric Power Industry	Petroleum	377,810	0.3%
2014	GA	Total Electric Power Industry	Solar Thermal and Photovoltaic	119,227	0.1%
2014	GA	Total Electric Power Industry	Other Biomass	413,496	0.3%
2014	GA	Total Electric Power Industry	Wood and Wood Derived Fuels	3,749,886	3.0%
2014	HI	Total Electric Power Industry	Total	10,204,158	
2014	HI	Total Electric Power Industry	Coal	1,511,184	14.8%
2014	HI	Total Electric Power Industry	Geothermal	253,841	2.5%
2014	HI	Total Electric Power Industry	Hydroelectric Conventional	94,083	0.9%
2014	HI	Total Electric Power Industry	Other Gases	62,204	0.6%
2014	HI	Total Electric Power Industry	Other	405,019	4.0%
2014	HI	Total Electric Power Industry	Petroleum	6,925,919	67.9%
2014	HI	Total Electric Power Industry	Solar Thermal and Photovoltaic	39,262	0.4%
2014	HI	Total Electric Power Industry	Other Biomass	334,030	3.3%
2014	HI	Total Electric Power Industry	Wind	578,617	5.7%
2014	IA	Total Electric Power Industry	Total	56,853,282	
2014	IA	Total Electric Power Industry	Coal	33,732,765	59.3%
2014	IA	Total Electric Power Industry	Hydroelectric Conventional	878,605	1.5%
2014	IA	Total Electric Power Industry	Natural Gas	1,372,515	2.4%
2014	IA	Total Electric Power Industry	Nuclear	4,152,468	7.3%
2014	IA	Total Electric Power Industry	Other	0	0.0%
2014	IA	Total Electric Power Industry	Petroleum	143,929	0.3%
2014	IA	Total Electric Power Industry	Other Biomass	264,470	0.5%
2014	IA	Total Electric Power Industry	Wind	16,306,755	28.7%
2014	IA	Total Electric Power Industry	Wood and Wood Derived Fuels	1,776	0.0%
2014	ID	Total Electric Power Industry	Total	15,184,417	
2014	ID	Total Electric Power Industry	Coal	77,671	0.5%
2014	ID	Total Electric Power Industry	Geothermal	78,799	0.5%
2014	ID	Total Electric Power Industry	Hydroelectric Conventional	9,002,210	59.3%
2014	ID	Total Electric Power Industry	Natural Gas	2,552,538	16.8%

EIA-Net Generation by State, Type of Producer and Energy Source

YEAR	STATE	TYPE OF PRODUCER	ENERGY SOURCE	GENERATION (Megawatthours)	% of Total
2014	ID	Total Electric Power Industry	Other	74,878	0.5%
2014	ID	Total Electric Power Industry	Petroleum	1	0.0%
2014	ID	Total Electric Power Industry	Other Biomass	175,414	1.2%
2014	ID	Total Electric Power Industry	Wind	2,805,800	18.5%
2014	ID	Total Electric Power Industry	Wood and Wood Derived Fuels	417,105	2.7%
2014	IL	Total Electric Power Industry	Total	202,143,878	
2014	IL	Total Electric Power Industry	Coal	87,282,390	43.2%
2014	IL	Total Electric Power Industry	Hydroelectric Conventional	132,298	0.1%
2014	IL	Total Electric Power Industry	Natural Gas	5,465,425	2.7%
2014	IL	Total Electric Power Industry	Nuclear	97,857,900	48.4%
2014	IL	Total Electric Power Industry	Other Gases	338,093	0.2%
2014	IL	Total Electric Power Industry	Other	281,632	0.1%
2014	IL	Total Electric Power Industry	Petroleum	86,756	0.0%
2014	IL	Total Electric Power Industry	Solar Thermal and Photovoltaic	50,117	0.0%
2014	IL	Total Electric Power Industry	Other Biomass	566,372	0.3%
2014	IL	Total Electric Power Industry	Wind	10,082,894	5.0%
2014	IL	Total Electric Power Industry	Wood and Wood Derived Fuels	0	0.0%
2014	IN	Total Electric Power Industry	Total	115,395,392	
2014	IN	Total Electric Power Industry	Coal	97,548,739	84.5%
2014	IN	Total Electric Power Industry	Hydroelectric Conventional	371,153	0.3%
2014	IN	Total Electric Power Industry	Natural Gas	9,572,346	8.3%
2014	IN	Total Electric Power Industry	Other Gases	2,161,219	1.9%
2014	IN	Total Electric Power Industry	Other	390,684	0.3%
2014	IN	Total Electric Power Industry	Petroleum	1,362,544	1.2%
2014	IN	Total Electric Power Industry	Solar Thermal and Photovoltaic	102,127	0.1%
2014	IN	Total Electric Power Industry	Other Biomass	390,539	0.3%
2014	IN	Total Electric Power Industry	Wind	3,496,042	3.0%
2014	IN	Total Electric Power Industry	Wood and Wood Derived Fuels	0	0.0%
2014	KS	Total Electric Power Industry	Total	49,728,363	
2014	KS	Total Electric Power Industry	Coal	28,752,282	57.8%
2014	KS	Total Electric Power Industry	Hydroelectric Conventional	16,214	0.0%
2014	KS	Total Electric Power Industry	Natural Gas	1,452,523	2.9%
2014	KS	Total Electric Power Industry	Nuclear	8,558,384	17.2%
2014	KS	Total Electric Power Industry	Other	1	0.0%
2014	KS	Total Electric Power Industry	Petroleum	44,881	0.1%

EIA-Net Generation by State, Type of Producer and Energy Source

YEAR	STATE	TYPE OF PRODUCER	ENERGY SOURCE	GENERATION (Megawatthours)	% of Total
2014	KS	Total Electric Power Industry	Other Biomass	59,217	0.1%
2014	KS	Total Electric Power Industry	Wind	10,844,861	21.8%
2014	KY	Total Electric Power Industry	Total	90,896,435	
2014	KY	Total Electric Power Industry	Coal	83,601,961	92.0%
2014	KY	Total Electric Power Industry	Hydroelectric Conventional	3,143,567	3.5%
2014	KY	Total Electric Power Industry	Natural Gas	2,499,599	2.7%
2014	KY	Total Electric Power Industry	Other	49,941	0.1%
2014	KY	Total Electric Power Industry	Petroleum	1,153,377	1.3%
2014	KY	Total Electric Power Industry	Other Biomass	93,534	0.1%
2014	KY	Total Electric Power Industry	Wood and Wood Derived Fuels	354,455	0.4%
2014	LA	Total Electric Power Industry	Total	104,229,402	
2014	LA	Total Electric Power Industry	Coal	19,221,019	18.4%
2014	LA	Total Electric Power Industry	Hydroelectric Conventional	1,090,038	1.0%
2014	LA	Total Electric Power Industry	Natural Gas	56,120,564	53.8%
2014	LA	Total Electric Power Industry	Nuclear	17,311,330	16.6%
2014	LA	Total Electric Power Industry	Other Gases	1,942,575	1.9%
2014	LA	Total Electric Power Industry	Other	533,197	0.5%
2014	LA	Total Electric Power Industry	Petroleum	5,231,074	5.0%
2014	LA	Total Electric Power Industry	Other Biomass	93,877	0.1%
2014	LA	Total Electric Power Industry	Wood and Wood Derived Fuels	2,685,727	2.6%
2014	MA	Total Electric Power Industry	Total	31,118,591	
2014	MA	Total Electric Power Industry	Coal	2,794,889	9.0%
2014	MA	Total Electric Power Industry	Pumped Storage	-458,158	-1.5%
2014	MA	Total Electric Power Industry	Hydroelectric Conventional	902,077	2.9%
2014	MA	Total Electric Power Industry	Natural Gas	18,497,715	59.4%
2014	MA	Total Electric Power Industry	Nuclear	5,769,154	18.5%
2014	MA	Total Electric Power Industry	Other	878,130	2.8%
2014	MA	Total Electric Power Industry	Petroleum	1,004,834	3.2%
2014	MA	Total Electric Power Industry	Solar Thermal and Photovoltaic	306,321	1.0%
2014	MA	Total Electric Power Industry	Other Biomass	1,073,422	3.4%
2014	MA	Total Electric Power Industry	Wind	224,971	0.7%
2014	MA	Total Electric Power Industry	Wood and Wood Derived Fuels	125,237	0.4%
2014	MD	Total Electric Power Industry	Total	37,833,652	
2014	MD	Total Electric Power Industry	Coal	17,603,291	46.5%

EIA-Net Generation by State, Type of Producer and Energy Source

YEAR	STATE	TYPE OF PRODUCER	ENERGY SOURCE	GENERATION (Megawatthours)	% of Total
2014	MD	Total Electric Power Industry	Hydroelectric Conventional	1,615,523	4.3%
2014	MD	Total Electric Power Industry	Natural Gas	2,505,890	6.6%
2014	MD	Total Electric Power Industry	Nuclear	14,343,334	37.9%
2014	MD	Total Electric Power Industry	Other	313,284	0.8%
2014	MD	Total Electric Power Industry	Petroleum	463,456	1.2%
2014	MD	Total Electric Power Industry	Solar Thermal and Photovoltaic	98,118	0.3%
2014	MD	Total Electric Power Industry	Other Biomass	416,719	1.1%
2014	MD	Total Electric Power Industry	Wind	323,612	0.9%
2014	MD	Total Electric Power Industry	Wood and Wood Derived Fuels	150,426	0.4%
2014	ME	Total Electric Power Industry	Total	13,248,710	
2014	ME	Total Electric Power Industry	Coal	79,104	0.6%
2014	ME	Total Electric Power Industry	Hydroelectric Conventional	3,623,249	27.3%
2014	ME	Total Electric Power Industry	Natural Gas	4,344,381	32.8%
2014	ME	Total Electric Power Industry	Other	405,129	3.1%
2014	ME	Total Electric Power Industry	Petroleum	305,132	2.3%
2014	ME	Total Electric Power Industry	Other Biomass	205,386	1.6%
2014	ME	Total Electric Power Industry	Wind	1,097,329	8.3%
2014	ME	Total Electric Power Industry	Wood and Wood Derived Fuels	3,189,000	24.1%
2014	MI	Total Electric Power Industry	Total	106,816,991	
2014	MI	Total Electric Power Industry	Coal	52,899,844	49.5%
2014	MI	Total Electric Power Industry	Pumped Storage	-700,889	-0.7%
2014	MI	Total Electric Power Industry	Hydroelectric Conventional	1,600,022	1.5%
2014	MI	Total Electric Power Industry	Natural Gas	12,522,837	11.7%
2014	MI	Total Electric Power Industry	Nuclear	31,245,848	29.3%
2014	MI	Total Electric Power Industry	Other Gases	1,119,846	1.0%
2014	MI	Total Electric Power Industry	Other	403,801	0.4%
2014	MI	Total Electric Power Industry	Petroleum	1,051,330	1.0%
2014	MI	Total Electric Power Industry	Other Biomass	1,055,106	1.0%
2014	MI	Total Electric Power Industry	Wind	3,868,118	3.6%
2014	MI	Total Electric Power Industry	Wood and Wood Derived Fuels	1,751,129	1.6%
2014	MN	Total Electric Power Industry	Total	56,998,330	
2014	MN	Total Electric Power Industry	Coal	27,956,679	49.0%
2014	MN	Total Electric Power Industry	Hydroelectric Conventional	548,488	1.0%
2014	MN	Total Electric Power Industry	Natural Gas	3,869,633	6.8%
2014	MN	Total Electric Power Industry	Nuclear	12,707,166	22.3%

EIA-Net Generation by State, Type of Producer and Energy Source

YEAR	STATE	TYPE OF PRODUCER	ENERGY SOURCE	GENERATION (Megawatthours)	% of Total
2014	MN	Total Electric Power Industry	Other	396,987	0.7%
2014	MN	Total Electric Power Industry	Petroleum	62,536	0.1%
2014	MN	Total Electric Power Industry	Solar Thermal and Photovoltaic	2,653	0.0%
2014	MN	Total Electric Power Industry	Other Biomass	614,241	1.1%
2014	MN	Total Electric Power Industry	Wind	9,691,019	17.0%
2014	MN	Total Electric Power Industry	Wood and Wood Derived Fuels	1,148,927	2.0%
2014	MO	Total Electric Power Industry	Total	87,834,468	
2014	MO	Total Electric Power Industry	Coal	72,409,212	82.4%
2014	MO	Total Electric Power Industry	Pumped Storage	18,853	0.0%
2014	MO	Total Electric Power Industry	Hydroelectric Conventional	697,336	0.8%
2014	MO	Total Electric Power Industry	Natural Gas	4,044,294	4.6%
2014	MO	Total Electric Power Industry	Nuclear	9,276,356	10.6%
2014	MO	Total Electric Power Industry	Other	26,315	0.0%
2014	MO	Total Electric Power Industry	Petroleum	106,655	0.1%
2014	MO	Total Electric Power Industry	Solar Thermal and Photovoltaic	8,707	0.0%
2014	MO	Total Electric Power Industry	Other Biomass	83,226	0.1%
2014	MO	Total Electric Power Industry	Wind	1,131,105	1.3%
2014	MO	Total Electric Power Industry	Wood and Wood Derived Fuels	32,409	0.0%
2014	MS	Total Electric Power Industry	Total	55,127,092	
2014	MS	Total Electric Power Industry	Coal	10,742,566	19.5%
2014	MS	Total Electric Power Industry	Natural Gas	32,605,949	59.1%
2014	MS	Total Electric Power Industry	Nuclear	10,252,183	18.6%
2014	MS	Total Electric Power Industry	Other	4,344	0.0%
2014	MS	Total Electric Power Industry	Petroleum	14,101	0.0%
2014	MS	Total Electric Power Industry	Other Biomass	17,345	0.0%
2014	MS	Total Electric Power Industry	Wood and Wood Derived Fuels	1,490,603	2.7%
2014	MT	Total Electric Power Industry	Total	30,257,616	
2014	MT	Total Electric Power Industry	Coal	15,579,415	51.5%
2014	MT	Total Electric Power Industry	Hydroelectric Conventional	11,482,751	37.9%
2014	MT	Total Electric Power Industry	Natural Gas	515,454	1.7%
2014	MT	Total Electric Power Industry	Other Gases	10	0.0%
2014	MT	Total Electric Power Industry	Other	264,814	0.9%
2014	MT	Total Electric Power Industry	Petroleum	428,369	1.4%
2014	MT	Total Electric Power Industry	Wind	1,973,794	6.5%
2014	MT	Total Electric Power Industry	Wood and Wood Derived Fuels	13,009	0.0%

EIA-Net Generation by State, Type of Producer and Energy Source

YEAR	STATE	TYPE OF PRODUCER	ENERGY SOURCE	GENERATION (Megawatthours)	% of Total
2014	NC	Total Electric Power Industry	Total	128,143,588	
2014	NC	Total Electric Power Industry	Coal	49,238,197	38.4%
2014	NC	Total Electric Power Industry	Pumped Storage	78,009	0.1%
2014	NC	Total Electric Power Industry	Hydroelectric Conventional	4,756,083	3.7%
2014	NC	Total Electric Power Industry	Natural Gas	28,737,608	22.4%
2014	NC	Total Electric Power Industry	Nuclear	40,967,020	32.0%
2014	NC	Total Electric Power Industry	Other	631,153	0.5%
2014	NC	Total Electric Power Industry	Petroleum	459,687	0.4%
2014	NC	Total Electric Power Industry	Solar Thermal and Photovoltaic	729,130	0.6%
2014	NC	Total Electric Power Industry	Other Biomass	519,931	0.4%
2014	NC	Total Electric Power Industry	Wood and Wood Derived Fuels	2,026,770	1.6%
2014	ND	Total Electric Power Industry	Total	36,462,508	
2014	ND	Total Electric Power Industry	Coal	27,394,068	75.1%
2014	ND	Total Electric Power Industry	Hydroelectric Conventional	2,531,360	6.9%
2014	ND	Total Electric Power Industry	Natural Gas	234,315	0.6%
2014	ND	Total Electric Power Industry	Other Gases	40,143	0.1%
2014	ND	Total Electric Power Industry	Other	31,440	0.1%
2014	ND	Total Electric Power Industry	Petroleum	26,117	0.1%
2014	ND	Total Electric Power Industry	Other Biomass	2,652	0.0%
2014	ND	Total Electric Power Industry	Wind	6,202,412	17.0%
2014	NE	Total Electric Power Industry	Total	39,431,291	
2014	NE	Total Electric Power Industry	Coal	24,922,175	63.2%
2014	NE	Total Electric Power Industry	Hydroelectric Conventional	1,157,781	2.9%
2014	NE	Total Electric Power Industry	Natural Gas	405,712	1.0%
2014	NE	Total Electric Power Industry	Nuclear	10,101,838	25.6%
2014	NE	Total Electric Power Industry	Other	0	0.0%
2014	NE	Total Electric Power Industry	Petroleum	42,660	0.1%
2014	NE	Total Electric Power Industry	Other Biomass	64,185	0.2%
2014	NE	Total Electric Power Industry	Wind	2,736,939	6.9%
2014	NE	Total Electric Power Industry	Wood and Wood Derived Fuels	0	0.0%
2014	NH	Total Electric Power Industry	Total	19,538,395	
2014	NH	Total Electric Power Industry	Coal	1,310,999	6.7%
2014	NH	Total Electric Power Industry	Hydroelectric Conventional	1,381,362	7.1%
2014	NH	Total Electric Power Industry	Natural Gas	4,388,291	22.5%

EIA-Net Generation by State, Type of Producer and Energy Source

YEAR	STATE	TYPE OF PRODUCER	ENERGY SOURCE	GENERATION (Megawatthours)	% of Total
2014	NH	Total Electric Power Industry	Nuclear	10,168,265	52.0%
2014	NH	Total Electric Power Industry	Other	49,639	0.3%
2014	NH	Total Electric Power Industry	Petroleum	287,450	1.5%
2014	NH	Total Electric Power Industry	Other Biomass	125,393	0.6%
2014	NH	Total Electric Power Industry	Wind	411,581	2.1%
2014	NH	Total Electric Power Industry	Wood and Wood Derived Fuels	1,415,415	7.2%
2014	NJ	Total Electric Power Industry	Total	68,051,086	
2014	NJ	Total Electric Power Industry	Coal	2,519,106	3.7%
2014	NJ	Total Electric Power Industry	Pumped Storage	-236,904	-0.3%
2014	NJ	Total Electric Power Industry	Hydroelectric Conventional	17,296	0.0%
2014	NJ	Total Electric Power Industry	Natural Gas	31,410,341	46.2%
2014	NJ	Total Electric Power Industry	Nuclear	31,507,121	46.3%
2014	NJ	Total Electric Power Industry	Other Gases	161,682	0.2%
2014	NJ	Total Electric Power Industry	Other	640,134	0.9%
2014	NJ	Total Electric Power Industry	Petroleum	496,776	0.7%
2014	NJ	Total Electric Power Industry	Solar Thermal and Photovoltaic	514,252	0.8%
2014	NJ	Total Electric Power Industry	Other Biomass	998,426	1.5%
2014	NJ	Total Electric Power Industry	Wind	22,855	0.0%
2014	NM	Total Electric Power Industry	Total	32,306,210	
2014	NM	Total Electric Power Industry	Coal	20,355,631	63.0%
2014	NM	Total Electric Power Industry	Geothermal	8,736	0.0%
2014	NM	Total Electric Power Industry	Hydroelectric Conventional	98,381	0.3%
2014	NM	Total Electric Power Industry	Natural Gas	8,975,656	27.8%
2014	NM	Total Electric Power Industry	Other	665	0.0%
2014	NM	Total Electric Power Industry	Petroleum	63,157	0.2%
2014	NM	Total Electric Power Industry	Solar Thermal and Photovoltaic	515,054	1.6%
2014	NM	Total Electric Power Industry	Other Biomass	14,179	0.0%
2014	NM	Total Electric Power Industry	Wind	2,274,750	7.0%
2014	NV	Total Electric Power Industry	Total	36,000,537	
2014	NV	Total Electric Power Industry	Coal	6,547,864	18.2%
2014	NV	Total Electric Power Industry	Geothermal	2,728,788	7.6%
2014	NV	Total Electric Power Industry	Hydroelectric Conventional	2,389,000	6.6%
2014	NV	Total Electric Power Industry	Natural Gas	22,961,355	63.8%
2014	NV	Total Electric Power Industry	Other Gases	5,151	0.0%
2014	NV	Total Electric Power Industry	Other	14,965	0.0%

EIA-Net Generation by State, Type of Producer and Energy Source

YEAR	STATE	TYPE OF PRODUCER	ENERGY SOURCE	GENERATION (Megawatthours)	% of Total
2014	NV	Total Electric Power Industry	Petroleum	15,030	0.0%
2014	NV	Total Electric Power Industry	Solar Thermal and Photovoltaic	1,013,682	2.8%
2014	NV	Total Electric Power Industry	Other Biomass	24,568	0.1%
2014	NV	Total Electric Power Industry	Wind	300,134	0.8%
2014	NV	Total Electric Power Industry	Wood and Wood Derived Fuels	0	0.0%
2014	NY	Total Electric Power Industry	Total	137,122,202	
2014	NY	Total Electric Power Industry	Coal	4,592,054	3.3%
2014	NY	Total Electric Power Industry	Pumped Storage	-491,330	-0.4%
2014	NY	Total Electric Power Industry	Hydroelectric Conventional	26,086,902	19.0%
2014	NY	Total Electric Power Industry	Natural Gas	54,379,759	39.7%
2014	NY	Total Electric Power Industry	Nuclear	43,038,624	31.4%
2014	NY	Total Electric Power Industry	Other Gases	0	0.0%
2014	NY	Total Electric Power Industry	Other	933,084	0.7%
2014	NY	Total Electric Power Industry	Petroleum	2,136,484	1.6%
2014	NY	Total Electric Power Industry	Solar Thermal and Photovoltaic	70,616	0.1%
2014	NY	Total Electric Power Industry	Other Biomass	1,668,768	1.2%
2014	NY	Total Electric Power Industry	Wind	3,968,407	2.9%
2014	NY	Total Electric Power Industry	Wood and Wood Derived Fuels	738,834	0.5%
2014	OH	Total Electric Power Industry	Total	134,476,405	
2014	OH	Total Electric Power Industry	Coal	89,879,052	66.8%
2014	OH	Total Electric Power Industry	Hydroelectric Conventional	478,007	0.4%
2014	OH	Total Electric Power Industry	Natural Gas	23,636,445	17.6%
2014	OH	Total Electric Power Industry	Nuclear	16,284,440	12.1%
2014	OH	Total Electric Power Industry	Other Gases	929,388	0.7%
2014	OH	Total Electric Power Industry	Other	-3,393	0.0%
2014	OH	Total Electric Power Industry	Petroleum	1,246,673	0.9%
2014	OH	Total Electric Power Industry	Solar Thermal and Photovoltaic	53,908	0.0%
2014	OH	Total Electric Power Industry	Other Biomass	470,881	0.4%
2014	OH	Total Electric Power Industry	Wind	1,153,418	0.9%
2014	OH	Total Electric Power Industry	Wood and Wood Derived Fuels	347,586	0.3%
2014	OK	Total Electric Power Industry	Total	70,155,504	
2014	OK	Total Electric Power Industry	Coal	29,905,952	42.6%
2014	OK	Total Electric Power Industry	Pumped Storage	-105,798	-0.2%
2014	OK	Total Electric Power Industry	Hydroelectric Conventional	1,428,473	2.0%
2014	OK	Total Electric Power Industry	Natural Gas	26,641,474	38.0%

EIA-Net Generation by State, Type of Producer and Energy Source

YEAR	STATE	TYPE OF PRODUCER	ENERGY SOURCE	GENERATION (Megawatthours)	% of Total
2014	OK	Total Electric Power Industry	Other	-2,279	0.0%
2014	OK	Total Electric Power Industry	Petroleum	12,494	0.0%
2014	OK	Total Electric Power Industry	Other Biomass	91,651	0.1%
2014	OK	Total Electric Power Industry	Wind	11,936,833	17.0%
2014	OK	Total Electric Power Industry	Wood and Wood Derived Fuels	246,705	0.4%
2014	OR	Total Electric Power Industry	Total	60,119,907	
2014	OR	Total Electric Power Industry	Coal	3,192,593	5.3%
2014	OR	Total Electric Power Industry	Geothermal	183,467	0.3%
2014	OR	Total Electric Power Industry	Hydroelectric Conventional	35,261,936	58.7%
2014	OR	Total Electric Power Industry	Natural Gas	12,698,958	21.1%
2014	OR	Total Electric Power Industry	Other	43,004	0.1%
2014	OR	Total Electric Power Industry	Petroleum	9,884	0.0%
2014	OR	Total Electric Power Industry	Solar Thermal and Photovoltaic	24,042	0.0%
2014	OR	Total Electric Power Industry	Other Biomass	348,095	0.6%
2014	OR	Total Electric Power Industry	Wind	7,555,402	12.6%
2014	OR	Total Electric Power Industry	Wood and Wood Derived Fuels	802,526	1.3%
2014	PA	Total Electric Power Industry	Total	221,058,365	
2014	PA	Total Electric Power Industry	Coal	78,985,629	35.7%
2014	PA	Total Electric Power Industry	Pumped Storage	-578,653	-0.3%
2014	PA	Total Electric Power Industry	Hydroelectric Conventional	2,641,157	1.2%
2014	PA	Total Electric Power Industry	Natural Gas	53,021,235	24.0%
2014	PA	Total Electric Power Industry	Nuclear	78,714,659	35.6%
2014	PA	Total Electric Power Industry	Other Gases	490,777	0.2%
2014	PA	Total Electric Power Industry	Other	900,134	0.4%
2014	PA	Total Electric Power Industry	Petroleum	803,004	0.4%
2014	PA	Total Electric Power Industry	Solar Thermal and Photovoltaic	62,392	0.0%
2014	PA	Total Electric Power Industry	Other Biomass	1,904,224	0.9%
2014	PA	Total Electric Power Industry	Wind	3,564,730	1.6%
2014	PA	Total Electric Power Industry	Wood and Wood Derived Fuels	549,077	0.2%
2014	RI	Total Electric Power Industry	Total	6,281,748	
2014	RI	Total Electric Power Industry	Coal	0	0.0%
2014	RI	Total Electric Power Industry	Hydroelectric Conventional	3,964	0.1%
2014	RI	Total Electric Power Industry	Natural Gas	5,962,951	94.9%
2014	RI	Total Electric Power Industry	Petroleum	88,419	1.4%
2014	RI	Total Electric Power Industry	Solar Thermal and Photovoltaic	9,803	0.2%

EIA-Net Generation by State, Type of Producer and Energy Source

YEAR	STATE	TYPE OF PRODUCER	ENERGY SOURCE	GENERATION (Megawatthours)	% of Total
2014	RI	Total Electric Power Industry	Other Biomass	206,694	3.3%
2014	RI	Total Electric Power Industry	Wind	9,917	0.2%
2014	SC	Total Electric Power Industry	Total	97,158,465	
2014	SC	Total Electric Power Industry	Coal	28,914,307	29.8%
2014	SC	Total Electric Power Industry	Pumped Storage	-884,495	-0.9%
2014	SC	Total Electric Power Industry	Hydroelectric Conventional	2,569,126	2.6%
2014	SC	Total Electric Power Industry	Natural Gas	11,406,640	11.7%
2014	SC	Total Electric Power Industry	Nuclear	52,418,553	54.0%
2014	SC	Total Electric Power Industry	Other	46,265	0.0%
2014	SC	Total Electric Power Industry	Petroleum	245,574	0.3%
2014	SC	Total Electric Power Industry	Solar Thermal and Photovoltaic	4,785	0.0%
2014	SC	Total Electric Power Industry	Other Biomass	194,059	0.2%
2014	SC	Total Electric Power Industry	Wood and Wood Derived Fuels	2,243,652	2.3%
2014	SD	Total Electric Power Industry	Total	10,995,240	
2014	SD	Total Electric Power Industry	Coal	2,689,216	24.5%
2014	SD	Total Electric Power Industry	Hydroelectric Conventional	5,498,214	50.0%
2014	SD	Total Electric Power Industry	Natural Gas	464,817	4.2%
2014	SD	Total Electric Power Industry	Other	0	0.0%
2014	SD	Total Electric Power Industry	Petroleum	6,700	0.1%
2014	SD	Total Electric Power Industry	Other Biomass	0	0.0%
2014	SD	Total Electric Power Industry	Wind	2,336,293	21.2%
2014	TN	Total Electric Power Industry	Total	79,506,886	
2014	TN	Total Electric Power Industry	Coal	35,874,582	45.1%
2014	TN	Total Electric Power Industry	Pumped Storage	-491,183	-0.6%
2014	TN	Total Electric Power Industry	Hydroelectric Conventional	8,900,650	11.2%
2014	TN	Total Electric Power Industry	Natural Gas	6,199,618	7.8%
2014	TN	Total Electric Power Industry	Nuclear	27,670,006	34.8%
2014	TN	Total Electric Power Industry	Other Gases	13,047	0.0%
2014	TN	Total Electric Power Industry	Other	14,041	0.0%
2014	TN	Total Electric Power Industry	Petroleum	185,127	0.2%
2014	TN	Total Electric Power Industry	Solar Thermal and Photovoltaic	27,481	0.0%
2014	TN	Total Electric Power Industry	Other Biomass	89,567	0.1%
2014	TN	Total Electric Power Industry	Wind	51,140	0.1%
2014	TN	Total Electric Power Industry	Wood and Wood Derived Fuels	972,810	1.2%

EIA-Net Generation by State, Type of Producer and Energy Source

YEAR	STATE	TYPE OF PRODUCER	ENERGY SOURCE	GENERATION (Megawatthours)	% of Total
2014	TX	Total Electric Power Industry	Total	437,629,668	
2014	TX	Total Electric Power Industry	Coal	148,173,726	33.9%
2014	TX	Total Electric Power Industry	Hydroelectric Conventional	385,898	0.1%
2014	TX	Total Electric Power Industry	Natural Gas	204,721,155	46.8%
2014	TX	Total Electric Power Industry	Nuclear	39,287,443	9.0%
2014	TX	Total Electric Power Industry	Other Gases	2,306,672	0.5%
2014	TX	Total Electric Power Industry	Other	381,027	0.1%
2014	TX	Total Electric Power Industry	Petroleum	278,033	0.1%
2014	TX	Total Electric Power Industry	Solar Thermal and Photovoltaic	282,351	0.1%
2014	TX	Total Electric Power Industry	Other Biomass	733,454	0.2%
2014	TX	Total Electric Power Industry	Wind	40,005,124	9.1%
2014	TX	Total Electric Power Industry	Wood and Wood Derived Fuels	1,074,785	0.2%
2014	US-Total	Total Electric Power Industry	Total	4,093,606,005	
2014	US-Total	Total Electric Power Industry	Coal	1,581,710,350	38.6%
2014	US-Total	Total Electric Power Industry	Geothermal	15,876,941	0.4%
2014	US-Total	Total Electric Power Industry	Pumped Storage	-6,173,548	-0.2%
2014	US-Total	Total Electric Power Industry	Hydroelectric Conventional	259,366,622	6.3%
2014	US-Total	Total Electric Power Industry	Natural Gas	1,126,608,958	27.5%
2014	US-Total	Total Electric Power Industry	Nuclear	797,165,982	19.5%
2014	US-Total	Total Electric Power Industry	Other Gases	12,021,786	0.3%
2014	US-Total	Total Electric Power Industry	Other	13,461,295	0.3%
2014	US-Total	Total Electric Power Industry	Petroleum	30,231,862	0.7%
2014	US-Total	Total Electric Power Industry	Solar Thermal and Photovoltaic	17,691,031	0.4%
2014	US-Total	Total Electric Power Industry	Other Biomass	21,649,719	0.5%
2014	US-Total	Total Electric Power Industry	Wind	181,655,282	4.4%
2014	US-Total	Total Electric Power Industry	Wood and Wood Derived Fuels	42,339,725	1.0%
2014	UT	Total Electric Power Industry	Total	43,784,526	
2014	UT	Total Electric Power Industry	Coal	33,376,688	76.2%
2014	UT	Total Electric Power Industry	Geothermal	521,582	1.2%
2014	UT	Total Electric Power Industry	Hydroelectric Conventional	632,823	1.4%
2014	UT	Total Electric Power Industry	Natural Gas	8,376,420	19.1%
2014	UT	Total Electric Power Industry	Other Gases	0	0.0%
2014	UT	Total Electric Power Industry	Other	117,979	0.3%
2014	UT	Total Electric Power Industry	Petroleum	24,318	0.1%
2014	UT	Total Electric Power Industry	Solar Thermal and Photovoltaic	2,235	0.0%
2014	UT	Total Electric Power Industry	Other Biomass	72,530	0.2%

EIA-Net Generation by State, Type of Producer and Energy Source

YEAR	STATE	TYPE OF PRODUCER	ENERGY SOURCE	GENERATION (Megawatthours)	% of Total
2014	UT	Total Electric Power Industry	Wind	659,951	1.5%
2014	VA	Total Electric Power Industry	Total	77,137,438	
2014	VA	Total Electric Power Industry	Coal	20,818,584	27.0%
2014	VA	Total Electric Power Industry	Pumped Storage	-1,295,354	-1.7%
2014	VA	Total Electric Power Industry	Hydroelectric Conventional	955,188	1.2%
2014	VA	Total Electric Power Industry	Natural Gas	20,881,566	27.1%
2014	VA	Total Electric Power Industry	Nuclear	30,220,977	39.2%
2014	VA	Total Electric Power Industry	Other	499,767	0.6%
2014	VA	Total Electric Power Industry	Petroleum	1,204,907	1.6%
2014	VA	Total Electric Power Industry	Other Biomass	1,097,011	1.4%
2014	VA	Total Electric Power Industry	Wood and Wood Derived Fuels	2,754,793	3.6%
2014	VT	Total Electric Power Industry	Total	7,031,394	
2014	VT	Total Electric Power Industry	Hydroelectric Conventional	1,175,321	16.7%
2014	VT	Total Electric Power Industry	Natural Gas	2,465	0.0%
2014	VT	Total Electric Power Industry	Nuclear	5,060,582	72.0%
2014	VT	Total Electric Power Industry	Petroleum	5,473	0.1%
2014	VT	Total Electric Power Industry	Solar Thermal and Photovoltaic	23,536	0.3%
2014	VT	Total Electric Power Industry	Other Biomass	23,489	0.3%
2014	VT	Total Electric Power Industry	Wind	311,310	4.4%
2014	VT	Total Electric Power Industry	Wood and Wood Derived Fuels	429,218	6.1%
2014	WA	Total Electric Power Industry	Total	116,334,363	
2014	WA	Total Electric Power Industry	Coal	6,719,928	5.8%
2014	WA	Total Electric Power Industry	Pumped Storage	-4,753	0.0%
2014	WA	Total Electric Power Industry	Hydroelectric Conventional	79,463,144	68.3%
2014	WA	Total Electric Power Industry	Natural Gas	11,058,815	9.5%
2014	WA	Total Electric Power Industry	Nuclear	9,497,321	8.2%
2014	WA	Total Electric Power Industry	Other Gases	336,932	0.3%
2014	WA	Total Electric Power Industry	Other	131,267	0.1%
2014	WA	Total Electric Power Industry	Petroleum	23,541	0.0%
2014	WA	Total Electric Power Industry	Solar Thermal and Photovoltaic	729	0.0%
2014	WA	Total Electric Power Industry	Other Biomass	313,080	0.3%
2014	WA	Total Electric Power Industry	Wind	7,267,794	6.2%
2014	WA	Total Electric Power Industry	Wood and Wood Derived Fuels	1,526,564	1.3%
2014	WI	Total Electric Power Industry	Total	61,064,796	

EIA-Net Generation by State, Type of Producer and Energy Source

YEAR	STATE	TYPE OF PRODUCER	ENERGY SOURCE	GENERATION (Megawatthours)	% of Total
2014	WI	Total Electric Power Industry	Coal	37,449,264	61.3%
2014	WI	Total Electric Power Industry	Hydroelectric Conventional	2,471,773	4.0%
2014	WI	Total Electric Power Industry	Natural Gas	8,053,503	13.2%
2014	WI	Total Electric Power Industry	Nuclear	9,447,096	15.5%
2014	WI	Total Electric Power Industry	Other	61,737	0.1%
2014	WI	Total Electric Power Industry	Petroleum	319,032	0.5%
2014	WI	Total Electric Power Industry	Solar Thermal and Photovoltaic	1,194	0.0%
2014	WI	Total Electric Power Industry	Other Biomass	542,315	0.9%
2014	WI	Total Electric Power Industry	Wind	1,618,001	2.6%
2014	WI	Total Electric Power Industry	Wood and Wood Derived Fuels	1,100,881	1.8%
2014	WV	Total Electric Power Industry	Total	81,059,577	
2014	WV	Total Electric Power Industry	Coal	77,514,645	95.6%
2014	WV	Total Electric Power Industry	Hydroelectric Conventional	1,241,974	1.5%
2014	WV	Total Electric Power Industry	Natural Gas	653,302	0.8%
2014	WV	Total Electric Power Industry	Other Gases	30,878	0.0%
2014	WV	Total Electric Power Industry	Other	0	0.0%
2014	WV	Total Electric Power Industry	Petroleum	162,780	0.2%
2014	WV	Total Electric Power Industry	Other Biomass	4,615	0.0%
2014	WV	Total Electric Power Industry	Wind	1,451,383	1.8%
2014	WY	Total Electric Power Industry	Total	49,696,183	
2014	WY	Total Electric Power Industry	Coal	43,408,651	87.3%
2014	WY	Total Electric Power Industry	Hydroelectric Conventional	868,710	1.7%
2014	WY	Total Electric Power Industry	Natural Gas	557,121	1.1%
2014	WY	Total Electric Power Industry	Other Gases	336,768	0.7%
2014	WY	Total Electric Power Industry	Other	74,053	0.1%
2014	WY	Total Electric Power Industry	Petroleum	45,123	0.1%
2014	WY	Total Electric Power Industry	Wind	4,405,757	8.9%

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Attachment 2
OCC and OMA Legislative Proposals



Priorities for Improving Senate Bill 221 to Protect Customers of Electric Utilities

Senate Bill 221 (SB 221) contains some provisions that tilt the balance of ratemaking against Ohio's electric customers and in favor of electric utilities. Here are six ways to bring more balance to SB 221 for Ohio customers:

- 1. Problem:** Under SB 221, a utility is not required to refund excessive profits to customers. Only if the utility's profits are deemed "significantly excessive" is the utility required to refund the amount of over-earnings to its customers.

Consumer Protection: Modify the language of SB 221 to require any utility that earns "excessive" profits to refund to customers the full amount of any excess profits – not just those deemed "significantly excessive."
- 2. Problem:** SB 221 permits a utility to effectively "veto" PUCO orders in an electric security plan (ESP) case.

Consumer Protection: Eliminate the provision in SB 221 that grants a utility the privilege to withdraw its application for an electric security plan if the PUCO modifies the plan.
- 3. Problem:** SB 221 allows a utility to include above-market, nonbypassable generation/stability charges (e.g., rate stabilization charges, provider of last resort charges) in an electric security plan even though the utility is or will be operating in a competitive marketplace for generation.

Consumer Protection: Modify the language of SB 221 to expressly prohibit utilities from collecting above-market, nonbypassable generation/stability charges from customers.
- 4. Problem:** The electric security plans permitted under SB 221 are not needed. These plans allow utilities to charge for costs other than market prices for generation at a time when Ohioans should be benefitting now (14 years after the 1999 enactment of Senate Bill 3, Ohio's electric restructuring legislation) from the current low market price for electricity.

Consumer Protection: Eliminate the SB 221 language that allows utilities to file electric security plans.
- 5. Problem:** SB 221 prescribes as the standard for PUCO approval of an electric security plan that its pricing and other terms and conditions be "more favorable in the aggregate" than the expected results that would apply otherwise. PUCO consideration of qualitative factors (not just quantitative factors) means that utilities can more easily obtain approval of their plans.

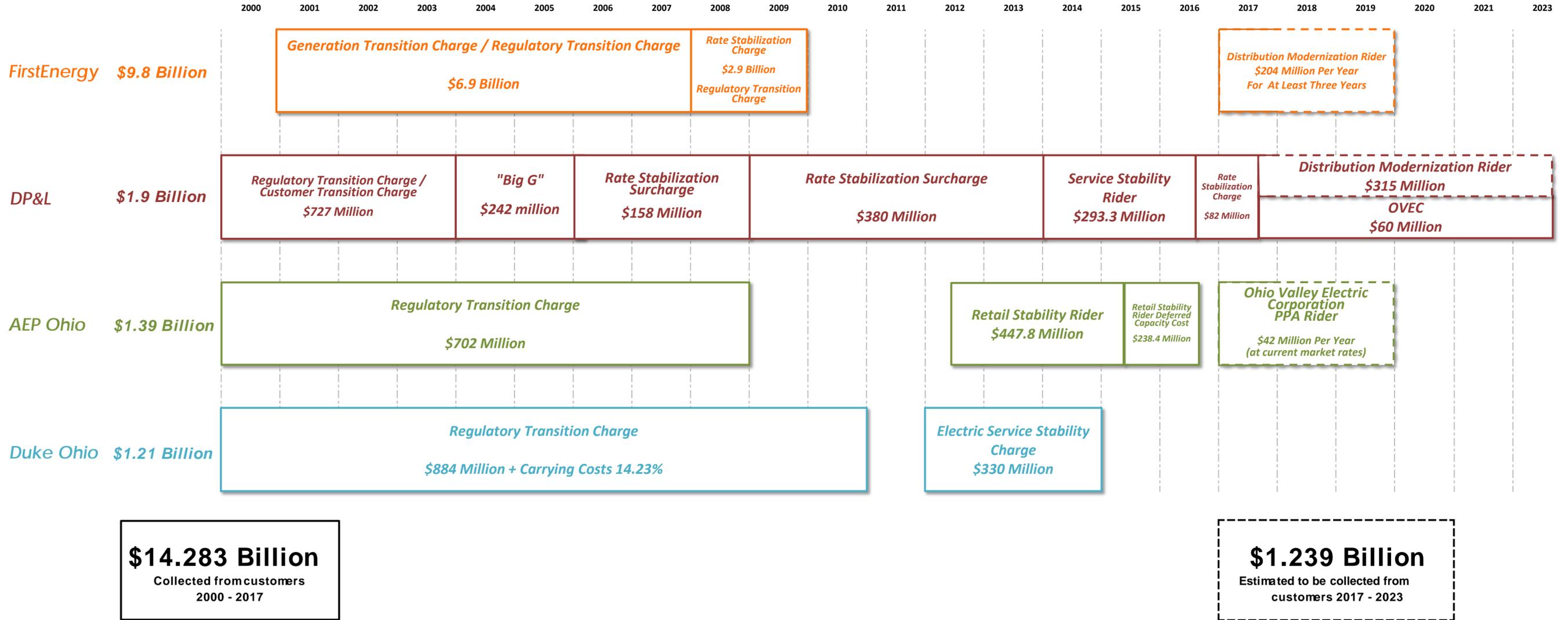
Consumer Protection: Modify the language of SB 221 to explicitly limit the "more favorable in the aggregate" test to solely quantitative factors.
- 6. Problem:** Under SB 221, an electric utility is allowed to keep what it already charged and collected from customers even after the Ohio Supreme Court finds the charges to be unjustified.

Consumer Protection: Modify the language of SB 221 to give customers the same financial protection a utility can obtain during the appeals process. This change will allow customers to obtain a refund of utility charges they paid when the Ohio Supreme Court reverses a PUCO order and finds such charges to be unjustified.

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Attachment 3
Subsidy Scorecard

SUBSIDY SCORECARD - ELECTRIC UTILITY CHARGES TO OHIOANS



Attachment 4

Board Resolution – Standard Service Offer



Resolution

Office of the Ohio Consumers' Counsel Governing Board

In Support of Preserving the Option of Public Utility Standard Offers for Ohio's Residential Consumers to Purchase Natural Gas and Electricity

- WHEREAS,** Ohioans are dependent upon natural gas, electricity or both for essential uses such as lighting, home heating, water heating and cooking; and
- WHEREAS,** Public utilities have historically made the commodities of natural gas and electricity available for sale to customers, in addition to providing the infrastructure (pipelines or wires and meters, etc.) to deliver natural gas and electricity to customers; and
- WHEREAS,** Ohio consumers' options for their supply of natural gas and electricity include purchasing natural gas and electricity through the public utilities' standard offers (which can vary in form between utilities) and from other sources such as energy marketers and government aggregators; and
- WHEREAS,** All traditional and alternative energy suppliers can use the public utilities' infrastructure to deliver their natural gas and electricity to Ohio consumers; and
- WHEREAS,** Some industry stakeholders favor eliminating the standard offer for customers to purchase natural gas from their utility (known in the industry as an "exit from the utility's merchant function") and there may be a similar interest by some in eliminating the standard offer option for customers to purchase electricity from their utility; and
- WHEREAS,** Eliminating the standard offer would remove one valuable customer option for purchasing natural gas or electricity; and
- WHEREAS,** Eliminating the standard offer would remove customers' ability to use the standard offer as a comparison price for considering the alternative offers of energy marketers; and
- WHEREAS,** The standard offers of the natural gas utilities, especially when prices are based on a competitive auction, have been very successful in reducing the natural gas bills of Ohioans who chose the utilities' standard offer for natural gas; likewise, the standard offers of certain electric utilities, when prices are based on a competitive auction, have reduced the electric bills of Ohioans who chose the utility's standard offer for electricity; and

WHEREAS, In recent news stories about a case at the Public Utilities Commission of Ohio it was widely reported that, based on 15 years of information obtained from an Ohio natural gas utility, customers who chose to purchase their natural gas from energy marketers paid \$885 million dollars more than what those customers would have paid had they purchased their natural gas from the public utility's standard offer; and

WHEREAS, The policy of Ohio, in Ohio Revised Code §4929.02, favors reasonable natural gas prices and diversity of natural gas supplies and suppliers for Ohio consumers; and

WHEREAS, The policy of Ohio, in Ohio Revised Code §4928.02, favors reasonable electricity prices and diversity of electricity supplies and suppliers for Ohio consumers; and

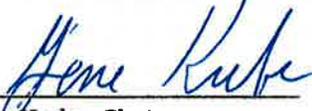
WHEREAS, The mission of the Office of the Ohio Consumers' Counsel (OCC) is to advocate for Ohio's residential utility consumers and the vision of OCC includes consumers having the ability "to choose among a variety of affordable, quality utility services."

THEREFORE, BE IT RESOLVED, that the Governing Board of the Office of the Ohio Consumers' Counsel supports the preservation of the standard service offer as an option for residential customers that can save them money on their natural gas and electricity bills and that provides a comparison price when considering offers from alternative suppliers;

AND, BE IT RESOLVED, that the Governing Board of the Office of the Ohio Consumers' Counsel supports advocacy by OCC to preserve the standard offer as a choice for residential customers in their purchases of natural gas and electricity and supports education by OCC to assist Ohio consumers with making economical choices for their purchases of natural gas and electricity;

AND, BE IT FURTHER RESOLVED, that the Governing Board of the Office of the Ohio Consumers' Counsel supports advocacy by OCC to preserve the standard offer as a choice for residential customers in their purchases of natural gas and electricity and supports education by OCC to assist Ohio consumers with making economical choices for their purchases of natural gas and electricity;

I verify that this Resolution has been approved by the Governing Board of the Office of the Ohio Consumers' Counsel, this fifteenth day of January 2013.



Gene Krebs, Chairman
Governing Board of the Office of the Ohio Consumers' Counsel

Attachment 5

Board Resolution - Submetering



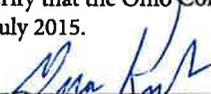
Resolution

Office of the Ohio Consumers' Counsel Governing Board

In support of protections for consumers who purchase public utility services through master-meters and/or submeters

- WHEREAS,** Public utility services are essential for Ohioans; and
- WHEREAS,** Ohioans need affordable, reasonably priced public utility services; and
- WHEREAS,** Residential consumers in many of Ohio's apartments, condominiums, manufactured homes, and other housing communities are not directly billed for utility services (such as electricity or water) by the public utility, electric cooperative, or municipality (or other provider certified by the Public Utilities Commission of Ohio ("PUCO")); instead, these consumers are charged by their property owner, condominium association, or other third party for utility service that is received at a master meter and/or submeter; and
- WHEREAS,** Residential consumers who are charged for resold utility services, through a master meter and/or submeter, lack the regulatory protection of the PUCO and lack the protection of competitive markets for these services; and
- WHEREAS,** Charges from a property owner, condominium association, or other third party for resold utility services, through a master meter and/or submeter, can result in significantly higher bills for residential consumers than what they would otherwise pay if they were provided service directly by the public utility, electric cooperative, or municipality (or other PUCO-certified provider) and also can result in the loss of other consumer protections; and
- WHEREAS,** Some residential consumers may not be aware when signing a lease or a housing agreement that the utility services they use will be resold to them through a master meter and/or submeter, without the rights and protections (including pricing protections) that are afforded to other customers; and
- WHEREAS,** Pricing protections and other protections are needed for residential consumers who are charged for utility services, through a master meter and/or submeter, by their property owner, condominium association, or other third party.
- THEREFORE, BE IT RESOLVED,** that the Governing Board of the Office of the Ohio Consumers' Counsel recommends that the Ohio General Assembly and the Public Utilities Commission of Ohio institute price protections and other protections for Ohioans who are charged for public utility services through a master meter and/or submeter by their property owner, condominium association, or other third party connected with their housing.

I verify that the Ohio Consumers' Counsel Governing Board approved this Resolution on the 21st day of July 2015.


Gene Krebs, Chairman

Ohio Consumers' Counsel Governing Board

Attachment 6
Dispatch Articles - Submetering

The Columbus Dispatch

Shocking cost investigation: Utility middle men charge renters inflated prices

Sunday

Posted Oct 20, 2013 at 12:01 AM

Updated Oct 20, 2013 at 4:58 PM

Consumer protection for utility customers sometimes stops at the apartment door in Ohio. Unlike most states, Ohio allows unregulated, third-party "submeter" companies to make big profits by reselling electricity and water to residents of apartments and condominiums. "They pretty much told me that I don't have a choice and this is how it is," said Rachelle Sexton, who rents at the Enclave at Albany Park in Westerville.

By Dan Gearino, The Columbus Dispatch

Consumer protection for utility customers sometimes stops at the apartment door in Ohio.

Unlike most states, Ohio allows unregulated, third-party "submeter" companies to make big profits by reselling electricity and water to residents of apartments and condominiums.

"They pretty much told me that I don't have a choice and this is how it is," said Rachelle Sexton, who rents at the Enclave at Albany Park in Westerville.

Her August bill was \$176.24, which was 30 percent more than she would have paid for the same usage at regulated prices.

>> More stories in our 'Shocking Cost' investigation

A 10-month investigation by *The Dispatch* found that residents pay markups of 5 percent to 40 percent when their landlords enter into contracts with certain submeter companies. If the customer fails to pay, the companies sometimes resort to collection tactics that would be illegal for regulated utilities, including shutting off heat in winter and even eviction.

The problems stem from an absence of regulation, a blind spot in Ohio law that affects an estimated 18,000 to 20,000 housing units in the Columbus area, and that has the potential to affect any of about 3 million Ohioans who live in apartments or condominiums.

"What it gets down to is the individual consumer," said Ohio Attorney General Mike DeWine in response to the *Dispatch* findings. "We made a public-policy decision years ago in this state that we were going to put in place certain protections for the individual utility consumer.

"It seems to be a problem when you have a small minority of consumers who do not have those protections. That, to me, would raise a lot of questions."

Yet no state agency has the authority to respond. That would require action by the Ohio legislature, DeWine said.

Here's how it works: A submeter company buys the utility meters and distribution system within an apartment complex. It then buys electricity or water, or both, from utilities and sells them to tenants, often at inflated prices and with fees.

In some cases, the submeter companies are owned by principal owners of the apartment complexes. And the submeter companies have names that sound like big, well-known businesses - names such as Nationwide Energy Partners and American Power & Light.

Complaints and questions about these companies are on the rise, with 5,137 inquiries to the Central Ohio Better Business Bureau about submeter companies since October 2012, up 33 percent from the year before.

The most-common complaints are about high bills and unresponsive customer service, said Joan Coughlin, a vice president in the office. "We had consumers state that they moved from a larger residence to a smaller apartment and had their utility costs increase," she said.

And, when a building is served by a submeter company, tenants are not eligible for money-saving programs available to most Ohioans. This includes the "choice" program, which allows customers to select a utility provider from among several. Instead, the submeter company is the only option.

Submeter customers also are ineligible for PIPP Plus, a federally funded subsidy for low-income residents available to anyone served by a state-regulated utility. The program served 41,160 households in Franklin County last year.

"We're being victimized," said Dustin Flowers, who rents at Northpark on the Far North Side. His most-recent bill was 23 percent more than it would have been at the regulated price.

He said high bills have thrown off his budget and forced him to cut back on spending in other areas. "I've lost sleep over this."

In many other states, this type of utility resale is banned by law or rule. That leaves just a few other states where it is allowed: Alabama, Georgia, Kansas, Pennsylvania, South Carolina, Utah and Washington.

What those states do not have is evidence that companies are using gaps in the system on a large scale. In this way, Ohio is unique, with companies whose business models depend on the lack of rules.

"Allowing markups for submetering is just bad policy," said Janine Migden-Ostrander, the former Ohio Consumers' Counsel who is now a principal at the Regulatory Assistance Project, a national nonprofit group that advises regulators on utility policy. "They aren't providing the customer with any real service that they wouldn't otherwise get from the utility company. There is no value added for the customer."

Made in central Ohio

The *Dispatch* investigation focuses on two central Ohio companies: American Power & Light and Nationwide Energy Partners. They sell services to property owners, read meters and handle billing and collections.

By acting as intermediary between utility and resident, the businesses perform functions of a utility without regulation.

Both companies have close ties to large apartment owners in the region, serving their tenants and others. American Power is part of a group that includes Ardent Property Management, and Nationwide Energy was founded by the chief executive of Lifestyle Communities.

While there are many similarities, the companies have some big differences. Nationwide Energy provides a detailed explanation of its fees, and it has a call center to respond to customers. It also works to resolve complaints and help those unable to pay, customers said.

In contrast, American Power is less responsive to customers and consumer groups, and it is more aggressive in collections. It gets a grade of D from the Better Business Bureau, compared with a B- for Nationwide Energy.

"We are moving toward complete transparency with the residents and the developers," said Mike Palackdharry, Nationwide Energy's president, interviewed at the company's Arena District offices.

He said his company delivers value that justifies the costs, including the convenience of a combined bill for water and power, and helping consumers reduce energy use.

"We are trying to do things the right way and to bring a positive impact to our residents," he said.

When presented with examples of customers paying more than the regulated price, Palackdharry said it was not a fair comparison, because his company's bills include charges for electricity use in common areas, such as hallways. If the tenants were not served by his company, those costs would lead to higher rents, he said.

After not responding to requests for an interview, Bill Finissi, American Power's vice president, provided *The Dispatch* with emailed responses to questions.

"(A)ll tenants enter into agreements with our company with eyes wide open and with full knowledge of the leasing contract provisions," he said.

"Our costs also include a share of common-area electrical usage, and a charge for submetering and administration," he said. "This is our business model which prospective tenants have complete freedom to accept or not. By the way, if we didn't do it this way, these extra costs, which are essential costs of providing apartment housing, would need to be included in the rent."

Consumer advocates say they would prefer that such charges were included in rent to make it easier for tenants to see the true costs when they shop for housing, as opposed to being surprised by high utility bills.

While submetering is legal throughout Ohio, the large majority of consumer complaints are in the Columbus area. Why not in other places? Consumer advocates can only guess. They point to a lack of well-organized tenants'-rights groups and the fact that Nationwide Energy and American Power happen to be based in the area.

Ohio's unique regulatory structure means that the business model easily could spread across the state. The model also could spread to other states with a similar lack of rules.

"Columbus is absolutely ground zero for these rebilling schemes," said Spencer Wells, a former tenant-outreach coordinator for the Coalition on Homelessness and Housing in Ohio, an advocacy group.

If residents are late with payments, American Power will sometimes evict them, even if the consumer's rent is up to date and even though American Power is not the landlord.

"Once you enter this slippery slope, where a third party has the ability to order evictions, that's shocking," said Emily Crabtree, a lawyer with Columbus Legal Aid who has defended American Power customers.

American Power initiated 51 eviction cases last year, according to Franklin County Municipal Court records. The company has opened 159 of the cases since 2010. Nationwide Energy opened 278 such cases from 2002 to 2011, but none since.

No connection to AEP

Despite familiar-sounding names, Nationwide Energy and American Power are not affiliated with two of Columbus' most-prominent companies, Nationwide Insurance and American Electric Power.

Housing-rights advocates say American Power's name is confusing for tenants who think they are dealing with the local utility, AEP. It's not as much of an issue for Nationwide Energy because Nationwide Insurance doesn't sell electricity.

Many of their practices would be illegal if the provider was a state-regulated utility like FirstEnergy or AEP.

In central Ohio, AEP sells electricity to the submetered complexes. The difference is that it sells in bulk to the property owner or submeter company, instead of to the end user.

Although AEP does not directly serve submeter customers, the company still gets calls from confused residents. AEP would prefer it if those customers were hooked up to AEP meters, but the company understands that submeter companies are following Ohio law, said spokeswoman Terri Flora.

"As people make choices to rent in an apartment, they need to be fully aware of what that choice involves," she said of the possibility of paying higher prices with a submeter company. "It's a different environment than consumers are used to."

According to AEP, there are about 130 submetered apartment or condominium complexes in central Ohio. When asked to estimate how many units are in the complexes, AEP said it is likely 18,000 to 20,000.

The state regulatory system was developed early in the last century to stop utilities from abusing local monopolies over the meters, wires and other delivery systems. Submeter companies did not exist then.

"As a matter of policy, we want all customers to be treated fairly and equally," said Todd Snitchler, chairman of the Public Utilities Commission of Ohio, which regulates utilities and is the type of agency that oversees submetering in many states.

While that might be the aim of Ohio's regulation, his agency lacks jurisdiction over submeter companies. He said that the Ohio General Assembly would need to take action for the PUCO to assert authority.

"That's a policy call for them to make," he said.

Customer bills tell story

When a customer questions the rates of Nationwide Energy or American Power, the companies reply that the charges are the same as those charged by the local utility. But that's not accurate, based on a *Dispatch* analysis of bills from a wide variety of customers.

In each case, the bills are based on the equivalent rates that would be charged by regulated utilities, except with added fees. When you include fees, customers are paying an extra 5 to 40 percent.

At the same time, the bills do not give customers the benefit of bulk-buying discounts and other savings that the submeter companies use to make their wholesale cost much lower than the regulated price.

To illustrate this, *The Dispatch* looked at a hypothetical 100-unit apartment complex in which each tenant used 750 kilowatt-hours of electricity in a month, which experts say is typical. At AEP's central Ohio regulated price, each household would get a bill for \$113.57, a figure confirmed by the utility.

However, if a submeter company bought the same amount of electricity for all 100 units, it would qualify for a commercial rate and it could also shop for a bulk-buying deal on Ohio's open market. Based on the commercial prices available in central Ohio, the complex could obtain the power for the equivalent of \$70.93 per unit.

By reselling power to the tenant at the full AEP rate of \$113.57, the submeter company's rate is 60 percent higher than its own wholesale power cost. And that doesn't include a host of submeter fees, which can easily exceed \$30 a month.

When presented with this, Palackdharry said the example overstates the potential profit because it does not take into account seasonal factors and other technical issues.

His boss, Nationwide Energy founder and CEO Mike DeAscentis Jr., went into great detail about the business model in a 2010 presentation to investors. "How we make money is we buy power at a commercial rate and we resell it at the residential rate and there is arbitrage in the rate structure," he said, according to a transcript obtained by *The Dispatch*.

DeAscentis is also the CEO of Lifestyle Communities, an apartment developer. He is the son of that company's founder and chairman, Mike DeAscentis Sr. Nationwide Energy provides its services to Lifestyle Communities and other large property managers, such as Crawford Hoying, which is owned by Brent Crawford and former Ohio State football player Bob Hoying.

Property owners are willing to sign these contracts because submeter companies often cover costs of setting up meters. Also, the submeter company will bill customers for electricity and water used in common areas and pass the money to the property owner. A regulated utility will not handle such payments.

"Our philosophy here is we are a real-estate company," said Dave Carline, president of Crawford Hoying's apartment division, explaining why his company hired Nationwide Energy. "We really wanted to get out of any energy business. We wanted to allow energy companies to do their own thing and let customers deal directly with them."

Nationwide Energy began in 1999 by installing its metering systems in newly built apartments. It later expanded to also serve older properties, including some in which tenants previously had individual meters and billing from the utility, and had no choice but to switch to the new provider. The company has about 40 employees.

"NEP is the new utility," DeAscentis said in the 2010 presentation. "We do everything that a utility does except generate power. NEP builds electrical-distribution systems for residential communities, and we were very deliberate when we started the business 10 years ago to put it in a place where it was not regulated."

He spoke of plans to expand into Pennsylvania, New York and the Washington, D.C., area. The company is now active in Pennsylvania.

"Our business is very unique," he said. "As we went across the country and did management presentations of people who see 300 or 400 deals a year in the energy space, no one ever saw a business that had a model like ours and what we were doing."

American Power was founded in 2003 by developer Donald R. Kenney Sr. It shares office space with many of his other ventures, including Ardent Property Management, Village Communities and Metro Development. His companies have built more than 35,000 apartments or condominium units, according to the Metro website.

Outside the mainstream

There are reasons other companies have not tried this. It is illegal in most states, and established submeter companies say that such a model has a high risk of lawsuits, intervention by regulators and blowback from angry consumers.

The submeter industry has been around for decades and has customers across North America and Europe. Most of these companies make money by selling equipment and services, and they comply with industry standards that say it is unethical to charge a markup on the cost of electricity or water.

"When you start trying to get creative (with pricing), you create problems for the entire industry, and we don't want that," said Matt White, president of Meter Technology Works of Tampa, Fla. He sells meters to submeter companies and is past president of the national submeter trade group, the Utility Management and Conservation Association.

The current president, Arthur Blankenship, owner of Argen Billing, an Atlanta-area submeter company, said he is concerned by reports of "rogue companies" in Ohio.

"Our industry doesn't have anything to hide, and if there are companies out there doing something dubious, that needs to be addressed," he said.

Neither Nationwide Energy nor American Power is a member of the trade group. But another local submeter company, Guardian Water & Power of Grandview Heights, is a longtime member.

Founded in 1983, Guardian has customers in 30 states. For its Ohio customers, Guardian typically charges about a \$3-per-month service fee for each apartment served, which the landlord can pay or pass along to the tenant. The company makes no profit from marking up water or power, and it has never evicted anybody.

Harry Apostolos, Guardian's co-founder and owner, declined to comment specifically about

Nationwide Energy or American Power, which he said are competitors.

In general, he said, some companies have chosen business models that go against industry best practices, and they have "created a black eye for the industry in central Ohio."

[Click here to read more about Guardian Water & Power's business practices](#)

State officials no help

Consumers often do not know what is happening. When they find out, they are shocked that this is legal in Ohio.

"It was inexplicable," said Gabriel Santiago of Reynoldsburg, a former Nationwide Energy customer who moved out of his apartment this year because of what he saw as excessive electricity charges.

Guy Fulcher, a former American Power customer who now lives in Galena, was fed up with the response when he tried to file a complaint.

"The attorney general back then was Richard Cordray, and his office just rolled over and said, 'We don't regulate that,??' he said. "They said to go to PUCO. PUCO said, 'We don't regulate that.??'"

Consumer advocates say that these extra charges, and the fact that they are legal in Ohio, should be a source of shame.

They would like to see the Ohio General Assembly or PUCO rein in the most-abusive of the practices. But first, they say, there must be awareness that a problem exists.

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The Columbus Dispatch

Shocking cost investigation: Lawmakers call for action on electricity markups

Tuesday

Posted Oct 22, 2013 at 12:01 AM

Updated Oct 22, 2013 at 9:41 AM

Rules protecting utility customers do not apply to thousands of apartment residents in Ohio, and that's a problem that should be fixed, according to a wide range of elected officials and regulators.

By Dan Gearino, The Columbus Dispatch

Rules protecting utility customers do not apply to thousands of apartment residents in Ohio, and that's a problem that should be fixed, according to a wide range of elected officials and regulators.

Over the past two days, a *Dispatch* investigation showed how some "submeter" companies use a lack of regulation to make a profit on the resale of electricity to apartment and condominium residents. The companies charge premiums that are 5 to 40 percent higher than regulated prices, often with little disclosure.

Submetering markups are legal in this state - although not in many others - but most state officials contacted were not aware of it.

They said the General Assembly should investigate.

"I didn't know this problem existed," said Sen. Bill Seitz, R-Cincinnati, chairman of the Ohio Senate Public Utilities Committee. "This bears some degree of looking into and some degree of regulation."

>> More stories in our 'Shocking Cost' investigation

Ohio Attorney General Mike DeWine, who also learned of this issue from the newspaper report, said he would welcome action by the legislature to investigate and potentially regulate these practices.

"Really, the regulations that are in place for most consumers are not in place for a certain minority of consumers that fall into this category, and that's really no fault of their own. It's just by chance of where they live," he said.

He thinks the use of evictions by submeter companies also should be part of the discussion. One of the companies, American Power & Light, goes to court to evict some tenants who fall behind on their utility bills, a practice that consumer advocates say is unconscionable.

Rep. Mike Foley, D-Cleveland, was the only legislator interviewed who was familiar with submetering in Ohio. He is former executive director of a tenants-rights group in his city and has sponsored several bills that deal with water submetering.

"It's something that isn't too hard to fix," he said.

What might be difficult, he said, is raising awareness and concern about rental-housing issues among his colleagues. Such issues don't come up often at the Statehouse.

"It's not something that people have a high knowledge base on," he said.

That isn't the case elsewhere.

In 29 states, officials have addressed submetering, making illegal at least some aspects of the practices employed by submetering companies doing business in Ohio.

For example, George Jepsen, the Connecticut attorney general, helped to arrange refunds for tenants in his state. "Submetering of electricity is restricted by state law because it does not afford consumers the same protections the law provides for utility customers," he said in a statement in June.

Ohio lawmakers seeking a model to emulate could look to Texas, a state whose electricity market is structured much like Ohio's. Texas is different because the state offers additional protections for apartment residents.

In Texas, a submeter company must pass through its cost of electricity to tenants. So, if the company uses its bulk buying power to get a big discount, the customers must receive all of the benefit. To verify that this is happening, the landlord must disclose the wholesale electricity cost to tenants. Submeter companies there make their money from service fees, which the law caps at 10 percent of the electricity bill.

Unlike Ohio, in which no agency regulates submeter companies, the Texas utility commission will investigate complaints. Since 2002, the agency in Texas had received 583 complaints about submetering, according to records provided in response to a request from *The Dispatch*.

That works out to about 50 per year, not a huge number to investigate, said Carol Biedrzycki, executive director of Texas Ratepayers Organization to Save Energy, an advocacy group.

"On this narrow issue, I would say this is a good rule and it's been well-enforced," she said.

Concern about workload was one of the reasons that Ohio regulators at one point decided not to get involved in regulating submeter companies.

In 1992, the PUCO ruled that it would not intervene in a dispute between a landlord and tenant over water submetering in a mobile-home park. That 4-1 ruling has served as a precedent when similar issues have come up.

The dissenting vote was from Ashley Brown, who now works for an energy research group at Harvard's Kennedy School of Government. He is not surprised to learn that some companies have built businesses on the idea of unregulated utility markups.

"It's an abusive monopoly power," he said. "These guys are providing nothing but gouging people."

Neither the PUCO nor the General Assembly has revisited the issue in a substantial way since then. This is despite major changes in the state's electricity market that stem from the 1999 decision to let consumers choose their electricity provider.

The 1999 law is what allows landlords and submeter companies to shop for the best deal, and it has no requirement that residents receive any of the savings. So a system designed to provide options and savings has instead led to monopolies and high prices for a subset of consumers.

This outcome was not the intention of the lawmakers who wrote the 1999 law, said Priscilla Mead, an Upper Arlington Republican and former legislator who co-sponsored the measure.

"There's a void in the law. That's all there is to it," she said.

She thinks the remedy is clear.

"It's up to the legislature to step in and do something about it," she said.

If lawmakers want to look at the issue, the Office of the Ohio Consumers' Counsel wants to be part of the discussion, said spokesman Marty Berkowitz. His agency is the state's consumer advocate on utility issues.

"(W)e are troubled by what we've read in the *Dispatch* articles," he said. "We are assessing options for protecting these customers who lack the usual state oversight for their utility services."

The Ohio Poverty Law Center, an advocate for low-income consumers, also would like to be at the table.

"There should be some reasonable regulations about what kind of charges are reasonable as far as administrative costs and commodity costs," said Joe Maskovyak, an attorney for the group.

For now, though, the best way to change the system is for renters to contact their legislators and ask for new rules, said Foley, the Cleveland lawmaker.

"Part of this is organizing within your own building," he said.

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The Columbus Dispatch

Shocking cost investigation: Summary

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At one time, apartment rent included just about every utility except the telephone. Gradually, property owners have switched to having tenants pay separate bills for the services.

By Dan Gearino, The Columbus Dispatch

Bottom line

At one time, apartment rent included just about every utility except the telephone. Gradually, property owners have switched to having tenants pay separate bills for the services. This often means the tenant has individual meters with electricity, natural gas and water companies. Sometimes, however, the property owner hires a "submeter" company to install meters in each unit and handle billing. For the tenants, the submeter company functions much like a utility.

[>> Read all stories in the series](#)

What we found:

-*- Lack of regulation allows Ohio submeter companies to charge residents more for electricity than the customers would pay to a regulated utility -- currently 5 percent to 40 percent more.

-*- One local submeter company, American Power & Light, uses evictions as a tool to help with collections, going far beyond the methods available to regulate utilities.

-*- No Ohio agency, including the Public Utilities Commission of Ohio and the Ohio attorney general's office, has any authority over submetering. The agencies often refer calls to the Better Business Bureau, which has seen a dramatic increase in inquiries about the companies.

-*- This submeter business model is legal only in the following other states: Alabama, Georgia, Kansas, Pennsylvania, South Carolina, Utah and Washington. There is no evidence that similar companies are using the model on a large scale in any of those states.

-*- The national trade group for submeter companies said some Ohio companies are outside the industry mainstream and pushing the envelope with their business practices. The Ohio companies are not members of the group.

How we did it:

-*- *The Dispatch* interviewed residents at apartment and condominium complexes across the region and analyzed their bills and reviewed their claims of unfair treatment. State officials, consumer advocates and energy-company executives also were interviewed.

-*- The bill analysis was done with the assistance of Riverside Energy of Dublin, a company that advises businesses on how to manage energy costs. American Electric Power also reviewed and confirmed the figures. The source documents were customers' bills and AEP's rate schedules.

-*- The information about state laws is based on interviews with officials in each state, with assistance from the Utility Management and Conservation Association, a national trade group for submeter companies.

Attachment 7

Board Resolution – Manufactured Gas Plants

Resolution

Governing Board of the Office of the Ohio Consumers' Counsel

In Support of Legislative Deference to Regulatory Processes at the Public Utilities Commission of Ohio

and

In Opposition to Weakening Statutory Standards that Protect Natural Gas Utility Customers from Paying Certain Environmental Remediation Costs

- WHEREAS,** Ohioans are dependent upon electricity, natural gas, telephone and water services; and
- WHEREAS,** The Ohio General Assembly has delegated to the Public Utilities Commission of Ohio ("PUCO") the responsibility for regulating public utilities and their services in the public interest; and
- WHEREAS,** The PUCO's regulatory responsibility often involves making decisions between competing proposals made by parties in litigation; and
- WHEREAS,** The PUCO's regulatory responsibility also can involve making decisions about proposals from parties in settlement of cases; and
- WHEREAS,** Parties in PUCO cases, whether in litigation or in settlement, devote what can be considerable time and resources to participating in PUCO processes; and
- WHEREAS,** The viability of the PUCO's processes depends, in part, on the parties' confidence and belief that that the system is fair and will bring finality (subject to appeal) to the issues in litigation or settlement; and
- WHEREAS,** The PUCO's processes, and parties who rely on those processes in good faith for a fair resolution of disputes, are disserved when others in the process seek legislative action to circumvent the outcomes at the PUCO; and
- WHEREAS,** The pending state budget bill (Am. Sub. H.B. 59) may be amended with language that would weaken the statutory standard that protects natural gas customers from paying for certain environmental remediation costs (such as costs for former manufactured gas plant site remediation).

THEREFORE, BE IT RESOLVED, that the Governing Board of the Office of the Ohio Consumers' Counsel opposes efforts to weaken the "used and useful" standard and other standards designed to fairly balance the interests of consumers and utilities.

AND BE IT FURTHER RESOLVED, that the Governing Board of the Office of the Ohio Consumers' Counsel encourages fair PUCO processes, for litigation and settlement, that offer parties an opportunity for issue resolution that will be respected and not circumvented by legislative actions sought by others in the PUCO process.

I verify that this Resolution has been approved by the Governing Board of the Office of the Ohio Consumers' Counsel, this 4th day of June 2013.



Gene Krebs, Chairman

Governing Board of the Office of the Ohio Consumers' Counsel

Attachment 8

Board Resolution – Telephone Service

Resolution

Governing Board of the Office of the Ohio Consumers' Counsel

In Support of Basic Local Telephone Service for Ohio Consumers

- WHEREAS,** Ohioans are dependent upon electricity, natural gas, telephone and water services; and
- WHEREAS,** It is the policy of the state of Ohio to ensure the availability of adequate basic local exchange service to citizens throughout the state; and
- WHEREAS,** Basic local telephone service is an essential service to thousands of consumers, especially elderly and rural consumers; and
- WHEREAS,** Ohio law requires incumbent local telephone companies to provide basic local telephone service, on a reasonable and nondiscriminatory basis, to all persons in their service areas who request basic local telephone service; and
- WHEREAS,** Ohio law provides pricing and service quality protections for basic local telephone service; and
- WHEREAS,** The pending state budget bill (Am. Sub. H.B. 59) may be amended with language that, among other things, could allow incumbent local telephone companies, in as soon as two years and at their option, to transfer customers from regulated basic local telephone service to an unregulated "voice service" that would not have pricing and service quality protections.

THEREFORE, BE IT RESOLVED, that the Governing Board of the Office of the Ohio Consumers' Counsel supports maintaining the most basic telephone service with price and quality protections for consumers and further recommends that, if this subject is to be considered, the subject should be considered in a stand-alone bill separate from the budget bill.

I verify that this Resolution has been approved by the Governing Board of the Office of the Ohio Consumers' Counsel, this 4th day of June 2013.



Gene Krebs, Chairman

Governing Board of the Office of the Ohio Consumers' Counsel

Attachment 9
Poverty and Food Insecurity



GUIDE TO EVIDENCE-BASED PREVENTION

State policy options to increase food security and access to healthy food

Food security and access to healthy food in Ohio

Food insecurity in Ohio

- In 2014, Ohio ranked **46th for food insecurity** in the U.S., with 45 states having a lower percent of households living without reliable, daily access to enough food.¹
- In 2014, **17 percent of Ohioans were living in food-insecure households**,² including nearly a quarter of children³ and more than 17 percent of seniors.⁴

Health outcomes

- Food insecurity is associated with increased **diabetes risk and poor diabetes control in adults**⁵ and **poor academic performance in children**.⁶
- Poor nutrition is a key factor in many of the leading causes of death in Ohio, including heart disease, stroke, diabetes and cancer.⁷

Healthcare costs

- Hunger costs Ohio an estimated **\$7 billion in healthcare, education and charity spending**⁸ – approximately \$600 for every Ohioan each year.⁹
- Preventing diabetes through lifestyle change, including improved nutrition, costs as little as \$440 per person per year.¹⁰
- Almost 15 percent of working-age adults enrolled in Medicaid in Ohio report having diabetes, well above the state rate of about 11 percent.¹¹ **Managing diabetes is estimated to cost Medicaid nearly \$4,000 per person per year in medical costs**.¹²

Evidence-based prevention strategies relevant to state policy

Increase participation in school breakfast programs ★

Ohio status

Fewer than half of eligible students in Ohio took advantage of free or reduced price school breakfasts in 2013-2014, resulting in \$68 million in unclaimed federal reimbursements.¹³

Policy options

- Support adoption of evidence-based practices to increase participation, such as offering breakfast in the classroom, "grab-and-go" options in more convenient locations or breakfast after first or second period.
- Provide free breakfast to all children in all schools.

Nutrition interventions in preschool and child care: Licensing standards

Because childcare settings play such an important role in establishing healthy habits for children, adding state licensing standards for healthy eating and active playtime can ensure all children have equitable access to healthy learning environments.

Ohio status

In 2014, Ohio's state licensing requirements for childcare facilities included only seven of the 47 components recommended to improve child nutrition by the National Resource Center for Health and Safety in Child Care and Early Education (NRC).¹⁴

Policy options

Continue to adopt licensing requirement recommendations from the NRC. (The Centers for Disease Control and Prevention [CDC] recommends states include at least 38 out of 47 recommendations.)

Evidence-based prevention strategies relevant to state policy (cont.)

Nutrition interventions in preschool and child care: Quality ratings	
<p>A state's childcare quality rating improvement system can incentivize childcare administrators to continue to improve their programs' health and safety.</p> <p>Ohio status Ohio's voluntary rating system, Step Up to Quality, does not include healthy eating standards.¹⁵</p>	<p>Policy options</p> <ul style="list-style-type: none"> • Adopt Step Up to Quality standards that require healthy eating policies, building upon existing resources: • Award Step Up to Quality bonus points for completion of the Ohio Healthy Program professional development designation process. • Award Step Up to Quality bonus points for compliance with 75 percent of the U.S. Department of Agriculture (USDA) Child and Adult Care Food Program best practices. • Consider Step Up to Quality recommendations proposed by the Ohio Early Childhood Health Network.
Competitive pricing for healthy foods (Incentives, subsidies or price discounts for healthy foods and beverages and/or disincentives or price increases for unhealthy foods and beverages)	
<p>Nutrition incentives increase the value of Supplemental Nutrition Assistance Program (SNAP) dollars when spent on produce, increasing affordability and accessibility to healthy fruits and vegetables for low-income consumers.¹⁶</p> <p>Ohio status</p> <ul style="list-style-type: none"> • Sixty-six of Ohio's 316 farmer's markets currently provide these incentives to SNAP customers.¹⁷ In 2015, participating markets saw \$140,000 in SNAP and incentive spending,¹⁸ increasing access to healthy foods and input to the local economy. This work is currently supported by local and federal funding. • The incentive model can be expanded to all venues that accept SNAP benefits, including grocery stores, corner stores, community-supported agriculture programs and others. <hr/> <p>State agencies and schools can use competitive pricing to decrease the cost of healthier options and increase the cost of less healthy options in food service venues and vending machines.¹⁹</p> <p>Ohio status</p> <ul style="list-style-type: none"> • Ohio has no recommendations or guidelines related to foods and beverages sold on state government property or by food vendors contracting with state government. • Ohio has no state guidelines for competitive pricing for healthy food in schools. 	<p>Policy options</p> <ul style="list-style-type: none"> • Fund a statewide program incentivizing the purchase of fruits and vegetables by SNAP consumers, similar to the Market Match program in California. • Assist Ohio's SNAP processing vendors in providing free wireless electronic benefits transfer (EBT) equipment and service to all farmer's markets as part of their state contract to increase EBT access. • Adopt healthy eating environment guidelines that include competitive pricing as a way to promote healthy eating in state agency cafeterias and other state-supported food venues.²⁰ • Develop and disseminate recommendations for schools to competitively price foods and beverages sold on school property.

Evidence-based prevention strategies relevant to state policy (cont.)

Diabetes Prevention Program (combined diet and physical activity promotion programs to prevent type 2 diabetes)	
<p>Ohio status</p> <ul style="list-style-type: none"> • Eighteen organizations have implemented the Diabetes Prevention Program (DPP) in Ohio, offering programs at more than 50 sites across the state.²¹ • In Ohio, only UnitedHealthcare currently reimburses for the cost of the DPP (for privately-insured only). Beginning in 2018, the DPP will also be covered as a Medicare preventive service. • No state employees are covered for the program through state-provided healthcare benefits.²² 	<p>Policy options</p> <ul style="list-style-type: none"> • Launch a high-intensity effort to increase screening, referral and treatment of prediabetes by healthcare providers, with special emphasis on Medicaid enrollees and state employees. • Encourage adoption of performance-based DPP reimbursement models by private health insurance. • Establish a Medicaid-approved, performance-based reimbursement model for all Medicaid managed care plans to incentivize adoption. • Incentivize program participation for patients through reduced out-of-pocket expenses, including waived co-pays for Medicaid enrollees. • Ensure health plan coverage and wellness programming for state employees includes performance-based program reimbursement and participation incentives. • Raise awareness among providers of prediabetes screening, identification and referral through dissemination of the Prevent Diabetes STAT toolkit.
Stable housing (housing choice vouchers and rapid rehousing programs) ★	
<p>Ohio status</p> <ul style="list-style-type: none"> • More than half of renters in Ohio spend at least 30 percent of their household income on rent, and more than 25 percent spend at least 50 percent of their income on rent, leaving little left for food.²³ • Ohio currently has only one state-funded housing assistance program, serving low-income people who are homeless and disabled.²⁴ 	<p>Policy options</p> <p>Establish a statewide housing assistance program to provide rental assistance to apartment owners who lease units to extremely low-income households.</p>

★=Likely to reduce health disparities (The Community Guide and/or What Works for Health have indicated that the strategy is likely to decrease disparities, including racial/ethnic, socioeconomic, geographic or other disparities, based upon the best available evidence.)

See [Evidence Inventory](#) publication for details and additional strategies

Our approach

To identify the strategies in this publication, HPIO and the Center for Public Health Practice (CPHP) at the Ohio State University developed an **Evidence Inventory** summarizing the following research reviews:

- What Works for Health (County Health Rankings and Roadmaps)
- Nutrition Evidence Library (USDA)
- The Guide to Community Preventive Services (CDC)
- U.S. Preventive Services Task Force Recommendations (Agency for Healthcare Research and Quality)

HPIO and CPHP selected strategies from the Evidence Inventory to include in this fact sheet that met the following criteria:

- Strong evidence for reducing food insecurity, improving access to healthy foods and reducing health disparities; or improving obesity, cardiovascular disease and diabetes outcomes through nutrition-based interventions
- Relevant to state policy and actionable by state legislators and/or state agency leaders
- Timely opportunity for our state given Ohio's current status and alignment with existing efforts, such as **Ohio's Plan to Prevent and Reduce Chronic Disease**

How can we improve health value in Ohio?

The **2014 HPIO Health Value Dashboard** identifies areas in which Ohio's performance is worse than most other states, including:

- Adult smoking
- Secondhand smoke exposure for children
- Adult diabetes
- Food insecurity
- Drug abuse (unmet need for illicit drug use treatment)
- Infant mortality



HPIO's **Guide to Evidence-Based Prevention** provides policymakers, community health improvement planners and philanthropy with the best-available sources of evidence for what works to address many of these challenges.

This fact sheet is part of a series of tools that comprise the Guide to Evidence-Based Prevention. HPIO will continue to add tools on specific health challenges throughout 2016. All publications can be found at: <http://bit.ly/1VVBPKH>

Notes

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www.hprio.net



Map the Meal Gap 2016:

Overall Food Insecurity in Ohio by County in 2014 ¹



County	Population	Food insecurity rate	Estimated number food insecure individuals (rounded)	Likely Income Eligibility for Federal Nutrition Assistance ²		
				% below 130% poverty <small>SNAP, WIC, free school meals, CSFP, TEFAP</small>	% between 130% and 185% poverty <small>WIC, reduced price school meals</small>	% above 185% poverty <small>Charitable Response</small>
Adams	28,342	18.1%	5,140	80%	6%	14%
Allen	105,562	16.5%	17,470	59%	13%	29%
Ashland	53,202	14.2%	7,550	59%	11%	30%
Ashtabula	100,346	15.7%	15,750	65%	12%	23%
Athens	64,840	19.8%	12,810	69%	4%	27%
Auglaize	45,867	11.8%	5,410	46%	19%	35%
Belmont	69,793	14.8%	10,300	51%	15%	34%
Brown	44,464	14.3%	6,370	62%	14%	24%
Butler	371,154	14.0%	52,060	50%	10%	41%
Carroll	28,539	13.7%	3,920	60%	14%	26%
Champaign	39,628	13.2%	5,220	52%	12%	36%
Clark	137,303	16.3%	22,410	61%	14%	25%
Clermont	199,450	12.3%	24,590	48%	9%	44%
Clinton	41,871	16.3%	6,840	56%	12%	32%
Columbiana	106,622	15.0%	15,960	59%	13%	28%
Coshocton	36,768	15.5%	5,700	66%	12%	22%
Crawford	43,036	15.1%	6,510	61%	13%	26%
Cuyahoga	1,267,513	19.4%	245,660	53%	14%	33%
Darke	52,537	13.7%	7,190	57%	17%	27%
Defiance	38,795	12.3%	4,750	58%	15%	27%
Delaware	181,821	9.0%	16,440	29%	11%	60%
Erie	76,416	15.0%	11,450	49%	15%	36%
Fairfield	148,067	13.2%	19,510	47%	12%	41%
Fayette	28,875	16.1%	4,660	64%	11%	25%
Franklin	1,197,592	17.9%	214,500	54%	13%	34%
Fulton	42,541	11.6%	4,920	51%	12%	37%
Gallia	30,763	16.1%	4,950	69%	12%	20%
Geauga	93,819	10.3%	9,680	43%	12%	45%
Greene	163,313	14.5%	23,650	48%	8%	44%
Guernsey	39,794	15.4%	6,140	65%	11%	24%
Hamilton	803,272	18.6%	149,740	53%	12%	36%
Hancock	75,290	12.9%	9,730	57%	10%	33%
Hardin	31,826	15.1%	4,800	61%	10%	29%
Harrison	15,698	14.5%	2,280	62%	15%	23%
Henry	28,074	12.1%	3,390	51%	9%	40%
Highland	43,266	16.5%	7,130	73%	12%	15%
Hocking	29,111	14.6%	4,250	62%	10%	28%
Holmes	43,176	12.4%	5,360	64%	24%	11%
Huron	59,186	14.2%	8,410	55%	14%	31%
Jackson	32,952	17.7%	5,840	73%	8%	19%
Jefferson	68,510	16.7%	11,410	57%	13%	29%
Knox	61,063	14.0%	8,520	56%	12%	32%
Lake	229,602	12.4%	28,410	41%	14%	46%
Lawrence	62,100	15.1%	9,350	61%	16%	23%
Licking	167,911	13.3%	22,330	49%	12%	39%
Logan	45,564	13.9%	6,330	65%	6%	30%
Lorain	302,465	14.3%	43,130	51%	10%	39%
Lucas	438,167	18.3%	80,260	60%	12%	28%
Madison	43,326	13.5%	5,850	44%	11%	45%
Mahoning	235,809	16.9%	39,790	56%	15%	29%
Marion	66,171	15.9%	10,520	61%	8%	31%
Medina	174,091	11.1%	19,280	38%	11%	51%
Meigs	23,564	16.9%	3,970	70%	12%	18%
Mercer	40,789	11.1%	4,530	42%	19%	39%
Miami	103,145	13.7%	14,090	52%	12%	35%
Monroe	14,590	17.1%	2,490	58%	14%	28%
Montgomery	534,801	18.4%	98,470	55%	14%	31%

County	Population	Food insecurity rate	Estimated number food insecure individuals (rounded)	Likely Income Eligibility for Federal Nutrition Assistance ²		
				% below 130% poverty <small>SNAP, WIC, free school meals, CSFP, TEFAP</small>	% between 130% and 185% poverty <small>WIC, reduced price school meals</small>	% above 185% poverty <small>Charitable Response</small>
Morgan	14,977	16.2%	2,420	65%	13%	22%
Morrow	34,991	12.6%	4,410	53%	12%	35%
Muskingum	85,947	16.7%	14,360	63%	15%	22%
Noble	14,561	14.8%	2,160	47%	21%	33%
Ottawa	41,304	12.6%	5,210	43%	16%	41%
Paulding	19,293	12.8%	2,470	56%	16%	28%
Perry	36,000	15.5%	5,590	65%	13%	22%
Pickaway	56,279	13.5%	7,620	47%	12%	41%
Pike	28,504	17.9%	5,100	74%	11%	15%
Portage	161,553	14.8%	23,930	54%	7%	39%
Preble	41,887	13.1%	5,510	56%	16%	29%
Putnam	34,256	9.6%	3,300	40%	14%	46%
Richland	122,813	16.2%	19,920	55%	14%	31%
Ross	77,552	16.1%	12,480	62%	10%	28%
Sandusky	60,498	12.9%	7,820	62%	12%	26%
Scioto	78,520	18.2%	14,280	70%	8%	23%
Seneca	56,100	14.2%	7,950	56%	11%	33%
Shelby	49,165	13.0%	6,380	51%	12%	38%
Stark	375,090	15.2%	57,080	53%	13%	34%
Summit	541,464	16.2%	87,480	50%	12%	38%
Trumbull	207,596	16.3%	33,820	56%	12%	33%
Tuscarawas	92,616	13.7%	12,690	58%	13%	29%
Union	53,090	11.2%	5,920	40%	13%	47%
Van Wert	28,612	12.7%	3,620	55%	19%	26%
Vinton	13,319	16.6%	2,220	72%	17%	11%
Warren	217,623	10.7%	23,290	30%	11%	59%
Washington	61,473	14.5%	8,880	61%	9%	30%
Wayne	114,978	13.0%	14,990	56%	16%	28%
Williams	37,493	13.3%	4,990	63%	18%	19%
Wood	128,139	13.7%	17,610	53%	7%	40%
Wyandot	22,535	12.5%	2,810	48%	17%	35%
State Total⁶	11,594,163	16.8%	1,943,340	52.3%	12.9%	34.7%

For additional data and maps by county, state, and congressional district, please visit www.feedingamerica.org/mapthegap.

Gundersen, C., A. Dewey, A. Crumbaugh, M. Kato & E. Engelhard. *Map the Meal Gap 2016: Food Insecurity and Child Food Insecurity Estimates at the County Level*. Feeding America, 2016. This research is generously supported by the Howard G. Buffett Foundation and The Nielsen Company.

¹Map the Meal Gap's food insecurity rates are determined using data from the 2001-2014 Current Population Survey on individuals in food insecure households; data from the 2014 American Community Survey on median household incomes, poverty rates, homeownership, and race and ethnic demographics; and 2014 data from the Bureau of Labor Statistics on unemployment rates.

²Numbers reflect percentage of food insecure individuals living in households with incomes within the income bands indicated. Eligibility for federal nutrition programs is determined in part by these income thresholds which can vary by state.

⁶Population and food insecurity data in the state totals row do not reflect the sum of all counties in that state. The state totals are aggregated from the congressional districts data in that state. All data in the state totals row pertaining to the cost of food or the "Meal Gap" reflect state-level data and are not aggregations of either counties or congressional districts.



Map the Meal Gap 2016:

Overall Food Insecurity in Ohio by Congressional District in 2014 ¹



Congressional District	Population	Food insecurity rate	Estimated number food insecure individuals (rounded)	Likely Income Eligibility for Federal Nutrition Assistance ²		
				% below 130% poverty	% between 130% and 185% poverty	% above 185% poverty
				SNAP, WIC, free school meals, CSEF, TEFAP	WIC, reduced price school meals	Charitable Response
1	729,726	19.3%	141,100	46%	12%	42%
2	724,587	15.9%	115,490	54%	10%	36%
3	755,499	23.0%	173,550	58%	18%	24%
4	709,882	15.4%	109,310	54%	11%	36%
5	730,503	13.0%	94,820	49%	13%	38%
6	713,457	15.9%	113,270	59%	10%	31%
7	725,548	14.4%	104,790	54%	11%	35%
8	722,889	15.0%	108,730	50%	12%	38%
9	709,813	19.4%	137,500	62%	14%	24%
10	720,794	19.0%	137,130	53%	11%	36%
11	699,736	29.8%	208,290	59%	17%	24%
12	755,978	12.4%	93,470	43%	9%	49%
13	707,940	18.0%	127,520	56%	14%	30%
14	722,474	12.2%	88,270	41%	12%	46%
15	740,854	14.3%	105,730	45%	12%	43%
16	724,483	11.6%	84,370	37%	13%	50%

For additional data and maps by county, state, and congressional district, please visit www.feedinamerica.org/mapthegap.

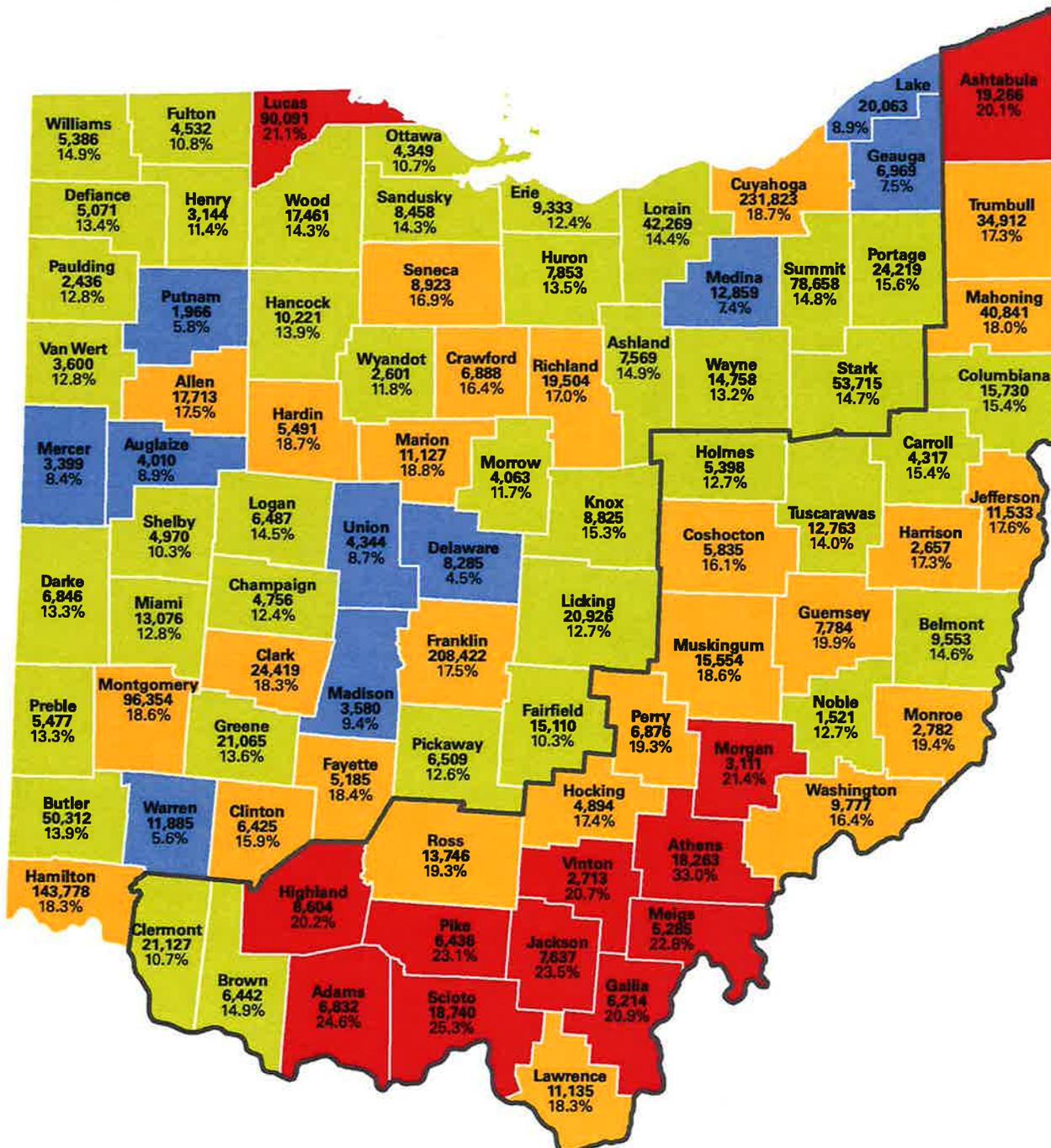
Gundersen, C., A. Dewey, A. Crumbaugh, M. Kato & E. Engelhard. *Map the Meal Gap 2016: Food Insecurity and Child Food Insecurity Estimates at the County Level*. Feeding America, 2016. This research is generously supported by the Howard G. Buffett Foundation and The Nielsen Company.

¹Map the Meal Gap's food insecurity rates are determined using data from the 2001-2014 Current Population Survey on individuals in food insecure households; and data from the 2014 American Community Survey on median household incomes, unemployment rates, poverty rates, homeownership, and race and ethnic demographics.

²Numbers reflect percentage of food insecure individuals living in households with incomes within the income bands indicated. Eligibility for federal nutrition programs is determined in part by these income thresholds which can vary by state.

Ohio

Poverty in Ohio by County 2011-2015 American Community Survey



Statewide Poverty
1,775,836
15.8%

**Percentage
County Population
in Poverty**

- 4.5% - 9.9%
- 10.0% - 15.8%
- 15.9% - 19.9%
- 20.0% - 33.0%

Appalachian Ohio

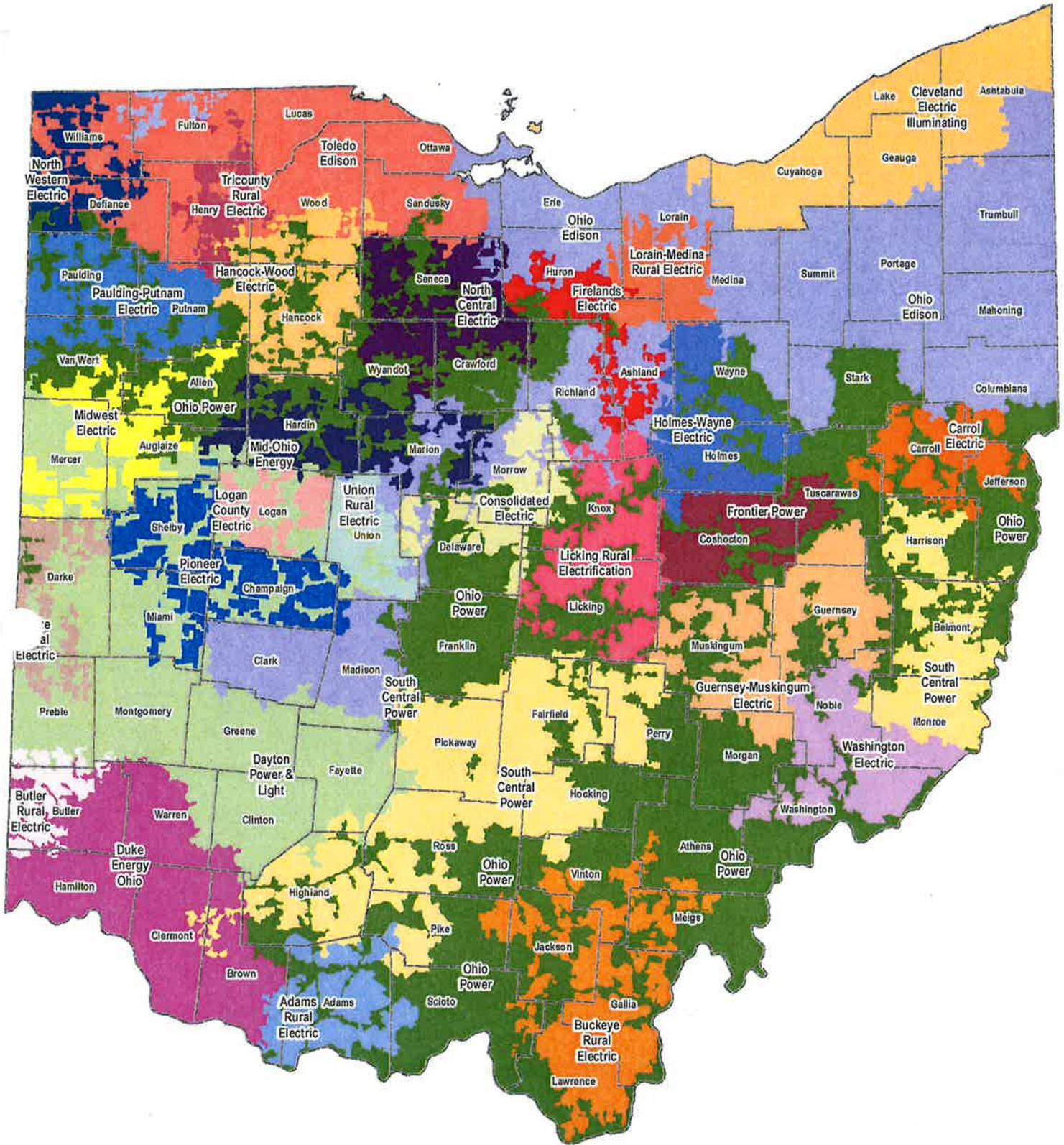
This map shows the 2011-2015 American Community Survey estimates of the number and percentage of persons in poverty by county

Source:
2011-2015 American Community Survey,
U.S. Census Bureau

Prepared by:
Office of Research
Ohio Development Services Agency
January 2017

Attachment 10
PUCO Maps – Utility Service Areas

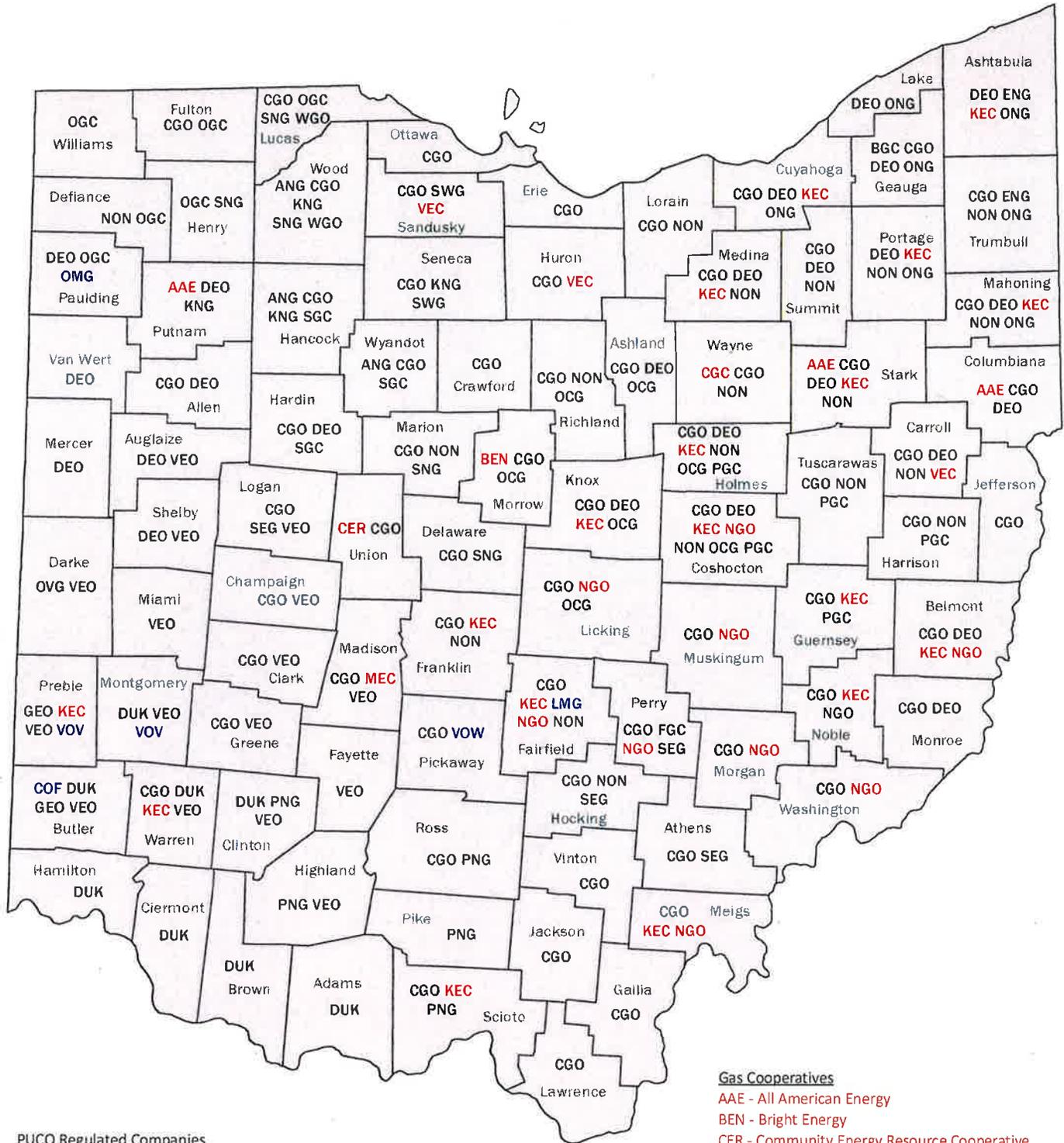
Electric Service Areas of Ohio



- | | | | | |
|---------------------------------|-----------------------------|-------------------------------|----------------------------|--------------------------|
| Adams Rural Electric | Darke Rural Electric | Hancock-Wood Electric | Midwest Electric | Paulding-Putnam Electric |
| Buckeye Rural Electric | Dayton Power & Light | Holmes-Wayne Electric | Midwest Energy Cooperative | Pioneer Electric |
| Butler Rural Electric | Duke Energy Ohio | Licking Rural Electrification | North Central Electric | South Central Power |
| Carroll Electric | Firelands Electric | Logan County Electric | North Western Electric | Toledo Edison |
| Cleveland Electric Illuminating | Frontier Power | Lorain-Medina Rural Electric | Ohio Edison | Tricounty Rural Electric |
| Consolidated Electric | Guernsey-Muskingum Electric | Mid-Ohio Energy | Ohio Power | Union Rural Electric |
| | | | | Washington Electric |

Natural Gas Distribution Companies in Ohio

Including Gas Cooperatives & Municipal Gas Systems



PUCO Regulated Companies

- ANG - Arlington Natural Gas Company
- BGC - Brainard Gas Corporation
- CGO - Columbia Gas of Ohio, Inc.
- DEO - Dominion East Ohio
- DUK - Duke Energy Ohio (Gas)
- ENG - Eastern Natural Gas
- FGC - Foraker Gas Company
- GEO - Glenwood Energy of Oxford, Inc.
- KNG - KNG Energy, Inc.
- NON - Northeast Ohio Natural Gas Corporation
- OCG - Ohio Cumberland Gas Company

- OGC - Ohio Gas Company
- OVG - Ohio Valley Gas Corporation
- ONG - Orwell Natural Gas Company
- PGC - Piedmont Gas Company
- PNG - Pike Natural Gas Company
- SGC - Sheldon Gas Company
- SEG - Southeastern Natural Gas Company
- SNG - Suburban Natural Gas Company
- SWG - Swickard Gas Company
- VEO - Vectren Energy Delivery of Ohio
- WGO - Waterville Gas and Oil Company

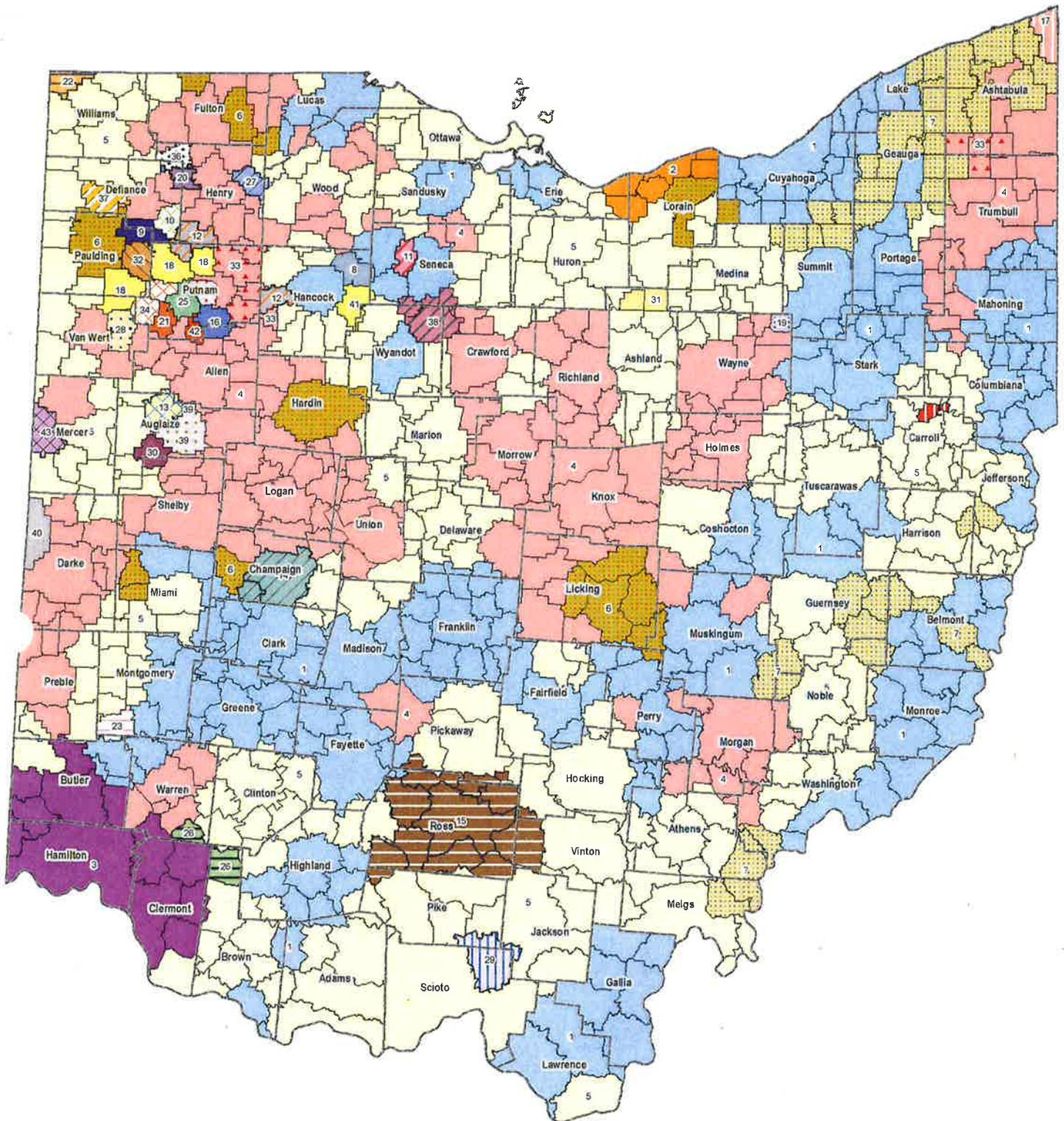
Gas Cooperatives

- AAE - All American Energy
- BEN - Bright Energy
- CER - Community Energy Resource Cooperative
- CGC - Consumers Gas Cooperative
- KEC - Knox Energy Cooperative Association, Inc.
- MEC - Madison Energy Cooperative Association, Inc.
- NGO - National Gas and Oil Cooperative
- VEC - Village Energy Cooperative Association, Inc.

Municipal Gas Systems

- COF - City of Hamilton
- LMG - Lancaster Municipal Gas
- OMG - Oakwood Municipal Gas
- VOV - Village of Verona
- VOW - Village of Williamsport

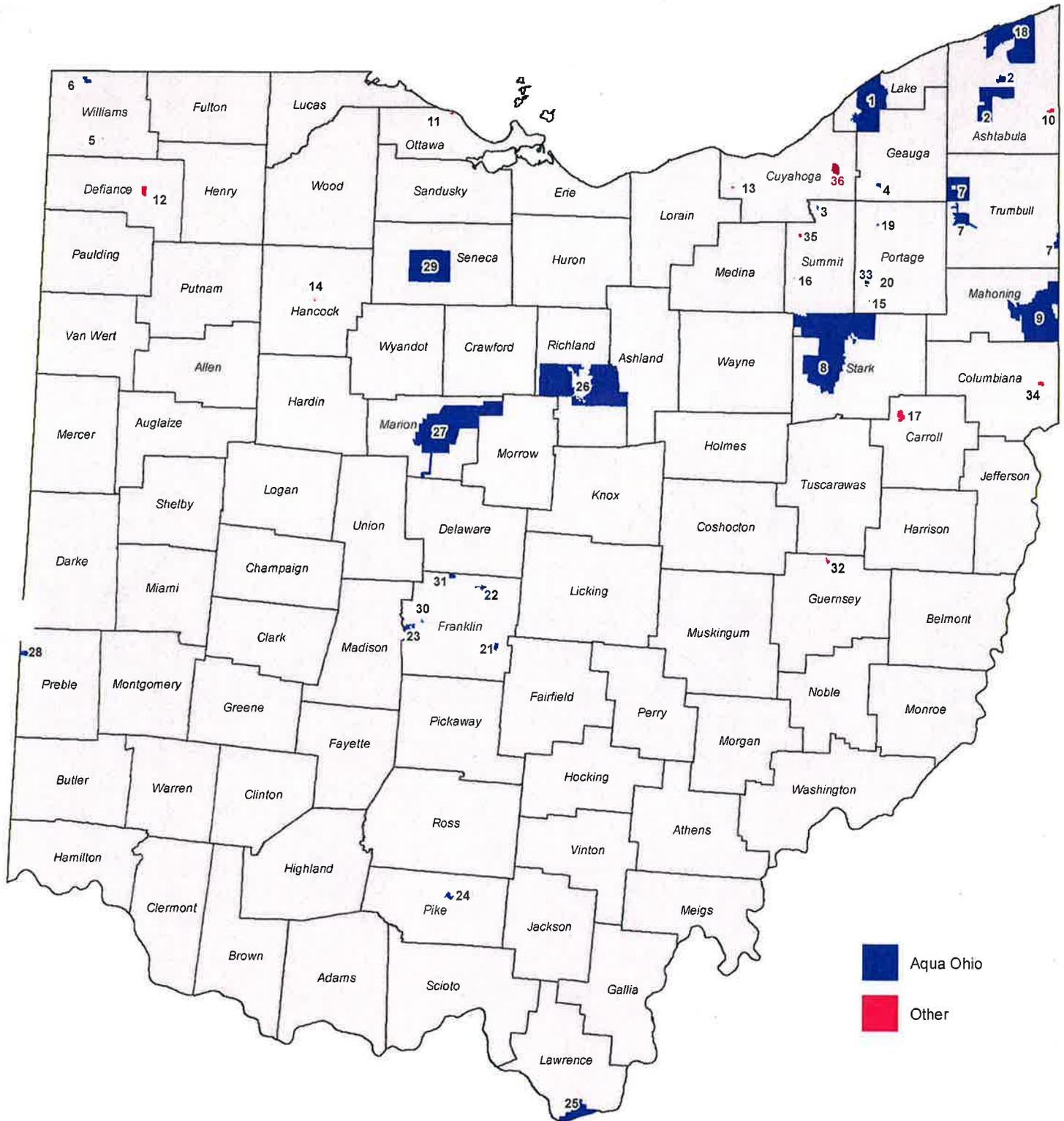
Telephone Service Areas in Ohio



Large Incumbent ILECs	Small Incumbent ILECs	(15) Chillicothe	(23) Germantown	(31) Nova	(39) Telephone Service
(1) AT&T Ohio	(8) Arcadia (TDS)	(16) Columbus Grove	(24) Glandorf	(32) Oakwood (TDS)	(40) United of Indiana
(2) CenturyTel (d/b/a CenturyLink)	(9) Arthur Mutual	(17) Conneaut	(25) Kalida	(33) Orwell	(41) Vanlue (TDS)
(3) Cincinnati Bell	(10) Ayersville	(18) Continental (TDS)	(26) Little Miami (TDS)	(34) Ottoville Mutual	(42) Vaughnsville
(4) UTO (d/b/a CenturyLink)	(11) Bascom Mutual	(19) Doylestown	(27) McClure	(35) Pattersonville	(43) Wabash Mutual
(5) Frontier North	(12) Benton Ridge	(20) Farmers Mutual	(28) Middle Point Home	(36) Ridgeville	
(6) Windstream Ohio	(13) Buckland	(21) Fort Jennings	(29) Minford	(37) Sherwood Mutual	
(7) Windstream Western Reserve	(14) Champaign	(22) Frontier	(30) New Knoxville	(38) Sycamore	

Map data last updated in 2012

Regulated Water Utilities in Ohio



- | | | |
|--|---|--|
| <ul style="list-style-type: none"> 1 AQUA OHIO - LAKE ERIE DIV. - Lake County 2 AQUA OHIO - LAKE ERIE DIV. - Ashtabula County 3 AQUA OHIO - LAKE ERIE DIV. - Suburban 4 AQUA OHIO - LAKE ERIE DIV. - Auburn Lakes 5 AQUA OHIO - LAKE ERIE DIV. - Norlick Place 6 AQUA OHIO - LAKE ERIE DIV. - Seneca 7 AQUA OHIO - MASURY DIV. 8 AQUA OHIO - STARK REGIONAL DIV. 9 AQUA OHIO - STRUTHERS DIV. 10 CAMPLANDS WATER CO., LLC 11 CARROL TOWNSHIP TREATMENT SERVICES 12 CHRISTI WATER SYSTEM INC. | <ul style="list-style-type: none"> 13 COLUMBIA PARK WATER & SEWER SYSTEM 14 EAGLE CREEK UTILITY CO. 15 FAIRLANE WATER CO. 16 FRAZIER, LTD. 17 MOHAWK UTILITIES 18 AQUA OHIO - ASHTABULA 19 AQUA OHIO - AURORA EAST 20 AQUA OHIO - BEECHCREST 21 AQUA OHIO - BLACKCLICK 22 AQUA OHIO - HUBER RIDGE 23 AQUA OHIO - LAKE DARBY 24 AQUA OHIO - LAKE WHITE | <ul style="list-style-type: none"> 25 AQUA OHIO - LAWRENCE COUNTY 26 AQUA OHIO - MANSFIELD 27 AQUA OHIO - MARION 28 AQUA OHIO - PREBLE 29 AQUA OHIO - TIFFIN 30 AQUA OHIO - TIMBERBROOK 31 AQUA OHIO - WORTHINGTON (VALLEY) 32 SALT FORK UTILITIES 33 SANDELWOOD WATER CO. 34 TOMAHAWK UTILITIES 35 WATER & SEWER LLC 36 WOODBRAN REALTY CO. |
|--|---|--|