Energy Committee

March 6, 2014

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2014 Energy Committee Calendar
Meetings will begin at 10:00am

Thursday, March 6, 2014
Wednesday, June 25, 2014
Thursday, September 18, 2014
Thursday, November 13, 2014

OMA Energy Committee Meeting Sponsor:

scioto energy

OMA Energy Committee Agenda
March 6, 2014

Welcome and Introductions	Brad Belden, Belden Brick Company
Member Spotlight	
Public Policy Report	Ryan Augsburger, OMA Staff
Energy Efficiency Report	John Seryak, PE, GoSustainableEnergy
Counsel's Report	Kim Bojko, Carpenter Lipps & Leland Rebecca Hussey, Carpenter Lipps & Leland Mallory Mohler, Carpenter Lipps & Leland
Guest Remarks	
• **Historic PJM RTO Winter Demand**	Kerry Stroup, PJM Interconnection
• **Mitigating Increased Electric Capacity Prices**	Susanne Buckley & Greg Bechert, Scioto Energy
• **Qualifying EE in Capacity Market**	Tim Seelaus, EMC Development
• **The Case for HB319**	Darnita Bradley, Columbia Gas of Ohio
• **Cleveland State University**	Iryna Lendel and Andrew Thomas
Lunch	
Natural Gas Report	Richard Ricks, NiSource

Meeting sponsored by:

To: OMA Energy Committee
From: Ryan Augsburger
Re: Energy Public Policy Report
Date: March 6, 2014

Electricity Rates and Regulation
Utility cases approved in 2012 and 2013 signal a sea change in the way Ohio regulates and prices electricity for all customer classes. The new environment raises questions on the role of government and the role of programs designed to help customers manage electricity consumption. The OMA Energy Committee and OMA Energy Group will be providing even more tools for understanding and engagement for manufacturers in 2014.

Capacity Prices Increase
Capacity prices, a portion of your electricity bill, are set by three-year looking forward auctions at PJM, and will increase in 2015, dramatically so in FirstEnergy service territory where the capacity charge will near three cents per kWh. Ask staff for an overview document of the issue.

To help manufacturers understand what they can do to mitigate the coming capacity rate increases, OMA is hosting a series of seminars later this month in four locations within FirstEnergy service area. We'll provide participants (and those who request) with capacity cost analyses for their facilities, and information about how to reduce the costs. See included flier on the seminars. Please pass it on to appropriate management, especially if you have operations in FirstEnergy territory.

The spike in capacity price for 2015 occurred in the 2012 auction. Since then, the PUCO ordered FirstEnergy to bid 75% of its energy efficiency resources into the PJM auctions to "substantially benefit ratepayers by lowering capacity auction prices and reducing Rider DSE costs." FirstEnergy has called the auctions "unfair." See included Plain Dealer article on FirstEnergy's business and its relation to the PJM auctions, and other issues. Capacity will be discussion topic for the March 6 OMA Energy Committee.

Energy Efficiency Legislation (SB 58 / HB 302)
Senator Bill Seitz (R – Cincinnati) chairs the Senate Public Utilities Committee that has been holding hearings on SB 58 to revise existing Ohio energy policy on renewables, efficiency, and advanced energy. After thoroughly researching the matter, the OMA adopted a position of opposition to the bill. Research shows benefits outweigh costs and that large energy users may need the option to opt-out. See included OMA SB 58 resource center.

In early December SB 58 stalled due to concern in the Senate about the bill's effect of enriching electric utilities by significantly increasing consumer bills. Since then, we've been working with members and senators on several issues that would improve Ohio's energy statutes.

A work group of OMA members has been developing legislative language that would provide a streamlined energy efficiency opt-out option for large industrial electricity users that does not compromise costs for other consumers. See attached draft language. The language has gone through a number of iterations through member input. It has the support of key stakeholders that could be helpful to move the proposal, and is a work in progress.

We are working on several other issues identified in the work group meetings: a cap on energy efficiency costs (for non-opted out ratepayers); standards for "counting" energy efficiency; and smoothing the ramp-up of the energy efficiency standards over the years. See included language. Member engagement in support of this alternative approach will be necessary.

Manufactured Gas Plant Remediation Costs
In Spring of 2013, lawmakers advanced a legislative proposal to revise a standard in utility law that would result in granting cost-recovery to utilities for remediation of obsolete manufactured gas plants. Governor Kasich vetoed the cost expansion legislation contained in the state budget bill, but that has not deterred the General Assembly from trying it again.

In response to member concerns, the OMA formed a work group for manufacturers to study the issue and advocate industry concerns against any such proposal and continues to communicate concerns.

Aside from a possible law change, a request for cost-recovery by Duke has been approved by the PUCO, even though the request seems to violate a state standard. The OMA Energy Group intervened in Duke Energy's gas distribution case before the PUCO case and is appealing the unfavorable decision.

New Gas Rider Could Pay for Line Extensions (HB 319)
Legislators are considering House Bill 319 (Cheryl Grossman) that would permit a natural gas company to establish a rider to fund gas infrastructure development. See analysis by OMA energy counsel that highlights concerns with the legislation.

"Reasonable Arrangements" Legislation (HB 312)
HB 312 (Terry Johnson) permits an electric distribution utility to recover the costs of economic and job retention programs, via approved reasonable arrangements, from ALL electric utility customers in the state, rather than only from customers located in the utility's certified territory or within the same holding company. The bill also prohibits the PUCO from approving applications for economic development and job retention reasonable arrangements and/or modifications or extensions after January 1, 2018. See OMA energy counsel's analysis of HB 312.

PUCO Chairman
PUCO Chairman Todd Snitchler decided not to apply for reappointment. The Public Utilities Commission of Ohio Nominating Council submitted the names of four finalists to be considered by Governor John Kasich for applicants for the position of commissioner of the PUCO to fill a five-year term commencing on April 11, 2014.

The Nominating Council recommended the following individuals: Patrick Donlon, Columbus; Thomas W. Johnson, Columbus; Stacey E. Polk, Cleveland; Tom Waniewski, Toledo. Kasich has 30 days to select a nominee or request a new list of names from the Nominating Council.

New AEP Rate Plan Filed
AEP Ohio has filed application with the PUCO seeking approval of an electric security plan (ESP) for the term June 1, 2015 to May 31, 2018. A major focus of the application is a distribution reliability strategic plan, which proposes to continue collecting a number of distribution-related rider charges throughout the ESP period, as well as creating several new distribution riders. As a result, although the application appears to minimize the overall

economic impact of the rate plan, the plan appears to disproportionately impact distribution rates. An analysis by counsel is available to members. The OMA Energy Group has intervened in the case to protect manufacturers' interests and will be discussing the case March 6.

PUCO Considers Modifications of "Reasonable Arrangements"
The OMA energy group will be reviewing modifications to existing reasonable arrangements. Recent high profile cases have included ORMET and Republic Steel.

Federal Greenhouse Gas Regulations (GHG)
Comment is open on proposed USEPA regulations of GHG emissions under the existing Clean Air Act. The OMA is working with the NAM and with other interests in a national coalition. State legislation to empower state regulators is also being considered. See OMA Environment Report.

Severance Tax -- Shale Gas
Governor Kasich's proposals to modernize the state severance tax (collected when oil and gas is extracted from the state) foundered twice in the wake of opposition from legislative Republicans; first in 2012 and again in 2013 in the context of the Governor's budget proposal. An OMA work group comprised on OMA energy committee representatives evaluated these proposals and made recommendations to the OMA Board of Directors. Look for the issue to return in the mid-biennium review (MBR).

"On-Bill" Financing of Efficiency Projects
A proposal by the environmental defense fund and supported by one regional business group calls for using utility bills as a place to make payments on capital loans to finance energy efficiency projects. This item was discussed at the November OMA Energy Committee meeting.

Energy Special Improvement District (E-SID)
An E-SID was created by law in 2009 and enables the building owner to self-finance energy efficiency improvements through a special assessment on their property. A legislative proposal would authorize port authorities to create and govern an E-SID and broadens qualifying projects to include energy efficiency / CHP projects. This topic will be discussed at March 6 OMA Energy Committee meeting.

Pipeline Tax Break?
Ohio has seen billions of dollars in system upgrades stemming from Ohio's proximity to shale gas production and gas markets. Various projects have been spotlighted at prior committee meetings. One company has expressed interest in changes to the state's tax structure to provide financing incentives.

Energy

Local Officials in Eastern Ohio Say Shale Impact Largely Positive

This week, Ohio University's Voinovich School of Leadership and Public Affairs disseminated the results of its Ohio Shale Development Community Impact Survey which investigates the impact shale development is having within 17 counties in eastern Ohio.

This research has assessed ongoing shale development activities and their influence on population, housing, public safety, infrastructure, environment, local employment, area business activity, and economic development. Survey respondents are local officials from the 17 target counties.

Across all local officials surveyed, 61.4% reported positive impacts, 25.7% reported that shale had resulted in no changes to their service area, and only 7.8% indicated that the impact had been negative.

The report is the first data release in what is anticipated to be a longitudinal study of the impact of shale development activities in eastern Ohio. *2/27/2014*

PUCO Launches "Energy Choice Ohio"

This week the Public Utilities Commission of Ohio (PUCO) launched a new website for consumers, "Energy Choice Ohio." The site was developed to help residential and small business consumers shop for competitive electric and natural gas supplier offerings and contract terms. *2/20/2014*

Rethinking Utility Business Models and Regulations

Regulators need to stop linking utility rates to their electric sales, a move that would help utilities support distributed generation and energy efficiency, the Edison Electric Institute (EEI), a trade group for investor-owned utilities, and the Natural Resources Defense Council (NRDC) said last week in a letter to the National Association of Regulatory Utility Commissioners.

These two groups "launched a joint campaign in 2008 to accelerate energy efficiency gains." Now, they make a series of recommendations that "reflect our strong belief in the promise of new technologies for enhancing grid performance while lowering emissions (e.g., communications infrastructure, smart grid technologies, distributed generation, demand response, and upgraded controls). This innovation surge is viewed as having potential for grid improvement (including reliability and cost-effectiveness), and increased value of connectivity." *2/14/2014*

OMA Members Invited to Participate in AEP-Ohio's Motor Rewind Efficiency Pilot

Did you know that motors lose efficiency with each rewind? For this reason, AEP-Ohio is working with manufacturers and rewind shops throughout its service territory to certify energy-efficient rewind processes.

AEP is currently offering participation in this pilot motor rewind program to OMA members. AEP will certify 3 to 4 rewind shops that handle large motors for this pilot program. If you're interested in participating, please contact OMA energy consultant John Seryak. *2/13/2014*

Building A Coalition To Meet America's Energy Needs

David Farr, chairman and CEO of OMA member Emerson Electric, writes in Forbes: "So how do we bring about a renaissance in manufacturing to meet these infrastructure needs? With energy representing one of the highest costs in manufacturing, the best first step is building a 21st century pipeline system to deliver the energy that already exists, more cost effectively. The complexity of the situation demands a coalition of stakeholders to evaluate the economics, regulations and processes of energy delivery, and take action to deploy the most modern pipelines as quickly and safely as possible."

Farr describes the scale of our pipeline development challenge: "The need for such a response is acute. For example, roughly 220,000 miles of modern high-strength steel pipelines crisscross the nation carrying natural gas to fuel businesses, homes, and commerce. Yet this infrastructure is not keeping pace with America's energy boom. The U.S. Energy Information Agency reported 367 miles of new natural gas pipeline in 2012, the lowest expansion of mileage since 1997. By comparison, the National Petroleum Council estimates we need another 30,000 miles of pipeline in the next generation just to handle growing natural gas production. Adding to this are hundreds of thousands of miles of pipeline carrying biofuels, home heating oil, propane, crude oil and other sources of energy."

Nowhere is Farr's descriptions more true than in newly energy-rich and traditionally energy-hungry Ohio. *2/13/2014*

New Legal Analysis of Statewide Rider Bill

As reported previously, members of the Ohio House are considering a bill that would allow for the creation of a statewide rider on electricity bills to subsidize large economic development projects.

House Bill 312 permits an electric distribution utility to recover the costs of economic and job retention programs, via approved "reasonable arrangements," from all electric utility customers in the state. This represents a change from existing economic and job development regulations, which permit an electric utility to recover costs for such reasonable arrangements only from customers located in the utility's certified territory or within the same holding company.

This bill analysis has been prepared by OMA energy counsel, Carpenter Lipps & Leland. OMA members will be discussing the bill at the March 6 meeting of the OMA Energy Committee. Register here. *2/5/2014*

OMA Presents to Midwest Governors Association

The Midwest Governors' Association (MGA) invited the OMA to make a presentation at its recent energy summit. The OMA discussed its support for the least-cost energy resources to reduce operating costs to its members, and presented analyses of the costs and benefits of energy efficiency programs, as well as ways to improve the benefit-to-cost ratio of energy efficiency.

The presentation was given by John Seryak, the OMA's consulting energy engineer.

Energy is a major focus of the MGA. *2/6/2014*

PUCO Commissioner Slate Goes To Governor

The Public Utilities Commission of Ohio (PUCO) Nominating Council this week submitted the names of four finalists to be considered by Governor John Kasich for applicants for the position of commissioner of the PUCO to fill a five-year term commencing on April 11, 2014.

The Nominating Council recommended the following individuals: Patrick Donlon, Columbus; Thomas W. Johnson, Columbus; Stacey E. Polk, Cleveland; Tom Waniewski, Toledo.

Kasich has 30 days to select a nominee or request a new list of names from the Nominating Council. The governor's appointment is subject to confirmation by the Ohio Senate.

The PUCO Nominating Council is a 12-member panel charged with screening candidates for the position of commissioner. Mike Koren is the acting chairman of the council. *1/30/2014*

New Rider on Gas Bills Proposed

Legislators are considering House Bill 319, a bill that would permit a natural gas company to establish a rider to fund gas infrastructure development. The bill sponsor, Rep. Cheryl Grossman (R – Grove City), said in testimony that the goal of the bill is to spur gas infrastructure development to provide an opportunity for increased natural gas usage.

Here is an analysis by OMA energy counsel, Carpenter Lipps & Leland LLP, that highlights concerns with the legislation. This issue will be on the agenda of the March 6 OMA Energy Committee. Register here. *1/30/2014*

OMA Reserves $500,000 in AEP Incentives for Large Efficiency Projects

OMA's energy consultant, Go Sustainable Energy LLC, recently placed a winning bid in AEP-Ohio's "Bid to Win" reverse-auction program for the benefit of OMA members in AEP territory.

A total of $500,000 in cash incentives is reserved to be split between two large energy efficiency projects or one extremely large project.

For comparison, incentives acquired via AEP's Bid to Win program pay one to three cents more per kWh than AEP's normal efficiency incentive programs.

Eligible projects must have a payback longer than one year, be completed in 2014 or 2015, and should save more than 3,000,000 kWh/year.

Please contact OMA's energy consultant, John Seryak, for more information or to qualify your upcoming efficiency project for this bonus incentive. *1/29/2014*

What Are Your Clean Fuels Activities?

Clean Fuels Ohio conducts an annual survey to capture the amount of petroleum reduction activity in Ohio. This includes alternative fuel stations, vehicles and fleet technology.

If your company is involved in efforts to improve efficiency or deploy alternative fuels and advanced vehicles, Clean Fuels Ohio would like to hear from you via a simple online 10-minute survey. Your participation allows for benchmarking in Ohio. *1/27/2014*

Bill Seeks to Repeal Ohio's Alternative & Advanced Energy Standards

This week senators heard from proponents of Senate Bill 34, legislation to repeal Ohio's renewable energy and advanced energy standards.

"Advanced energy" includes clean coal and nuclear energy technology. "Renewable energy" includes solar photovoltaic or solar thermal energy, wind energy, power produced by a hydroelectric facility, and geothermal energy. Ohio law requires utilities to provide 25% of their retail power supplies from advanced and renewable energy resources by 2025. *123/2014*

Statewide Electricity Rider?

A hearing was held this week on House Bill 312, a bill that would allow for the creation of a statewide rider on electricity bills to subsidize large economic development projects. The bill is sponsored by Rep. Terry Johnson (R-McDermott) and is intended to support a proposed steel mill development along the Ohio River in Scioto County.

The bill would allow utilities to recover the costs of reduced price of electricity for the proposed mill (or other economic development project) from electricity consumers across the state, rather than just from the operating territory of the utility, as allowed in current law. *1/24/2014*

PUCO Chairman Snitchler Not Seeking Reappointment

Public Utilities Commission of Ohio (PUCO) Chairman Todd A. Snitchler announced this week that he will not seek reappointment. His term expires on April 10, 2014.

Appointed to the post by Governor Kasich in 2011, Snitchler leads the 320-person agency that oversees the regulation of electric, natural gas, telecommunications, water and commercial transportation in the state of Ohio. He also serves as the chairman of the Ohio Power Siting Board (OPSB) that reviews, evaluates and approves the siting of electric generation plants and electric and natural gas transmission lines.

According to the PUCO: "Chairman Snitchler's work has focused on encouraging the development of competitive markets; advancements in gas pipeline safety; leading the charge on gas and electric industry coordination; ensuring Ohio is involved in cybersecurity discussions; boosting savings and benefits to ratepayers through the Securitization Act of House Bill 364; reducing regulatory lag through House Bill 95; as well as streamlining and improving the efficiency of PUCO processes including efforts to accelerate automatic approvals of RECs, OPSB process improvements and implementing internal performance management goals."

An advocate for electric and natural gas choice, he commissioned a new website focused on consumer education regarding electric and natural gas choice, which is scheduled to be released in the coming weeks. *1/16/2014*

OMA Offers Workshops on Reducing Electricity Costs

Those manufacturers that spend $250,000 or more annually or buy at least 3 million kilowatt hours per year are highly encouraged to attend one of six OMA breakfast workshops scheduled in February.

The impact of the coming capacity cost increases will be felt by Ohio manufacturers starting in June 2014 with another increase to come in June 2015. Customers of all Ohio utilities will be affected to one degree or another, and due to unique aspects of its market, especially by FirstEnergy customers. Large consumers in FirstEnergy territory who have not addressed available strategies to mitigate the coming capacity cost increases will especially benefit.

Attendees will receive a free customized report that quantifies the effect of the coming capacity price increases on their facility. Register here or call us @ (800) 662-4463. *1/16/2014*

AEP Files Rate Plan for 2015-2018

AEP Ohio has filed application with the Public Utilities Commission of Ohio (PUCO) seeking approval of an electric security plan (ESP) for the term June 1, 2015 to May 31, 2018.

The application proposes utilizing full auction-based pricing for AEP Ohio's standard service offer (SSO) customers beginning in June 2015 through the full term of the proposed ESP.

A major focus of the application is a distribution reliability strategic plan, which proposes to continue collecting a number of distribution-related rider charges throughout the ESP period, as well as creating several new distribution riders. As a result, although the application appears to minimize the overall economic impact of the rate plan, the plan appears to disproportionately impact distribution rates.

Here's a summary of the filing by OMA's energy legal partner, Carpenter Lipps & Leland LLP.

The OMA Energy Group, OMA's organization for PUCO intervention activity, will intervene in the case to protect manufacturers' interests. Contact OMA's Ryan Augsburger to learn more. *1/9/2014*

Cold Taxed the Grid, Set Records

PJM Interconnection, the electric grid operator for more than 61 million people in Ohio and 12 other states plus D.C. made a special request earlier this week to the public, prompted by the extreme cold weather, to reduce consumption.

PJM broke the record for peak winter electricity use twice on January 7 from the previous peak of 136,675 megawatts in 2007. Tuesday morning's electricity use peaked at 138,000 MW and in the evening at 141,312 MW.

Conditions were challenging for the grid due to the extreme cold, a number of generating plant outages as well as increased demand for electricity to meet consumers' heating needs. PJM said the generating plant outages were mostly related to the weather.

PJM was able to meet demand without interruption. *1/9/2014*

ODNR Releases Third Quarter Production Data for Horizontal Shale Wells

Production results from Ohio's horizontal shale wells for the third quarter of 2013 were released at the end of last year by the Department of Natural Resources (ODNR).

The report lists 285 wells, 245 of which reported production results. Forty wells reported no production as they are waiting on pipeline infrastructure. The 245 wells produced 1,332,477 barrels of oil and 33,606,075 Mcf (1,000 cubic feet) of natural gas.

The highest producing oil well was the Gulfport Energy "Boy Scout" well in Harrison County at 41,617 barrels of oil during 70 days of production. The highest producing gas well was the Gulfport Energy "Stutzman" well in Belmont County at 1,249,739 Mcf during 89 days of production.

Passed in Sub. House Bill 59, and effective Sept. 29, operators of horizontal oil and gas wells in Ohio are now required to submit data quarterly instead of annually. The increased reporting provides ODNR, the industry and the public with more accurate and timely information regarding Ohio's oil and gas industry.

Moving forward, ODNR will release quarterly data online after it is compiled and verified for accuracy. *1/2/2014*

CHP Technical Assistance Available - Act Quickly

The Midwest CHP Technical Assistance Partnership (of the U.S. Department of Energy) is offering a free economic assessment of combined heat and power (CHP) as a compliance option for manufacturers effected by boiler MACT regulations.

The timeline for the free assessment is running short. If you are potentially interested in this assessment, please contact OMA's energy engineer partner, John Seryak, yet this year. *12/19/2013*

House Hears Opponent Testimony on Energy Efficiency Bill

The Ohio House Public Utilities Committee this week heard opponent testimony on House Bill 302, the companion legislation to Senate Bill 58, from Ohio Partners for Affordable Energy. The group's executive director, Dave Rinebolt, told the committee that the measure would result in greater compensation for utility companies at the cost of Ohio ratepayers.

Rinebolt's remarks included an overview of how energy efficiency impacts cost in a deregulated marketplace such as Ohio. *12/12/2013*

"Energy Risk Lab" at PUCO

On Tuesday, December 17, the Public Utilities Commission of Ohio (PUCO) will host an "Energy Risk Lab." This interactive simulation will "pit teams of energy experts against each other as they develop new and unique approaches to the challenges facing the energy industry. The workshop will simulate real-world situations to explore how various strategies, tools and policies can help or inhibit meeting the challenges facing the utility industry in the coming decades."

This lab was developed by the National Association of Regulatory Utility Commissioners (NARUC), which has run "tabletop emergency scenario workshops and simulation games that help regulators and public- and private-sector partners practice going through cyber-attacks, natural disasters and other incidents that challenge reliability, to help them find the approaches that work best. Since 2010, NARUC used this model to help regulators become ready for challenges that are caused by policy, technology and market activities, instead of just emergencies."

Read more about the labs. *12/12/2013*

Electric Utilities: PwC Sees "Disruption and Transformation"

The 13th annual PwC Annual Global Power & Utilities Survey finds: "Many in the industry expect the existing power utility business model in their market to transform or even be unrecognizable in the period between now and 2030."

Utility executives surveyed globally see: "The growth of distributed generation and its threat to the power utility business model depends on technological developments and cost. Its rise in Europe has been subsidy-driven. Cost barriers remain in the way of it being truly market-driven. But, if these barriers can be overcome, they could set the scene for widespread global industry transformation. Many believe that point is within reach. Energy efficiency, falling solar prices, demand-side management and smart grid technology head the list of technological developments that the industry believes will have the biggest impact on their power markets."

As to fuel sources: "…new sources of fossil fuel supply will also have a major impact on the power market. The advent of shale gas and tight oil are changing the economics of the energy landscape. Peak oil forecasts are fast being revised. The prospect of North American energy independence is within reach and the geopolitics of world energy flows are in flux. Industry opinion is far from ruling out the possibility that a new abundant energy era might open up. But alongside this, there is a significant degree of societal concern about extractive activities and a feeling that renewable energy can bring benefits and is here to stay." *12/12/2013*

HB12 **LICENSED OPERATOR REQUIREMENT** (ROEGNER K) To eliminate the licensed operator requirement for gaseous fuel and fuel oil fired boilers that comply with certain safety and engineering standards.

Current Status: 10/31/2013 - **SIGNED BY GOVERNOR**; Eff. 1/30/2014
State Bill Page: http://www.legislature.state.oh.us/bills.cfm?ID=130_HB_12

HB41 **OIL-GAS DRILLING HEALTH-SAFETY STANDARDS** (HAGAN R) To authorize a political subdivision to enact and enforce health and safety standards for oil and gas drilling and exploration.

Current Status: 6/25/2013 - House Agriculture and Natural Resources, (First Hearing)
State Bill Page: http://www.legislature.state.oh.us/bills.cfm?ID=130_HB_41

HB42 **OIL AND GAS LAW CHANGES** (HAGAN R) To revise the requirements concerning an oil and gas permit application, an oil and gas well completion record, designation of trade secret protection for chemicals used to drill or stimulate an oil and gas well, and disclosure of chemical information to a health care professional or emergency responder, to require an owner to report all chemicals brought to a well site, and to make other changes in the Oil and Gas Law.

Current Status: 6/25/2013 - House Agriculture and Natural Resources, (First Hearing)
State Bill Page: http://www.legislature.state.oh.us/bills.cfm?ID=130_HB_42

HB59 **BIENNIAL BUDGET** (AMSTUTZ R) To make operating appropriations for the biennium beginning July 1, 2013, and ending June 30, 2015; to provide authorization and conditions for the operation of state programs.

Current Status: 6/30/2013 - **SIGNED BY GOVERNOR**; Eff. 6/30/2013; Some Eff. 9/29/2013; Others Various Dates
State Bill Page: http://www.legislature.state.oh.us/bills.cfm?ID=130_HB_59

HB63 **TAX CREDIT- OIL AND GAS PRODUCTION** (CERA J, O'BRIEN S) To establish a nonrefundable commercial activity tax credit for companies involved in horizontal well drilling or related oil and gas production services that hire Ohio residents or dislocated workers who have enrolled in or completed a federally registered apprenticeship program.

Current Status: 2/20/2013 - Referred to Committee House Ways and Means
State Bill Page: http://www.legislature.state.oh.us/bills.cfm?ID=130_HB_63

HB93 **OIL AND GAS LAW** (HAGAN R) To increase criminal penalties for violations of the Oil and Gas Law relating to improper disposal, transport, and management of brine, to establish a criminal penalty for a negligent violation of certain provisions of the Solid, Hazardous, and Infectious Wastes Law, and to require the revocation of a violator's permits and registration certificate and denial of future permit and registration certificate applications under the Oil and Gas Law.

Current Status: 6/25/2013 - House Agriculture and Natural Resources, (First Hearing)
State Bill Page: http://www.legislature.state.oh.us/bills.cfm?ID=130_HB_93

HB102 **NATURAL GAS POLICY** (ROEGNER K) To change state policy regarding natural gas competition, to require assessments on retail natural gas suppliers for subsidies granted in

retail auctions, and to require the assessments to be distributed to nonmercantile customers.

Current Status: 3/19/2013 - Referred to Committee House Public Utilities

State Bill Page: http://www.legislature.state.oh.us/bills.cfm?ID=130_HB_102

HB124 **OIL-GAS BAN-LAKE ERIE** (ANTONIO N) To ban the taking or removal of oil or natural gas from and under the bed of Lake Erie.

Current Status: 6/25/2013 - House Agriculture and Natural Resources, (First Hearing)

State Bill Page: http://www.legislature.state.oh.us/bills.cfm?ID=130_HB_124

HB136 **THIRD FRONTIER COMMISSION-GRANTS** (SCHURING K) To authorize the Third Frontier Commission to award grants related to the establishment and operation of data centers and the development of a high speed fiber optic network in the state, and to authorize a kilowatt-hour excise tax reduction for electric distribution companies supplying such centers at a discounted rate.

Current Status: 5/29/2013 - House Public Utilities, (Fifth Hearing)

State Bill Page: http://www.legislature.state.oh.us/bills.cfm?ID=130_HB_136

HB148 **OIL AND GAS LAW** (DRIEHAUS D, HAGAN R) To prohibit land application and deep well injection of brine, to prohibit the conversion of wells, and to eliminate the injection fee that is levied under the Oil and Gas Law.

Current Status: 6/25/2013 - House Agriculture and Natural Resources, (First Hearing)

State Bill Page: http://www.legislature.state.oh.us/bills.cfm?ID=130_HB_148

HB282 **SALES-USE TAX LICENSE** (ROGERS J) To authorize vendors and others required to hold a sales or use tax license whose business and home address is the same to apply to the Tax Commissioner to keep such address confidential.

Current Status: 2/26/2014 - **BILL AMENDED**, House Ways and Means, (Second Hearing)

State Bill Page: http://www.legislature.state.oh.us/bills.cfm?ID=130_HB_282

HB302 **ALTERNATIVE ENERGY-PEAK DEMAND REDUCTION LAW** (STAUTBERG P) To modify the alternative energy resource, energy efficiency, and peak demand reduction law.

Current Status: 12/11/2013 - House Public Utilities, (Sixth Hearing)

State Bill Page: http://www.legislature.state.oh.us/bills.cfm?ID=130_HB_302

HB312 **ELECTRIC LIGHT COMPANY-JOB RETENTION PROGRAM COSTS** (JOHNSON T) To permit a public utility electric light company to recover costs of an economic and job retention program from all public utility electric light customers in Ohio.

Current Status: 1/22/2014 - House Public Utilities, (Second Hearing)

State Bill Page: http://www.legislature.state.oh.us/bills.cfm?ID=130_HB_312

HB319 **INFRASTRUCTURE DEVELOPMENT RIDER-GAS COMPANIES** (GROSSMAN C) To permit natural gas companies to apply for an infrastructure development rider to cover costs of certain economic development projects.

Current Status: 2/19/2014 - House Public Utilities, (Second Hearing)

State Bill Page: http://www.legislature.state.oh.us/bills.cfm?ID=130_HB_319

HB335 **GREEN FLEETS LOAN GUARANTEE PROGRAM** (BUTLER, JR. J) To create the Green Fleets Loan Guarantee Program to guarantee the repayment of loans made to

governmental entities and private businesses to fund the conversion of all or a portion of their fleet vehicles to run on natural gas fuel; to apply the motor fuel tax to compressed natural gas; to authorize a temporary exemption from the motor fuel tax for purchasers of propane and compressed natural gas; to require the inspection of certain natural gas vehicles; to create a weight limit exemption for compressed natural gas vehicles; and to clarify the regulatory authority of the Fire Marshal with regard to filling stations dispensing gaseous fuel.

Current Status: 12/4/2013 - House Ways and Means, (Second Hearing)

State Bill Page: http://www.legislature.state.oh.us/bills.cfm?ID=130_HB_335

HB336 **GASEOUS FUEL VEHICLE CONVERSION PROGRAM** (O'BRIEN S, HALL D) To create the Gaseous Fuel Vehicle Conversion Program, to allow a credit against the income or commercial activity tax for the purchase or conversion of an alternative fuel vehicle, to reduce the amount of sales tax due on the purchase or lease of a qualifying electric vehicle by up to $500, to apply the motor fuel tax to the distribution or sale of compressed natural gas, to authorize a temporary, partial motor fuel tax exemption for sales of compressed natural gas used as motor fuel, and to make an appropriation.

Current Status: 2/18/2014 - House Finance and Appropriations, (Second Hearing)

State Bill Page: http://www.legislature.state.oh.us/bills.cfm?ID=130_HB_336

HB368 **SMART METERS-PUBLIC UTILITY CUSTOMERS RIGHTS** (LYNCH M) To establish rights for public utility customers regarding smart meters installed on their premises.

Current Status: 1/22/2014 - House Public Utilities, (First Hearing)

State Bill Page: http://www.legislature.state.oh.us/bills.cfm?ID=130_HB_368

HB421 **ELECTRIC COMPANY-MERCANTILE CUSTOMER REASONABLE ARRANGEMENTS** (CERA J) To permit the Governor to terminate reasonable arrangements between an electric distribution utility or public utility electric light company and certain mercantile customers.

Current Status: 2/19/2014 - House Public Utilities, (First Hearing)

State Bill Page: http://www.legislature.state.oh.us/bills.cfm?ID=130_HB_421

HCR9 **KEYSTONE XL PIPELINE** (ADAMS J) To urge the United States Department of State to approve the presidential permit application allowing the construction and operation of the TransCanada Keystone XL Pipeline between the United States and Canada.

Current Status: 4/9/2013 - Referred to Committee Senate Public Utilities

State Bill Page: http://www.legislature.state.oh.us/res.cfm?ID=130_HCR_9

HCR30 **COAL ACCOUNTABILITY AND RETIRED EMPLOYEE ACT** (CERA J) To urge Congress to enact the Coal Accountability and Retired Employee Act.

Current Status: 10/15/2013 - House Agriculture and Natural Resources, (First Hearing)

State Bill Page: http://www.legislature.state.oh.us/res.cfm?ID=130_HCR_30

HCR42 **GREENHOUSE GAS EMISSIONS** (FOLEY M, RAMOS D) To recognize that human actions have contributed to the rise in global sea and atmospheric temperatures and the increase in concentration of greenhouse gases, and to declare that Ohio will actively participate in diminishing and minimizing future greenhouse gas emissions.

Current Status: 1/21/2014 - House Agriculture and Natural Resources, (First Hearing)

State Bill Page: http://www.legislature.state.oh.us/res.cfm?ID=130_HCR_42

HCR43 **OHIO SUSTAINABLE ENERGY-ABUNDANCE PLAN** (BOOSE T, THOMPSON A) To establish a sustainable energy-abundance plan for Ohio to meet future Ohio energy needs with affordable, abundant, and environmentally friendly energy.

Current Status: 2/26/2014 - House Public Utilities, (Second Hearing)

State Bill Page: http://www.legislature.state.oh.us/res.cfm?ID=130_HCR_43

HR282 **CARBON DIOXIDE EMISSIONS-EXISTING POWER PLANTS** (DOVILLA M, HILL B) To urge the U.S. Environmental Protection Agency to hold public listening sessions on proposed regulations targeting carbon dioxide emissions from existing power plants in those states that would be most directly impacted by the regulations.

Current Status: 11/19/2013 - **REPORTED OUT**, House Policy and Legislative Oversight, (First Hearing)

State Bill Page: http://www.legislature.state.oh.us/res.cfm?ID=130_HR_282

SB17 **OIL-GAS LAW CHANGES** (SKINDELL M) To revise the requirements concerning an oil and gas permit application, an oil and gas well completion record, designation of trade secret protection for chemicals used to drill or stimulate an oil and gas well, and disclosure of chemical information to a health care professional or emergency responder, to require an owner to report all chemicals brought to a well site, and to make other changes in the Oil and Gas Law.

Current Status: 2/13/2013 - Referred to Committee Senate Energy and Natural Resources

State Bill Page: http://www.legislature.state.oh.us/bills.cfm?ID=130_SB_17

SB34 **ELECTRIC DISTRIBUTION COMPANIES** (JORDAN K) To repeal the requirement that electric distribution utilities and electric services companies provide 25% of their retail power supplies from advanced and renewable energy resources by 2025.

Current Status: 2/12/2014 - Senate Public Utilities, (Fourth Hearing)

State Bill Page: http://www.legislature.state.oh.us/bills.cfm?ID=130_SB_34

SB46 **OIL AND GAS LAW** (SCHIAVONI J, LAROSE F) To increase criminal penalties for violations of the Oil and Gas Law relating to improper disposal, transport, and management of brine, to establish a criminal penalty for a negligent violation of certain provisions of the Solid, Hazardous, and Infectious Wastes Law, and to require the revocation of a violator's permits and registration certificate and denial of future permit and registration certificate applications under the Oil and Gas Law.

Current Status: 6/19/2013 - **SUBSTITUTE BILL ACCEPTED**, Senate Energy and Natural Resources, (First Hearing)

State Bill Page: http://www.legislature.state.oh.us/bills.cfm?ID=130_SB_46

SB58 **RETAIL ELECTRIC SERVICE** (SEITZ B) To review and possibly modify the energy efficiency, peak demand reduction, and alternative energy resource provisions established by Ohio law governing competitive retail electric service.

Current Status: 2/19/2014 - Senate Public Utilities, (Seventh Hearing)

State Bill Page: http://www.legislature.state.oh.us/bills.cfm?ID=130_SB_58

SB59 **EDUCATION ENERGY COUNCIL** (BEAGLE B) To authorize an eligible regional council of governments to establish itself as an education energy council for the purpose of issuing debt to pay for school district energy purchases.

Current Status: 2/19/2014 - Senate Public Utilities, (Fourth Hearing)

State Bill Page: http://www.legislature.state.oh.us/bills.cfm?ID=130_SB_59

SB87 **OIL/NATURAL GAS-LAKE ERIE** (SKINDELL M) To ban the taking or removal of oil or natural gas from and under the bed of Lake Erie.

Current Status: 10/29/2013 - Senate Energy and Natural Resources, (First Hearing)

State Bill Page: http://www.legislature.state.oh.us/bills.cfm?ID=130_SB_87

SB181 **SMART METER INSTALLATION** (JORDAN K) To require electric distribution utilities to obtain a customer's consent prior to installing a smart meter on the customer's property

Current Status: 9/26/2013 - Referred to Committee Senate Public Utilities

State Bill Page: http://www.legislature.state.oh.us/bills.cfm?ID=130_SB_181

SCR7 **KEYSTONE XL PIPELINE** (HITE C) To urge the United States Department of State to approve the presidential permit application allowing the construction and operation of the TransCanada Keystone XL Pipeline between United States and Canada.

Current Status: 4/17/2013 - **ADOPTED BY HOUSE**; Vote 90-7

State Bill Page: http://www.legislature.state.oh.us/res.cfm?ID=130_SCR_7

SCR25 **GREEN BUILDING RATING STANDARDS** (UECKER J) To urge, for Ohio state agencies and other government entities, the use of green building rating systems, codes, or standards that are consistent with state energy efficiency and environmental performance objectives and policies and that meet American National Standards Institute voluntary consensus standard procedures.

Current Status: 2/26/2014 - **ADOPTED BY SENATE**; Vote 22-10

State Bill Page: http://www.legislature.state.oh.us/res.cfm?ID=130_SCR_25

SCR34 **U.S. EPA-STATES PRIMACY** (GENTILE L) To urge the U.S. Environmental Protection Agency to recognize the primacy of states to rely on state utility and environmental regulators in developing guidelines for reductions of carbon dioxide emissions from existing power plants and to take other specified actions regarding greenhouse gas emissions.

Current Status: 2/19/2014 - Referred to Committee Senate Energy and Natural Resources

State Bill Page: http://www.legislature.state.oh.us/res.cfm?ID=130_SCR_34

FirstEnergy explains its dividend cut, blames recession, reveals new directions

 By **John Funk, The Plain Dealer**

on January 22, 2014 at 3:00 PM, updated January 22, 2014 at 6:16 PM

 You can expect to pay more for power that moves across the grid when FirstEnergy begins planned upgrades.*Plain Dealer file*

AKRON-- FirstEnergy Corp's **decision** to slash dividends by a third, shutter power plants and pull back its unregulated subsidiary is not the result of management blunders, top executives said Wednesday.
Rather they are the result of changing business conditions that have forced the Akron-based, multi-state power company to re-think its entire business, they said, including the substantial dividends it has paid to its shareholders since 2008

In a 20-minute public presentation to financial analysts now **recorded on the company's website**, Chief Executive Officer Anthony Alexander and Chief Financial Officer Jim Pearson blamed the company's plight on everything except FirstEnergy's business model - a model that has emphasized the deregulated sale of electricity by FirstEnergy Solutions for the last five years and paid less attention to old-fashioned utility practices.

Nevertheless, referring to details in a **letter to investors** posted overnight on its website and available to anyone, Alexander and Pearson drew a picture of a company that in the future will rely on profits from its regulated side rather than continued power sales expansions throughout the state and region by FirstEnergy Solutions.

The problem with the model based on unfettered growth of FirstEnergy Solutions, analysts have said, is that power prices have been driven lower by the recession and by cheap natural gas, used increasingly by other utilities to generate electricity.

Cleaner, gas-fired power plants competing with coal-fired plants in wholesale markets now supply about 30 percent of all electricity used in the nation, according to federal estimates.

The company, Alexander explained to analysts, is a victim of the recession, of tightening federal pollution and environmental rules, of Hurricane Sandy and of unfair supply auctions conducted by high-voltage grid overseers PJM Interconnection.

That's the same PJM that FirstEnergy fought to join over the objections of consumer groups here who argued in a case before state regulators that it would lead to higher electric bills.

An annual PJM "capacity auction" which determines a portion of the price of power has led to lower-than-expected rates because the auction accepts energy efficiency bids - commitments to permanently use less power - right alongside bids from power plants. Effectively, this lowers overall demand and therefore lowers the price of power.

This so-called "demand response" has proved so successful that Ohio regulators - siding with consumer and environmental groups, have ordered FirstEnergy to bid energy efficiency gains its customers have achieved into future auctions.

"PJM's capacity auctions - which are intended to provide support for competitive generators - do

not, and instead have delivered unpredictable and inadequate results," Alexander argued.

To be fair, other power companies have also complained about the PJM capacity auctions, including its estimates of what demand will actually be and the auction's "ability" to generate controversy, say analysts.
PJM spokeswoman Paula DuPont-Kidd disagreed with Alexander's complaints. Noting that the other companies participating in the PJM's markets are building new power plants with a total generating capacity of 28,000 megawatts -- or about the same as 30 Davis-Bess reactors -- DuPont-Kidd argued that power companies that own large coal-fired power plants are being challenged simultaneously by stricter pollution rules and gas-fired plants.

Finally, Alexander pointed to the ongoing sluggish economy as the real problem.
"We have suffered from a multi-year economic downturn that has directly affected us in many ways, including essentially no load (demand) growth at our utilities and declining energy prices," Alexander said.

And storms in 2011 and 2012, including Hurricane Sandy, forced the company to spend more than $1 billion on repairs, Alexander said -- cash it had to spend from operating budgets and cash it still hopes to make up from customers.

Cutting the dividends is the first step in the company's decision to rely on future profit growth from its regulated divisions, Alexander explained.

"Following a thorough review, the board ultimately determined that aligning the dividend with our regulated operations will provide the best path forward," he said.

In recent years, the company has paid dividends exclusively from profits earned by its regulated divisions. Those divisions are the local system of wires and substations regulated by the state and the regional high-voltage lines, or grid, regulated by the Federal Energy Regulatory Commission.

These authorities set delivery rates - and ultimately company revenues - that are based on how much the utility has invested in the systems and how much they have depreciated, in other words, on their value.

FirstEnergy's board of directors on Tuesday reduced quarterly dividends from 55 cents per share to 36 cents - calculating that the new rate would reflect not only the current regulated income but also the real price of the company's stock, now $30 to $32 per share.

FirstEnergy's plan over the next several years is to invest billions to upgrade its delivery systems - investments that it calculates will lead to higher delivery rates and additional income.

Pearson did a quick review of some of those plans and noted that the dividend cut will help pay for the upgrades, which will ultimately make the company more valuable.

"We expect to fund this expansion with a combination of debt, equity issuances (sale of new stock) through the stock investment and employee benefit plans, and $320 million annually in cash preserved as a result of our dividend action," Pearson told the analysts.

"This should provide sufficient capacity to not only invest in these growth initiatives, but also support significant balance sheet improvements," he said.

Analysts participating in the call asked for detail on some points but were not overly critical.
Moody's Investors Service called the dividend reduction positive, but said it would not lift its negative outlook on the company.

Investors appeared to be trying to figure out the company's future as more than 14 million shares had been traded on the New York Stock Exchange by the end of the day, nearly three times the average volume. The share price fell 3 percent to $31.13.

D

Utility Dive

Dayton Power & Light may sell power plant fleet

By Ethan Howland

February 27, 2014 | Print:

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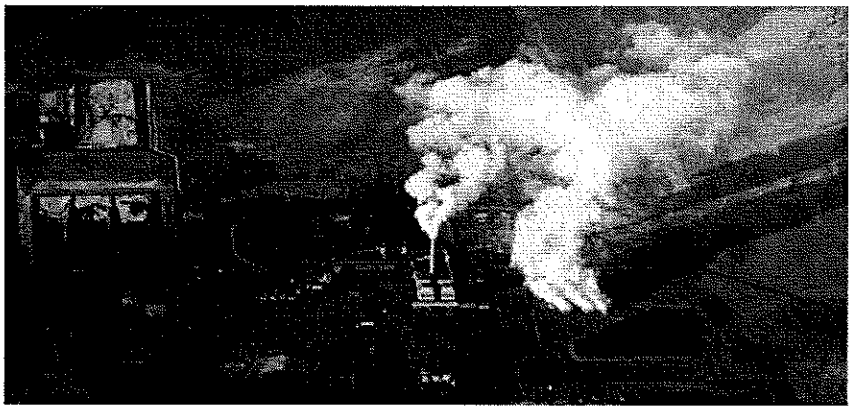

Dive Brief:

In a cost-cutting move, Arlington, Virginia-based AES is considering selling Dayton Power & Light's (DPL) roughly 3,450 MW power plant fleet as part of a requirement that the utility separate its generation from the company by mid-2017, company officials said during an earnings conference call.

If DPL sells its assets instead of retaining them through an affiliated company, the utility would likely exit the retail power business, company officials said during an earnings conference call. DPL Energy Resources has about 308,000 retail customers in Ohio and Illinois.

AES plans to continue focusing on energy storage opportunities worldwide, officials said.

Dive Insight:

Ameren late last year sold its merchant power plants to Dynegy and another investor. Duke Energy plans to sell its unregulated Midwest power plant fleet. So it's no surprise AES may sell DPL's generating assets, which burn coal and diesel.

"We are seeking to have the Ohio commission approve our plan to transfer our generation assets to an affiliated genco by May 2017," Thomas O'Flynn, AES chief financial officer, told analysts. "We'll explore all potential options to optimize the solution and we recently began to evaluate the sale of DPL generation asset to an unaffiliated third-party through a potential sale."

With more than 170 MW, AES has the most non-hydroelectric energy storage of any company. AES is building 40 MW. "We are actively developing other energy storage opportunities at our existing platforms in California, the Philippines, Northern Ireland, and Puerto Rico," Andres Gluski, AES CEO, said.

From the Cincinnati Business Courier :http://www.bizjournals.com/cincinnati/morning_call/2014/02/duke-energy-to-sell-ohio-power-plants.html

Feb 18, 2014, 7:23am EST

Duke Energy to sell Ohio power plants

Erin Caproni
Digital Producer- *Cincinnati Business Courier*
Email | Twitter | Google+ | LinkedIn

Duke Energy is planning to sell 13 Midwest power plants, including several in Ohio, the company announced on Monday.

The move is part of Duke's exit from the region's commercial generation business, and the company said it will work closely with employees and local officials to ensure a smooth transition at each of its locations upon sale.

The sales will not affect Duke's 1.3 million customers in Ohio and Kentucky, the company said.

Seven of the plants that will be sold are in Ohio, while one is in Illinois and one is in Pennsylvania. They are owned or partially owned by Duke Energy Ohio. Approximately 600 employees and contractors work in the facilities, which Duke expects to sell in the next 12 to 18 months.

"Our merchant power plants have delivered volatile returns in the challenging competitive market in the Midwest," Lynn Good, president, CEO and vice chairman of Duke Energy, said in a statement. "The earnings profile is not a strategic fit for Duke Energy and we have begun a process to exit the business."

Citigroup and **Morgan Stanley** will advise Duke Energy in the transaction.

To see a full list of plants that will be sold, click here.

Caproni heads up web operations for the Business Courier.

Go Sustainable Energy, LLC

3709 N. High Street, Suite 100, Columbus, OH 43214
www.gosustainableenergy.com – 614.268.4263

MEMORANDUM

Date: March 5, 2014

To: Ohio Manufacturer's Association – Energy Committee

From: John Seryak, PE (Go Sustainable Energy)

RE: Energy Committee 3.6.14 Meeting - Energy Efficiency Report

PJM Capacity Market Bid

- PJM will hold a base residual auction (BRA) for the 2018/19 delivery year this coming May
- OMA EG is working with other stakeholders to promote a robust bid of energy-efficiency into the BRA, by Ohio's utilities. Bidding energy-efficiency into the BRA can reduce capacity prices, and will result in payments to the efficiency programs, thereby reducing future program costs.

Member Services

- Please continue to contact OMA to assist with your efficiency project, whether it be a need for technical advice, rebate application assistance, or working with your utility.
  - Contact John for assistance or more information – jseryak@gosustainableenergy.com.
- Please consider attending the upcoming Energy Efficiency/CHP Workgroups
  - March 19th, 10 am – 11:30 am – Combined Heat & Power screening – Free screening analysis to determine if your facility is a good candidate for CHP.
  - May 14th, 10 am – 11:30 am - Industrial insulation. Presentation from a manufacturer and insulation expert. Free analysis and rebate support for industrial insulation.
  - Past work-group presentations and documents are at: http://www.ohiomfg.com/omas-chpweree-work-group/

Utility Program Update

- AEP
  - Bid-to-Win: **$500,000** in reserved incentives - OMA's energy consultant recently placed a winning bid in AEP's "Bid to Win" reverse-auction program, for the benefit of OMA's members. A total of $500,000 is reserved to be split between two

large efficiency projects, or for one extremely large project. The winning incentive amount is to 1-2 cents more per kWh than a typical custom project, and about 3 cents/kWh more than a very large metal halide replacement, or other prescriptive project. Eligible projects must have a payback longer than 1 year, be planned for completion in 2014 or 2015, and should have savings of over 3,000,000 kWh/year.

- Green Motor Rewind Pilot - Did you know that motors lose efficiency with each rewind? For this reason, AEP-Ohio is working with manufacturers and rewind shops throughout its service territory to certify energy-efficient rewind processes. AEP is currently offering participation in this pilot motor rewind program to OMA members. AEP will certify 3 to 4 rewind shops that handle large motors for this pilot program. If you're interested in participating, please contact OMA energy consultant John Seryak.

- Duke
  - Duke will not jointly-file mercantile applications. Please contact OMA for assistance in filing your mercantile application in Duke territory.
- DP&L
  - New business audit program, manufacturers eligible. 50% of audit cost-shared, additional 50% cost-shared if projects are implemented within the year and your investment is great than or equal to the cost of the audit.

Customer Usage (kWh)	Max Audit Cost	Not to exceed $/sq ft
Up to 500,000	$3,500	-
500,001-2,000,000	$7,500	$0.10
2,000,001 and greater	$10,000	$0.07

    - http://www.dpandl.com/save-money/business-government/business-energy-audit-program/
  - Reminder - Enhanced rebates for DRG3 certified businesses.
- First Energy
  - When applying for FirstEnergy efficiency programs on their new website, use administrator code 50941 in order for OMA to receive credit from FirstEnergy without reducing your rebate.
    - http://energysaveoh-business.com/

- New business audit program - There is now a "large" audit program that will rebate up to 50% of the cost of an energy audit, with no maximum, plus $.01/kWh saved from implemented measures.
    - http://energysaveoh-business.com/audit.html
- New retro-commissioning program, may include industrial systems - A new "retro-commissioning" project will pay $.03/kWh saved, up to 50% of the total project cost. Potential qualifying projects include, but are not limited to: adjustments to lighting and HVAC equipment operating schedules; adjustments of HVAC temperature set points; central plant optimization; and, compressed air leak loss detection/inappropriate uses of compressed air, such as open blowing.
    - http://energysaveoh-business.com/retrocommisioning.html

CARPENTER LIPPS & LELAND LLP

ATTORNEYS AT LAW

280 PLAZA, SUITE 1300
280 NORTH HIGH STREET
COLUMBUS, OHIO 43215

MEMORANDUM

To: OMA Energy Committee
From: Kim Bojko, OMA Energy Counsel
Re: Energy Committee Report
Date: March 6, 2014

Administrative Actions

<u>American Electric Power (AEP Ohio)</u>

AEP Corporate Separation Case (Case No. 12-1126-EL-UNC)

On October 4, 2013, AEP Ohio filed an application to amend its corporate separation plan (Application), indicating that it has been unable, in the past year, to transfer its contractual entitlements to purchase power from generating resources owned by Ohio Valley Electric Corporation (OVEC), in which AEP Ohio is a joint owner, to AEP Generation Resources, Inc. (AEP Genco), as directed by the Commission's prior Finding and Order.

On October 29, 2013, OMAEG and other parties filed comments on the Application, noting that AEP Ohio did not explain the impact on rates from approval of its Application, and that as a result, it could not support the Application. OMAEG stated that AEP Ohio's request to retain its Ohio Valley Electric Corporation contractual entitlements to generation resources raises serious questions of compliance with Section 4928.17, Revised Code, and Chapter 4901:1-37, Ohio Administrative Code. Pursuant to this rule, negative implications exist regardless of whether AEP Ohio itself retains the proceeds from the sale of its OVEC generation resources, or allocates those proceeds to an affiliate, e.g., AEP Genco. OMAEG further commented that AEP Ohio must provide additional information regarding the impacts of its Application in order for interested parties and the Commission to properly assess its request.

On December 4, 2013, the Commission approved AEP Ohio's amended corporate separation plan. In its Opinion and Order, the Commission permitted AEP Ohio to retain certain contractual entitlements, including the power to purchase power from generating resources owned by Ohio Valley Electric Corporation (OVEC), so long as it liquidates the power delivered under its OVEC contract through the PJM market. On January 3, 2014, the Ohio Consumers' Counsel (OCC) filed an application for rehearing in this matter, which the Commission subsequently denied. As no further applications for rehearing are pending at the Commission at this time, an appeal to the Supreme Court may now be taken.

AEP Storm Rider Case (Case No. 12-3255-EL-RDR)

The Commission approved the establishment of a Storm Damage Recovery Rider (SDRR) in AEP Ohio's ESP II case by which it may recover incremental expenses incurred due to major storms. On December 21, 2012, AEP Ohio filed an application, revised on March 1, 2013, for authority to establish initial storm damage recovery rider rates to allow for the recovery of expenses related to three major storms that occurred in 2012. OMAEG filed comments on the application on May 29, 2013.

On November 4, 2013, pursuant to an attorney examiner directing interested parties to file a nonbinding list of issues citing specific concerns about which the party may be interested in pursuing cross-examination of witnesses at an evidentiary hearing on the matter, OMAEG submitted to the Commission a list citing three concerns: (1) whether AEP Ohio has properly demonstrated that the expenses it seeks to recover were prudently incurred and reasonable; (2) whether AEP Ohio may appropriately recover certain expenses through Rider SDRR; and (3) whether AEP Ohio may properly record carrying costs on the 2012 storm recovery costs at the weighted average cost of capital.

On December 6, 2013, Ohio Power Company, Staff, the Ohio Hospital Association, OMAEG, Kroger, IEU-Ohio, and the Ohio Energy Group entered into and filed a joint Stipulation and Recommendation with the Commission. The Ohio Consumers' Counsel did not sign onto the stipulation and the matter proceeded to hearing on January 22, 2014.

2011 SEET Proceeding (Case No. 13-2249-EL-UNC et al.)

On November 22, 2013, AEP Ohio submitted to the PUCO correspondence contending that neither Columbus Southern Power's nor Ohio Power Company's return on equity was excessive in 2011. In support of its position, AEP Ohio submitted testimony of three individuals, Gary Spitznogle, Thomas Mitchell, and Anil Makhija. Mr. Spitznogle serves as AEP Ohio's overall policy witness supporting its position that Ohio Power and Columbus Southern Power pass the statutory Significantly Excessive Earnings Test (SEET) for 2011. Mr. Mitchell's testimony describes the method AEP Ohio used for calculating Ohio Power's and Columbus Southern Power's 2011 earned return on common equity, including adjustments to exclude off-system sales net margins and special accounting items. Dr. Makhija's testimony describes the methodology he developed on behalf of AEP Ohio to implement the SEET for Ohio Power's and Columbus Southern Power's earnings during 2011.

OMAEG filed a motion to intervene in the case, which the Commission subsequently granted. A Stipulation and Recommendation, stating that Ohio Power Company and Columbus Southern Power did not have significantly excessive earnings in 2011, was entered into by AEP Ohio and Staff. OMAEG, Ohio Energy Group, and the Ohio Consumers' Counsel did not oppose the stipulation. On February 25, 2014, a hearing on the stipulation took place. The parties now await Commission approval.

2012 SEET Proceeding (Case No. 13-2249-EL-UNC et al.)

On November 22, 2013, AEP Ohio submitted correspondence to the Commission contending that its return on equity for 2012 was not excessive. In support of its position, AEP Ohio submitted testimony of three individuals, Gary Spitznogle, Thomas Mitchell, and Anil Makhija. Mr. Spitznogle serves as AEP Ohio's overall policy witness supporting its position that AEP Ohio passes the statutory Significantly Excessive Earnings Test (SEET) for 2012. Mr. Mitchell's testimony describes the method AEP Ohio used for calculating its 2012 earned return on common equity. Dr. Makhija's testimony describes the methodology he developed on behalf of AEP Ohio to implement the SEET for AEP Ohio earnings during 2012.

The Commission subsequently issued a procedural schedule in the case, establishing that the intervention deadline is March 20, 2014, and that intervenor testimony is due on March 27, 2014. An evidentiary hearing on the matter is scheduled to take place on April 29, 2014.

ESP III Application (Case Nos. 13-2385-EL-SSO and 13-2386-EL-AAM)

On December 20, 2013, Ohio Power Company (AEP Ohio or the Company) filed an application for authority to establish a standard service offer and for approval of certain accounting authority (Application) in PUCO Case Nos. 13-2385-EL-SSO and 13-2386-EL-AAM. In its Application, AEP Ohio seeks the Commission's approval of an electric security plan (ESP or ESP III) based on Section 4928.143, Revised Code, and Rule 4901:1-35, Ohio Administrative Code (O.A.C.), for a term commencing on June 1, 2015 and ending May 31, 2018. On January 7, 2014, OMAEG filed a motion to intervene in this proceeding.

On January 24, 2014, a procedural entry was issued, establishing the following deadlines/dates in the case: motions to intervene are due March 7, 2014; discovery requests, except for notices of deposition, should be served by May 2, 2014; intervenor testimony is due on May 6, 2014; Staff testimony is due on May 20, 2014; a procedural conference is scheduled for May 27, 2014 at 10:00 a.m., at the offices of Commission, Hearing Room 11-A; and an evidentiary hearing is scheduled to commence on June 3, 2014.

Economic Development Cost Recovery Rider Rate Adjustment Case (Case No. 14-193-EL-RDR)

On February 3, 2014, Ohio Power Company (AEP-Ohio) filed an application to adjust the economic development cost recovery rider rate (EDR). The EDR was approved by the Commission in AEP-Ohio's 2011 ESP case. The EDR is to be adjusted periodically to recover economic development amounts authorized by the Commission. AEP-Ohio files this application to adjust the EDR to recover costs lost under the reasonable arrangements with Ormet, Eramet Marietta, Inc., Globe Metallurigical, Inc., and The Timken Company. AEP-Ohio proposes a 13.33676% rate to be applied to customers' distribution charges beginning with the first billing cycle of April 2014. This is a more than 3% increase from the current rate of 10.00620%. AEP-Ohio is also proposing to collect the cumulative carrying charge balance each month.

In its application, AEP-Ohio states that the adjustment is just and reasonable, and that no hearing is needed. AEP-Ohio further argues that a hearing would cause needless delay in beginning recovery of delta revenues and carrying charges, and will result in increased carrying charges for customers. AEP-Ohio also requests interim authorization to begin collection, based on the proposed EDR rates, at the start of the April 2014 billing cycle, in the event that this proceeding is still ongoing at that time.

To date, Eramet Marietta, Inc., Globe Metallurigical, Inc., The Timken Company, and the Ohio Consumers' Counsel have filed motions to intervene. No procedural schedule has been established.

FirstEnergy

Republic Steel Application for a Unique Arrangement (Case No. 13-1913-EL-AEC)

On September 9, 2013, Republic Steel ("Republic") filed an application requesting the PUCO to approve a unique arrangement with Ohio Edison Company ("FirstEnergy") in order to expand its production facility in Lorain, Ohio, including the installation and operation of an Electric Arc Furnace ("EAF"). Republic's Lorain facility produces and supplies special bar steel to various manufacturers. Republic currently employs 489 people at its Lorain facility, and committed to add 449 new full time equivalent manufacturing and supporting jobs within three years of full commercial operation of the EAF, while retaining 100 existing jobs.

On February 6, 2014, Republic and other various parties, including Staff, entered into a stipulation resolving the outstanding issues in the case. OMAEG agreed not to oppose the stipulation. A hearing on the stipulation took place on February 13, 2014. The parties are now awaiting a Commission decision on the stipulation.

Dayton Power & Light Company

Transfer or Sale of Generating Assets (Case No. 13-2420-EL-UNC)

On December 30, 2013, DP&L filed an application to transfer or sell certain generation assets. In its application, DP&L indicates that despite the fact that the deadline to transfer such assets was set for a certain period in the future, it is presently exploring its options to sell/transfer such assets to an affiliate as early as 2014. DP&L asks the Commission to waive hearing on this matter. DP&L argues that a hearing is not necessary at this time because DP&L does not have a final plan for separation and plans to file a supplement to this application. DP&L also argues that the issue of generation asset transfer was fully addressed in the recent DP&L ESP proceeding. DP&L also requests waiver of the requirement that it state the fair market value for its generation assets to be transferred, or that the calculation be postponed until it is closer to the time of the transfer.

OMAEG filed comments in this proceeding on February 4, 2014, stating that DP&L did not provide enough information to allow interested parties to properly comment. Like OMAEG, the other parties that filed comments in the case also stated that DP&L did not provide enough information in its application for the interested parties to conduct any substantive analysis of DP&L's plan to transfer its assets.

On February 25, 2014, DP&L filed a supplemental application to transfer its generation assets. DP&L is no longer requesting waiver of the requirement to disclose the fair market value (FMV) of the assets it transfers. However, DP&L is still requesting waiver of the hearing. DP&L now seeks authority to transfer its generation assets to GenCo, an affiliated company, at FMV by May 31, 2017. DP&L states that the FMV of the assets will be determined 90 days before the transfer date.

However, DP&L also states that they are considering all options, including transfer to an unaffiliated third party through sale. The assets would be transferred at FMV under this proposal. This additional proposal of a sale to an unaffiliated third party makes it unclear what DP&L's true intentions are for transferring its generation assets. Without more information or a more definite plan, it is still difficult for interested parties to effectively protect their interests.

Application to Amend Corporate Separation Plan (Case No. 13-2442-EL-UNC)

On December 30, 2013, DP&L filed an application to amend its corporate separation plan. In its application, DP&L notes that its amended plan, filed with the application, explains the formation of AES US Services LLC, which will provide certain administrative services to DP&L. On February 25, 2014, the Commission suspended DP&L's application to amend its corporate separation plan so that the Commission may conduct further review of the plan contained in the application.

<u>Duke Energy Ohio</u>

Capacity Cost Case (12-2400-EL-UNC)

Duke filed an application to increase its collection of capacity charges from all customers by approximately $260 million per year for a period of three years. The proposed increase in revenues was based on the argument that Duke is entitled to collect its fully embedded cost of providing generation capacity because of the Commission's decision in the AEP capacity case. Duke proposed to collect this amount for the period from August 1, 2012 to May 31, 2015. The actual collection from customers was not proposed as a capacity charge to load-serving entities on the Duke Energy Ohio system, but rather, collection was proposed through means of a non-bypassable rider.

On February 13, 2014, the Commission issued an Opinion and Order denying Duke's Application. The Commission found that Duke's request to recover capacity charges on a cost-based charge calculated by the "newly established state compensation mechanism" was in direct contravention of the stipulation reached in Duke's base transmission rate rider and regional transmission organization rider cost recovery proceeding (BTR/RTO). The Commission agreed

that allowing Duke to recover a cost-based charge would require the Commission to reopen the evidentiary considerations in the Duke ESP case to afford all signatory parties the opportunity to revise or litigate other terms of the stipulation in that case. The Commission determined that the language of the Duke ESP and BTR/RTO Stipulations was clear, and that Duke agreed to provide capacity at the final zonal capacity price until such time as a subsequent SSO is approved. No such SSO has been approved and, therefore, Duke cannot unilaterally change its capacity charges. The Commission further noted that as part of the negotiations of the BTR/RTO Stipulation, the parties agreed upon a $110 million electric stability service rider, to be collected by Duke, to provide stability and certainty for Duke's provision of retail electric service as an FRR entity during the term of the ESP. Because the application was in direct contravention to the Stipulations, the Commission found that the Application in Duke's capacity case must be denied.

The Commission rejected Duke's argument that the Application was not a violation of the Stipulations because the Stipulations only specifically barred Duke from filing with FERC. The Commission stated that when it approved the Stipulations, it was with the understanding that all applicable capacity pricing and compensation issues were resolved in their entirety at the state level.

The Commission did not rule on whether the AEP Capacity Case created a state compensation mechanism because the Commission determined that the Application was in conflict with the Stipulations signed by Duke.

Moreover, the Commission agreed, in its Opinion & Order, with the intervening parties that Duke's Application was an application for an increase in rates and not an application for a new service. The Commission also agreed that the Application was actually a late-filed application for rehearing of the Duke ESP case. The Commission stated that, at the time Duke negotiated the Stipulations, it was involved in FERC proceedings in which the issue involved a request to implement cost-based pricing for capacity. Therefore, Duke was fully informed of the status of capacity pricing at the time it signed the Stipulations. The Commission stated that Duke's Application should be denied and dismissed as a late-filed application for rehearing.

The Commission also found that Duke "raised nothing new that has not already been considered, addressed, and open for litigation through [the Commission's] review and consideration of the application and the ESP stipulation in the Duke ESP Case." Accordingly, the Commission held that even if Duke had met its burden of proof, the Application would be denied on the basis of collateral estoppel and res judicata.

The Commission did not make a determination as to whether it has the authority, pursuant to R.C. Chapters 4905, 4909, or 4928, to consider Duke's Application. The Commission did note that many of the arguments raised by the parties were fully considered and addressed by the Commission in the AEP Capacity Case.

The Commission similarly did not make a determination regarding the applicability of the AEP Capacity Case to the circumstances of Duke or any other EDU. The Commission, however,

emphasized that the record in each proceeding stands on its own merits and that its decisions rest on the evidence presented therein.

Applications for Rehearing are due March 17, 2014.

AMRP Rider Case (Case No. 13-2231-GA-RDR)

On February 27, 2014, pursuant to the Stipulation and Recommendation filed in the Duke MGP Case (Case No. 12-1685-GA-AIR), Duke filed its Application to adjust its Accelerated Main Replacement Program Rider (Rider AMRP) and to change accounting methods. Duke proposes increases in the charges for gas service that double the current tariff charges for the following rates:

- Rates GS-S and GS-L (General Service)
- Rate DGS (Distributed Generation Service)
- Rates FT-S and FT-L (Firm Transportation Service)
- Rate IT (Interruptible Transportation Service)
- Rate GGIT (Gas Generation Interruptible Transportation Rate)

The proposed test year is the twelve month period ending with December 31, 2013. Duke estimates that approval of its Application would increase revenues by $9.9 million, or 2.6%, annually over the estimated test period. Duke states that the increase in rates is necessary because the current rates do not yield just and reasonable compensation for Duke.

Given these circumstances, and to the extent that its members falling within these rate classes take gas service from Duke, OMAEG should likely intervene in this proceeding.

<u>Statewide</u>

Commission's Review of Chapters 4901-1, 4901-3, 4901-9, and 4901:1-1, Ohio Administrative Code (Case No. 11-776-AU-ORD)

On March 2, 2011, the Commission issued Staff proposed changes to the rules regarding practice and procedure, Commission meetings, complaint proceedings, and utility tariffs and underground protection. OMAEG submitted comments suggesting that the Commission amend the rules to make electronic service the default service. OMAEG suggested that all service should be sent by email unless a party specifically opts out of electronic service.

On January 22, 2014, the Commission issued an Opinion & Order in the case, stating, among other things, that it supports electronic service but is hesitant to adopt it as the default rule, as proposed by OMAEG. The Commission stated that it supports electronic service by agreement of the parties but will not adopt rules to make electronic service the default.

On February 22, 2014, Duke Energy Ohio, FirstEnergy, and OCC filed applications for rehearing of the Commission's decision.

Commission's Investigation of Ohio's Retail Electric Service Market (Case No. 12-3151-EL-COI)

On December 12, 2012, the Commission issued an entry initiating an investigation into the health, strength, and vitality of Ohio's retail electric service market. The Commission initially presented a series of questions to stakeholders regarding market design and corporate separation, and received comments from the OMAEG and others. Subsequently, numerous stakeholder collaboration workshops were held to discuss the current status of Ohio's electric market and suggest changes from which it may benefit. The workshops focused on supplier concerns, the purchase of receivables, contract portability, and customer enrollment options, among other issues.

On January 16, 2014, Staff issued a Market Development Plan in response to the comments submitted and the workshops held over the course of the proceeding. On February 6, 2014, OMAEG filed comments on the Market Development Plan, which indicated that generally, OMAEG agrees with the contents of the Plan issued by Staff. OMAEG recommends that the Commission require utilities to provide most transparent, understandable information and products available and that the Commission work with nearby states to develop and standardize best practices across the region for implementing improvements to the retail electric service market.

In addition to OMAEG filing comments, several other parties filed comments on the Market Development Plan on February 6, 2014. A Commission decision taking account of the comments, or an entry requesting additional comments, is awaited.

Commission's Review of its Rules for Energy Efficiency Programs (Case No. 13-651-EL-ORD)

On March 3, 2014, the OMA Energy Group (OMAEG) submitted comments on amendments to the Public Utilities Commission of Ohio's (Commission) energy efficiency (EE) regulations in Chapter 4901:1-39, Ohio Administrative Code, which were proposed by the Staff of the Commission (Staff). OMAEG's comments centered on the importance of customers retaining the ability to challenge electric utilities' claimed shared savings and lost distribution revenues in the context of the program portfolio proceedings. Despite proposals by Staff to move from a pre-approval process to a "post-approval scenario" for portfolio programs, OMAEG asserted in its comments that moving away from a pre-approval process significantly curtails the ability of utility customers to meaningfully participate in the process. OMAEG's comments also stress the importance of including in Commission rules the right of mercantile customers who have engaged in self-direct EE projects to retain the EE attributes of their projects when committing savings from those projects to electric utilities. Further, OMAEG's comments contend that the $0.005/kwh incentive for CHP projects set forth in the proposed rules is far too meager an

incentive to meaningfully encourage CHP development in the Ohio. OMAEG will be filing reply comments in mid-March 2014.

Legislative Actions

- **Sub. S.B. 58**: Much action has taken place over the past few months on this proposed legislation. Please see Public Policy report for details.
- **Manufactured Gas Plant Legislation**: Developments have also occurred in the past few months regarding MGP legislation. Please see Public Policy report for details.
- **HB 312**: proposes statewide rider for unique/economic development arrangements. Please see full summary in packet.
- **HB 319**: permits a natural gas company to file an application with Commission to establish and recover prudently incurred infrastructure development costs of certain economic development projects. Please see full summary in packet.
- **Energy Special Improvement District Bill Draft:** purportedly gives Port Authorities (in addition to qualified nonprofit corporations) the ability to create and govern special improvement districts (SIDs) and to adopt bylaws for implementing plans for special energy improvement projects under Chapter 1710, Revised Code. Presently requires further development before proposal in the General Assembly.

Judicial Actions—Pertinent Cases Presently on Appeal from the Commission to the Supreme Court of Ohio

AEP Ohio

- *In the Matter of the Fuel Adjustment Clauses for Columbus Southern Power Company and Ohio Power Company*, Case No. 2012-1484 (Appeal of Case No. 08-972-EL-FAC, et al.)
    - Oral Argument scheduled to take place on March 12, 2014
- *In the Matter of the Application of Ohio Power Company for Approval of a Mechanism to Recover Deferred Fuel Costs Ordered Under Section 4928.144, Ohio Revised Code*, Case No. 2012-2008 (Appeal of Case No. 11-4924-EL-RDR, et al.)
- *In the Matter of the Commission Review of the Capacity Charges of Ohio Power Company and Columbus Southern Power Company*, Case Nos. 2012-2098 and 2013-228 (Appeal of Case No. 10-2929-EL-UNC)
- *In the Matter of the Application of Ohio Power Company to Update its Transmission Cost Recovery Rider Rates*, Case No. 2013-154 (Appeal of Case No. 12-1046-EL-RDR)
- *In the Matter of the Application of Columbus Southern Power Company for Authority to Establish a Standard Service Offer Pursuant to Section 4928.1143, Revised Code, in the*

Form of an Electric Security Plan, Case No. 2013-521 (Appeal of Case No. 11-346-EL-SSO, et al.)

- *In the Matter of the Application of Ohio Power Company for Approval of an Amendment to its Corporate Separation Plan*, Case No. 2013-1014 (Appeal of Case No. 12-1126-EL-UNC)

FirstEnergy

- *In the Matter of Ohio Edison Company, The Cleveland Electric Illuminating Company, and The Toledo Edison Company for Authority to Provide for a Standard Service Offer Pursuant to Section 4928.143, Revised Code, in the Form of an Electric Security Plan*, Case No. 2013-513 (Appeal of Case No. 12-1230-EL-SSO)
- *In the Matter of the Review of the Alternative Energy Rider Contained in the Tariffs of Ohio Edison Company, Toledo Edison Company, and The Cleveland Electric Illuminating Company*, Case No. 2013-2026 (Appeal of Case No. 11-5201-EL-RDR)

Statewide

- *In the Matter of the Mercantile Customer Pilot Program for Integration of Customer Energy Efficiency or Peak-Demand Reduction Programs*, Case No. 2012-2182 (Appeal of Case No. 10-834-EL-POR)
- *In the Matter of the Adoption of Rules for Alternative and Renewable Energy Technology, Resources, and Climate Regulations, and Review of Chapters 4901:5-1, 4901:5-3, 4901:5-5, and 4901:5-7 of the Ohio Administrative Code, Pursuant to Chapter 4928.66, Revised Code, as Amended by Substitute Senate Bill No. 221*, Case No. 2013-1472 (Appeal of Case No. 08-888-EL-ORD)

1325-001.382001v1

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OMA Energy Group – Comments Submitted on Proposed Rule Amendments to Chapter 4901:1-39, Ohio Administrative Code (Energy Efficiency Rules)

On March 3, 2014, the OMA Energy Group (OMAEG) submitted comments on amendments to the Public Utilities Commission of Ohio's (Commission) energy efficiency (EE) regulations in Chapter 4901:1-39, Ohio Administrative Code, which were proposed by the Staff of the Commission (Staff). The proposed rules address concepts such as electric utilities' recovery of shared savings and lost distribution revenues associated with EE projects; incentivizing the savings associated with combined heat and power (CHP) and waste energy recovery projects; and the administrative approval process associated with electric utilities' EE portfolio programs.

OMAEG's comments centered on the importance of customers retaining the ability to challenge electric utilities' claimed shared savings and lost distribution revenues in the context of the program portfolio proceedings. Despite proposals by Staff to move from a pre-approval process to a "post-approval scenario" for portfolio programs, OMAEG asserted in its comments that moving away from a pre-approval process significantly curtails the ability of utility customers to meaningfully participate in the process. OMAEG's comments also stress the importance of including in Commission rules the right of mercantile customers who have engaged in self-direct EE projects to retain the EE attributes of their projects when committing savings from those projects to electric utilities. Further, OMAEG's comments contend that the $0.005/kwh incentive for CHP projects set forth in the proposed rules is far too meager an incentive to meaningfully encourage CHP development in the Ohio.

We are presently in the process of evaluating the comments submitted by other interested parties in this docket, and will be responding to a number of these arguments by means of reply comments, which will be filed in mid-March. Please feel free to contact Kim Bojko with any questions you may have about the proposed rules or OMAEG's recommendations at Bojko@carpenterlipps.com.

1325-001.382354v1

Summary and Analysis – 130th General Assembly, HB 312, proposed by Rep. Johnson

Legislation Summary

HB 312 permits an electric distribution utility to recover the costs of economic and job retention programs, via approved reasonable arrangements, from ALL electric utility customers in the state. This represents a change from existing economic and job development regulations, which permit an electric utility to recover costs for such reasonable arrangements only from customers located in the utility's certified territory or within the same holding company.

HB 312 further prohibits the Public Utilities Commission of Ohio (Commission) from approving applications for economic development and job retention reasonable arrangements and/or modifications or extensions thereof after January 1, 2018.

Analysis

HB 312 was purportedly proposed in response to a developer's representations of its intentions to construct a steel plant in Scioto County if certain electricity incentives are provided.

As proposed, the legislation seems to serve competing interests. First, it would create a state-wide economic development and job retention rider on electric rates. Second, the legislation prevents the Commission from approving any new or modifying/extending any existing economic or job retention reasonable arrangements after January 1, 2018. Third, as written, the rate schedule associated with the new tariff cannot be modified or extended after January 1, 2018, unless it is altered, changed, or modified by the Commission.

Although intended, in many respects, to expand the dollars available and the number of customers that ultimately fund the economic development and job retention reasonable arrangements, the legislation proposes January 1, 2018 as an end date for utilities and mercantile customers to apply for new economic and job retention reasonable arrangements. In so doing, the bill forecloses beneficial economic opportunities to any entities which have not been approved to receive such treatment by January 1, 2018. Proposing a cut-off date by which companies looking to invest or expand operations in Ohio must have been awarded economic development or job retention arrangements in order to benefit from these electricity incentives largely contradicts existing Ohio reasonable arrangement regulations and overarching policies to promote and continue to promote job growth and retention in the state.

As proposed, the legislation may compel businesses in any number of industries to effectively subsidize energy costs for other companies that may be in direct competition. This result is anticompetitive and may have the effect of significantly assisting one company in Ohio, while significantly harming another company in Ohio, possibly in the same industry. This outcome

contradicts existing policy goals of providing ALL customers with access to non-discriminatory and reasonably priced electric service.

Also problematic is the lack of information provided on the estimated cost of a statewide economic development rider. Notwithstanding the fact that costs associated with the proposed rider are not discussed, one outcome of approval of the legislation that may significantly increase the costs of a statewide rider to customers is the potential number of customers who may seek to obtain Commission approval of an economic development arrangement on an expedited basis prior to January 1, 2018. Because the opportunity to obtain incentives of this nature expires on that date, numerous customers may, predictably or, in other cases, unpredictably, apply for economic development arrangements with their electric utilities in order to preserve their rights to the incentives received thereby. To the extent that these arrangements are approved, rider costs associated with economic development arrangements could increase exponentially.

Another consideration relates to the collection of costs of the rider from customers across the state. The collection of economic development and job retention rider costs from electric customers statewide may promote Ohio's effectiveness in the global economy. The availability of electric or economic development incentives for Ohio manufacturers may result, through saved costs, in Ohio products being more widely available nationally and locally and, therefore, more widely used. However, it is important to be sensitive to the fact that customers located, for instance, two hundred miles from a facility for which they have been directed to fund electricity costs for economic development purposes (by participation in the rider), may not recognize the need for or support increases in their electric rates. Such customers might prefer to fund electric incentives or economic development projects located closer to home, as they may feel the benefits of investing in such projects may be more direct or beneficial for them than investing in other projects across the state.

Recommendation

Given that OMA does not oppose the concept of reasonable arrangements or economic development initiatives, it must be careful to ensure that any proposed reasonable arrangements will not be significantly detrimental, economically or otherwise, to its members. This policy applies equally to applications for reasonable arrangements submitted by individual OMA members. While OMA encourages member companies to seek out economic development incentives, it must ensure that the incentives sought will not negatively impact other member companies. On a statewide scale, this will be a delicate balancing act.

To the extent that the proposed legislation may be economically or competitively detrimental to its member companies, OMA should consider not supporting this bill. To the extent that proponents of the proposed legislation are able to demonstrate, however, that the economic impacts of the bill will be limited, and the bill will not result in electric rate subsidies that are anticompetitive to existing members' businesses, OMA should consider entertaining and inspecting such information.

Bill Analysis

DRAFT

Energy Special Improvement District
aka Energy SID
2/12/14

E-SID enables the building owner to self-finance energy efficiency improvements through a special assessment on their property.

Abstract

To amend sections of the OHR....

To authorize Port Authorities to create and govern a special improvement district and adopt bylaws for the purpose of developing and implementing plans for special energy improvement projects under Chapter 1710 of the revised code.

Bill Summary

- Expands the Energy SID to include a waste heat recovery project, a hydroelectric project, a combined heat & power (CHP) project, a co-generation project, as well as a water efficiency project, fuel source conversion project, and a bio-digester project.
    - Current law allows Energy SID's for a solar voltaic project, a solar thermal energy project, a geothermal project, a customer-generated energy project, or an energy efficiency improvement.
- Expands the type of entities that can create Energy SID's to include Port Authorities. Port Authorities have been involved in existing Energy SIDs as the financing agents of the project.
    - Current law allows Energy SIDs to be created by existing qualified non-profit corporations whose by-laws are approved by the local government, and by petition of real property owners.
    - This bill would allow Port Authorities to both create and implement the programs, with the approval of the local government where the Energy SID is to be created.
    - The existing board of the Port Authority would also serve as the board for the Energy SID. Bylaws would specify that local governments in the district would have approval over the project.
- Limits the Energy SIDs to just non-residential properties.
    - Current law allows for both residential and commercial properties. Energy improvements to residential properties have proven to be troublesome with other housing lenders.

Benefits of the Bill

- Streamline the bureaucracy of creation and governance of Energy SIDs
- Expedite the creation of energy improvement projects, which in turn will boost economic development in the district

Rationale of the Bill

- Port Authorities already work closely with local governments and Port Authorities already do financing of economic development projects.

Agreements – Ohio Township Association and Ohio Municipal League
Legislative Background – 128-SB-232 – Sen Widener

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Analysis – Proposed Legislation Regarding Energy Special Improvement Districts

Legislation Summary

The legislation under consideration by Representative Conditt purportedly gives Port Authorities, in addition to qualified nonprofit corporations, the ability to create and govern special improvement districts (SIDs) and to adopt bylaws for implementing plans for special energy improvement projects under Chapter 1710, Revised Code. Further, the legislation allegedly expands eligible special energy improvement projects to include waste heat recovery, hydroelectric, combined heat and power (CHP), cogeneration, water efficiency, fuel source conversion, and biodigester projects. The legislation also purportedly limits the benefits available to energy special improvement districts (energy SIDs) to non-residential properties.

Analysis

Chapter 1710, Revised Code, presently governs SIDs. The proposed changes to SID-related legislation will affect several sections of Chapter 1710, Revised Code, and two related provisions, Sections 4982.16 and 4982.31, Revised Code.

Two documents appended to the text of the bill draft, titled "Bill Analysis" and "2014 Ohio ESID Law Amendments" include, respectively, an outline of the outcomes to be achieved by the proposed revisions, and a list of amendments, by section, that are incorporated into the bill. Despite the presence, in these documents, of specific goals and language to be incorporated into the legislation, the draft that was provided to OMA for its input fails to incorporate the lion's share of these proposed changes. Therefore, significant development of the bill draft is still necessary before meaningful suggestions can be offered on the text of the bill.

To the extent that the above documents suggest that the bill adds several types of projects, including waste heat recovery, combined heat and power (CHP), cogeneration, fuel source conversion, and biodigester projects, which may be used to achieve compliance with Ohio energy portfolio standards, these additions are, in fact, present in the bill draft. Language extending the ability to create energy SIDs to Port Authorities is also present in the bill draft. An area of concern evidencing missing language in the bill draft, however, is the ability of political subdivisions that comprise Port Authorities, including municipal corporations, townships, counties, or any combination of these entities, to levy assessments for energy special improvement projects within energy SIDs. The proposed legislation does not detail how such assessments may be structured or implemented. The lack of details surrounding the assessments and magnitude of such assessments is an area of concern for OMA. Additionally, given that there are other available methods in current Ohio law to support and fund energy efficiency and alternative energy projects, the ability to fund such projects through Port Authorities may be considered redundant and could be duplicative. Without some type of cap on the dollars that may be collected by means of assessments for energy special improvement projects located

within energy SIDs, as well as a description of how such assessments will be apportioned, OMA should be reticent to support legislation authorizing Port Authorities to create energy SIDs and, by extension, levy assessments to fund energy special improvement projects in those energy SIDs.

Although, as discussed above, language adding further types of projects and providing Port Authorities with the ability to create SIDs is present in the bill draft, several of the goals of the legislation, as stated in the Bill Analysis and 2014 Ohio ESID Law Amendments documents, have also not been incorporated into the bill draft. For instance, definitions of a number of important terms, such as "energy special improvement district," have not been included in the bill draft. Moreover, amendments that are explicitly outlined in the 2014 Ohio ESID Law Amendments document are noticeably absent in the bill draft. Proposed changes to Sections 1710.02, 1710.04, 1710.06, and 1710.12, Revised Code, which include several important details, have not been included in the bill draft. These changes must be included in the bill for the amendments that have been incorporated to be appropriately supported.

Recommendation

Although OMA has shown significant support for energy efficiency projects and funding, both in the past and present, it would be advisable for the organization to withhold support for this legislation at the present time. The legislation must be further developed, as detailed above, in order for a proper evaluation to be performed by OMA regarding its ability to support the bill. Additionally, even if the bill is further developed, there are already several methods by which energy efficiency and other energy programs may be implemented and funded in the state. As such, subjecting OMA members to potential assessments by Port Authorities for these types of projects may not be the best means by which to continue supporting energy efficiency and development.

Reports criticizing Ohio efficiency law limited in scope

Posted on 02/26/2014 by Kathiann M. Kowalski

(Photo by Walter Grutchfield via Creative Commons)

Two economists who favor scaling back Ohio's energy efficiency standard admit they did not consider all potential benefits in their recent reports criticizing the current law.

Last week, an industry group released two reports finding fault with an analysis that projects billions of dollars in costs and thousands of job losses if Ohio's renewable energy and energy efficiency standards are rolled back.

The new reports conclude that the costs of energy efficiency programs outweigh one benefit—lower wholesale energy prices. The reports' authors acknowledge, however, that they did not calculate any other potential benefits.

The new reports are basically "nitpicking," responds Joseph Fiksel. He heads The Ohio State University's Center for Resilience, which did the modeling work last fall.

More importantly, supporters of the current law say, the reports don't address basic problems in a pending bill that would scale back Ohio's energy efficiency law.

Energy efficiency under attack

Ohio's renewable energy and energy efficiency standards have been under attack since September.

At that time, Republican State Sen. Bill Seitz introduced Substitute Senate Bill 58, which would greatly scale back both standards. The current law's renewable energy standard says 25 percent of the state's electricity must come from renewable and alternative energy sources by 2025. By the same date, the energy efficiency standard requires a 22 percent cut in retail electricity sales.

Current law lets utilities pass costs for complying with the law on to customers, but only if the programs have been shown to be cost-effective. Essentially, energy efficiency programs must cost less than the present value of their projected savings. If not, the Public Utilities Commission of Ohio cannot allow the charges.

After Sen. Seitz's bill was introduced, The Ohio State University's Center for Resilience analyzed the benefits of Ohio's current renewable and energy efficiency standards. Advanced Energy Economy – Ohio Institute, which promotes the use of renewable energy and energy efficiency, commissioned that analysis.

The Ohio State report, updated in November, found that without the 2008 law, Ohioans would have paid 1.4 percent more for electricity than they do now. Moreover, if Senate Bill 58 were passed, Ohioans would pay 3.7 percent more than they would under current law. The average increase between 2014 and 2025 would be more than $300 million per year, for a total of $3.94 billion by 2025.

Now Jonathan Lesser of Continental Economics in New Mexico and Michael Jones of the University of Cincinnati have criticized the Ohio State analysis. Industrial Energy Users – Ohio (IEU) commissioned the reports by both experts. The group of large Ohio energy consumers supports Senate Bill 58 and its cutbacks to energy efficiency programs.

'Shove it down their throats'

Jones and Lesser oppose the energy efficiency standard in principle.

"Consumers have every incentive to reduce their energy demand," argues Jones. The energy efficiency standard is "assuming that businesses and customers weren't acting in their best interests."

Lesser agrees. "I'm of the belief that it's much better to let customers make their own decisions [and] make their own investment choices than to simply shove it down their throats with government mandates based on assumptions that may not come true at all."

The Ohio State projections use a model called Dynamic Energy-Economic Policy Simulation, or DEEPS, which both Jones and Lesser question.

"The model they use assumes consumers willingly eat their spinach and ask for a second helping," argues Lesser. "There's a fundamental disconnect in this model."

Lesser focused on the charges that consumers pay for energy efficiency programs relative to wholesale energy prices.

In addition to efficiency programs, utilities must also bid a certain amount of projected energy efficiency into the PJM Interconnection's annual capacity auction. PJM manages the grid and wholesale electricity market for all or parts of 13 states, plus the District of Columbia. Utilities can

bid energy efficiency into the auction the same way they would bid in generating capacity at a power plant. In effect, a guarantee of lower demand covers part of PJM's overall supply requirements for the region.

Bidding energy efficiency into the capacity auction has little or no cost for utilities. However, it lowers the overall capacity prices for electricity, because the most expensive forms of generating capacity aren't needed. And payments to utilities can offset costs for future energy efficiency programs.

Lesser says the benefit of lower electricity prices is far less than the total cost of energy efficiency programs. A customer using 750 kilowatt-hours of electricity would save just 37 cents per month, he estimates.

"For the privilege of getting that 37-cent reduction, a customer is paying five to ten times that every month," says Lesser. "That's not a good deal."

However, Lesser's report did not consider any other potential benefits from the energy efficiency standard. In particular, he did not examine support behind utilities' claims and Commission findings that energy efficiency programs save more than they cost.

Among other things, those benefits would include saving money by using less electricity. Lesser noted that such benefits can be long-term rather than immediate.

"I did not try to do an analysis of dubious programs that benefit consumers in the long run," says Lesser.

Questioning the model

Jones also limited the scope of his analysis, focusing on a function in the DEEPS model called the Cobb-Douglas function. Jones cites a Congressional Budget Office report saying that the function does not work well when determining the impact of taxes on capital. Because utilities can pass costs on to customers, his report says the standard "functions as a tax on capital."

Charges for energy efficiency programs, however, are not a tax in the form of payments going to a government body. They are a cost for utilities to comply with the law, which utilities can pass on to consumers. Companies often pass on costs for complying with other types of regulation, such as worker safety laws.

"The argument for those regulations is for safety purposes" when people aren't always aware of the risks, says Jones. In contrast, he says, "Consumers have every incentive to reduce their energy demand."

While Jones disagreed about the wisdom of both types of laws, he did not explain why costs to comply with one would be a tax, but not the other.

Jones also takes issue with the ease of substituting some economic inputs for others.

“There are limitations in a business’s ability to substitute workers for machines,” he says.

Also, when Lesser ran the model with the unrealistic assumption of zero emissions, the results showed job creation. That result is “absurd,” says Jones. “It raises questions about the validity of the model.”

“That’s just a misuse of the model,” responds Fiksel, of Ohio State. “That has nothing to do with the actual work that was done in entering valid assumptions in the model.”

‘Essentially nitpicking’

“I interpret these reports as essentially nitpicking and basically advancing an alternative position,” continues Fiksel. He adds that Lesser’s report reflects a misunderstanding of DEEPS as a system dynamics model.

“We’re very confident that the model itself is a strong foundation,” says Fiksel. And, he stresses, the net result of the renewable and energy efficiency standards is positive.

“The net result that we saw was a healthy economy, with a lower overall energy bill [and] lower energy prices,” says Fiksel.

The reports by Lesser and Jones were not objective, claims Ted Ford. He’s president of Advanced Energy Economy Ohio, which commissioned the Ohio State analysis.

“They started out with the goal of trying to discredit the model,” he says. As a result, their analysis contains “fundamental flaws.”

For example, Lesser “just focused in on the costs of the riders to consumers,” says Ford, “where in fact the benefits outweigh the cost several times over.” Otherwise, energy efficiency programs would not meet requirements of current law.

The bigger picture

Criticism of the Ohio State model comes at a time when Seitz and others want to scale back Ohio’s renewable energy and energy efficiency standards.

Among other things, the current version of Senate Bill 58 would allow many more things to count as energy efficiency, even if they did not provide direct savings to consumers. Additionally, the bill would cap total spending for energy efficiency, thus limiting the potential for savings.

It would also let utilities keep one-third of all after-tax savings from energy efficiency, up to the law’s targets. In other words, consumers would get only two-thirds of the benefits they pay for.

“Ohioans are currently benefiting from energy efficiency on their electric bills,” stresses Marty Berkowitz, a spokesperson for the Office of the Ohio Consumers Counsel. The office is currently reviewing the Lesser report and will provide additional comments in the future.

“But, in any event,” Berkowitz adds, “Dr. Lesser’s presentation does not address or refute the concerns of various customer representatives, including the Consumers’ Counsel, that Senate Bill 58/House Bill 302 are converting energy efficiency into the utilities’ profit center at Ohioans’ expense.”

Kathiann M. Kowalski is a freelance journalist based in Ohio who writes often on science and policy issues.

This entry was posted in News and tagged efficiency, Ohio, politics by Kathiann M. Kowalski. Bookmark the permalink.

Voters Overwhelmingly Support Energy Efficiency

A national survey among 1,000 likely voters clearly illustrates broad support for energy efficiency. Nine in ten voters support using energy efficient products and believe it's important to include energy efficiency as part of our country's energy solutions. The support for energy efficiency cuts across demographic and political lines. Two-thirds are more likely to vote a candidate for congress who supports energy efficiency policies.

- **66%** disapprove of the job congress is doing in addressing energy issues and meeting the country's energy needs. One-quarter (24%) approves of the job congress is doing.

- **94%** support using energy efficient products. Seven in ten (70%) "strongly" support it. Only 5% opposes using energy efficient products. The support is broad and intense among all demographic and political groups.

- **90%** believe it's important to include energy efficiency as part of our country's energy solutions. This overwhelming sentiment is evident among Republicans (86%), Democrats (99%) and Independents (88%). The majority (56%) says it's "very" important. Only 9% say it's not important.

- **74%** support investing taxpayers' dollars on energy efficiency technologies, innovations and programs if it would save consumers more money. Less than one-quarter (22%) opposes it. The majority support cuts across political lines: Republicans (63% to 33%), Democrats (91% to 6%) and Independents (68% to 29%).

- **67%** are more likely to vote for a candidate for congress who supports energy efficiency policies. The majority of Republicans (51%), Democrats (86%) and Independents (66%) are all more likely to vote for such a candidate.

- **69%** are more likely to support investing taxpayers' dollars on energy efficiency if the investments in energy efficiency won't raise taxes, won't add to the federal deficit and won't have any government mandates on consumers. This makes two-thirds or more of voters regardless of party affiliation more likely to support investing taxpayers' dollars on energy efficiency: Republicans (65%), Democrats (78%) and Independents (67%).

Methodology: This national survey of 1,000 likely general election voters was conducted between September 22-26, 2013. Seven hundred (700) interviews were conducted by professional interviewers via telephone and 300 interviews were conducted online among respondents who only have cell phones. Interview selection was at random within predetermined geographic units. These units were structured to statistically correlate with actual general election turnouts. The accuracy of the sample of 1,000 likely general election voters is within +/- 3.1% at a 95% confidence interval.

Specifically, do you approve or disapprove of the job Congress is doing in addressing energy issues and meeting the country's energy needs?

Approve	Disapprove	Don't Know
24	66	10

Do you support or oppose using energy efficient products, such as energy saving light bulbs, programmable thermostats or Energy Star-certified appliances to reduce energy use?

Support	Oppose	Don't Know
94	5	1

How important is it for Congress to include energy efficiency as part of our country's energy solutions?

Very Important	Somewhat Important	Not Important	Don't Know
56	34	9	1

Do you support or oppose investing taxpayers' dollars on energy efficient technologies, innovations and programs now if it would save consumers like you more money?

Support	Oppose	Don't Know
74	22	4

Would you be more likely or less likely to vote for a candidate for Congress who supports energy efficiency policies? If it would make no difference, just say so.

More Likely	Less Likely	No Difference	Don't Know
67	25	5	3

Please tell me whether the following statement makes you more likely or less likely to support investing taxpayers' dollars on energy efficiency. If it would make no difference, just say so.
"The investments in energy efficiency won't raise your taxes, won't add to the federal deficit and won't have any government mandates on consumers."

More Likely	Less Likely	No Difference	Don't Know
69	19	9	3

NATIONAL ASSOCIATION OF
Manufacturers

Americans Broadly Support Energy Efficiency

9 IN 10 LIKELY VOTERS SUPPORT ENERGY EFFICIENCY AS SOLUTION TO ENERGY CHALLENGES

Contact:
Matthew Lavoie ((202 637-3085)

WASHINGTON, D.C., 02/27/14 - Efforts to promote energy efficiency enjoy overwhelming support among key political demographics, according to a poll released today by the National Electrical Manufacturers Association (NEMA) and the National Association of Manufacturers (NAM).

The poll, commissioned by McLaughlin & Associates, found that 9 in 10 likely voters support energy efficiency as a key part of the solution addressing our energy challenges. Results showed a desire for greater adoption of efficient technologies throughout our economy, including the federal government, where tax dollars can be saved.

The poll of 1,000 likely voters indicated broad support of energy efficiency among conservative, moderate and liberal groups. In addition, each of these groups would be more likely to support a member of Congress who voted for energy-efficiency policies.

"The results prove that energy efficiency is a winning topic with consumers. An investment in energy efficiency returns significant cost savings," said NEMA President and CEO Evan R. Gaddis. "Energy-efficiency policies for the residential, commercial and industrial sectors should be a central component to any national energy policy."

"Energy efficiency will continue to play a critical role in our nation's ability to succeed economically, and commonsense energy-efficiency legislation is a win-win that means savings for manufacturers and their communities," added NAM President and CEO Jay Timmons. "These results show that consumers from across the political spectrum agree that energy efficiency is a key part of our nation's energy future."

To view the poll results in their entirety, click here.

Related Tags: News, Press Releases

Comments + Add a Comment

MEMORANDUM

Date: March 5, 2014

To: OMA Energy Committee, OMA Energy Group, OMA staff

From: John Seryak, PE (Go Sustainable Energy)

RE: Response to Dr. Lesser 2/18/2014 Study

Dr. Jonathan Lesser of Continental Economics presented a testimony to the Ohio Senate Public Utilities Committee on February 18th, 2014 titled "Ohio's Electricity Usage Reduction Mandate: The "Free Lunch" Paid for by Ohio Consumers". Dr. Lesser's testimony primarily critiques a study from the Ohio State University's Center for Resilience, as well as the general concept of price suppression in wholesale energy markets.

We thoroughly reviewed Dr. Lesser's testimony, and found that:

- Lesser's testimony in fact acknowledges a relationship between energy load and energy price. OMA has commissioned a study, and reviewed several other studies, which show the same relationship.
- Lesser significantly underestimates price suppression
  - Capacity market savings were not considered.
  - Significantly underestimates achieved energy (kWh) savings – Dr. Lesser only considered the minimum required savings from each electric utility. In fact, most of Ohio's utilities have achieved significantly more savings. For example, DP&L achieved 660,599 MWh in savings through 2012, compared to its cumulative benchmark of 326,459 MWh – more than double. AEP and Duke have similarly overachieved.
  - Underestimated savings lifetime significantly – It is generally held that energy savings will impact the market for 5-10 years, or longer. Lesser accounts for considerably less than that.
  - Analysis methodology leads to "stranded" benefits – Lesser repeatedly acknowledges financial benefits, but then does not account for them (ex., capacity market savings, price suppression that crosses state lines). This leads to a full accounting of costs, while stranding benefits without an owner.
- Lesser does not consider benefits of avoided energy purchases
  - Recent discussions in Ohio have had a focus on the price of electricity, rightly so since non-participants in efficiency programs only receive the benefit of reduced prices and avoided infrastructure investments. However, the bulk of the financial benefit to the state is through avoided energy purchases. An OMA commissioned

study showed avoided energy purchases in Ohio to amount to $3.37 billion through 2020, more than paying for the program costs by 2-fold, as shown next in this summary table[1]:

Table ES-1. Summary of Wholesale Energy Cost Savings and Wholesale Energy and Capacity Price Mitigation Impacts from Ohio's EERS Through 2020

	Economic Savings (Million
Wholesale Energy Cost Savings	$3,370
Wholesale Energy Price Mitigation Savings	$880
Wholesale Capacity Price Mitigation Savings (Estimated, 2017-2020)	$1,320*
Total Savings	**$5,570**
Wholesale Capacity Price Mitigation Savings (Forgone, 2015/2016)	$500
Utility Program Administration Costs**	$2,800

* Assumes that savings from the 2017/2018 through 2019/2020 auctions are equal to the estimates of savings from 2020/2021 auction. Does not include savings from 2016/2017 auction, which transpires in May 2013 and, hence, the potential savings have already been lost.

** Utility program investments will accrue savings over the life of the measures installed in each program year and, therefore, they will deliver savings beyond 2020. However, we only count program savings through 2020.

- The study is subjective, poorly researched, and presents little data and no references to support the conclusions.
  - Lesser confuses and confounds studies he's critiquing throughout the testimony.
  - Lesser critiques price suppression without ever specifically arguing against the study which would be the subject of his critique.
  - Lesser does not recognize or address the wealth of studies supporting the price suppression concept from academics, utilities, grid operators, and consultancies.
  - The positions, analysis, and findings of the work he critiques are grossly misrepresented.
  - Lesser presents his opinions as factual statements, with no supporting data or reference to supporting literature.
  - Lesser relies strongly on non-sequitur logic – conclusions that do not follow from the premises - to make his arguments. Non-sequitur logic is common in marketing, but is by definition invalid in science, and also typically does not hold up in law.

[1] http://www.ohiomfg.com/legacy/communities/energy/OMA-ACEEE_Study_Ohio_Energy_Efficiency_Standard.pdf

Following is a detailed critique of Dr. Lesser's study/testimony, addressing the large number of immediately apparent issues. Because there are so many issues, this critique should be considered preliminary. The fact that we do not address every one of Dr. Lesser's statements does not indicate that we accept them as true.

1. Pg. EX-1, "…the budgets will certainly continue to increase…" – Dr. Lesser makes a strong claim of certainty without any supporting analysis. While there are several upward pressures on program budgets, Dr. Lesser ignores several important downward pressures on program budgets:
    a. Flat annual savings benchmarks through 2018. - The size of the annual benchmark is likely the primary driver of program budgets. However, they will not increase for the next five years.
    b. PJM Capacity Auction payments – Utilities will begin receiving payments from PJM's capacity auctions in the next several years. These payments are likely to amount to several million dollars. For example, AEP will receive over $10 million for the 2015/16 auction.
    c. Banked savings – AEP, DP&L, and Duke all have significantly "banked" savings from over-performance from prior years. These banked savings can be applied to future year benchmarks to reduce the cost of future compliance.
    d. Economies of scale – Some programs actually reduce their cost on a unitized basis, while others have slightly increased.
    e. New technologies and programs – New efficiency technologies and program types may deliver energy savings at a lower cost.
    f. Upward pressures on budgets include: increasing annual benchmarks beyond 5 years out, penetration of energy savings technology into the market.
2. Page EX-1, "…budgets have grown at a rate of 12% per year. If that rate growth continues…"
    a. Dr. Lesser implies program budgets will grow at 12% per year based on historical budget growth. This implication is not supported with data, and does not consider the downward pressures on program budgets we present in Point 1.
3. Page EX-1, "Those who favor the electricity usage reduction mandate and oppose any reforms to it assert that Ohio's retail electric consumers will receive a "free lunch":
    a. In general, proponents of the efficiency programs have also presented reforms, both at the PUCO and at the statehouse. Opposition to SB 58 does not imply opposition to "any reforms".

b. Proponents of the efficiency programs have always considered the cost of the programs in a cost benefit analysis. In other words, no "free lunch" has ever been assumed or represented.

4. Page EX-1, 2, "…claims are similar to claims that...renewable generating resources spurs economic growth and job creation…"

    a. Dr. Lesser is conflating two wholly unrelated issues: economic development analysis and wholesale energy analysis. This is an example of non-sequitur logic.

5. Page EX-2, "…government can, at the expense of its citizens, subsidize long-term economic growth…"

    a. Dr. Lesser again misrepresents the findings and position of the work he is critiquing. The studies he is critiquing address consumer energy expenditures and energy pricing, not economic development policies. This again is an example of non-sequitur logic, which is inherently invalid logic.

6. Page EX-2, "…AEEOI study asserts that by mandating reductions in electricity usage…"

    a. Dr. Lesser presents a perhaps inaccurate picture of the DEEPS model outputs, likely be confusing the AEEOI study conducted by the OSU Center for Resilience, and the OMA commissioned study by ACEEE and Synapse Energy Economics. Confusion concerning which study Dr. Lesser is critiquing abounds throughout his report.

7. Page EX-2, "…the effects of the Ohio electricity usage reduction mandate are spread throughout PJM."

    a. While this is true, Dr. Lesser does not address how benefits change in constrained areas of the grid, such as northern Ohio's ATSI region.

    b. Additionally, Dr. Lesser does not address benefits which accrue to Ohio's ratepayers from out-of-state efficiency programs. This leads to Dr. Lesser's methodology "stranding benefits". That is, Dr. Lesser shows they occur but does not attribute the benefit to anyone, or account for it in any way.

8. Page EX-3, "…..80% of the alleged benefits accrue to "free riders""

    a. 100% of the benefits presented in the OSU and ACEEE studies occur within Ohio. While we agree that there is a universal benefit, Dr. Lesser does not consider that both the OSU and ACEEE/Synapse studies confine their summation of benefits to those realized within Ohio, from Ohio funded programs.

9. Page EX-3, "…at best, a 37 cent reduction in their monthly electric bill…"

    a. As noted, Dr. Lesser does not reference achieved energy savings from the utility programs, and thus significantly underestimates energy (kWh) savings.

b. Dr. Lesser does not consider price suppression in the wholesale capacity market.

c. Dr. Lesser significantly underestimates the duration of energy savings and resulting price suppression.

d. Dr. Lesser's methodology leads to "stranded benefits", ie, benefits he acknowledges exist, but that he does not account for or attribute to any ratepayer.

10. Page EX-3, "…err on the side of maximizing…"

    a. As noted in Point 9 above, Dr. Lesser significantly underestimates benefits to ratepayers for multiple reasons.

11. Page EX-3, "…pay a monthly mandate tax ranging between $1.74 and $3.92…"

    a. Dr. Lesser does not support his analysis. We've shown in Point 9 that Dr. Lesser's analysis is inaccurate.

12. Page EX-4, Figure EX-1

    a. Dr. Lesser asserts that regulated residential rates have increased as a result of energy-efficiency programs, but provides no data or evidence to support this assertion. He does not:

        i. Present the effect of retail shopping on regulated rates.

        ii. Present secondary, primary, or transmission rates with retail shopping.

        iii. Investigate the many riders factored into regulated residential rates. Dr. Lesser does not analyze which riders contribute to the increase in regulated residential rates.

13. Page EX-4, "…then the biggest winners from the Ohio electricity usage reduction mandate are the consumers and market participants inside and outside Ohio who don't pay…"

    a. Again, this is a non-sequitur argument, and thus inherently illogical.

    b. Dr. Lesser ignores the direct benefit of reduced energy consumption. The direct benefits to Ohio consumers who implement energy efficiency is much larger than the price suppression effect. While price suppression is important, it is mostly useful for evaluating program impact on manufacturers who can't or won't implement an efficiency project. ACEEE found that Ohio consumers, and Ohio consumers only, could save $3.4 billion through 2020 from reduced energy purchases.

    c. Dr. Lesser ignores the price suppression effect of non-Ohio efficiency programs which accrue to Ohio ratepayers.

    d. Dr. Lesser does not consider that many Ohio manufacturers and businesses have facilities in multiple states, and have an interest in reducing electric costs at all of their facilities.

e. We concur that there is a universal benefit of price suppression.

14. Page EX-5, "...unsupported by the wholesale price suppression theory…"

    a. As noted above, Dr. Lesser dramatically underestimates price suppression, in addition to ignoring capacity markets.

    b. Dr. Lesser does not address a growing body of literature which supports the notion of price suppression, including work by the New England ISO and Lawrence Berkeley National Lab.

15. Page 1, "Most of the monies…are then transferred to businesses that manufacture, sell, and install goods and services that reduce electricity usage."

    a. This is inaccurate. Most program monies are returned to ratepayers in the form of incentive payments.

16. Page 2, "…they have asserted (often inconsistently) that the mandated reductions in electricity usage will "suppress" electricity prices…"

    a. We are not aware of any inconsistent position by a specific party.

17. Page 3, "..by simply extending the theory's logic. For example…to prohibit Ohioans from using electricity whatsoever."

    a. Dr. Lesser's suggestion to test a tool with impossible conditions is academically unsound. For example, one would not test a manufactured good significantly outside of its expected performance environment, and expect the same performance.

    b. Dr. Lesser is supposed to be critiquing energy and pricing functions of the DEEPS tool, yet instead is critiquing the job development function.

18. Page 3, "Consumers are not forced by the government to purchase only subcompact cars…"

    a. The energy-efficiency resource standards do not force consumers to purchase any product, though Dr. Lesser suggests that is the case.

19. Page 3-4, "Electric utility capital costs end up being "fixed" by the level of investment they must make to meet their "obligation to serve"."

    a. Dr. Lesser does not consider varying fuel costs.

    b. Dr. Lesser does not address Ohio's deregulated electric generation, in which shareholders, not ratepayers, must justify investment.

20. Page 4, "…as electricity usage is reduced through the mandate, those fixed costs are spread over fewer and fewer sales, thereby raising the average retail price…"

    a. Dr. Lesser does not actually analyze the impact of the Energy Efficiency Resource Standard on retail electric sales. In fact, historically, outside of recession periods, electricity consumption has grown from year to year. The US Energy Information

Administration (EIA) forecasts a 0.6% growth rate through 2040.[2] This growth rate will offset the energy-efficiency benchmark to some extent, meaning that fixed asset costs will not be concentrated to the extent Dr. Lesser claims.

b. Dr. Lesser neglects to consider avoided distribution and transmission investment, which is a typical consideration for studies on the cost effectiveness of energy-efficiency programs.

c. Dr. Lesser neglects that generation is no longer a fixed cost to Ohio ratepayers. Not only is it a considerable component of the costs variable due to fuel, but also the fixed costs are at risk to the company shareholders.

d. In short, Dr. Lesser claims there is an impact of efficiency programs on the average retail price without actually conducting any sort of analysis.

21. Page 5, "As the "low-hanging fruit" is picked to satisfy the mandate, the cost of satisfying each additional kWh of mandated usage reduction increases."

    a. Dr. Lesser does not consider cost reductions from new technologies, economies of scale with the programs, increased experience and competition in the energy-efficiency market, or the competitive pressure of the self-direct program or benchmarking program performance.

22. Page 5, "If that rate of growth continues, by 2020…"

    a. This is an unsubstantiated assumption, for the reasons stated in Point 1 and 2.

23. Page 6, "In other words, government can, at the expense of its citizens…"

    a. As we state in Point 5, Dr. Lesser is creating a non-sequitur argument based on a misrepresentation of other's conclusions and analysis.

24. Page 7, "Although the reform opponents have reference several "studies" to support their "free lunch" claim…"

    a. Dr. Lesser focuses his critique on the OSU Center for Resilience study using the DEEPS model. He does not address the mounting body of work supporting the concept of price suppression. Following is an extensive list of academic, government, and consulting studies that counter Dr. Lesser:

[2] http://www.eia.gov/forecasts/aeo/er/pdf/tbla2.pdf

Estimates of Price Suppression in Wholesale Electricity Markets

	Date	Region	Resource	Citation
Ohio PUC	2013	Ohio	Renewable energy	OH PUC, 2013.
Lawrence Berkely National Laboratory	2013	MA	Energy Efficiency	LBNL, 2013
Baltimore Gas & Electric + Potomac Electric Power Company	2012	MD	Energy efficiency and Demand response	BGE & PEPCO, 2012
New England Independent System Operator	2012	New England	Energy Efficiency	ISO-NE, 2012
Frank A. Felder, Ph.D. Director, Center for Energy, Economic & Environmental Policy, Rutgers University	2011	various	various	Felder, 2011.
National Association of Regulatory Utility Commissioners	2011	VT	Renewable energy	NARUC, 2011
Black & Veatch	2010	PA	Energy Efficiency/ renewable energy	Black & Veatch, 2010
Charles River Associates	2010	ISO-NE	Cape Wind project	Charles River Associates, 2010
Levitan Associates Inc.	2010	RI	Wind	RIEDC, 2010
PJM	2009	PJM	Wind	PJM, 2009
Lawrence Berkely National Laboratory	2009	various	Renewable energy	LBNL, 2009
Tudor Pickering Holt & Co	2009	ERCOT	Wind	Tudor Pickering Holt & Co., 2009
KEMA Inc	2009	NYISO	Renewable energy	NYSERDA, 2009a
Summit Blue Consulting	2009	NYISO	Energy Efficiency/ renewable energy	NYSERDA, 2009b
The Brattle Group	2007	PJM	Demand response	Brattle Group, 2007
Christensen Associates Energy Consulting	2007	various	Renewable energy	Christensen Associates, 2007

[3]

25. Page 7, "…the greater the energy usage reduction mandate, the larger the retail consumer price benefit."

    a. Dr. Lesser misrepresents the analysis and findings of the work he critiques. Specifically, the studies did not test, or assert, that the relationship of benefits outweighing costs could be extended at will to extremes. Instead the studies tested the specific reductions required by SB 221, and found that within this range of reductions benefits outweighed costs.

26. Page 8, "The conclusions reached by the reform opponents required one to accept that Ohio retail consumers…will not otherwise act in their own economic self-interest, even if they do know what's good for them."

    a. Dr. Lesser again offers an opinion, not analysis. Again, his opinion is misrepresentative of the analysis and findings of the work he critiques. The studies he critiques were focused on costs and benefits, not consumer behavior.

[3] Testimony of Rick Hornby, Synapse Energy Economics, to the Ohio Public Utilities Committee on behalf of the Ohio Manufacturers' Association, 10/30/2013

b. Dr. Lesser fails to consider that efficiency programs provide a new ability for consumers to influence the price of electricity in wholesale markets, and that indeed their behavior and investments may change in their own best interest with this new ability.

27. Page 9, "In other words, Ohio businesses have a strong and never-ending economic incentive to evaluate new opportunities to reduce their energy-intensiveness."

    a. Dr. Lesser fails to address that prior to deregulating generation and creating efficiency resource standards, businesses could only effect the price of electricity through advocacy at the PUCO. Now, efficiency resource standards provide the ability to effect the price of generation in the wholesale capacity market. In other words, the combination of the efficiency resource standard and forward capacity markets may be creating new incentives and opportunities for Ohio businesses to reduce their energy consumption.

28. Page 9-10, entire last paragraph

    a. Dr. Lesser claims businesses are forced to reduce electricity use by the force of government. In fact, no Ohio business is forced to reduce electricity consumption.

    b. Dr. Lesser references shareholder interests as a drive for competitive self-interest. As noted, for many reasons, many others disagree with Dr. Lesser and consider efficiency resource standards in the best self-interest of business.

29. Page 10, "nefarious – "barriers to entry""

    a. Dr. Lesser does not address specific market barriers for energy-efficiency, which encompass much more than barriers to entry, calling them "vague", when in fact they are well documented. For example, manufacturers typically have investment thresholds of a 2-year simple payback, or less. Projects that payback in 3 to 4 years are thus not typically implemented. However, the result is that these same manufacturers and other business then fund generation plants which have much longer paybacks, and are far less economical. Efficiency programs, in effect, allow a ratepayer to invest less money in generation assets, with some of the money that is invested is done so in Ohio business and consumer facilities.

30. Page 13, "Specifically, assuming the mandate achieved the annual electric usage reductions set forth in the 2008 legislation, the cumulative reduction in usage over the four-year period, 2009-2012, is 2.3%."

    a. This is an incorrect assumption. Utilities have achieved greater energy reduction than is required, sometimes more than double[4] (see the ACEEE/Synapse study, Table 8). As a result, Dr. Lesser has significantly underestimated price impacts.

[4] http://www.ohiomfg.com/legacy/communities/energy/OMA-ACEEE_Study_Ohio_Energy_Efficiency_Standard.pdf

31. Page 14, "..as well as how long such measures last."
    a. Dr. Lesser doesn't address how long measures last. Typically, electricity savings are thought to persist between 5 and 10 years, and sometimes longer. Dr. Lesser only accounts for wholesale energy savings for a few years, significantly shortchanging the benefits calculation.
32. Page 15, "…a decrease in PJM hourly wholesale market price doesn't automatically reduce the wholesale prices that are dictated by long-term contracts…"
    a. While reductions in contract prices are not automatic, it is disingenuous to imply that wholesale prices do not eventually affect contract prices. For example, lower wholesale energy and capacity prices due to the usage reductions from the recession have flowed through to customers.
33. Page 17, "..the reform opponents' price suppression theory implies that the wholesale market price would have been higher without the Ohio mandate."
    a. In fact, later on Dr. Lesser will show that there is a relationship between electric load and price. And, recent studies[5] suggest that energy-efficiency resource standards play a major role in reducing load.
34. Page 17, "…as slight increase in price can lead to huge increases in supply.", "As we would expect, as prices increase, so does the amount of power supplied in the PJM wholesale market."
    a. Dr. Lesser repeatedly recognizes that changes in price can effect supply, while avoiding the obvious conclusion that the change in price likely initiated from a change in demand. Thus, he is acknowledging the general relationship between supply, demand, and price, without specifically stating that changes in demand can change prices.
35. Page 18, Figure 2.
    a. Figure 2 shows a relationship between load and price of electricity.
36. Page 19, Footnote 12
    a. Dr. Lesser misunderstands PJM's capacity market to only accept load control programs from efficiency programs. In fact, the capacity market accepts permanent reductions in peak demand associated with energy-efficiency programs, which can be substantial.
    b. Dr. Lesser is right in anticipating criticism for not accounting for capacity market savings. A trend of Dr. Lesser's analysis is to "strand" benefits, that is, recognize they exist but not account for them. While capacity market benefits are delayed, they

[5] http://aceee.org/white-paper/low-electricity-growth

are also substantial, and a true apples-to-apples comparison of costs versus benefits would require they be included.

37. Page 20, "…reductions inside Ohio has the unintended consequence of increasing electricity usage outside Ohio."
    a. We note that Dr. Lesser is recognizing that there is a universal benefit of price reduction that accrues to all ratepayers.
    b. There may be a rebound effect of low-priced electricity related to consumption, though Dr. Lesser has not supported that.
    c. Dr. Lesser asserts that "reform opponents" have completely ignored that price suppression would extend outside of Ohio. In fact, this was not ignored, however the studies Dr. Lesser critiques focused on benefits that accrue to Ohio ratepayers. In other words, this was considered and accounted for, not ignored.
38. Page 20, second paragraph
    a. We reiterate that Lesser has ignored capacity market savings, underestimated energy savings that have been realized, and significantly underestimated how long those savings impact the market.
39. General comment
    a. Dr. Lesser focuses most of his analysis on price suppression. Price suppression has been a focus of discussion based on that it accrues to all ratepayers. However, the avoided quantity of purchased electricity is as important to Ohio businesses as the price. That is, total benefits include avoided purchases AND lower prices.
40. Page 22, "Ohio's retail electric bills indicate that what happens in the wholesale market stays in the wholesale market."
    a. Dr. Lesser's conclusion that the wholesale market pricing does not affect retail rates is based on non-comprehensive data. He does not examine non-residential rates.
    b. Moreover, he confounds regulatory approved distribution rates with the effectiveness of the wholesale market.

MEMORANDUM

Date: March 5, 2014

To: Ohio Manufacturer's Association – Energy Committee

From: John Seryak, PE (Go Sustainable Energy)

RE: Member Service – Efficiency Program Cost versus Benefit Calculator

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We are pleased to offer custom reports to OMA members which detail the universal benefits of efficiency programs through price suppression that accrue to your facility, as well as the costs. Currently, costs are detailed in your rate structure. The avoided costs of capacity and energy which are realized through energy-efficiency programs are not. Because of this, we have extended the ACEEE study price suppression methodology to calculate what that price suppression is worth to you.

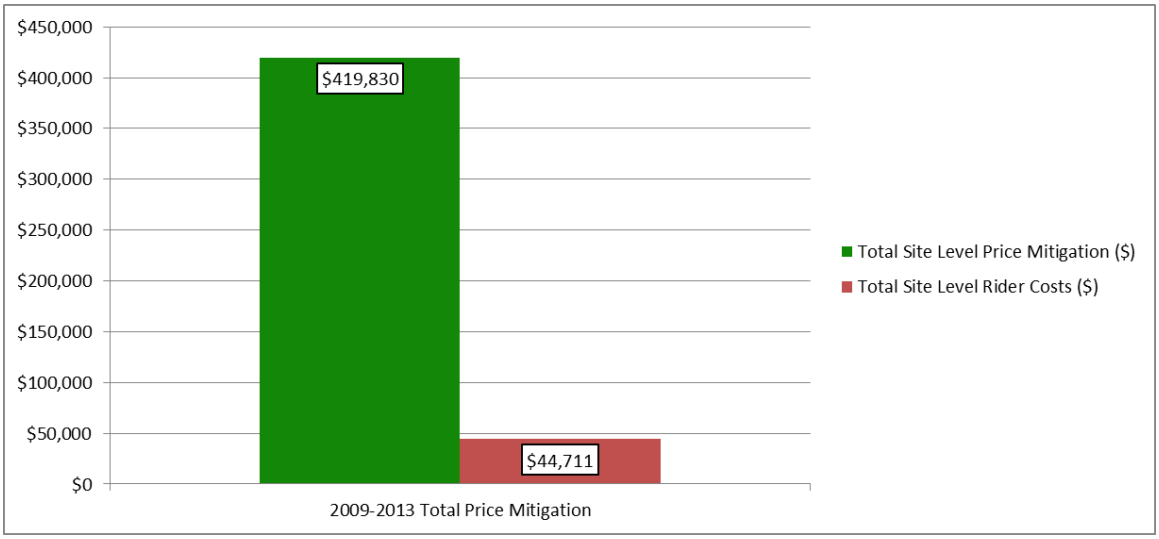
This calculator and accompanying custom report can be used at the facility level to determine if costs exceed benefits, and when.

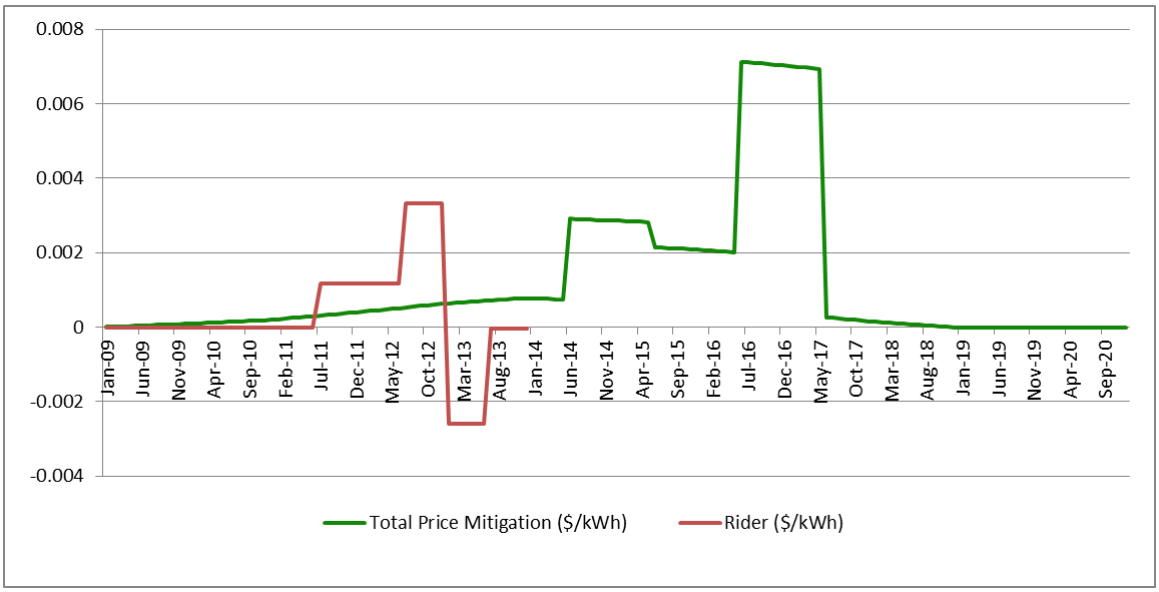
To receive your custom report, we need the following information for your facility:

- Utility and tariff
- Annual kWh consumption
- Peak-load contribution (kW) or if unknown your average demand (kW)

Below is the table of contents from the report, and an example of the costs versus benefit summaries.

Table of Contents





Proposed SB 221 Reforms

Ohio Energy Efficiency (EE) Standards:

The Collaborative has agreed to the following simple and balanced reforms to Ohio's EE standards:

1. **Industrial Opt-Out**:

Allows any customer above the "primary voltage level" or a customer subject to the "self-assessing purchaser option" to opt out of the EE standards. (Section 4928.661.) To opt out, the customer must simply notify its electric distribution utility and the Commission of its intent through a verified statement. The statement includes the following (Section 4928.662):

A. The customer will have ongoing EE expertise or processes in place to identify and implement EE projects or contract with a third party EE aggregator to do so.

B. The customer will identify in its sole discretion EE projects and implement only cost-effective programs.

C. The customer will utilize measurement and verification protocols that meet or exceed the protocols accepted by either the PUCO or PJM.

D. The customer will bid eligible and cost-effective EE savings into the PJM capacity market, ensuring that the benefits of EE are delivered system-wide.

Upon opt-out, the consumer's account would no longer be subject to EE cost recovery mechanisms of the utility and the customer may not access utility EE programs funded by the cost recovery mechanisms. (Section 4928.663.) A customer may opt back in after a three-year period with notice to the PUCO and utility. Upon opting in, the customer must stay in the program for a minimum of three years. (Section 4928.664.) Utilities are required to exclude from their EE baseline the load of any customer who has opted out. (Section 4928.666.) The customer obtains ownership rights to their EE savings achieved in order to bid it into the PJM capacity auction if eligible and cost-effective. (Section 4928.667.)

2. **Making the Benchmarks More Gradual**:

In response to concerns that the energy efficiency benchmarks begin to rise steeply after 2018 (from 1% to 2% annually), the proposal would make the upward adjustments more gradual while maintaining the final 22% target by 2025. (Section 4928.66.)

2014: 1%	2019: 1.6%
2015: 1%	2020: 1.7%
2016: 1.2%	2021: 1.8%
2017: 1.3%	2022: 1.9%
2018: 1.5%	2023-2025: 2%

3. **Cost Cap**:

Current law already requires that all utility EE programs be certified as cost-effective prior to PUCO approval and implementation. Nonetheless, in addition to that protection, the proposed cost containment measure would limit a utility's annual EE spending to no more than an annual 3% increase in the utility's compliance costs approved in calendar year 2013 for each respective rate class. (Section 4928.668.)

Additional Terms:

The Collaborative working group has discussed and is considering additional ways to improve SB 221. The following terms and concepts are still under development:

1. Eliminate utility privilege to "withdraw" its application for an electric security plan if the PUCO modifies it. In essence, this would eliminate the electric utility's ability to *veto* PUCO orders in electric security plan cases. (Revise Section 4928.143(C)(2)(a).)

2. Eliminate charges to consumers for utilities earning excessive profits, regardless of whether the earnings are deemed *significantly* excessive profits. (Revise Section 4928.143(E) and (F) to remove any references to "significantly.")

3. Eliminate above-market nonbypassable generation/stability charges in an electric security plan case. (Revise Section 4928.143(B)(2)(d).)

4. Eliminate assessing distribution-related charges in an electric security plan case. (Revise Section 4928.143(B)(2)(h) to prohibit the inclusion of such in an utility's electric security plan.) The utility may use the traditional opportunity to file a distribution rate case under Section 4909.18, Revised Code.

5. Prohibit lost distribution revenues in an electric security plan case. (Revise Section 4928.143(B)(2)(h) to add this prohibition.)

6. Limit "more favorable in the aggregate" test for whether the PUCO can approve an electric security plan to solely quantitative (not qualitative) factors. (Revise Section 4928.143(C)(1).)

7. Give customers the same protection that utilities can obtain during appeals, to allow customers to obtain a refund of utility charges when the Ohio Supreme Court reverses a PUCO order.

Sec 4928.66. (A) (1) (a) Beginning in 2009, an electric distribution utility shall implement energy efficiency programs that achieve energy savings equivalent to at least three-tenths of one per cent of the total, annual average, and normalized kilowatt-hour sales of the electric distribution utility during the preceding three calendar years to customers in this state. An energy efficiency program may include a combined heat and power system placed into service or retrofitted on or after the effective date of the amendment of this section by S.B. 315 of the 129th general assembly, September 10, 2012, or a waste energy recovery system placed into service or retrofitted on or after the same date, September 12, 2012, except that a waste energy recovery system described in division (A)(38)(b) of section 4928.01 of the Revised Code may be included only if it was placed into service between January 1, 2002, and December 31, 2004. For a waste energy recovery or combined heat and power system, the savings shall be as estimated by the public utilities commission. The savings requirement, using such a three-year average, shall increase to an additional five-tenths of one per cent in 2010, seven-tenths of one per cent in 2011, eight-tenths of one per cent in 2012, nine-tenths of one per cent in 2013, one per cent from 2014 to 2015~~8~~, one and two-tenths per cent in 2016, one and three-tenths per cent in 2017, one and five-tenths per cent in 2018, one and six-tenths per cent in 2019, one and seven-tenths per cent in 2020, one and eight-tenths per cent in 2021, one and nine-tenths per cent in 2022, and two per cent each year thereafter, achieving a cumulative, annual energy savings in excess of twenty-two per cent by the end of 2025. For purposes of a waste energy recovery or combined heat and power system, an electric distribution utility shall not apply more than the total annual percentage of the electric distribution utility's industrial-customer load, relative to the electric distribution utility's total load, to the annual energy savings requirement.

(b) Beginning in 2009, an electric distribution utility shall implement peak demand reduction programs designed to achieve a one per cent reduction in peak demand in 2009 and an additional seventy-five hundredths of one per cent reduction each year through 2018. In 2018, the public utilities commission ~~standing committees in the house of representatives and the senate primarily dealing with energy issues~~ shall make recommendations to the general assembly regarding future peak demand reduction targets.

(2) For the purposes of divisions (A)(1)(a) and (b) of this section:

(a) The baseline for energy savings under division (A)(1)(a) of this section shall be the average of the total kilowatt hours the electric distribution utility sold in the preceding three calendar years, and the baseline for a peak demand reduction under division (A)(1)(b) of this section shall be the average peak demand on the utility in the preceding three calendar years, except that the commission may reduce either baseline to adjust for new economic growth in the utility's certified territory. The commission shall exclude from the baselines the load and usage of any customer that has elected to opt out under sections 4928.661 to 4928.667 of the revised code.

(b) The commission may amend the benchmarks set forth in division (A)(1)(a) or (b) of this section if, after application by the electric distribution utility, the commission determines that the amendment is necessary because the utility cannot reasonably achieve the benchmarks due to regulatory, economic, or technological reasons beyond its reasonable control.

(c) Compliance with divisions (A)(1)(a) and (b) of this section shall be measured by including the effects of all demand-response programs for mercantile customers of the subject electric distribution utility, all waste energy recovery systems and all combined heat and power systems, and all such mercantile customer-sited energy efficiency, including waste energy recovery and combined heat and power, and peak demand reduction programs, adjusted upward by the appropriate loss factors. Any mechanism designed to recover the cost of energy efficiency, including waste energy recovery and combined heat and power, and peak demand reduction programs under divisions (A)(1)(a) and (b) of this section may exempt mercantile customers that commit their demand-response or other customer-sited capabilities, whether existing or new, for integration into the electric distribution utility's demand-response, energy efficiency,

including waste energy recovery and combined heat and power, or peak demand reduction programs, if the commission determines that that exemption reasonably encourages such customers to commit those capabilities to those programs. If a mercantile customer makes such existing or new demand-response, energy efficiency, including waste energy recovery and combined heat and power, or peak demand reduction capability available to an electric distribution utility pursuant to division (A)(2)(c) of this section, the electric utility's baseline under division (A)(2)(a) of this section shall be adjusted to exclude the effects of all such demand-response, energy efficiency, including waste energy recovery and combined heat and power, or peak demand reduction programs that may have existed during the period used to establish the baseline. The baseline also shall be normalized for changes in numbers of customers, sales, weather, peak demand, and other appropriate factors so that the compliance measurement is not unduly influenced by factors outside the control of the electric distribution utility.

(d) Programs implemented by a utility may include demand-response programs, smart grid investment programs, provided that such programs are demonstrated to be cost-beneficial, customer-sited programs, including waste energy recovery and combined heat and power systems, and transmission and distribution infrastructure improvements that reduce line losses. Division (A)(2)(c) of this section shall be applied to include facilitating efforts by a mercantile customer or group of those customers to offer customer-sited demand-response, energy efficiency, including waste energy recovery and combined heat and power, or peak demand reduction capabilities to the electric distribution utility as part of a reasonable arrangement submitted to the commission pursuant to section 4905.31 of the Revised Code.

(e) No programs or improvements described in division (A)(2)(d) of this section shall conflict with any statewide building code adopted by the board of building standards.

(B) In accordance with rules it shall adopt, the public utilities commission shall produce and docket at the commission an annual report containing the results of its verification of the annual levels of energy efficiency and of peak demand reductions achieved by each electric distribution utility pursuant to division (A) of this section. A copy of the report shall be provided to the consumers' counsel.

(C) If the commission determines, after notice and opportunity for hearing and based upon its report under division (B) of this section, that an electric distribution utility has failed to comply with an energy efficiency or peak demand reduction requirement of division (A) of this section, the commission shall assess a forfeiture on the utility as provided under sections 4905.55 to 4905.60 and 4905.64 of the Revised Code, either in the amount, per day per undercompliance or noncompliance, relative to the period of the report, equal to that prescribed for noncompliances under section 4905.54 of the Revised Code, or in an amount equal to the then existing market value of one renewable energy credit per megawatt hour of undercompliance or noncompliance. Revenue from any forfeiture assessed under this division shall be deposited to the credit of the advanced energy fund created under section 4928.61 of the Revised Code.

(D) The commission may establish rules regarding the content of an application by an electric distribution utility for commission approval of a revenue decoupling mechanism under this division. Such an application shall not be considered an application to increase rates and may be included as part of a proposal to establish, continue, or expand energy efficiency or conservation programs. The commission by order may approve an application under this division if it determines both that the revenue decoupling mechanism provides for the recovery of revenue that otherwise may be forgone by the utility as a result of or in connection with the implementation by the electric distribution utility of any energy efficiency or energy conservation programs and reasonably aligns the interests of the utility and of its customers in favor of those programs.

(E) The commission additionally shall adopt rules that require an electric distribution utility to provide a customer upon request with two years' consumption data in an accessible form.

Sec. 4928.661. Any customer of an electric distribution utility that meets either of the following requirements may opt out of both the opportunity and ability to obtain direct benefits from the utility's energy efficiency and peak demand reduction programs established. pursuant to section 4928.66 of the Revised Code:

(A) The customer receives service above the primary voltage level as determined by the utility's tariff classification.

(B) The customer's account is subject to the self-assessing purchaser option under section 5727.81 of the Revised Code.

Sec. 4928.662. Any customer electing to opt out under Sections 4928.661 to 4928.667 of the Revised Code shall do so by providing a written notice of intent to opt out to the electric distribution utility from which it receives service and submitting a complete copy of the opt-out notice to the secretary of the public utilities commission.

(A) The notice provided to the utility shall include the following:

(1) A statement indicating that the customer has elected to opt out;

(2) The effective date of the election to opt out:

(3) The customer's account numbers for each account subject to opt out;

(4) The physical location of the customer's load center.

(B) The opt-out notice shall include a written election to opt out and a verified statement that affirms all of the following:

(1) That the customer has contracted with a third party energy efficiency aggregator or has ongoing energy efficiency expertise or processes that enable the customer to identify and implement cost-effective energy efficiency and peak demand reduction programs on its own;

(2) That the customer shall identify, in its sole discretion and implement only cost-effective energy efficiency and peak demand reduction programs;

(3) That the aggregator or customer utilizes measurement and verification protocols that meet or exceed measurement and verification protocols that are accepted by either the public utilities commission for purposes of compliance with the electric distribution utility's energy efficiency and peak demand reduction programs or the PJM interconnection regional transmission organization, L.L.C., or any entity performing the functions identified in section 4928.12 of the Revised Code within this state;

(4) That the aggregator or customer shall bid the eligible and cost effective energy efficiency and peak demand reduction savings the customer has achieved into the capacity market of the PJM interconnection regional transmission organization, L.L.C. or any entity

performing the functions identified in section 4928.12 of the Revised Code within this state in order to provide compensation to the customer.

Sec. 4928.663. Upon a customer's election to opt out under Sections 4928.661 to 4928.667 of the Revised Code all of the following apply:

(A) An account properly identified in the customer's verified notice is not subject to cost recovery mechanisms established under section 4928.66 of the Revised Code.

(B) An account properly identified in the customer's verified notice is not eligible to participate in or directly benefit from programs arising from electric distribution utility compliance plans approved by the commission to meet the requirements of section 4928.66 of the Revised Code.

(C) The customer is not eligible to participate in a cost recovery exemption agreement under division (A)(2)(c) of section 4928.66 of the Revised Code.

Sec. 4928.664. (A) A customer subsequently may opt in under section 4928.665 of the Revised Code after a previous election to opt out under sections 4928.661 and 4928.662 of the Revised Code if both of the following apply:

(1) The customer has previously opted out for a period of at least three consecutive calendar years.

(2) The customer gives notice of its intent to opt in to the public utilities commission and the electric distribution utility from which it receives service. The customer shall give the notice six months prior to the next calendar year of the utility's formal plan for compliance with section 4928.66 of the Revised Code.

(B) A customer that opts in under this section shall maintain its opt-in status for three consecutive calendar years before being eligible subsequently to exercise its right to opt out after giving the utility notice six months prior to the next calendar year of the utility's formal plan for compliance with section 4928.66 of the Revised Code.

Sec. 4928.665. Any customer electing to opt in under section 4928.664 of the Revised Code shall do so by providing a written notice of intent to opt in to the electric distribution utility from which it receives service and submitting a complete copy of the opt-in notice to the secretary of the public utilities commission. The notice shall include the following:

(A) A statement indicating that the customer has elected to opt in;

(B) The effective date of the election to opt in;

(C) The customer's account numbers for each account subject to opt in;

(D) The physical location of the customer's load center.

Sec. 4928.666. The baseline for energy efficiency savings and peak demand reductions under divisions (A) (1) (a) and (b) of section 4928.66 of the Revised Code shall exclude load and usage of any customer that has elected to opt out under sections 4928.661 to 4928.667 of the Revised Code.

Sec. 4928.667. A customer that has elected to opt out retains ownership rights to energy efficiency and peak demand reduction savings the customer has achieved and shall bid the eligible and cost effective energy efficiency and peak demand reduction savings into the capacity market of the PJM interconnection regional transmission organization, L.L.C. or any entity performing the functions identified in section 4928.12 of the Revised Code within this state.

Sec. 4928.668. Costs associated with the electric distribution utility's annual compliance with the energy efficiency and peak demand reduction requirements and associated programs established pursuant to Section 4928.66 of the Revised Code for each respective rate class shall not exceed the compliance costs approved for that electric distribution utility in calendar year 2013, except that the total compliance costs for each respective rate class may increase by no more than 3% annually each year thereafter.

Monetize Your Energy Efficiency Projects through PJM

Mark your calendar for this
60 minute webinar
DATE: Wednesday, March 26, 2014
TIME: 10:00 – 11:00 a.m.

Manufacturers, even those not among the largest consumers of electricity, are able to monetize their energy efficiency projects by contributing them to the PJM Interconnection (PJM) capacity markets through a third party aggregator.

The purpose of this webinar is to educate manufacturers about how PJM energy and capacity markets work and the opportunity to contribute their energy project savings to the grid, creating financial gain while contributing to wholesale electricity price suppression.

PJM is the regional transmission organization that coordinates the movement of wholesale electricity in all or parts of 13 states, including Ohio, and the District of Columbia. As a neutral, independent party, PJM operates competitive wholesale and capacity markets and manages the high-voltage electricity grid to ensure reliability for more than 61 million people.

Key Topics

- How the PJM energy and capacity markets operate
- Role of a third party aggregator acting on behalf of manufacturing customers
- How PJM defines energy efficiency resources for the purpose of capacity market bids
- Submission requirements for manufacturers contributing projects to PJM
- Opportunities for manufacturers to monetize lighting, HVAC, chiller, compressed air and other energy efficiency projects

Who should attend?

If your company has executed a lighting, HVAC, chiller, compressed air or other energy efficiency project in the last three years and you have not received a rebate or bill rider exemption for it, consider this opportunity. Also for:

- ✓ CFOs & Controllers
- ✓ Energy Purchasers & Managers
- ✓ Plant & Facilities Managers
- ✓ Plant Engineers

Registration fee (for an unlimited number of participants at one phone/computer location)
OMA Members: **Free** Non-OMA Members: **$39**

To register, go to **My OMA** at www.ohiomfg.com (Login required; then click on Register for Events.)

By registering for this event, you acknowledge that the organization sponsoring this event will have access to your name and contact information.

QUESTIONS? Call (800) 662-4463

Your Presenter

Timothy J. Seelaus, President, EMC^2 Development Company, Inc., has 25 years' experience in the utility infrastructure market in North America, Asia, Europe and Latin America. A former Vice President and Officer of PPL Corp, he has participated in the successful closings of over $5 billion worth of electric power transactions including energy supply and electric distribution assets. He was one of the founding executives of Bechtel's EnergyWorks which developed, owned and operated on-site energy systems for large multinational corporations in Asia and Latin America using a variety of fuel sources. Prior to EnergyWorks, Tim worked at Air Products and Chemicals where he developed multiple environmental and energy projects.

Tim is a Professional Engineer; he received his BS in civil and environmental engineering from Cornell University, an MS in civil and environmental engineering from Colorado State University and an MBA in finance from MIT's Sloan School of Management.

Energy Efficiency Business Opportunity

PJM Capacity Market

Discussion with Ohio Manufacturers Association

March 2014

Discussion Points

- Introduction to EMC Development Company, Inc.
  - PJM EE Experience
- Overview of PJM Energy and Capacity Market
- EE resource as defined by PJM
- Eligible Delivery Years
- Submission Requirements
- Recent Auction History
- Next Steps

EMC Development Company, Inc.

- Member of PJM
- Focused on Energy Efficiency capacity market
- PJM Energy Efficiency Capacity Market experience
  - Qualified over 8,500 energy efficiency (EE) projects as capacity resources for PJM RPM capacity market; (~ 115 MW of EE capacity resources)
  - Submitted and received PJM approval of thirteen (13) Energy Efficiency Measurement and Verification Plans
  - Have qualified a number of OMA members' projects
  - EMC is the largest non-utility participant in PJM's Energy Efficiency Capacity Market

Benefits to OMA Members

- Further incentive for Energy Efficiency project
- Simple qualification process for most EE projects
- Provide low cost source of capacity; helps drive down capacity prices
- No on-going obligation (like DR load reduction)
- “Found money”

The PJM Electric Market

- PJM is the largest, most efficient power market in world
- PJM Energy market ***(kWh)***
  - PJM coordinates the continuous buying, selling and delivery of wholesale electricity
  - Pricing based upon location and time
  - 8,000+ Locational Marginal Prices (LMPs)

**** PJM Territory Shown in Blue***

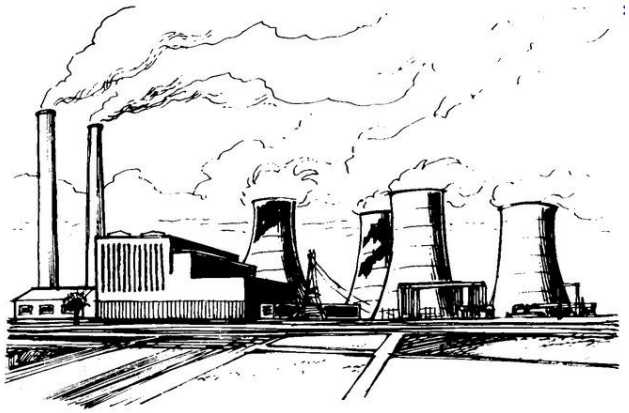
PJM Capacity Market

- PJM Capacity Market ***(kW)***
  - Designed to ensure reliability of the grid
  - Provides market signals to support infrastructure investment
- Locational Capacity Pricing
  - Annual auctions
  - Pricing by location
    - 25 Locational Deliverability Areas (LDAs)
    - Capacity prices primarily driven by system transmission constraints

**** PJM Territory Shown in Blue***

Meeting Capacity Requirements

- Generation
  - Utility owned Coal-fired, Natural Gas & Nuclear Power stations
  - Non-utility, in-front of meter energy generation



- Demand Response programs

- Energy Efficiency projects

EE Capacity in PJM Market

- As of 2011, PJM Capacity market includes **Energy Efficiency** as a capacity resource
- Projects must achieve a permanent, continuous reduction in electric energy consumption – not dispatchable
- Load reductions during peak hours between 2-6pm, June 1 to Aug 31.
- Typical projects:
  - Lighting Upgrades
  - HVAC Equipment Upgrades
  - Chiller Upgrades
  - Compressed Air retrofits

EE Projects Eligible for 4 Years of Capacity Payments

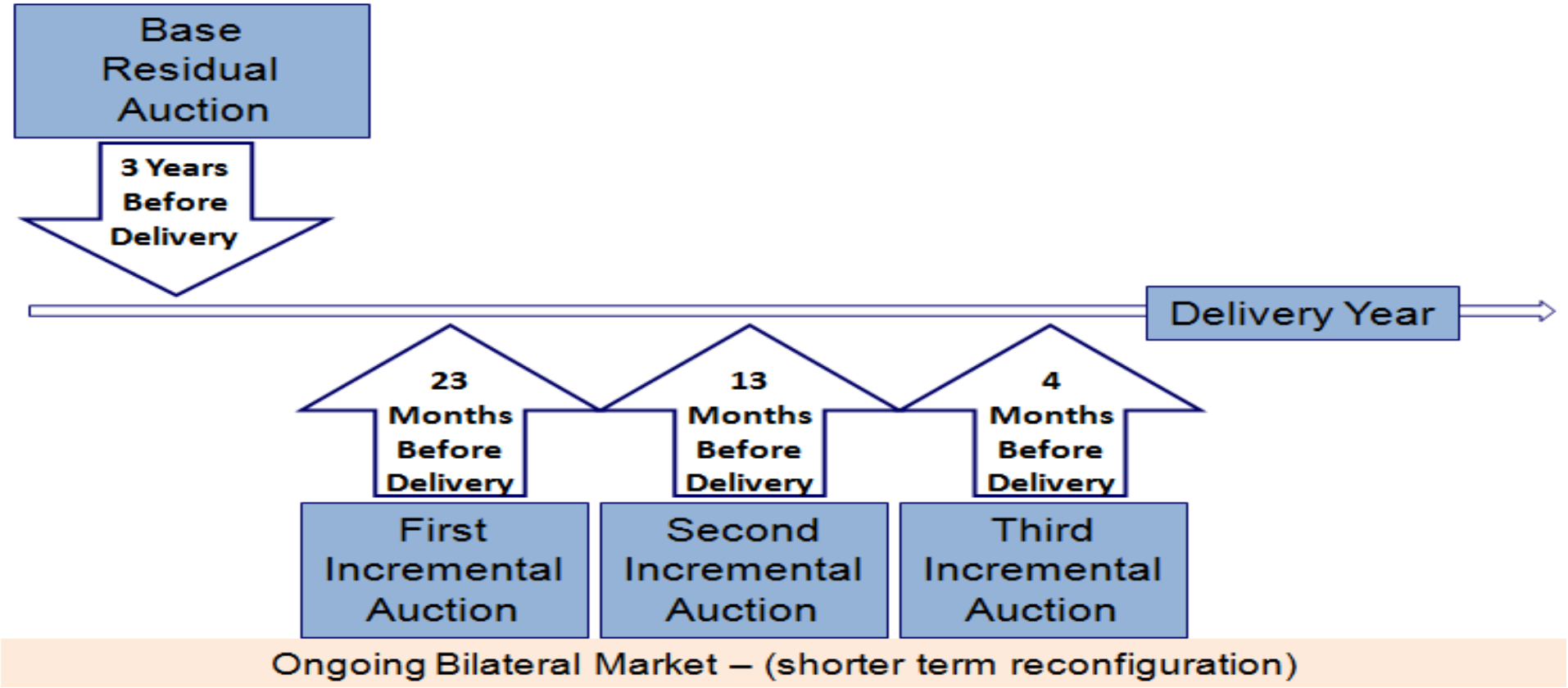
Installation Period	Fully Installed for Summer	Eligible Delivery Years
June 2010 - May 2011	2011	2014/2015
June 2011 - May 2012	2012	2014/2015, 2015/2016
June 2012 - May 2013	2013	2014/2015, 2015/2016, 2016/2017
June 2013 - May 2014	2014	2014/2015, 2015/2016, 2016/2017, 2017/2018

PJM EE Capacity Requirements

- EE capacity must be pre-qualified by PJM for participation in all Auctions – Required 30 days before each auction.
- Minimum 100kW per submission - aggregations allowed within utility zones
- Measurement & Verification Plans submitted by EMC for approval by PJM.
  - EMC requires basic project information; typically available with rebate applications, contractor proposals or energy audits. **No additional work required by property owner.**
- EMC is responsible for Measurement and Verification activities for kW savings

Capacity Auctions

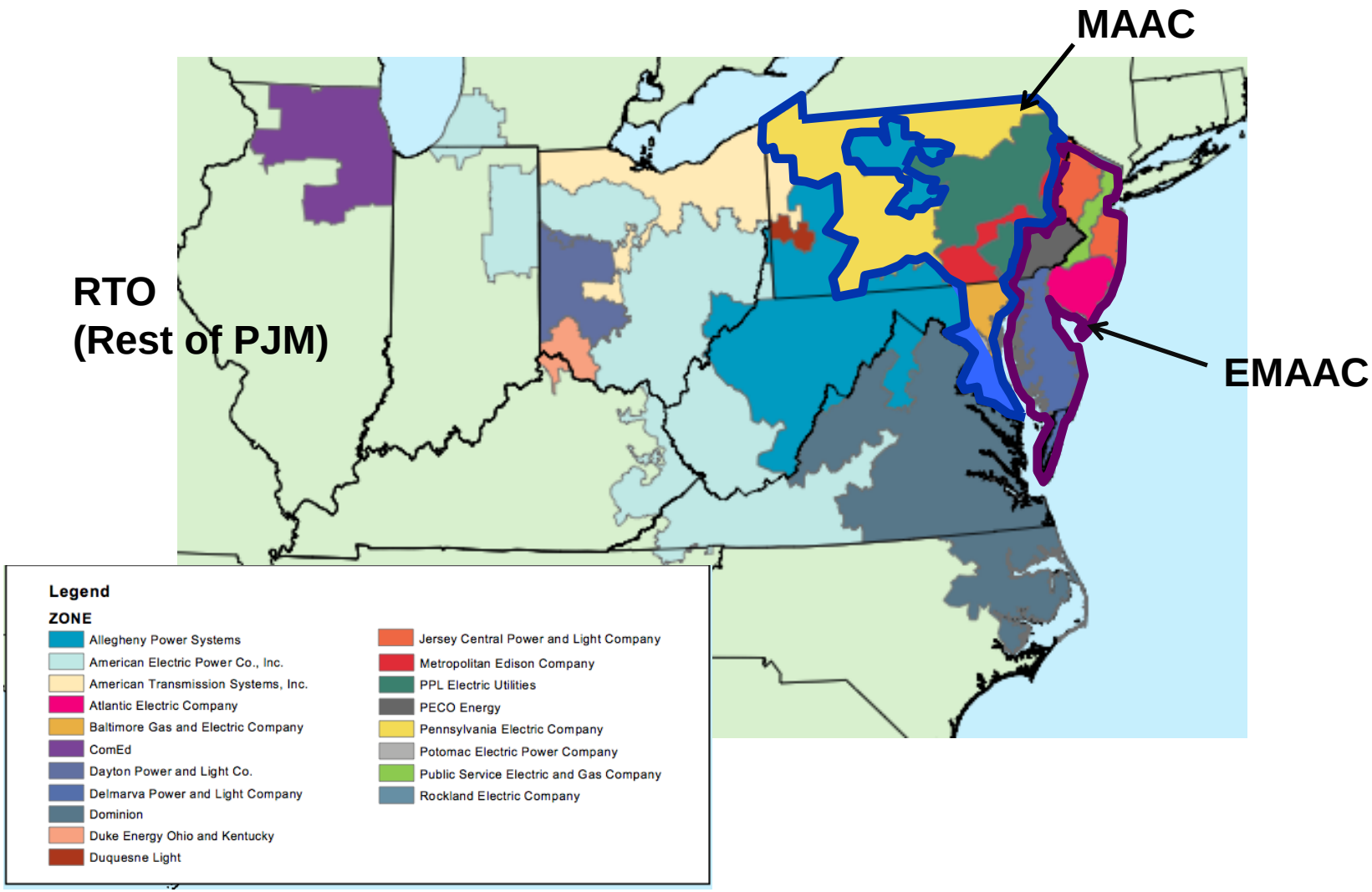
- Capacity is transacted in annual auctions
  - Three years forward



Auction Results – Incremental Auctions are unpredictable

2012/2013 DY	BRA (May-09)	1st IA (Sep-10)	2nd IA (Jul-11)	3rd IA (Mar-12)
RTO	6.01 $/kW/yr	6.01	4.75	0.92
MAAC	48.68	6.01	4.75	0.92
EMAAC	51.00	56.09	17.85	0.92
2013/2014 DY	**BRA (May-10)**	**1st IA (Sep-11)**	**2nd IA (Jul-12)**	**3rd IA (Mar-13)**
RTO	10.12 $/kW/yr	7.30	2.56	1.48
MAAC	82.54	7.30	3.65	10.95
EMAAC	89.43	65.28	14.60	68.78
2014/2015 DY	**BRA (May-11)**	**1st IA (Sep-12)**	**2nd IA (Jul-13)**	**3rd IA (Mar-14)**
RTO	45.99 $/kW/yr	2.02	9.13	
MAAC	49.82	6.04	20.78	
EMAAC	49.82	6.04	20.78	
2015/2016 DY	**BRA (May-12)**	**1st IA (Sep-13)**	**2nd IA (Jul-14)**	**3rd IA (Mar-15)**
RTO	49,64 $/kW/yr	15.70		
MAAC	61.12	40.52		
EMAAC	61.12	40.52		
ATSI	130.31	61.46		
2016/2017 DY	**BRA (May-13)**	**1st IA (Sep-14)**	**2nd IA (Jul-15)**	**3rd IA (Mar-16)**
RTO	21.67			
MAAC	43.48			
EMAAC	43.48			

PJM Locational Deliverability Areas



Schedule/Next Steps

- Project submissions
  - Completed projects dating back to June 1, 2010
  - Proposed projects – anything that would be completed by May 31, 2014
- Analysis and preparation of project data for qualification submission by EMC
- Participation authorization
  - Execute Capacity Rewards Agreement
- 2014/15 PJM Submission Schedule
  - Submissions by EMC to PJM in April 2014

Contact Information

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  6011 University Blvd, Suite 400

  Ellicott City, MD 21043

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  - Pip Robins- probins@emc2devco.com; cell – 443-742-5580
  - Andy Seelaus – ajseelaus@emc2devco.com; cell – 303-807-3837

www.emc2devco.com

Energy Research

conducted for The Ohio Manufacturers' Association

Maxine Goodman Levin College of Urban Affairs
CLEVELAND STATE UNIVERSITY

March 6, 2014

Research Agenda

- Completed studies:
  - Moving Ohio Manufacturing Forward: Competitive Electricity Pricing
  - Distributed Generation as a Response to Rising Electricity Costs in Ohio
- Study under Completion:
  - Typology of Ohio Electricity Markets for Manufacturing Users
- Prospective study:
  - Developing curricular for training on *Electricity Markets 101* and *Advanced Electricity Markets*

Moving Ohio Manufacturing Forward: Competitive Electricity Pricing

- Twelve Ohio industries manufacture highly electricity-intensive products and, at the same time, are part of the economic base of the state economy.
- These industries belong to 4 broader sectors:
  - NAICS 311: Two industries in *Food Manufacturing* had total employment over 20,000 and were growing since 2000.[1] Average GSP growth of these industries in 2009-2010 was 10%.
  - NAICS 325: Three industries in *Chemical Manufacturing* experienced GSP growth since 2000.[1] Two of these three industries (NAICS 3251 & 3252) were also among the industries with the highest productivity in Ohio. Together, these three industries employed almost 15,000 people in Ohio in 2010.
  - NAICS 327: Two industries in *Nonmetallic Mineral Product Manufacturing* experienced GSP growth since 2007.[2] These two industries employed almost 14,000 people in Ohio in 2010.
  - NAICS 331: Five industries in *Primary Metal Manufacturing* sector were not among those with GSP growth or high productivity. However, this industry sector employed 37,297 people in Ohio in 2010.

[1] This statement implies that the industry was growing from 2000 to 2010, from 2007 to 2010, and from 2009 to 2010.

[2] This statement implies that the industry was growing from 2007 to 2010 and from 2009 to 2010.

Industrial Electricity Prices Affect Manufacturing Productivity

- An increase in the industrial electricity price by 1 cent per kilowatt-hour (16.3% change in price) is likely, in 99% of cases, to decrease average manufacturing productivity in the five selected states by $2,527 of annual GSP per employee (2.2% change in productivity).
- The productivity change resulting from industrial electricity price change has low elasticity: 2.2%/16.3%=0.13.
- This means that for a 1% increase of industrial electricity prices, manufacturing productivity drops by 0.13%.

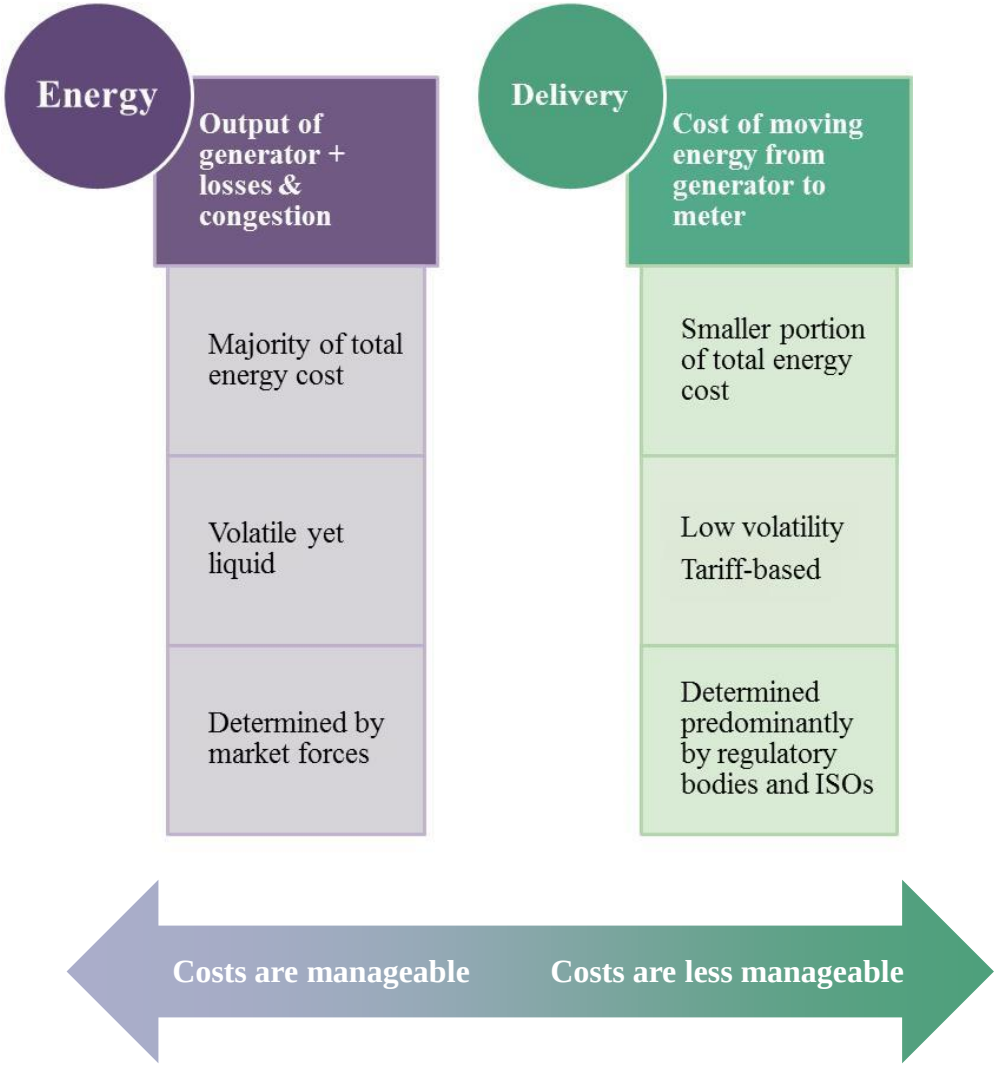
Distributed Generation as a Response to Rising Electricity Cost in Ohio

- Manufacturing is facing rising electricity costs due to rapidly increasing PJM capacity charges and new EPA requirements for electricity, steam and heat generation.
- Only way to constrain distribution and non-bypassable charges is through self-generation.
- One response to rising costs: combined heat and power.
  - Most cost effective if based upon heat load requirements.
  - Before CHP can be adopted in Ohio, high standby charges and impediments to the marketing of surplus power must be addressed (no net metering available).
  - Senate Bill 315 qualifies CHP for energy efficiency credits, but value diminished by tie to DSE-2 waiver, which is of value only through continued high volume of grid sales.

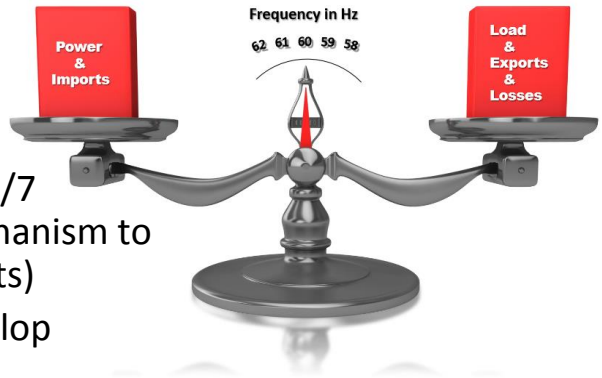
ELECTRICITY MARKETS: PRODUCTS, STRUCTURE, PRICE

Electric Industry Products

- Electricity
- Capacity
- Transmission
- Distribution
- Ancillary Services

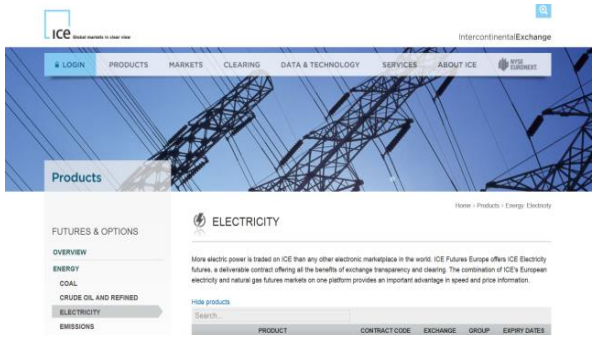


Two Dimensions of Electricity Markets



- Physical
  - Physical movement of all electrons occur through 24/7 PJM dispatch system regardless of the financial mechanism to obtain the load (bilateral contract or the spot markets)
  - Actual physical congestion used in algorithm to develop *Locational Marginal Price* (LMP)

- Financial
  - Market transactions
    - Most of load is hedged through mechanisms of futures and options on bilateral contracts
    - Residual amount electricity requirements is balanced through purchases on PJM-administered Day-Ahead and Real-Time wholesale spot markets
  - Market price
    - Bilateral contracts: usually have fixed average price
    - Spot markets: oligopolistic *single market clearing price* for all supply for the relevant time period
    - Both bilateral and spot market prices are based on the algorithm of LMP reflecting costs of physical congestion

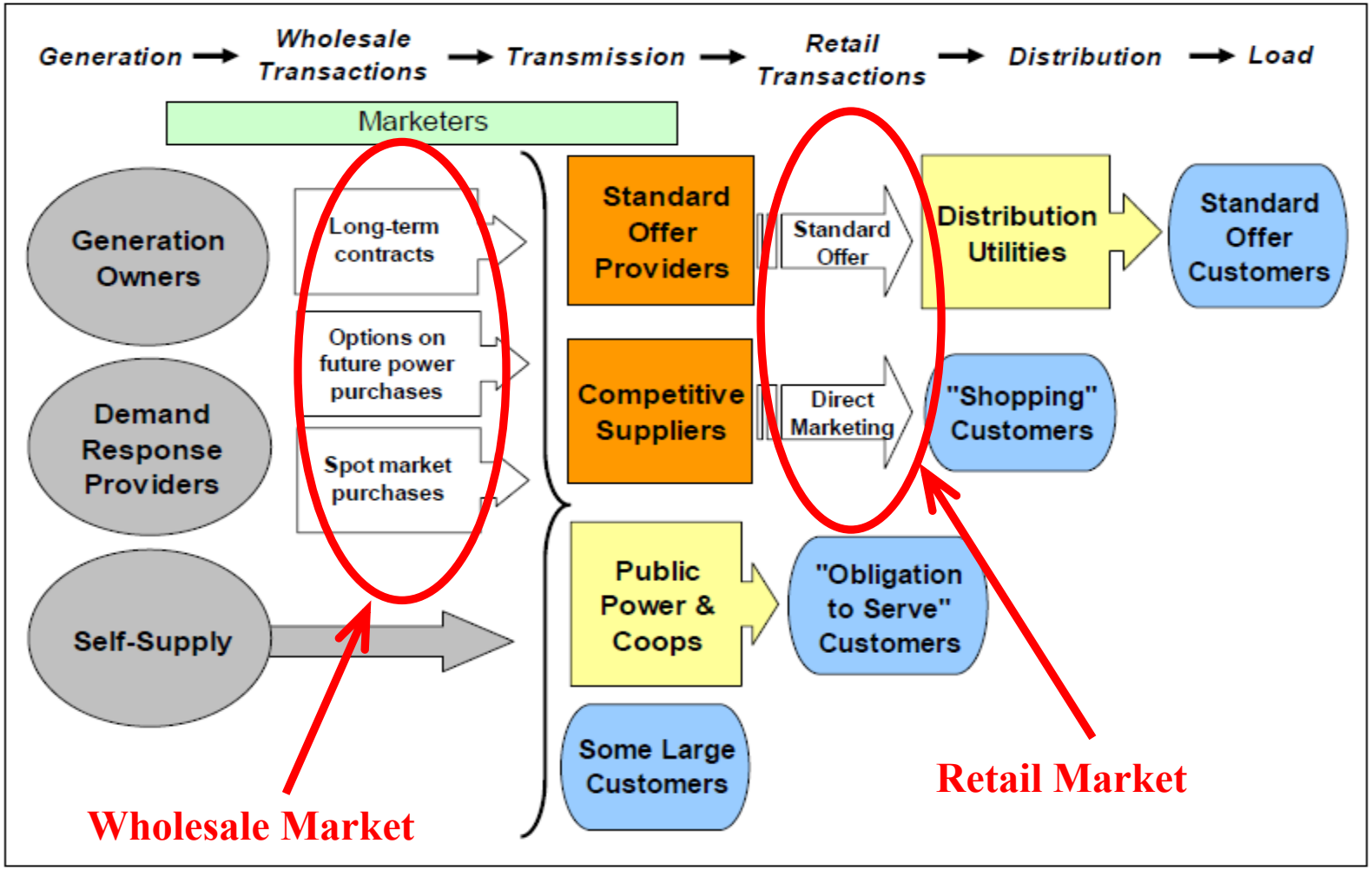


Products and Corresponding Financial Mechanisms on Electricity Markets

- **Electricity**:
  - Long-term markets – NOT managed by PJM
    - Bilateral contracts
      - Through ICE and brokerage houses (using over-the-counter energy brokerage services)
  - Spot Markets
    - Day-Ahead Energy Market (DAEM)
    - Real-Time Energy Market (RTEM)
- **Rights to generating capacity**:
  - Capacity Market
  - Synchronized Reserve Markets
  - Day-Ahead Scheduling Reserve (DASR) Market
- **Transmission:**
  - Financial Transmission Rights (FTR) Markets: long-term, annual, and monthly auctions
- **Demand Response and Energy Efficiency:**
  - Demand response and energy efficiency market
- **Ancillary services**:
  - Regulation Market
  - Market in Spinning Reserve

Managed by PJM

Deregulated Electricity Markets

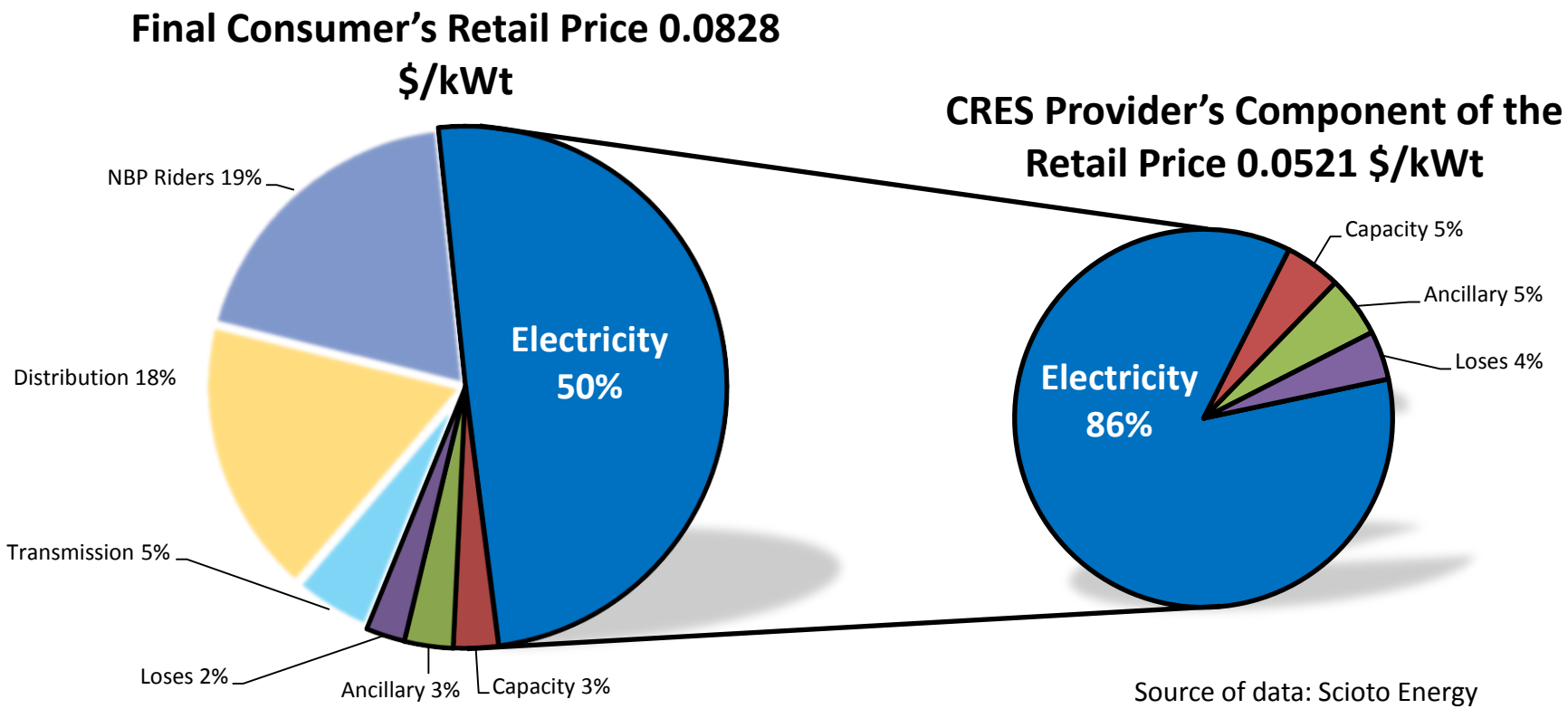


Source: Figure 1. Schematic of deregulated wholesale and retail electricity markets. Hausman, E., Hornby, R., and Smith A. Bilateral Contracting in Deregulated Electricity Markets. Synapse Energy Economics, Inc. April, 2008.

Electricity Market Players

Supply	Regulatory/Management	Demand
Investor Owned Utilities (IOUs)	Public Utility Commission of Ohio (PUCO)	Residential Users
Commercial Retail Electricity Service (CRES) Providers	Federal Energy Regulatory Commission (FERC)	Commercial Users
Electricity Distribution Companies (EDUs)	Regional Transmission Organization (RTO)	Industrial Users
Public Utilities & Electricity Cooperatives		
Aggregators		

Structure of Electricity Retail Prices, 2013

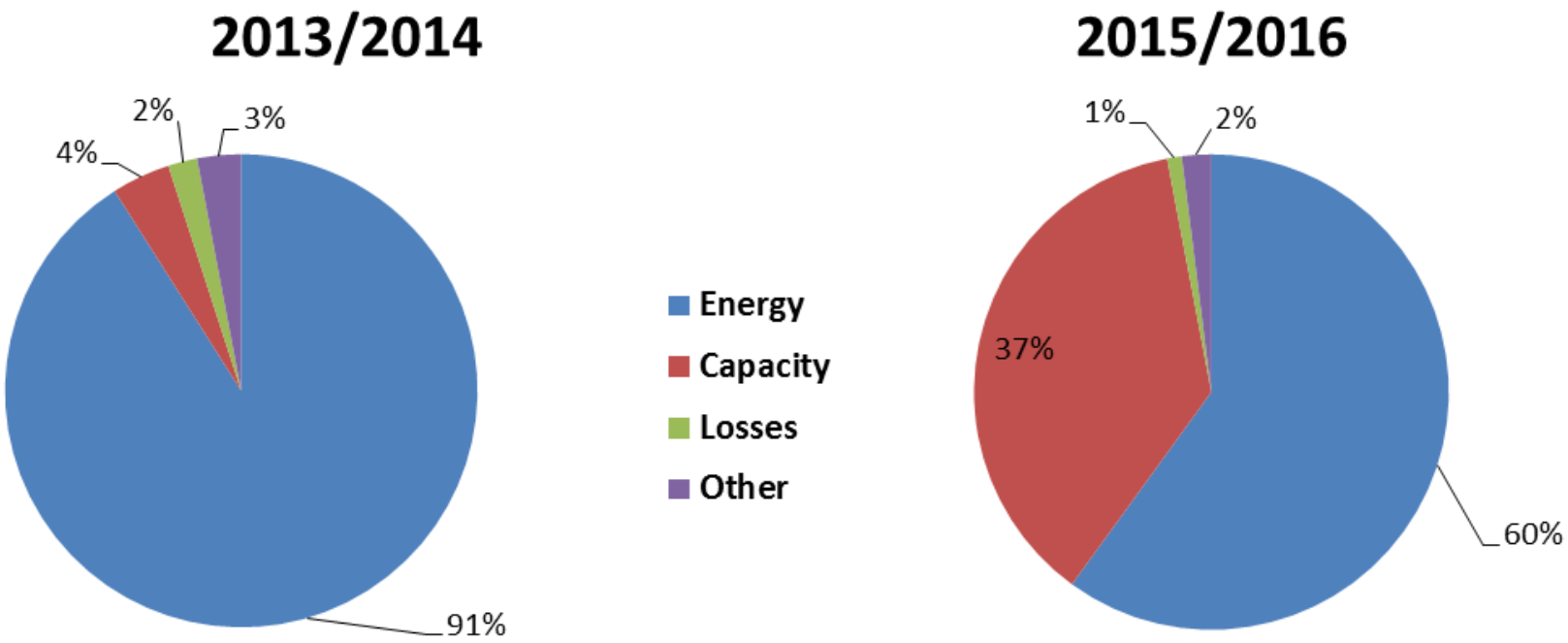


Source of data: Scioto Energy

Electricity is above 80% of the CRES Provider's component of retail price, but only 50% of the final consumer's retail price

Levin
Urban.csuohio.edu

Projected Structure of CRES Provider's Component of the Retail Price



Capacity charges are on the steep rise

Future Study: *Roadmap of the Utica Play*

- Prepare a roadmap of the likely ways Ohio's shale gas industry will develop
- Identify potential geographic nodes of development across the entire Utica footprint (locations holding critical concentration of companies, industries, or infrastructure facilities)
- Build scenarios of further development of downstream petroleum and chemical industries based on throughputs projections
- Identify demands that will be made on the region's labor market by the development of the Utica play by the shale gas industry

Deliverable:

- Maps describing the existing inventory of assets and probable geographic development
- The roadmap of likely paths the development of the play will take over time
- Analysis of the factors that will enable different development scenarios
- The different development scenarios will include strategies for realization of opportunities created for downstream industries

Research Team

Cleveland State University

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Urban Center

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Dr. Iryna Lendel, Assistant Director, Center for Economic Development

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David J. Fornari, Senior Research Fellow of the Energy Policy Center

Columbia Gas of Ohio
A NiSource Company

Columbia Gas of Ohio
Jobs Growth Fund Program

Overview:
The Columbia Gas of Ohio (COH) Jobs Growth Fund program is a $1.55 million grant program. The funds provide financial assistance to new and existing companies that create new jobs within COH's service territory. The grant awards range from $50,000 - $250,000. COH will fund approximately 2 to 4 industry and regionally diverse projects per year. The funds will be awarded through April 2012 or until funds are exhausted.

Eligibility:
A new or existing company employing more than 50 employees within COH's service territory can apply for the grant. It is preferred that the company meet one or more of the three criteria: (a) involve a capital investment of at least $1 million; (b) create at least 50 new jobs; or (c) add at least 20,000 sq. ft. of new floor area.

Small businesses employing less than 50 employees are also eligible for the grant. It is preferred that the company meet the following criteria: (a) create at least 10 full-time equivalent employees; (b) payroll wages of at least 175% of the federal minimum wage; and (c) the established business has been in existence for a minimum of three years.

Determination of Funding:
The funding level will be based upon the following:

- Number of new jobs created
- Wages
- Use of funds
- Level of competition
- Level of investment
- Project location
- Demonstration of support and need
- Additional funding assistance from other sources

Use of Funds:
The funds may be used to offset costs associated with new projects and existing company expansions. These funds may not be used to offset costs associated with natural gas utility infrastructure improvements to support new location projects and existing company expansions.

Application Process:
The COH Economic Development (ED) Manager will collaborate with representatives of the local, regional ED organizations and the Ohio Department of Development (ODOD) to identify eligible projects. The COH ED Manager with work with the applicant company to complete the grant application. An acceptance letter will be required from the applicant officially accepting the grant funds.

Contact:
Darnita M. Bradley
Economic Development Manager
www.columbiagasohio.com/JobsGrowthFund

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Summary and Analysis – 130th General Assembly, HB 319, as proposed by Rep. Grossman

Legislation Summary

HB 319 permits a natural gas company to file an application with the Public Utilities Commission of Ohio (Commission) to establish and recover infrastructure development costs of economic development projects either (1) certified under the SiteOhio program described in Section 122.9511, Revised Code, or (2) located in areas where adequate natural gas infrastructure is unavailable, infrastructure development provides an opportunity for increased natural gas usage, and economic development benefits may result from infrastructure development. Presently, Ohio law does not provide for the establishment of this type of rider or the recovery of these types of costs through a rider dedicated to this purpose.

Analysis

The economic impact of the proposed legislation on manufacturers is presently very difficult to predict. The rider has been proposed as a nonbypassable rider—meaning that all customers of the natural gas distribution utility will be assessed charges pursuant to the rider. The actual costs associated with such a rider, however, have not been quantified or proposed at this point.

It is likewise difficult to predict the development opportunities that may be available to manufacturers based upon approval of the rider. To the extent that manufacturers are able to take advantage of development resulting from the utility's collection of costs for infrastructure development, the bill could provide manufacturers with important opportunities. Manufacturers' ability to influence utilities' decisions to seek recovery of the costs of their projects, however, will color the impacts the bill's provisions may have upon them.

Unfortunately, per proposed Section 4929.16(C)(2), Revised Code, the investments for which a natural gas utility would seek economic recovery pursuant to the rider have previously been determined by the applicable natural gas company not to be "economically justified." While this issue may not pose problems if an independent party or process is used to evaluate which projects the rider proceeds should fund, pursuant to proposed Section 4929.165(E), Revised Code, the natural gas company is afforded the sole discretion to determine the economic development projects for which it will seek funding approval.

The manner in which HB 319 is structured and the extremely favorable treatment of natural gas companies in its provisions suggest that the bill was designed by specific companies seeking investment funds for particular infrastructure development projects, in conjunction with natural gas utilities. This bill reflects the interests of both types of entities, and will ultimately cost both little in comparison to the benefits they stand to gain from its approval.

One additional issue of note is that the proposed legislation directs that in considering an application for approval to fund an economic development project through the infrastructure development rider, the Commission shall not consider whether any of the property of the natural gas company that is currently owned or projected to be owned is "used and useful in rendering utility service." Although the applicability of the used and useful standard to the circumstances created by the proposed legislation is unclear, OMA intends to closely monitor developments relating to the "used and useful" standard, as it has for other legislation creating an exception to the used and useful requirement in ratemaking proceedings.

Recommendation

As previously mentioned, although the costs resulting from approval of this bill could prove significant for all classes of customers, manufacturers stand in a position to potentially benefit from the creation of the infrastructure development rider. Therefore, additional information must be obtained regarding the f costs to be incurred by customers before OMA can take a firm position supporting or opposing the bill. Further, information must be obtained regarding the intended allocation of costs of the rider across customer classes.

One significant point of concern for OMA is the discretion provided to the natural gas utilities to determine the projects for which they will seek funding. Utilization of a less subjective system should be incorporated into the bill, otherwise, projects affecting business concerns that are not favored by utilities but have important value may not be considered or submitted for funding. An objective qualification system is an important trade-off for manufacturers' support of the bill. As presently drafted, the utilities are already permitted to exclude any sums of money received or to be received (1) from the rider, or (2) from infrastructure development placed into service, from their property valuations. Permitting the objective, rather than subjective, evaluation of projects for which funding approval will be sought would demonstrate reasonableness and the absence of bias on the part of utilities regarding the projects to be funded.

High electricity capacity prices are coming ... but, *there is something you can do about it* to protect your company

Join us for a webinar on Tuesday, April 1, 2014, 10:00 – 11:30 a.m.

- **Learn what price increases are coming and why**
- **Learn what you can do - with your commodity contracts and within operations— to mitigate the effects**
- **Understand the timeframe within which to act to best protect your company**

If your company spends $250,000 or more annually or buys at least 3 million kilowatt hours per year, you are highly encouraged to attend to learn available strategies to mitigate the coming capacity cost increases.

What is at stake?

The impact of the coming capacity cost increases will be felt by most Ohio manufacturers starting in June 2014 with another increase to come in June 2015. Customers of all Ohio utilities will be affected to one degree or another.

Capacity Rates:

Utility	2013/2014	2014/2015	2015/2016
AEP, DP&L, DUKE	$27.73	$125.99	$136.00
FE	$27.73	$125.99	$294.03

There is something you can do to protect your costs, but there is a limited amount of time available to act. Actions you can take now can protect your costs.

Who should attend?

- CFOs & Controllers
- Energy Purchasers & Managers
- Plant & Facilities Managers
- Plant Engineers

You will receive a customized report that quantifies the effect of the coming capacity price increases on your facilities.

Registration

There is no charge for this webinar. To register, call (800) 662-4463 or go online to My OMA at www.ohiomfg.com.

PJM limited by use of 'winter' demand response

Platts Megawatt Daily - January 09, 2014
By Brian Hansen

When extremely cold weather sent electricity demand and power prices skyrocketing across much of the US earlier this week, PJM Interconnection invoked the emergency provisions of its tariff and directed generators within its footprint to be ready to produce as much power as possible.

And to be sure, the so-called "Maximum Emergency Generation Alert" that PJM issued Tuesday helped keep the lights on in PJM's sprawling market area.

But notably, PJM could not order the emergency deployment of demand response resources, which have become a key resource used when electricity demand climbs for various reasons. This is because PJM's tariff, as currently written, only allows the grid operator to order the deployment of emergency DR programs during the summer months, which are when high-demand days usually occur.

Plenty of DR was indeed deployed in PJM earlier this week in response to the "polar vortex" that gripped much of the Eastern US. But that DR was deployed voluntarily as economic DR – not because PJM had the authority to order it, as PJM could do on high-demand days in the summer.

"We can't force demand response to comply outside of the period of time when it must do so, which for this [market] period is the summer," said Ray Dotter, a PJM spokesman.

That could change as PJM is looking to use DR resources on more of a year-round basis and it has proposed a change in its tariff to that effect.

Dotter noted that because PJM holds its capacity auction three years in advance, the DR resources that PJM currently has at its disposal were procured in the capacity auction that was held in the summer of 2010. And at the time that auction was held, would-be DR providers were only bidding in to provide services during the summer months, Dotter said.

"The demand response that we have now was procured three years ago, under the rules that were then in effect, which did not provide for annual DR resources, but summer only, meaning that demand response was only obligated to respond in the summer months," he said. "So they can't be penalized when they don't respond in January."

Dotter said that even though PJM cannot currently require DR providers to reduce load in the winter months, PJM nevertheless reached out to several entities and said, "We know you're not obligated to respond, but what can you give us?"

Dotter said PJM believes that those calls netted about 2,000 MW of DR, although he stressed that the exact amount will not be known for a couple of months.

Asked if PJM would have preferred to garner more DR earlier this week in order to deal with the extraordinarily high electricity demand, Dotter said "The reliability and system operation would have been better if we had more resources available the last two days, whether that's generation or demand response. It certainly would have been very valuable to system operations to have more megawatts of demand response that they could relied on over the system peak."

PJM could indeed have more DR to tap on high-demand winter days in the coming years if the Federal Energy Regulatory Commission approves some modifications that PJM has proposed to its tariff. Specifically, PJM has proposed to limit the amount of DR that it contracts for the summer months, which it says will make it more economically attractive for companies to provide DR services year around.

"We want to set up the market rules so there's a strong incentive for annual resources," Dotter said. "We certainly didn't create the cold weather this week to prove the point, but if all of the demand response that we have available were annual, and we could have required it to respond, we would have had a much bigger safety margin and much bigger resources this week than we did."

PJM Winter Operations
January 2014

Ohio Manufacturers' Association
Energy Committee
Columbus, Ohio
March 9, 2014
Kerry Stroup
Manager, Stage Government Policy
PJM Interconnection

January 2014 Low (& Wind Chill) vs Historic Temperatures

Unseasonably Cold Weather in January

Region	Week of Jan 6th	Week of Jan 20th	Week of Jan 27th	Avg Jan Low Temp	All-Time Record Low
Philadelphia	4° (1/7) -18° WC	4° (1/22) -17° WC	10° (1/30) -3° WC	25.5°	-7° (1982 & 84) -16° & -33° WC
Richmond	10° (1/7) -8° WC	7° (1/23) -2° WC	4° (1/30) 4° WC	28.4°	-12° (1940) WC N/A
Chicago	-16° (1/6) -41° WC	-6° (1/24) -24° WC	-11° (1/28) -30° WC	16.3°	-27° (1985) -57° WC

All temperatures are in Fahrenheit and WC denotes Wind Chill

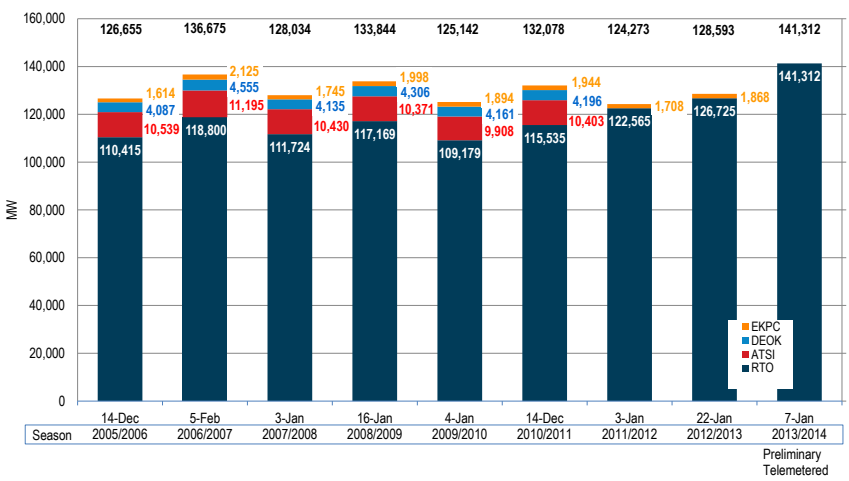
PJM RTO Highest Historic Winter Demands

1. 1/7/2014	141,312 MW	Evening Peak
2. 1/7/2014	138,733 MW	Morning Peak
3. 1/24/2014	137,898 MW	Morning Peak
4. 1/28/2014	137,868 MW	Evening Peak
5. 1/30/2014	137,032 MW	Morning Peak
6. 2/5/2007	136,675 MW	Evening Peak
7. 1/29/2104	136,517 MW	Morning Peak
8. 1/22/2014	135,874 MW	Evening Peak
9. 1/23/2014	134,989 MW	Evening Peak
10. 2/6/2007	134,492 MW	Morning Peak

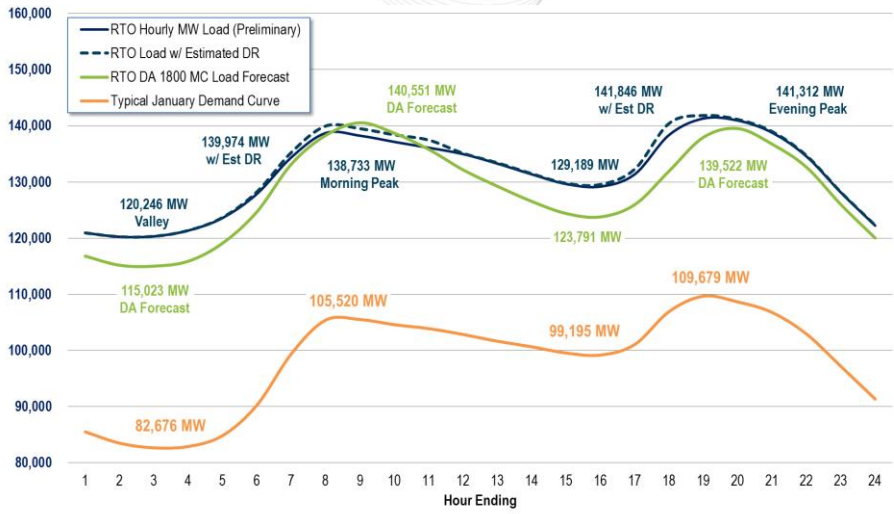
2014 Demands are Preliminary Telemetered Data

Pre-2014 Demands include Coincident Demands of Not-Yet-Integrated Zones

Historic PJM RTO Annual Winter Seasonal Peak Demand



Tuesday, January 7 – 18:00 DA Load Forecast versus Actual



Emergency Procedures Summary for January 2014

	Emergency Procedure	MON 6-Jan	TUE 7-Jan	WED 8-Jan	WED 22-Jan	THU 23-Jan	FRI 24-Jan	MON 27-Jan	TUE 28-Jan	WED 29-Jan	THU 30-Jan
Alerts	Cold Weather										
	Max Emergency										
	Voltage Reduction										
	Primary Reserve										
Warnings	Voltage Reduction										
	Primary Reserve										
Actions	Max Emergency										
	Voltage Reduction										
	Reserve Action										
	Shortage Pricing										
	Emergency Energy			*		*					
	Load Management										
	C2 Conservation										

* Emergency Energy bids were requested but not loaded

Tuesday, January 7, 2104 - Peak – Generation by Fuel type

Fuel Types	01/07/2014 HE 19					
	ICAP (MW)	Ambient Air (MW)	Generation Outages (MW)	Maintenance / Planned (MW)	Forced (MW)	Forced Outages (% of ICAP)
All Fuel Types	189,658	-1,054	39,136	1,103	38,033	20%
Gas	51,750	-685	15,473	176	15,286	30%
Plant Outages			9,105			
Gas Curtailments			6,368			
Coal	70,773	-4	14,148	560	13,595	19%
Nuclear	33,316	-455	1,151	-474	1,605	5%
Hydro	8,304	12	757	725	61	1%
Wind	6,633	0	1,588	33	1,554	23%
Oil	9,460	-174	3,674	60	3,612	38%
Other	9,422	252	2,345	23	2,320	25%

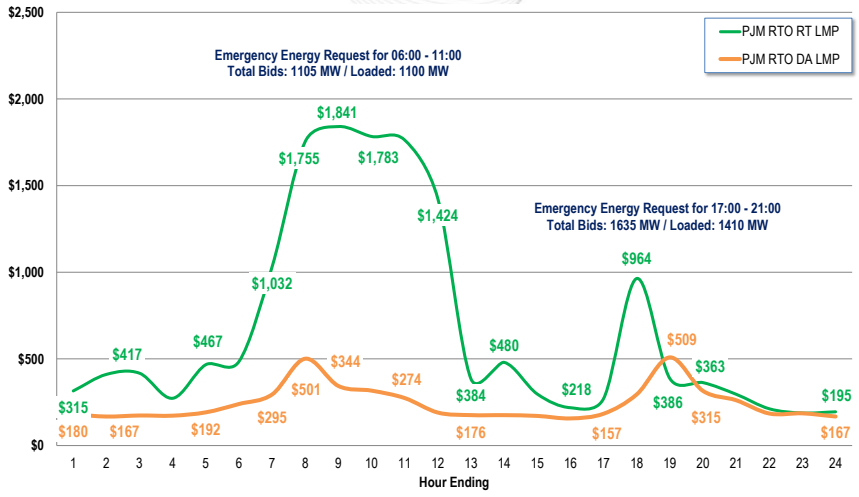
Tuesday, January 7, 2104 - Peak – Generation by Unit type

Unit Types	ICAP (MW)	Ambient Air (MW)	Generation Outages (MW)	Maintenance / Planned (MW)	Forced (MW)	Forced Outages (% of ICAP)
All Unit Types	189,658	-1,054	39,136	1,103	38,033	20%
Diesel/CT	38,762	-167	13,053	679	12,374	32%
Plant Outages			7,971			
Gas Curtailments			5,082			
Steam/Fossil	85,417	-91	19,252	468	18,784	22%
Nuclear	33,316	-455	1,150	-455	1,605	5%
Combined Cycle	11,185	-212	2,129	-229	2,358	21%
Hydro	8,304	12	756	695	61	1%
Wind	6,633	0	1,586	32	1,554	23%
Other	6,041	-141	1,210	-87	1,297	21%

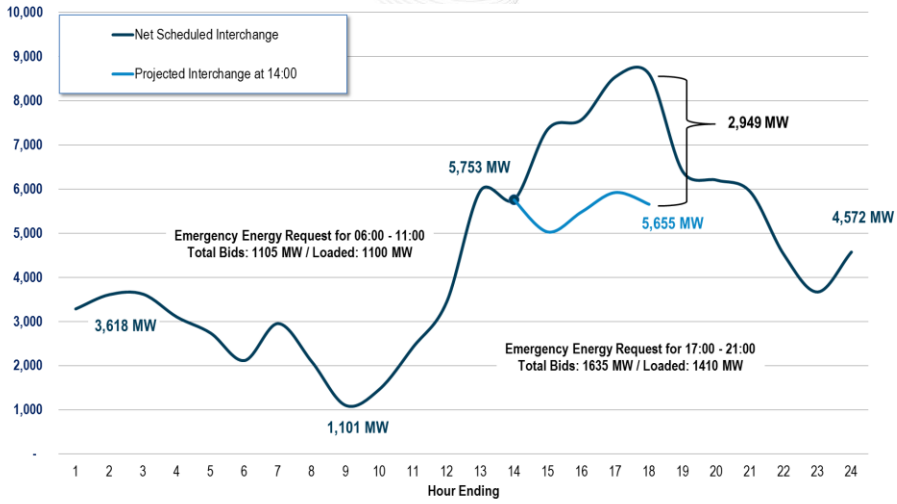
Gas/Electric Interface

- Information Sharing / Coordination
  - FERC Order 787 Emergency Waivers
  - Daily communication of generation commitment to Pipelines
  - Implemented joint status calls
- Gas Pricing Issues January 22 – 28
  - Gas units variable cost > $1000/MWh offer cap
  - PJM emergency waiver filings
  - Long term solution required
- Scheduling and Commercial Issues

PJM RTO DA vs RT LMP on January 7, 2014



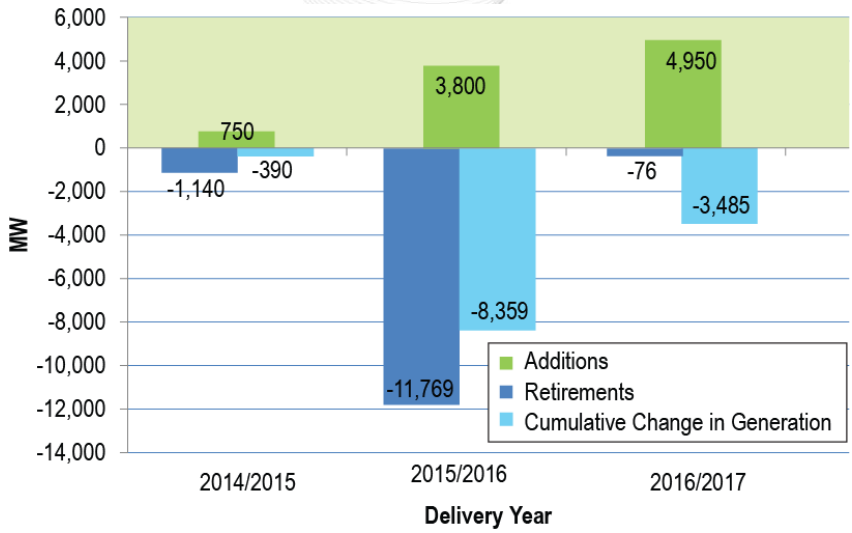
Net Scheduled & Projected Interchange on January 7, 2014



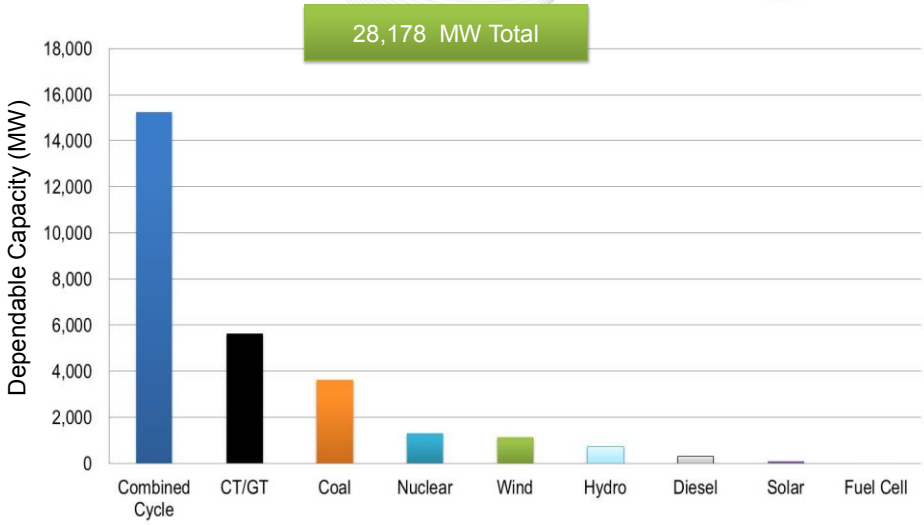
Cold Weather Demand Response

Date	Peak	Duration	Zones	MW
7-Jan	Morning	5 ½ Hours	RTO	1,720
7-Jan	Evening	2 Hours	RTO	2,920
8-Jan	Morning	Cancelled	RTO	1,960
22-Jan	Evening	6 Hours	BGE, PEPCO	160
23-Jan	Morning	3 Hours	Mid-Atlantic, DOM, APS	570
23-Jan	Evening	4 Hours	Mid-Atlantic, DOM, APS	1,280
24-Jan	Morning	3 Hours	Mid-Atlantic, DOM, APS	585

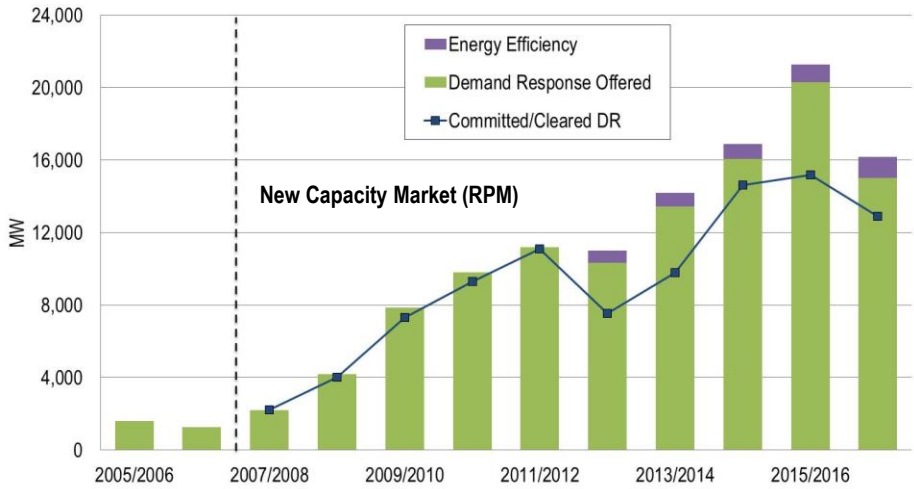
Generation Retirements, Additions and Net Generation Supply Change Over the Next Three Years



New Generation by Fuel Type
Since RPM Implementation in 2007



Increasing Demand Resources



Challenges Over the Next Few Years

- Electricity Demand Trends
- **World's Largest Fuel Switch**
- **Narrowing Reserve Margins**
- Power Market / Natural Gas Interoperability
- Integration of Intermittent, Distributed and Demand Side Resources

Natural Gas Update
OMA Energy Committee

Richard Ricks
NiSource
March 6, 2014

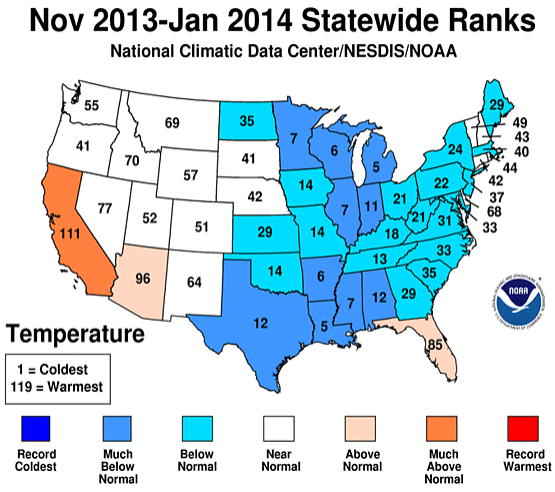
1

Agenda

- Weather
  - National
  - Ohio Historical Temperature Statistics
  - Degree Days
- National Storage
- Natural Gas Prices
  - Historic Gas Spot Price
  - NYMEX Prompt Month History
  - NYMEX Gas Futures
  - Selected City Gate Pricing
- Drilling Rig Counts
- Supply & Pricing Outlook

2

3-Month Statewide Temperature Ranks



3

Coldest Days on Record

3 days in January 2014 in the Top 35 "Coldest Days"
Data dates back to 1929
Toledo, Ohio NWS

DAY		Daily Average Temp		Ranking
18-Jan-94		-14		1
20-Jan-85		-13		2
06-Jan-14		**-11**		**3**
21-Jan-84		-10		4
17-Jan-82		-10		5
24-Dec-83		-9		6
19-Jan-94		-8		7
17-Jan-77		**-8**		**8**
25-Dec-83		-7		9
10-Jan-82		-7		10
24-Jan-63		-7		11
15-Jan-94		-6		12
15-Jan-72		-6		13
22-Dec-89		-5		14
21-Dec-89		-5		15
04-Jan-81		-5		16
16-Jan-77		**-5**		**17**
07-Jan-14		**-2**		**25**
28-Jan-14		**-1**		**34**
03-Feb-96		-1		35
29-Jan-77		**-1**		**39**

4

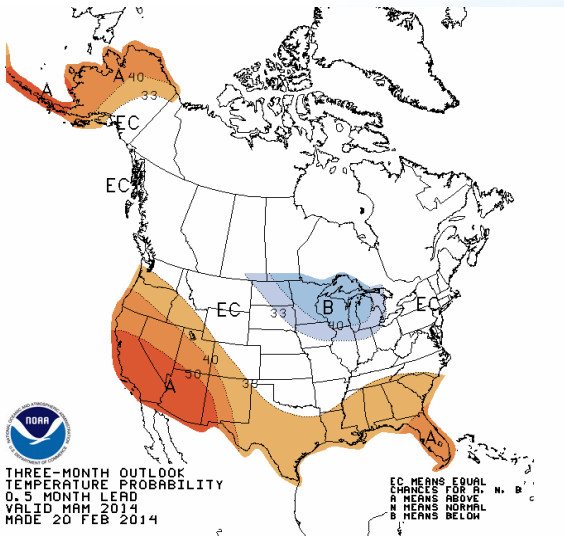
Coldest Months on Record

January 2014 was 5th coldest January
Preliminary February 2014 data – 7th coldest February
Data dates back to 1949 – Toledo, Ohio NWS

Rank	Monthly Degree Days	Period	% From Average	Average Temp
1	**1,714**	**1977**	**81**	**9**
2	1,507	1963	59	16
3	1,488	1982	57	17
4	1,483	1970	57	17
5	**1,483**	**2014**	**57**	**17**
6	**1,482**	**1978**	**57**	**17**
7	1,471	1994	55	17
8	1,457	2009	54	18
9	1,448	1984	53	18
10	**1,442**	**1979**	**52**	**18**
11	1,423	1981	50	19
12	1,393	1985	47	20
13	1,378	2004	46	20
14	**1,368**	**1976**	**45**	**20**

5

March, April and May 2014 Temperature Outlook



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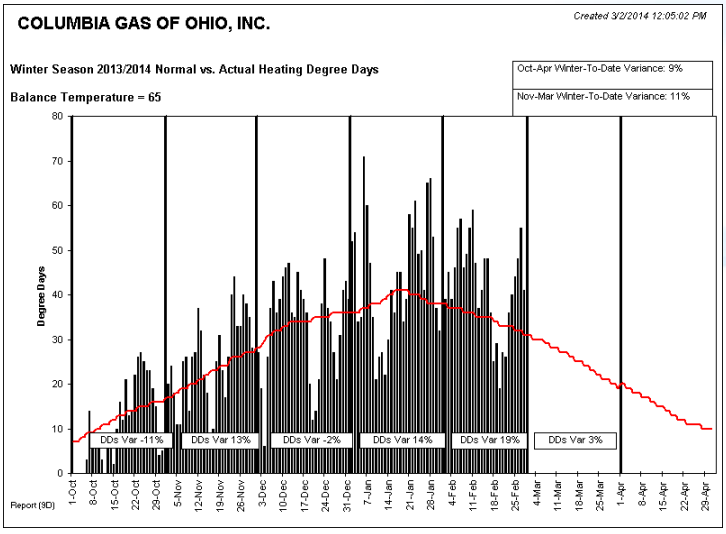
Degree Day Comparison



7

Degree Days in Numbers

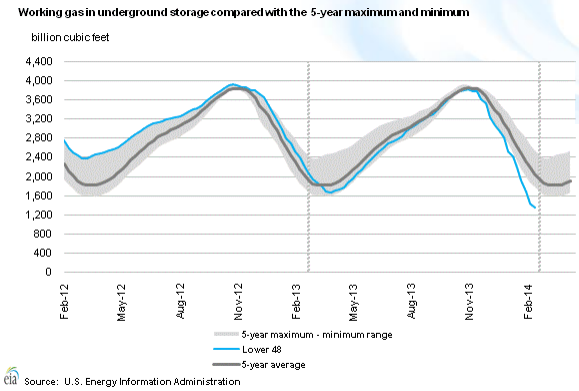
Ohio Statewide Data
No matter how you view it, it has been COLD
65 degree base versus daily average temperature

Month	Normal	2013/2014	% Deviation
Nov	668	756	13.2%
Dec	1037	1016	-2.0%
Jan	1198	1360	13.5%
Feb	975	1164	19.4%

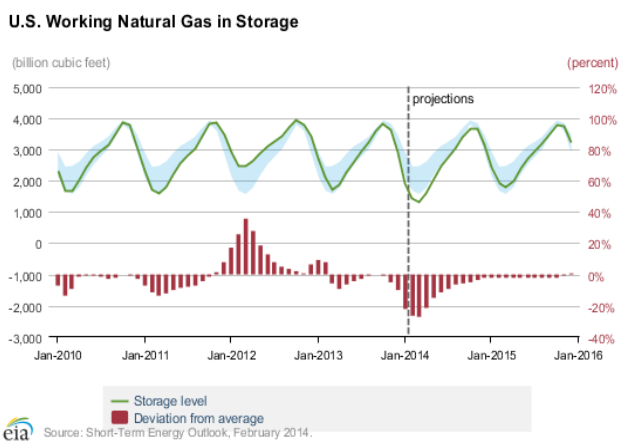
8

US Gas Storage

Summary
Working gas in storage was 1,348 BCF as of Friday, February 21, 2014, according to EIA estimates. This represents a net decline of 95 BCF from the previous week. Stocks were 905 BCF less than last year at this time and 711 BCF below the 5-year average of 2,059 BCF. In the East Region, stocks were 361 BCF below the 5-year average following net withdrawals of 78 BCF. Stocks in the Producing Region were 251 BCF below the 5-year average of 775 BCF after a net withdrawal of 5 BCF. Stocks in the West Region were 99 BCF below the 5-year average after a net drawdown of 12 BCF. At 1,348 BCF, total working gas is below the 5-year historical range.

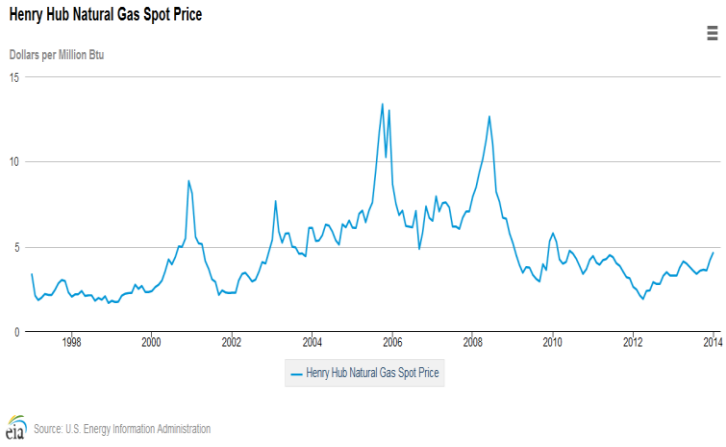


US Gas Storage



Note: Colored band around storage levels represents the range between the minimum and maximum from Jan. 2009 - Dec. 2013.

Natural Gas Spot Price



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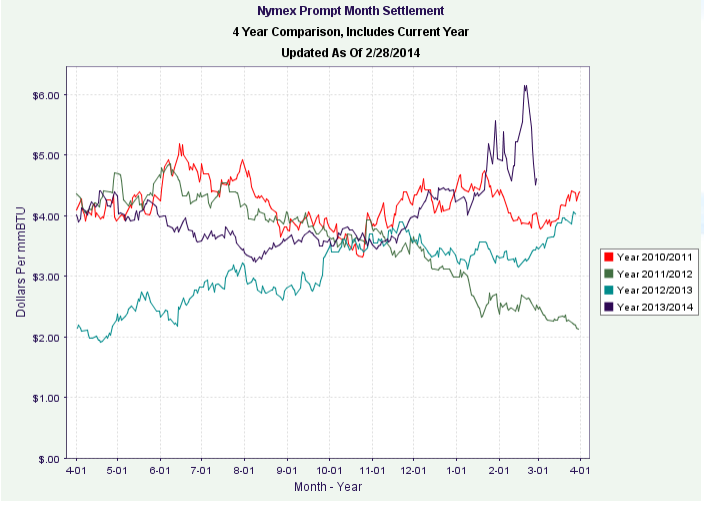
NYMEX Prompt Month Settlement



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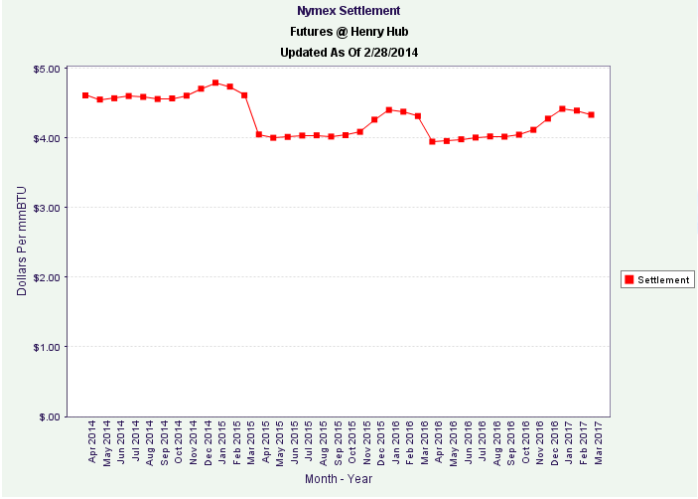
NYMEX Strip



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Regional Gas Pricing Data

Midwest and East Coast Pricing
Gas Daily Prices

Date	Chicago CG	TCO Appalachia	Henry Hub	TGP Zone 6 CG	TETCO M-3 CG
12/1/2013	3.89	3.67	3.79	5.07	3.70
12/12/2013	4.59	4.10	4.24	21.12	11.01
12/13/2013	4.65	4.27	4.40	24.88	6.14
12/16/2013	4.62	4.21	4.36	32.22	5.63
12/17/2013	4.49	4.14	4.22	22.43	5.25
12/18/2013	4.41	4.09	4.21	20.36	4.62
1/3/2014	4.85	4.40	4.33	32.15	18.38
1/4/2014	13.74	4.40	4.34	16.46	11.32
1/22/2014	6.74	4.72	4.59	**54.18**	**72.58**
1/23/2014	9.00	5.07	4.91	**65.70**	**74.25**
1/24/2014	6.49	5.70	5.55	37.07	31.71
1/25/2014	10.54	5.37	5.18	42.27	48.90
1/26/2014	10.54	5.37	5.18	42.27	48.90
1/27/2014	10.54	5.37	5.18	**42.27**	**48.90**
1/28/2014	**42.20**	5.84	5.69	**70.08**	**81.30**
2/10/2014	12.85	6.37	5.89	20.55	8.72
2/11/2014	15.44	8.25	7.76	27.40	21.44
2/17/2014	6.43	5.62	5.53	21.52	6.82
2/18/2014	6.43	5.62	5.53	21.52	6.82
2/23/2014	18.80	6.36	6.22	22.11	6.43
2/28/2014	20.27	4.64	4.53	28.91	11.88
3/1/2014	**36.67**	4.82	4.70	28.35	6.65
3/2/2014	**36.67**	4.82	4.70	28.35	6.65
3/3/2014	36.67	4.82	4.70	28.35	6.65
3/4/2014	24.22	6.96	6.94	37.42	20.72
Period Average	9.11	4.89	4.88	19.28	11.44

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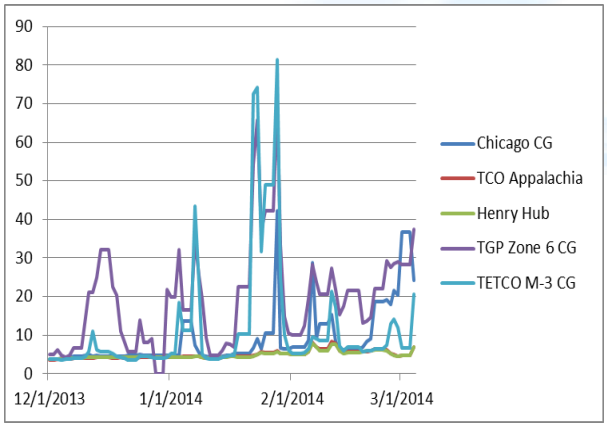
Regional Gas Pricing Data

Midwest and East Coast Pricing
Gas Daily Prices



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Regional Gas Pricing Data

- Price > $120/MMBTU
  - CG Spot Daily East Coast delivery (1-22-14)
- Price > $30/MMBTU
  - CG Spot Daily Ohio delivery (Several days)
- Value of Firm Transportation Service (FTS)
  - Ability to deliver
  - There is a limited amount of FTS
  - Secondary capacity does not flow sometimes

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2014 World Wide Rig Count

BAKER HUGHES INCORPORATED

WORLDWIDE RIG COUNT

2014	Latin America	Europe	Africa	Middle East	Asia Pacific	Total Intl.	Canada	U.S.	Total World
Jan	401	126	139	403	256	1,325	504	1,769	3,598
Feb									
Mar									
Apr									
May									
Jun									
Jul									
Aug									
Sep									
Oct									
Nov									
Dec									
Avg.	401	126	139	403	256	1,325	504	1,769	3,598

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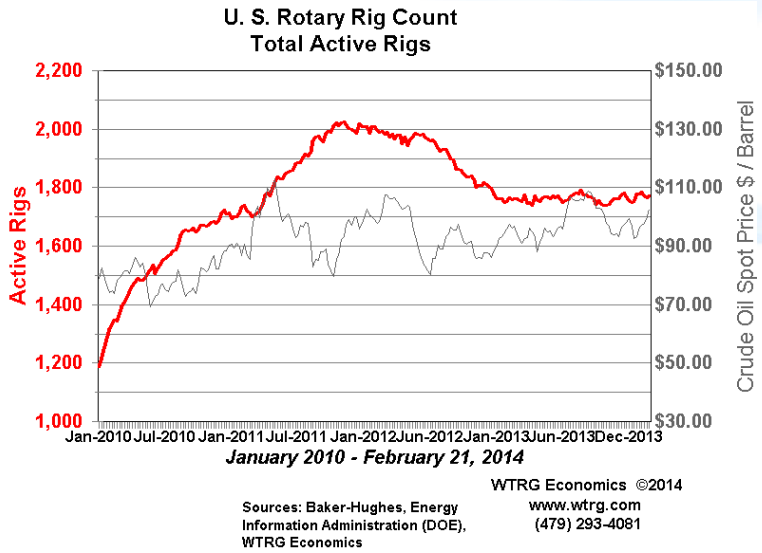
U.S. Rig Count



Outlook

- Where is the NYMEX strip today?
  - $4 to $5
- Outlook a few years ago with a winter like this?
  - Higher; likely much higher?
- Difficult to bet against the prolific shale gas plays
- Can be difficult if in the day to day spot market
  - On contrary, can be advantageous too
  - What is your risk tolerance

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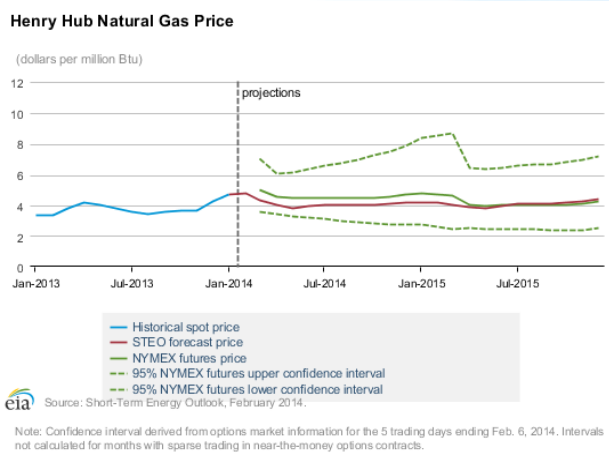
Pricing Outlook



Note: Confidence interval derived from options market information for the 5 trading days ending Feb. 6, 2014. Intervals not calculated for months with sparse trading in near-the-money options contracts.

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