Energy Committee
November 13, 2014

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2015 Energy Committee Calendar
Meetings will begin at 10:00am

Wednesday, February 25, 2015
Thursday, May 21, 2015
Thursday, August 27, 2015
Thursday, November 19, 2015

OMA Energy Committee Meeting Sponsor:

OMA Energy Committee Agenda
November 13, 2014

Welcome and Introductions	Brad Belden of Belden Brick, Chair
Project Updates	
• OMA Energy Guide	Susanne Buckley, Scioto Energy
Counsel's Report	Kim Bojko, Carpenter Lipps & Leland
• Utility power purchase agreements (PPAs)	Rebecca Hussey, Carpenter Lipps & Leland
Customer Sited Resources Report	John Seryak, PE, RunnerStone, LLC
• PJM Capacity Performance	
Guest Presentations	
• **Utility Energy Efficiency Program Update**	Andy McCabe, AEP Ohio
• **Demand Response** **Impact of PJM / FERC Activity**	Greg Geller, EnerNoc Katie Guerry, EnerNoc
• **Rover Pipeline**	Gretchen Krueger, Energy Transfer Mark Ryan, Energy Transfer Ken Collins, Strategic Public Partners
• **OMA Commissioned Research on Electricity Markets by CSU**	Andrew Thomas, Cleveland State University Iryna Lendel, Cleveland State University
Lunch	
Public Policy Report	Ryan Augsburger, OMA Staff
Natural Gas Report	Richard Ricks, NiSource

Meeting sponsored by:

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:	November 13, 2014

Administrative Actions in which OMA Energy Group is Actively Involved:

American Electric Power (AEP Ohio):

- ESP Application (Case No. 13-2385-EL-SSO, et al.)
  - Over course of electric security plan (ESP), customers could be exposed to \$82-\$116 million through approval of proposed Rider PPA, which represents costs associated with AEP's interest in the Ohio Valley Electric Corporation (OVEC) generating units
  - Customers also at risk to incur \$246 million in additional distribution costs without the necessity of approval of such costs in a base rate case
- PPA Rider Expansion Case (Case No. 14-1693-EL-RDR, et al.)
  - AEP has proposed to expand Rider PPA to include costs associated with a number of other generation plants owned by its affiliate, exposing distribution customers to those costs as well
- Retail Stability Rider Case (Case No. 14-1186-EL-RDR)
  - AEP has requested authority to recover from customers an additional \$463 million, representing a deferred capacity regulatory asset, through Rider RSR
- IGCC Costs Case (Case No. 05-376-EL-UNC)
  - Intervening parties are seeking a refund of \$24.24 million which customers have previously paid toward construction of an IGCC generation plant which was never built

Duke Energy Ohio:

- ESP Application (Case No. 14-841-EL-SSO, et al.)
  - Customers exposed to \$22 million in costs associated with Duke's entitlement to generation from the OVEC facilities over the course of the proposed ESP under Rider PSR
  - Customers also exposed to unlimited costs associated with a distribution capital investment rider, which has been projected by Duke to cost customers roughly \$211 million over the term of the ESP

- Shared Savings Mechanism Extension Case (14-1580-EL-RDR)
    - Duke requests extension of its shared savings mechanism for 2016, which would resulting in further unlimited incentives for the utility, even for minimal compliance with energy efficiency and peak demand reduction benchmarks

FirstEnergy:

- ESP IV Application (Case No. 14-1297-EL-SSO)
    - Pursuant to proposed Rider RRS, customers may be exposed to millions in costs associated with power purchase agreements between FirstEnergy and FirstEnergy Solutions (FES) regarding generation from FES' Sammis coal generation facility and its Davis Besse nuclear generation facility, as well as FirstEnergy's entitlement to generation from the OVEC facilities over the course of the proposed ESP under Rider RRS
- Portfolio Plan Amendment Case (Case No. 12-2190-EL-POR, et al.)
    - Under the amended plan, customers are exposed to extremely limited offerings from the utility, but are still at risk for shared savings incentives

Statewide:

- S.B. 310 Rules Proceeding (Case No. 14-1411-EL-ORD)
    - As proposed, the rules do not adequately distinguish the costs of compliance with energy efficiency and peak demand reduction benchmarks from other costs associated with EE/PDR programs, such as incentive payments
- Commission's Investigation—CRES Marketing Practices (Case No. 14-568-EL-COI)
    - Commission investigating what "fixed-price" means in relation to a contract for electric generation
- Challenges to the FES RTO Expense Surcharge
    - Customers at risk for millions in ancillary service charges sought to be passed through by FES
        - Carbo Forge, et al. v. FirstEnergy Solutions (Case No. 14-1610-EL-CSS)
        - Power4Schools v. FirstEnergy Solutions (Case No. 14-1182-EL-CSS)
        - City of Toledo v. FirstEnergy Solutions (Case No. 14-1944-EL-CSS)

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

AEP Ohio:

- *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. 11-4920-EL-RDR, et al.)
  - **Case Status:** Notice of appeal filed on November 30, 2012; fully briefed on July 1, 2013; oral argument has not been scheduled.
  - **Brief Synopsis:** Ohio Power contests the Commission's decision to calculate deferred fuel carrying costs using long-term debt rate instead of weighted average carrying costs (WACC); Industrial Energy Users-Ohio contests the Commission's decision not to account for accumulated deferred income tax (ADIT) in calculating the deferral; OCC contests the Commission's decision not to reduce recovery of the fuel charges to refund customers for POLR charges.

- *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)
  - **Case Status:** Notice of appeal filed on February 11, 2013; fully briefed on October 23, 2013; oral argument has not been scheduled.
  - **Brief Synopsis:** Appellants contest a Commission decision that set the capacity price which AEP Ohio charges competitive retail electric service providers.

- *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.)
  - **Case Status:** Notice of appeal filed on April 1, 2013; fully briefed on December 30, 2013; oral argument has not been scheduled.
  - **Brief Synopsis:** Kroger, OCC, Industrial Energy Users-Ohio, and Ohio Energy Group appealed the Commission's order establishing AEP Ohio's second electric security plan.

- *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)
  - **Case Status:** Notice of appeal filed on June 24, 2013; fully briefed on December 23, 2013; oral argument has not been scheduled.
  - **Brief Synopsis:** Industrial Energy Users-Ohio challenges the order approving AEP Ohio's corporate separation plan.

Dayton Power and Light:

- *In the Matter of the Dayton Power and Light Company to Establish a Standard Service Offer in the Form of an Electric Security Plan*, Case No. 2014-1505 (Appeal of Case No. 12-426-EL-SSO)
  - Case Status: On October 14, 2014, OCC and IEU-Ohio filed a joint motion for stay of implementation of Rider SSR during the pendency of the appeal; DP&L filed a memorandum contra the joint motion on October 24, 2014. OCC and IEU-Ohio additionally filed a motion to dismiss certain assignments of error raised by DP&L in its cross-appeal on October 31, 2014; DP&L filed a memorandum contra the motion to dismiss on November 10, 2014.
  - DP&L, IEU-Ohio, and OCC appeal various components of the Commission's decision regarding DP&L's ESP.

Duke Energy Ohio:

- *In the Matter of the Application of Duke Energy Ohio, Inc., for an Increase in its Natural Gas Distribution Rates*, Case No. 2014-328 (Appeal of Case No. 12-1685-EL-AIR, et al.)
  - **Case Status:** On August 13, 2014, OMA, OCC, Kroger, and Ohio Partners for Affordable Energy filed a joint brief addressing the appropriate amount of bond necessary to continue the stay. The brief argues that the bond amount should be zero or a *de minimis* amount. Duke also filed a brief addressing the amount of bond. Duke requested that bond be set at a minimum of $11,405,825. On November 5, 2014, the Supreme Court of Ohio ordered appellants, including OMA, to post bond in the amount of $2,506,295 within ten days in order to continue the stay.
  - **Brief Synopsis:** OMA, OCC, Kroger, and Ohio Partners for Affordable Energy appeal a Commission order that permitted recovery from ratepayers for environmental remediation costs associated with two former manufactured gas plant sites.

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)
  - **Case Status:** Notice of appeal filed on March 29, 2013; fully briefed on September 27, 2013; oral argument has not been scheduled. Motion of Northeast Ohio Public Energy Council (NOPEC) to expedite oral argument was denied on October 8, 2014.
  - **Brief Synopsis:** NOPEC and Environmental Law and Policy Center challenge the Commission's order establishing FirstEnergy's third electric security plan.

- *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)
    - **Case Status:** Notice of appeal filed on December 24, 2013; briefing schedule stayed on March 21, 2014 to consider FirstEnergy's motion to seal confidential information; Court denied FirstEnergy's motion to seal on September 3, 2014. Briefing schedule resumed on September 3, 2014; parties filed second merit briefs on October 23, 2014.
    - **Brief Synopsis:** FirstEnergy and OCC appeal a Commission order that disallowed recovery of FirstEnergy's costs of purchasing renewable energy credits; OCC and Environmental Law and Policy Center challenge the Commission's decision to treat certain information as confidential.

Statewide:

- *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)
    - **Case Status:** Notice of appeal filed on September 16, 2013; fully briefed on February 21, 2014; oral argument has not been scheduled.
    - **Brief Synopsis:** FirstEnergy challenges the Commission's adoption of various rules regarding how electric distribution utilities meet Ohio's statutory renewable energy and energy efficiency benchmarks.

- *In the Matter of the Commission's Review of Chapter 4901:1-10, Ohio Administrative Code, Regarding Electric Companies*, Case No. 2014-1633 (Appeal of Case No. 12-2050-EL-ORD)
    - **Case Status:** FirstEnergy filed a notice of appeal on September 22, 2014; journal has been transmitted.
    - **Brief Synopsis:** FirstEnergy challenges the Commission's adoption of various rules governing net metering and compensation for the same.

1325-001.602152

Ohio Electric Utilities' Proposed Power Purchase Agreement Riders

EXECUTIVE BRIEFING

American Electric Power (AEP), Duke Energy (Duke) and FirstEnergy (FE) have recently filed applications for Electric Security Plans (ESPs) with the Public Utilities Commission of Ohio (PUCO). Among other provisions, the ESPs seek to establish generation service rates, as well as some distribution-related charges, for the utilities' respective Standard Service Offers (SSOs).

As part of their ESP applications, the three distribution utilities have proposed to establish nonbypassable riders that all customers would be required to pay to subsidize full recovery of utilities' costs associated with certain generating facilities owed partially or wholly by the utilities or their competitive generation affiliates. Specifically:

- AEP initially proposed a rider (Rider PPA) to monetize the utility's entitlement share of the Ohio Valley Electric Corporation (OVEC) generating plants. AEP recently expanded the proposed rider to also include costs associated with a power purchase agreement (PPA) with its competitive affiliate AEP Generation Resources for generation from nine specified coal-fired generating units. AEP seeks approval of the proposed rider for three years (June 2015 through May 2018).

- Duke's ESP contains a proposed rider (Rider PSR) similar to AEP's initial rider proposal in that it seeks to monetize Duke's entitlement share in the OVEC generating units. The major difference is that Duke is asking the PUCO to approve the rider through 2040.

- FirstEnergy's ESP contains a proposed rider (Rider RRS) that will allow the utility to collect costs associated with its entitlement share of the OVEC generating plants, as well as costs associated with a PPA with its competitive generation affiliate FirstEnergy Solutions (FES) for power from FES's Sammis coal-fired generating plant and Davis-Besse nuclear generating plant. FirstEnergy seeks approval of its proposed rider for a 15-year period (June 2016 through May 2031). The FirstEnergy rider includes customer subsidization of an 11.15 percent ROI for FirstEnergy Solutions.

FirstEnergy's proposed rider is for costs associated with approximately 3,244 MW of generation and AEP's is for costs associated with approximately 6,263 MW. Both are substantially larger than Duke's proposal.

How the PPAs and Proposed Riders Would Work

The utilities are seeking regulatory approval to sell into the PJM wholesale market all of the power they procure from their existing OVEC generation agreements and proposed PPAs at rates that may be higher – or lower – than the price the utilities pay for the OVEC/PPA generation. If the PUCO approves the PPAs, the difference between the PJM market price and the OVEC/PPA price, whether it is a net cost or a net benefit, would be passed on to customers. So, if the PJM market price is higher than the price the utility pays for generation through its OVEC contracts or PPA agreements, the resulting net increase in revenue would be reflected as a credit on customers' bills; alternatively, if the market price is lower than the price the utility pays, customers would pay the net additional generation cost in the form of a surcharge.

The proposed PPA riders are nonbypassable. They would be paid by all customers in the incumbent utility's service territory – regardless of whether the customer purchases its generation service from the incumbent utility or a competitive generation supplier.

What the Utilities Say: A hedge against market price volatility

The utilities characterize the proposed PPAs as a useful "hedge" or insurance policy against market volatility, which they say will protect consumers over the long term. The utilities warn of a shortage of generation in Ohio and throughout PJM, which they say will increase both energy and capacity prices. The utilities have intimated that their own competitive generation affiliates may shut down some or all of the affiliate-owned generating plants if the utilities' PPA proposals are rejected by the PUCO. They contend the PPAs will help ensure that coal-fired and nuclear power plants continue to operate so Ohio and the PJM region will have adequate supplies of generation.

What Concerned Stakeholders Say: A subsidized bailout for utilities' business decisions

Opponents of the proposed PPAs regard them as nothing more than a large-scale government and consumer bailout of utilities that already have received billions of dollars in stranded cost recovery from their customers as part of Ohio's transition to a competitive retail electricity marketplace. Opponents believe the utilities are seeking relief from financial pressures caused in part by the combination of an aging and increasingly uneconomical generation fleet; new supplies of natural gas driving down the price of power; and increased growth of energy efficiency and renewable energy – but also by the regulated utilities' and their competitive generation affiliates' own decisions.

The proposed PPAs, opponents say, are a play by utilities to secure, through regulatory intervention and customer subsidies, guaranteed profits and cost recovery from selected generation assets regardless of the market value of the power produced by those assets and regardless of their operational and maintenance costs.

Opponents believe the PPAs represent an unwarranted shifting of costs and risk from utility shareholders to utility customers – a reversal that is inconsistent with the intent of Ohio's electric restructuring law. In competitive markets, investors – not consumers – bear the risk of bad business decisions.

Opponents of the utilities' PPA proposals also claim there is no shortage of generation, citing PJM estimates of reserve margins in the 20 percent range for the foreseeable future.

Potential Impact on Electricity Customers

PUCO approval of the utilities' proposed PPAs would impact consumers in a number of ways:

- **Customers will pay higher prices, with no new benefits.** The proposed PPAs will force all customers to pay a generation surcharge for which they will receive no certain or guaranteed benefits. The only "guarantee" is for the utilities – they get a guaranteed rate of return and guaranteed full cost recovery.

- **Customers will be forced to pay twice for generation service.** If the PPAs are allowed, customers will pay twice for their electricity – first, for the power they purchase from their incumbent utility or their alternative supplier, and then additionally via a PPA surcharge.

- **Customers will lose access to lowest available market prices.** The proposed PPAs will deny customers the ability to purchase electricity at the lowest price available in the competitive marketplace, putting Ohio businesses at a disadvantage *vis a vis* competitors in surrounding states who do not face similar nonbypassable generation charges.

- **Customers will have fewer choices.** By providing utilities with what essentially is a "guaranteed rate of return" for generating plants owned by their competitive generation affiliates, the proposed PPAs are inconsistent with Ohio's transition to a competitive marketplace for electricity. This anti-competitive step backward will thwart suppliers, marketers and aggregators whose presence in Ohio is helping to drive innovation and keep electricity prices low.

- **Ohio will suffer economic harm from the resulting disincentive to invest in new generation.** New sources of generation (e.g., natural gas) will not have the benefit of the PPA "subsidies" that have been proposed for power produced by certain inefficient and uneconomic generation plants in incumbent utility territories. This competitive disadvantage will serve as a disincentive to new generation investment in our state and region, which ultimately will drive prices upward and undermine economic development and job creation.

Quantifying the Potential Impact on Electricity Customers

All three distribution utilities acknowledge that the proposed riders will result in higher costs for customers in the short term but claim the locked-in PPA prices will produce benefits in the long run. Numerous interveners in the ESP cases contend, however, that the riders will result in a net cost for customers over the long run.

Where Things Stand Today

Hearings for AEP's original ESP filing are completed. Hearings for Duke's ESP began in October 2014, with hearings for FE's ESP to follow in January 2015. To date, PUCO staff have strongly recommended that Commissioners reject AEP's and Duke's proposed riders.

See below for more detailed timelines:

AEP

- Original ESP filed December 20, 2013
- Expanded PPA filed October 3, 2014 (with request for expedited ruling)
- Original case already fully litigated
- PUCO decision imminent (By statute, the PUCO must rule on ESP proposals within 275 days of their filing.)

Duke

- ESP filed May 29, 2014
- Hearing began October 22, 2014
- Deadline for ruling: March 31, 2015

FirstEnergy

- ESP filed August 4, 2014
- Hearing to begin January 20, 2015
- Deadline for ruling: May 6, 2015

\# # #

RunnerStone, LLC
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614.268.4263

MEMORANDUM

Date: November 13, 2014

To: Ohio Manufacturer's Association – Energy Resources Committee

From: John Seryak, PE (RunnerStone, LLC)

RE: Energy Committee 11.13.14 Meeting – Customer-Sited Resources Report

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Member Services

- Get assistance
  - About 10+ companies – rebate filing, rebate appeal, demand response advise, efficiency project advise, review of vendor cost savings
  - Contact John – jseryak@gosustainableenergy.com
- Get analysis
  - Free CHP screening! (contact John – jseryak@gosustainableenergy.com)
  - Industrial insulation pilot in the works, potentially – contact John if you have an industrial insulation project
- Please consider attending the upcoming Energy Efficiency/CHP Workgroups
  - November 12th – Tour of CHP plant at Jay Industries in Mansfield.
  - Past work-group presentations and documents are at: http://www.ohiomfg.com/omas-chpweree-work-group/
  - Organizing for 2015 – welcome your requests, demand response has been proposed for a meeting

Utility Efficiency Program Update

Utility	Efficiency Programs in 2015- 16	Opt-Out Available	Updates
AEP	Yes	No	Recruiting 70+ manufacturers for Continuous Energy Improvement
DP&L	Yes	No	150% rebate for HVAC, Oct-Dec
Duke	Yes	Unclear	Under-valuing custom rebates
FirstEnergy	None	Yes	Advisory - PUCO ruling in near term will be relevant to OMA members decisions
Municipals	Varied	No	27 communities in Efficiency Smart http://www.efficiencysmart.org/communities + Westerville, Cuyahoga Falls city run programs
Cooperatives	Minimal	No	

- FirstEnergy - filed to amend programs. Several points of concern.
    - FE suspending all programs used by manufacturers.
    - FE proposing to "capture" customer savings
        - No savings, but it will cost $6.7 million. Not a cost beneficial program to manufacturers.
    - 2015 budget maintained, spread out through 2016.
        - *OMAEG recommended reducing budget by **$53.6 million**, commiserate with savings reduction.*
    - Extension of the profit "shared-savings" mechanism.
        - *OMA opposed extension of shared-savings*
- Statewide – SB 310 bill rules
    - SB 310 requires utilities to list separately the customer's share of the utilities cost of compliance for the energy efficiency (EE), peak demand reduction (PDR), and renewable energy (RE) resource standards

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- Issues
  - Riders are volatile, including true-ups and banking, and don't reflect actual costs of the programs
  - EE and PDR pricing should be listed separately and accurately – consumers need accurate pricing information to make informed decisions
  - PUCO should provide an apples-to-apples resource comparison

PJM

Of 53 organizations providing Capacity Performance comments, OMAEG was the only commenter that represented the full breadth of manufacturing customer rate classes (secondary, primary, sub-trans, and transmission).

- PJM "Evolution of Demand Response" sets the stage for the future of customer-sited resources (demand response, energy-efficiency, and presumably anything behind-the-meter, even generation like CHP or distributed renewable)
- PJM - Business-as-usual presents an "unacceptable litigation risk" and is "intolerably uncertain", and thus proposes
  - DR/EE eligible to participate in capacity auctions as a response, not a resource.
  - Not eligible for capacity payments
  - Only be bid in by load-serving entities (distribution utilities and retail electric suppliers)
  - Still subjected to penalties for non-performance
  - Demand Resources must be assigned to a load-serving entity through incremental auctions in the near term
  - Acknowledges the amount of money is "considerable" and "the change in clearing prices given the sensitivity of the supply and demand curves in the auction can be dramatic."
  - Implications for manufacturers
    - Would demand response participate at current quantities with no payment incentives, but penalties? If not, capacity prices could rise.
    - PJM's Independent Market Monitor studied the effects of removing demand response and energy-efficiency from the 2017/18 base residual auction - An extra **$9 billion!!!**

BEFORE
THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Amendment of Chapters 4901:1-10 and 4901:1-21, Ohio Administrative Code, Regarding Electric Companies and Competitive Retail Electric Service, to Implement 2014 Sub. S.B. No. 310.	)))))	Case No. 14-1411-EL-ORD

COMMENTS OF
THE OHIO MANUFACTURERS' ASSOCIATION ENERGY GROUP

I. BACKGROUND AND PROCEDURAL HISTORY

In May 2014, the General Assembly passed 2014 Sub. S.B. No.310 (S.B. 310), which became effective on September 12, 2014. S.B. 310, inter alia, amended provisions in Chapter 4928, Revised Code, which governs the alternative energy portfolio standard rules and regulations. Additionally, newly-enacted Section 4928.65, Revised Code, directs the Public Utilities Commission of Ohio (Commission) to adopt rules concerning disclosure to customers of the costs of renewable energy resource, energy efficiency savings, and peak demand reduction requirements[1] by January 1, 2015.

On August 26, 2014, the Commission held a workshop to permit stakeholders to publicly comment on proposed rules for consideration by the Commission's staff (Staff). Many stakeholders, including the Ohio Manufacturers' Association Energy Group (OMAEG), were present at the workshop and a number of these stakeholders offered comments on the content of rules proposed pursuant to S.B. 310.

[1] See Sections 4928.64 and 4928.66, Revised Code.

By entry dated October 15, 2014, the Commission issued draft rules relating to the above-mentioned topics, as well as a business impact analysis projecting effects of the draft rules. The Commission directed interested stakeholders to file comments on the draft rules and/or business impact analysis by November 5, 2014. Pursuant to that request, OMAEG hereby submits its comments for the Commission's consideration.

II. COMMENTS

A. A Utility's Energy-Efficiency/Peak-Demand Reduction (EE/PDR) Rider Includes Costs Additional to the Cost of Utility Compliance.

S.B. 310 requires that a customer's utility bill separately list the "individual customer cost of the utility's compliance" for the renewable energy portfolio standard (RPS), the energy efficiency resource standard (EERS), and the peak demand reduction standard (PDR). Staff has proposed listing the energy-efficiency/peak demand reduction (EE/PDR) rider costs to a customer's bill to meet this requirement, and to allocate costs between the EE and PDR requirements. Specifically, Staff has proposed to:

1. Allocate the EE/PDR entirely as EE or entirely as PDR compliance costs, or
2. Prescriptively allocate 80% of EE/PDR rider costs to EE compliance, and the remaining 20% of costs to PDR compliance.

Basing the itemized cost of compliance on the EE/PDR rider may seem meritorious because it is simple, easy to implement, and allows consumers to accurately match compliance costs with their monthly billed costs.

However, the simplicity of this approach is countered by the fact that the proposed options are not in compliance with the requirements of S.B. 310 and Section 4928.65, Revised Code, for the basic reason that the EE/PDR rider includes *more* than just compliance costs. Section 4928.65, Revised Code, clearly dictates that only compliance costs are to be listed on the bill. The EE/PDR rider includes costs associated with items that are not required for EE and PDR compliance pursuant to Section 4928.65, Revised Code. Most notably, the electric distribution utilities' (EDU) riders include costs associated with shared savings incentives for the utilities, which is profit for the utilities that was negotiated in settlement agreements for most of the utilities. The EDU riders also may contain lost distribution revenue amounts. These non-compliance costs are significant. For example, 24.7% of AEP's 3-year EE/PDR costs for 2012-2014 are for shared savings.[2] Similarly, 37.7% of Duke's EE/PDR costs for the most recent program year of 2013 are for the *non-compliance* costs of shared-savings and lost distribution revenue recovery.[3] Obviously, utilizing the EE/PDR rider has a major shortcoming of dramatically inflating compliance costs presented to the consumer, and confounding utility shareholder profit with the cost of the important customer-sited resources of EE and PDR.

B. Historic Volatility and Inconsistency in Utility Energy-Efficiency/Peak-Demand Reduction (EE/PDR) Riders May Confuse Consumers as to the Cost of Utility Compliance

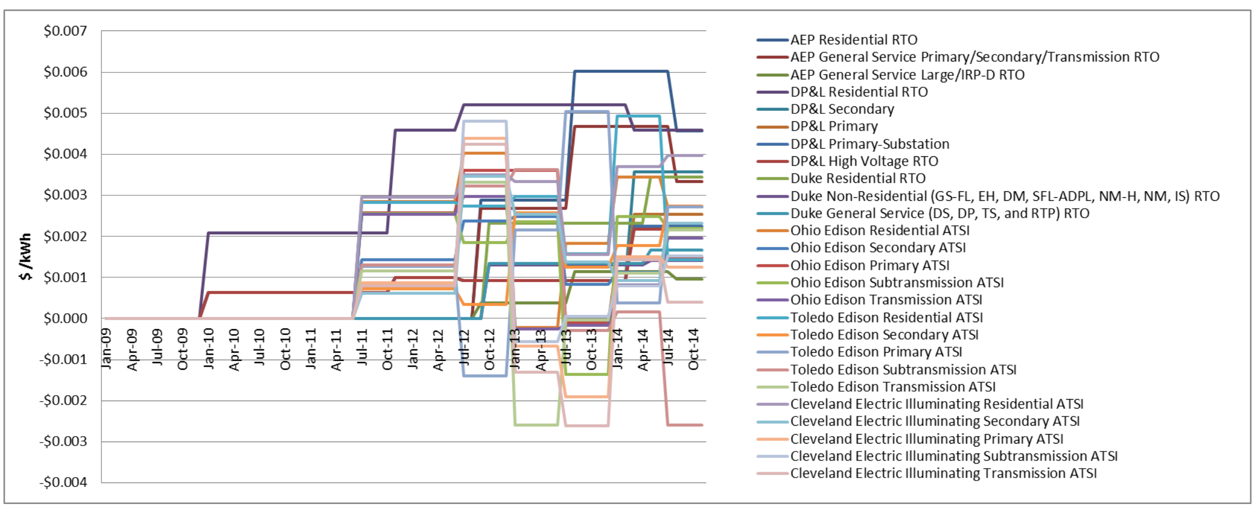
As described, Section 4928.65, Revised Code, requires that consumer bills reflect the costs of compliance for the utility as collected from customer bills. The utility's costs of compliance that are passed on to customers through the EE/PDR rider do not accurately depict a utility's actual compliance costs, apportioned to an individual customer. The EE/PDR riders have historically shown extreme volatility in some utility territories. This illustrates that the EE/PDR rider reflects *recovery* of compliance costs, not *actual* compliance costs. The difference between recovery of rider amounts and actual compliance costs is not insignificant to consumers. EE/PDR riders have shown to have spiked (most notably in FirstEnergy's service territories in

[2] See *In the Matter of the Application of Ohio Power Company to Update the Energy Efficiency and Peak Demand Reduction Rider*, Case No. 14-0873-EL-RDR, Application, Attachment 1, Schedules 1 and 2 (May 15, 2014).

[3] See *In the Matter of the Application of Duke Energy Ohio, Inc. for Recovery of Program Costs, Lost Distribution Revenue and Performance Incentives Related to its Energy Efficiency and Demand Response Programs*, Case No. 14-457-EL-RDR, Application, Attachment JEZ-1 (March 28, 2014).

fall 2012), followed by declines so steep they often result in credits to consumers (again, most notably in FirstEnergy's service territories in early 2013). The rider spikes and crashes affect consumer decisions. For example, anecdotally, many mercantile customers were informed of 2012 rider spikes and encouraged by some utilities and consultants to self-direct projects to gain rider exemption, only to forego the coming credits in 2013. Customers acting on the price signal of a rider spike may have lost revenue. Figure 1 below shows EE/PDR rider values for all utilities, for all rate classes, as filed by the utilities over the period from January 2009 through October 2014. Figure 1 shows rider volatility within specific utility rate classes, and inconsistency between utilities and rate classes. Figure 1 clearly demonstrates that EE/PDR riders have historically represented a very poor apportionment of a utility's cost of compliance to an individual customer. Although some utilities and rate classes may have relatively consistent EE/PDR riders for certain durations, generally, the EE/PDR rider represents an imperfect metric of an individual customer's costs for the EE and PDR resources.

Figure 1: Utility Filed EE/PDR Rider for All Utilities, All Rate Classes



As required by Section 4928.65, Revised Code, the costs delineated on customer bills should only reflect the actual costs of compliance under Section 4928.66, Revised Code, rather than merely reflecting the EE/PDR rider amount at any given point in time.

C. The Cost of EE/PDR Compliance is an Inadequate and Incomplete Description of the Benefits and Costs of Energy Efficiency and Demand Response Resources

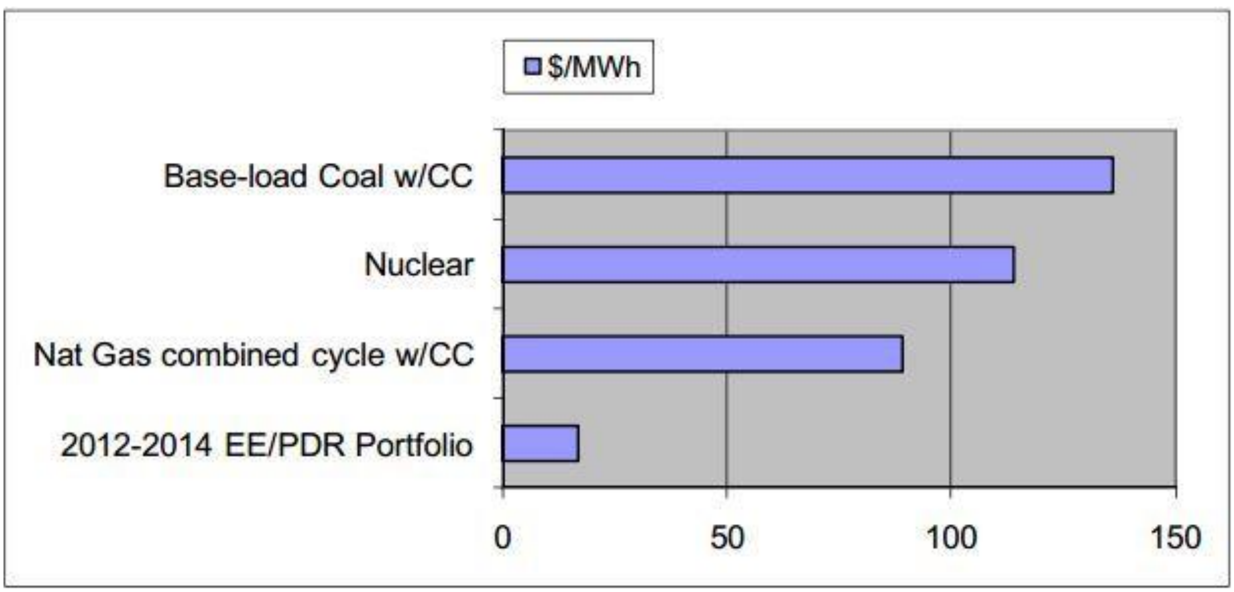
Intuitively, the objective of line itemization of any cost, or energy consumption, on a utility bill would be to better inform consumers about the costs they are paying, such that they can better manage both their electricity purchasing and their electricity consumption based on this information. However, when only costs are presented, a consumer has incomplete information and may make a poor energy management decision. A fully informed decision would compare costs to benefits side-by-side, and additionally benchmark alternate investment choices for electricity resources. In many cases, the utility bill is limited to informing the consumer of just costs, while excluding information on benefits and resource benchmarking. Recognizing the limitations of informing consumers through the bill, the Commission has created the Energy Choice Ohio website, which provides "apples to apples" comparisons of retail electric supply costs and product characteristics to consumers. The need for supplemental information from the Commission for consumer choice is not just limited to retail electric supply – it clearly extends to the electricity resource.

Consider that both the EE and PDR resources produce considerable benefits for consumers, both directly to participants of the programs, but also universally to all consumers via the Demand Response Induced Price Effect (DRIPE). DRIPE has been overwhelmingly recognized by consumers groups, utilities, state commissions, and others.[4] PJM's Independent

[4] Testimony of J. Richard Hornby on behalf of the Ohio Manufacturers' Association, http://www.ohiomfg.com/wp-content/uploads/2013-11-04_OMA-TESTIMONY-S.B.58-FINAL.pdf

Market Monitor (IMM) showed that eliminating DR and EE from a recent base residual auction (BRA) would have yielded an additional $9.3 billion in capacity costs for just one year.[5] The PJM IMM illustrates the financial stakes to Ohio's economy and manufacturing sector if the benefits and cost-effectiveness of PDR and EE programs are not communicated to consumers. Whether through studies of market price suppression, or regulatory cost testing, credible studies of EE and PDR programs have shown to save consumers more than they cost. In fact, AEP Ohio's most recent portfolio filing effectively illustrates this concept by showing the total resource cost of their EE/PDR programs versus other generation resources in their most recent portfolio filing, reproduced here in Figure 2.[6]

Figure 2: AEP-Ohio Apples-to-Apples Comparison of EE/PDR Portfolio versus Other Electricity Resources



[5] Monitoring Analytics, "The 2017/2018 RPM Base Residual Auction: Sensitivity Analyses," http://www.monitoringanalytics.com/reports/Reports/2014/IMM_20172018_RPM_BRA_Sensitivity_Analyses_20140710.pdf.

[6] AEP-Ohio 2012 to 2014 Energy Efficiency/Peak Demand Reduction Action Plan, Volume 1, Figure 1.

D. The Commission Should Not Prescriptively Allocate EE and PDR Requirement Compliance Costs

As discussed, Section 4928.65, Revised Code, specifies that the utility's cost of compliance for the energy efficiency resource standard requirements, and the peak demand reduction requirements, be listed separately on a customer's bill.

As an alternative of separating the costs of EE from PDR, Staff has proposed that all costs of the EE/PDR rider be prescriptively allocated 80% of EE/PDR rider costs to EE compliance, and the remaining 20% of costs to PDR compliance. The proposed alternative, however, does not accurately itemize compliance costs for either resource. Section 4928.65, Revised Code, specifically requires that each standard be itemized separately. Accurate itemizing of costs will lay the foundation for sound cost/benefit analysis by consumers. For example, in 3 years of AEP Ohio's EE/PDR costs, 12% of the costs come solely from interruptible tariff credits.[7] This is a substantial cost to consumers with no impact on the EE standard. However, the benefit to consumers is also substantial. Although utilities, consumer groups, and many other entities have recognized the price suppression effect of demand response in wholesale capacity markets, confounding the costs of EE and DR programs confuses consumers with regard to the cost of compliance and inhibits the ability of sophisticated consumers to judge the cost effectiveness of the two resource standards.

Accordingly, the OMAEG recommends that the Commission order that interruptible tariff credits and the costs of other demand response programs be allocated specifically as a cost of the DR resource standard. Because EE programs contribute, however, both to the EE and PDR resource standards, it would be acceptable to divide program costs between the two standards. However, instead of applying a prescribed 80/20 percent allocation between the two standards,

[7] *In the Matter of the Application of Ohio Power Company to Update the Energy Efficiency and Peak Demand Reduction Rider*, Case No. 14-0873-EL-RDR, Application, Attachment 1, Schedules 1 and 2 (May 15, 2014).

the OMAEG recommends that the Commission require the utility to determine this allocation, with supporting evidence, when the utility submits their cost of compliance metrics to the Commission for approval.

E. The Commission Should Create Supplemental Educational Materials on the Benefits and Costs of the EE and PDR Resources, with an Apples-to-Apples Comparison Against Other Electricity Resources

While allocating the EE/PDR rider to separately itemize compliance costs for the EE and PDR resource standards may be appropriate, the Commission should also provide appropriate, supplemental educational materials for consumers on the benefits and costs of EE and PDR resources as compared to other electricity resources. Furthermore, EE and PDR resources benefit the electric grid differently; however, the way in which they benefit the grid overlaps in a manner which makes it difficult for the average consumer to weigh the benefits of the resource against the costs, if only the costs are provided. The EE resource reduces electrical energy consumption (kWh) and often also electrical demand, or capacity (kW), thereby reducing consumption and suppressing prices in both wholesale capacity and energy markets. The PDR resource most notably reduces capacity needs (kW) and thereby reduces capacity consumption and price. However, PDR can also reduce prices in wholesale energy markets during grid peaking periods. To this end, the Commission should provide supplemental information to consumers describing and quantifying the benefits of both the EE and PDR resource. This would allow consumers to better understand the benefits versus cost for each and every particular resource. The EE/PDR rider is the simplest and most readily available metric of program costs, and importantly, consumers can accurately match compliance costs and their electricity consumption to their actual billed costs. Electricity bills are already complicated, and complication impedes proper management of electricity and costs by consumers. Thus, a simple metric which directly relates to the billed costs for a consumer has merits.

However, we have shown that EE/PDR rider is not solely the cost of utility compliance with the standards, as it includes shared savings incentives and lost revenue recovery. Thus, the Commission's current proposal does not follow the ORC 4928.65. Additionally, the EE/PDR rider does not reflect *actual* compliance costs at the time of billing, but instead the *recovery of* compliance costs. Because of true-ups, recovery of compliance costs can be dramatically out of synch with actual costs, potentially confusing customers. Finally, the EE/PDR rider gives no indication of the savings benefits from these resources.

For these reasons, in addition to the modifications proposed herein, OMAEG recommends that the Commission provide supplemental information materials to consumers regarding the benefits and costs of EE and PDR resources, and as an "apples to apples" comparison against other electricity resources. This supplemental information could take the form of a dedicated page on the Commission website and bill inserts. A bill message accompanying the resource compliance costs could direct consumers to the webpage for more information.

The EE/PDR programs have the lowest cost to consumers in this comparison. The Commission has an opportunity to continue its tradition of providing consumers with an "apples to apples" comparison of electricity costs and benefits so that consumers can make informed decisions. Absent this supplemental information, the proposed rules do not conform with the spirit of Section 4928.65, Revised Code, to fully disclose the actual costs of the EE and PDR standards.

III. CONCLUSION

In connection with the arguments set forth above, OMAEG respectfully requests that the Commission recognize that the EE/PDR rider imperfectly apportions utility compliance costs to the individual customers for compliance with EE and PDR resource standards, and also dramatically over-quantifies compliance costs by including in its calculation costs unrelated to compliance. Accordingly, OMAEG requests that the Commission order the inclusion of a bill message accompanying the compliance cost itemization on consumer bills, directing consumers to a Commission website with supplemental information on the benefits of EE and PDR resources, as well as an apples-to-apples comparison of EE and PDR resources versus other electricity resources.

Respectfully submitted,

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Counsel for OMAEG

CERTIFICATE OF SERVICE

I hereby certify that a true and accurate copy of the foregoing was served upon the following parties via electronic mail on November 5, 2014.

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The Future of AEP Ohio Energy Efficiency Programs

ENERGY IS PRECIOUS. **LET'S NOT WASTE IT.**

Ohio’s Energy Efficiency

The Big Picture for Energy Efficiency and AEP Ohio

- Customers and AEP Ohio win:
  - 3 to 4 times the financial benefits over the costs
  - Lessens the demand overall on the system benefitting pricing
  - Lowers participant costs through energy/demand savings
- The Law: SB 221, SB 315, SB 310
- Changes coming in the Standards/Mandates
- The Next 2 Years: 2015 and 2016
- Opportunities for Customers

Highlights of AEP Ohio Program

2013 Annual energy savings achieved-587 GWh

- Enough to power 48,600 homes for 10 years*

- Paid $46 Million in incentives-all programs
- Since 2009 AEP Ohio has saved 2,280 GWh
  - Enough to power 190,000 homes up to 10 years*

* Numbers *assume the average household energy consumption of 12,000 kwh per yr.*

AEP Ohio 2015 Programs

- Continue to enhance/modify existing applications
- Many projects over 25K will come from auction participants
- Buy now options available
- Strong focus on non-participants

How AEP Ohio Can Help?

- We can be your independent "Trusted Energy Advisor"
- AEP Ohio energy professionals are available to assist you:
  - ensure customers understand program opportunities
  - site visits/opportunity assessments
  - financial guidance, ROI calculations etc..

2014 Demand Response Operations Markets Activity Report: August 2014

James McAnany

PJM Demand Side Response Operations

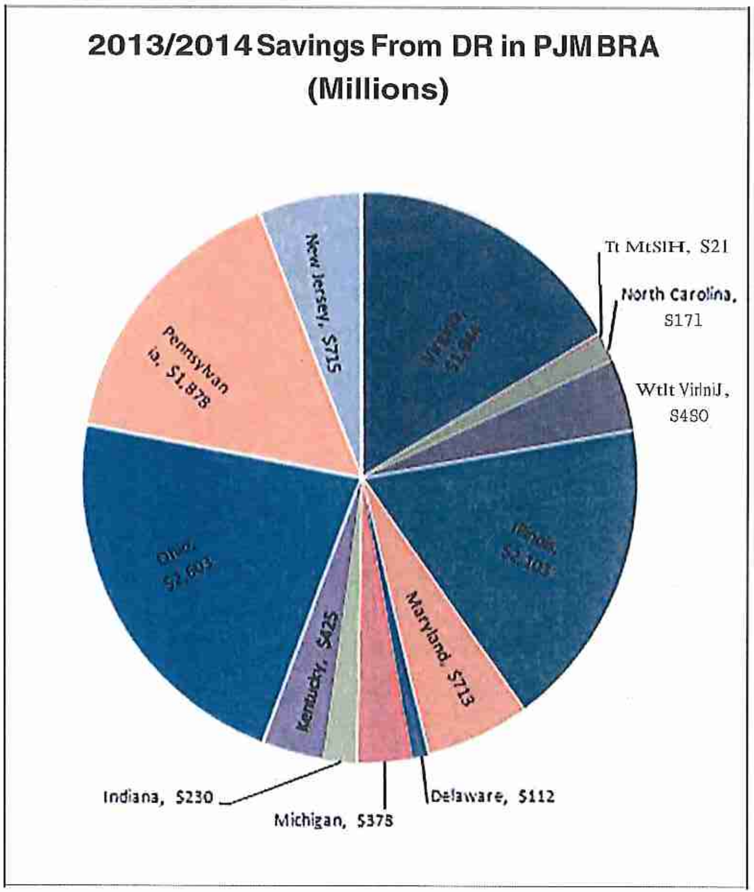
August 13, 2014

Growing Value of Demand Response in PJM (specifically Ohio)

1. From the attached PJM DR activity report:
    a. Ohio 1822 MWs of Capacity DR from 2422 locations
    b. 77% percent of DR is from CSPs,10% is from the LSE

2. More Ohio figures:
   Total DR Payments in Ohio 2013/14: $5,800,000
   Total DR Payments in OH 2014/15: $80,000,000
   Total DR Payments in OH 2015/16: $120,000,000

3. Cost savings from the 2013/14 BRA-are estimates of the state shares using the IMM's $11.8 billion dollar figure:



The biggest threat to demand response? It may not be the Order 745 ruling

By Robert Walton | October 21, 2014 print

The overturning of Federal Energy Regulatory Commission Order 745 has injected speculation into the wholesale demand response conversation, and not just for its impacts on energy markets.

In the wake of the U.S. Court of Appeals for the D.C. Circuit's decision to vacate the order, FirstEnergy Corp. filed a complaint asking FERC to order demand response barred from capacity markets under PJM's tariff. Some observers say a victory there could have wider implications, so Utility Dive spoke with EnerNOC senior vice president of marketing and sales Gregg Dixon. EnerNOC is a leading provider of demand response software solutions, and has been vocal in its opposition to FirstEnergy's complaint. We asked Dixon to give us a demand response provider's take on the impact of recent events, beginning with the court's decision.

"[The decision] vacated demand response's ability to participate in wholesale energy markets. And on the face of it, it's kind of meaningless to the demand response industry—from the practical perspective of generating revenue," Dixon said. "I say that because FERC Order 745—though from a policy perspective was an important win for the demand response industry, and really for consumers of energy at large—it didn't really have any impact on the demand response industry itself when it comes to revenue or profit because the demand response industry predominately generates its revenue from the capacity markets."

Dixon explained that with gas prices so low in recent years, and the economy on the road to recovery, wholesale prices were low and demand response providers participating in energy markets generated little revenue. But FirstEnergy's complaint to FERC could change everything, because demand response competes significantly in capacity markets.

'Massive amount of megawatts' at risk

"You would see a massive amount of megawatts in the PJM market vaporize overnight."

"At that point people really began to get nervous," Dixon said. "If you can eliminate demand response from competing in wholesale capacity markets you would see a massive amount of megawatts in the PJM market vaporize overnight. And that's where it really gets interesting, and that's where the fight is right now."

"FirstEnergy has a very, very clear incentive," he continued. "Demand response has been a very successful new entrant into capacity markets, and over the past five to seven years has reduced capacity prices that clear most wholesale energy markets by 50 percent because demand response megawatts are competing with traditional generating megawatts in the wholesale market."

FERC will need to rule on FirstEnergy's complaint, but the commission's support for demand response in capacity markets is established. The generator could then go to the courts, and if it were successful in pulling demand response from capacity markets Dixon said the impacts are much less clear.

"It's really anyone's guess. A number of things could happen," Dixon said. "First, [there would be] a debate over at what point this actually takes effect in the market, because PJM is a three-year forward capacity market.

"If the markets were to change," he explained, "conceivably it would impact only those capacity markets that took place after whatever the outcome of this appeal is. And if it was against what we believe is the right thing, it could impact the May 2015 base residual auction for resources in the 2017/2018 power year. One could argue that if it was appealed there could be a retroactive ratemaking, but that's very rare and highly unlikely and FirstEnergy itself actually has not requested that."

'The single largest power plant in all of PJM'

Results of PJM's most recent capacity auction in May yielded 10,975 MW of demand response resources and PJM noted that there was a shift to types of resources that have more flexibility and a greater contribution to reliability. All of that resource would disappear, Dixon said, if demand response disappeared from capacity markets.

"[Demand response is] the single largest power plant in all of PJM."

"After that, what would happen? You've got all these megawatts in the market for demand response. It's the single largest power plant in all of PJM, if you think of it like a single virtual power plant. If it can no longer participate in the market construct that exists today, where would they participate?"

"They could participate at a retail level, on a state program-by-program basis, and state's place a lot of value on demand response," Dixon said. "That program-by-program model would take a tremendous amount of work. It can take years to design. Effectively what can happen is those [10,975 MW] are gone from the market for a year or two years, and then all of the sudden PJM capacity market prices go through the roof and ratepayers are stuck with a much bigger bill until some form of megawatts fill the void."

"Of course," he added, "FirstEnergy would want them to be generation megawatts. It would give them a much bigger incentive to go build more power plants."

The Columbus Dispatch

New shale projects worth $3.5 billion planned in Ohio

By **Dan Gearino** *The Columbus Dispatch* • Saturday October 11, 2014 12:05 PM

In the last six months, companies have announced at least $3.5 billion worth of projects in Ohio related to shale oil and gas energy, an indication that the industry is beginning to mature in the state.

Most of the investment is for pipelines and processing facilities.

A list of projects was compiled by Bricker & Eckler, a Columbus law firm. Including the $3.5 billion, shale development in the state has spurred $22.3 billion worth of projects since 2010.

Much of the recent investment is for the “pipeline spider web,” said Matt Warnock, a lawyer who worked on the list.

“Trying to get capacity on existing pipelines in near impossible,” he said. As a result, companies are building new pipelines that connect to an existing system in a way that resembles a spider web.

Two bits of fine print: These are announced plans, which does not mean they will get built. Also, the total spending does not include projects for which no cost estimate has been disclosed, several of which are likely to amount to more than $1 billion each, Warnock said.

Among the recent announcements:

• Columbia Pipeline Group plans to spend $1.75 billion on a pipeline that will run from Fairfield County to West Virginia.

• Appalachian Resins Inc. has said it will spend $1 billion for a “cracker” plant in Monroe County that breaks down ethane so that it can be used for chemical applications.

• Regency Energy Partners and American Energy-Midstream LLC plan to spend $500 million for a 52-mile pipeline that will connect to the existing Rockies Express Pipeline.

“The Utica is transforming from an exploration phase to a development phase,” said Shawn Bennett, senior vice president of the Ohio Oil and Gas Association, a trade group. “We are getting significant results in eastern Ohio, and it is important we get that gas to market.”

As of last Saturday, the state had approved a total of 1,534 permits to drill horizontal wells in the Utica shale, and 1,102 wells had been drilled. More permits, 551, have been approved this year than in all of 2013. The Utica is a layer of shale rock that runs deep beneath the eastern and southeastern parts of the state.

Bricker & Eckler updates its report about every six months. Warnock expects the next one to be much like this one.

“We’re going to be in this phase for a while,” he said. “As long as there are new wells being drilled, there is going to need to be pipeline infrastructure.”

dgearino@dispatch.com

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OHIO ENERGY RESOURCE ALLIANCE

Providing information on powering Ohio's economy, job growth and energy security

News To Use And Share

Ohio Shale Energy Highlights

From the Ohio Energy Resource Alliance

November 11, 2014

UTICA SHALE: Ohio Activity

Updated November 1, 2014

According to the Ohio Department of Natural Resources Division of Oil and Gas Resources Management's online statistics (Shale Activity tab) last updated November 1, 2014, ODNR has issued a total of 1,581 permits for drilling in the Utica shale in Ohio since December 2009, an increase of 14 since ODNR's update on October 25, 2014.

- A total of 1,148 Utica wells have been drilled since December 2009, an increase of 7 since ODNR's update on October 25, 2014.
- 611 wells are in production, an increase of 4 since ODNR's update on October 25, 2014.
- Carroll County is first in permits in Ohio with 440, an increase of 0 since ODNR's update on October 25, 2014.
- Harrison County is second with 287 permits and Belmont County is third with 172.

ODNR has not updated these numbers since the previous Ohio Shale Energy Highlights.

Youngstown Voters Turn Down Anti-Fracking Proposal — Again

The headline reflects a truth that the self-styled protectors of the earth refuse to admit: a majority of the residents of the city of Youngstown who have expressed an opinion think that a ban on fracking is a goofy idea.

How do we know this? Because city dwellers have said so in the voting booth on four occasions.

They rejected a proposed charter amendment to ban fracking and other related oil and gas exploration activities in May 2013, November 2013, May of this year, and on Tuesday.

Three days ago, the so-called Community Bill of Rights was summarily rejected by a vote of 7,231 to 5,268.

Youngstown Vindicator (11/7/14)

Gates Mills Voters Deny Anti-Fracking Bill of Rights, Unofficial Election Results Show

Voters have rejected a group of residents' bid to ban fracking in the village, according to unofficial results from the Cuyahoga County Board of Elections.

More than 68 percent voted against the amendment, which would prohibit more oil and gas wells from being drilled in the village.

The bill of rights has ignited a months-long dispute between city officials and a group of anti-fracking residents called the Citizens for the Preservation of Gates Mills, who collected signatures for the bill of rights.

Cleveland Plain Dealer (11/5/14)

Kent Community Bill of Rights Defeated in November General Election

Voters defeated Issue 21 by a vote of 2,357 to 2,033 on Tuesday, according to complete but unofficial results from the Portage County Board of Elections.

The measure would have banned the extraction of hydrocarbons and fossil fuels by method of hydraulic fracturing, or fracking within the city limits.

The ballot issue was proposed as a city charter amendment by members and supporters of the Kent Environmental Rights Group and opposed by several city officials, including Mary Jerry Fiala, Law Director James Silver and City Manager Dave Ruller.

Opponents of the bill organized the coalition Citizens for Good Legislation, a coalition of Kent city officials, local business owners and more. The group thanked voters for blocking the bill Tuesday.

Kent Record-Courier (11/5/14)

Pipeline Workshop Scheduled Nov. 19 in Stark County

Executives, attorneys and other professionals involved with the oil and gas industry will cover the facts and myths about pipelines, both locally and nationally, at "Pipeline 101," an event to be presented by the Stark County Oil & Gas Partnership on Wednesday, Nov. 19 at Tozzi's on 12th in Canton.

Akron Beacon Journal — Ohio Utica Shale Blog (11/4/14)

Rex Energy Invested $88.3 Million in Its Utica, Marcellus Operations

Rex Energy's wells in Carroll County are producing more condensate than expected, and the company's Utica Shale drilling next year will focus on that liquids-rich part of its acreage.

The State College, Pennsylvania-based driller discussed its third quarter results during a conference call with analysts on Wednesday.

Rex invested $88.3 million in its Utica and Marcellus operations during the third quarter, including nine gross Utica wells the company put in service in Carroll County.

New Philadelphia Times Reporter (11/5/14)

Utica Shale Wells Fuel Gulfport Production Spike

Gulfport Energy's third-quarter oil and natural gas production increased 60 percent from the previous quarter thanks to better than expected performance from new Utica Shale wells, the company said Thursday.

Oklahoma City-based Gulfport produced 3.9 million barrels of oil equivalent for the third quarter, a rate of 42,332 barrels of oil equivalent per day, according to a press release. Ninety percent of its production came from Utica wells.

Canton Repository (11/6/14)

Ohio State, WVU Sharing Federal Grant for Shale Research Lab

The Ohio State University will help West Virginia University conduct what WVU says is the first long-term, comprehensive field study of shale gas sites.

The U.S. Department of Energy awarded the universities a five-year, $11 million grant to establish a new field site and research lab in Morgantown, West Virginia, the school said.

Columbus Business First (11/7/14)

Crane Group Makes Another Deal in the Oil and Gas Industry

Crane Group Co. has continued its diversification strategy through a deal with an Indiana company that makes natural-gas leak detectors.

The Columbus family-run firm acquired an interest in Sensit Technologies. The Valparaiso-based company makes more than 20 kinds of leak detectors for use in the natural gas and water industries, among others.

Columbus Business First (11/10/14)

Contact:
OhioEnergyResource.org
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(513) 703-6277
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Forward


ROVER PIPELINE
An ENERGY TRANSFER Company
ENERGY TRANSFER

ROVER PIPELINE

The Rover Pipeline will transport up to 3.25 billion cubic feet per day of domestically produced natural gas from multiple gas processing facilities located in Eastern Ohio, Northwest West Virginia and Western Pennsylvania to multiple markets in the Central U.S. and Canada, including Ohio and Michigan.

The 800-mile pipeline will contribute an estimated $154 million in tax revenue annually to the states and counties along the route.

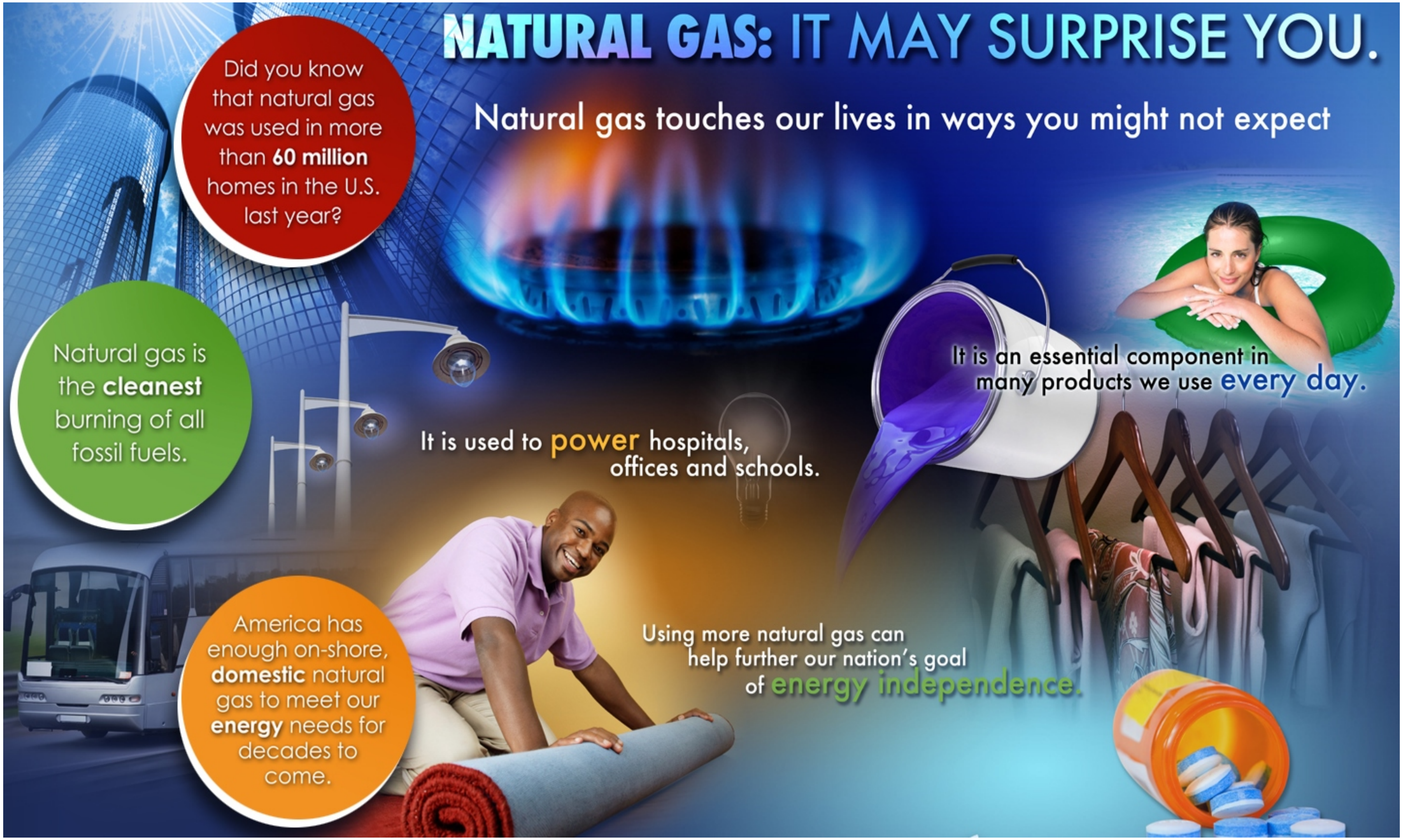
Why The Pipeline Makes Sense

- Natural gas production is forecasted to increase by 44% by 2040, mostly due to abundant supply in the Marcellus and Utica shale formations.
- Pipelines are the safest and most efficient way of transporting natural gas.
- Natural gas production is a clean-burning fuel used to heat our homes, schools and hospitals, to cook food, generate electricity and fuel manufacturing facilities.
- Bringing this crucial energy source to the national supply and open market, price is kept in balance and the U.S. becomes more independent of foreign energy.
- Respectively, **Ohio and Michigan are the 8th and 9th largest consumers of natural gas** in the United States according to the U.S. Energy Information Administration's 2013 report on natural gas consumption.

Rover Pipeline Fast Facts

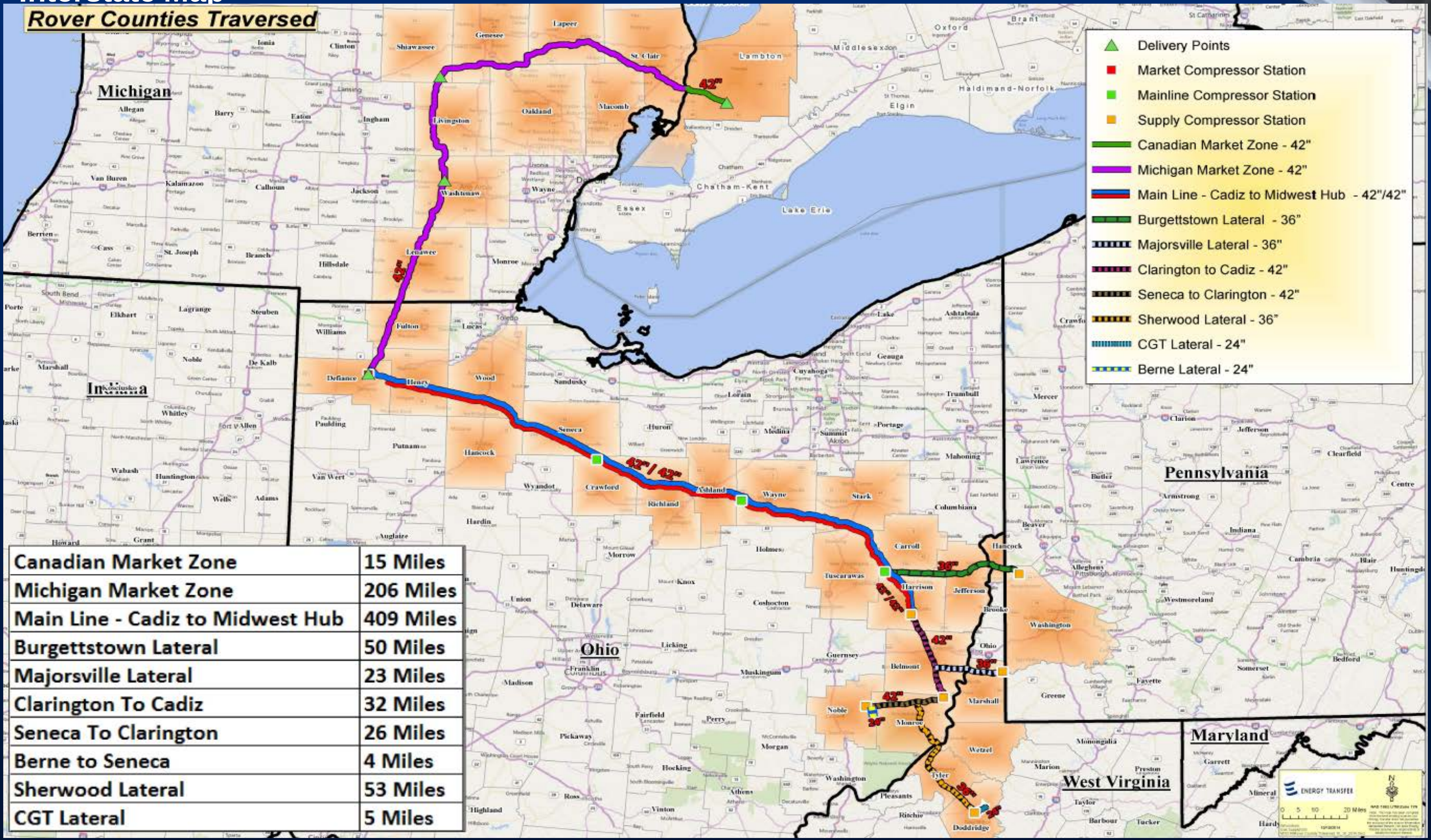
- A projected **$4.3 billion** investment directly impacting the local, regional, national labor force by creating up to **10,000 temporary construction jobs.**
- Approximately **30-40 permanent jobs** will be created through the project.
- Natural gas pipelines are a key component of **America's energy infrastructure.**

ROVER PIPELINE



ROVER PIPELINE

Interstate Map



Canadian Market Zone	15 Miles
Michigan Market Zone	206 Miles
Main Line - Cadiz to Midwest Hub	409 Miles
Burgettstown Lateral	50 Miles
Majorsville Lateral	23 Miles
Clarington To Cadiz	32 Miles
Seneca To Clarington	26 Miles
Berne to Seneca	4 Miles
Sherwood Lateral	53 Miles
CGT Lateral	5 Miles

ENERGY TRANSFER

ROVER PIPELINE

Construction and the Land

- 80 percent of the main transmission line will be under agricultural land and parallel to existing pipelines, power lines or existing roads.
- The pipeline will be covered by a minimum of 3 feet of soil and more if it crosses under roads, rivers, lakes or streams.
- The pipe will be buried no less than 48 inches in agricultural fields.
- Rover Pipeline covers the costs of any drain tile impacted during the construction or operation of the pipeline including relocation, repair or replacement.
- Topsoil will be segregated during construction to a minimum of 12 inches or in accordance with landowner requirements.
- A specific agriculture crossing plan is being developed and will be approved by the state agriculture commissions, bureaus and other applicable resource agencies and will be presented to each landowner for use or comment.
- All drain tiles will be crossed with a minimum of 2 feet of separation between the pipe and drain tiles. The pipeline will be located beneath drain tiles in most circumstances unless specifically approved by the landowner.

Rover Pipeline Fast Facts

- Construction will include a visual and a non-destructive inspection of every weld that joins sections of pipe together.
- The pipeline will be tested with water under higher-than-normal pressure and regulation devices will be installed to prevent pressure from exceeding safe limits.
- Rover Pipeline will have automated valves installed to shut off the flow of gas in the case of emergency.
- Gas control will monitor the pipeline 24 hours a day/7 days a week.
- Pipelines are regulated by the Federal Energy Regulatory Commission (FERC) and Pipeline and Hazardous Materials Safety Administration (PHMSA).

ROVER PIPELINE

The Pipeline

PIPELINES	Miles	Diameter	Capacity/Volume
Mainline (Ohio)			
Cadiz to the Midwest Hub	409	42-inch	3.25 Bcf/d
Supply Laterals			
(*including Alternate Routes*)			
Burgettstown Plant to Leesville Plant	50	36-inch	
Clarington to Cadiz Plant (Ohio)	32	42-inch	
Majorsville Lateral	23	36-inch	
Seneca to Clarington (Ohio)	26	36-inch	
Sherwood to Clarington	53	36-inch	
Sherwood to CGT (West Virginia**)**	5	24-inch	
Michigan Market Zone –			
Midwest Hub to the			
International Border	206	42-inch	1.3 Bcf/d
Canadian Market Zone –			
International Border to Dawn	15	42-inch	1.3 Bcf/d

ROVER PIPELINE

The Pipeline

DELIVERY
Rover will have at least five delivery points along the route including one in Ohio, two in Michigan, and one at the Dawn Hub near Sarnia, Canada.

Consumers Energy provides natural gas to more than 1.7 millions customers in Michigan. As planned, the Rover interconnect with Consumer's pipeline will deliver the company 300 million cubic square feet of gas per day.

Rover's proposed interconnect with MichCon Energy will also deliver 300 million cubic square feet of gas per day. MichCon supplies natural gas to 1.3 million residential, commercial and industrial customers in Michigan.

COMPRESSION
Approximately 194,000 horsepower at four new mainline compressor stations to be located on the Leesville Plant to Midwest Hub Plant mainline route. Approximately 38,000 horsepower at five new compressors to be located on supply laterals.

Mainline Compressor Stations
- Carroll County CS
- Wayne County CS
- Defiance County CS
- Crawford County CS

Lateral Compressor Stations
- Harrison County CS
- Washington County CS
- Doddridge County CS
- Noble County CS
- Marshall County CS

ROVER PIPELINE

Economic Impact

Rover Pipeline project will directly benefit the local communities and states traversed by the project, depositing millions into their economies.

Estimated $154 million annually in ad valorem Taxes:

Michigan:	$13.4 million per year
Ohio:	$134 million per year
Pennsylvania:	$1.3 million per year
West Virginia:	$3.8 million per year

Estimated $109 million in sales tax revenue during construction:

Michigan:	$19.4 million
Ohio:	$73 million
Pennsylvania:	$.56 million
West Virginia:	$5.5 million

Rover Pipeline Fast Facts

- More than **$100 million** will be paid in direct payments to landowners.
- Approximately **$1 billion in labor payments** to the various contractors working on the project.
- 76% of the pipeline will be **manufactured in the United States** along with all compression assembly and packaging.

ROVER PIPELINE

Ohio

Projected Ad Valorem Taxes Paid by County:

Ashland $ 7,781,178
Milton Twp. $ 2,096,434
Mohican Twp. $ 2,506,343
Montgomery Twp. $ 156,959
Vermillion Twp. $ 3,021,443

Belmont $ 8,312,326
Mead Twp. $ 1,186,919
Pultney Twp. $ 416,603
Richland Twp. $ 1,755,332
Smith Twp. $ 2,024,535
Washington Twp. $ 1,169,736
Wheeling Twp. $ 1,104,666
York Twp. $ 654,535

Carroll $ 6,220,007
Loudon Twp. $ 1,253,956
Orange Twp. $3,430,709
Perry Twp. $ 1,535,342

Crawford $ 8,406, 519
Auburn Twp. $ 517,550
Chatfield Twp. $ 2,790,176
Cranberry Twp. $2,405,659
Lykens Twp. $ 1,094,229
Vernon Twp. $ 1,598,904

Defiance $ 3,530,385
Adams Twp. $ 772, 248
Richland Twp. $1,701,859
Tiffin Twp. $ 1,056,278

Fulton $ 4,020,990
Chesterfield Twp. $ 1,269,736
Dover Twp. $ 45,757
Franklin Twp. $ 885,361
German Twp. $ 1,820,136

Hancock $ 2,645,415
Washington Twp. $ 2,645,415

Harrison $ 9,834,096
Athens Twp. $ 1,200,259
Cadiz Twp. $ 2, 395,200
Monroe Twp. $ 2,307,721
North Twp. $ 1,059,027
Stock Twp. $ 2,871,889

Henry $ 10,026,130
Flatrock Twp. $ 2,888,036
Monroe Twp. $ 2,956,953
Richfield Twp. $ 3,001,779
Ridgeville Twp. $ 1,179,362

- **Projected jobs in OH – 4,500-6,500**
- **Ohio is the 8th largest consumer** of natural gas in the United states according to the U.S. Energy Information Administration's 2013 report on natural gas consumption.
- **Approximate Projected Ad Valorem Taxes Paid**: (Federal, state, and local taxes paid while the pipeline is in service)
  $134 million – Ohio
  $154 million – Total Project
- **Projected Sales Tax Revenue Generated During Construction**: (Federal, state, and local sales tax revenue generated via consumption of major materials)
  $73 million - Ohio
  $109 million - Total Project

ROVER PIPELINE

Ohio

(Continued)

Jefferson $ 4,767,742
Island Creek Twp. $ 1,021,506
Knox Twp. $ 1,214,956
Salem Twp. $ 1,541,468
Springfield Twp. $ 989,813

Monroe $ 10,998,930
Adams Twp. $ 1,135,050
Center Twp. $ 180,480
Franklin Twp. $ 217,946
Green Twp. $1,341,573
Lee Twp. $ 1,528,153
Malaga Twp. $ 806,291
Seneca Twp. $ 922,838
Summit Twp. $ 1,298,966
Sunsbury Twp. $ 2,101,722
Switzerland Twp. $ 1,465,910

Noble $ 772,061
Marion Twp. $ 772,061

Richland $ 8,273,999
Franklin Twp. $ 1,953,311
Jackson Twp. $ 1,944,320
Sharon Twp. $ 2,295,452
Weller Twp. $ 2,080,917

Seneca $ 11,152,096
Bloom Twp. $ 1,622,221
Eden Twp. $ 3,326,150
Hopewell Twp. $ 1,682,013
Loudon Twp. $ 3,024,470
Seneca Twp. $ 1,497,241

Stark $ 6,795,185
Bethlehem Twp. $ 3,026,964
Pike Twp. $ 1,106,345
Sugar Creek Twp. $ 2,661,877

Tuscarawas $ 6,879,322
Fairfield Twp. $ 306,690
Sandy Twp. $ 3,269,905
Warren Twp. $ 3,302, 727

Wayne $ 13,221,948
Franklin Twp. $ 2,055,591
Paint Twp. $ 3,046,246
Plain Twp. $ 3,935,774
Salt Creek Twp. $ 2,870,523
Wooster City $ 433,697
Wooster Twp. $ 880,117

Wood $ 10,759,429
Bloom Twp. $ 3,126,086
Henry Twp. $ 3,014,908
Jackson Twp. $ 1,072,311
Milton Twp. $ 1,899,422
Perry Twp. $1,646,701

ROVER PIPELINE PROJECT

Michigan

Projected Ad Valorem Taxes Paid by County

Genesee $1,650,664
Argentine Twp. $ 466,289
Atlas Twp. $ 572,543
Fenton Twp. $ 210,933
Grand Blanc Twp. $ 107,806
Mundy Twp. $ 293,095

Lapeer $2,040,869
Almont Twp. $ 213,341
Attica Twp. $ 511,450
Elba Twp. $ 26,655
Hadley Twp. $ 538,738
Imlay Twp. $ 300,440
Lapeer Twp. $ 450, 245

Lenawee County $ 2,135,424
Adrian Twp. $ 476,208
Dover Twp. $ 401,163
Franklin Twp. $ 551,396
Madison Twp. $ 120,292
Seneca Twp. $ 586,365

Macomb $ 410,609
Richmond Twp. $ 410,609

Livingston $ 2,081,690
Cohoctah Twp. $ 507,321
Handy Twp. $ 222,907
Howell Twp. $ 241,854
Iosco Twp. $ 117,464
Marion Twp. $ 359,582
Putnam Twp. $ 632,562

Oakland $ 464,723
Groveland Twp. $ 100,872
Holly Twp. $ 363,851

Shiawassee $562,673
Burns Twp. $562,673

St. Clair $ 1,972,807
Berlin Twp. $ 574,593
China Twp. $ 435,304
Columbus Twp. $ 607,097
East China Twp. $ 91,179
Riley Twp. $ 151,283
St. Clair Twp. $ 113,352

Washtenaw $ 2,075,964
Bridgewater Twp. $ 105,040
Dexter Twp. $ 524,065
Freedom Twp. $ 466,421
Lima Twp. $ 487,169
Manchester Twp. $ 493, 269

- **Projected jobs in MI – 3,000-4,000**
- **Michigan is the 9th largest consumer** of natural gas in the United states according to the U.S. Energy Information Administration's 2013 report on natural gas consumption.
- **Approximate Projected Ad Valorem Taxes Paid**: (Federal, state, and local taxes paid while the pipeline is in service)
  $13.4 million – Michigan
  $154 million – Total Project
- **Projected Sales Tax Revenue Generated During Construction**: (Federal, state, and local sales tax revenue generated via consumption of major materials)
  $19.4 million - Michigan
  $109 million - Total Project

ROVER PIPELINE

West Virginia

Projected Ad Valorem Taxes Paid by County

Doddridge $994,128
Beech Dist. $ 434,502
Maple Dist. $ 559,626

Hancock $ 350,703
Clay Dist. $ 350,703

Marshall $ 804,205
District 1 $ 804,205

Tyler $ 1,575,194
Central Dist. $ 326,185
North Dist. $ 339,011
South Dist. $ 691,318
West Dist. $ 218,680

Wetzel $ 132,636
District 2 $ 132,636

- **Projected jobs in WV – 1,800-2,200**

- **Approximate Projected Ad Valorem Taxes Paid**: (Federal, state, and local taxes paid while the pipeline is in service)

  $3.9 million – West Virginia

  $154 million – Total Project

- **Projected Sales Tax Revenue Generated During Construction**: (Federal, state, and local sales tax revenue generated via consumption of major materials)

  $5.5 million – West Virginia

  $109 million - Total Project

ROVER PIPELINE

Pennsylvania

Projected Ad Valorem Taxes Paid by County

Washington $ 1,300,000

Hanover Twp. $ 1,300,000

- **Projected jobs in PA – 150-300**
- **Approximate Projected Ad Valorem Taxes Paid**: (Federal, state, and local taxes paid while the pipeline is in service)

  $1.3 million – Pennsylvania

  $154 million – Total Project

- **Projected Sales Tax Revenue Generated During Construction**: (Federal, state, and local sales tax revenue generated via consumption of major materials)

  $.56 million – Pennsylvania

  $109 million - Total Project

ROVER PIPELINE

Ohio Based Manufacturing

- **Emerson Process Management Automation Inc.** – Actuation packages for 24”, 36” and 42” ball valves.
- **Ariel Corporation** – Ariel frames and cylinders for 37 compressors.
- **Warren Group/Allied Fitting** – All Tectubi weld fittings and Trilas weld flanges.
- **Industrial Piping Specialists** – Bolts, gaskets and additional pipeline materials.

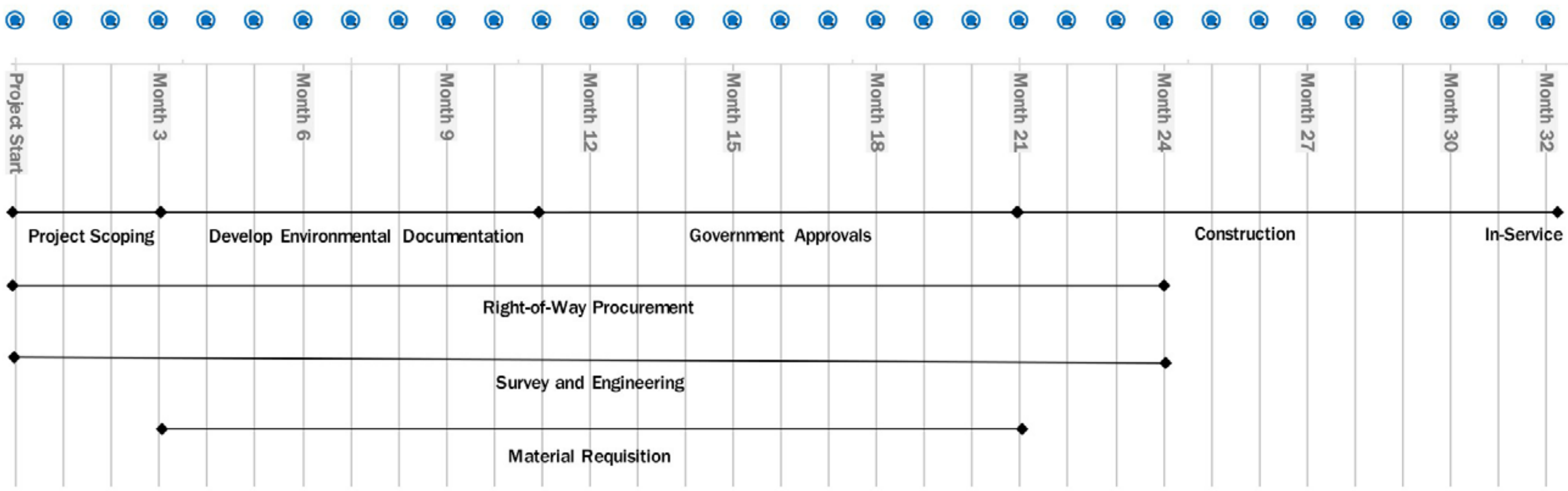
Potential Ohio Fabricators

- Bi-Con Services
- Dragon Products
- Pioneer Group
- Artisan Mechanical
- Modern Welding Co.

ROVER PIPELINE

Timeline

- **June 2014** Submit FERC Pre-Filing Request
- **January 2015** File FERC Certificate Application
- **November 2015** FERC Issues Construction Certificate
- **January 2016** Construction Starts
- **December 2016** In-service Seneca Plant to Midwest Hub
- **June 2017** In-service Midwest Hub to Union Gas Hub



Thank you

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http://www.energytransfer.com/ops_etrover.aspx

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Maxine Goodman Levin
College of Urban Affairs

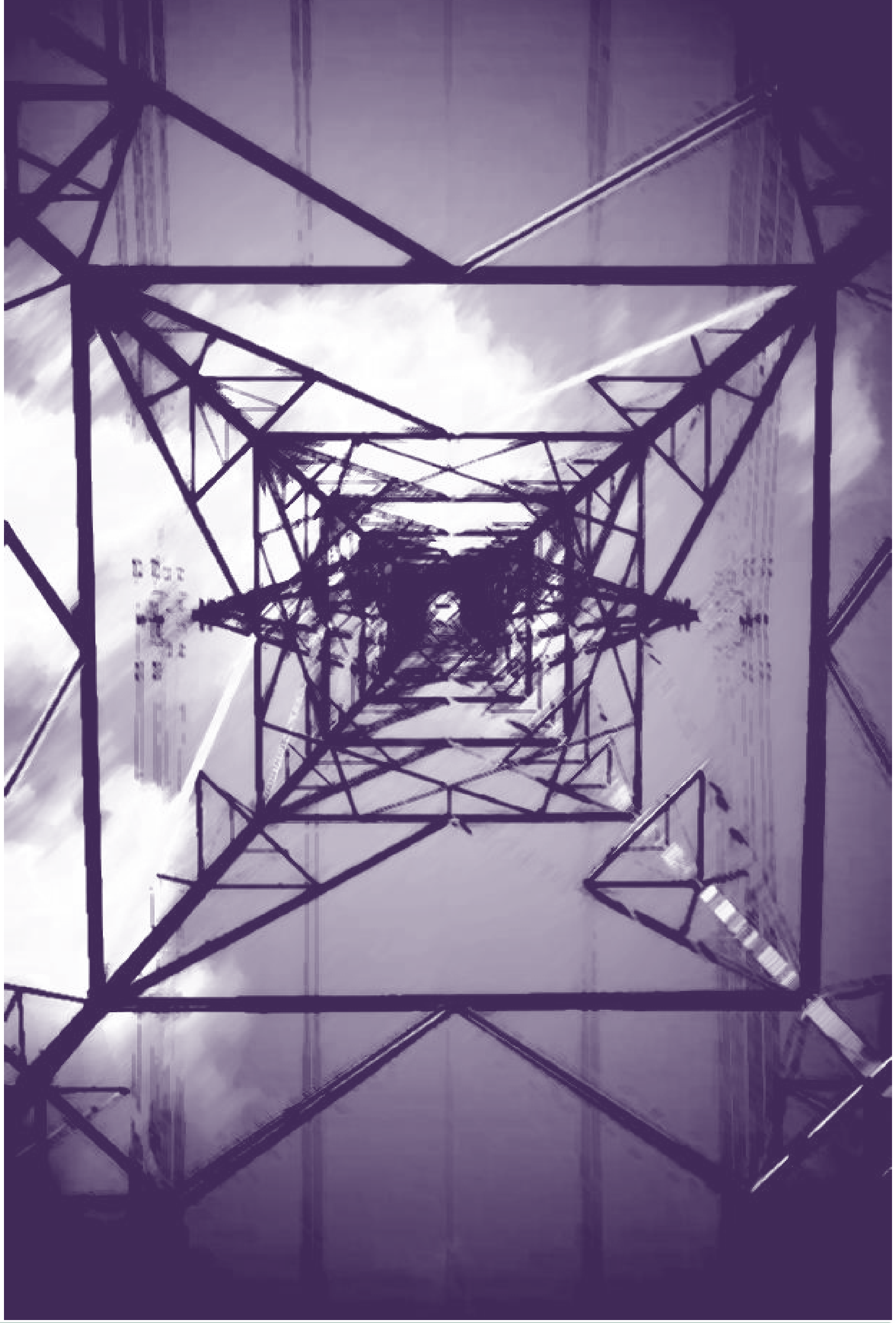
Understanding Ohio's Electricity Markets:

Characteristics, Structure and Price

Prepared by:
The Urban Center, Levin College,
Cleveland State University

Prepared for:
The Ohio Manufacturers' Association

August 2014



Navigating the Electricity Market:
What a Manufacturer Needs to Know

- How to simplify the complexities:
  - What are the components of the price?
  - What factors influence each component?
  - How can the consumer influence these factors?
  - Who are the key players in the market, and what are their functions?

- What controls the market:
  - Physical infrastructure
  - Financial models
  - Regulatory environment

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Principal Components of Electricity Cost

- “Energy” is commonly used to describe the generation component
  - Cannot be completely separated from other components
- “Capacity” refers to the standby generation held in reserve for peak power demands
  - Electricity cannot be stored easily
- “Delivery” includes transmission and distribution
  - Transmission: high-voltage, long-distance, lower losses
  - Distribution: low-voltage, short-distance, higher losses

Energy	Capacity	Delivery
Output of generator + losses (greater with congestion)	**Cost to supply peak + reserve margin**	**Cost of moving energy from generator to meter**
Majority of total energy cost	Smaller portion of total energy cost but increasing	Smaller portion of total energy cost but increasing
Volatile yet liquid	Volatile based on auction	Low volatility; Tariff-based
Continuously determined by market forces	Determined by market forces over a year + some regulation	Determined predominantly by regulatory bodies and ISOs

Costs are manageable
Costs are less manageable

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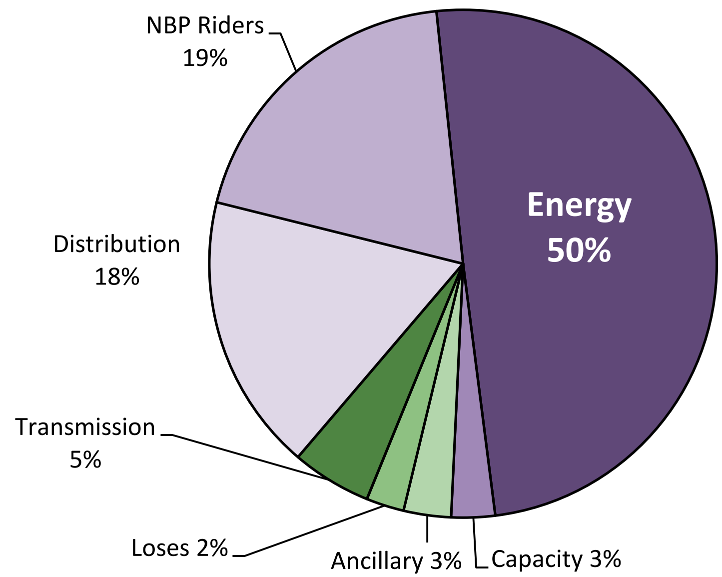
Electricity as a Complex Commodity

- In 2013 “Energy” was around half of the total cost of the commodity
  - Typically line losses will be subsumed into the energy price
- Delivery includes transmission (5%) and distribution (18%)
- Ancillary charges refer to RTO charges to manage the grid and the wholesale market, among other things (3%)
- Maintaining dispatchable capacity in Ohio has been a small but growing component (3%)
- Non-by-Passible Riders are special payments for expenditures that typically reflect social and economic development programs, sometimes to address market failures (19%)

Approximate Structure of Electricity Price in Ohio, 2013 (Source: Scioto Energy)

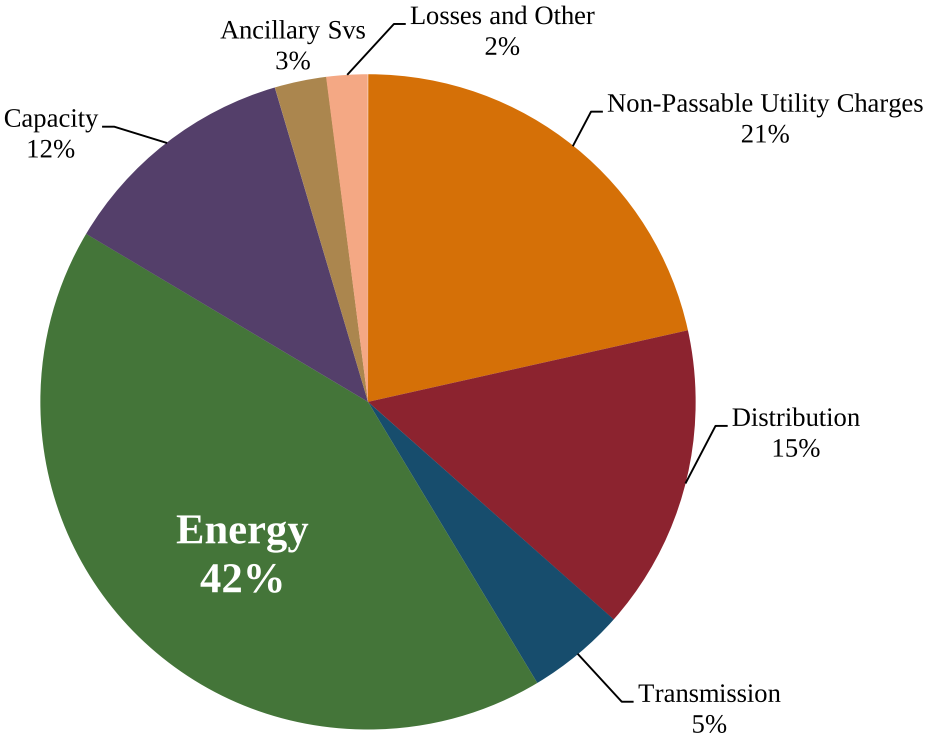


Components of Electricity as a Complex Commodity

Energy and losses
Capacity
Transmission
Distribution
Ancillary Services

Electricity Price Structure -- 2014

Approximate Structure of Electricity Price in Ohio
June 2014 (Source: Scioto Energy)



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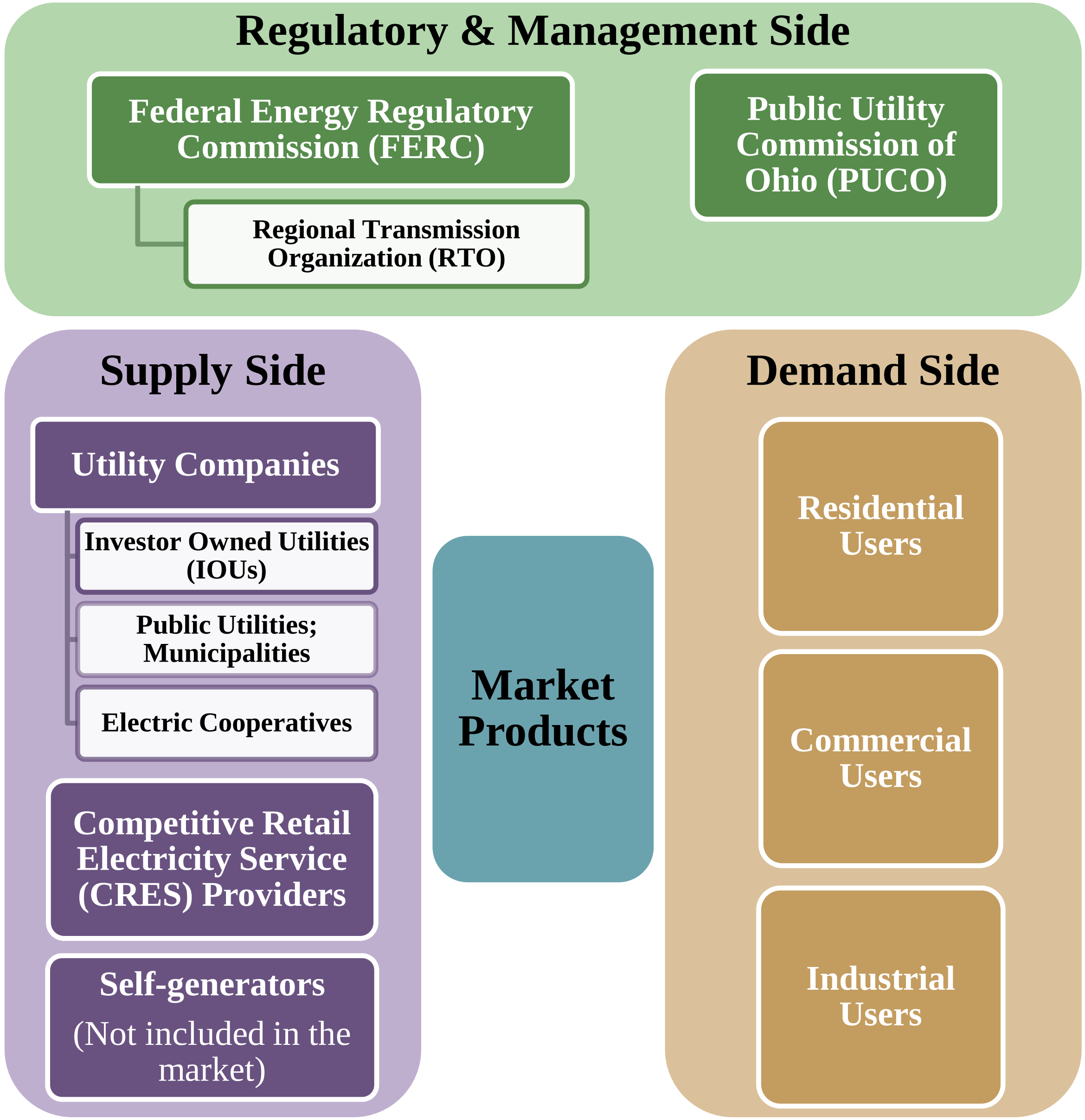
Players on the Electricity Market



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Products and Corresponding Financial Mechanisms on Electricity Markets

- **Energy**:
  - Long-term markets – NOT managed by PJM
    - Bilateral contracts
      - Through Intercontinental Exchange (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 Market
  - Day-Ahead Scheduling Reserve (DASR) Market
  - Demand response and energy efficiency
- **Transmission:**
  - Financial Transmission Rights (FTR) Markets: long-term, annual, and monthly auctions
- **Ancillary Services**:
  - Regulation Market
  - Market in Spinning Reserve

Managed by PJM

Products and Corresponding Financial Mechanisms on Electricity Markets

Products

Markets

- **Energy**
  - Long-term Markets
  - Spot Markets
- **Rights to Generating Capacity**
  - Capacity Market
  - Synchronized Reserve Market
  - Day-Ahead Scheduling Reserve (DASR) Market
  - Demand Response & Energy Efficiency
- **Transmission**
  - Financial Transmission Rights (FTR) Market
- **Ancillary Services**
  - Regulation Market
  - Market in Spinning Reserve

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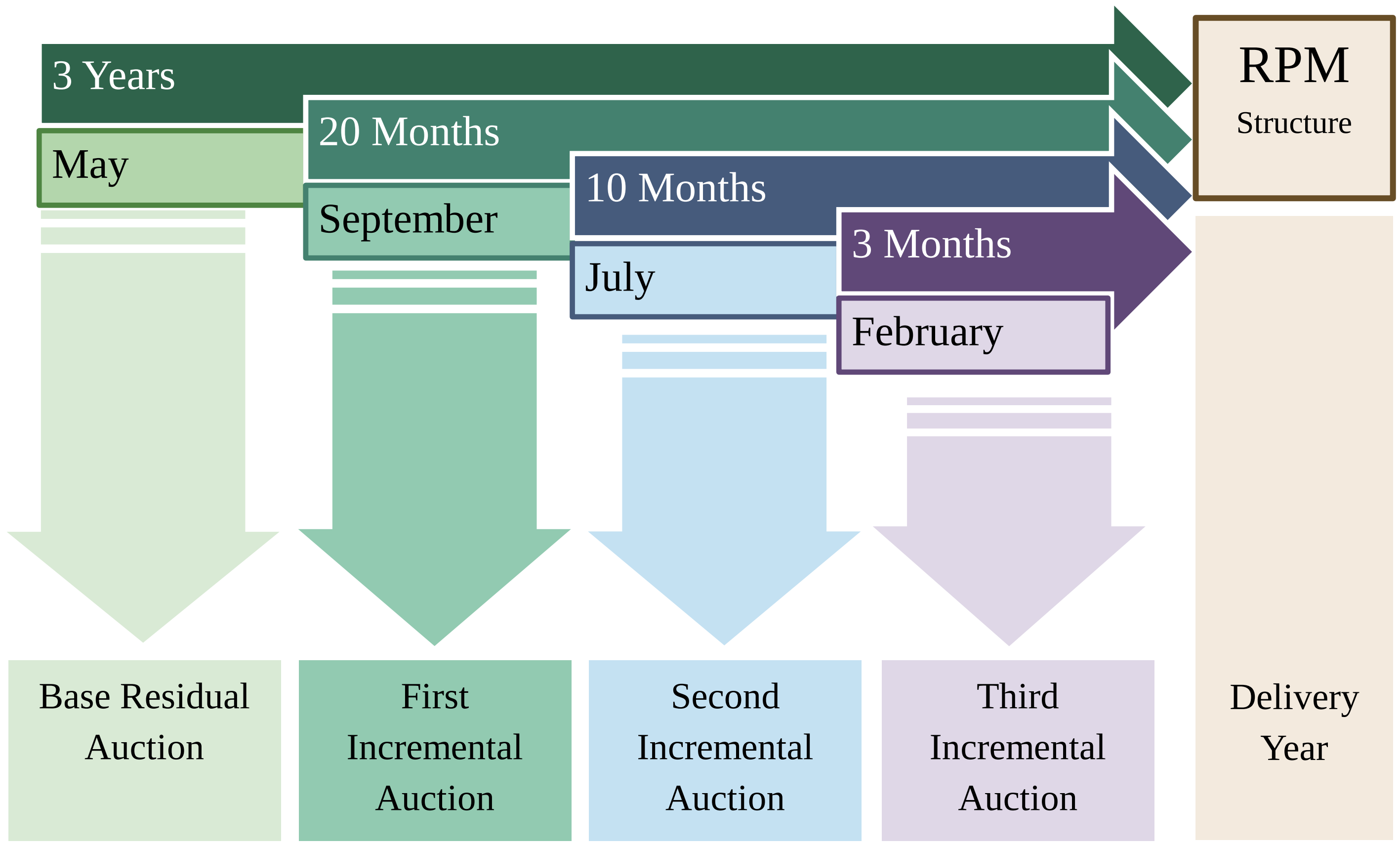
PJM Capacity Auctions (2013)



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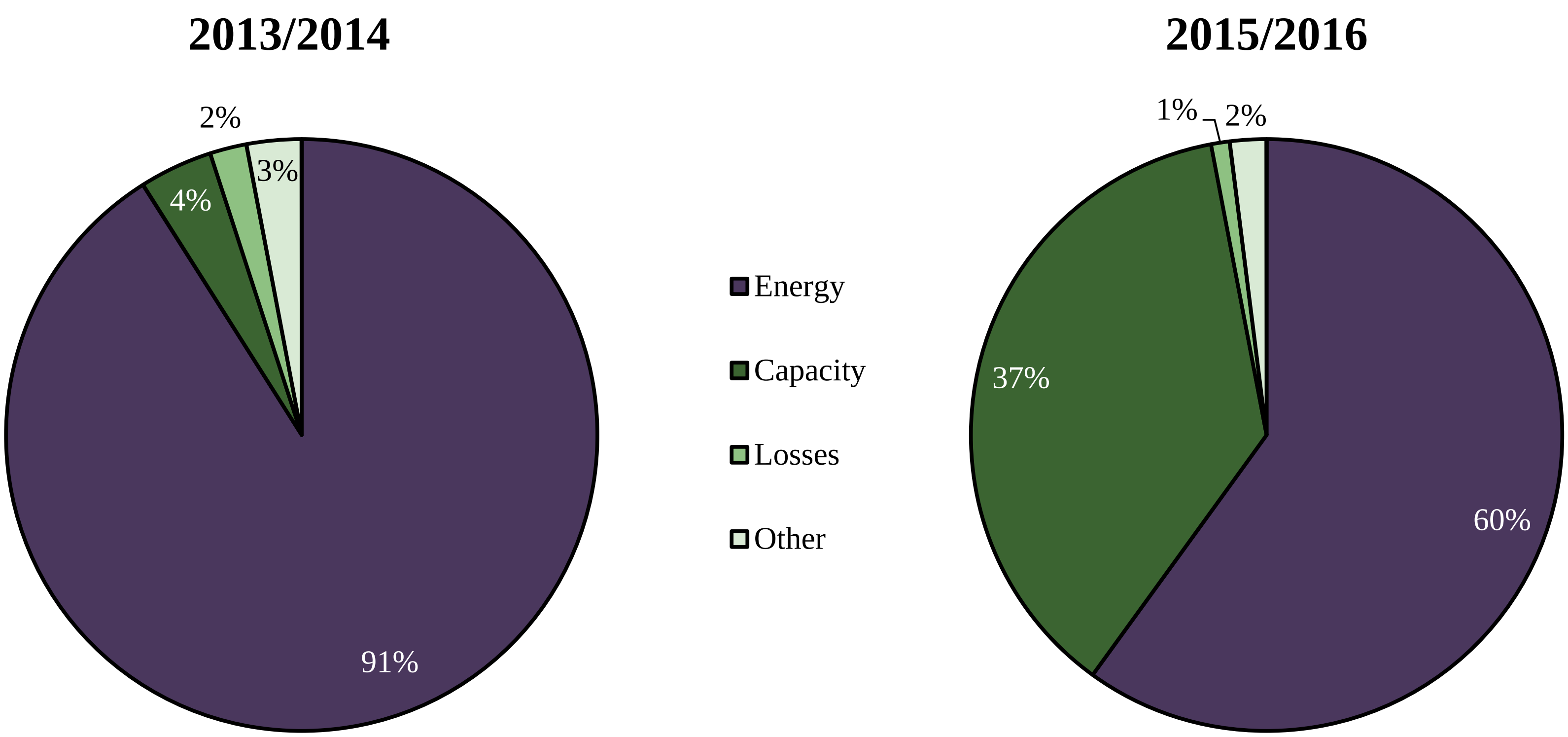
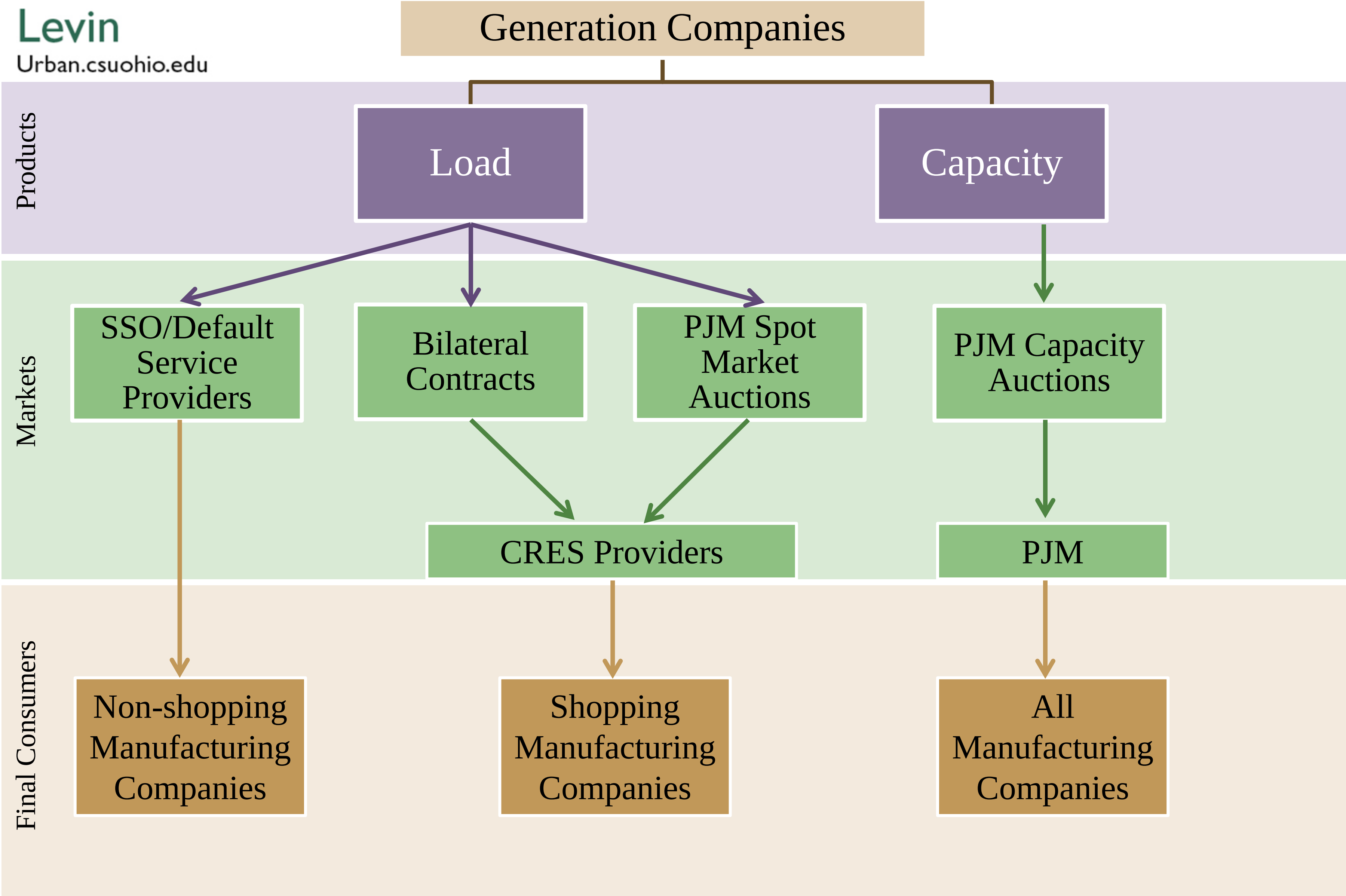
Projected Structure of CRES Provider's Component of the Retail Price:

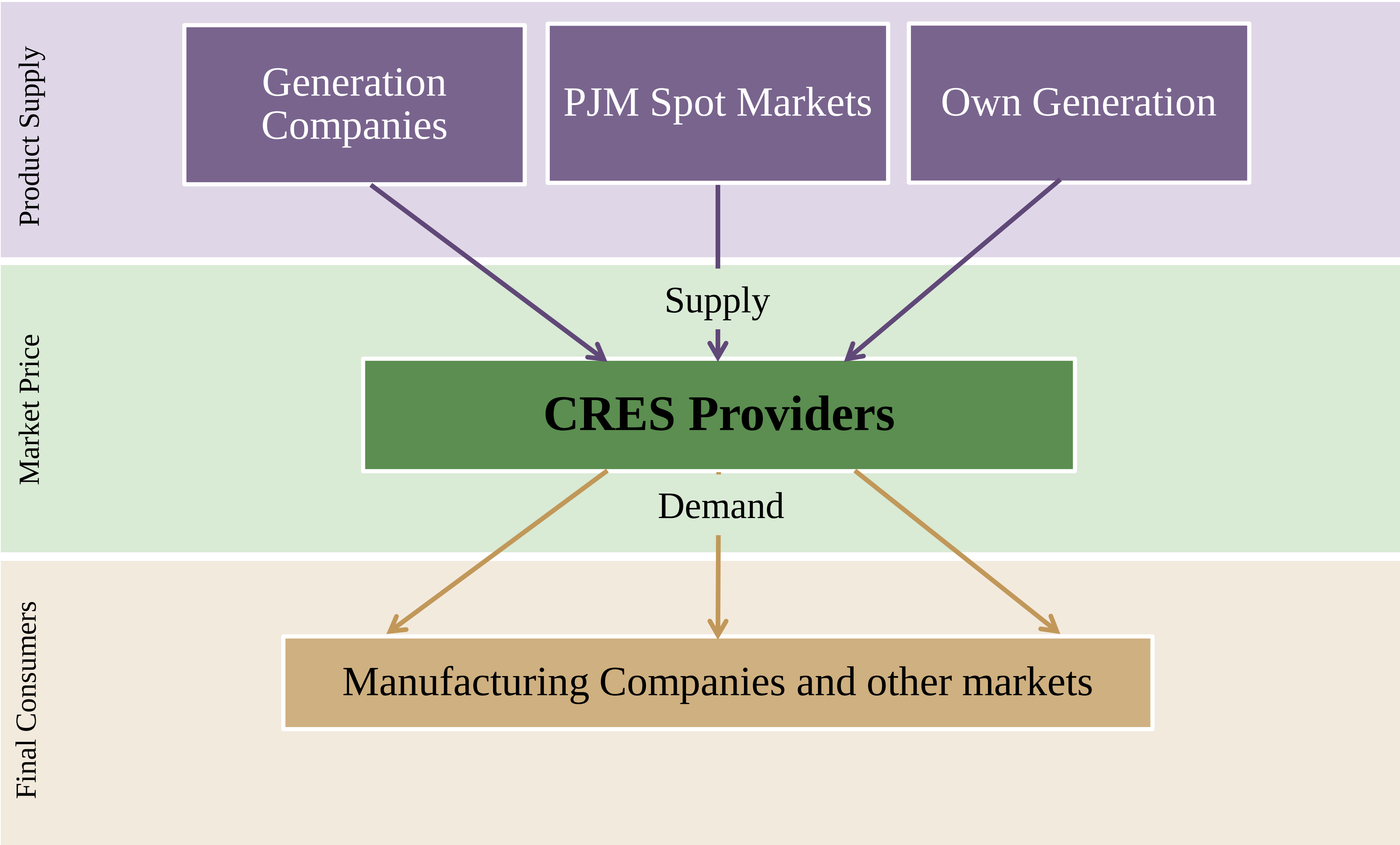
Example of the First Energy Territory



Capacity charges are on the rise.


Generation Companies
Products
Load
Capacity
Markets
SSO/Default Service Providers
Bilateral Contracts
PJM Spot Market Auctions
PJM Capacity Auctions
CRES Providers
PJM
Final Consumers
Non-shopping Manufacturing Companies
Shopping Manufacturing Companies
All Manufacturing Companies

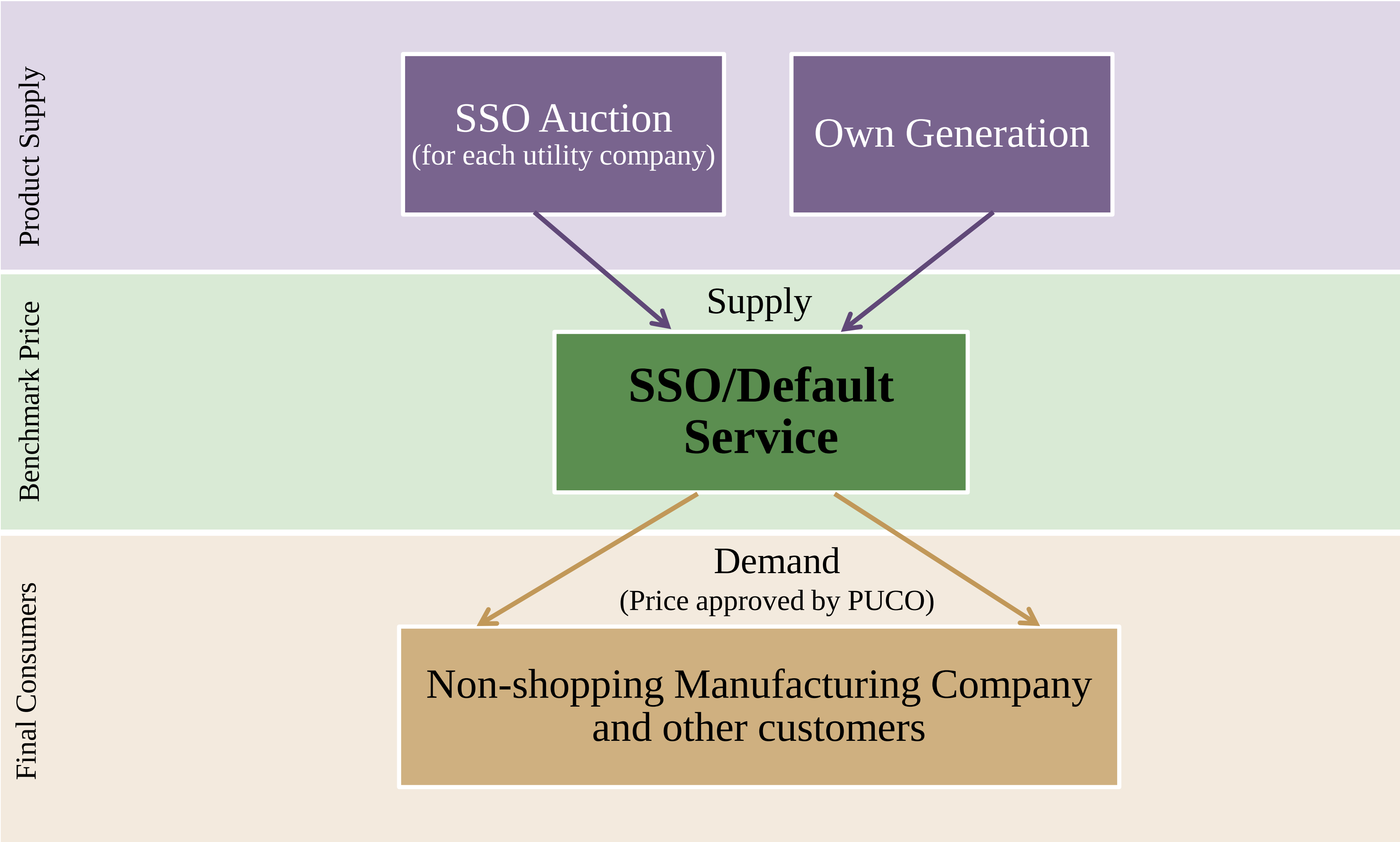
Competitive Retail Electricity Service (CRES) Suppliers

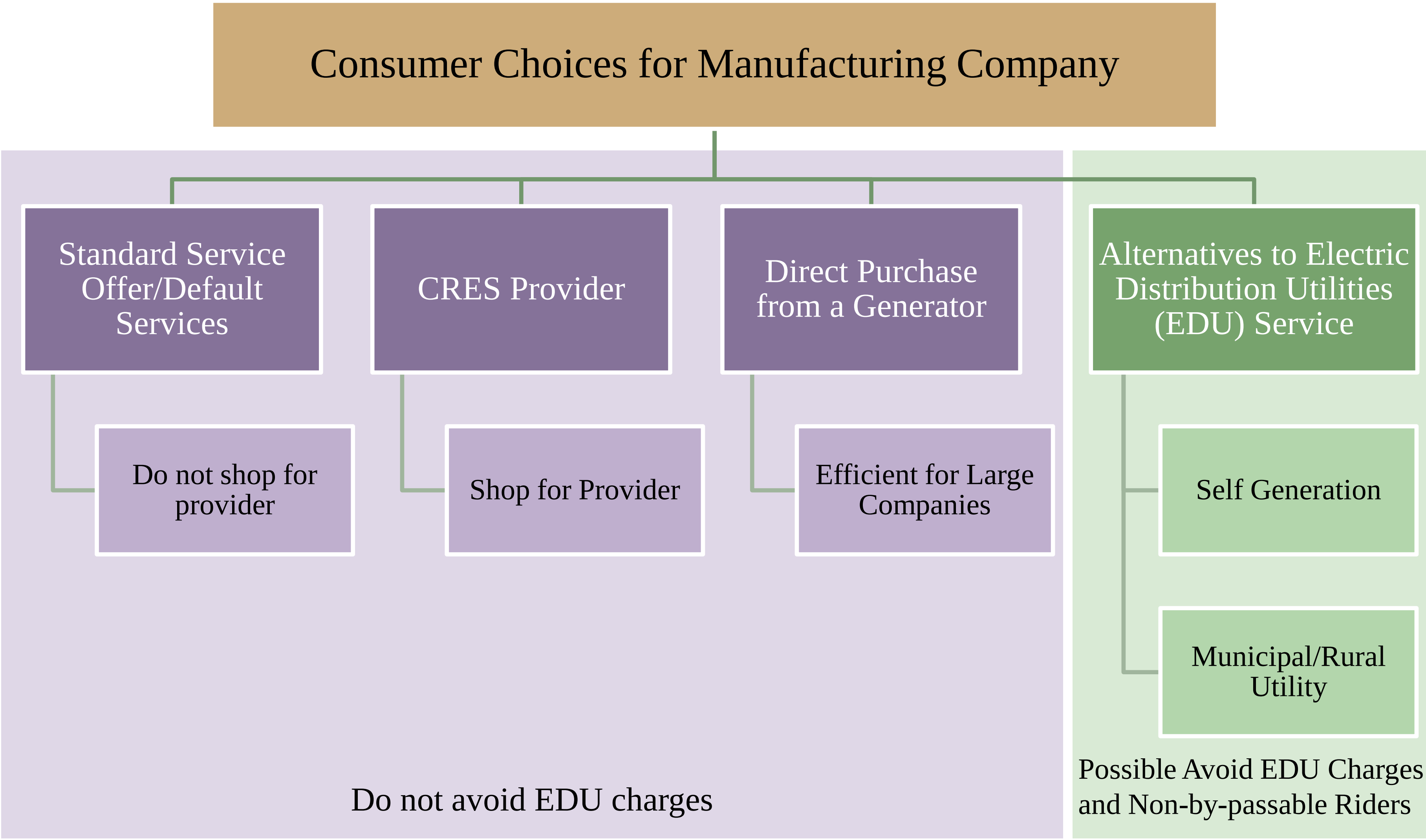


CRES Sales Strategies

- CRES Risk Strategy
  - The daily demand load delivered to retail customers is balanced with daily supply load
    - residual of the load between their daily demand and supply is purchased on the spot markets
  - CRES risk strategy defines the desired level of balance between the inventory of load and the inventory of retail obligations
  - For fixed price contracts CRES provider bears the risks of covering higher than estimated costs on ancillary services (from PJM) and on higher than estimated LMP price affected by transmission congestion
    - Can hedge through Financial Transmission Rights acquisitions
- Obtain customers through direct marketing of their services and therefore have additional cost (compared to traditional utility companies)

Standard Service Offer (SSO) Providers/ Default Service




Consumer Choices for Manufacturing Company
Standard Service Offer/Default Services
CRES Provider
Direct Purchase from a Generator
Alternatives to Electric Distribution Utilities (EDU) Service
Do not shop for provider
Shop for Provider
Efficient for Large Companies
Self Generation
Municipal/Rural Utility
Possible Avoid EDU Charges and Non-by-passable Riders
Do not avoid EDU charges

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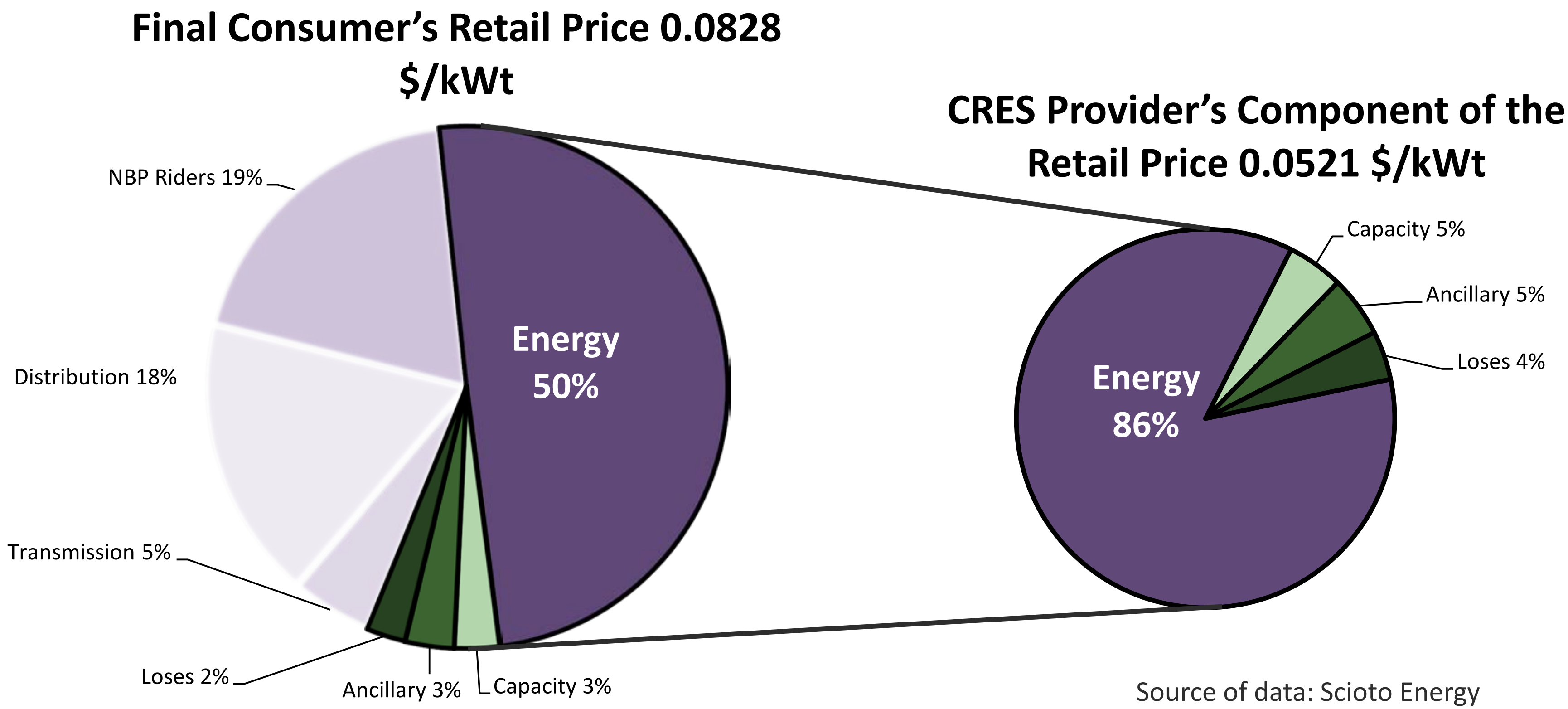
Structure of Electricity Retail Prices, 2013



Source of data: Scioto Energy

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

Understanding the Components of Electricity Retail Price

- First step to reducing electricity bill:
  - Understand that only about 50% of electricity cost is from energy load.
  - Other 50% is cost of transmission, distribution, capacity, ancillary services, and non-by-passible riders.
- Most Manageable Costs: Energy Load
- The price for energy load (your first 50% of the total cost) may be secured through a power purchase agreement with a CRES provider.
  - Typically PPAs are for 1-3 years.
  - Often accompanied by restrictions:
    - All electricity requirements.
    - Bandwidth limitations.
  - Even for smaller users, this is usually a better option than default services if you shop. However it may not be lower than can be acquired through an aggregator.
    - Aggregator will not have restrictions on self-generation or bandwidth.

Costs That Can Be Managed in Part

- The rate of capacity charges depends on 3-year-ago market auction.
- Can be heavily influenced by amount and time when peak consumption occurs.
  - Capacity auctions are individual to each service area.
  - Capacity costs can be managed in part through ensuring peak consumption does not coincide with five system wide peak periods.
    - Peak Load Coincidence must be managed the summer before charges are incurred to affect capacity charges.

Costs Controlled Only Through Conservation, Energy Efficiency or Self Generation

- Ancillary Services.
  - Grid support costs that PJM charges each CRES provider. These charges are typically allocated to individual customers based on consumption and are included in the rate from the CRES provider.
  - Normally passed through by CRES provider as a fixed rate.
    - Recently became controversial due to polar vortex.
- EDU Charges.
  - Cost of distribution, transmission, and non-by-passable charges are proportional to the amount of electricity you consume

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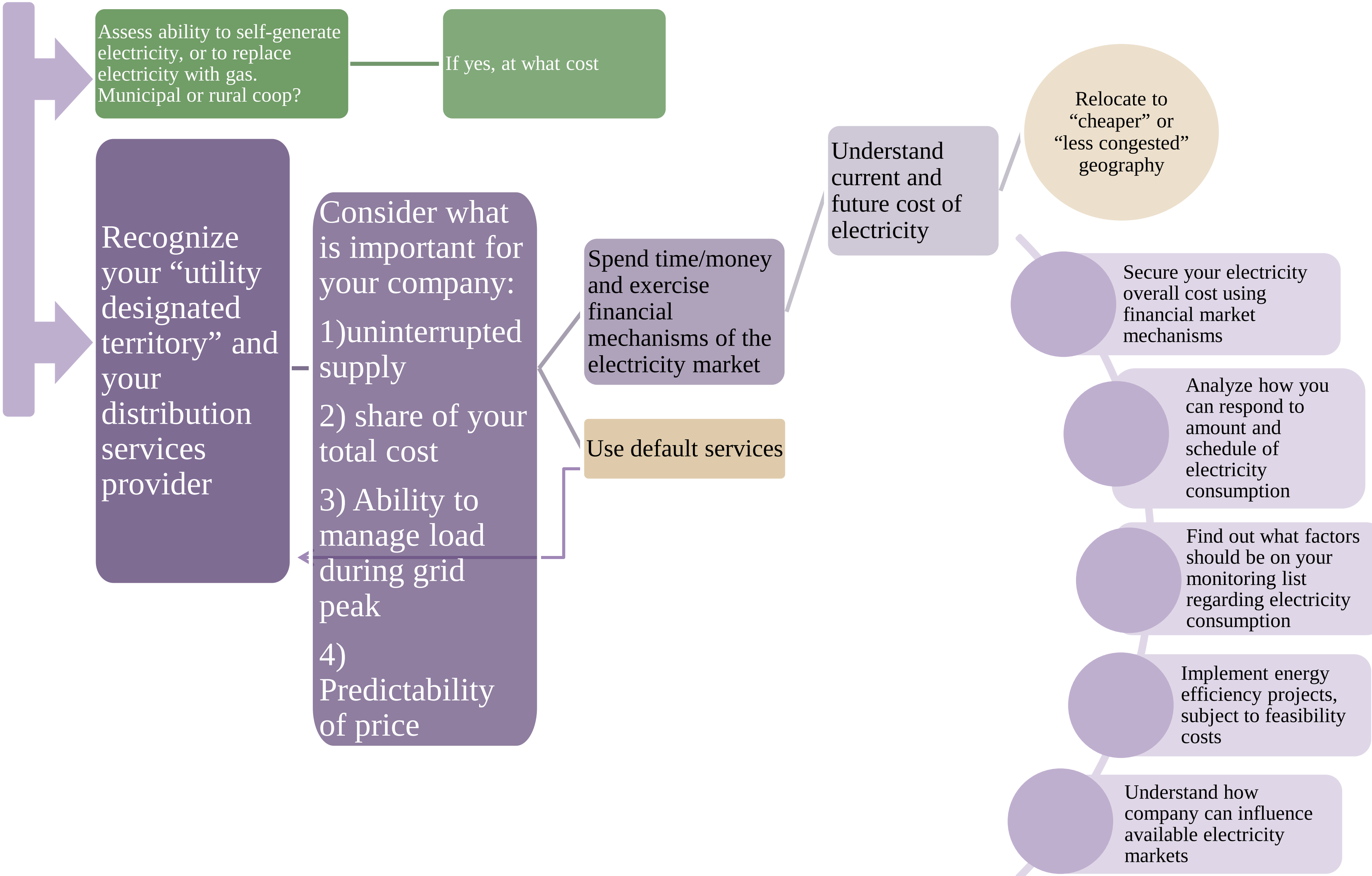
Manufacturer's Decision Making Process



Research Team

Cleveland State University
Maxine Goodman Levin College of Urban Affairs

Publications:

- Electricity Markets in Ohio –
  - http://engagedscholarship.csuohio.edu/urban_facpub/1179/
- Understanding Ohio's Electricity Markets: Characteristics, Structure and Price ---
  - http://engagedscholarship.csuohio.edu/urban_facpub/1180/

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The research team is grateful to **Susanne Buckley** from **Scioto Energy** and **Lisa McAllister** from **American Public Power** for content, analytical examples and comments on the study.

CRAIN'S CLEVELAND BUSINESS

ENERGY GUEST COLUMN -- ANDREW THOMAS

Saudi oil production increase won't affect Utica development

Drillers in some other shale plays might be affected but in Ohio, where it's all about natural gas, falling oil prices are not likely to have a big impact.
By ANDREW THOMAS

Much has been made in the press lately about Saudi Arabia increasing its oil production in response to the recent oil price slide.
International oil prices have held steady at over $100/barrel for years, notwithstanding a deep and lengthy worldwide recession. But oil prices finally started to drop this fall. Brent Crude prices dropped from around $105/barrel in early September to around $85/barrel by the end of October.
Oil market analysts expected the Saudis to respond by trying to shore up oil prices by cutting production. Instead, they did the opposite by increasing production. Some American oil market experts, like Deborah Lawrence writing in <I>Energy Policy Forum</I>, have suggested that the ramped-up production may have been designed to drive down prices so as to render American shale development unprofitable.
Of course, had the Saudis cut production as expected, American oil experts would have been equally distraught over price rigging and illicit cartel operations. So the Saudis can't really win.
I can't begin to guess what the Saudis are thinking, but there are a couple of things that we can say are certainly true.
First, low oil prices are not a bad thing for the American economy. After all, even with the spectacular success of the Bakken shale, we still import half of the oil we consume. And second, flooding the market with oil won't stop shale drilling in America, which is predominantly for natural gas. Certainly it won't affect drilling in the Utica.
There is no doubt that the OPEC nations understand that shale development is a long-term threat to oil prices, even if confined to natural gas. When I teach my course in oil and gas contracts to national oil company management overseas, I am always asked for an update on American shale production.
The reason why is clear: Shale is changing the geopolitical world order. If the price differential between oil and gas remains, inevitably technologies will emerge that substitute gas for oil. Already this is being done, as Americans are recapturing petrochemical market share by using ethane, derived from natural gas, instead of oil-based naphtha as a feedstock for plastics.
As a result, jobs are being re-shored in the United States. Likewise, if a CNG (compressed natural gas) fueling infrastructure gets built — and there are 30 CNG stations now in Ohio — we will see natural gas replace gasoline and diesel as a transportation fuel. Gas-to-liquid technologies also are on the horizon, which could enable more use of natural gas as a transportation fuel, should gas prices remain low relative to oil.
Indeed, shale gas seems, at least in part, to have played a part in setting off the oil price slide. The Global Energy Strategy team at

CitiGroup, for example, told CNBC that the bearish market for global oil was a direct result of the American shale revolution.

Lawrence quotes an IEA report that suggests the average cost of shale oil production is around $85/barrel, which would certainly mean a drilling curtailment might be expected. But other experts, such as those at CitiGroup, estimate that oil prices would have to drop to below $50/barrel to stop shale oil growth.

Robert Baird Equity Research places the break-even costs for shale oil for Bakken and the Eagle Ford at around $61 to $65/barrel. What's more, the one thing we have learned about shale operators is that they are resourceful — shale drillers continue to find new ways to reduce costs.

Regardless of what the truth is about Saudi motives or the real cost of oil development from shale, we do know that it should have little effect on the Utica. The Utica is a natural gas play. There is an oil window on the western side of the Utica, but to date there have been few wells drilled there, and it is unclear if the oil window will be economical. But drilling for natural gas and natural gas liquids will continue unabated regardless of oil prices.

America is and will remain an oil-importing nation. So a reduction in oil prices is welcome. And it seems unlikely that the drop in oil prices will slow shale oil drilling.

However, America needs to concern itself with a long-term, more fundamental problem: The vast majority of the world's proven oil reserves are still under the control of nations that are hostile to America, including some OPEC nations. And every year the problem gets worse, as we deplete our own resources.

So it is in America's interest to continue replacing oil with other forms of fuel, such as natural gas or hydrogen. This is the real danger from cheap oil — that we go back to business as usual and fail to find a substitute for oil.

Andrew Thomas is Executive in Residence at the Energy Policy Center of the Levin College of Urban Affairs at Cleveland State University and also of counsel to the law firm Meyers, Roman, Friedberg & Lewis.

To: OMA Energy Committee
From: Ryan Augsburger
Re: Energy Public Policy Report
Date: November 13, 2014

Electricity Rates and Regulation
Utility cases approved by the PUCO in 2012 and 2013 signaled 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 Group has been heavily engaged in matters pending before the PUCO and PJM. Recent market trends have seen utilities sell generation assets while seeking guaranteed returns on power purchase agreements. See counsel's report and PPA white paper.

Federal Greenhouse Gas Regulations GHG and 111(d)
Comment period remains open on proposed USEPA regulations of GHG emissions under the existing Clean Air Act. The deadline was extended until December 1, 2014. The OMA is working with the NAM and with other interests in a national coalition. At the same time staff has participated in talks with state officials from Ohio EPA and the PUCO responsible for the state's comment. State legislation to empower state regulators has been approved in one chamber and is awaiting approval in the Senate.

Capacity Prices
Capacity prices, a portion of an electricity bill, are set by three-year looking forward auctions at PJM, will increase beginning in summer of 2015, dramatically so in FirstEnergy service territory where the capacity charge will be significantly increased. Ask staff for an overview document.

As a result of the "polar vortex" of 2014, late this summer, PJM issued a proposed revision and invited comment. See Sept 18 meeting materials. OMA filed comment with PJM earlier this autumn.

Energy Efficiency Legislation (SB 58 / HB 302 / SB 310)
Legislation to revise Ohio's energy standards was signed into law by Governor Kasich following swift legislative action this Spring. The issue has been reported and discussed at OMA meetings for nearly two years.

Recall the legislation revised existing Ohio energy policy on renewables, efficiency, and "advanced energy." After thoroughly researching the matter, the OMA adopted a position supportive of continued efficiency standards and a streamlined opt-out from the rider costs for industrial customers. OMA-commissioned research demonstrated that benefits of Ohio efficiency standards outweigh their costs and that large energy users may need the option to opt-out.

After SB 58 stalled late in 2013 due to concern in the Senate about the bill's effect of enriching electric utilities by significantly increasing consumer bills, SB 310 was introduced in March. SB 310 froze the alternative energy standards for two years and created a legislative study committee to assess the impacts of the standards. The bill also revised what constitutes as energy efficiency and provides an industrial opt-out. Governor Kasich signed the bill into law in mid-June. Contact staff for a detailed analysis.

A work group of OMA members developed legislative language that would provide a streamlined energy efficiency opt-out option for large industrial electricity users that did not compromise costs for other consumers. Together with a customer cost cap (on energy efficiency costs) the OMA fashioned a compromise proposal that also would have provided a study committee and either benchmark reduction or one-year freeze. This compromise enjoyed broad support but was not adopted.

The study committee has been appointed and is expected to meet during the late 2014. A couple members of the all-legislator study committee will not be returning next year so substitutions are expected.

Manufactured Gas Plant Remediation Costs
In Spring of 2013, lawmakers advanced a legislative proposal to revise a standard in utility law that would have required customers to pay 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 did not deter 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.

The 2014 mid-biennium review (MBR) or mini-budget bill (HB 483) initially included a provision that would require customers to pay gas utilities to recover the cost of remediating these old plants. The OMA and member companies worked to have these provisions removed from the bill. The Senate did not reinsert the language as the MBR went through the Senate committee process, however all eyes are on the "lame duck" general assembly now underway. Tools are available for manufacturers to take action.

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. The Ohio Supreme Court handed us a partial victory in May but a final outcome is many months away in the complex litigation.

Polar Vortex *Pass-Through* Charges
Generation customers of First Energy Solutions (FES) were notified by the provider that they would be billed for a regulatory event associated with the polar vortex power shortages in January. The one-time charge is outside the terms of the contract. If allowed by regulators, the charges would result in an unfavorable precedent for all customers. Several OMA members are working collectively to contest the charges. Contact staff to learn more.

New Gas Rider Could Pay for Line Extensions (HB 319)
Legislators are considering House Bill 319 (Cheryl Grossman, R-Grove City) that would permit a natural gas company to establish a rider to fund gas infrastructure development. This bill has not had a hearing since February however several interested party meetings have been held over the past months. Representatives of Columbia Gas, the leading proponent, appeared at the OMA energy committee in March to make the case and respond to questions. OMA staff and counsel has offered suggestions for improvement. Action on the bill could occur later in the year. The issue raises questions over the role of state government to support economic development within a deregulated utility environment.

Energy

OMA: Make Electricity Bill Rider Cost Disclosures "Apples to Apples"

The OMA Energy Group, a subsidiary membership group of the OMA, this week filed comments to a proposed Public Utilities Commission of Ohio (PUCO) rule concerning disclosure to customers of the costs of renewable energy resource, energy efficiency savings, and peak demand reduction requirements. The energy group urges the PUCO to assure that disclosures are true "apples to apples" comparisons, in order to inform consumer decision-making.

The comments note: "The energy efficiency/peak demand reduction (EE/PDR) riders have historically shown extreme volatility in some utility territories. This illustrates that the EE/PDR rider reflects *recovery* of compliance costs, not *actual* compliance costs. The difference between recovery of rider amounts and actual compliance costs is not insignificant to consumers. EE/PDR riders have shown to have spiked (most notably in FirstEnergy's service territories in fall 2012), followed by declines so steep they often result in credits to consumers (again, most notably in FirstEnergy's service territories in early 2013)."

"The rider spikes and crashes affect consumer decisions. For example, anecdotally, many mercantile customers were informed of 2012 rider spikes and encouraged by some utilities and consultants to self-direct projects to gain rider exemption, only to forego the coming credits in 2013. Customers acting on the price signal of a rider spike may have lost revenue," wrote the energy group. *11/6/2014*

NERC: More Engineering Analysis Needed on Carbon Rule

The North American Electric Reliability Council (NERC) this week released its study of the potential grid reliability effects of the U.S. EPA's proposed Clean Power Rule under section 111(d) of the Clean Air Act. Its conclusion: More time and more analysis are needed for reliability protection.

"The bulk power system is undergoing a fundamental transformation toward increasing dependency on natural gas, wind and solar resources. The Clean Power Plan substantially accelerates that shift and proposes a very different mix of power resources than we have today," said Gerry Cauley, president and chief executive officer at NERC.

"Based on our preliminary assessment of the proposed rule, we believe there must be further detailed engineering analysis to demonstrate whether the assumptions and targets are feasible in the timeframe proposed," he said.

"The proposed timeline does not provide enough time to develop sufficient resources to ensure continued reliable operation of the electric grid by 2020. More time for implementation may be needed to accommodate reliability enhancements," according to the report. *11/6/2014*

U.S. EPA Claims Flexibility on Carbon Rules

This week, the U.S. EPA released a Notice of Data Availability, in which it invited further comment from stakeholders in three areas of its proposed power plant carbon rules: the 2020-2029 glide path for emission reductions, the plan's "building blocks," and the methodology for calculating state-specific carbon goals.

The agency appears to be reacting to criticisms that the rules are technically flawed and economically damaging. Its notice states: "(S)takeholders have expressed a concern that shifting generation away from existing generating assets, particularly coal-fired [electricity generating units], could, in some situations, result in limiting cost-effective options."

The EPA is also inviting comment on whether it should move from using 2012 as the plan's baseline: "The EPA is seeking comment on whether we should use a different single data year or the average of a combination of years (such as 2010, 2011, and 2012) to calculate the state fossil fuel emission rates used in state goal calculations." *10/30/2014*

U.S. EPA Out of Sync with Voters

The Partnership for a Better Energy Future (PBEF), of which OMA is a member, commissioned a nationwide survey of 1,340 likely voters about the U.S. EPA's Clean Power Plan, which proposes to reduce power plant carbon emissions.

Among the findings:

- A plurality of voters are opposed to the EPA regulations: 47% of voters oppose the regulations, with 31% strongly opposed; 44% support the regulations, with just 19% strongly supporting them. Men, seniors and middle-class voters are the most strongly opposed to the regulations.
- Nearly 4 in 10 voters are less likely to vote for a candidate who supports the EPA regulations: 39% of voters are less likely to vote for a candidate who supports the regulations while 22% are more likely to vote for a candidate who supports the regulations.

- Nearly half of voters say they are not willing to pay a single dollar more in their energy bill to accommodate the EPA regulations: 45% of voters say they are not willing to pay more in their monthly energy bill.
- A majority of voters believe the United States cannot afford new costs and potential job losses resulting from the EPA regulations.
- Almost three-quarters of voters say they want all-of-the-above energy policies. *10/22/2014*

Grid Operator Proposes Diluting Demand Response Benefits

Earlier this month PJM, the electricity grid operator for this region of the country, released a whitepaper on demand response (DR). In it, PJM makes proposals that could greatly reduce the value of DR programs for manufacturers going forward. The proposals could affect current contracts, and, ultimately, increase capacity prices significantly.

EnerNoc will present on the development at the November 13 meeting of the OMA Energy Committee. EnerNoc works with manufacturers, and others, to aggregate DR and manage DR bid processes. Register for the committee meeting here. *10/23/2014*

Sign Up for CHP Tour of OMA Member, Jay Industries, Inc., in Mansfield

The OMA CHP/WER/EE work group has a limited number of spaces remaining for its November 12 tour of Jay Industries, Inc.'s new combined heat and power (CHP) plant in Mansfield.

The tour will be 10:00 - 11:30 a.m. followed by a lunch discussion hosted by IGS Energy.

CHP plants generate electricity on-site while utilizing the waste heat to generate hot-water, steam, or chilled water. CHP plants use natural gas and have an overall efficiency of about 75%, which exceeds the overall combined efficiency of traditional centralized power plants and boilers, which are typically 50% efficient.

To find out more or reserve your spot, contact OMA's energy engineering consultant, John Seryak, of Go Sustainable Energy LLC.

The OMA CHP/WER/EE work group is a peer-sharing, learning group for facility and energy managers charged with managing energy consumption and peak demand in their facilities. Learn more or join here.

Is your plant a good candidate for CHP? As an OMA member, you are eligible for a free screening analysis from Go Sustainable Energy LLC. Contact John Seryak. *10/22/2014*

In-State Renewable Generation Standards to be Cancelled

On October 15, the Public Utilities Commission of Ohio (PUCO) issued an entry directing PUCO staff to propose rules amending Ohio Adm. Code 4901:1-40-03 in order to eliminate the in-state renewable energy requirement. The revisions incorporate recently enacted S.B. 310 into the commission's regulations. *10/23/2014*

Should Consumers Subsidize Utilities?

Three of Ohio's four investor-owned utilities have rate cases pending before the Ohio Public Utilities Commission (PUCO) that would impose nonbypassable riders on all electricity consumers to subsidize the continued operation of uneconomic generation units.

The proposals are so significant to the operation of the electricity markets in PJM (which manages the markets in Ohio and 12 other states) that its Independent Market Monitor has filed a motion to intervene. In it, the market monitor says: "The Market Monitor takes the position that subsidies should not be permitted to interfere with the competitiveness of PJM markets and PJM's competition-based market design."

A national coalition notes: "This amounts to a hidden tax on the state's consumers and businesses and Ohio's economy, and represents a threat to the realization of the competitive market's benefits."

To learn what you can do about this issue, contact Ryan Augsburger.

FirstEnergy Seeking a "Subsidized Turnaround?"

The Institute for Energy Economics and Financial Analysis this week released a study that paints a stark picture of the financial condition of FirstEnergy. The study, "FirstEnergy, A Major Utility Seeks a Subsidized Turnaround," claims FirstEnergy "turning to regulatory capture and ratepayer bailouts as it struggles to reverse a deepening spiral of debt service and revenue declines."

"FirstEnergy's financial condition has deteriorated since it merged with Allegheny, and its key financial metrics are on a downward trajectory. Over the past three years, it has experienced declining revenues, declining net income, declining stock price, declining dividends, and rising debt... To shore up its balance sheet, FirstEnergy has relied heavily on "one-time resources," including proceeds from asset sales and short-term borrowings. FirstEnergy's poor financial performance stems from the underlying condition that the company's business – the sale of electricity – is performing poorly and not generating sufficient revenue to cover expenses," write the researchers.

The study concludes: "FirstEnergy's regulatory and political strategies are aimed to squeeze as much profit as possible out of the regulated subsidiaries, while using the regulated subsidiaries and other taxpayer subsidies to prop up its failed merchant generation business. But despite the above initiatives, FE's financial situation has not turned around, and the company is still burdened by excessively high levels of debt. FE's reliance on subsidies and bailouts – while costly to ratepayers – will not solve the underlying downward slide of the company's financial performance." *10/8/2014*

AEP Wants Customers Liable for Plant Losses

AEP Ohio filed with the Public Utilities Commission of Ohio a proposal to make customers liable for losses from four more generation plants last week. Earlier in the year, AEP had proposed the same guarantee for another entity, the Ohio Valley Electric Corporation, which it owns jointly with other utilities and which operates a 60 old plant in Ohio (and one in Indiana).

The new plan would make customers liable for losses for 2,700 megawatts of generation from the Cardinal Unit 1 in Jefferson County, the Conesville Units 4, 5 and 6 in Coshocton County, the Stuart Units 1 – 4 in Brown County, and Zimmer Unit 1 in Clermont County.

Under the proposal, AEP says it could bid all energy and capacity from the units into the PJM market and pass on any costs, or savings, to customers through a non-bypassable power purchase agreement rider. *10/9/2014*

Bill to Subsidize New Steel Plant May be Taken Up

Last week, Sen. Bill Seitz, chairman of the Senate Public Utilities Committee, told an audience of energy suppliers that a legislative proposal (SB 312) could be revised and considered during the lame duck session.

The bill would enable New Steel Company to finance its proposed pig iron plant in Scioto county by allowing a statewide rider on electricity bills to subsidize the project.

New Steel Company seeks to obtain a power purchase agreement with a utility to buy electricity generated onsite by a combined heat and power facility.

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.

Member companies that are interested in helping to develop manufacturers' policy position on SB 312 are urged to contact OMA's Ryan Augsburger. *10/9/2014*

Legislative Energy Study Committee Seated

Senate Bill 310, passed earlier this year provided for a two-year freeze of Ohio's energy efficiency standards and called for a study committee that would report back at the end of 2016 about whether the freeze should be continued.

Last month, Senate President Keith Faber (R – Celina) announced appointments to the committee including Senators Troy Balderson, co-chair, Bill Seitz, Cliff Hite, Bob Peterson, Shirley Smith, and Capri Cafaro.

This week House Speaker Bill Batchelder announced House appointments would be Reps. Peter Stautberg, co-chair, Ron Amstutz, Christina Hagan, Louis Blessing, Jack Cera, and Michael Stinziano.

The panel could commence its work as soon as this fall's lame duck session *10/9/2014*

OMA Members File Complaint Against FES for "Polar Vortex" Charges

On September 12, eighteen OMA members, including Whirlpool Corp., Cooper Tire & Rubber Co., Campbell Soup Co., and Navistar, Inc., jointly filed a complaint against FirstEnergy Solutions (FES) stemming from surcharges billed for the "polar vortex" pass-through event from January 2014.

The complaint asserts that FES violated Ohio statutes and Public Utilities Commission of Ohio (PUCO) rules by, among other things, engaging in unfair, misleading, deceptive, or unconscionable acts or practices in the marketing and administration of customer contracts. The complaint also asserts that FES set forth no foundation for the calculation of the regional transmission organization (RTO) expense surcharges included in customer bills.

The PUCO is also independently conducting an investigation of the FES surcharges. *9/29/2014*

The Gift of Cost Recovery

Once a month, OMA's Energy Guide, a service that helps members purchase energy at the best price and terms, publishes INSIGHTS, a short blog about hot topics in energy purchasing, markets, or management.

Subscribe at no charge at My OMA, under My Publications, or email us.

Here's the October post, *The Gift of Cost Recovery:* More and more headlines are going to be reading that Ohio is re-regulating generation, and in a sense they may be right. AEP Ohio, Duke Energy and FirstEnergy Corp. all have rate cases pending at the Public Utility Commission that includes a Power Purchase Agreement (PPA) Rider. This rider would guarantee the regulated utilities a .... read more. *9/26/2014*

Utility Plans for Energy-Efficiency Diverge Under SB 310

Ohio's investor-owned utilities are planning markedly different implementation strategies for their energy-efficiency programs as they react to Ohio's Substitute Senate Bill 310 (SB 310), which took effect earlier this month.

Utilities have 30 days from the law's effective date to amend their efficiency program offerings to follow new rules created by SB 310. SB 310 allows utilities to determine which set of rules, pre or post-SB310, to follow at their sole discretion. Without amendment, utility programs automatically extend through 2016 under the pre-SB 310 rules. The Public Utilities Commission of Ohio (PUCO) has 60 days to approve, approve in part or reject the utilities' amended plans.

Read more here**.** *9/25/2014*

Utility Power Purchase Agreements Limit Price Competition

Addressing the OMA Energy Committee last week, Lael Campbell, director of state regulatory and government affairs for the Exelon company, shared a presentation detailing how applications pending at the PUCO filed by Ohio distribution utilities to purchase power from their subsidiary-owned generation plants will lead to less customer choice, effectively driving out the benefits of competition. 9/25/2014

OMA Reacts to PJM Capacity Performance Proposal

On August 20, PJM issued a "Capacity Performance Proposal" and invited stakeholder comments. The proposal defines a new capacity product, "Capacity Performance," to address the reliability issues experienced during the winter of 2013/2014.

PJM's proposal highlights four issues that contributed to the reliability issues in January 2014: 1) Record cold-weather peak electric demand; 2) Limited natural gas availability due to coincident peaking electric and natural gas demand; 3) No availability of warm-weather demand response (DR) capacity; and 4) Cold-weather related operations and maintenance (O&M) shortcomings at generation facilities.

PJM's proposed Capacity Performance product creates incentives and penalties designed to promote reliable *annual* capacity resources to meet *winter* coincident peaks.

In comments submitted to PJM this week, the OMA Energy Group suggests a mismatch of *annual* products to *winter-time* reliability ignores several root issues: (1) Cold weather capacity resources are not organized by PJM, and (2) Electric and natural gas peaking are coincident.

The OMA Energy Group recommends to PJM:

- Pricing cold-weather coincident peaks into capacity markets
- Developing cold-weather capacity products, including cold-weather demand response and energy-efficiency
- Allowing combined heat and power (CHP) as an eligible capacity resource

This would allow PJM to procure winter reliability at the least cost to consumers, while simultaneously reducing stress on the natural gas network. *9/17/2014*

Policy Goal:
Access to Reliable, Economical, Diverse Energy Resources

Energy policy can enhance—or hinder—Ohio's ability to attract business investment, stimulate economic growth and spur job creation, especially in manufacturing. State and federal energy policies must (a) ensure access to reliable, economical sources of energy, (b) support the development of a diverse energy resource mix, and (c) conserve energy to preserve our natural resources, while lowering cost.

The Ohio Manufacturers' Association's energy policy advocacy efforts are guided by these principles:

- Predictable, stable energy pricing achieved though effective energy rate design attracts job-creating capital investments.
- A modernized energy infrastructure will help maximize energy supplies and stabilize energy pricing and reliability.
- Strategic and operational collaboration among utilities, government and manufacturers and their supply chains produces better economic outcomes than do confrontational and adversarial regulatory proceedings.
- Ohio's traditional industrial capabilities enable global leadership in energy technology innovation and manufacturing.
- Sustainability requirements can create profitable new market opportunities but must be economically feasible.
- Effective government regulation recognizes technical and economic realities.

Shaping energy policy in Ohio that aligns with these principles will support manufacturing competitiveness, stimulate economic expansion and job creation, and foster environmental stewardship.

Energy policy priorities are:

Assure an open and fair electricity generation marketplace, in which competition generates consumer choice, which in turn drives innovation.

Design an economic development discount rate for energy-intensive manufacturers that makes Ohio competitive with other states.

Support deployment of customer-sited generation technologies such as cogeneration, energy efficiency and demand-side management, in order to achieve least-cost and sustainable resources.

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: 5/27/2014 - Senate Finance, (First 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

HB472 **MBR-MID-BIENNIUM BUDGET REVIEW** (MCCLAIN J) To make operating and other appropriations and to provide authorization and conditions for the operation of state programs.

Current Status: 3/26/2014 - House Ways and Means, (Third Hearing)
State Bill Page: http://www.legislature.state.oh.us/bills.cfm?ID=130_HB_472

HB483 **MBR-OPERATION OF STATE PROGRAMS** (AMSTUTZ R) To make operating and other appropriations and to provide authorization and conditions for the operation of state programs.

Current Status: 6/16/2014 - **SIGNED BY GOVERNOR**; Eff. 6/16/2014 Other Sections Eff. on Other Dates
State Bill Page: http://www.legislature.state.oh.us/bills.cfm?ID=130_HB_483

HB568 **PUCO-MAXIMUM FEES** (MCGREGOR R) To require the Public Utilities Commission to set the maximum fees that a manufactured home park operator, condominium unit owners association, and landlord may charge for electric, gas, water, or related services, or for sewage disposal service provided to a resident, unit owner, or tenant when a submeter is used to measure public utility service to the premises.

Current Status: 6/4/2014 - House Public Utilities, (First Hearing)
State Bill Page: http://www.legislature.state.oh.us/bills.cfm?ID=130_HB_568

HB649 **HEATING FUEL SALES EXEMPTION** (BARBORAK N) To exempt from sales and use taxation the bulk sale of firewood, propane, butane, kerosene, and number two fuel oil for heating purposes and to declare an emergency.

Current Status: 10/28/2014 - Introduced

State Bill Page: http://www.legislature.state.oh.us/bills.cfm?ID=130_HB_649

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

SB375 **RENTAL AGREEMENT UTILITY DUTY** (JONES S) To include the duty to pay utility bills to the list of duties of a tenant who is party to a rental agreement.

Current Status: 10/28/2014 - Introduced

State Bill Page: http://www.legislature.state.oh.us/bills.cfm?ID=130_SB_375

SB378 **UNDERGROUND UTILITY FACILITIES LAW** (COLEY W) Regarding the enforcement of the law governing the protection of underground utility facilities.

Current Status: 10/28/2014 - Introduced

State Bill Page: http://www.legislature.state.oh.us/bills.cfm?ID=130_SB_378

SB380 **INCOME PAYMENT PLAN FUNDING** (JONES S) To modify the funding process for the percentage of income payment plan program.

Current Status: 10/29/2014 - Introduced

State Bill Page: http://www.legislature.state.oh.us/bills.cfm?ID=130_SB_380

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: 3/11/2014 - Referred to Committee House Manufacturing and Workforce Development

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

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RISING STARS YOU NEED TO KNOW
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FIVE INDUSTRIES
WHERE DRONES ARE TAKING OFF
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GRADING
BUFFETT'S STOCK PICKER
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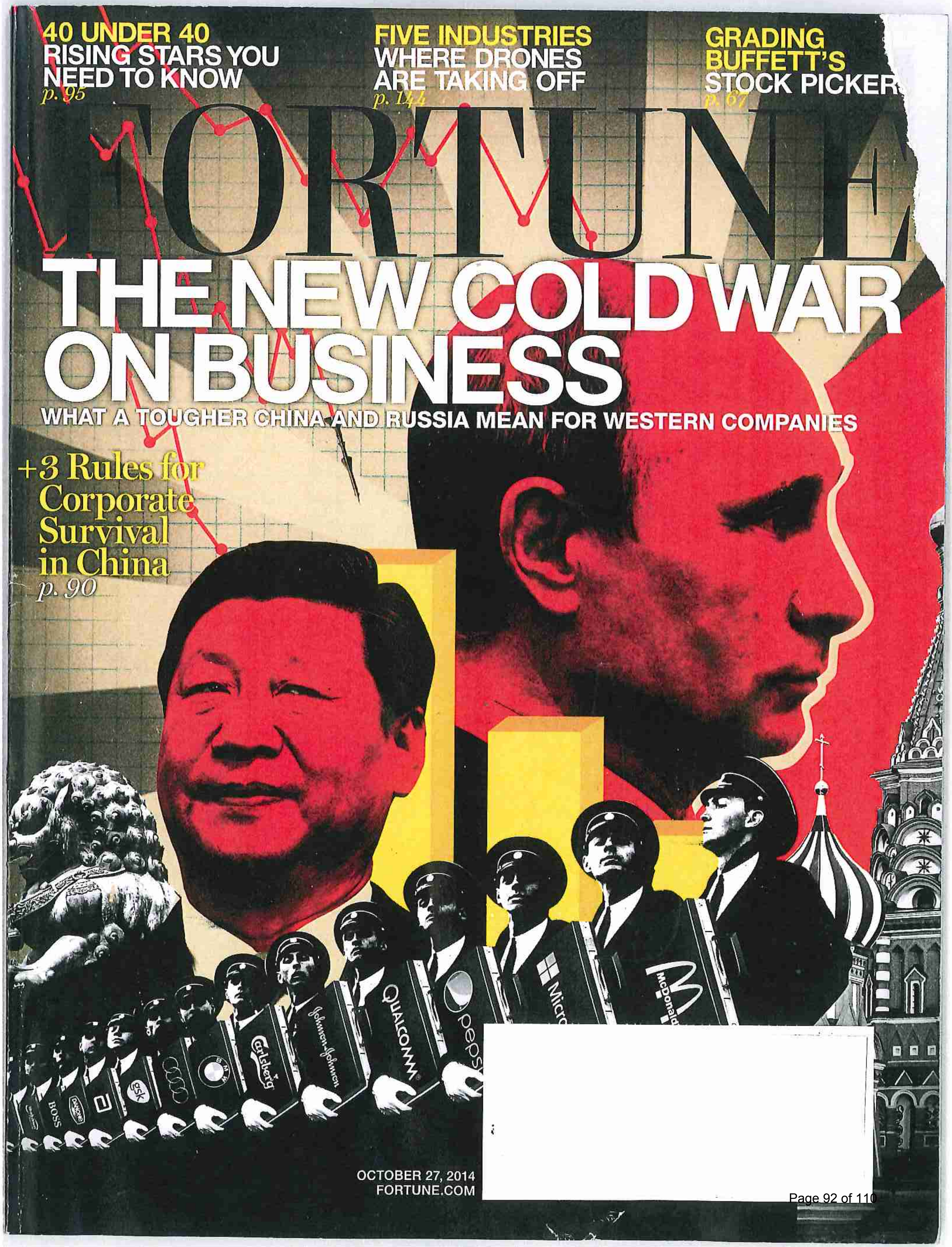

THE NEW COLD WAR ON BUSINESS

WHAT A TOUGHER CHINA AND RUSSIA MEAN FOR WESTERN COMPANIES

+3 Rules for Corporate Survival in China
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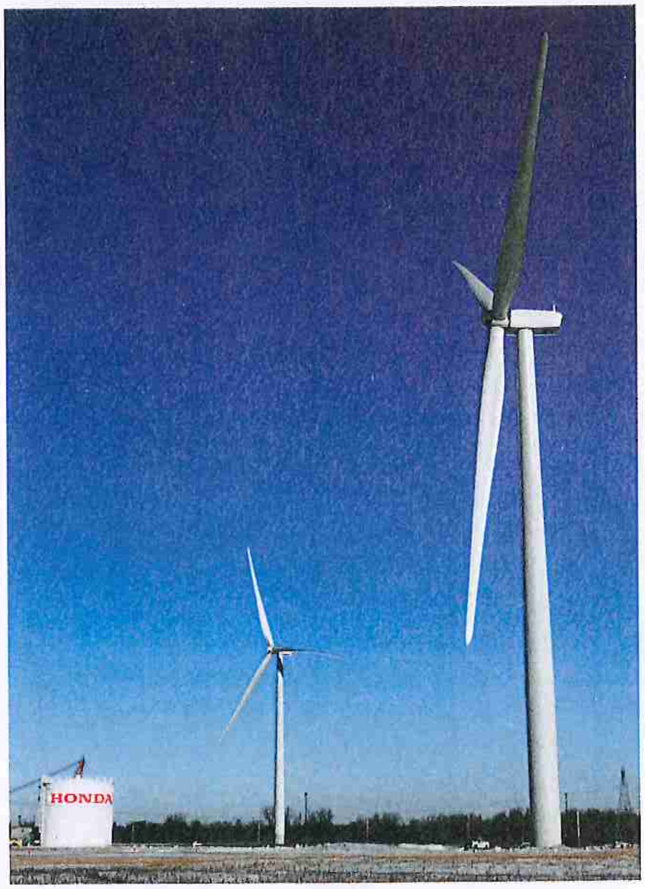
NEW ENERGY



Last year Honda installed these two wind turbines at its transmission plant in Russells Point, Ohio. They provide 10% of the facility's power.

BILL BOWEN

The Battle of Ohio: Clean Energy vs. Coal

AS POLITICIANS SQUABBLE OVER ENERGY POLICY, MANUFACTURERS ARE CLAMORING FOR MORE RENEWABLES. *By Richard Martin*

Western Ohio is Honda country. Since 1982, when the company's first auto production plant went in at Marysville, some 30 miles northwest of Columbus on Highway 33, the Japanese automaker has built a manufacturing infrastructure that has transformed the bucolic area into an industrial powerhouse.

In addition to Marysville, one of the largest manufacturing facilities under a single roof in the U.S., Honda operates the Anna engine complex, a full-assembly facility at East Liberty, an R&D center near Marysville, and a transmission plant at Russells Point. It was at Russells Point last year that Honda took another transformative step by putting up a pair of wind turbines to help meet its massive need for electricity. Owned by ConEd Solutions and installed by Minnesota-based Juhl Energy, the 260-foot-high towers, each equipped with three blades more than half a football field long, supply about 10,000 megawatt hours a year—or about 10% of the plant's power.

Today the turbines stand as a symbol of Honda's loyalties in a contentious political fight over the future of renewable-energy policy in Ohio—one with national implications. In 2008 the state legislature passed one of the most ambitious renewable-energy laws in the U.S. The original legislation required utilities to get 25% of their power from renewable- and other clean-energy sources by 2025, while cutting their customers' power usage by 22%. (Today Ohio gets just 1% of its total energy from renewables, according to the EPA, and 70% of its electricity comes from coal-fired power plants.)

However, in June, Ohio became the first state in the U.S. to roll back clean-energy mandates when Republican Gov. John Kasich—running for reelection in November—signed a bill called SB 310 into state law. The bill, which freezes standards for two years, was backed by deep-pocketed Ohio-based utilities and conservative groups. Coming just a week after the EPA announced tough new rules on carbon emissions from power plants, the freeze threw into question the future of government-supported renewable-energy markets nationwide.

Environmentalists and renewable-power providers fear that Ohio could be the spearhead for pushing back other states' mandates for renewables. Despite five years of relatively robust investment in renewables here, the presence in Ohio of two of the nation's largest utilities (AEP and First-Energy), along with the legacy coal industry (Ohio produced 26,000 tons of coal in 2012), makes it a prime battleground for the struggle between clean energy and cheap, dirty coal. "This is ground zero," says Sierra Club Ohio energy director Dan Sawmiller.

But there's an interesting twist to the conflict: The environmental groups have been joined in their opposition to SB 310 by a less obvious ally—big manufacturers. The Ohio Manufacturers Association came out against SB 310, as did a handful of large companies such as Anheuser-Busch and, yes, Honda.

That's not as surprising as it might sound. Auto manufacturing, one of the most energy-intensive businesses in the world, is gradually but decisively reducing its energy use and obtaining more of it from cleaner sources. Honda has trumpeted its "Green Factory" initiative, saying it plans to lower CO_2 emissions from its plants 30% by 2020, compared with 2000 levels. And the carmaker has made it clear that it wants to cut its consumption of power from fossil fuels in order to be a better corporate citizen and to reap the accompanying good PR—as long as it makes good business sense. "Honda is always looking for opportunities to improve our efficiency and cost," says Karen Heyob, the director of facility management for Honda North America. "I'm happy to say that we've kept energy usage stable this year despite significantly expanding our operations."

The embrace of clean energy by industry is hardly a Honda-only trend. Manufacturers of products from camshafts to catheters are finding that using energy more efficiently—and reducing their reliance on traditional, utility-centric, fossil-fuel-dominated resources—is good not only for the corporate image, but also for the bottom line. Prodded by government regulations, shareholder unrest, and a changing energy landscape, the manufacturing sector is transforming the way it sources and uses energy.

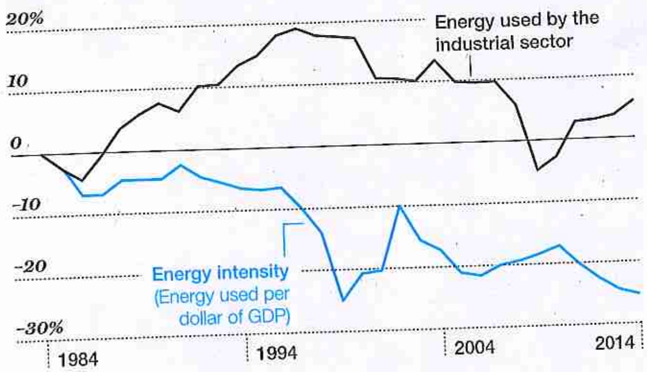
This transformation is being driven by forces both outside and inside the walls of manufacturing plants. The external factors are well documented: Falling prices for natural gas and renewable energy have made clean, distributed (i.e., located at or close to the plant) electricity generation a compelling business case. The effects of the shale gas bonanza on U.S. manufacturing are somewhat in dispute, but there is no question that low-cost natural gas is providing a competitive advantage to companies that make stuff in the U.S. According to the U.S. Manufacturing Purchasing Managers Index, a measure developed by financial research firm Markit, manufacturing activity in the U.S. in September reached its highest point in more than four years. Factory employment, though still well below pre-2008 levels, is surging as well, reaching its highest level since March 2012. A large part of the increase can be attributed to inexpensive natural gas.

The use of renewable energy in manufacturing, meanwhile, hovers at 8% to 9%, and it's not guaranteed to soar. A June study by the International Renewable Energy Agency found that the figure could grow to more than a quarter by 2030, or a third if some form of carbon pricing takes effect—or, under current deployment plans and government policies, it could stagnate at 10%. Those are global figures; the U.S., with accelerating coal plant retirement and tightening government regulations of carbon emissions from power generation, should see increases at the high end of that scale.

What's happening inside today's manufacturing plants

MORE WITH LESS

A look back at 30 years of energy use by U.S. manufacturers shows a peak in the mid-1990s. Gains in efficiency are helping to keep power use down despite a recent surge in activity.



is more complicated but ultimately equally transformative. Simply put, a confluence of technological advances in networks, wireless sensors, virtualization, and monitoring equipment is enabling improvements in manufacturing efficiency, energy conservation, and quality control that were hardly conceivable just a few years ago. Greater efficiency combined with cheaper renewable power sources is a powerful formula.

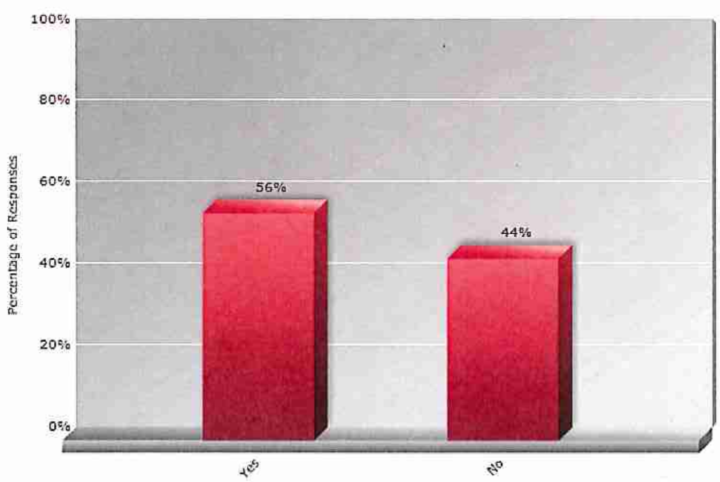
The benefits of alternative energy are not evenly distributed across all manufacturing locations, of course. Honda's Ohio complex, for example, is within the service area of Buckeye Power, a rural electricity co-op that has been untouched by utility deregulation and still gets the bulk of its power from coal. Honda had to reach a power purchase agreement with Buckeye in order to erect the Russells Point turbines. But now every megawatt that Honda generates from wind is one that doesn't derive from coal.

On a recent evening the turbines turned lazily in the breeze while casting long shadows across the adjoining cornfields. It's a good bet that Honda will soon be adding more turbines to its facilities. Moving from centralized coal plants to distributed power generation from renewable sources benefits manufacturers because users control the assets, and long-term prices are fixed. What's more, shifting to clean energy now mitigates the risk of future carbon taxes or other forms of carbon pricing, says Barry McClelland, Honda's longtime energy and operations chief, who retired in June but still heads the energy committee of the Ohio Manufacturers Association. "Honda's view is you've got to go with the change," says McClelland. Perhaps if Honda leads the way, others in Ohio will follow.

OMA Committee Meeting
Participant Survey Results August 2014

Have you attended a committee meeting IN PERSON in the past year?

Answer	Percentage	Number
Yes	56 %	15
No	44 %	12
Number of Respondents: 27		



What was the best part about attending an OMA policy committee meeting in person?

Themes:

- **Information** – "The information on how pending policies impact the economics of business in Ohio."
- **Networking** - "I enjoy the personal interaction and the important sidebar conversations."
- **Access to elected officials** – "Hearing directly from administration or legislative representatives."
- **Meeting design** – "It is easier to ask questions of the guest speakers when you are in the room."

What changes to policy committee meetings should OMA consider?

Time management –

"Sometimes there is not enough time to properly accomplish the business."

"I'd like to figure out way to attend without losing the entire day from the office."

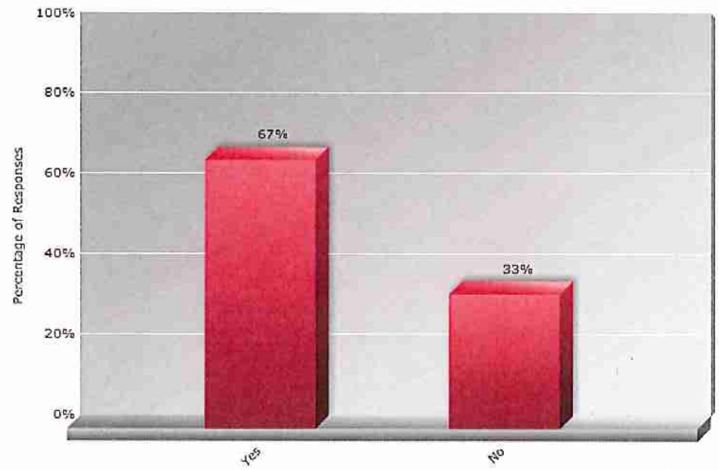
"More time for networking, shared perspectives, learning through interaction."

"Lengthen them."

"Shorten them."

Have you participated in an OMA policy committee meeting VIA PHONE in the past year?

Answer	Percentage	Number
Yes	67 %	16
No	33 %	8
Number of Respondents: 24		



What would improve OMA policy committee meeting participation via phone?

Themes:

Interaction – "Ask people on the phone for their reactions more frequently."

Technology –

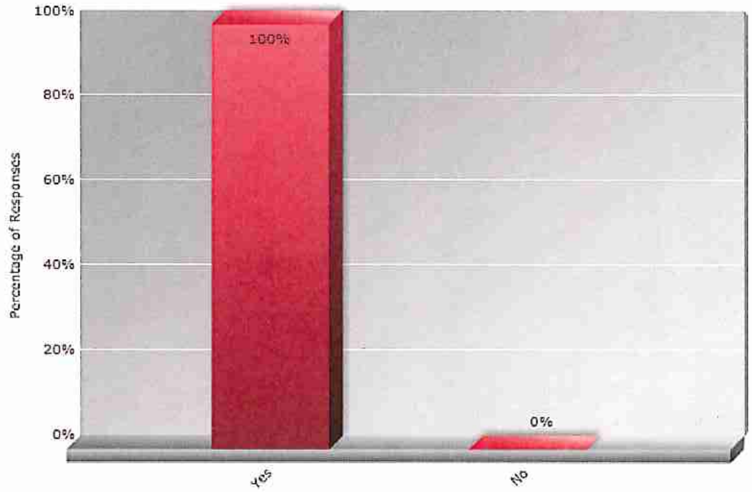
"Webinar or improved system that does not allow callers to interfere with the meeting."

"It would be nice to be able to view the meetings by internet."

"It is difficult to hear the speakers and attendees who have questions or comments."

OMA emails the committee materials to you whether or not you register for the policy committee meeting(s). Is this of value to you?

Answer	Percentage	Number
Yes	100 %	20
Number of Respondents: 20		



Should OMA consider any changes to the meeting materials?

"Making sure they are as brief as possible while still being meaningful."

"Adding an executive summary."

"More detailed index."

"Have archives online for reference." (See ohiomfg.com footer)

The Ohio Manufacturers' Association

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About OMA
About OMA
100 Years of OMA

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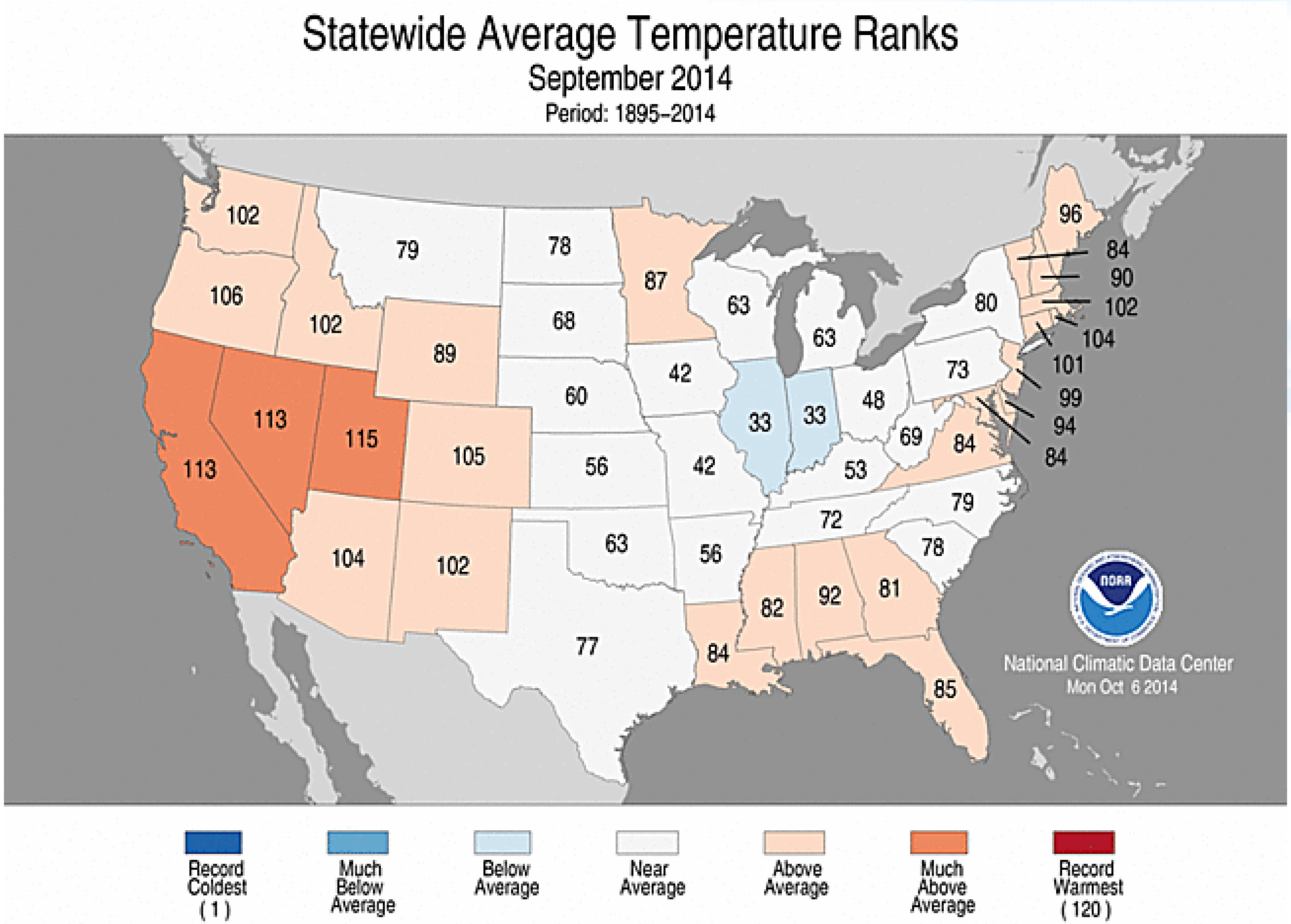
Natural Gas Update
OMA Energy Committee

Richard Ricks
NiSource
November 13, 2014

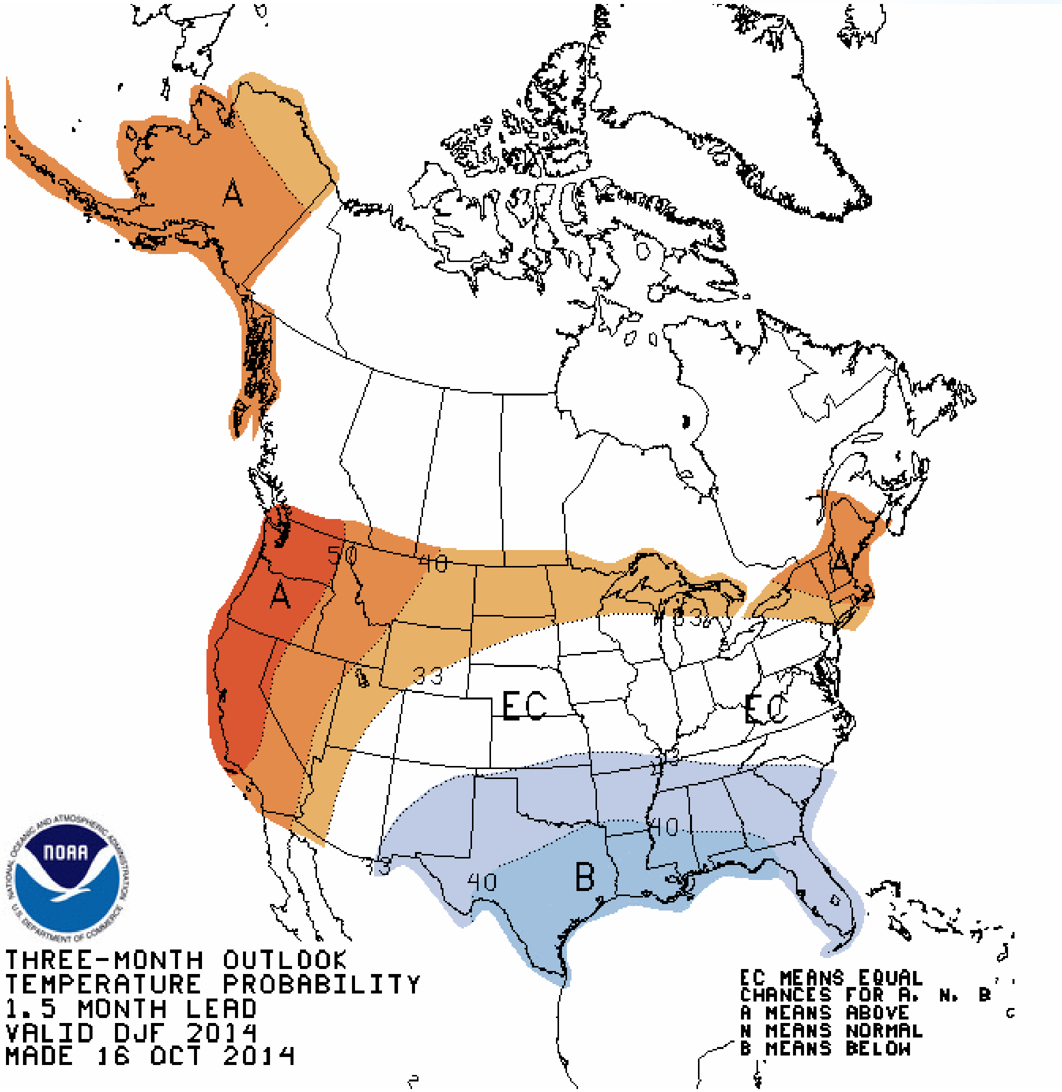
Agenda

- Weather
  - National
  - NOAA Outlook
  - Ohio Degree Days
- National Storage
- Natural Gas Pricing
  - NYMEX Prompt Month History
  - NYMEX Gas Futures
  - NYMEX Strip Prices
- Drilling Rig Counts
- Petroleum Pricing

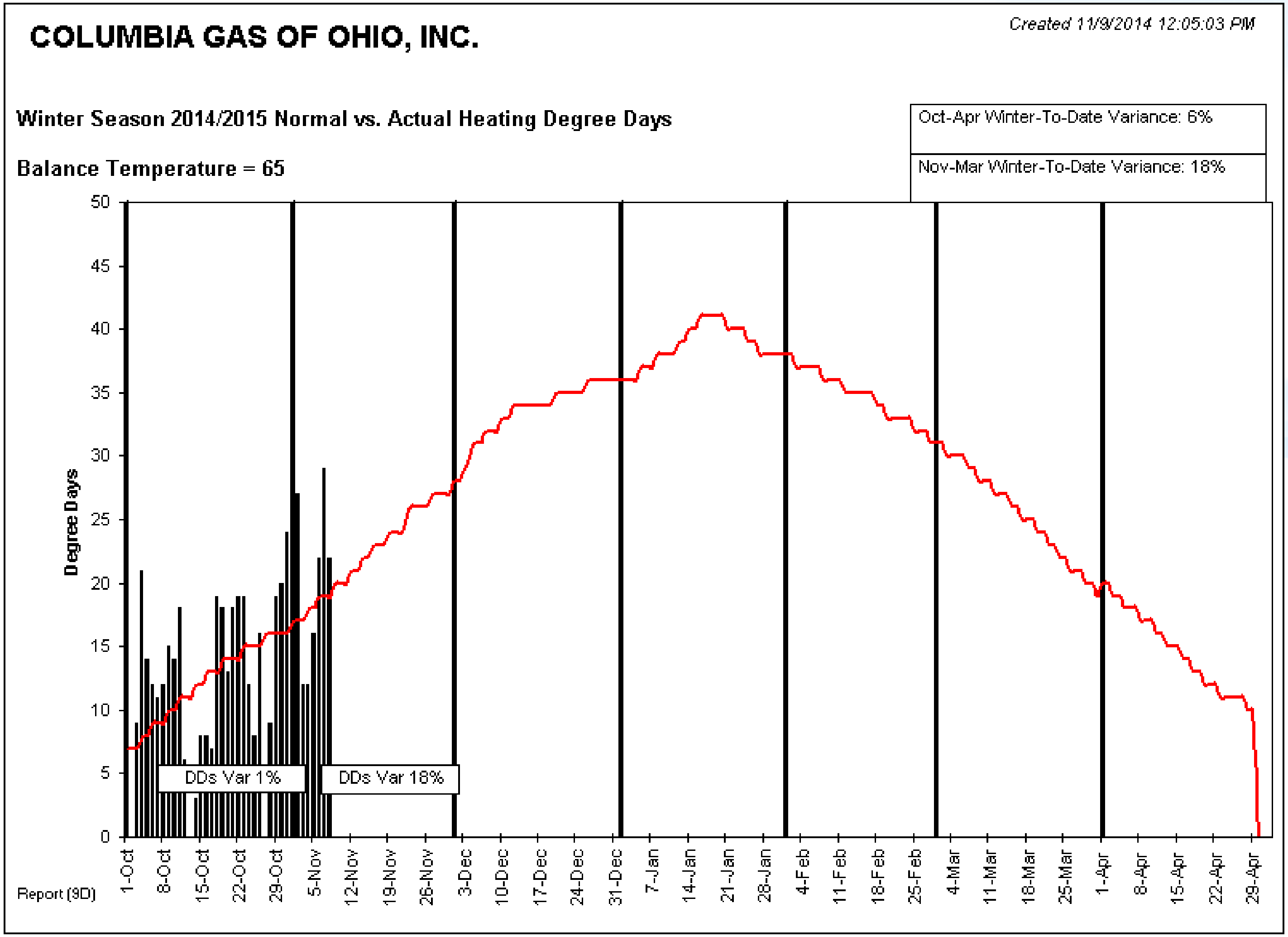
U.S. Temperatures – 26th Warmest September on Record



December, January, February 2014/15 Temperature Outlook

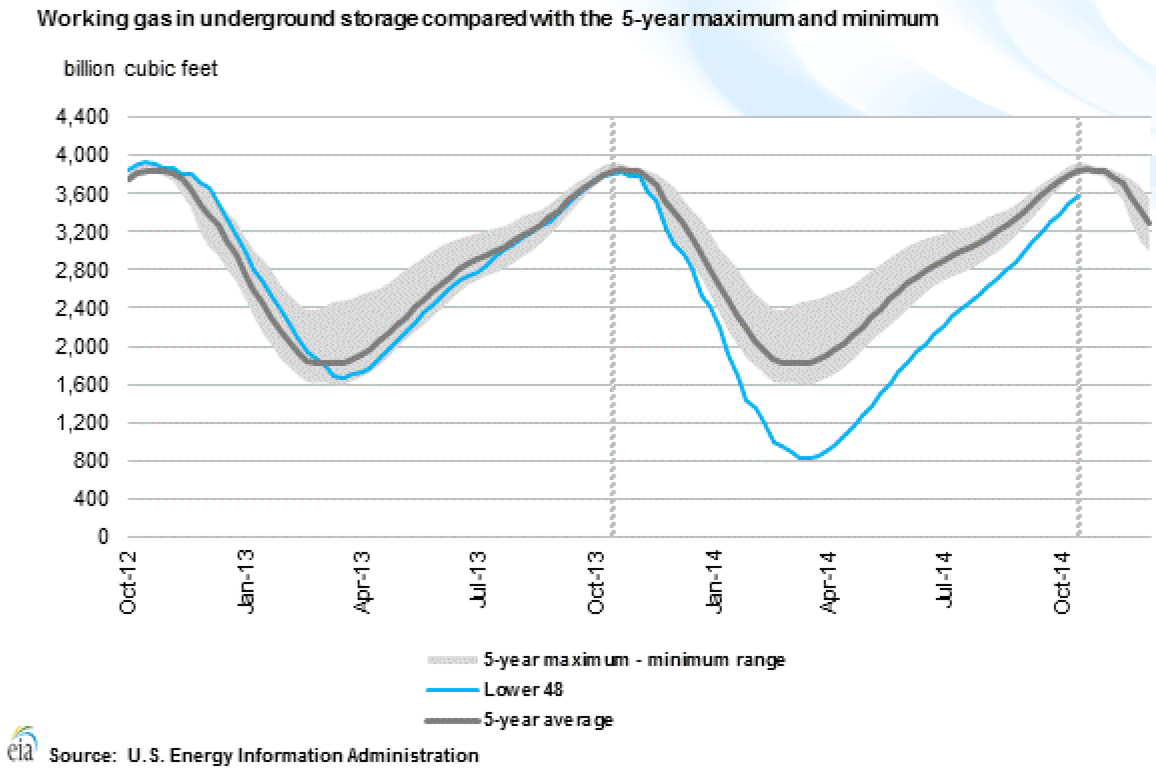


Ohio Degree Day Comparison

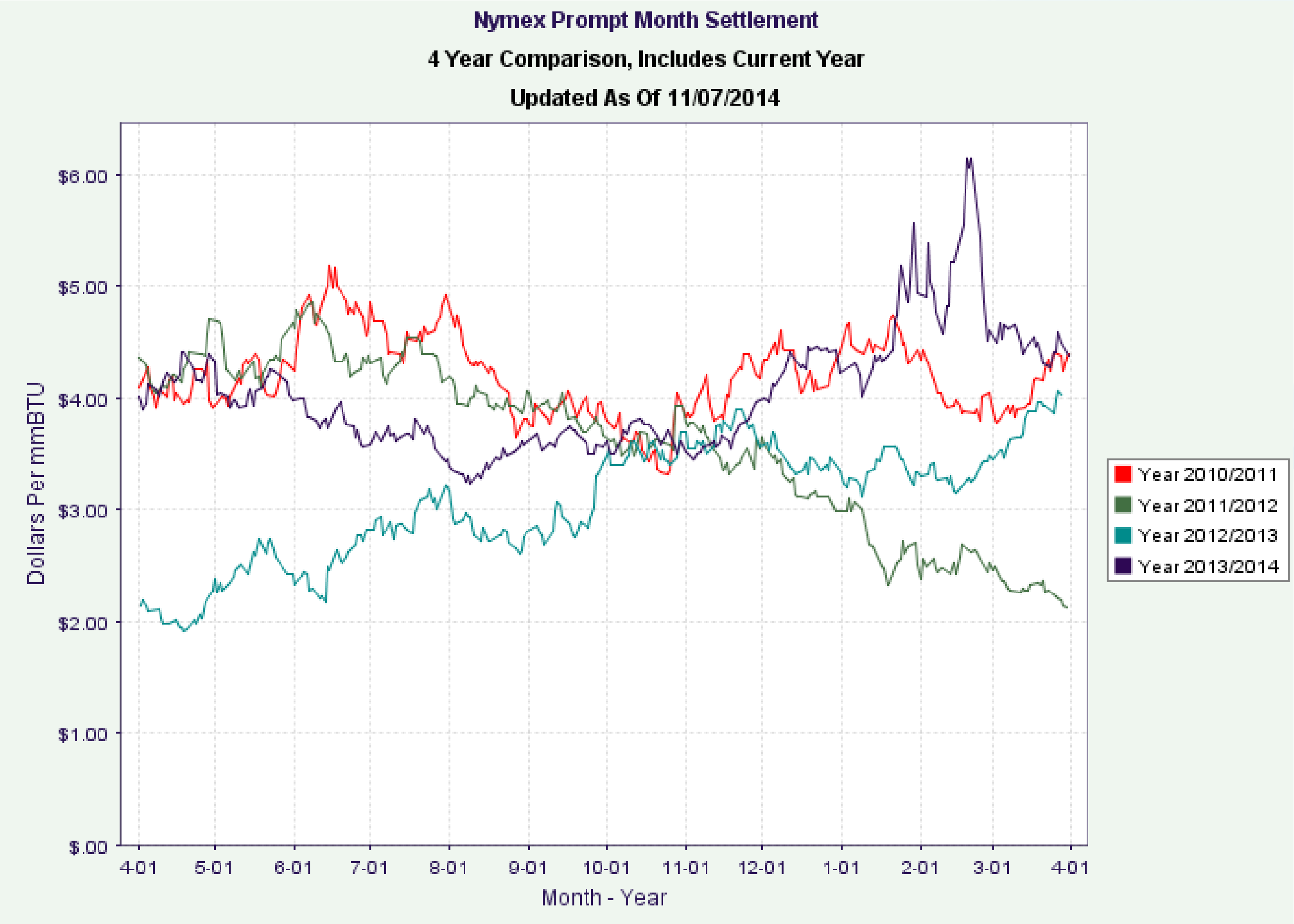


National Storage Summary

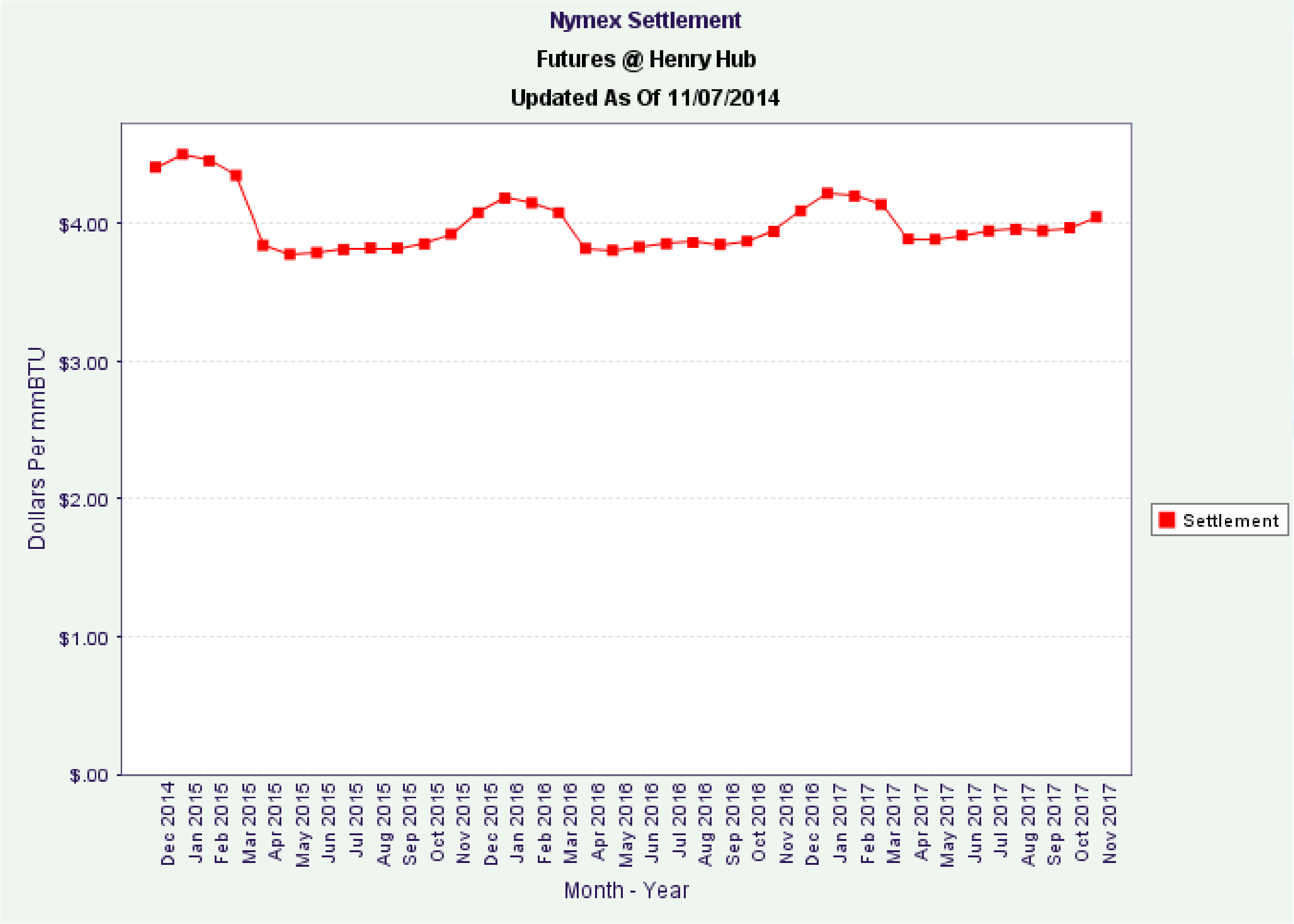
Summary
Working gas in storage was 3,571 Bcf as of Friday, October 31, 2014, according to EIA estimates. This represents a net increase of 91 Bcf from the previous week. Stocks were 238 Bcf less than last year at this time and 261 Bcf below the 5-year average of 3,832 Bcf. In the East Region, stocks were 107 Bcf below the 5-year average following net injections of 43 Bcf. Stocks in the Producing Region were 124 Bcf below the 5-year average of 1,241 Bcf after a net injection of 40 Bcf. Stocks in the West Region were 30 Bcf below the 5-year average after a net addition of 8 Bcf. At 3,571 Bcf, total working gas is below the 5-year historical range.



NYMEX Prompt Month Settlement



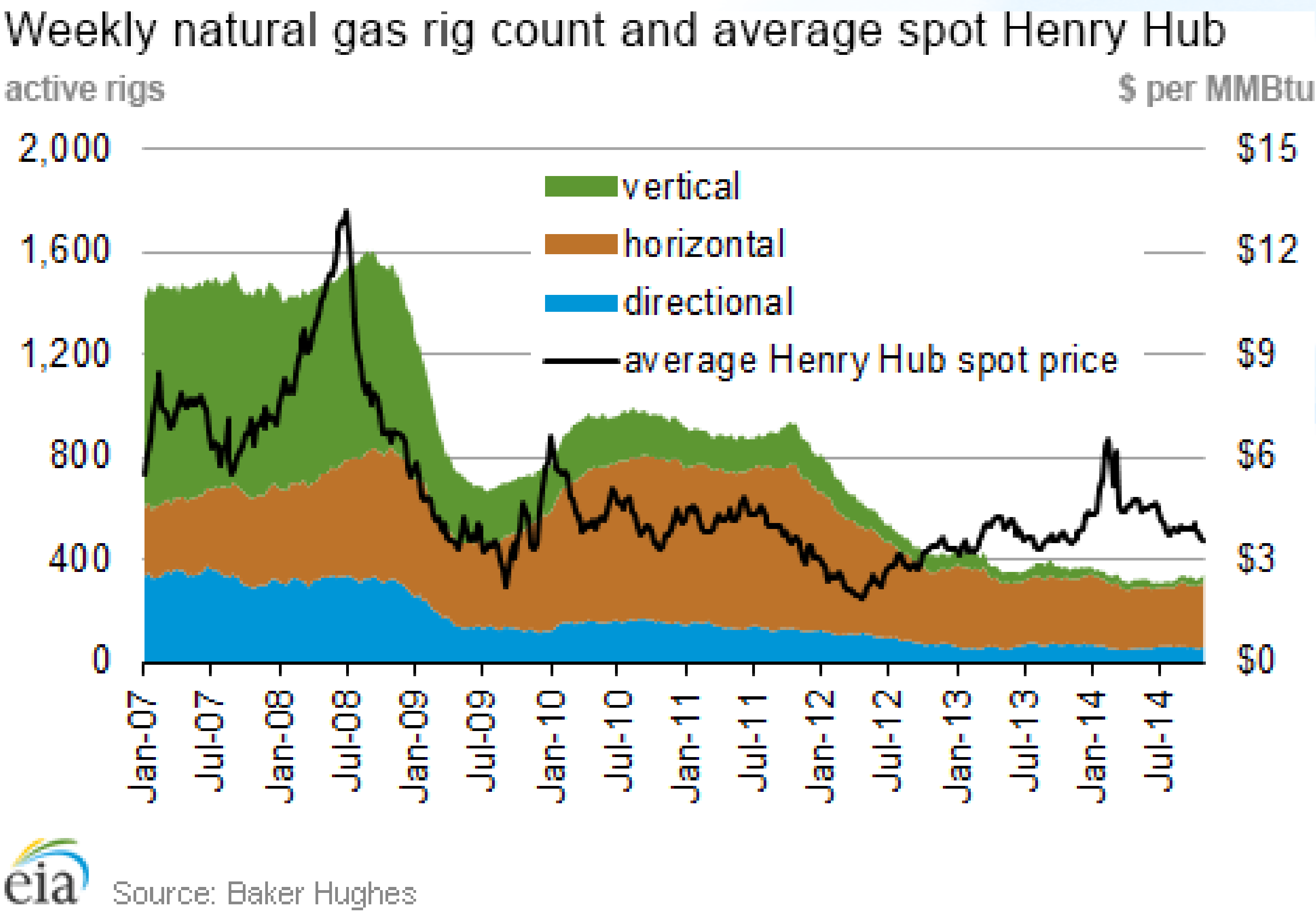
NYMEX Futures



NYMEX Strip Prices

3 Months	$4.45
6 Months	$4.23
12 Months	$4.03
18 Months	$3.98

Henry Hub
Natural Gas Rig Count/Average Spot



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	400	132	154	396	259	1,341	626	1,769	3,736
Mar	406	148	132	401	258	1,345	449	1,803	3,597
Apr	403	151	136	407	252	1,349	204	1,835	3,388
May	404	149	140	414	243	1,350	162	1,859	3,371
Jun	398	147	123	425	251	1,344	240	1,861	3,445
Jul	407	153	137	432	253	1,382	350	1,876	3,608
Aug	410	143	125	406	255	1,339	399	1,904	3,642
Sep	402	148	117	396	260	1,323	406	1,930	3,659
Oct	393	148	125	390	252	1,308	424	1,925	3,657
Nov									
Dec									
Avg.	402	145	133	407	254	1,341	376	1,853	3,570

Petroleum Pricing

- What happens if petroleum prices continue to fall?
- Is has occurred many times in the past
- Thank You