Energy Committee
September 18, 2014

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

Thursday, September 18, 2014
Thursday, November 13, 2014

OMA Energy Committee Meeting Sponsor:

OMA Energy Committee Agenda
September 18, 2014

Welcome and Introductions	Brad Belden of Belden Brick, Chair
Project Updates	
• **OMA Energy Guide**	Susanne Buckley, Scioto Energy
• **OMA Commissioned Research on Electricity Markets by CSU**	Andrew Thomas, J.D.
Member Spotlight	Ryan Swank, Anheuser-Busch InBev
• **Peer-to-peer energy cost savings**	
Energy Efficiency Report	
• **PJM Capacity Performance**	John Seryak, PE, GoSustainableEnergy
• **CHP / EE Workgroup**	
• **OMA member benefits**	
• **Utility programs**	
Counsel's Report	
• **Utility power purchase**	Kim Bojko, Carpenter Lipps & Leland
• **FES "polar vortex" pass-through charge s**	Rebecca Hussey, Carpenter Lipps & Leland
Guest Presentation	
• **Market "Reregulation"**	Lael Campbell, Constellation
Public Policy Report	Ryan Augsburger, OMA Staff
Lunch	
Natural Gas Report	Richard Ricks, NiSource

Meeting sponsored by:

THE OHIO MANUFACTURERS' ASSOCIATION

ENERGY GUIDE

LEADING THE WAY

THE OHIO MANUFACTURERS' ASSOCIATION (OMA) CREATED ENERGY GUIDE TO HELP MANUFACTURERS ACHIEVE COST SAVINGS IN ENERGY PURCHASING AND MANAGEMENT.

USE ENERGY GUIDE TO GET CUSTOMIZED ENERGY PRICING AND SMART MANAGEMENT STRATEGIES FOR YOUR FACILITY.

ANSWER THE 4 QUICK QUESTIONS BELOW TO START SAVING.

GET STARTED

CHARTING THE COURSE

Tell us a little about your facility so we can quickly provide you with a set of energy savings solutions.

1

Which of these is your local utility?

American Electric Power Duke DP&L FirstEnergy Other

2

What is the monthly average electricity consumption of your facility?

DOLLARS KWH

$1000$1000 $1000 - $2,999 $3,000 - $4,999 $5,000 - $6,999 $7,000 - $14,999 $15,000 - $39,999 $40,000 - $69,999 $70,000 - $99,999 $100,000+$100,000+
1,500,000 kWh+1,000,000 kWh+**3**

How many shifts are running most days?

1 2 3

4

Have you invested in the past two years, or do you plan to invest in the near future, in new equipment or productivity improvements?

SEE RESULTS

KEY DISCOVERIES

There are four keys to a comprehensive energy savings strategy. Not all companies need all four strategies. Combining the correct ones for your company will help you maximize efficiency and successfully manage your energy savings program.

View your basic analysis below and

DOWNLOAD YOUR SUMMARY

MEDIUM PRIORITY

PROCUREMENT

Electric generation accounts for 80% of your total bill – so shopping rates is essential. Do you know how to manage the ups and downs of the market?

MEDIUM PRIORITY

DEMAND RESPONSE

Responding to the demands of the transmission grid is an effective strategy to monetizing the operational flexibility of your facility.

MEDIUM PRIORITY

PLC MANAGEMENT

8,760 hours/year determine your energy price with a supplier, but just five hours during the summer set your capacity and transmission costs for an entire year – you can save money by managing this five-hour Peak Load Contribution.

MEDIUM PRIORITY

AUDITS & REBATES

A combination of state, federal and local programs can lead to reimbursement of up to 75% of a project cost. How are you monitoring and taking advantage of these programs?

GET CUSTOM ANALYSIS

NAVIGATING AHEAD

Your OMA Energy Guide is a trusted co-pilot who will qualify energy service providers, validate proposed offers, negotiate favorable contract terms and give you full transparency along the way.

IT ALL STARTS WITH A FREE, CUSTOMIZED NAVIGATION PACKAGE THAT INCLUDES:

- ☑ Competitive electricity offers from more than 30 suppliers to reduce rate charges
- ☑ Executable demand response offers from 10+ providers to benefit from managing consumption
- ☑ Custom Peak Load Contribution (PLC) notification analysis to reduce capacity costs
- ☑ On-site facility engineering review to identify potential productivity improvements

CONTACT

Get your company's custom navigation package by contacting an OMA Energy Guide today.

Cleveland State University
Maxine Goodman Levin College of Urban Affairs

Prepared for:
OHIO MANUFACTURERS' ASSOCIATION

Electricity Markets in Ohio

Prepared by:
Andrew R. Thomas, J.D.
Iryna Lendel, Ph.D.
Sunjoo Park, Ph.D.

Center for Economic Development and Energy Policy Center

July 2014

2121 Euclid Avenue | Cleveland, Ohio 44115
http://urban.csuohio.edu/economicdevelopment

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Columbus Brewery Update
September 10, 2014

Ryan Swank

Global Overview

Global Overview

North America	USA	113 048	47.2%
	Canada	9 068	40.1%
Mexico	Mexico[1]	38 185	58.4%
Latin America North	Brazil	113 148	Beer: 67.9% Soft Drinks: 18.4%
Latin America South	Argentina	24 160	Beer: 78.5% Soft Drinks: 21.1%

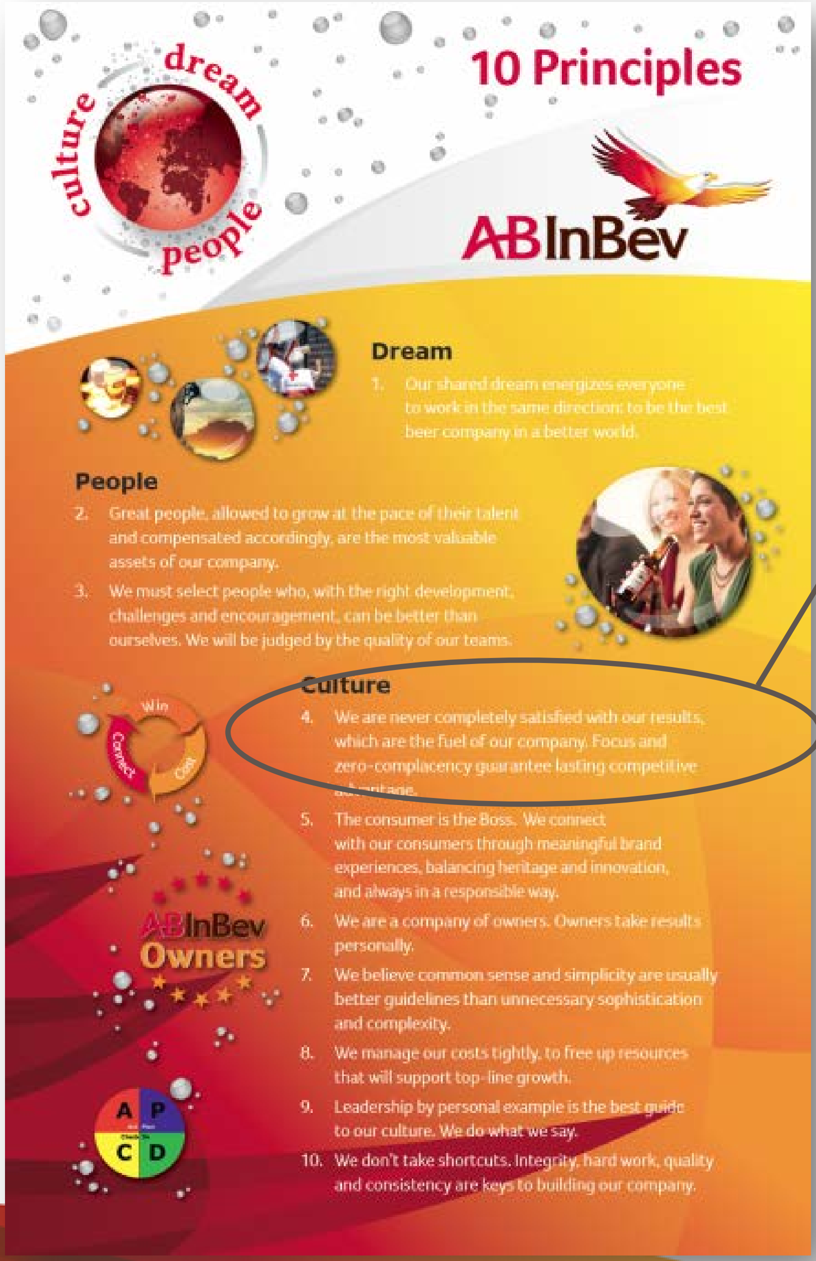
Global Overview

Europe	Belgium	4 931	56.0%
	Germany[2]	8 097	8.8%
	U.K.[3]	8 465	17.2%
	Russia[4]	11 675	15.1%
Asia Pacific	China[5]	65 523	14.1%

US Brewery Locations

Columbus Brewery Overview

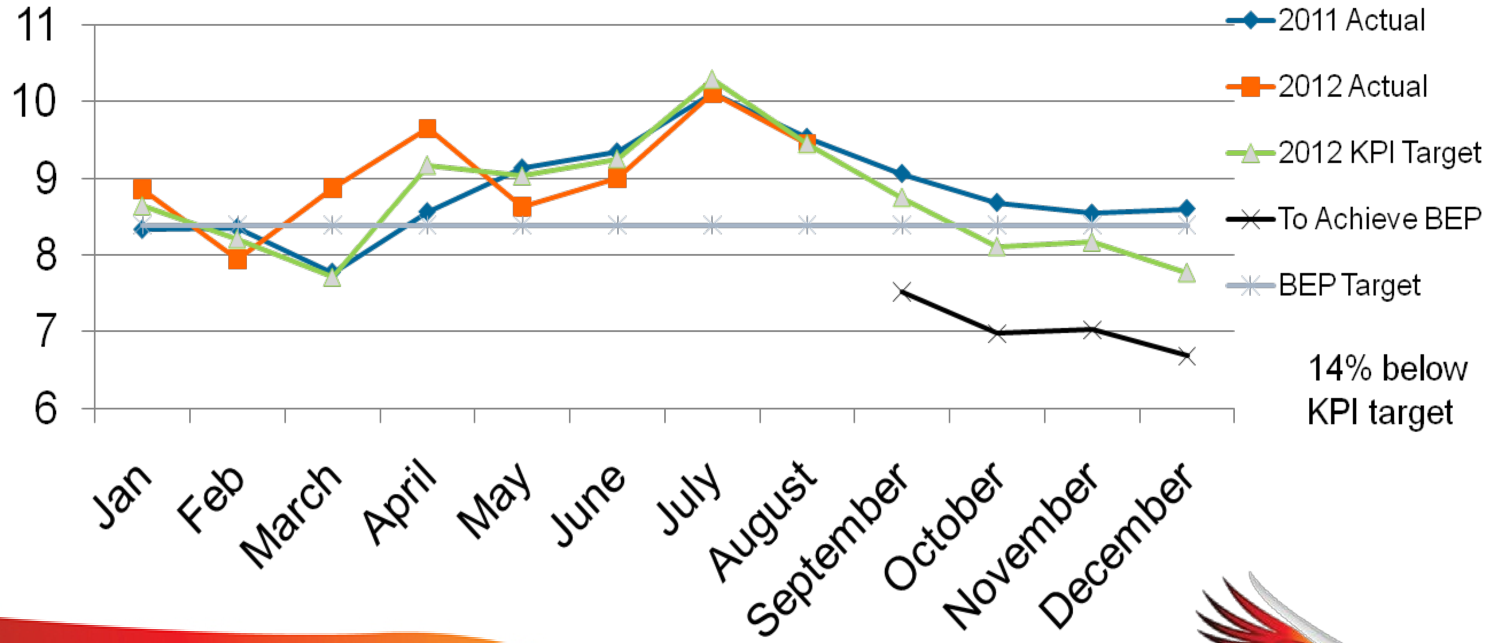
- Built in 1968
- Capability to produce 11MM BBL's/year
- 24 Brews/day
- 500,000 cases packaged/day
- 300 truck shipments/day
- 8 Packaging Lines
  - 4 bottle/3 can/1 draft
- Recycling Rate >99.7%
- Top 10 globally in water usage



- **Principle 4** ...We are never completely satisfied with our results, which are the fuel of our Company. Focus and zero complacency guarantee lasting competitive advantage.

Opportunity/Gap Identification

- Measuring the process through Key Performance Indicator's (KPI's)and gap recognition is key to improving
- Gap recognition lead to the formation of the Electrical ITF which then became our Energy Team



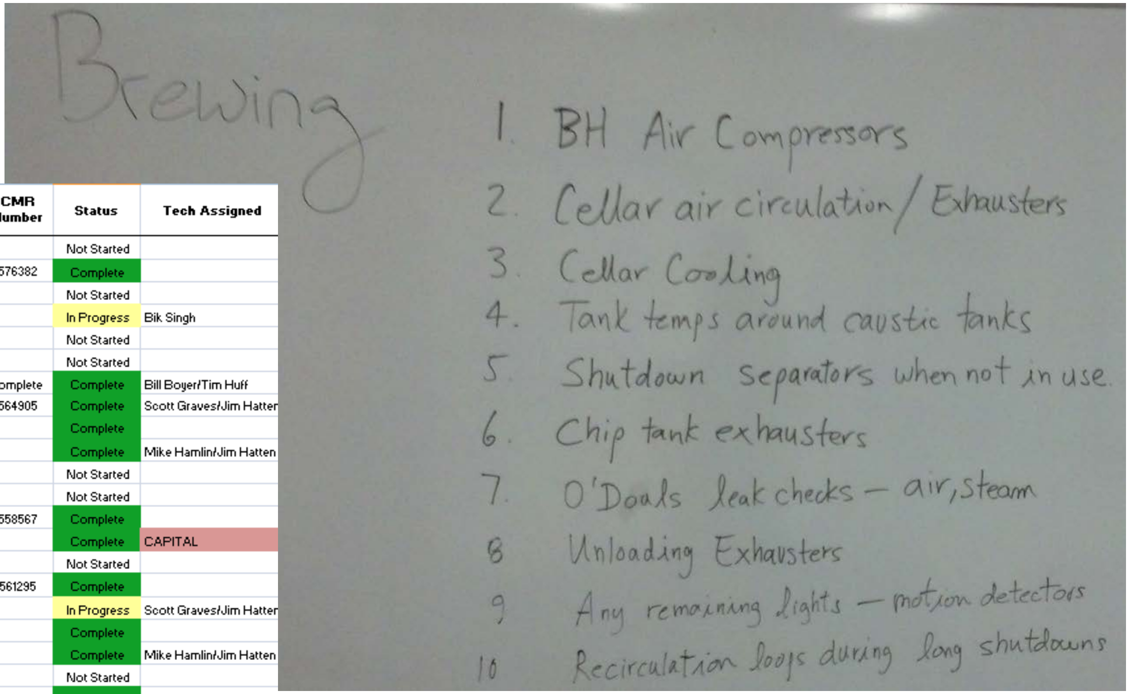
Energy Team

- Kevin Lee (Executive Sponsor), Aimee Ulstad (Energy Champion)

Task Force Member	Title
Ryan Swank	QA Manager
Bethany Halasz	Brewing Manager
Adam McEntire	Utility Manager
Lenair Robertson	Utility Operating Engineer
Roger Gorrell	Utility Electrician
Wayne Tignor	Brewing Electrician
Mark Stinson	Brewing Operator
David James	Brewing Manager
Bill Boyer	Packaging Electrician
Jarrod Wiggins	Packaging Manager

Opportunity/Gap Identification

- Brain-storming, observations, data collection and analysis completed by Energy Team



Department	Project Location	Unnecessary Energy Consumption	Cost of Unnecessary Usage	Work Order Number	CMR Number	Status	Tech Assigned
Operations	L25 Early Side	77,805.30	$4,357.10			Not Started	
Operations	L25 Pasteurizer to Labelers	102,998.74	$5,767.93		576382	Complete	
Operations	L25 Jetair Blower	37,683.86	$2,110.30			Not Started	
Operations	L25 Late Side	50,210.95	$2,811.81	75180577		In Progress	Bik Singh
Operations	L25 Labeler Blowers	39,844.92	$2,231.32			Not Started	
Operations	L25 BG & PR	24,489.20	$1,371.39	75180567		Not Started	
Operations	L25 Baler Conveyers	14,256.11	$798.34		Complete	Complete	Bill Boyer/Tim Huff
Operations	L45 Highline	39,575.02	$2,216.20	75181252	564905	Complete	Scott Graves/Jim Hatten
Operations	L45 Early Side	45,853.84	$2,567.81			Complete	
Operations	L45 Late Side	112,253.28	$6,286.18	35827852		Complete	Mike Hamlin/Jim Hatten
Operations	L45 Air Knife Blowers	16,277.08	$911.52			Not Started	
Operations	L45 Palletizers	11,440.04	$640.64	75181253		Not Started	
Operations	L45 Baler Conveyers	3,203.14	$179.38		558567	Complete	
Operations	L45 CO2 Exhauster	50,657.91	$2,836.84			Complete	CAPITAL
Operations	L45 Air Conveyer	36,593.16	$2,049.22			Not Started	
Operations	L55 Filtec Blowers	113,061.24	$6,331.43		561295	Complete	
Operations	L55 Highline	39,156.43	$2,192.76	75180816		In Progress	Scott Graves/Jim Hatten
Operations	L55 Early Side	47,280.83	$2,647.73			Complete	
Operations	L55 Late Side	22,995.38	$1,287.74			Complete	Mike Hamlin/Jim Hatten
Operations	L55 Palletizers	9,213.38	$515.95	75181254		Not Started	
Operations	L55 Baler Conveyers	4,139.22	$231.80		558567	Complete	
Operations	L55 CO2 Exhauster	40,225.66	$2,252.64			Complete	CAPITAL
Operations	L55 Air Conveyer	31,920.71	$1,787.56			Not Started	
Operations	L55 Pasteurizer Blowers	17,523.50	$981.32			Not Started	
Operations	L45/55 Lid Sleeve System	17,223.04	$964.49			Not Started	
Operations	L65 Highline	54,196.42	$3,035.00	75180575		Not Started	
Operations	L65 Lid Sleeve System	61,214.32	$3,428.00	75180566		Not Started	CAPITAL
Operations	L65 Early Side	36,661.74	$2,053.06			Complete	
Operations	L65 Late Side	145,249.04	$8,133.95	75180719		Complete	
Operations	L65 Palletizers	9,979.73	$558.86	75181255		Not Started	
Operations	L65 Air Knife Blower	60,279.21	$3,375.64		Complete 11/6	Complete	
Operations	L65 CO2 Exhauster	62,920.82	$3,523.57			Complete	CAPITAL
Operations	L65 Air Conveyer	46,411.26	$2,599.03			Not Started	

Opportunity/Gap Identification

- Action Items created and prioritized

ACTION LOG

Menu

TARGET: Purchased Elec (kWh/hL) FROM 8.92 TO 8.39 BY 12/31/2012

Follow Up Status (Review at appropriate frequency) | Results Check | Standardization Log

Attendees:

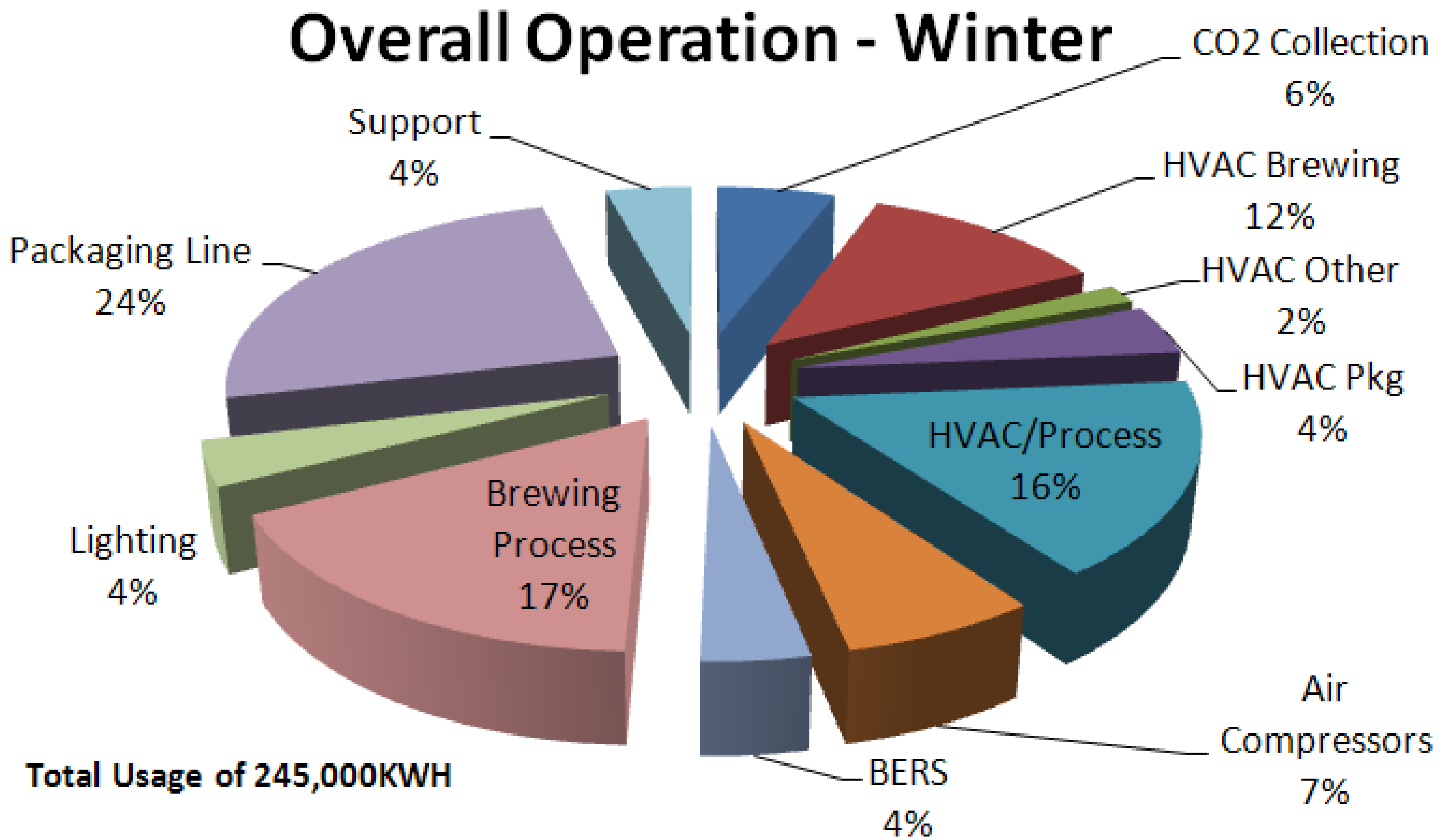
Distribution:

#	Priority	Topic (Root Cause)	Action (What)	Comments (How)	Accoutability (Who)	Begin Date (PLANNED)	End Date (PLANNED)	Begin Date (ACTUAL)	End Date (ACTUAL)	Status
72		Utilities - Unnecessary Usage	SIC chart for keg room	Check periodically for frost	Lenair Robertson	4-Oct-12	11-Oct-12			COMPLETE
77		Brewing - Unnecessary Usage	Taste Room HVAC	Investigate set back tstat	Bethany Halasz	1-Nov-12	29-Nov-12			TO BE STARTED
78		Brewing - Unnecessary Usage	5t Fl Conf Rm HVAC	Shutdown	Bethany Halasz	1-Nov-12	29-Nov-12			TO BE STARTED
79		Brewing - Lighting	Document old lighting to be converted		Mark Stinson	1-Nov-12	15-Nov-12			COMPLETE
80		Brewing - Unnecessary Usage	NS Chip Kitchen Exhaust Fan	Shutdown. Still looking for disconnect	Wayne Tignor	1-Nov-12	8-Nov-12			TO BE STARTED
82		Brewing - Unnecessary Usage	OS Chip Kitchen Exhaust Fan	Shutdown. Still looking for disconnect	Wayne Tignor	1-Nov-12	8-Nov-12			TO BE STARTED
83		BPS - Unnecessary Usage	Program L75 bulk glass and pallet return conveyors based on time		Bethany Halasz					TO BE STARTED
84		Brewing - Lighting	MCC Rooms with no switches	Determine location of panel shut off for MCC room lights	Wayne Tignor					TO BE STARTED
85		BPS - Lighting	L75 Lighting Shutdown SOP		Aimee Ulstad					COMPLETE
86		BPS - Lighting	L85 Lighting Shutdown SOP		Aimee Ulstad					COMPLETE
87		BPS - Lighting	L45 Lighting Shutdown SOP	Lighting switches found. Tom Ervin working on.	Aimee Ulstad					COMPLETE
88		BPS - Lighting	L55 Lighting Shutdown SOP		Aimee Ulstad					COMPLETE
89		BPS - Lighting	L65 Lighting Shutdown SOP		Aimee Ulstad					COMPLETE
91		Utilities	VPO tool to bring visibility to raising NH3 suction pressure	Need OPL on system	Lenair Robertson	8-Nov-12				COMPLETE
92		Brewing - Unnecessary Usage	Alpha cellar exhausters	Scope out	Mark Stinson	8-Nov-12				COMPLETE
94		Brewing - Compressed Air	Follow up on Wos for BH air leaks		Bethany Halasz	8-Nov-12				COMPLETE
95		CEI Program	High level process flow							COMPLETE
96		CEI Program	High level facility diagram, including square footages for process, warehouse, offic							COMPLETE
97		CEI Program	Motor Inventory – including location, hp, etc.							COMPLETE
98		CEI Program	Description of any internal electrical energy meters and data collected							COMPLETE
99		CEI Program	Scheduling information							COMPLETE
100		CEI Program	Production data and daily electrical consumption							COMPLETE
101		Brewing - Unnecessary Usage	Determine if BH glycol pump can be put on VFD		Aimee Ulstad					
102		Brewing - Unnecessary Usage	Check if SH4 glycol pump is on VFD and scope out if not		Roger Gorrell					
103										

3.0 | Department_Usage | Brewing_Usage | BP_S_Usage | PH_Usage | Fishbone | Cause Priority Matrix | 5.0 | **Action Log** | Action Log Evolution | Action Log Completion | 6.0 | Results

Opportunity/Gap Identification

- Breakdown of usage by process

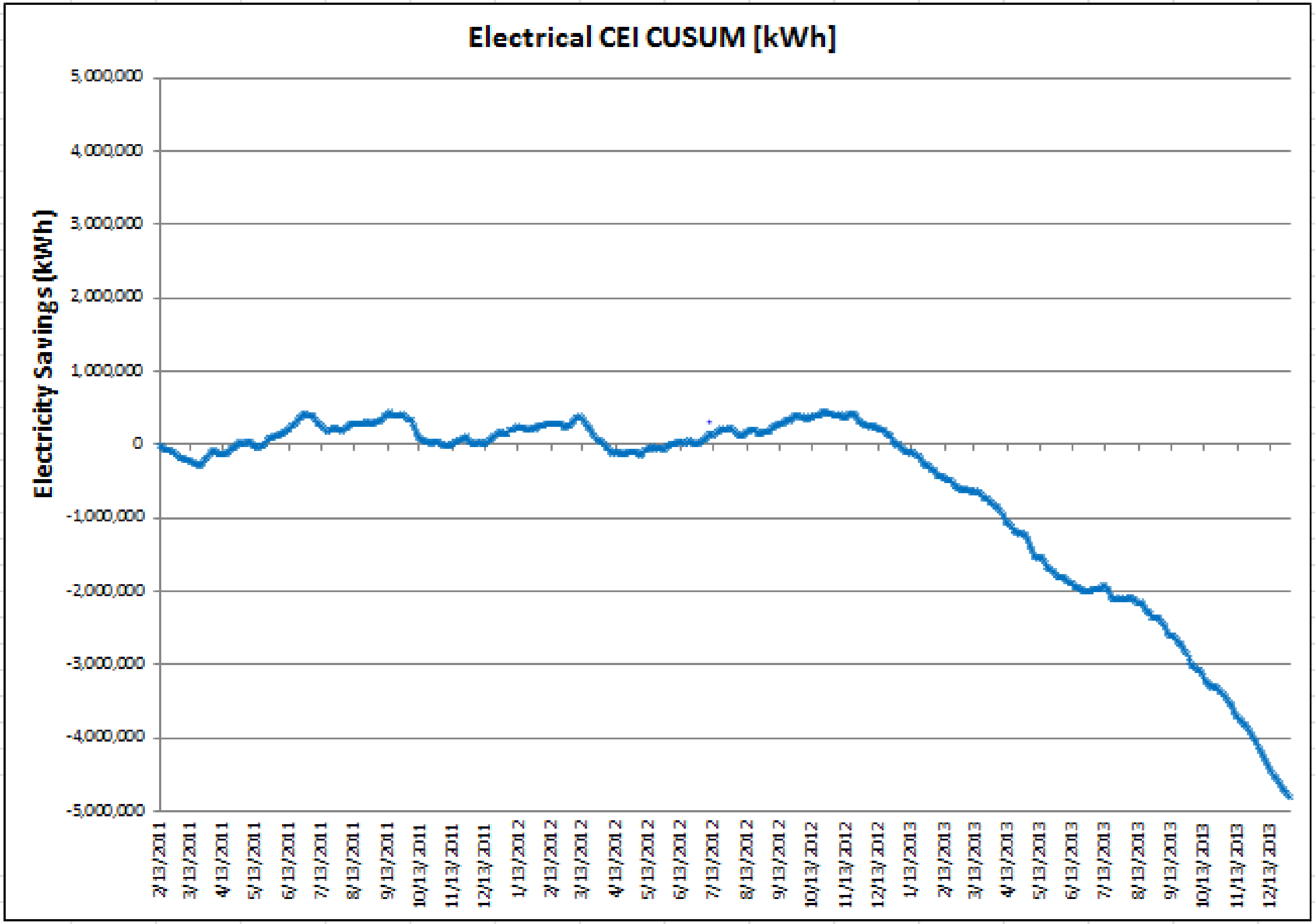


Operational Transition

Key Action Items

- Conveyer Modulations
- Pasteurizer Controls
- Lighting
- VFD's on Supply Fans
- Yeast Separators

CEI CUSUM 2011-2013



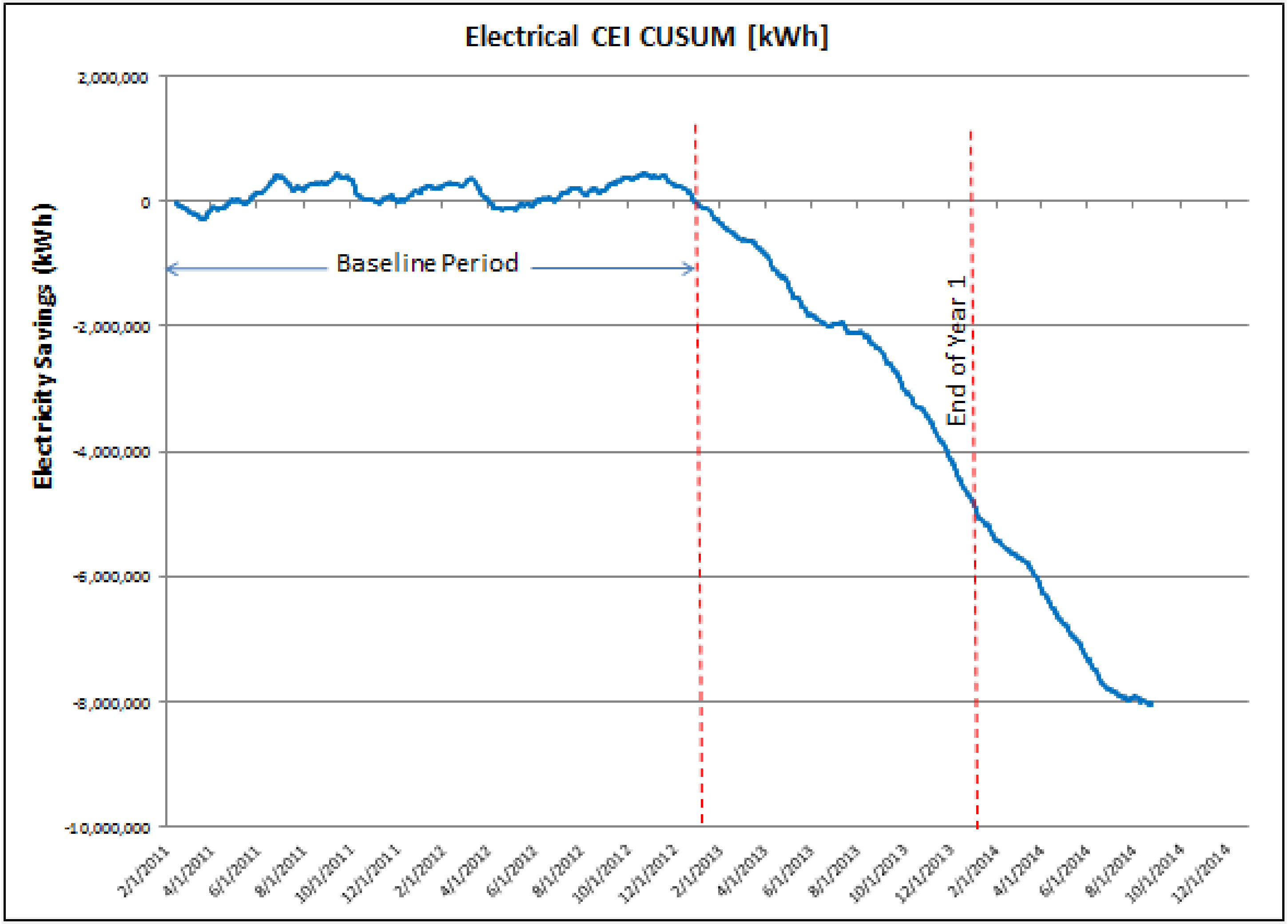
2013 Results

- Operational Transition Results

Customer CUSUM Savings		
Start of measurement period	1/1/2013	
End of measurement period	12/31/2013	
Measurement period	365	days
Sum of predicted energy during measurement period	96,314,696	kWh
Sum of actual energy during measurement period	91,326,071	kWh
Total energy savings during measurement period	4,988,625	kWh
Percentage change	5%	
Capital Project Savings	179,659	kWh
Total CEI Incentivized Savings	4,808,966	kWh
Total Incentive	$96,179.31	


AEP OHIO
Date April 21, 2014
Anheuser - Busch
$96,179.31
Ninety-six thousand one hundred seventy-nine and 31/100 Dollars
MEMO AEP OHIO CEI PROGRAM

Year 2 CEI CUSUM



2014 Progress

Customer CUSUM Savings for Year 2		
Start of measurement period	1/1/2014	
End of measurement period	8/25/2014	
Measurement period	237	days
Sum of predicted energy during measurement period	63,890,359	kWh
Sum of actual energy during measurement period	60,648,924	kWh
Total CEI energy savings during measurement period	3,241,435	kWh
CEI percentage change	5.1%	
	$64,828.70	
Capital project savings during measurement period	1,115,556	kWh
Total energy savings during measurement period	4,356,991	kWh
Total percentage change	6.7%	

Sustainability

- Employee Process Indicators - Ensures gains of 2013 are sustained
- Updating SOP's to standardize
- GOP to be amended or improved
- Creation and sharing of Best Practices with NA Zone and beyond

QUESTIONS?

go sustainable energy™

Go Sustainable Energy, LLC

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

MEMORANDUM

Date: September 17, 2014

To: Ohio Manufacturer's Association – Energy Committee

From: John Seryak, PE (Go Sustainable Energy)

RE: Energy Committee 9.18.14 Meeting - Energy Efficiency Report

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Member Services

- Technical assistance – We've helped ~10 manufacturers this year, some on multiple projects. Please continue to contact OMA to assist with your efficiency project, whether it is a need for technical advice, rebate application assistance, or working with your utility.
  - Contact John for assistance or more information – jseryak@gosustainableenergy.com.
- Free CHP screening – Contact John. See attachment.
- Please consider attending the upcoming Energy Efficiency/CHP Workgroups
  - May - Industrial insulation, July – Compressed Air, September – Fans & Dust Collection
  - 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/

Utility Program Update

- AEP
  - AEP expected to extend energy-efficiency programs through 2016. SB 310 rules would not take effect for AEP customers until 2017.
  - Expanding Continuous Energy Improvement (CEI) program to mid-sized manufacturers. CEI incents low-cost/no-cost efficiency improvements.
  - Rider increase from 0.267¢/kWh to 0.33¢/kWh
    - If you'd like to self-direct exempt from rider, or get custom programs at a lower cost, contact John - jseryak@gosustainableenergy.com
- Duke

- Filed to continue efficiency programs
- Alert – Duke offering arbitrary, and low, custom incentives without justification.
  - Recommendation – evaluate self-direct exemption and 3rd party PJM provider if you are in Duke territory. Learn how - jseryak@gosustainableenergy.com

- DP&L
  - 150% Enhanced Rebates for HVAC projects applied for October-December, 2014.
- FirstEnergy
  - When applying for FirstEnergy efficiency programs on their new website, use administrator code 50941 in order for OMA to receive credit from FirstEnergy without reducing your rebate.
    - http://energysaveoh-business.com/
- Self-directed manufacturers; manufacturers without programs
  - Maximize PJM revenue by selling capacity to 3rd party
    - We've done it, it was easy.
    - Utilities only monetizing half of PJM revenue
  - Manage rider spikes
  - Avoid utility profit mark-ups on efficiency programs
  - Still like efficiency programs? Do it at lower cost. Learn more - jseryak@gosustainableenergy.com

PJM News

- $9 billion extra /year
  - PJM's Independent Market Monitor studied the effects of removing demand response and energy-efficiency from the 2017/18 base residual auction
    - Reliability unchanged, actually there are lower reserves
    - Costs increased from $7 billion to $16 billion
    - An extra **$9 billion!!!**

Table 1 Summary of sensitivity results: 2017/2018 RPM Base Residual Auction

Scenario	Scenario Description	RPM Revenue ($ per Delivery Year)	Difference from Actual Results RPM Revenue ($ per Delivery Year)	Difference from Actual Results Percentage
0	Actual Results	$7,512,229,630	NA	NA
1	Annual Resources Only	$9,738,222,922	$2,225,993,292	29.6%
2	No Offers for DR or EE (Generation Resources Only)	$16,859,658,203	$9,347,428,573	124.4%
3	No Short-Term Resource Procurement Target Reduction	$9,947,329,539	$2,435,099,909	32.4%
4	No Short-Term Resource Procurement Target Reduction and Annual Resources Only	$10,932,522,889	$3,420,293,259	45.5%
5	No Short-Term Resource Procurement Target Reduction and No Offers for DR or EE (Generation Resources Only)	$23,870,404,571	$16,358,174,941	217.8%

Table 2 includes a summary of the results of the sensitivity analyses associated with the removal of defined demand side products. The first column shows the cleared MW in UCAP. The second column shows the cleared MW in ICAP. The third column shows the level of reserves cleared in excess of the Installed Reserve Margin (IRM), which is PJM's target level of reserves.

Table 2 Reserves cleared in excess of IRM with peak load forecast reduced by Short-Term Resource Procurement Target: 2017/2018 RPM Base Residual Auction

Scenario	Scenario Description	Cleared MW (UCAP)	Cleared MW (ICAP)	Reserves Cleared in Excess of IRM
0	Actual Results	167,003.7	177,004.5	4.4%
1	Annual Resources Only	166,237.1	176,191.9	3.8%
2	No Offers for DR or EE (Generation Resources Only)	163,713.2	173,516.9	2.0%

- PJM proposing changes to capacity market in response to Polar Vortex (see presentation)

Go Sustainable Energy, LLC

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MEMORANDUM

Date: September 16, 2014

To: Company

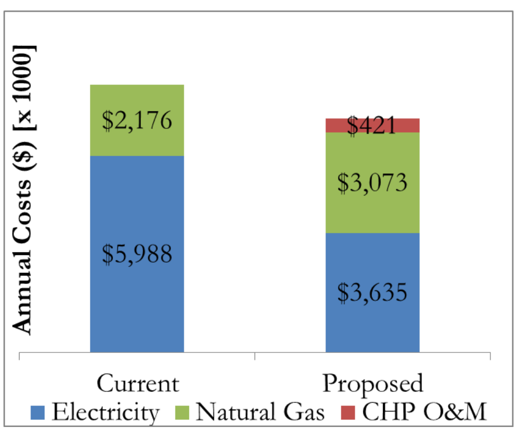
From: Abdul Qayyum Mohammed, Kevin Fisher & John Seryak (Go Sustainable Energy)

RE: Combined Heat and Power (CHP) Screening Analysis and Results

Go Sustainable Energy conducted a CHP screening analysis for the members of Ohio Manufacturers' Association (OMA) through the Energy Efficiency/CHP workgroup program. This memo briefly describes the technology and summarizes the results from the screening analysis for your facility. It also presents the calculations used in the screening analysis and the information submitted for this analysis.

A CHP system uses available fuel, such as natural gas, to generate heat. This heat is then converted to electrical energy similar to a conventional power plant. The excess heat, which is typically rejected in conventional power plant, is used for manufacturing and other processes that require heat. This increases the overall efficiency of the system compared to a conventional power plant. CHP systems can have overall efficiencies as high as 75% compared to net efficiencies of about 33%[1] for conventional power plants. This increased efficiency makes CHP a good option for facilities that have a demand for both electricity and heat. Additionally it can improve reliability of power supply to the facility for its critical pieces of equipment.

Summary: Based on the screening analysis performed on the provided information, we believe that a CHP system would be a good option for your facility, and warrants an investment grade study. Table 1 below summarizes the results of the screening analysis.



Summary		
Term	**Value**	**Units**
Net Cost Savings from CHP	[redacted]	/year
Net CO_2 Savings	[redacted]	lbs-CO_2/year
Capital Cost	[redacted]	-
Simple Payback without Rebate	8.5	years
Maximum Rebate Potential	[redacted]	-
Simple Payback with Rebate	5.2	years

Table 1: Summary of Results

[1] Includes transmission and distribution losses of about 7%

Go Sustainable Energy, LLC

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

Recommendation: We recommend further investigating the economics of CHP at your facility. While this screening shows good potential for CHP at your facility, an investment grade analysis is warranted given the multi-million dollar investment. An investment grade analysis would analyze the thermal and electrical loads for your facility by shift, if not by hour, as well as the impact of gas contracting, standby rates, utility incentives, and power-purchase agreements on the overall project economics.

Go Sustainable Energy can provide you with names and contacts of several CHP developers, and potentially solicit funding from the Midwest CHP Technical Assistance Partnership for an investment grade evaluation.

Estimating Energy and Cost Savings:

Table 2 below presents the facility information that was derived from the submitted information.

Facility Information		
Electrical Energy Consumption Information		
Term	**Value**	**Units**
Annual Consumption (AEc)	[redacted]	kWh/year
Average Monthly Demand (Pavg)	[redacted]	kW
Highest Monthly Peak Demand (Pmax)	[redacted]	kW
Lowest Monthly Peak Demand (Pmin)	[redacted]	kW
Natural Gas Consumption Informatio	[redacted]	
Term	[redacted]	**Units**
Annual Gas Consumption (AGc)	[redacted]	mmBtu/year
Max Monthly Gas Use (Gmax)	[redacted]	mmBtu/month
Min Monthly Gas Use (Gmin)	[redacted]	mmBtu/month
Annual Process Heat Runtime	[redacted]	hours/year
Avg. Combustion Efficiency (%HE)	[redacted]	-
Average Process Load (Qload) = Gmin / (8,760 hrs/yr / 12 mo/yr)	[redacted]	mmBtu/hour
Facility Energy Prices	[redacted]	
Term	[redacted]	**Units**
Average Natural Gas Price (CNG)	[redacted]	/mmBtu
Average Electricity Cost (CElec)	[redacted]	/kWh
Avoided Electric Rate (%Aviod)	[redacted]	-
Maximum Rebate Incentive (Rbt-max)	[redacted]	/kWh
Other Facility Information	[redacted]	
Term	[redacted]	**Units**
Downtime	[redacted]	hours/year
Cost of Downtime	[redacted]	/hour
Carbon Energy Intensity	[redacted]	
Term	[redacted]	**Units**
Carbon Intensity Electric (CIE)	[redacted]	lbs-CO_2/kWh
Carbon Intensity Natural Gas (CIG)	[redacted]	lbs-CO_2/mmBtu

Table 2: Facility Information[2]

[2] Average Electricity Cost (CElec) updated on 7/15/14 to reflect increase in capacity prices. New average cost was provided by plant personnel.

The CHP system was then sized based on the facility's information. Details for different CHP systems were obtained from generic manufacturer data. According to the submitted information the facility has consistent load throughout the week which helps in maximizing the runtime for the CHP system. This CHP system data along with the generation and consumption of the CHP system are presented below in Table 3.

CHP System Details		
Term	**Value**	**Units**
CHP System Operating Capacity (Pchp)	[redacted]	MW
CHP Maintenance time (Tmaint)	[redacted]	hours/year
Electrical Efficiency of CHP System (%Elec)	[redacted]	-
Thermal Efficiency of CHP System (%Ther)	[redacted]	-
Overall Efficiency of CHP System	[redacted]	-
O&M Costs for CHP (OMchp)	[redacted]	/kWh
Install Cost with Aux Burner (Cost)	[redacted]	/kW
CHP Operation	[redacted]	
Term	[redacted]	**Units**
Annual Elec Generation (Egen) = Pchp x 1000 kW/MW x (8,760 hrs/yr - Tmaint)	[redacted]	kWh/year
Heat Output (Qout/hr)= [(Pchp x 3.412 mmBtu/MW)/(%Elec)] x %Ther	[redacted]	mmBtu/hour
Annual Heating Output (Qout/yr) = Qout/hr x (8,760 hrs/yr - Tmaint)	[redacted]	mmBtu/year
Annual Natural Gas Input (Qin/yr) = Qout/yr / %Ther	[redacted]	mmBtu/year
Percentage of Electrical Energy Provided by CHP = Egen / AEc	[redacted]	-
Precentage of Min Demand Suppied by CHP = Pchp x 1000 kW/MW / Pmin	[redacted]	-
Percentage of Process Heat Supplied by CHP = Qout/hr / Qload	[redacted]	-

Table 3: CHP System Details and Operation

The CHP system uses natural gas and generates both heat and power for the facility. All generation from the CHP system is savings for the facility and the fuel used by the CHP system is an added cost. In addition the CHP system also has an operation and maintenance cost. Table 4 below presents all these pieces of information along with the net savings. It also presents the economics for the system with the generic cost data, with and without rebates.

Energy and Cost Savings Calculations		
Term	**Value**	**Units**
Annual Electrical Energy Savings (AEsav) = Egen	[redacted]	kWh/year
Annual Electrical Cost Savings (AECsav) = AEsav x CE x %Avoid	[redacted]	/year
Annual Natural Gas offset by CHP (ANGoffset) = Qout/yr / %HE	[redacted]	mmBtu/year
Annual Nat Gas Use for CHP (ANGuse-chp) = Qin/yr	[redacted]	mmBtu/year
Net Natural Gas Savings (NGsav) = ANGoffset - ANGuse-chp	[redacted]	mmBtu/year
Net Natural Gas Cost Savings (NGCsav) = NGsav x CNG	[redacted]	/year
Added O&M Costs for CHP (COchp) = Egen x OMchp	[redacted]	/year
Net Cost Savings from CHP (NCS) = AECsav + NGCsav - COchp	[redacted]	/year
Net CO_2 Savings = AEsav x CIE + NGsav x CIG	[redacted]	lbs-CO_2/year
Implementation and Simple Payback	[redacted]	
Term	[redacted]	**Units**
Capital Costs (Capital) = Pchp x 1000 kW/MW x Cost	[redacted]	-
Simple Payback without Rebate (SPhigh) = Capital / NCS	[redacted]	years
Maximum Rebate (MR) = Rbt-max x AEsav	[redacted]	-
Simple Payback with Max Rebate (SPlow) = (Capital - MR) / NCS	[redacted]	years

Table 4: Savings and Economics

It should be noted that this is a simplified screening analysis and does not include all nuances. For example, there may be additional incentives available; installation of the CHP system may result in an electric rate change for the facility etc.

Tables 5 through 7 present the information that was submitted your facility personnel for this analysis.

	Electricity					Natural Gas		
Month	**Energy Use (kWh/mo)**	**Demand (kW)**	**Cost ($)**	**Avg. ($/kWh)**	**Electric Load Factor**	**Energy Use (mmBtu/mo)**	**Cost ($)**	**Avg. ($/mmBtu)**
Jan	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Feb	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Mar	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Apr	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
May	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Jun	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Jul	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Aug	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Sep	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Oct	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Nov	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Dec	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Avg.	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Table 5: Electricity and Natural Gas Use and Costs

% Load Information	Natural Gas			Electricity		
	Shift 1	Shift 2	Shift 3	Shift 1	Shift 2	Shift 3
Weekdays	[redacted]					
Saturday						
Sunday						

Table 6: Approximate Electric and Gas Loads by Shift

Misc Information	
Company Name	[redacted]
Address	
Contact	
Email	
Primary Heating Method	
Electric Utility Company	
Electric Tariff	
About how many hours of power outages have you had per year, on average for the last 5 years? (hours/year)	
Cost of downtime ($/hour)	
Do you have critical equipment in the plant?	
Does your site have year round cooling?	
What is your average summer cooling load? (tons)	
What is your average winter cooling load? (tons)	
Does your company have carbon reduction goals?	
If your site considered CHP, your company would prefer to:	

Table 7: Other Company Information

The Ohio Manufacturers' Association

OMA Energy Resources Committee

PJM Problem Statement on Capacity Performance Definition

September 18th, 2014

Outline

- The Problem during the Polar Vortex
  - Least-cost and highest-cost energy
- Contributing factors
  - Cold Weather
  - Power plant outages
  - Lack of winter-specific demand response (DR)
- PJM Solution
  - Capacity Performance product
  - Cost impact to manufacturers
- Least cost capacity
  - Consumer-based resources
  - DR and energy-efficiency impact on capacity prices
  - CHP - common sense

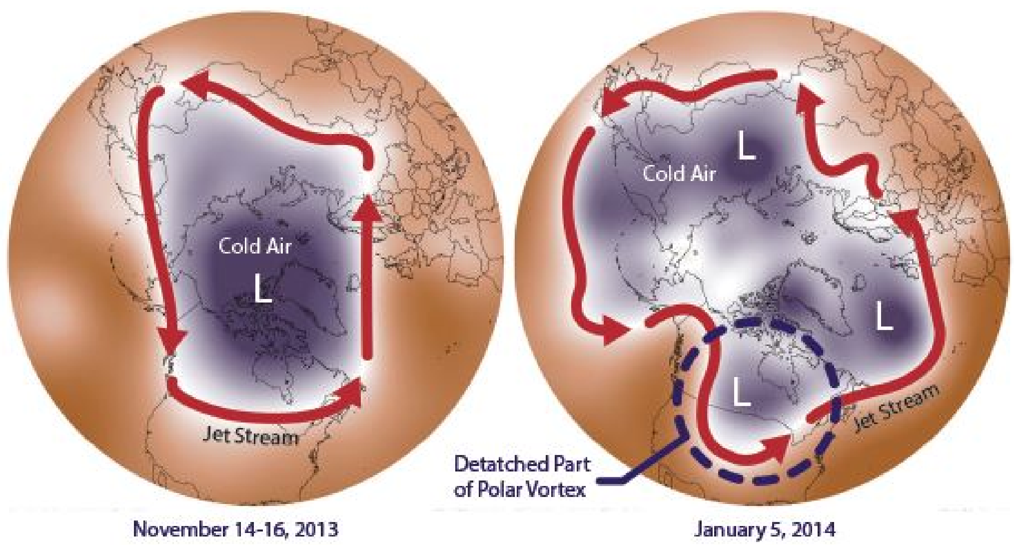
The Problem – The Polar Vortex

- Winter peak record @ **141,846 MW**
- Power plant failures – **40,200 MW (22%)**
- **1,667 MW to spare** (500 MW synchronized (ready to go within 10 min), 1,167 MW primary reserves (available in 10 min)

We actually want a *strong* polar vortex to stay warm?

The breaking off of part of the vortex is what defines a polar vortex event. But it actually occurs when the vortex is weaker, not stronger. That might sound weird—but it actually makes sense. Normally, when the vortex is strong and healthy, it helps keep a current of air known as the jet stream traveling around the globe in a pretty circular path. This current keeps the cold air up north and the warm air down south.

But without that strong low-pressure system, the jet stream doesn't have much to keep it in line. It becomes wavy and rambling. Put a couple of areas of high-pressure systems in its way, and all of a sudden you have a river of cold air being pushed down south along with the rest of the polar vortex system.



http://scijinks.jpl.nasa.gov/polar-vortex/

Lowest-Cost Resource / Highest-Cost Resource

- What is the highest cost resource?

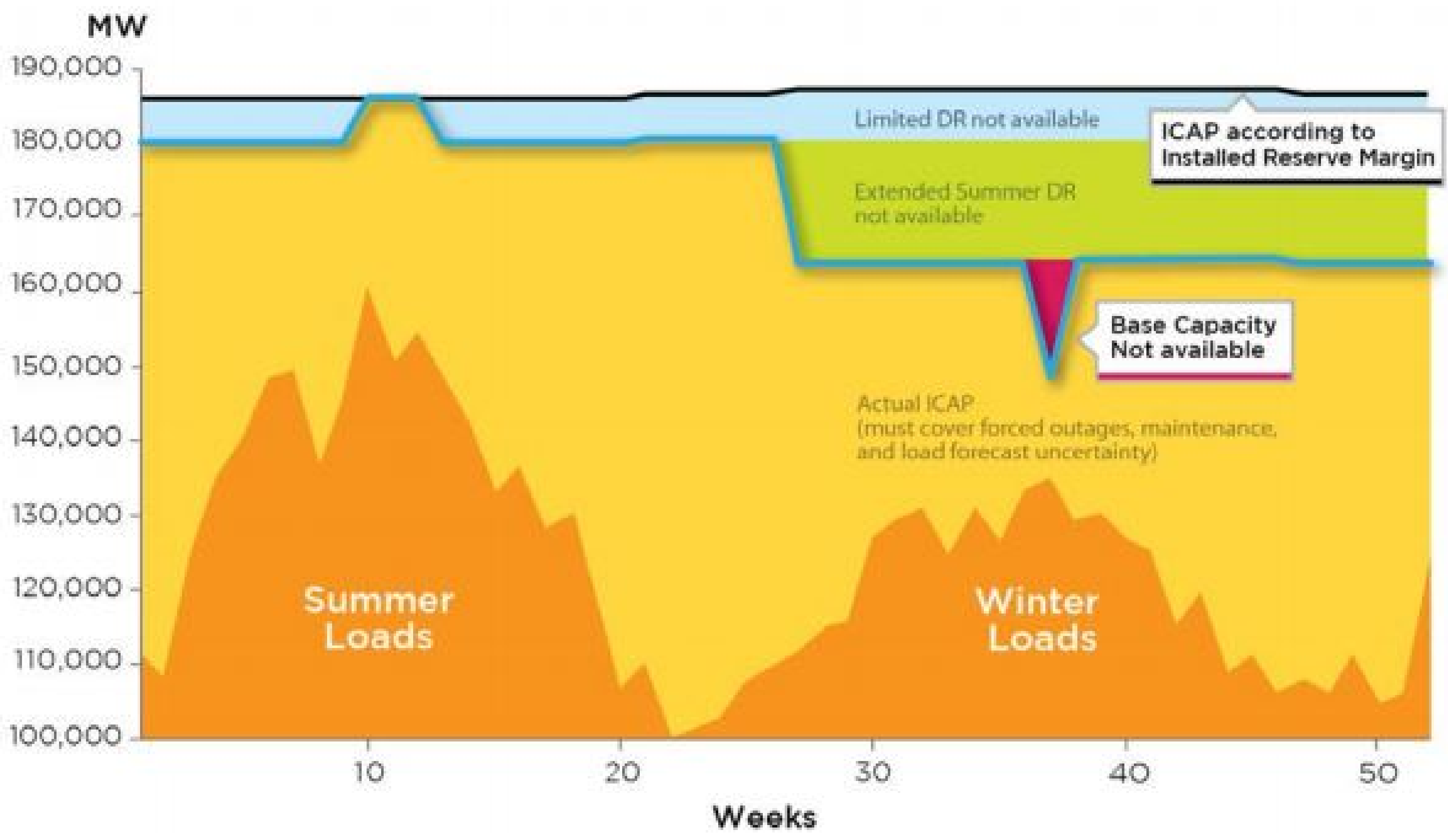
- A power outage
  - US spends about $1-$1.2 trillion / year on energy
  - Power outages cost $100-$150 billion /year (2001)

- Outages are ~10% - 20% of total energy costs

The Ohio Manufacturers' ASSOCIATION

Polar Vortex Capacity Problem: Three Contributing Factors

1. Record peak in electric demand
2. Demand response not organized for winter
3. Base capacity power plant failures



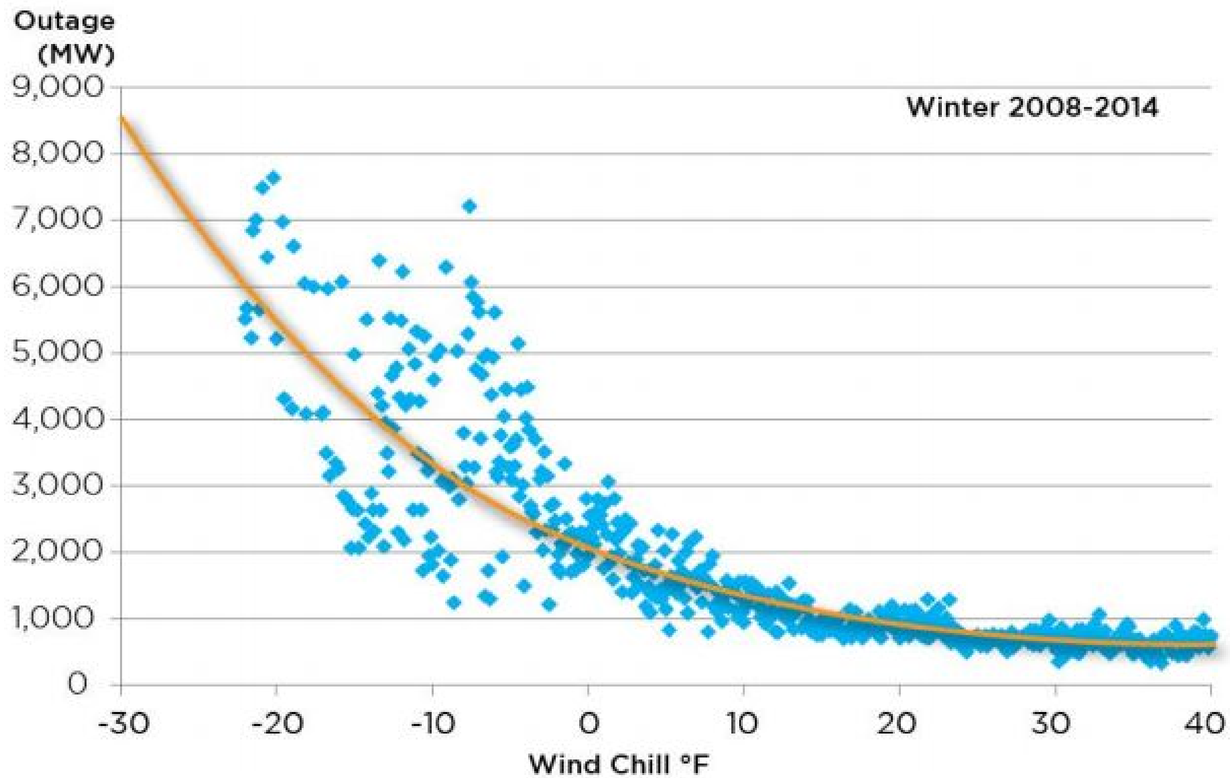
http://www.pjm.com/~/media/documents/reports/20140820-pjm-capacity-performance-proposal.ashx

Cold Weather – Unusual or Unprecedented?

- Jan 7th around -15 F
  - 40,100 MW outage
- Jan 29th around -10 F
  - 29,000 MW outage
- Weather was unusual
- Outages were unprecedented

Problem Statement on PJM Capacity Performance Definition

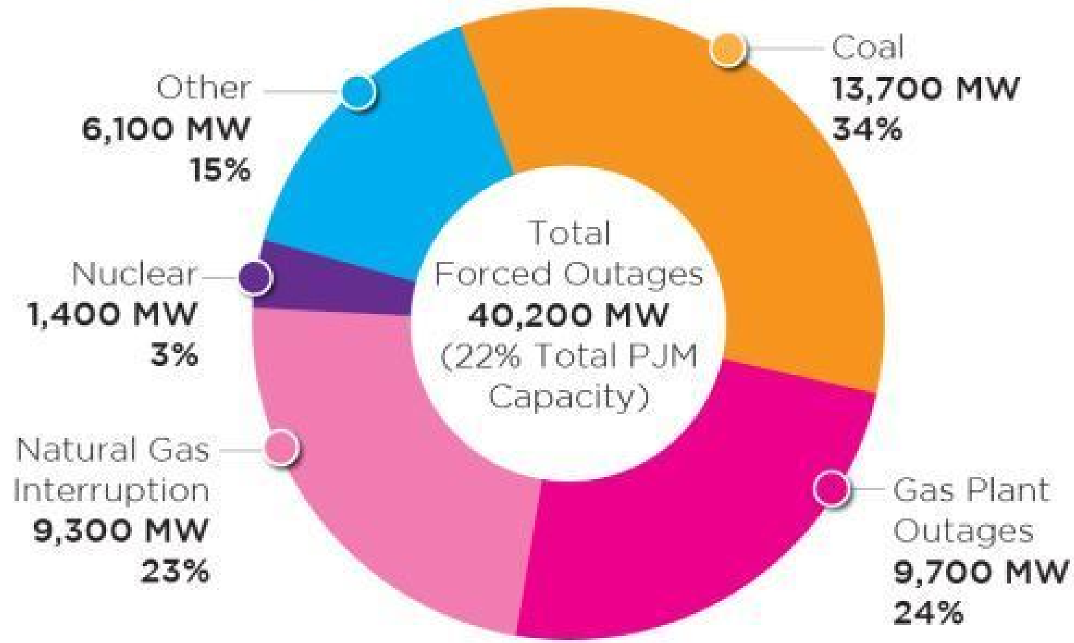
Figure 6: Wind Chill vs. Forced Outage – Western PJM



Power Plant Outages - Unprecedented

- What failed?
  - Coal, gas failure, gas interrupted, nuclear…everything
- Reasons for failure
  - Natural gas supply interruption
  - Frozen equipment (condensate lines, boiler controls)
  - Frozen coal
  - Fuel delivery issues due to weather
  - Emissions equipment freezing (water injection systems)
  - Frozen limestone, hydrogen leaks
  - Secondary process issues
  - Some units not operated since summer

Figure 3: January 7 Evening Peak (7 p.m.) Forced Outage



The Ohio Manufacturers' Association

PJM on Power Plant Outages

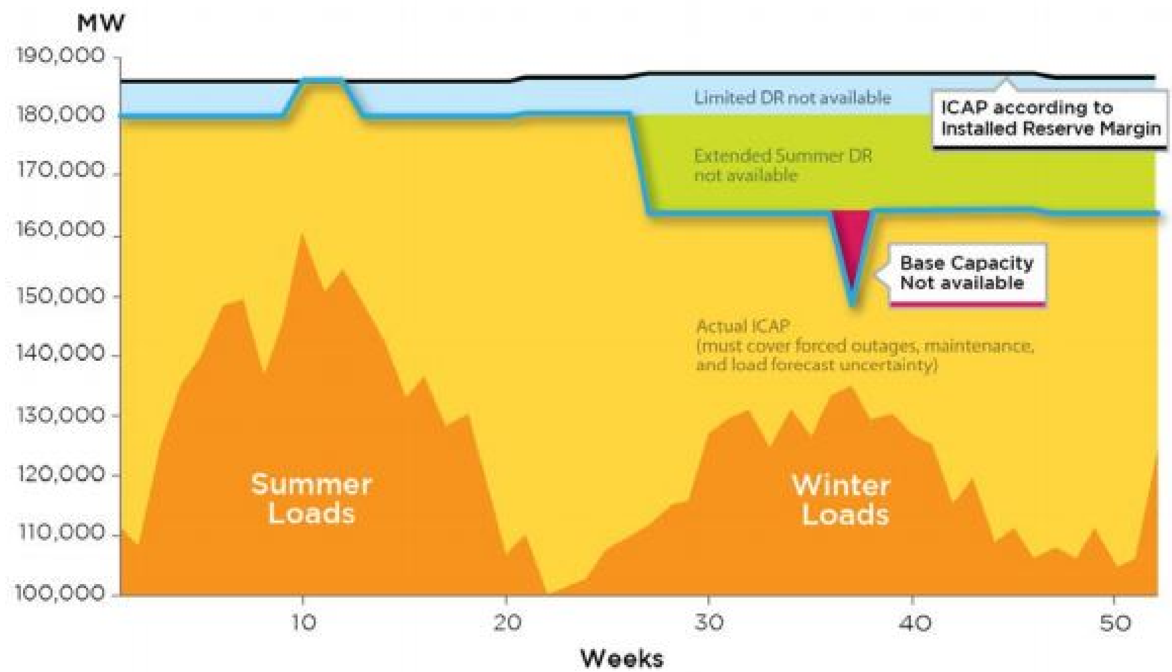
- PJM: "Availability is within the Generation Owner's Control"

- Generators control
  - Operations and maintenance
  - Firm gas pipeline transportation
  - Weatherization investments

- PJM: "..generation owners may choose to cut O&M costs or choose not to make investments that enhance availability as a means to manages costs….while this is a rational economic decision from the perspective of the generation owner, from a reliability perspective PJM commits resources to …cover low probability, high reliability impact events."

Demand Response – Limited

- Limited DR
  - NOT AVAILABLE
  - At least 10 interruptions
  - June through September
  - Noon through 8 pm
  - 6 hour duration
- Extended Summer DR
  - NOT AVAILABLE
  - Unlimited interruptions
  - June through October
  - 10 am through 10 pm
  - 10-hour duration
- Available
  - Annual DR
    - Unlimited, May-Oct, 10 am – 10 pm, 10 hours
    - Unlimited, Nov-Apr, 6 am – 9 pm, 10 hours
  - Interruptible



PJM Solution: A New Capacity Product – "Capacity Performance"

- Capacity Performance
  - Generation
  - Demand response
  - Energy efficiency
  - Storage
- Availability
  - All year, any hours of the day
  - 16 hours/day, up to 3 days in a row
    - Expected to have fuel on-site or firm transportation
    - Expected to have appropriate O&M investments
  - Start time – depends on whether base-load, interday cycling, intraday cycling
- Pricing
  - Based on winter coincident peaks, two cost-allocation methods proposed, one based on winter PLC
- Penalties
  - Location marginal price

Impact to Manufacturers – When and How Much?

- The risk – PJM reliability analysis for 2015/16 shows that
  - Comparable cold weather
  - Same rate of outages
  - Expected coal retirements
  - …<u>would likely prevent PJM from meeting it's peak load retirements</u>
- Thus, prevent similar rate of outages. Proposing:
  - Incremental auctions for 2015/16, 16/17, 17/18 delivery years for Capacity Performance
- Take-away: Generator reliability issues will be priced yet into your 2015 and beyond capacity prices
  - How much…?
  - **<u>Your winter PLC this winter may matter!</u>**
  - Are gas prices reflecting firm contracts for electric generation now, or with this proposal

Least Cost Solutions – Demand Response and Energy Efficiency

- PJM Independent Market Monitor
  - Sensitivity analysis of removing demand response and energy-efficiency from 17/18 auction…
  - $7 billion → $16 billion
  - NO CHANGE IN RELIABILITY!
- Critical to max DR and EE in auctions
  - Ohio utilities buying back EE resource due to SB 310?
  - Ohio utilities underbid EE
  - …consider 3rd party options

Table 1 Summary of sensitivity results: 2017/2018 RPM Base Residual Auction

Scenario	Scenario Description	RPM Revenue ($ per Delivery Year)	Difference from Actual Results: RPM Revenue ($ per Delivery Year)	Difference from Actual Results: Percentage
0	Actual Results	$7,512,229,630	NA	NA
1	Annual Resources Only	$9,738,222,922	$2,225,993,292	29.6%
2	No Offers for DR or EE (Generation Resources Only)	$16,859,658,203	$9,347,428,573	124.4%
3	No Short-Term Resource Procurement Target Reduction	$9,947,329,539	$2,435,099,909	32.4%
4	No Short-Term Resource Procurement Target Reduction and Annual Resources Only	$10,932,522,889	$3,420,293,259	45.5%
5	No Short-Term Resource Procurement Target Reduction and No Offers for DR or EE (Generation Resources Only)	$23,870,404,571	$16,358,174,941	217.8%

Table 2 includes a summary of the results of the sensitivity analyses associated with the removal of defined demand side products. The first column shows the cleared MW in UCAP. The second column shows the cleared MW in ICAP. The third column shows the level of reserves cleared in excess of the Installed Reserve Margin (IRM), which is PJM's target level of reserves.

Table 2 Reserves cleared in excess of IRM with peak load forecast reduced by Short-Term Resource Procurement Target: 2017/2018 RPM Base Residual Auction

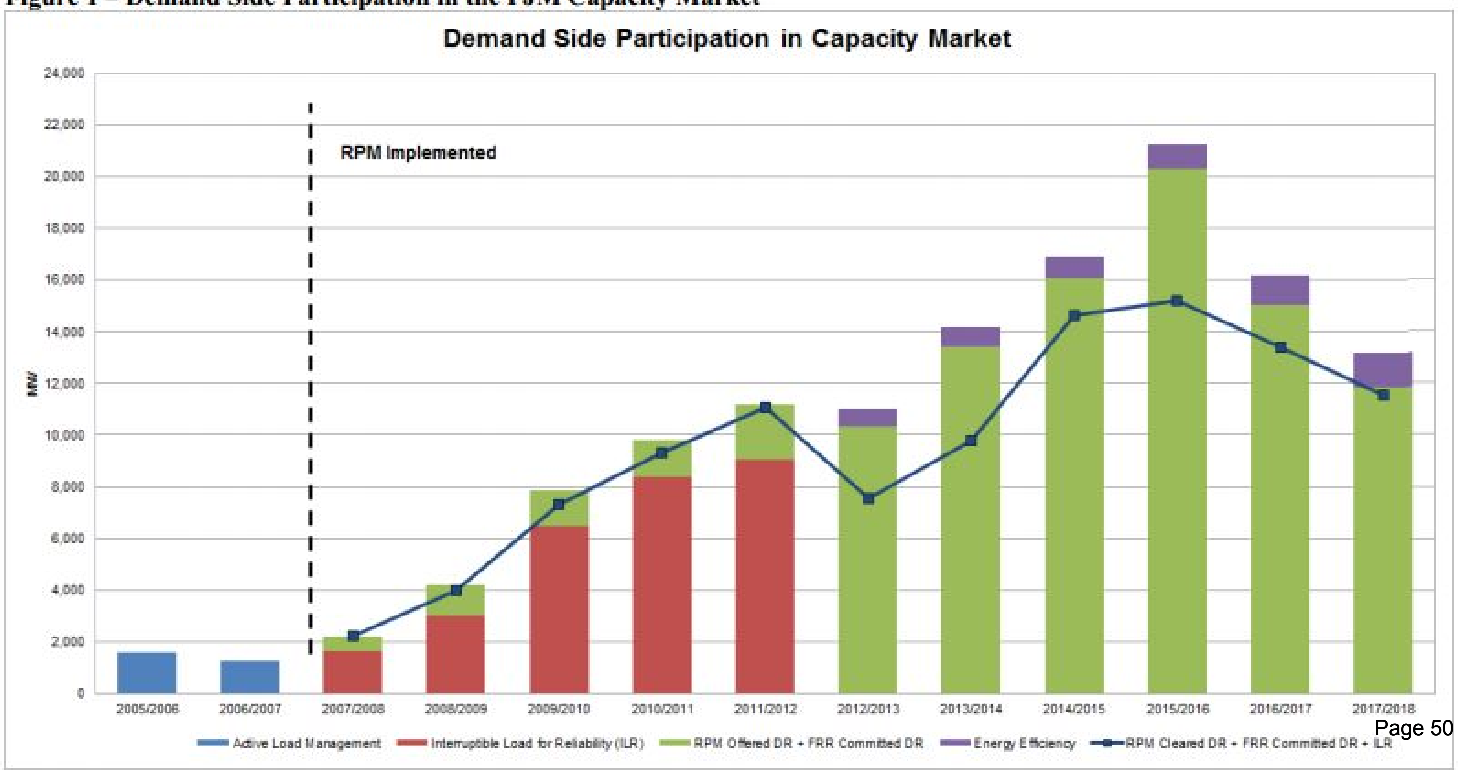
Scenario	Scenario Description	Cleared MW (UCAP)	Cleared MW (ICAP)	Reserves Cleared in Excess of IRM
0	Actual Results	167,003.7	177,004.5	4.4%
1	Annual Resources Only	166,237.1	176,191.9	3.8%
2	No Offers for DR or EE (Generation Resources Only)	163,713.2	173,516.9	2.0%

Power to the Consumers…and Revenue

- ➢ DR and Efficiency lowers prices for everyone
- ➢ Also redirects revenue from generators to consumer businesses

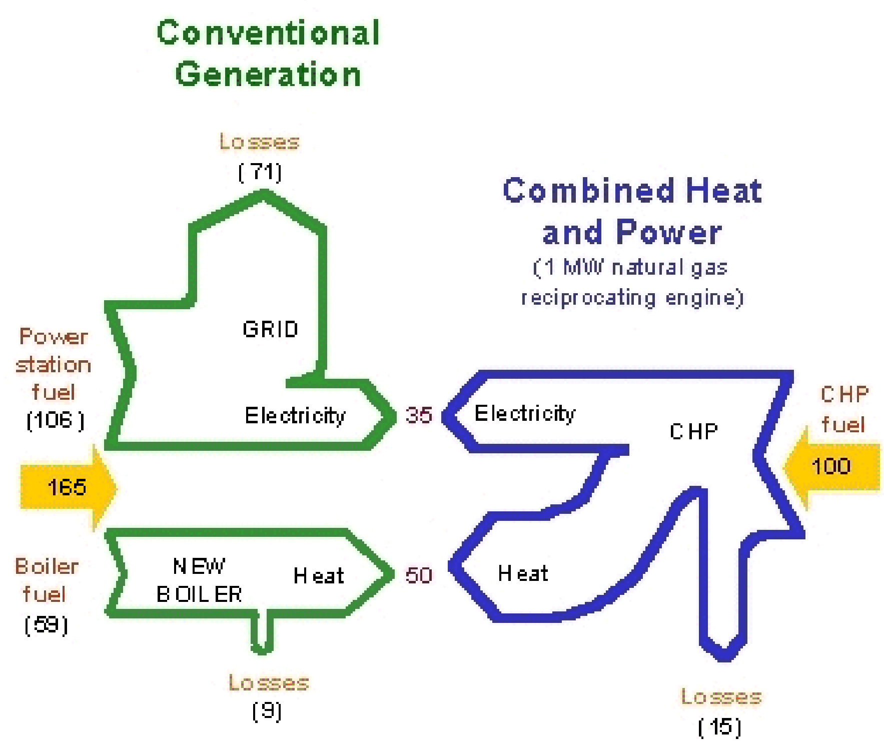
2017/2018 RPM Base Residual Auction Results

Figure 1 – Demand Side Participation in the PJM Capacity Market



Combined Heat & Power

- CHP reduces both electric demand and gas consumption
  - Checks both electric and gas stress, and prices
- CHP potential from PJM states
  - 44,000 MW (outages were 40,000 MW)
- CHP not currently recognized as a capacity resource by PJM
  - You pay for any capacity that CHP displaces (what if 44,000 MW went up?)
- Comment to PJM
  - Include CHP as a capacity resource

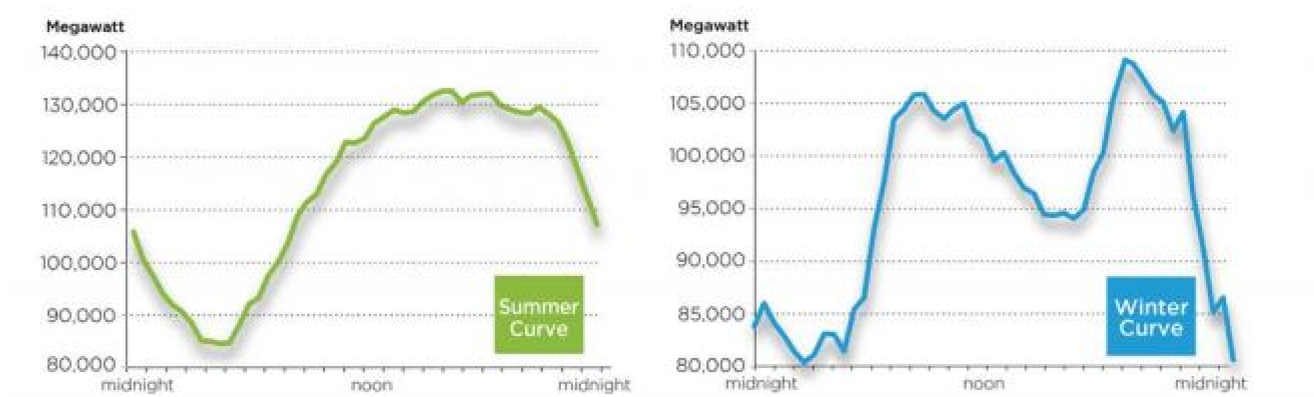


Winter-Specific Demand Response & Efficiency

- Winter peaks vs summer peaks
  - Two peaks instead of one
  - Different times
  - Gas and electric peaks coincident

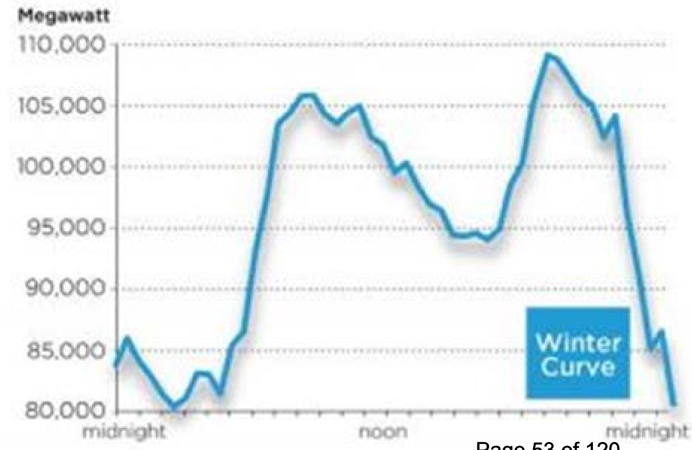
PJM Capacity Performance Proposa

Figure 2: Summer vs. Winter Load Shape



Winter-Specific Demand Response & Efficiency

- Winter peaks vs summer peaks
  - Load shifting potential w/ space heating equipment
- Cold weather DR & Efficiency hits electric & gas
- Thermal mass
- Heating equipment efficiency
- Comment to PJM
  - Develop cold-weather capacity products to include low-cost resources
  - Allocate costs based on winter peaks, so businesses can manage to costs



A Fork in The Road - Capacity

- 20% of power plants failed
  - PJM points to O&M and gas contracts, not cold weather
- Coincident peaks in natural gas and electric likely to continue
  - Impact on gas prices?
- Additional costs coming through incremental auctions
- Independent Market Monitor - $9 billion in savings from demand response and efficiency
  - The least cost resource
- Other considerations
  - Revenue flows to manufacturers and other consumers
  - Potential for new markets for manufactured goods and technologies to shave peaks and reduce demand
  - Major implications for cost of meeting EPA 111d compliance

The Columbus Dispatch

AEP keeping it 'green'

Most investor-owned utilities in Ohio don't plan any changes to energy-efficiency programs despite new law

By **Dan Gearino** *The Columbus Dispatch* • Wednesday July 23, 2014 7:55 AM

"Green"-energy efforts in Ohio might not be in suspended animation after all.

All but one of Ohio's regulated electricity utilities plan to continue with their green-energy programs despite a new state law that allows the companies to put a two-year freeze on the initiatives.

As a result, changes in that industry might not be as drastic as environmental advocates have feared.

American Electric Power and Duke Energy say they will stick with existing plans for energy-efficiency (programs that help customers reduce energy use) and renewable energy (investments in solar, wind and other renewable sources) that were in place before the law changed. Dayton Power & Light says it will keep its current plan through at least 2015.

That leaves FirstEnergy as the only utility considering a large pullback.

"It's not Armageddon," said Pablo Vegas, president and chief operating officer of AEP Ohio, in an interview. "We didn't dive off the cliff as some of the opponents said we were going to."

For AEP, current programs include incentives to recycle old refrigerators, rebates for businesses that upgrade to more efficient equipment, and discounts on energy-use audits.

Each of the four major electricity utilities were asked by *The Dispatch* recently about their plans, several months before the companies need to disclose their intentions to regulators.

During the legislative debate over the bill that resulted in the two-year freeze — Senate Bill 310 — many opponents assumed that utilities would use the law to completely stop their green programs during that time, leading to a loss of jobs and investment. Gov. John Kasich signed the bill in June.

But the key part of the law might be that each utility gets to choose its response.

FirstEnergy spokesman Doug Colafella said the company is reviewing its options and has not made any decisions.

Despite this public stance, FirstEnergy had advised some customers and vendors that it is likely to suspend its energy-efficiency programs, according to multiple sources, including John Seryak, CEO of Go Sustainable Energy in Clintonville. His company, which helps businesses improve their efficiency, mainly serves customers in AEP territory.

"(FirstEnergy) clearly doesn't want to run their programs," he said. He was one of many business leaders who urged lawmakers to reject the bill this spring.

FirstEnergy helped lead the push for the bill, joined by several large manufacturers and business groups. Other utilities supported the measure but were much less vocal.

"It's really been about FirstEnergy from the get-go," said Rob Kelter, senior attorney for the Environmental Law and Policy Center, an opponent of the changes. "The other utilities decided it wasn't worth being involved in a legislative bloodbath when they could just continue with what they're doing right now."

Opponents remain concerned that the new law will harm the economy, and they want to see more details from the companies.

"It's early, and we need to see how the new law is interpreted and implemented," said Ted Ford, CEO of Ohio Advanced Energy Economy, a trade group for clean-energy companies.

AEP's energy-efficiency programs, which cost $78 million last year, will keep the same levels of funding and staffing, Vegas said. Customers pay for this with an electricity-bill charge of about $3 per month for a typical household.

As for renewable energy, AEP has long-term contracts with solar arrays and wind farms that were designed to meet the old standards. Those contracts remain in place, even though the standards have changed.

The efficiency and renewable programs were developed to comply with a 2008 state law that required utilities to meet escalating annual benchmarks for conservation. The new law puts a two-year freeze on the benchmarks and makes a variety of other changes.

The new law applies mainly to investor-owned electricity utilities, the companies that serve the large majority of the state's consumers.

Energy-efficiency programs

A new state law gives investor-owned electricity companies wide latitude to revise programs that help customers improve energy efficiency. What each company is planning:

Note: The costs and benefits are for 2009 to 2013

IN MILLIONS	COSTS	SAVINGS	PLANS FOR 2015
AEP	$174	$367	Will maintain current program
FirstEnergy	$206	$317	Expected to significantly reduce program but has not yet disclosed plans
Duke Energy	$86	$197	Will maintain current program
Dayton Power & Light	$49	$154	Will maintain much of current program
Total	$516	$1,035	

Source: PUCO, Dispatch research, company reports

THE COLUMBUS DISPATCH

FirstEnergy has about 2.1 million customers, or 43 percent of the total affected by the law. AEP is next with 1.5 million, or 30 percent, followed by Duke with 695,000, or 15 percent, and Dayton Power & Light with 573,000, or 12 percent.

"We believe that our portfolio of (energy-efficiency) offerings benefit our customers, the company and help the environment," said Duke spokesman Blair Schroeder in an email.

Dayton Power & Light said it will continue with its current plan until the end of 2015 and is reviewing options for the following years.

AEP's Vegas said his company was active behind the scenes during the debate, trying to preserve the programs that are popular with AEP customers but also trying to increase the utilities' flexibility in complying with the law.

"We were very engaged in the conversation, trying to get a balanced approach," he said.

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ATTORNEYS AT LAW

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MEMORANDUM

To: OMA Energy Committee
From: Kim Bojko, OMA Energy Counsel
Re: Energy Committee Report
Date: September 18, 2014

Administrative Actions

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

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

On December 20, 2013, Ohio Power Company (AEP) filed an application for authority to establish a standard service offer and for approval of certain accounting authority (application) in Commission Case Nos. 13-2385-EL-SSO and 13-2386-EL-AAM. In its application, AEP sought the Commission's approval of an electric security plan (ESP) for a term commencing on June 1, 2015 and ending May 31, 2018, with the ability to terminate the plan on May 31, 2017 in the event of certain regulatory or legal changes. Among other things, the Application seeks a substantial increase in the amount to be recovered through Company's Distribution Infrastructure Rider (Rider DIR). The Application also seeks approval of a Power Purchase Agreement Rider (Rider PPA), which passes through to customers the costs or benefits associated with a financial hedge on AEP Ohio's OVEC contractual entitlements. On January 7, 2014, OMAEG filed a motion to intervene in this proceeding.

Despite an attempt by the Company to settle the case in late May, the parties did not reach an agreement; therefore, an evidentiary hearing commenced on June 3, 2014. Cross-examination concluded on June 18, 2014 and the rebuttal portion of the hearing commenced on June 30, 2014. OMAEG submitted its initial brief on July 23, 2014, and its reply brief on August 15, 2014. The parties now await a Commission decision.

Retail Stability Rider Case (Case No. 14-1186-EL-RDR)

In AEP's ESP II Case, the Commission authorized AEP to collect, through the Retail Stability Rider (RSR), funds to eliminate the $463 million deferred capacity regulatory asset projected to be on its books as of the beginning of the ESP III term. The Commission authorized such collection over a three year period starting at the beginning of the ESP III term and ending three years (36 months) later.

On July 8, AEP filed an application to collect amounts to eliminate the deferred capacity regulatory asset over the course of 32 months. OMAEG filed motion to intervene in the matter on July 18, 2014. Industrial Energy Users-Ohio (IEU-Ohio) the Office of the Ohio Consumers' Counsel (OCC), and other parties have also filed motions to intervene in the proceeding.

On August 19, 2014, IEU-Ohio filed a motion to dismiss AEP's application, arguing that the Commission does not have jurisdiction under state law and is preempted under federal law from approving the application. AEP subsequently filed a memorandum contra IEU-Ohio's motion to dismiss the case.

On September 2, 2014, the OCC filed a motion for a procedural schedule governing the case, in which it requested that a hearing on the matter commence on January 12, 2015.

IGCC Costs Case (Case No. 05-376-EL-UNC)

On April 10, 2006, the Commission issued an Opinion and Order in this matter which approved the application of Columbus Southern Power Company and Ohio Power Company (collectively, AEP Ohio) to establish a mechanism by which it could recover Phase I costs related to the design and construction of the Great Bend IGCC electric generation facility, which AEP intended to use its provider of last resort (POLR) obligation. In its entry on rehearing, issued on June 28, 2006, the Commission clarified the conditions of its approval of the application, indicating that (1) all Phase I costs would be subject to subsequent audits to determine whether such expenditures were reasonable and prudently incurred to construct the proposed IGCC facility; and (2) if AEP had not commenced a continuous course of construction of the proposed facility within five years after the entry on rehearing, all Phase I charges collected for expenditures associated with items that may be utilized in projects at other sites must be refunded to Ohio ratepayers with interest.

IEU-Ohio, FirstEnergy Solutions (FES), OCC, and Ohio Energy Group (OEG) appealed the Commission's order to the Supreme Court of Ohio. On March 13, 2008, the Court affirmed the Commission's decision in part, but further determined that the record did not support the Commission's regulation of a generation facility for distribution-ancillary services in support of AEP Ohio's POLR obligation, and remanded the case to the Commission for further development of the record. The Court also declined to rule upon the request to refund costs already collected from AEP Ohio's customers, indicating that the matter was being remanded for further development of the record, and that the Commission's entry on rehearing included a conditional refund provision which remained effective.

On June 28, 2011, OCC, Ohio Partners for Affordable Energy, Industrial Energy Users-Ohio, and the Ohio Energy Group filed a joint motion on remand, requesting that the Commission direct AEP Ohio to refund to customers, with interest, revenues it had previously collected for the design, construction, and operation of the Great Bend IGCC electric generation facility. On June 29, 2011, AEP Ohio filed a reply statement regarding the status of the facility.

On August 11, 2014, the attorney examiner issued an Entry requesting interventions and comments from interested parties order to assist the Commission in its review of the issues on remand in the case. OMAEG filed a Motion for Leave to Intervene Out of Time on September 2, 2014, contending that at the time of most of the operative facts at issue in the proceeding, OMAEG was not in existence; however, its member companies paid the same costs at issue in the upcoming phases of the proceeding, and it should therefore be granted the opportunity to participate in the case as a full party of record. The Commission has not yet ruled on the motion to intervene.

On September 5, 2014, a number of parties filed comments regarding AEP's return of the Phase I costs, totaling $24.24 million, to customers. OMA will be submitting reply comments advocating the return of Phase I costs to customers, with interest, on September 19, 2014.

<u>Duke Energy Ohio</u>

SSO Application (Case No. 14-841-EL-SSO, et al.)

On May 29, 2014, Duke Energy Ohio filed an application to establish an SSO for the period of June 1, 2015 through May 31, 2018, in the form of an ESP.

Similar to AEP Ohio, Duke is in possession of certain contractual entitlements in the Ohio Valley Electric Corporation (OVEC) generation supply. Like AEP Ohio, Duke has also proposed a Price Stabilization Rider (Rider PSR), which will pass through to customers gains or losses on power delivered from OVEC to Duke. Much as the PPA Rider proposed by AEP Ohio in its recent ESP application, Duke's Rider PSR is proposed as a nonbypassable rider, and is financial in nature, providing a "partial hedge" against market volatility. There will be no physical flow of power from OVEC to Duke's retail customers. Unlike AEP's proposal, which would establish the PPA Rider for a period of three years (the term of its proposed ESP), Duke has proposed that Rider PSR will continue to be utilized through the term of its contractual entitlements, i.e., until 2040.

The parties are presently entrenched in the discovery phase of the proceeding. A hearing on Duke's application is scheduled to commence on October 22, 2014.

<u>FirstEnergy</u>

ESP IV Case (Case No. 14-1297-EL-SSO)

On August 4, 2014, the FirstEnergy electric distribution utilities (FirstEnergy) filed an application for their fourth ESP, entitled Powering Ohio's Progress, which is proposed to cover the term from June 1, 2016 to May 31, 2019. Much like in the AEP and Duke ESP applications, the FirstEnergy application proposes a mechanism, which it calls an "Economic Stability Program," by which FirstEnergy claims that customers will be insulated from volatility and retail price increases if/when energy and capacity prices rise in future years. The Economic Stability Program includes a nonbypassable retail rate stability rider which will cover the costs associated with power purchased from FirstEnergy Solutions, as generated at FES' Sammis coal-powered generating facility and its Davis Besse nuclear generating facility.

On August 29, 2014, OMAEG filed a motion to intervene in the proceeding. By entry dated the same day, the Commission scheduled a hearing on the FirstEnergy EDUs' application to commence on January 20, 2014. Recently, OMAEG and others filed a joint motion to modify discovery time limits and amend the procedural schedule, such that a hearing on the matter would commence on February 10, 2014. The Commission has not yet ruled on the motion.

Statewide

Commission's Investigation of Marketing Practices in the CRES Market (Case No. 14-568-EL-COI)

The Commission became aware in March 2014 that competitive retail electric service (CRES) suppliers have included pass-through clauses in the terms and conditions of a number of their fixed-rate contracts, purportedly permitting the CRES suppliers to pass on to the customer the additional costs of certain pass-through events. The Commission opened an investigation on April 9, 2014, to determine whether it is unfair, misleading, deceptive, or unconscionable to market supply contracts as fixed-rate contracts when the contracts include pass-through clauses. OMAEG filed comments on May 9, 2014 and reply comments on May 27, 2014 contesting the ability of CRES providers to pass through these types of charges to customers. The Commission has not taken any recent action pursuant to its investigation.

Power4Schools v. FirstEnergy Solutions (Case No. 14-1182-EL-CSS)

On July 3, 2014, Power4Schools filed a complaint against FES in connection with FES' assessment of an RTO Expense Surcharge on Power4Schools member organizations. Subsequently, a number of industrial customers and OMA filed motions to intervene in the matter, in order to preserve their interests, as related to challenging the RTO Expense Surcharge. On August 4, 2014, Power4Schools filed a memorandum contra the Industrial Customers' and OMA's motions to intervene, contending that intervention should be denied because the interests in the proceeding were too speculative, and that OMA and other prospective intervenors may institute their own complaints, as the issue in the Power4Schools proceeding is based on specific contract language between Power4Schools and FES.

On September 4, 2014, the Commission issued an Entry denying the motions to intervene of OMA and the industrial customers that sought intervention, explaining that its denial of the parties' motions to intervene in the proceeding will not impair their rights to file their own complaints and prosecute them in the manner that they so choose.

Carbo Forge, Inc., et al. v. FirstEnergy Solutions (Case No. 14-1610-EL-CSS)

On September 12, 2014, Energy Counsel for OMA filed a complaint with the Commission against FES on behalf of OMA members Carbo Forge, Inc., Wyandot, Inc., Plaskolite, Inc., American Trim, LLC, Whirlpool Corporation, Clow Water Systems Company, Navistar, Inc., Sauder Woodworking Co., McDonald Steel Corporation, Henny Penny Corporation, Lima Refining Company, Campbell Soup Supply Company, LLC, Cooper Tire & Rubber Company, Mantaline Corporation, Republic Steel, Jay Industries, Inc., Sun Chemical Corporation, and 3M Company (collectively, Complainants) asserting that FES has impermissibly attempted to pass through to customers certain costs allegedly related to the January 2014 polar vortex. The complaint also asserts that FES' assessment of the RTO Expense Surcharge on Complainants violates numerous sections of the Ohio Revised Code and Ohio Administrative Code.

The Commission's decision not to permit OMA member companies to intervene in Power4Schools complaint against FES underscores the importance of participation by affected OMA member companies in the new complaint against FES, as a challenge by one group of consumers will not likely result in a positive outcome for similarly-situated consumers who have not participated in the challenge. Please note that even if you have not previously participated in the efforts by the opt-in group to dispute the RTO Expense Surcharge, you may still be permitted to participate in the challenge established in the complaint. Please contact Ryan Augsburger at (614) 629-6017 or Kim Bojko at (614) 365-4100 for further information regarding participation in the matter.

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)

On August 26, 2014, OMA participated in a Commission workshop at which participants were encouraged to discuss proposed rules for implementing one provision of SB 310, regarding disclosure to customers of the costs associated with the renewable energy standards, energy efficiency standards, and peak demand reduction requirements of R.C. 4928.64 and 4928.66. At the workshop, parties discussed the importance of educating customers of the existing costs and purpose for including them on customers' bills, the calculation of the various costs, inclusion of only net costs, definitions of the various costs, and affording the utilities ample time to make bill format changes. After the Commission issues Staff's proposed rules, OMA and other parties will have an opportunity to file comments and reply comments on the proposed rules. The Commission must adopt rules prior to January 1, 2015.

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 that AEP-Ohio charges CRES providers.

- *In the Matter of the Application of Ohio Power Company to Update its Transmission Cost Recovery Rider Rates,* Case No. 2013-154 (Appeal of Case No. 12-1046-EL-RDR)
  - **Case Status:** Notice of appeal filed on January 25, 2013; fully briefed on May 28, 2013; oral argument held on July 9, 2014; awaiting decision.
  - **Brief Synopsis:** Industrial Energy Users-Ohio challenges the Commission's decision permitting AEP-Ohio to phase-in recovery of transmission charges on a non-bypassable basis.

- *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 Commission's order approving AEP-Ohio's corporate separation plan.

<u>FirstEnergy</u>

- *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.
  - **Brief Synopsis:** Northeast Ohio Public Energy Council 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.
  - **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.

<u>Duke Energy Ohio</u>

- *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. The Supreme Court of Ohio has not yet ruled on the parties' briefs on necessary bond amounts.
  - **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.

Statewide

- *In the Matter of the Mercantile Customer Pilot Program for Integration of Customer Energy Efficiency or Peak-Demand Reduction Programs*, Case No. 2012-2182 (Appeal of Case No. 10-834-EL-POR)
  - **Case Status:** Notice of appeal filed on December 31, 2012; fully briefed on June 10, 2013; oral argument has not been scheduled.
  - **Brief Synopsis:** Ohio Environmental Council challenges the Commission's application of Ohio's energy efficiency statutes, and how the Commission implements the mercantile pilot-program.

- *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.

1325-001.409280

BEFORE
THE PUBLIC UTILITIES COMMISSION OF OHIO

Carbo Forge, Inc., Wyandot, Inc., Plaskolite, Inc., American Trim, LLC, Whirlpool Corporation, McWane, Inc., Navistar, Inc., Sauder Woodworking Co., McDonald Steel Corporation, Henny Penny Corporation, Lima Refining Company, Campbell Soup Supply Company, LLC, Cooper Tire & Rubber Company, Mantaline Corporation, Republic Steel, Jay Industries, Inc., Sun Chemical Corporation, and 3M Company,	)	Case No. 14-1610-EL-CSS
Complainants,	)	
v.	)	
FirstEnergy Solutions Corp.,	)	
Respondent.	)	

COMPLAINT AND REQUEST FOR RELIEF

Pursuant to Sections 4905.26 and 4928.16, Revised Code, and Rules 4901-9-01, 4901:1-21-02(B)(2), and 4901:1-24-12(A), Ohio Administrative Code (O.A.C.), Carbo Forge, Inc., Wyandot, Inc., Plaskolite, Inc., American Trim, LLC, Whirlpool Corporation, Clow Water Systems Company, Navistar, Inc., Sauder Woodworking Co., McDonald Steel Corporation, Henny Penny Corporation, Lima Refining Company, Campbell Soup Supply Company, LLC, Cooper Tire & Rubber Company, Mantaline Corporation, Republic Steel, Jay Industries, Inc., Sun Chemical Corporation, and 3M Company (collectively, Complainants) hereby file this complaint (Complaint) with the Public Utilities Commission of Ohio (Commission) asserting violations of, inter alia, Chapter 4928, Revised Code, and Chapters 4901:1-21 and 4901:1-24, O.A.C., against FirstEnergy Solutions Corporation (FES or Respondent), and seek the relief set forth herein.

In support of their Complaint, the Complainants state as follows:

PARTIES

1. Carbo Forge, Inc. (Carbo Forge) is an Ohio corporation with facilities located at 150 State Route 523, Fremont, Ohio 43420.

2. Wyandot, Inc. (Wyandot) is an Ohio corporation with facilities located at 135 Wyandot Avenue, Marion, Ohio 43302.

3. Plaskolite, Inc. (Plaskolite) is an Ohio corporation with facilities located at 1770 Joyce Avenue and 1772 Joyce Avenue, Columbus, Ohio 43219, as well as 1175 5 BS Drive, Zanesville, Ohio 43701.

4. American Trim, LLC (American Trim) is an Ohio limited liability corporation with facilities located at 1501 Michigan Street, Sidney, Ohio 45365.

5. Whirlpool Corporation (Whirlpool) is a corporation organized under the laws of the state of Delaware, duly authorized to conduct business in the state of Ohio, with facilities located at 1300 Marion Agosta Road and 1650 Marion Agosta Road, Marion, Ohio 43302; 4901 North Main Street, Findlay, Ohio 45840; 1700 Kitchen-Aid Way, Greenville, Ohio 45331, and 1701 Kitchen-Aid Way, Greenville, Ohio 45331.

6. McWane, Inc. (Clow Water Systems Company) is a corporation organized under the laws of the state of Delaware, duly authorized to conduct business in the state of Ohio, with facilities located at 2266 S. 6th Street, Coshocton, Ohio 43812.

cleveland.com

FirstEnergy's free-wheeling retail company offered fixed rates that ruined the market, frustrated competitors

John Funk, The Plain Dealer By **John Funk, The Plain Dealer**

on August 15, 2014 at 7:00 AM, updated August 16, 2014 at 9:04 AM

"It is my opinion that FirstEnergy Solutions' behavior was irresponsible," J.D. Burrows, market vice president, GDF Suez Energy Resources NA

View full size FirstEnergy Corp.'s unregulated subsidiary, FirstEnergy Solutions, is retreating from retail sales and returning to generating and selling power wholesale into the regional grid. FES won't be missed, say its competitors, who saw its low fixed-price contracts as unsustainable. FirstEnergy Corp.

AKRON, Ohio -- The collapse of FirstEnergy Corp.'s retail marketing company is news -- but not to national retail power suppliers or to local electricity brokers working with them.

For months they saw it coming, a failure signaled in the spring when FirstEnergy Solutions said it would be passing on to its customers the "polar vortex" surcharges that grid manager PJM Interconnection levied against the company.

Then a week ago during a **quarterly financial conference** Anthony Alexander, FirstEnergy's CEO, confirmed the rumors.

He said the company had decided that FirstEnergy Solutions -- which also owns the corporation's power plants -- would focus on selling its power into wholesale markets and stop pitching retail deals to commercial and most industrial customers, leaving only a few very large industrial customers and its long-term, less risky municipal retail contracts serving residential customers.

"While we have experienced a relatively stable and predictable wholesale market for the past several years, we believe that a fundamental change in markets is under way as available generation is being reduced due to environmental rules and competitive markets rely more heavily on natural gas and other less reliable resources," he said.

He was referring to the power shortages and price spikes that occurred last September during unusually hot weather and during January's "polar vortex" episodes when arctic temperatures invaded the nation, knocking out power plants and pushing demand up.

Less than 24 hours earlier, the company had **filed a new rate plan** with state regulators that included an instantly controversial provision that ratepayers be forced to subsidize two of the company's aging power plants, suggesting the company is struggling to remain competitive.

About 70 FirstEnergy Solutions sales and sales-support positions **will be cut next week,** leaving the company's commercial and industrial customers scratching their heads, and competitors scrambling to grab new customers as their contracts with the Akron-based company run out.

Competitors -- about 30 of them in Ohio alone -- are ready for what will be a marketing bonanza. And they are not shedding tears.

"They took a strategic approach to sell their generation at retail prices that were less than the wholesale market (prices) that would support them," said J.D. Burrows, vice president of marketing at Houston-based competitor GDF Suez Energy Resources, North America.

"It is my opinion that FirstEnergy Solutions' behavior was irresponsible. It is almost unbelievable. They bought market share but in the long run, they short-changed their customers," he said in an interview earlier this week.

"And they have ruined the market," he added. "Now, the rest of us have to go back and re-educate the market."

Calling that criticism "unfair and unprofessional," FirstEnergy Solutions spokeswoman Diane Francis on Friday said the company had saved customers a lot of money.

"Through our competitive offers, we have helped our customers, from the individual homeowner to the largest industrial business, save more than half a billion dollars," she said.

"And we were making those money-saving offers available when no other suppliers were," she added.

"However, because of market conditions that are preventing us from being able to offer low, predictable
prices to new residential and certain business customers, we have decided to no longer pursue those retail channels. We will continue to honor all of our customer contracts and maintain our high level of customer service."

GDF Suez Energy Resources, NA, is a division of the French multinational GDF Suez. Globally it serves about 100,000 customers and owns about 600 power plants. The U.S. division tailors its retail contracts to each commercial and industrial customer, Burrows said.

Typically, the rates GDF Suez offers commercial and industrial customers are variable, he said, indexed in this region to daily wholesale prices published by PJM.

Another Houston-based company, Direct Energy, which is a subsidiary of UK-based Centrica plc, and the largest U.S. competitive power retailer, dealt with FirstEnergy's low, fixed price by offering a suite of efficiency and technological upgrades to reduce the amount of electricity their customers used.

That has been effective, particularly with larger companies that regard power prices as a risk, but one that can be managed, said the company.

"Customers at this level know where the market is and understand it (a contract) is about more than just a low price," said Teresa Ringenbach, a Columbus-based senior manager of government & regulatory affairs.

Direct Energy also markets to businesses that want fixed-rate contracts but the price will include the risk the power supplier is shouldering, she said, but no fine-print "pass-through" charges such as the "polar vortex" charges. Smaller companies want these kind of contracts.

"They tend to be smaller independently owned companies, and larger franchised companies who want to know what they will be paying next year and don't want to spend days watching power markets," she said.

Baltimore-based Constellation Energy, now part of the Exelon Corp., headquartered in Chicago, is another major national competitive supplier that sees FirstEnergy's problems as an opportunity.
"I will admit they have been very aggressive over the last several years," said Mark Huston, president of Constellation's retail business division.

"We try to price in risk factors because we are in for the long haul. We have seen competitors in the past offering predatory pricing. But we held to our discipline.

"When you don't have periods of [wholesale] market volatility, they become complacent. We have seen competitors not price in their risk. And they make a decision not to be in it for the long haul," he said.
"I won't speak to whether FirstEnergy was doing that. But they are leaving."

It's the same story at the grass-roots level among local brokers who help commercial clients choose contracts offered by the big suppliers, much as an independent insurance company helps consumers choose an affordable insurance policy.

"They have been eating FirstEnergy's lunch for some time," said Matt Brakey, president of Brakey Energy, a Cleveland-based energy broker who shops for electric contracts for his commercial clients with major retail power companies, including Constellation Energy, Direct Energy and GDF Suez, and once, FirstEnergy Solutions.

FirstEnergy's low-priced deals turned out to be not-so-fixed following last January's unusual storms that pushed sub-zero, arctic temperatures deep into much of the nation, increasing power demand and simultaneously knocking out power plants.

"FirstEnergy Solutions went from a don't-lose-any-business-no-matter-what price, in order to retain customers, to raising its prices well above everyone else," Brakey said.

He and other brokers said the decision by FirstEnergy Solution to push "polar vortex" surcharges stemming from the two January storms onto its commercial and industrial customers was a signal of big trouble ahead. (The company has backed down from charging consumers a much smaller surcharge.)
"Everybody is dancing on FirstEnergy Solutions' grave," said Chris Greulich, president of Chagrin Falls-based North Shore Energy Consulting, referring to other big power suppliers who have had to compete against its low prices.

His preliminary analysis of 2013 state records shows that FirstEnergy Solutions accounted for 53 percent of the electricity sold to commercial and industrial customers through retail contracts.

Greulich's analysis puts 22 competitors, including Constellation, Direct Energy and Suez in the single digit percentage of the total amount of power delivered under retail contracts to commercial and industrial customers in the state.

"This is a huge opportunity for us," he said, "because over the years, FES has been both our greatest partner and also our greatest competitor at the same time."

CLEVELAND PLAIN DEALER

FirstEnergy Solutions to lose 70 people as its parent company abandons some retail markets

John Funk, The Plain Dealer By **John Funk, The Plain Dealer**

on August 12, 2014 at 7:00 AM, updated August 12, 2014 at 7:03 AM

AKRON -- FirstEnergy Solutions is cutting its sales staff because parent FirstEnergy Corp. no longer intends to sell electricity to medium-sized companies and industries and will not renew contracts when they expire.

And that includes some cities that signed contracts with FirstEnergy Solutions to buy power for their energy intensive operations such as sewage treatment plants.

"We are losing approximately 70 positions in sales and sales support staff," confirmed FirstEnergy Solutions spokeswoman Diane Francis on Monday.

But fewer than 70 will actually lose a job, she said, because the company is trying to move them into other FirstEnergy divisions.

"We are making every attempt we can to place anybody affected somewhere else in the company," said Francis. The layoff date is Aug. 20. Employees were notified of the impending cuts a week ago.

The retail sales arm of unregulated FirstEnergy Solutions has grown by leaps and bounds in the last five years, selling retail contracts not only across Ohio but in other states, including Illinois, Pennsylvania, New Jersey and Maryland.

Anthony Alexander, FirstEnergy president and CEO, **announced the change of direction** during the company's second quarter earnings teleconference last week, explaining the company wanted to move away from retailing to "weather sensitive" customers.

"We intend to exit the medium commercial and industrial and mass market retail channels as existing contracts expire," he told analysts.

"But we will continue to serve strategic large industrial and commercial customers as well as our governmental aggregation...," he said.

The largest of those government aggregation contracts is with the Northeast Ohio Public Energy Council, or NOPEC, which has a discounted contract with FirstEnergy Solutions through 2019 to provide power to residential and small business customers.

Residential customers receive a total discount of 7 percent off what they would pay if they were buying the electricity from the Illuminating Co. Ohio Edison or Toledo Edison.

Six percent of that discount is from FirstEnergy Solutions, and an additional 1 percent from NOPEC itself. Small businesses, including some city halls that don't use a lot of power, receive a 4 percent discount.

But Alexander's announcement -- and a marketing campaign that followed it by an independent energy consulting company -- created a lot of confusion for cities.

NOPEC this week was still fighting a brush fire of panic that began Thursday among some of its 169 member communities who worried that FirstEnergy Solutions was about to abruptly end its long-term contract, throwing residential customers back to the traditional utilities.

"NOPEC met ... with FES senior management to discuss those changes and to confirm FES will remain in the governmental aggregation business," NOPEC executive director Chuck Keiper wrote in a letter to all communities on Friday.

"The FES/NOPEC contract remains in effect until December 2019, and your community's residents enrolled in NOPEC's electricity aggregation program will continue to receive their electricity generation at a discounted price."

The problems started with a mass email sent out by a salesman at Integrity Energy, a 12-year old energy broker and consultant based in Cuyahoga Heights.

Integrity Energy matches commercial customers with large energy suppliers and has no intention of selling to residential customers, said a spokesman on Tuesday.

But the company has won contracts with some large municipal customers to supply the cities themselves and hopes to win more when FirstEnergy Solutions does not renew its contracts with other cities, he said.

Retail Competition and Ohio PPA Riders

Ohio Manufacturers Association

Lael E. Campbell
Director, State Regulatory & Government Affairs
September 18, 2014

Constellation
An Exelon Company

Agenda

- Background
  - Exelon and Constellation Overview

- Competition in Ohio and Key Market Developments

- PPA Rider Proposals

- Q&A

Exelon Corporation: A National Energy Leader

Operations & Business Activities in 47 states, Washington, DC & Canada (2013)

Revenues: $24.9 billion (2013)

Assets: $80 billion (2013)

Employees: 26,000 (2013)

Competitive Load Served:

- 150 TWH (electric) (2013)
- 1.4 TCF (natural gas) (2013)

Energy Generation: Exelon Generation

- Generating Capacity: ~35,000 MW (2013)

Competitive Energy Sales: Constellation

- 100,000 business & public sector customers
- Nearly 1 million residential customers
- Wholesale sales, dispatch, and delivery from Exelon's 35-gigawatt power generation portfolio

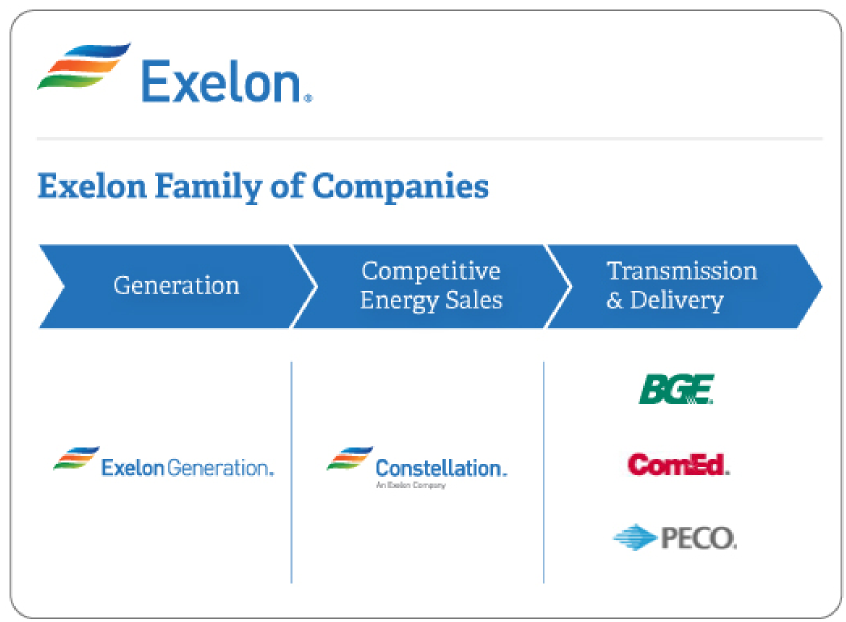
Transmission & Distribution: BGE, ComEd, PECO

- 6.6 million electric customers (2013)
- 1.2 million natural gas customers (2013)

NYSE Ticker Symbol: EXC

Headquarters: Chicago, IL

One of the nation's leading competitive power generators, with approximately $24.9 billion in annual revenues. The Exelon family of companies participates in every stage of the energy business, from generation to competitive energy sales to transmission to delivery.

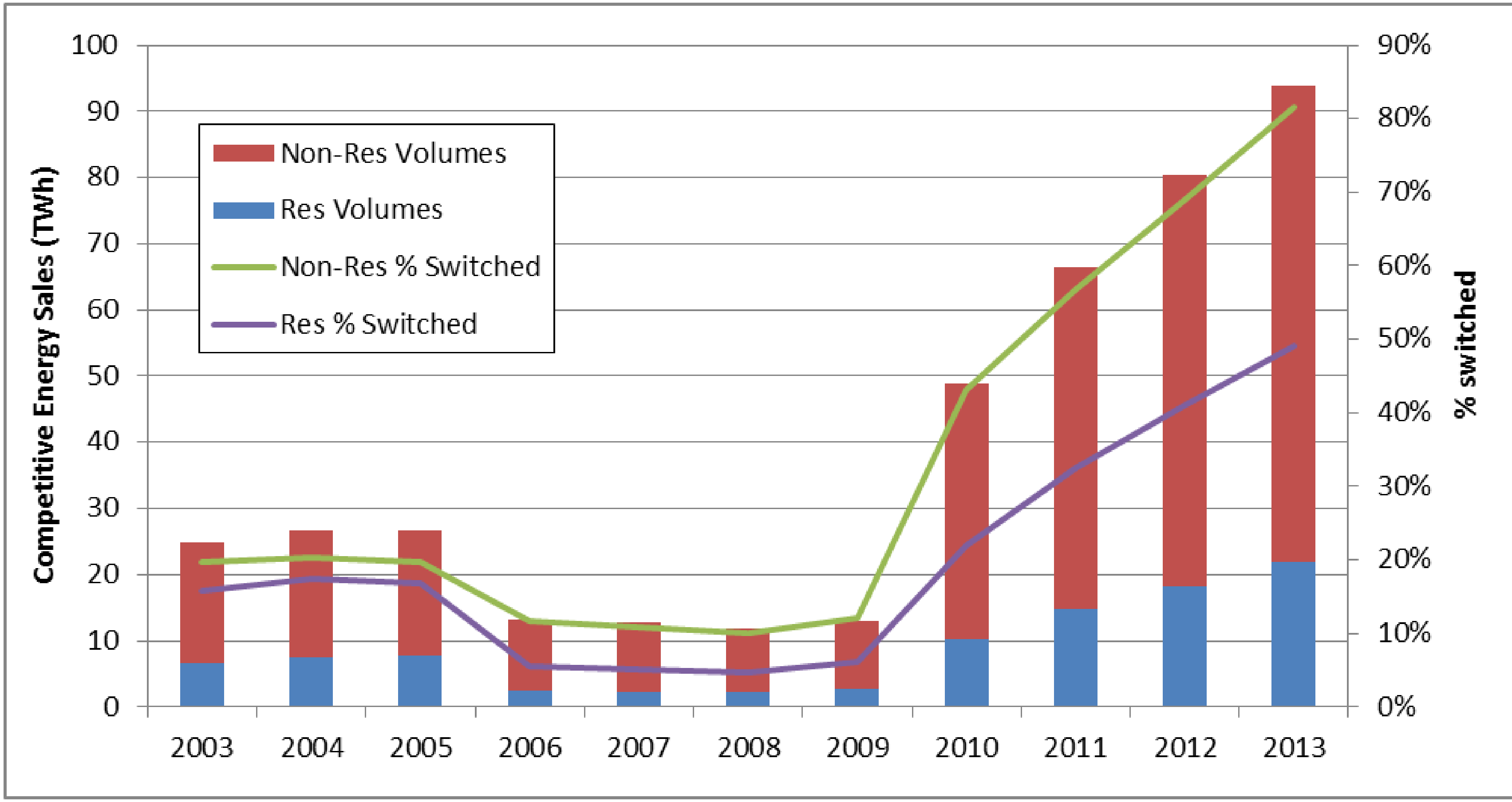


Constellation. An Exelon Company

What Constellation Offers to Ohio Customers

- Financial Stability
- Corporate commitment to competition and customer choice
  - Local offices
  - Local employees
- Focus on the Ohio competitive market
  - Long-time advocate for development and expansion of reliance upon the competitive market model
  - Significant resources dedicated over past 15 years
  - Active Participant Before the PUCO and General Assembly
- National presence
  - Ability to serve customer's electric, gas, energy efficiency, demand response, and solar needs in any restructured, competitive market
- Access to market information and energy policy expertise
  - Regular briefings and updates
  - Customer Meetings and Conferences

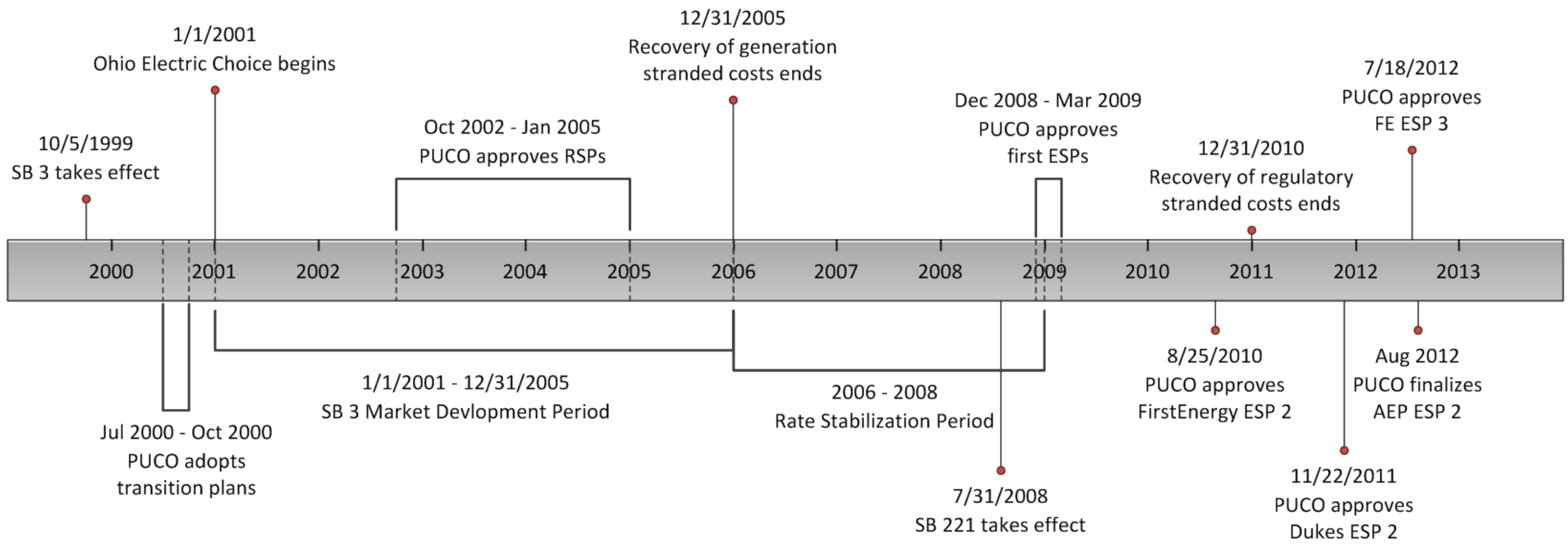
Ohio Competitive Market - Switching Trends



Source: DNV GL

Constellation
An Exelon Company

Ohio’s Transition to Competition



<u>Key Issues to Continued Transition</u>

- Transfer of Generation Assets
- Transitional Issues
- Establishment of Retail and Wholesale Competition
- Wholesale Load Auctions for Customers That Do Not Shop
- Municipal Aggregation
- Consumer Protections
- Market Power
- Independent System Operation
- **<u>PPA Rider Proposals by Ohio utilities</u>**

The AEP, Duke and First Energy PPA Riders

- ESP plans all include a proposal for a non-bypassable rider that would collect a surcharge from all customers to provide full cost recovery on Purchase Power Agreements ("PPAs") between the respective utility and its competitive generation-owning affiliate ("PPA Riders")

- Mechanics of PPA Riders: The Utility enters into a PPA, all entitlements under the PPA are sold into the PJM market (not to customers), and a non-bypassable rider would allocate costs (most likely) or credits to customers for the difference between the price the generation receives in the market and the PPA price.

- Primary customer benefit cited by utilities is "retail rate stabilizing" due to purported credit when the market price increases above the PPA price
  - even aggressive forward price estimates show no customer credit in the near term
  - AEP's own witness testified that under a best case scenario the projected savings would be 35 thousandths of a cent per kWh, ($0.07 a month for a typical 1,000 kWh customer)
  - Party receiving stability is utility via the guaranteed return
  - Competitive market offers better and cheaper alternatives to hedge market volatility

- The AEP and Duke ESP proposals only seek approval at the outset for cost recovery associated with legacy PPA stakes in OVEC generation (AEP ~900MW, Duke ~240MW) that the utilities have been unable to divest.
  - However ESPs also include a mechanism that would allow AEP and Duke to "add" new PPAs to their PPA Riders at a later date.

The AEP, Duke and First Energy PPA Riders

- FE proposal seeks cost recovery on a PPA between First Energy and its competitive affiliate First Energy Solutions for over 3,000 MW of previously divested generation.

  - Proposes 15-year PPA with FES for 900MW David Besse nuclear plant, the 2,200 MW Sammis coal facility, and 115MW slice of OVEC generation

    - Represents 1/3 of FES's merchant fleet, and 25% of peak load

  - Proposal mirrors regulated cost recovery including 11.15% ROE.

  - PPA reported to start June 1st, 2016 at approximately $65/MWh, rising by ~$2/MWh per year, resulting in ~ $500 million p/y above market return

    - $65/MWh is roughly $25/MWh above current market
    - Estimated to be over 20 TWh (20 million MWh) of generation receiving subsidy
      - presumes 90% capacity factor for Davis Bessie and 65% capacity factor for Sammis

PPA Rider Potential Impacts and Concerns

The PPA Riders are inconsistent with Ohio's transition to a fully competitive market

- Cost will rise for all Ohio customers regardless of whether they are purchasing generation service from AEP or a competitive supplier (CRES)
  - CRES Customers will be forced to pay the generation subsidies through the PPA surcharges but will receive no benefit from those surcharges.
  - All customers would pay twice for their generation service – once for the power purchased for their use through either the incumbent utility or their CRES, and then again to ensure the guaranteed profits and elimination of risk for the utility and its affiliates.
- OH utilities and affiliates will be guaranteed a profit from generation assets in Indiana and Ohio, regardless of the actual market value of the electricity generated
  - Inappropriate shift of costs and risks from the utility to customers
  - Denies consumers the ability to purchase their electricity at the lowest prices available in the competitive market.
  - PPA surcharges put Ohio industrial customers at a disadvantage to surrounding competitive states that do not mandate similar subsidies from customers
- There is no generation shortage in PJM and the plants are not needed for reliability
  - PPA surcharges will undermine investment in new generation in Ohio.
- Legality concerns under state and federal law
  - Ohio Law prohibits generation costs from being recovered through a distribution rider
  - Supremacy Clause of Constitution – Recent 4th and 3rd Circuit opinions for MD and NJ
  - FERC Cross-Subsidization/Affiliate Restrictions

PPA Rider Potential Impacts and Concerns

Opposition to PPA Rider far outnumbers support

➢ Key Opponents Include:

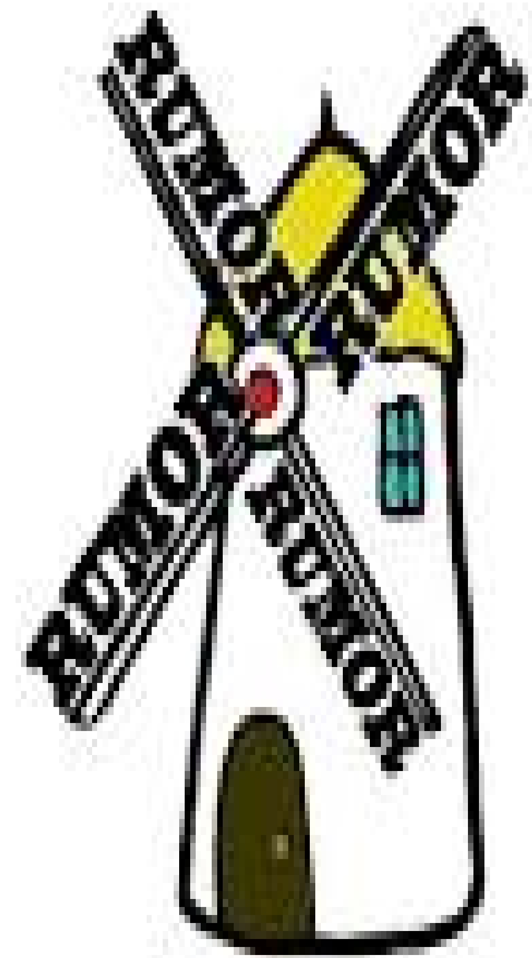
PUCO Staff, Ohio Manufacturers Association RESA/Suppliers, Environmental groups, Consumer Protection groups, Ohio Hospital Association, other large load interests such as Kroger

➢ PUCO's Staff has been vocal and strong:

"Since AEP Ohio will no longer be in the business of selling electricity after May 31, 2015, Staff does not see a need for granting a PPA rider that is tied to electric generation. None of the MWs coming out of AEP Ohio's interests in the OVEC generation is being sold to AEP Ohio's distribution customers. It took over a decade for the Commission to transition the four Ohio EDUs to a fully competitive retail electricity market. Granting a PPA rider is a move in the opposite direction."

➢ Politics can undermine regulatory developments

- Rumors of potential Legislation as early as fall veto session
- Rumor that AEP may withdraw its ESP, re-starting the procedural timeline



Questions?

To: **OMA Energy Committee**
From: **Ryan Augsburger**
Re: **Energy Public Policy Report**
Date: **September 18, 2014**

Electricity Rates and Regulation

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

Recent market trends have seen utilities sell generation assets while seeking guaranteed returns on power purchase agreements. See counsel's report and guest presentation. See attached media story by Cleveland Plain Dealer.

Federal Greenhouse Gas Regulations GHG and 111(d)

Comment is open on proposed USEPA regulations of GHG emissions under the existing Clean Air Act. The OMA is working with the NAM and with other interests in a national coalition. At the same time, state officials from Ohio EPA and the PUCO are holding meetings to consider Ohio options. State legislation to empower state regulators has been approved. The US EPA this week extended the comment period until Dec 1.

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.

The most recent auction results have been released; the auction prices are for the July 2017-2018 year. The price of capacity cleared at $120 /MW-day, this is up from $59 /MW-day from last year's auction price.

As a result of the polar vortex of 2014, PJM recently invited comment on how to combat capacity shortages. See efficiency report.

PJM Interconnection

The OMA Energy Group hosted a meeting on July 30 with PJM and PUCO Chairman Thomas Johnson. Contact staff for a copy of the PJM presentation materials that addressed market pricing trends as well as impact on USEPA 111(d) rule and FERC order 745.

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.

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.

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.

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) 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 an interested party meeting will be held next week. Representatives of Columbia Gas, a 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 support for economic development within a deregulated utility environment.

PUCO Approves "Reasonable Arrangement"

A new reasonable arrangement application for Warren Steel Holdings was approved by the PUCO in July and will affect customer costs in the FirstEnergy service territory.

Energy

Energy-efficient Fan and Dust Collection Systems Topic of Sept. 17 Work Group

The next OMA CHP/WER/EE work group meeting is via webinar on Wednesday, September 17, from 10:00 - 11:30 a.m. The topic of the meeting is energy-efficient fan systems and dust collection. This session will cover fan energy-efficiency fundamentals, plus "Top 10" examples of fan efficiency and dust collection projects.

OMA members can participate in this energy work group led by OMA's consulting energy engineering partner, Go Sustainable Energy LLC. Access the most up-to-date information, contacts, and opportunities in Ohio in the areas of combined heat and power (CHP), waste heat recovery (WER), and energy efficiency (EE).

Plant engineers, facility staff, and others responsible for implementing and managing energy efficiency are participating in the work group. Learn more here. Register here. *9/11/2014*

"Shale Gas: A Game Changer for U.S. Manufacturing"

A new report from a University of Michigan-led panel, "Shale Gas: A Game-Changer for U.S. Manufacturing," recommends steps to make the American shale gas boom happen in a responsible manner and in a way that supports domestic manufacturing.

Those steps include increasing public trust of hydraulic fracturing, monitoring and reducing methane emissions, training a next-generation energy workforce, and using shale gas profits to advance renewable energy technologies, among other efforts.

The report summarizes and expands on the U-M-sponsored daylong conference held this spring in Washington, D.C. U-M faculty members, representatives from industry, environmental organizations and government agencies participated.

Mark Barteau, director of the U-M Energy Institute and one of the report authors said about the purpose of the study, "The U.S. lacks a strategic plan and a suite of economically, socially and environmentally viable policies to responsibly leverage the new abundance of low-cost natural gas as both a fuel and a feedstock for a variety of industries." *9/10/2014*

Court Upholds PUCO Order Limiting AEP-Ohio's Fuel Cost Collection

This week the Ohio Supreme Court unanimously upheld a PUCO order that determined how much Ohio Power Company (an AEP-Ohio company) could collect in fuel costs for providing electric generation service to customers in 2009. The PUCO order had originally limited the amount of fuel costs Ohio Power Company could collect from customers that chose to buy generation service from them rather than from an electric service provider.

Writing for the court, Chief Justice Maureen O'Connor noted that before 2009 the American Electric Power Companies – Ohio Power and Columbus Southern Power – were operating under a "rate stabilization plan." The PUCO approved the rate stabilization plan in 2005, and it was in effect from 2006 through 2008. Under this plan, Ohio Power and Columbus Southern Power recovered their fuel costs though fixed rates that included automatic increases in 2007 and 2008. However, if the cost of fuel to the companies was more than the amount collected in rates, AEP bore the risk of any losses.

Here is more about the decision. *9/4/2014*

PUCO Holds Workshop on SB 310 Billing Rules

On August 26 the Public Utilities Commission Ohio (PUCO) held a workshop to discuss proposed rules for implementing the provision of Senate Bill 310 that requires disclosure to customers via their bills of the costs associated with the renewable energy standards, energy efficiency standards, and peak demand reduction requirements.

At the workshop, parties discussed, among other issues, the calculation of the various costs, inclusion of gross vs. net costs, definitions of the various costs, and affording the utilities time to make bill format changes.

After the PUCO issues proposed rules, there will be an opportunity for parties to file comments. The OMA will participate in the process. The PUCO is required to adopt rules prior to January 1, 2015. *8/31/2014*

Documented Energy Efficiency Benefits in Hoosier State

Earlier this year, Indiana repealed statewide energy efficiency standards on distribution utility companies. Legislation required state regulators to conduct a cost-benefit analysis of the now discontinued energy efficiency programs.

The findings? $3 of benefits for every $1 of cost in the aggregate. For solely the commercial and industrial sector: the same $1 of cost yielded $5 of savings.

Here's the report. *8/28/2014*

Duke Exits Merchant Power Business in Ohio

Duke Energy announced the sale of its Midwest merchant power business to Texas-based Dynegy for $2.8 billion in cash. The sale includes ownership of 11 power plants and Duke Energy Retail Sales, the company's competitive retail business in Ohio.

Nine of the power plants are located in Ohio, one is in Illinois and one in Pennsylvania. Duke Energy Ohio, the regulated distribution utility, is not a part of the transaction.

Duke said it will focus on its regulated businesses. Meanwhile, Dynegy is counting on an improved wholesale market (higher prices) for its new generation.

The transaction continues the consolidation occurring in power markets. *8/27/2014*

Introducing OMA Energy Guide, Energy Savings and Management Strategies

OMA Energy Guide helps members find the best energy rates & terms and smart energy management strategies.

At Energy Guide, members enter just a bit of information about their company's energy use to receive custom energy management recommendations. Then, with that game plan in hand, they proceed to pricing quotes and more.

Energy Guide sifts competitive electricity offers from more than 30 suppliers to find the best rate and terms.

"In Ohio's deregulated electricity market, it's important to know how to get the best price and terms. We created Energy Guide to help manufacturers reduce price risk and save management time," said OMA's Ryan Augsburger, Managing Director, Public Policy Services.

OMA selected Scioto Energy as its partner so members have access to energy experts who do nothing but energy procurement and management in the deregulated Ohio market. Check out Energy Guide now. *8/21/2014*

Key Points on Carbon Rules

The Partnership for a Better Energy Future (PBEF) has developed a useful document that summarizes key points about the aggressive U.S. EPA's proposed carbon regulations.

The document is designed to communicate simply the issues raised by the regulations: legal problems, economic impacts, electricity reliability, global context, process and timeline, lack of flexibility, technological achievability, use of 2012 as a baseline, and follow-up regulations on other industries.

It is a good document to share with elected officials. *8/13/2014*

FirstEnergy Calls for Regulation

In it Q2 earnings call, FirstEnergy announced a retreat from the Ohio retail market and a plan to ask the Public Utilities Commission of Ohio (PUCO) to reregulate some of its generation plants.

FirstEnergy CEO Tony Alexander said: "(W)e intend to exit the medium commercial and industrial or MCI and mass market retail channels as existing contracts expire, but we will continue to serve strategic large industrial and commercial customers as well as our governmental aggregation..."

Leila Vespoli, Executive Vice President, Markets and Chief Legal Officer, discussed the company's recent PUCO filing to provide electric service for a three-year term from June 1, 2016 through May 31, 2019.

She said: "We have named this plan, Powering Ohio's Progress, as it provides numerous benefits that support reliable electric service, uplift our customers from volatility and retail price increases and encourages growth and development of the State's economy.

A highlight of the plan is the Economic Stability Program which provides for a rider to cover the cost associated with the proposed purchase power agreement between the Ohio utilities and FirstEnergy Solutions.

The proposed PPA would dedicate the output of Davis-Besse, SAMA and a portion of OVEC for approximately 3,200 megawatt or an average of approximately 23 terawatt hours annually beginning in June 2016 and running through May 2031."

In other words, the company would like to return to a regulated rate for that load, paid for by a rider on customer bills. *8/11/2014*

PJM and PUCO Leaders Visit OMA Energy Group

Members of the OMA Energy Group this week held a discussion with Kerry Stroup of PJM Interconnection and Tom Johnson, Chairman of the Public Utilities Commission of Ohio. Stroup described trends in electricity capacity and generation pricing. Chairman Johnson discussed with the group the operation of the commission, as well as the state process for responding to the federally proposed carbon regulations of power plants. *7/31/2014*

Large-Scale Interstate Natural Gas Pipeline Planned

A major interstate natural gas transmission pipeline has been proposed that would transport product from Marcellus and Utica formations to delivery points in Ohio, Michigan and Ontario, Canada.

The ET Rover Pipeline, a subsidiary of Energy Transfer Partners, is in the pre-filing process with the Federal Energy Regulatory Commission.

The Rover Pipeline Project as currently proposed will consist of approximately 380 miles of 36-inch and 42-inch diameter mainline pipeline, with capacity up to 3.25 billion cubic feet per day.

Here's more information; see also map on page 4 of this document. *7/21/2014*

PBEF Petitions U.S. EPA to go Back to Drawing Board on Proposed Carbon Rules

The Partnership for a Better Energy Future (PBEF), of which OMA is a member, sent this letter this week to U.S. EPA's Administrator Gina McCarthy laying out five high-level concerns with the proposed carbon standards for existing power plants. This letter was sent in advance of a press call with executives from the National Association of Manufacturers (NAM), U.S. Chamber, and other PBEF members.

The letter makes the following requests to EPA: 1) Go back to the drawing board on the proposed rule, and 2) At a minimum, expand the public outreach beyond the four scheduled hearings and extend the comment deadline by 60 days.

The five concerns expressed in the letter: 1) The rule will increase electricity prices and negatively impact the economy; 2) The method for calculating the proposed standards exceed EPA's statutory authority; 3) EPA has failed to demonstrate that the targets and "building blocks" are technologically achievable; 4) The rule sets bad precedent for future regulation of other sectors; and 5) There has been inadequate public engagement and the agency is adhering to a rushed and arbitrary rulemaking deadline. *7/20/2014*

Ohio Energy Standards: What Elected Leaders Said This Week

Following passage earlier this summer of legislation that revises Ohio's energy standards (SB 310), state officials made comments this week hinting at things to come. SB 310 froze energy efficiency and renewable energy standards and created a panel of legislators to study the costs and benefits of the standards.

Ohio Speaker of the House William Batchelder told Hannah News Service that he expects swift action on the SB 310 study committee, implying that appointments could come as soon as September.

In responding to reporters' questions, Governor John Kasich defended his commitment to "green energy" telling an audience of regional chamber of commerce members near Mansfield that critics of the energy standards have two years to come up with an alternative. The Columbus Dispatch reported that the governor said "If they don't give us something that works, we go back to the old standards." *7/17/2014*

Hands-on Opportunity to Boost Your Facility's Energy Savings

OMA members from all energy-supply territories in the state can participate in an energy work group led by OMA's consulting energy engineering partner, Go Sustainable Energy LLC.

Access the most up-to-date information, contacts, and opportunities in Ohio in the areas of combined heat and power (CHP), waste heat recovery (WER), and energy efficiency (EE).

Plant engineers, facility staff, and others responsible for implementing and managing energy efficiency are participating in the work group. The work group meets via web-conference every other month. Read more. And click here to receive work group meeting invitations, which have detailed agendas.

Also, for a limited time, OMA members can access a no-charge CHP assessment for their facilities. Contact John Seryak, OMA's energy engineer consultant, for details. *7/8/2014*

Ohio Natural Gas Production Doubles, in One Year

Ohio's natural gas production nearly doubled from 2012 to 2013 because of increasing activity in the Utica shale and continued development of midstream infrastructure, the Ohio Department of Natural Resources (ODNR) said in a release this week.

ODNR "projects all oil and gas wells in Ohio produced 8 million barrels of oil and 171 billion cubic feet of gas in 2013. Compared to 2012, Ohio's total oil production increased by 62 percent and natural gas production increased by 97 percent. The percentage increase in natural gas production is the largest in Ohio history, and the total production is the fourth highest annual total in state history. ODNR also released production data for the first quarter of 2014. A total of 418 wells reported production of 1.9 million barrels of oil and 67 billion cubic feet of gas."

The department noted: "The production growth depends heavily on the development of the midstream infrastructure needed to transfer the resources to market. In a little more than 24 months, a new industry developed, including 11 processing facilities and miles of new pipelines. Companies have spent or have committed more than $6 billion on midstream infrastructure." *7/2/2014*

Member Spotlight: Cooper Tire Shares Cost Savings Projects

Anthony Smith, PE & Six Sigma Black Belt - Energy Management, Cooper Tire & Rubber Company, shared with members of the OMA Energy Committee this week how his company has achieved savings from energy reduction projects and process improvements. Here's his presentation.

Manufacturers routinely share case studies in energy reduction and savings at OMA Energy Committee meetings. The next OMA Energy Committee meeting is September 18; register at My OMA. *6/26/2014*

DP&L Customers: 50% Bonus Rebates July - September

Dayton Power & Light (DP&L) offers 50% rebate bonuses on motor, drive and compressed air efficiency projects July through September.

Additionally, DP&L is offering at no cost to the first 30 customers who request it, a mini audit of their compressed air systems. An energy engineer will perform an onsite assessment of your compressed air system and make recommendations for improving efficiency. Opportunities to take advantage of DP&L's bonus air compressor rebates will be identified. Contact John Seryak at Go Sustainable Energy LLC for more information. *6/26/2014*

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Current Status: 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

OMA Public Policy Framework for Action

Manufacturing is responsible for 17% of Ohio's Gross Domestic Product; this is greater than the contribution of any other Ohio industry sector. Manufacturing is the engine that drives Ohio's economy.

In the competitive domestic and global economies, every public policy decision that affects Ohio's business climate affects Ohio's manufacturing competitiveness. In turn, Ohio's manufacturing competitiveness determines the ability of the state to grow its economy and create jobs.

Ohio manufacturers require public policies that attract investment and protect the state's manufacturing legacy and advantage. These policies apply to a wide variety of issues that shape the business environment within which manufacturers operate.

Major policy goals include the following:

- An Efficient, Competitive Tax System

- A Lean, Productive Workers' Compensation System

- Access to Reliable, Economical, Diverse Energy Resources

- A Fair, Stable, Predictable Civil Justice System

- Science-based, Technologically Achievable, and Economically Reasonable Environmental Regulations

- A Modern Public Resource Infrastructure

- An Educated, Highly Skilled Workforce

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.

Ohio Department of Natural Resources
John R. Kasich, Governor
James Zehringer, Director

For Immediate Release
Sept. 8, 2014

Ohio's Horizontal Shale Wells Reach New Marks in Second Quarter

Horizontal wells produced more gas in 3 months than all Ohio wells produced in 2012

COLUMBUS, OH – During the second quarter of 2014, Ohio's horizontal shale wells produced 2,467,283 barrels of oil and 88,673,741 Mcf (88 billion cubic feet) of natural gas, according to figures released today by the Ohio Department of Natural Resources (ODNR).

The report lists 562 wells, 504 of which reported production results. Fifty-eight wells reported no production as they are waiting on pipeline infrastructure. Of the 504 wells reporting production results:

- The average amount of oil produced was 4,895 barrels.
- The average amount of gas produced was 175,939 Mcf.
- The average number of days in production was 67.

The highest producing oil well was the Antero Resources "Myron" well in Noble County at 78,309 barrels of oil in 91 days of production. The highest producing natural gas well was the Hall Drilling "Hercher North" well in Monroe County at 1.4 billion cubic feet during 91 days of production.

All horizontal production reports can be accessed at:

oilandgas.ohiodnr.gov/production.

Ohio law does not require the separate reporting of Natural Gas Liquids (NGL). Gas reporting totals listed on the report include NGLs.

ODNR ensures a balance between wise use and protection of our natural resources for the benefit of all. Visit the ODNR website at ohiodnr.gov.

– 30 –

For more information, contact:
Bethany McCorkle, ODNR Office of Communications
614-265-6860

[View this email in your browser]

News To Use And Share

Ohio Shale Energy Highlights

From the Ohio Energy Resource Alliance **September 9, 2014**

UTICA SHALE: Ohio Activity

Updated August 30, 2014

According to the Ohio Department of Natural Resources Division of Oil and Gas Resources Management's online statistics (Shale Activity tab) last updated August 23, 2014, ODNR has issued a total of 1,474 permits for drilling in the Utica shale in Ohio since December 2009, an increase of 14 since ODNR's update on August 30, 2014.

- A total of 1,059 Utica wells have been drilled since December 2009, an increase of 21 since ODNR's update on August 23, 2014.
- 554 wells are in production, an increase of 5 since ODNR's update on August 23, 2014.
- Carroll County is first in permits in Ohio with 430, an increase of 3 since ODNR's update on August 23, 2014.
- Harrison County is second with 266 permits and Belmont County is third with 155.

REGISTER NOW: Utica Summit II

Utica Summit II is an event that brings people together to talk about what can be done to fuel transportation across the United States with Utica energy, to build sustainable businesses powered by Utica energy and to grow businesses that use Utica energy as its raw product to create industrial and consumer goods.

The event will take place **Tuesday, October 14** at **Kent State University at Stark** in **Canton, Ohio** and feature speakers from the American Petroleum Institute, IHS Chemical, SPI: The Plastics Industry Trade Association, TopLine Analytics and Cleveland State University.

To register now, and for sponsorship opportunities, click here!

Following the event, API and Energy Nation will host a free Women in Energy reception!

Dominion, Duke Propose $5 billion Pipeline to Send Ohio Natural Gas to Southeast

Dominion Resources, Duke Energy and other partners are proposing a $5 billion natural-gas pipeline to connect the Southeast with the prodigious supplies of natural gas being produced in Ohio, Pennsylvania and West Virginia.

Gas is being relied upon to generate more of the nation's electricity in recent years because enormous new domestic supplies have drastically lowered its price and because natural gas burns cleaner than coal, the nation's other most important fuel for electric power.

Columbus Dispatch (9/3/14)

Aubrey McClendon Calls Utica Shale Play 'Extraordinary' at Dallas Energy Conference

If the billions of dollars raised by Aubrey McClendon's drilling company isn't enough of an indicator of his fondness for the Utica shale, here's more proof:

"In our view, pound per pound, it's the best gas rock in the U.S.," McClendon said Thursday at a Dallas energy conference.

A spokesman for American Energy Partners LP, McClendon's year-old company, said the company would not comment on his special address. But the Twitter account for Hart Energy, the company that put on the event, tweeted the pound-per-pound remark and said McClendon called the Utica "extraordinary."

Columbus Business First (9/5/14)

UTOPIA Ethane Pipeline to Run from Ohio to Ontario

Kinder Morgan Energy Partners LP, the Texas-based pipeline giant, is proceeding with a new pipeline to carry ethane from Ohio's Utica shale to Ontario.

The company on Thursday announced the launch of a binding open season to solicit commitments for its previously announced Utica to Ontario Pipeline Access (UTOPIA).

It is designed to carry ethane and ethane-propane mixtures from the liquid-rich Utica shales in eastern Ohio.

Norwalk Reflector (9/7/14)

Utica Shale to Produce 1.5 Billion Cubic Feet Per Day of Natural Gas in October

The Utica shale is expected to produce almost 1.5 billion cubic feet per day of natural gas next month.

Production estimates for September are 1.39 billion cubic feet per day, according to the latest monthly report from the U.S. Energy Information Administration.

Columbus Business First (9/8/14)

2Q Utica Production of Oil, Natural Gas Soars in Ohio

Horizontal wells in the Utica shale in the eastern part of the state produced more natural gas during the second quarter than all of the Ohio wells combined in 2012, reports the Ohio Department of Natural Resources.

The shale wells in the state produced 2,467,283 barrels of oil and 88.673 billion cubic feet of natural gas during the three months ended June 30, according to a summary report ODNR released Monday.

Youngstown Business Journal (9/9/14)

Contact:
OhioEnergyResource.org
Rebecca Heimlich
(513) 703-6277
heimlichr@api.org

Forward

People Are Asking Us About

Our Rover Pipeline Project

As we begin work on our Rover Pipeline Project, we know you may have a number of questions about our project and how the plans could potentially affect property owners.

This document will provide you with answers to questions we are most commonly asked. These questions include those about our company, proposed routes, safety and protecting sensitive areas. We've also tried to address some of the key topics of interest to people whose property may be involved in the project. Finally, we've provided directions on how you can get more information about natural gas pipelines in general, and our Rover Pipeline Project in particular.

If you have additional questions that are not addressed in this document, please give us a call. You can reach us at 1-888-844-3718 or visit our Web site at www.energytransfer.com/ops_etrover.aspx

As a leader and partner in providing clean energy solutions for nearly 60 years, Energy Transfer and ET Rover Pipeline Company looks forward to hearing from you.

Sincerely,

Joey Mahmoud
Vice President, Engineering
ET Rover Pipeline Company LLC

Questions Addressed Here Include:

Pipelines and This Project:
- Who is the ET Rover Pipeline Company?
- What is the company's track record?
- What is a natural gas pipeline?
- What is the Rover Pipeline Project?
- What is the purpose of the Project?
- Where will you build the pipeline?

Safety:
- How safe are natural gas pipelines?
- Will the pipeline be underground?
- How does the ET Rover Pipeline Company maximize pipeline safety?

Impacts on Sensitive Areas, Including the Environment:
- What is the ET Rover Pipeline Company's commitment to protecting sensitive areas and the environment?
- How will the ET Rover Pipeline Company protect sensitive areas, such as wetlands and culturally important sites?
- Will the ET Rover Pipeline Company use existing right of ways?
- What is the usual width of the right of way?
- How close will the pipeline get to residences?

Possible Property Owner Interests:
- What is the role of a land agent?
- What rights do owners have with respect to having a pipeline located on their property?
- How will property owners be compensated for their land?
- What happens if an owner and the ET Rover Pipeline Company can't agree?
- How far in advance will a property owner be notified that survey or other crews will be coming on their land?
- Will property owners be able to use land used for the right of way after construction?

Getting More Information:
- Who is the primary contact for owners of property involved in the project?
- Where can I learn more about this project?
- If my property is affected by the project, when will I hear again from the ET Rover Pipeline Company?

About Pipelines and This Project:

Who is the ET Rover Pipeline Company LLC?

• ET Rover Pipeline Company LLC (ET Rover) is a new interstate natural gas pipeline company being designed to transport natural gas from processing facilities located in the prolific Marcellus and Utica Shale areas to market regions in the United States and Canada.

• ET Rover Pipeline Company LLC is a subsidiary of Energy Transfer Partners (NYSE:ETP) which is a master limited partnership owning and operating one of the largest and most diversified portfolios of energy assets in the United States. ETP currently owns and operates approximately 35,000 miles of natural gas and natural gas liquid pipelines. The Energy Transfer family of companies owns more than 61,000 miles of natural gas, natural gas liquids, refined products, and crude oil pipelines.

What is the company's track record?

• Energy Transfer and its interstate pipelines have supplied natural gas throughout the country for over 60 years through an extensive network of underground pipelines. We have designed, built and safely operated natural gas pipelines in a number of states in the southwest, Midwest, and southeast portions of the country. Our employees works together to ensure our pipelines operate safely, efficiently and reliably year round.

What is a natural gas pipeline?

• Natural gas pipelines safely transport large volumes of gas over long distances. Pipelines are specially designed and carefully constructed, and today there are more than 300,000 miles of natural gas pipelines in operation in the United States.

• Natural gas enters the pipeline at pipeline interconnects, wellheads or processing plants near the gas fields. The gas then moves through underground pipelines with the aid of compression to customers in the pipelines' market area. Compressor stations are facilities that help gas move in the pipeline by keeping it under pressure. Our customers include local distribution companies that resell the gas to residential and business customers, as well as electric utilities that use the natural gas to generate electricity.

What is the Rover Pipeline Project?

• The Rover Pipeline Project as currently proposed capacity at 2.2 billion cubic feet per day will consist of approximately 380 miles of 36-inch and 42-inch diameter mainline pipeline, the installation of approximately 194,000 horsepower at five new mainline compressor stations, and construction of six new meter stations along the mainline pipeline, and the construction of approximately 197 miles of 24, 36 and 42-inch diameter supply laterals, approximately 38,000 horsepower at five new compressor stations, and various new meter stations in the supply areas.

Due to shipper commitments, the Rover Pipeline Project facilities will be constructed with phased in-service dates of December 2016 for the portion of the project from the supply areas to near Defiance, Ohio and June 2017 for the mainline segment from near Defiance, Ohio to the Union Gas Hub, near Sarnia Canada.

What is the purpose of the Rover Pipeline Project?

• The purpose of this project is to transport natural gas from processing facilities located in the prolific Marcellus and Utica Shale areas to numerous market regions in the United States and Canada.

• The project will enable the flow of natural gas from processing plants and interconnections in Pennsylvania, West Virginia, and Ohio to point of interconnection with Energy Transfer's existing Panhandle Eastern Pipe Line and other Midwest pipeline interconnects near Defiance, Ohio.

• Additionally, the Rover Pipeline Project expects to construct a segment from the Defiance, Ohio area through Michigan and ultimately to the Union Gas Hub, near Sarnia Canada providing producers with access to diverse markets and end-users in Michigan and Canada with access to Marcellus and Utica supplies.

Where will you build the pipeline?

•The map on the following page illustrates the proposed route of the Rover Pipeline Project. The shaded areas of the map represent the counties affected by the pipeline route in the states of Pennsylvania, West Virginia, Ohio, Michigan, and a province in Canada. In determining the siting, construction, and maintenance of facilities ET Rover is required to avoid or minimize effects on scenic, historic, wildlife, and recreational values.

About Safety:

How safe are natural gas pipelines?

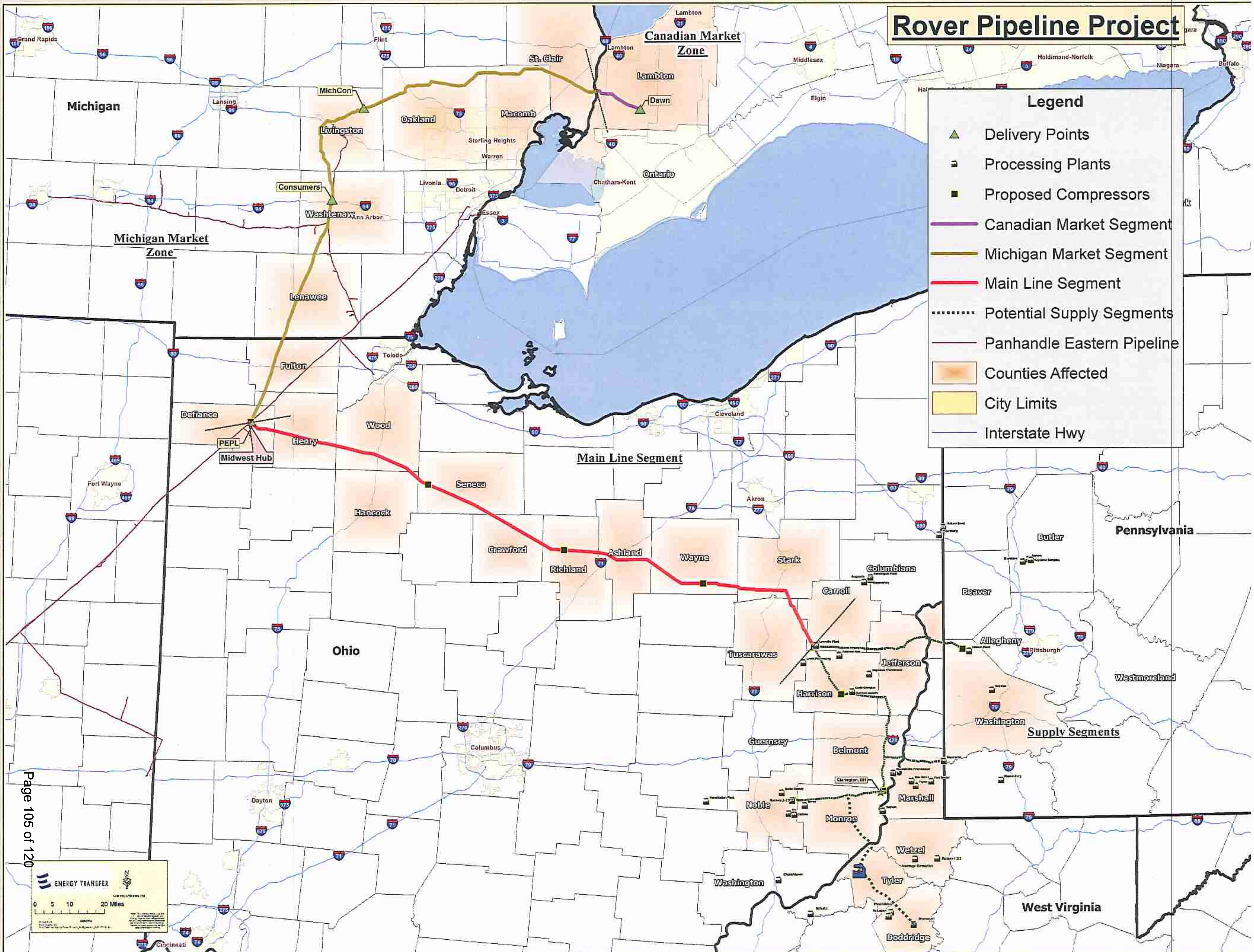
• Underground pipelines are the safest mode of transporting natural gas, and U.S. Department of Transportation statistics show underground pipelines transport gas far more safely than ships, railcars or trucks.

• Interstate natural gas pipelines are a vital part of the nation's energy infrastructure and fall under federal regulations.

• The Federal Energy Regulatory Commission is an independent government agency that approves the siting of interstate natural gas facilities.

• The U.S. Department of Transportation regulates the operations of interstate pipelines.

• Pipeline construction work is supervised and inspected under stringent federal, state and company requirements.


Rover Pipeline Project
Legend
Delivery Points
Processing Plants
Proposed Compressors
Canadian Market Segment
Michigan Market Segment
Main Line Segment
Potential Supply Segments
Panhandle Eastern Pipeline
Counties Affected
City Limits
Interstate Hwy
Canadian Market Zone
Michigan Market Zone
Main Line Segment
Supply Segments
Michigan
Ohio
Pennsylvania
West Virginia
Ontario
Grand Rapids
Flint
Lansing
Lambton
St. Clair
Dawn
MichCon
Livingston
Oakland
Macomb
Sterling Heights
Warren
Consumers
Washtenaw
Ann Arbor
Livonia
Detroit
Essex
Chatham-Kent
Middlesex
Elgin
Haldimand-Norfolk
Niagara
Buffalo
Lenawee
Fulton
Toledo
Defiance
PEPL
Midwest Hub
Henry
Wood
Seneca
Hancock
Crawford
Richland
Ashland
Wayne
Stark
Akron
Cleveland
Fort Wayne
Columbus
Dayton
Cincinnati
Columbiana
Carroll
Tuscarawas
Jefferson
Harrison
Guernsey
Belmont
Noble
Monroe
Marshall
Wetzel
Tyler
Doddridge
Washington
Butler
Beaver
Allegheny
Pittsburgh
Westmoreland
Clarington, OH
ENERGY TRANSFER
0 5 10 20 Miles

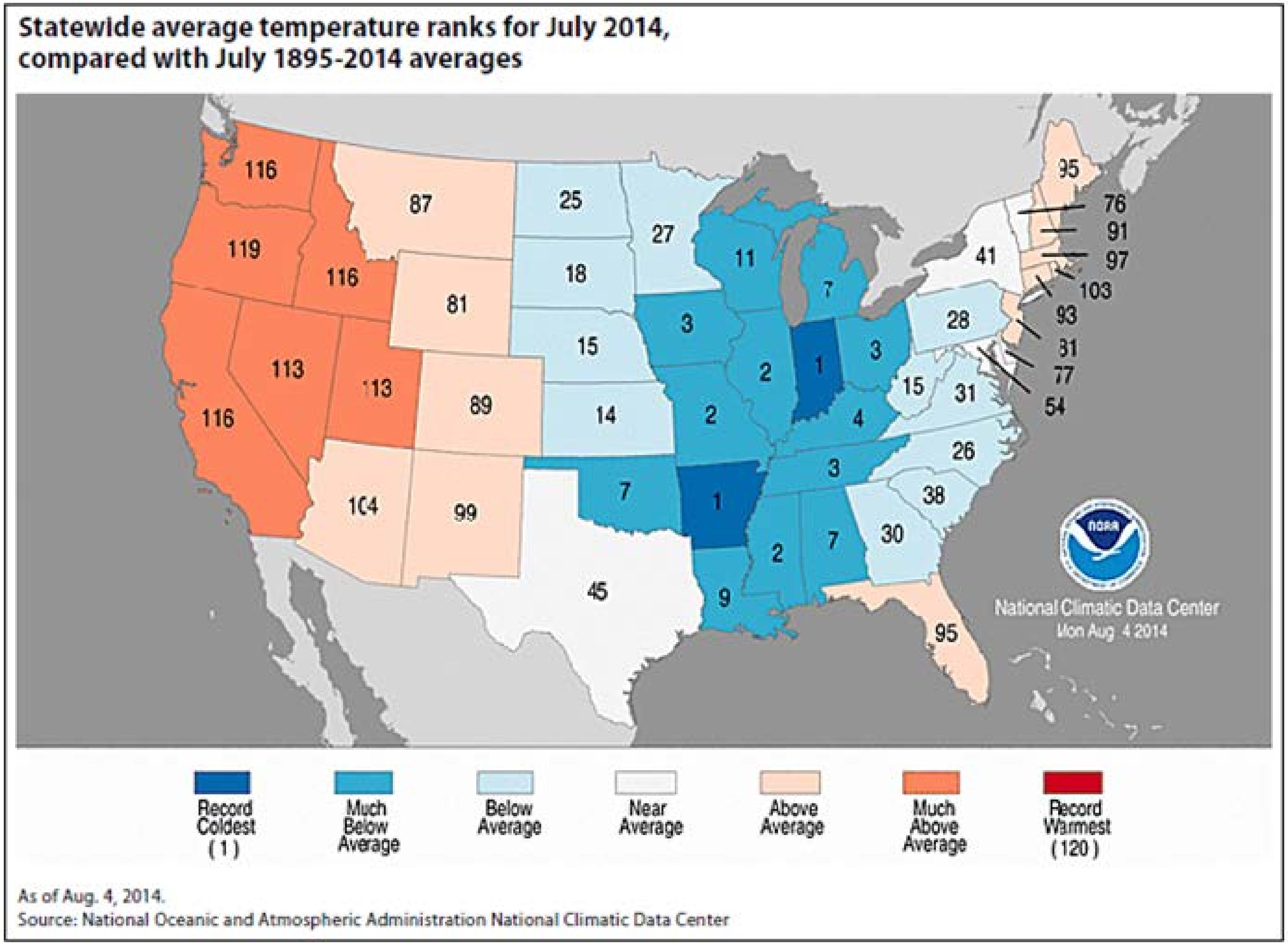
Natural Gas Update
OMA Energy Committee

Richard Ricks
NiSource
September 18, 2014

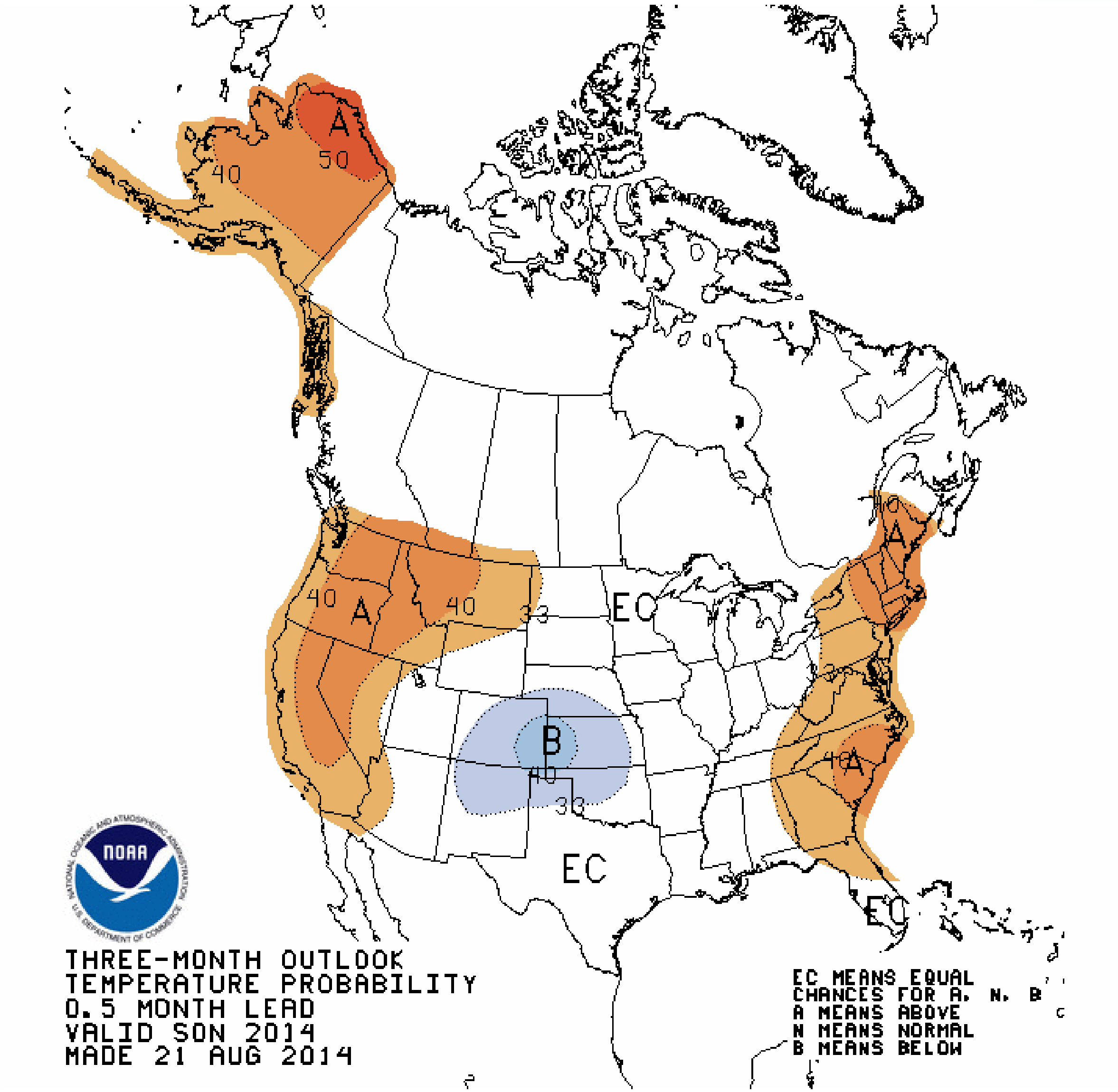
Agenda

- Weather
  - National
  - 14/15 Winter Outlook
- National Storage
- Natural Gas Pricing
  - Spot Prices
  - NYMEX Prompt Month History
  - NYMEX Gas Futures
  - Strip Prices
- Drilling Rig Counts
- Gas Consumption Outlook
- Marcellus & Utica Pipeline Projects

U.S. Temperatures Lower than Average in July



September, October, November 2014
Temperature Outlook



14/15 Farmer’s vs National Weather Service

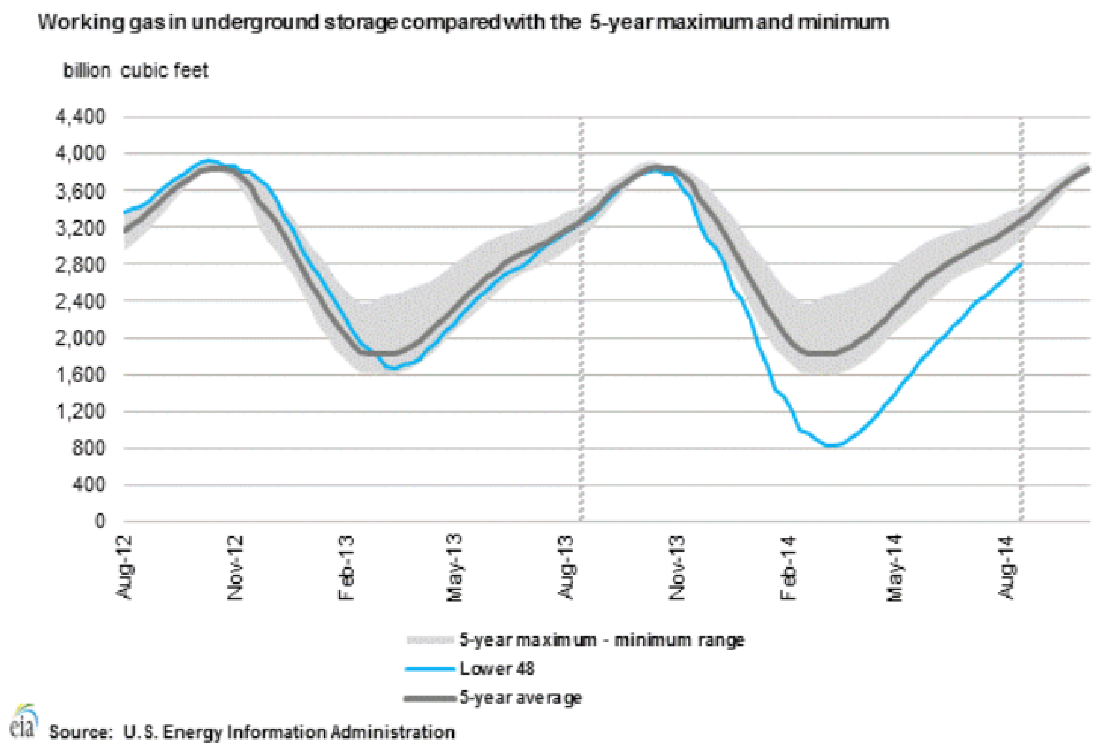
- Farmer’s Almanac
  - Another cold, wet wintery outlook in Midwest
  - Almanac was right on target for 13/14 winter

- National Weather Service
  - El Nino pattern holds in Pacific
  - 65 % chance of El Nino now
  - Predicts normal to warmer than normal in Midwest
  - Not accurate last winter

Storage

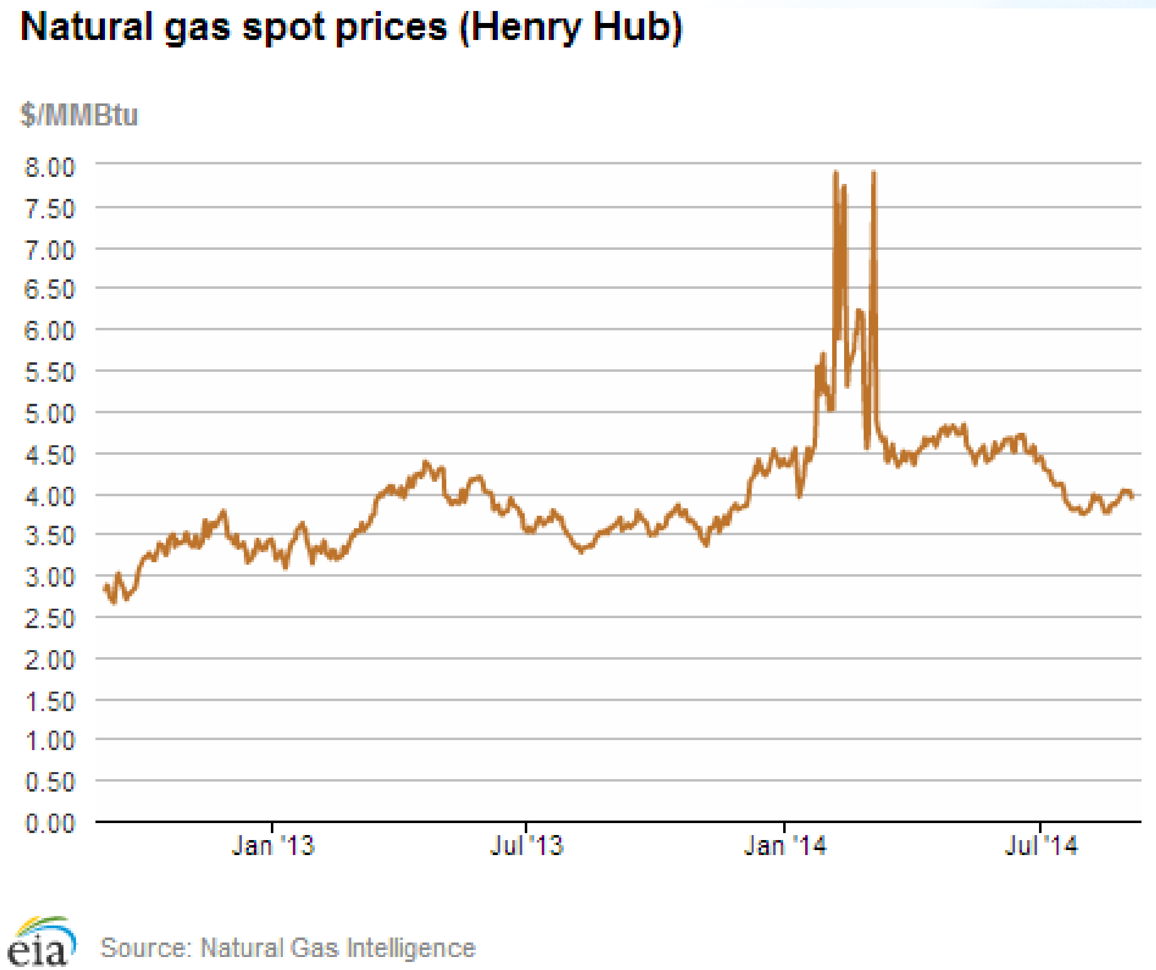
Summary

Working gas in storage was 2,801 Bcf as of Friday, September 5, 2014, according to EIA estimates. This represents a net increase of 92 Bcf from the previous week. Stocks were 443 Bcf less than last year at this time and 463 Bcf below the 5-year average of 3,264 Bcf. In the East Region, stocks were 215 Bcf below the 5-year average following net injections of 60 Bcf. Stocks in the Producing Region were 211 Bcf below the 5-year average of 1,052 Bcf after a net injection of 20 Bcf. Stocks in the West Region were 38 Bcf below the 5-year average after a net addition of 12 Bcf. At 2,801 Bcf, total working gas is below the 5-year historical range.

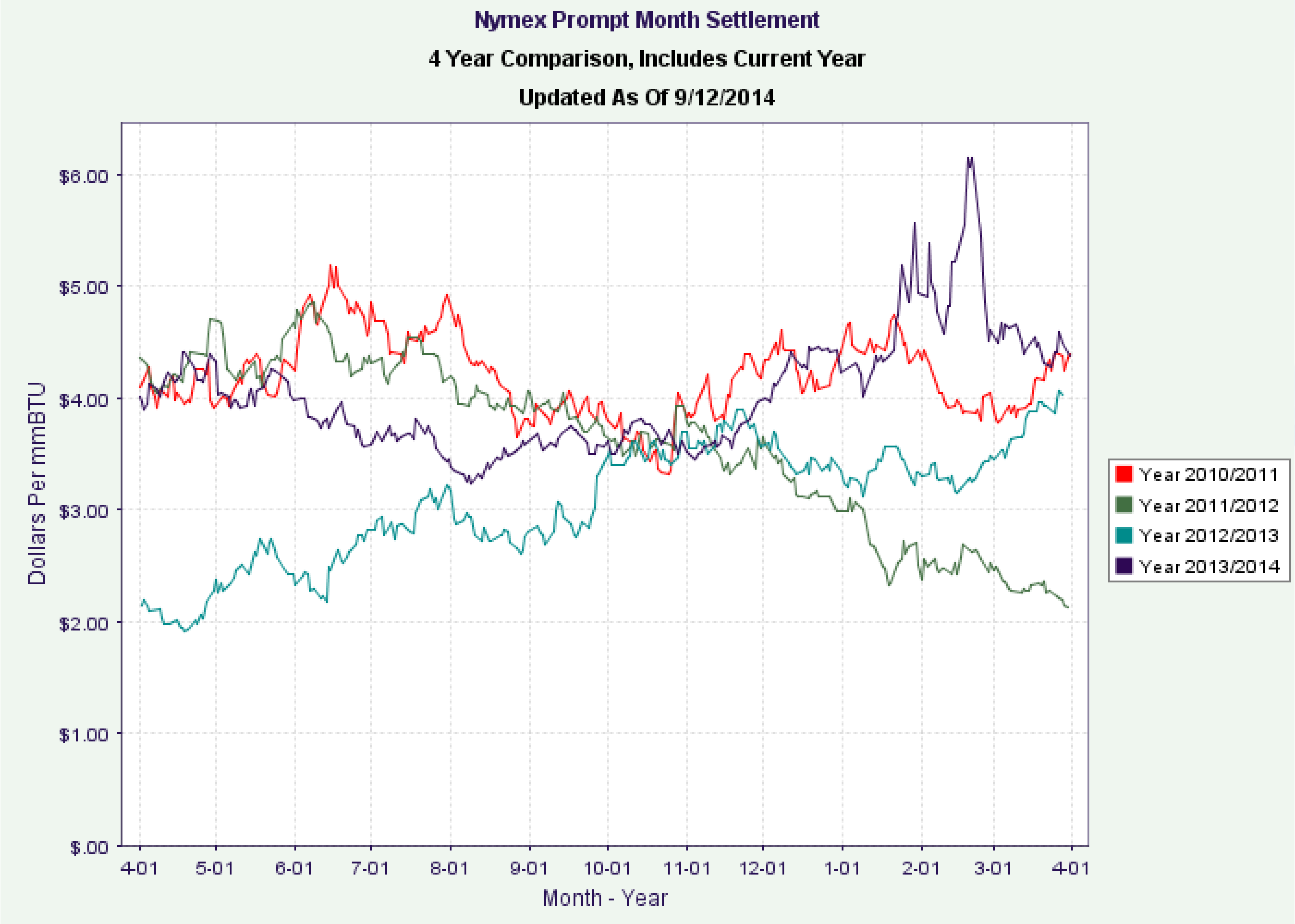


Note: The shaded area indicates the range between the historical minimum and maximum values for the weekly series from 2009 through 2013.
Source: Form EIA-912, "Weekly Underground Natural Gas Storage Report." The dashed vertical lines indicate current and year-ago weekly periods.

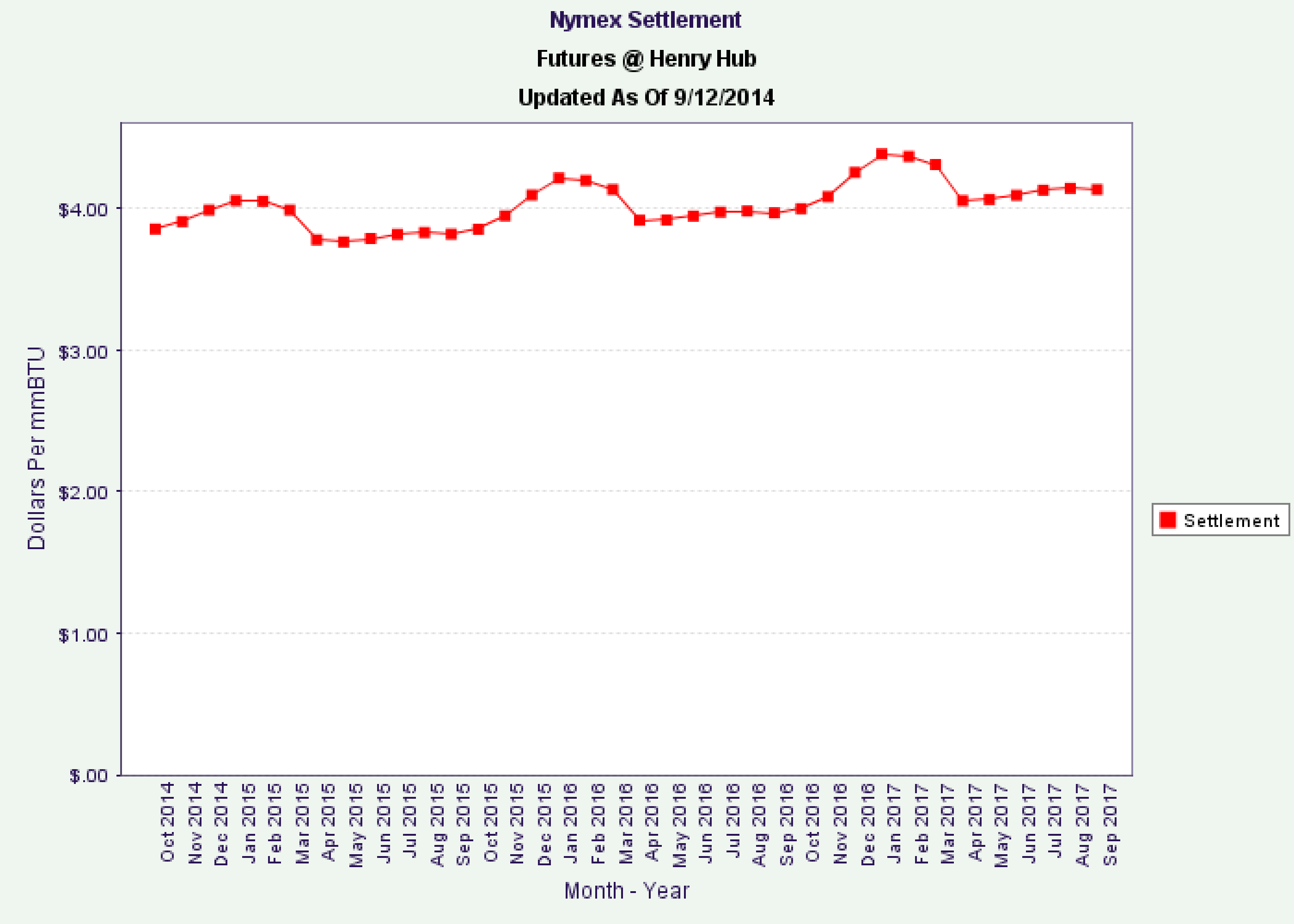
Natural Gas Spot Price



NYMEX Prompt Month Settlement



NYMEX Strip


Nymex Settlement
Futures @ Henry Hub
Updated As Of 9/12/2014
Dollars Per mmBTU
$4.00
$3.00
$2.00
$1.00
$.00
Oct 2014
Nov 2014
Dec 2014
Jan 2015
Feb 2015
Mar 2015
Apr 2015
May 2015
Jun 2015
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Mar 2017
Apr 2017
May 2017
Jun 2017
Jul 2017
Aug 2017
Sep 2017
Month - Year
Settlement

Strip Gas Prices

- Flat and Boring
- 3 Month $3.92
- 6 Month $3.98
- 12 Month $3.89
- 18 Month $3.95

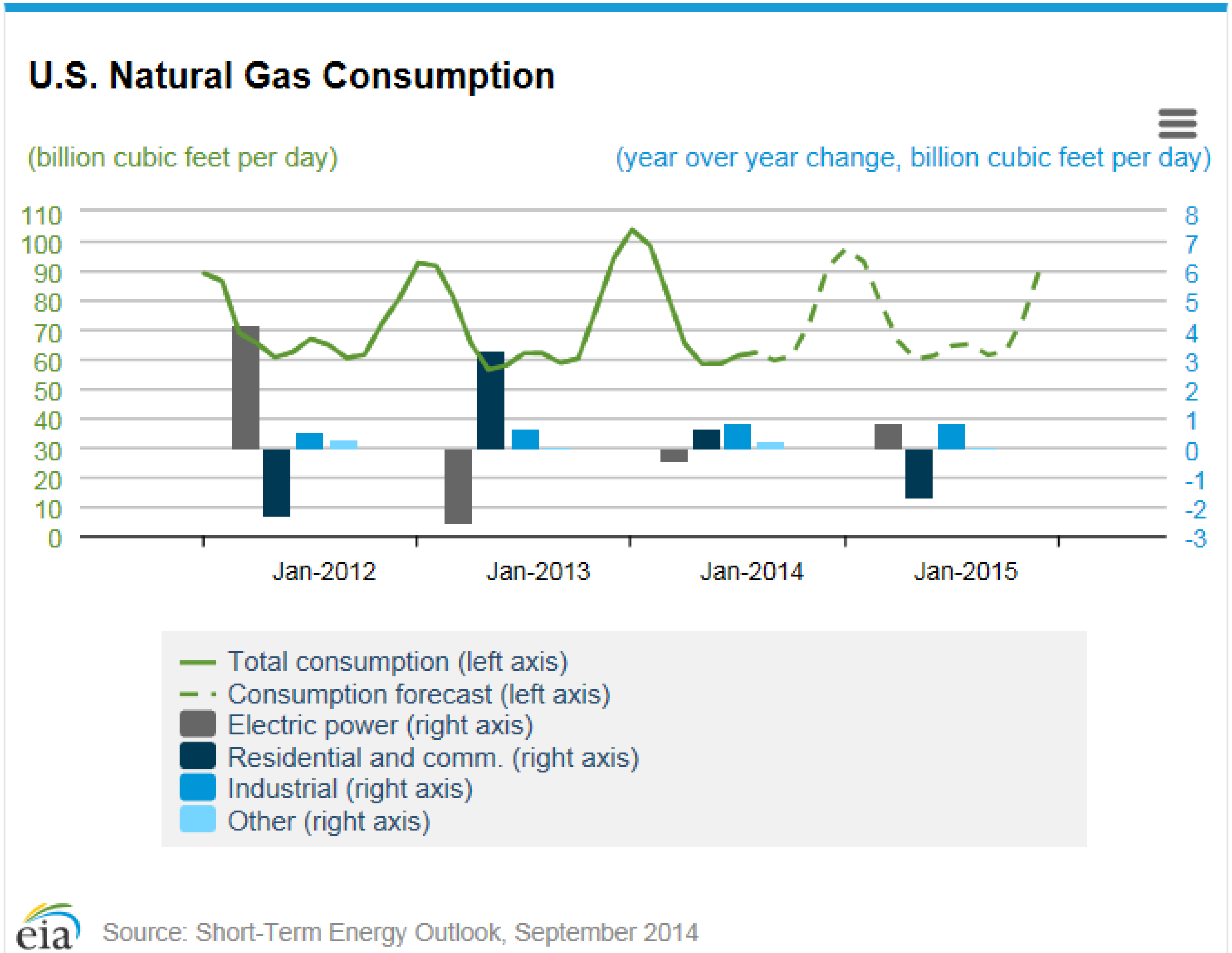
2014 World Wide Rig Count

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									
Oct									
Nov									
Dec									
Avg.	404	144	136	411	253	1,347	367	1,835	3,548

Total Natural Gas will average 72.6 Bcf/d in 2014 increase of 1.8% from 2013



Some Marcellus & Utica Pipeline Projects

- Energy Transfer Partners - “Rover” Pipeline
  - 3 Bcf/Day: Northern Oh, MI, and Ontario
- Williams (Transco) - “Western Marcellus”
  - 1 to 2 Bcf/Day: Mid Atlantic & Southeastern States
- Duke, Piedmont, AGL, & Dominion - “Atlantic Coast” Pipeline
  - 1.5 Bcf/Day: WV to North Carolina
- EQT & NextEra - “Mountain Valley” Pipeline
  - 2 Bcf/Day: Mid-Atlantic & South Atlantic
- Columbia - “Leach Express” Pipeline
  - 1.5 Bcf/Day: Gulf Coast
- DTE & Spectra Energy - “Nexus” Pipeline
  - 2 Bcf/Day: Similar route as “Rover” Pipeline

Some Marcellus & Utica Pipeline Projects

- Just the Natural Gas Pipeline Projects
- There will be more
- Open Seasons
- Projects looking for Anchor Shippers
- Large Capital Projects
- Large Pipeline Capacities
- Stretching Pipeline Contractor Capacities

Summary

- Billions of $s in “local” investments
- Ample Supply Outlook
- LNG Exports
- Natural Gas Electric Generation
- Boring Price Outlook