Reducing Energy Costs & Savings Opportunities!

Rapidly Changing Energy Marketplace
AEP, FirstEnergy, Duke Energy & DPL Rates
Managing Soaring Capacity Costs
PJM’s Regional Electricity Market
Energy Efficiency & Peak Demand Reduction
Co-Generation ▪ Compressed Air ▪ Electric Motors
Ohio’s Shale Boom … What’s Next?
New Technology to Reduce Energy Costs
Polar Vortex’s Impact on Contracting & Procurement
Best Practices in Energy Management

Best Practices in Energy Efficiency

19th ANNUAL Ohio Energy Management Conference

Wednesday & Thursday, February 25-26, 2015
The Columbus, a Renaissance Hotel, Columbus, Ohio
Ohio Energy Management Conference

Rapidly Changing Energy Marketplace

With a heavily industrial economy, Ohio is among the top States in total energy consumption in the nation. With the Shale boom in Ohio & U.S. EPA’s recent actions to limit carbon emissions from power plants, the energy source to power Ohio’s giant industrial plants & large institutions is rapidly changing. In just two years powering Ohio’s electricity generation, coal slipped from fueling 78% to now 69%, and natural gas leaped from 8.9% to 15% according to the most recent data available from U.S. Energy Information Administration.

In a series of aggressive executive branch actions, the U.S. EPA wants to further slash pollution from new U.S. coal-fired power plants, the chief contributor to carbon pollution—a move that, once finalized, is expected to freeze construction of U.S. coal plants and further lessen the reliance of coal to power Ohio’s mighty industrial sector.

In addition to the U.S. EPA’s climate change rules, Ohio industrial, institutional & commercial energy users have been substantially impacted by last winter’s extreme weather. A major white paper issued by GDF Suez concluded that the 2014 Polar Vertex will impact future energy buying decisions. According to market analysts, it is important to build energy strategies that limit exposure to sudden price swings as the ‘PJM market is likely to be hypersensitive to any early-season cold, substantially increasing the risks for any uncovered end user.’ In Ohio, FERC rule changes limiting demand response and fuel generation have caused capacity prices to jump for the 2017-2018 delivery year, doubling form last year’s auctions in several areas. And, the further retirement of coal-fired generation (the bulk will occur in 2015) will only add to the pricing risks facing consumers.

Forecasts of another bitterly cold winter for the Great Lakes coupled with the big changes spawned by environmental regulations, has American Electric Power (AEP) Chairman, President & CEO, Nicholas K. Akins, worried about a massive grid failure. According to a Columbus Business First cover story in September, 2014, Akins was most vocal about whether the grid system is prepared to handle pushed to its limits and wondered whether brownouts or blackouts could occur if the system is overtaxed at the same time it is making its transition. “But truth be known,” Akins told Columbus Business First, “something probably going to have to happen before people realize that there is an issue.”

According to an energy research white paper prepared by Brakey Energy, capacity charges may be the second largest expense on electric bills and advises simple steps for big savings. To mitigate the impact of capacity costs, their recommended steps include: install an interval meter, peak demand curtailment in response to capacity alerts, shifting electric load to natural gas powered processes, energy efficiency measures, on-site generation, demand response programs defaulting to Standard Offer Service and generation contract negotiations.

Attend the 19th Annual Ohio Energy Management Conference and receive priceless insights on electricity rates in the near future as the transition from coal to natural gas is made as well as the response to last winter’s extreme temperatures. As always, energy savings opportunities, energy efficiency, and how emerging technologies can help you reduce energy consumption will be major components of this annual conference.

Again, featured at the 2015 Ohio conference is a plethora of best practices and case studies from Ohio companies and their leading-edge initiatives. Register today for the largest energy management conference in America’s Heartland and reduce your energy costs & take advantage of savings opportunities now!

Information From This Conference Will Pay Huge Dividends in Savings on Your Energy Costs

This conference is ideal for the full-time energy manager/engineer and for the manager/professional with other energy responsibilities along with a ‘plate-full’ of other duties.

Facility & Energy Managers
Maintenance Supervisors
Energy Engineers
Municipal & Rural Cooperatives

Plant Engineers
Managers/Purchasers of Energy
Governmental Affairs Managers
Corporate Affairs Staff

Plant Operations Managers
Energy Aggregators
Managers from Utility Companies
Energy Consultants

“I use this annual conference to keep up with the changing market. Your conferences are outstanding!”
–Jack Carney, Facilities Maintenance Engineer, Mettler-Toledo, Columbus

REGISTER ON-LINE AT WWW.MECSEMINARS.COM
**Wednesday, February 25, 2015**

**7:30 a.m.**  Registration, Displays Open & Breakfast  
*Sponsored by Direct Energy Business*

**8:45 a.m.**  Conference Welcome & Introductions

**8:55 a.m.**  **Energy, Smart Regulation, Federalism & Technology … Removing Barriers to Innovation & Technology on the Smart Grid for New Products & Services to Energy Consumers**  
Joel B. Eisen  
*Professor of Law & Austin Owen Research Fellow*  
*University of Richmond*  
Richmond, VA

**9:30 a.m.**  **Energy Outlook … Wholesale Market Price Drivers - Capacity Market and Demand Response Evolution**  
Andrew Ott  
*Executive Vice President, Markets*  
*PJM Interconnection LLC*  
Norristown, PA

**10:00 a.m.**  **Less Power Diversity Will Raise Electricity Costs and Cost Jobs … Wholesale Prices Could Increase By 75% and Retail Prices Could Be 25% Higher -- The EPA's Proposed Carbon Regulations Will Reduce Diversity By Making Coal an Energy Loser & Driving it Out of the Resource Mix**  
Heath Knakmuhs,  
*Senior Director of Policy*  
*Institute for 21st Century Energy*  
Washington, DC

**10:30 a.m.**  **Visit the Energy Displays & Mid-Morning Break**  
*Sponsored by Plug Smart*

**10:45 a.m.**  **7 Interactive & Concurrent Workshops**

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A. **Significant Impact on Electricity Rates – Capacity Costs … How to Best Manage in a Changing Market**  
- New rules – capacity definitions, auction changes, transition approach.  
- Charges to curtailment service provisions – how demand response (capacity, energy & ancillary services) ties into the new structure.  
- Price impacts on loads.  
- How to develop a strategy to manage capacity cost.  

Susan Misconish,  
*Commodity Manager, Strategic Sourcing*  
*The Timken Company*  
Canton; George Deljevic,  
*Vice President, Risk & Structuring*  
*Brock Ondayko, Director, RTO Operations*,  
*Lee Feder, Manager of Risk & Ritesh Tipnis, Manager of Products*,  
*AEP Energy, Chicago & Columbus*

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B. **PJM 101 … Insights into the Regional Electricity Market Operated by PJM and How Electricity Prices are Impacted**  
- A tutorial.  
- How locational marginal prices are established, how the Reliability Pricing Model operates to procure and set prices for capacity, and how the markets for ancillary services operate.  
- How financial transmission rights, virtual bids, and other tools are used to hedge transmission congestion and other charges.  

Robert Weishaar, Jr.,  
*Counsel, Industrial Customer Coalition & Chairman, Energy & Environmental Group*,  
*Mchnee Wallace & Nurick LLC, Washington, DC*;  
Lou D’Alessandris,  
*Advisor, Competitive Market Policies*,  
*FirstEnergy Solutions, Akron*;  
Frederick ‘Stu’ Bressler,  
*VP, PJM Interconnection LLC, Audubon, PA*

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C. **Ohio’s Shale Boom & Natural Gas Developments – What’s Next?**  
- How the avalanche of Utica natural gas is changing pipeline flows, market basis pricing, and commodity conversions.  
- How the LNG exporting may change the demand side forever.  
- Repurposing underutilized pipelines almost done & now building new mega pipelines to market hubs. New ethane projects. Natural gas storage.  

Mark Jergens,  
*CEO, Midwest Energy Logistics, LLC*,  
Galena

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D. **Controlling Energy in Manufacturing … Best Practices & Trends in Sustainability & Energy Savings**  
- Techniques to successfully deliver energy reduction and calculate return on investment.  
- Best practices in control systems & networks, intelligent motor control & efficiency, energy management solutions and advanced manufacturing technology.  
- Information – key to sustainability & the connected enterprise.  

Dave Mayewski,  
*Regional Industry Manager & Fred Discenzo, Manager of Advanced Technology*,  
*Rockwell Automation, Twinsburg & Mayfield Heights*

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E. **Advanced Techniques for Performance Contracting … Insights into University of Akron Case Study on Leveraging Real Time Energy Markets to Drive Cost Savings Beyond Simple Efficiency**  
- Strategic vision.  
- Leveraging strategic assets to drive demand response revenue. Building automation & metering initiatives and installation of advanced analytics program for revenue, savings & proactively addressing facility issues.  
- Benefits & challenges of comprehensive approach.  

Ralph Morrone,  
*Associate Vice President, Capital Planning & Facilities Management*,  
*The University of Akron*;  
Akron and  
*George Deljevic, Regional Industry Manager*,  
*Midwest Energy Logistics, LLC, Galena*;  
*Dave Mayewski, Regional Industry Manager & Fred Discenzo, Manager of Advanced Technology*,  
*Rockwell Automation, Twinsburg & Mayfield Heights*

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F. **Leveraging Energy Efficiency Rider Exemptions in Uncertain Times**  
- Rebates vs. rider exemptions … insights on the details of both.  
- What qualifies for an exemption and can you get pre-approved?  
- What’s the value and charting your course through 2017?  

Lucas Dixon,  
*CEM, BPI, Project Manager & Jarrett Kelley, Project Manager*,  
*Plug Smart, Columbus*
- Best practices & how to achieve the big savings by rethinking products & processes.
  Kelly Kissock, Ph.D., PE, Prof. and Director, University of Dayton Industrial Assessment Center (UD-IAC), Dayton

 Noon Luncheon Sponsored by AEP Energy

 12:30 p.m. Behind the Retail Curtain, Managing RTO Risks in the Wholesale Energy Marketplace
  Todd D. Busby
  Senior Vice President, Commercial Operations
  American Electric Power
  Columbus

 1:15 p.m. Visit Displays & Mini-Desserts

 1:45 p.m. 7 Interactive & Concurrent Workshops

H. SB 310 Reform to Energy Efficiency & Peak Demand Reduction Mandates … Actionable Measures for Energy End-Users & Savings Opportunities
- What does SB 221 & SB 310 mean to energy customers in addition to the mandate escalation timeout, clarification of how energy efficiency will be measured & what counts, how customers will be billed for compliance costs & streamlined opt-out opportunity for large customers. How you can benefit from SB 310.
  Samuel Randazzo, General Counsel, IEU-Ohio; Matthew Brakey, President, Brakey Energy, Shaker Heights; and Renee Oonesti, Director, Plant Engineering and Maintenance, Kent Elastomer Products, Inc., Kent

I. Duke Energy Ohio: Current Electric Rates & Tariffs, Potential Impacts from the ESP III & Extracting Value … Shopping Opportunities, Demand Response Opportunity Update and Ohio Energy Efficiency & Peak Demand Reduction Mandates
  Ben Tan, Energy Specialist, Marathon Petroleum Corporation, Findlay; and Frank Darr, Member & Joseph Bowser, Technical Specialist, McNees Wallace & Nurick LLC, Columbus

J. PJM 201 … A Deeper Dive into the Regional Electricity Market Operated by PJM and How Electricity Prices Are Impacted
- Pending and proposed changes to PJM markets. Events from 2014 Polar Vortex and the market rule changes PJM proposed in response. Actionable steps end-users can take to manage capacity costs and how federal court decisions on demand response opportunities may affect these actionable steps and electricity purchasing decisions going forward.
  Robert Weishaar, Jr., Counsel, Industrial Customer Coalition & Chairman, Energy & Environmental Group, McNees Wallace & Nurick LLC; Washington, DC and Frederick ‘Stu’ Bressler, Vice President, PJM Interconnection LLC, Audubon, PA

- Behind-the-meter storage – speed, dependability & managing over-generation. What loads are the best candidates and what technologies are viable & commercially available? How to store projects generate margins for the host, type of paybacks and revenue/cost streams. FERC Order 745, cost of storage batteries & generation impact the future for behind-the-meter energy storage?
  Scott Slipher, President, AEP Energy, Columbus; Ram Sastry, Vice President, AEP Service Corp., Columbus and Brock Ondayko, RTO Operations, American Electric Power, Pickerington

L. Energy Calculations, Monitoring & Leveraging Data for Energy Savings & Performance Improvement
- Best practices on calculating energy costs per item manufactured and the use of data, monitoring, regression & analysis to the advantage of your bottom line. Leveraging data through role specific dashboards within your organization. Tracking savings and performance improvements.
  Rich Housh, CEO, Plug Smart, Columbus and Matt Culbertson, Project/Energy Eng., Crown Battery Manufacturing, Fremont

M. Industrial Energy Efficiency & Practical Tips on Energy Management
- Best practices & insights on case studies from industrial energy managers. Balancing the promise & reality of energy efficiency. Practical tips on energy management, PLC management, power purchasing & cost-effective lighting.
  Anthony Smith, PE, Energy Coordinator, Cooper Tire & Rubber Company, Findlay and Timothy Ling, Environmental Engineer, Plaskolite, Inc., Columbus

N. Best Practices: Converging Supply & Demand Strategies … Optimizing Costs & Creating Revenues
- New alternatives in load management are delivering commercial and industrial users the flexibility through customized strategies that reduce total energy costs.
  Michael Liskay, Regional Vice President, PJM-Midwest, GDF SUEZ Energy Resources, Oak Brook, IL and Bradley Dakake, Director, Viridity Energy, Inc., Philadelphia

3:00 p.m. Visit Energy Displays and Afternoon Refreshment Break
Sponsored by Brakey Energy, Inc.

3:15 p.m. 6 Interactive & Concurrent Workshops

O. AEP Ohio: Current Electric Rates & Tariffs, Potential Impacts from the ESP III & Extracting Value … Shopping Opportunities, Demand Response Opportunity Update and Ohio Energy Efficiency & Peak Demand Reduction Mandates
  James Loder, Director of Energy Management, Glatfelter, York, PA; Joseph Bowser, Technical Specialist, McNees Wallace & Nurick LLC, Columbus and Andrea Moore, Director, Regulatory Services, AEP Ohio, Columbus

P. How to Minimize Impact of Soaring Capacity Costs on Electricity Prices in the FirstEnergy Territory
- How PJM’s capacity market impact prices, how a customer’s obligation is determined. New products to help you manage your capacity costs and information on future actions. What you can do to manage costs. A plethora of steps, examples and case studies on how capacity costs have been managed for customers.
  Bruce Walker, CEP, Energy Program Administrator, Battelle Memorial Institute; Matthew Brakey, President, Brakey Energy, Shaker Heights and Carolyn Blake, OF Counsel, Meyers Roman Friedberg & Lewis, Cleveland

REGISTER ON-LINE AT WWW.MCESEMINARS.COM
11:15 a.m.  6 Interactive & Concurrent Workshops

**AA.** Advanced, New & Emerging Energy Technologies to Reduce Energy Consumption Within Your Facility
  - Insights on new and emerging technologies, how to apply them properly & what to avoid. Practical applications of cogeneration & the potential for subsidy. When to use valuable new technologies -- batteries, plasma lighting, the Energy Catalyzer, solid state generators, the Noble gas engine, new window films, etc. James Wilbanks, Senior Energy Engineer, The Brewer-Garrett Company, Middleburg Heights and Craig Opaich, Vice President, Magnum Energy Solutions, LLC, Hudson

**BB.** FirstEnergy: Electric Rates & Tariffs, Potential Impacts from Proposed ESP, and Extracting Value & Managing Costs: Shopping Opportunities, and Exposure to Capacity & Transmission Charges and Ohio’s Energy Efficiency & Peak Demand Reduction Mandates

**CC.** Mid/Downstream Strategies …Current Status of Utica Shale Production and Infrastructure Build Out
  - Insights on report commissioned by JobsOhio on status of oil & gas production, midstream and downstream infrastructure development, and to assess the potential opportunities for Ohio companies interested in becoming engaged in the oil and gas business. Andrew Thomas, Executive in Residence, Energy Policy Center & Iryna Lendel, Ph.D., Assistant Director, Center for Economic Development, Cleveland State University, Cleveland and Jeffrey Dick, Ph.D., Director, Natural Gas & Water Resources Institute, Youngstown State University, Youngstown

**DD.** Energy Procurement… How to Maximize Price Discovery & Mitigate Risk in the Changing Energy Markets
  - How much financial pain did you suffer during the Polar Vortex 2014 winter and what steps can you take to mitigate future risk. What to look for and how to ensure that all product options and maximum competition is part of your future energy procurement strategy. Rob McKim, VP & Steven Willett, VP, Amexx Energy Services, Sugar Land, TX & West Chester, PA

**EE.** Best Practices in Energy Efficiency… Electric Motors & Drives and Compressed Air Systems
  - How to properly evaluate motor operating conditions, evaluate motor drive/motor interaction, address motor and drive inefficiencies & develop a robust preventive maintenance program. Leveraging today’s technology & best practices to manage and continuously optimize compressed air systems to become more energy efficient. Understanding systems, controls, applications, case studies, auditing and incentives review. Thomas J. Sherrman, CEM, CDSM, President, Sustainable Energy Services, Inc., Bay Village and Steve Briscoe, Vice President, North Region & Scott Dubov, Senior Area Manager, IAC Air Compression, Columbus

**FF.** Best Practices in Co-Generation and Combined Heat & Power (CHP)
  - There’s an enormous amount of interest in co-generation & CHP. Evaluating the potential and economics … are you a candidate to co-generate? How to decide if a co-generation project would be beneficial. Case studies of actual installations, some potential problems and how they were addressed. Tom Fitzpatrick, PE, Power Department Manager, SSJE Inc., Toledo and H. Kelly Tisdale, CEM, LEED AP, DGCP, CDSM, CSP, General Manager, Energy Services Division, The Brewer-Garrett Company, Middleburg Heights

**12:30 p.m. Luncheon & Keynote**

**1:00 p.m. Luncheon Keynote: **
    
    Dr. Joseph Bowring, President Monitoring Analytics

**1:45 p.m. Break**

**2:00 p.m.  4 Interactive & Concurrent Workshops**


**HH.** Understanding & Managing Your Risks … A Real Time Approach for Long-Term Power Purchases
  - Constructing your risk profile -- business drivers, budget flexibility & risk tolerance. Low-risk options: fixed rate & hybrid product. Medium-risk options: block & index. Higher risk options: managed product(s). Dave Laipple, Regional Director - PJM, Champion Energy Services, Westerville and Andrew Barth, Director, Links Energy LLC, Houston, TX

**II.** Best Practices to Manage & Reduce Energy Use & Costs … Utilities as a Partner for Success

**JJ.** Dayton Power & Light (DPL): Electric Rates & Tariffs, and Extracting Value and Managing Costs: Shopping Opportunities, Exposure to Capacity & Transmission Charges and Ohio’s Energy Efficiency & Peak Demand Reduction Mandates
  - Matt Pritchard, Attorney, McNees Wallace & Nurick LLC, Columbus and Robert Adams, Senior Regulatory Analyst, The Dayton Power and Light Company, Dayton

**3:15 p.m. Conference Adjournment**
Best Guarantee in the Business – YOUR SATISFACTION IS GUARANTEED – 100%

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2/25 Workshops
10:45 a.m. A. Managing Capacity Costs H. SB310/EE & Peak Demand O. AEP Ohio Rates AA. Emerging Technology OG. Save Energy & Financing
1:45 p.m. B. 101 PJM Regional Market I. Duke Ohio Electric Rates PB. First Energy Capacity Costs BB. First Energy Rates HH. Long-Term Purchases
3:15 p.m. C. Ohio Shale Boom – Next? J. 201 PJM Regional Market Q. New Tools & Technology CC. Shale Development II. Utilities as a Partner
3:15 p.m. E. Performance Contracting L. Energy Data & Monitoring S. Best Practices/Price Solutions EE. Electric Motors/Compressor AA. Air Conditioning
4:45 p.m. F. Energy Efficiency Rider M. Industrial Energy Efficiency T. Peak Load Management FF. Co-Generation
4:45 p.m. G. Energy Savings Best Practices N. Converging Supply/Demand

19th Annual Ohio Energy Management Conference Registration Form
Investment: $595/person – Register early!!!

Attend Ohio’s premier energy conference for $595 per person. Fee includes expert instruction for continuing education credits (including PDH credits for professional engineers, credits for certified energy managers and CLE hours for attorneys), a manual & handouts featuring all the speakers’ presentations & written materials, a flash drive of PDFs of all the written materials & presentations at the conference, two luncheons & continental breakfasts, an afternoon refreshment break and a networking reception.

Huge Savings: Multiple Attendees
Three to six persons from one organization, the registration fee is $495 per person. For seven or more persons from one organization, the fee is $445 per person.

Registration/Confirmation
Register early!!!
Display opportunities are again nearly sold out and there’s a possibility, due to the timely nature of this conference, attendance may have to be limited (sell out) as well.
Please register by Thursday, February 19. Cancel by 5:00 p.m. on 2/19/15 for full refund.
Confirmations and maps will be sent to all who register. Please indicate special needs when registering.

Location & Lodging
The Columbus, A Renaissance Hotel, 50 North Third Street, (Downtown), Columbus 614/228-5050
For overnight lodging on Tuesday, February 24 and/or Wed., February 25, either use the online reservations link at www.MECSeminars.com or call The Columbus Renaissance at 800.417.1057 and ask for the special Manufacturers’ Education Council rate of $149 before February 2, 2015.

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On-line: www.MECseminars.com
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