MACRUC

Mid-Atlantic Conference of Regulatory Utilities Commissioners

23rd Annual Education Conference

AS OF

Thursday, June 21, 2018

MACRUC 23rd Annual Education Conference Sunday, June 24, 2018

This agenda is subject to change.

4:00 – 6:00 pm	Registration	Registration Desk
5:00 – 6:00 pm	Welcome Reception	Fountain Room

MACRUC 23rd Annual Education Conference Monday, June 25, 2018

9:00 - 10:30 am

General Session Welcome Remarks

Garden

Terrace Ballroom

&

Confirmation of Officers

President, Hon. Judy Jagdmann, VA

The Big Picture: Thoughts on the Movement Towards Grid Transformation

Many States are actively considering whether or how to significantly upgrade their electric grids in response to

technological changes, changing economics of renewables, security or hardening initiatives, electrification, and customer engagement. The concept of grid transformation comprises challenging aspects of electric services: potential implications for the generation, transmission, and distribution of electricity, as well as; costs paid by customers. This session will address the types and level of grid investments that some States are reviewing to deliver maximum value. Participants will debate whether grid hardening or resilience are appropriate components or drivers of such investment. Attendees will learn about approaches or processes conducive to informed decision-making. Attendees will hear about lessons learned from States already pursuing grid modernization or transformation. Attendees will hear how grid transformation, especially if it results in increased electrification, may affect the natural gas industry.

Moderator: Hon Judy Jagdmann, VA

- Francisco de la Chenaye, Ph.D., Senior Manager, Energy and Environmental Analysis, EPRI
- Matt McCaffree, Director, Regulatory Affairs, ITRON
- Chris McGill, VP, Energy Analysis & Standards, American Gas Association
- Philip D. Moeller, Executive Vice President, Business Operations Group and Regulatory Affairs at the Edison Electric Institute
- Greg Pouolos, Executive Director, Consumer Advocates of PJM States (CAPS)

10:30 - 10:45 am

Networking Break

10:45 - 11:45 am

Who has the answers?

Starlight Room

A - 1

A discussion about the Existing Nuclear Fleet in the MACRUC Region

The fate of the existing nuclear fleet is being hotly debated around the MACRUC region. Issues around fuel diversity, grid resilience, environmental benefits and economic ramifications are playing into policy discussions around the region. This panel will include a variety of perspectives on the issues including both state initiatives to preserve nuclear as well as market reforms being considered or occurring at a neighboring RTO. Panel participants will also discuss the

challenges and externalities that are coming up in various states related to preservation of the existing nuclear fleet.

Moderator: Hon. Anthony O'Donnell, MD

- Steve Aaron, President, SRA Communications
- Kathleen Barron, Exelon Corp.
- Anne George, New England ISO

10:45 - 11:45 am

Tax Reform: This CIAC won't Float

Castilian Room – 3rd Floor

A - 2

The effects of Federal Tax Reform provide the same pressure on Water, Gas and Electric utilities, particularly regarding cash flows. While the 500-page Act will impact every utilities' rates, will it influence infrastructure improvements in different ways? Will State Revolving Funds and Federal Funds dry up for water companies? Until the passage of the Act, Contributions in Aid of Construction (CIAC) were exempt from taxation for water and waste water utilities; how will these utilities and their regulators adapt? How will utilities make up for the reduction in cash flows because of the passage of the Act? How will the reduction in cash flows impact the cost of capital? How will passage of the Act affect multi-year infrastructure planning? Commissioners and their staff will need to consider regulatory policy and regulations to right the CIAC without current customers subsiding developers and new customers.

Organizer: Hon. Mary-Anna Holden, NJ Moderator: Hon. Joann Conaway, DE

- Jairo Chung, Assoc. Vice President Analyst, Moody's Ratings Services
- Christine Hoover, Senior Assistant Consumer Advocate, PA OCA
- Jay Kooper, General Counsel, Middlesex Water Company
- Tommy Oliver, Deputy Director, Div. of Utility Accounting & Finance, Virginia SCC

 David Spacht, VP, CFO & Treasurer, Artesian Water Company

10:45 -11:45 am

Successful Coexistence

Garden Terrace Ballroom

A - 3

MACRUC energy players are hotly debating what is needed in the wholesale and retail power markets, as well as, grid transformation and regulatory policies. Attendees will hear what the hotly debated topics are and how it relates to infrastructure. Attendees will learn about regulatory policies that may be necessary to successfully manage the energy infrastructure need of the MACRUC region. Also to be discussed is how and where the consumer fits in the discussion.

Organizer: Hon. Diane Burman, NY Moderator: Hon. Renee Larrick, WV

- Michelle Bloodworth, Chief Operating Officer, American Coalition for Clean Coal Electricity
- Carl Carlotti, President, National Fuel Gas Distribution Corporation
- Robin Lunt, Attorney, Wilkinson Barker Knauer LLP
- Richard Mroz, Commissioner Emeritus
- Nicole Sitaraman, Senior Manager of Public Policy, SunRun

12:00 pm - 1:45 pm

Lunch Break (On Own)

2:00 pm - 3:00 pm

What the Fund? Finding the Money for Rural Broadband

Starlight Room

B - 1

The United States managed to accomplish near-universal rural electric and telephone service in the 1930s and 1940s during one of the most financially challenging times in our nation's history. In the 21st Century why are we having such difficulty eliminating the rural divide for Broadband? Participants will discuss if sufficient and accurate data can identify where service is inadequate, what defines adequate service and what this service could eventually cost. The

panel will also discuss the growing use of alternative technologies and non-incumbent providers that can play an important roles in bridging the digital divide but may not be part of the existing universal service program. Attendees will hear debate about the concern of "overly taxing the Internet" as a source of funding and where the money will/should come from. Attendees can decide if State and Federal policymakers are coordinating sufficiently to get the job done.

Moderator: Hon. Gregg Sayre, NY

- Hon. Upendra Chivukula, NJ
- Hon. Mignon Clyburn, Commissioner Emeritus, Federal Communications Commission
- Brian O'Hara, NRECA
- John Windhausen, Jr., Executive Director, Schools, Health & Libraries Broadband (SHLB) Coalition
- Joseph Witmer, Counsel to Chair Brown, PA PUC

2:00 pm - 3:00 pm

Offshore Wind: Pull Together or Be Blown Off Course!

Castilian Room – 3rd Floor

B - 2

The lack of completed offshore wind projects maintains the status quo reliance on imported power and/or natural gas and may result in foreign countries monopolizing the global offshore wind market. Each state currently works in isolation, resulting in a lack of idea sharing, technologies, policies and completed offshore wind projects. The panel will discuss methods and policies to advance offshore wind projects through the sharing of new policies and technologies. Attendees will learn how collaboration will enhance regional economic opportunities; provide multiple regional environmental benefits; grow the offshore wind industry and make it cost competitive in the U.S.

Moderator: Hon. Joseph Fiordaliso, NJ

- Hon. Kim Drexler, DE
- Hon. Kevin Hughes, MD
- Matthew N. Greller, Esq., LLC
- Anne Marie McShea, Offshore Wind Program Administrator, NJ Board of Public Utilities

2:00 pm - 3:00 pm

The Value of Energy Storage in the MACRUC Region

Garden Terrace Ballroom

B - 3

Energy storage offers the potential to provide grid and capacity support to both the distribution and bulk electric systems. Recent developments in the regulatory sphere surrounding energy storage resources have altered the future for compensation of these resources. In Order 841, FERC required that regional transmission organizations (RTOs) establish a participation model consisting of market rules that recognize the physical and operational characteristics of electric storage resources, and facilitate their participation in wholesale markets. The requirement that PJM must change its market rules will unlock opportunities for market revenues that will encourage deployment. The panel will discuss key issues and areas of further exploration raised by Order 841 and FERC's subsequent technical conference on distributed energy resources, such as minimum size requirements, implications and opportunities for behind the meter storage resources, and the roles for state commissions and RTO's in maximizing the value of these new resources. Attendees will also confront issues relating to the requirement to charge resources at locational marginal pricing (LMP), including storage of LMP-priced energy for later injection and the related joint state/federal jurisdiction issues.

Moderator: Hon. Dallas Winslow, DE

- Scott Baker, Senior Business Solutions Analyst, PJM
- Joe DeLosa, Public Utility Analyst, New Jersey BPU
- Nitzan Goldberger, State Policy Director, Energy Storage Association
- Anne Hoskins, Chief Policy Officer, Sunrun, Inc.

3:00 - 5:00 pm

*****NEW**** INNOVATION EXPERIENCE LABs

This new facet of the MACRUC Annual Education Conference gives attendees the opportunity to see, hear and experience innovative technologies in the utility space.

Experience #1

Energy Concierge is here!

Come see and hear about an innovative billing system that benefits all income levels, homeowners and renters. With this unique system customers pay ONE consolidated bill each month. Renewable energy, on-bill financing, community solar PLUS customer retail energy choices are all included.

(Tea House Room)

Experience #2

Utility of the Future!

Visit our interactive smart home where the future of in-home energy management becomes real. Learn what kinds of applications are available today to improve efficiency and what kind of costs are involved for consumers. A personal tour will discuss how these technology advancements can change the utility-customer relationship for the better, and we will ask—what could the Utility of the Future look like?

(Overlook Room)

Experience # 3

Have you ever Driven Electric?

Now's your chance! Electric vehicles are in the news and they're at our event! Commissioners and staff are invited to participate in an electric vehicle ride and drive event during the annual MACRUC conference at the Hershey Hotel on Monday, June 25 from Noon to 2 PM and 3:00 to 5 PM. Don't have time for a test drive? Check out one of the static display vehicles! *Please note priority will be given to Commissioners.

(Fountain Lobby)

Experience #4

R2D2 and Pipeline Safety!

MACRUC has a unique opportunity to learn about one of the most advanced robots in the world for pipeline inspection! Utilities and pipeline operators across the country have been using the Pipetel Explorer iLi robots to inspect for the safety and integrity conditions of their pipes. Attendees will see videos from inside pipelines and.... a prototype robot!

(Cocoa Room)

MACRUC 23rd Annual Education Conference Tuesday, June 26, 2018

8:30 - 10:00 am

What Does the Future Hold? Understanding Synergies

Garden Terrace Ballroom

The U.S. Energy Information Administration (EIA) forecasts natural gas will remain the primary energy source for electricity generation. EIA also reported that most natural gas fired power plants in United States use firm contracts that require the producer and pipeline operator to send the natural gas to the plant when requested. Generally, firm contracts are more expensive than interruptible agreements/non-firm contracts but provide more reliability. Interruptible contracts/non-firm contracts can be set up for short periods, used for next-day delivery, and are more common in the Northeastern United States. More natural gas was purchased in the northeast using interruptible contracts than with firm contracts in 2016. As natural gas use for power generation has increased so has the interdependencies between natural gas supply and infrastructure and electric power generator operations. Attendees will examine the challenges and inherent risks in managing these contractual relationships and interdependencies. This panel will provide attendees with the information necessary to have informed discussions about

natural gas infrastructure needs and related natural gas system issues – especially on the need to ensure access to natural gas. Audience participation will be rewarded!

Moderator: Hon. Lawrence Friedeman, OH

- Daniel Deifenbach, Dominion Transmission
- Brian Fitzpatrick, PJM
- Amanda Frazier, VistraEnergy
- Christopher Lutz, VP Strategic Origination, BP Energy Company
- Eric Matheson, Energy Adviser to Vice Chairman Place, PA Commission
- Andrew MacBride, Director, FERC Gas Markets Policy, National Grid

10:00 – 10:15 am Networking Break

Foyer

10:15 - 11:15 am

C - 1

Futureproofing the Distribution System: Planning for a New Tomorrow

Garden Terrace Ballroom

If the electric distribution system and resources interconnected to it are the focus of future investment, what does the future hold for distribution system planning? What affect does this have on generation and transmission planning? In the evolving grid, how does the role of the distribution utility change?

Participants will discuss what services, functions and capabilities the distribution utility needs to develop in order to support the modern distribution system (Integrated Resource Plans, hosting capacity, additional forecasting, and interconnection standards). What is needed to harden or make the electric system more resilient? How can non-wires alternatives be used to resolve distribution system constraints? How have regulatory frameworks for planning addressed the emergence of distribution-level resources and what further evolution is needed?

Moderator: The Hon. Beth Trombold, OH

- Ron Chebra, Vice President of Grid Modernization, EnerNex
- Tom Kirkpatrick, VP-Customer Services, Marketing & Distribution Services, AEP
- Jeffrey Taft, PNNL

10:15 - 11:15 am

Stormy Weather

Castilian Room – 3rd Floor

C - 2

The MACRUC states have experienced severe weather events with dramatic impacts: Irene, Sandy, the Derecho, Irma, Katrina, Harvey, as well as recent storms. These significant storms brought dramatic winds, snow and flooding that interrupted electric, gas, water and wastewater, as well as, telecommunications services. Utilities and regulators prepare and anticipate these storms but as recent events have shown the extent of the damage or length of disruption is difficult to anticipate. This session will analyze measures that were employed to restore services and explain the protocols that worked and those that didn't. Speakers will debate what reasonable costs are for ratepayers and what regulators should expect in terms of performance by utilities. Attendees will learn: how industry and regulators can improve storm threat preparation and response for the future and the role of mutual assistance. Attendees should be able to assess the expectations of preparedness for future natural events.

Moderator: Hon. Dianne Solomon, NJ

- Hon. John Clendenin, VI
- Braulio Baez, Commissioner Emeritus, Executive Director, Florida PSC
- Joe Bastardi, Chief Forecaster, WeatherBELL
- Eileen Unger, P.E., Emergency Preparedness Partnerships

10:15 - 11:15 am

C - 3

Is the Glass Half Full or Half Empty? Valuing Municipal Water Acquisitions

Starlight Room

When municipally-owed water utilities face increasingly stringent water standards, depreciated systems requiring significant capital investment, and financial distress, they have the choice of raising rates or selling. Original cost is often insufficient to fairly

compensate the municipality for the value of its system. Fully depreciated assets and contributions may be far less than the fair market value which makes the sale by the municipality unattractive to an investor owned utility; a higher price is needed to close the deal. Attendees will learn how the value of water systems is calculated, and what this means for consumers

Moderator: Hon. Norm Kennard, PA

- The Hon. Mindy Herman, MD
- Kimberly Joyce, Esq., Vice President Regulatory,
 Government & External Affairs, Aqua America
- Gina L. Miller, Esq., Prosecutor, Bureau of Investigation and Enforcement, PA Public Utility Commission
- Harold Walker, Manager, Gannet Fleming, LLC
- Thomas Wyatt, Partner, Dilworth Paxson, LLC

11:15 – 11:30 am Networking Break Foyer

11:30 am – 12:30 pm

D - 1

Are State policies detrimental to competitive electricity capacity markets in theory, in fact, or in your dreams?

Garden Terrace Ballroom

The question of compatibility between state public policies relating to electricity generation and competitive regional capacity markets has come to the forefront as a major point of discussion and contention in the MACRUC area, as well as in neighboring parts of the country, where policies regarding nuclear generation in New York and renewable resources in ISO-New England are similarly under review.

PJM has recently concluded a stakeholder process in the Capacity Construct Public Policy Senior Task Force (CCPPSTF) to find a way to harmonize its competitive markets with state policies. After, considering the work of the CCPPSTF two separate and distinct approaches to the future of the PJM Capacity Market have been developed. The first, PJM's Capacity Repricing approach, proposes a two-step process wherein all capacity bidders will be cleared based on their bids, but the final clearing price will be based on PJM repricing of units considered by PJM to be receiving an "actionable subsidy." The second, the

Extended Minimum Offer Price Rule (MOPR-Ex) proposal, modifies the Minimum Offer Price Rule to apply to existing resources and a wider range of new resources considered to be receiving an "actionable subsidy."

MACRUC will present a panel representing diverse viewpoints and positions to focus attention and develop a better understanding of this topical and critical issue.

This panel will discuss:

- Are state public policies detrimental to competition in a free and open electricity capacity market?
- Are state policies creating subsidies in the traditional sense, and if so, are these subsidies disrupting regional capacity markets?
- Do out-of-market payments to an electricity supplier by state taxpayers, or retail rate payers, raise any concerns of cost shifting from one state to another?
- Can state policies truly be accommodated in RTO markets, and at what price?

Co- Moderators: Hon. Brooks McCabe, WV and Hon. Michael Richard, MD

- Randy Elliott, Regulatory Counsel, NRECA
- Abby Hopper, President and CEO, Solar Energy Industries Association
- David Hunger, Vice President, Charles River Associates
- Glen Thomas, President, GT Power Group

11:30 am – 12:30 pm

D - 2

Demystifying Natural Gas Marketing and Trading

Castilian Room – 3rd Floor

Natural gas markets have many moving parts and price formation is not always obvious to someone who does not live in the market every day. This session will try to dispel some preconceptions about trading in the US natural gas market. Attendees will hear what is needed for a well-functioning market to operate, how various market participants complete their gas transactions, and the differing needs of various customer groups. The discussion will touch upon the day to day operations of a marketing and trading organization and highlight the key price formation factors, including how global prices can impact US prices. Finally, the

panel will answer questions in a Q&A session from a real life trader's perspective

Moderator: Hon. Robert Cicero, KY

- Michael D. Anderson, Director, Supply Development, Nisource
- Joseph A. Holtman, Portfolio Director, Northeast Retail Commercial Operations, NRG
- Donald "Blue" Jenkins, Vice-Chairman for NGSA, Chief Commercial Office for EQT
- Barbara Mariner-Volpe , Team Lead, Natural Gas Downstream Statistics, EIA

11:30 am – 12:30 pm

Driving Force: Are Electric Vehicles the Future?

Starlight Room

D - 3

As States work to modernize the energy grid, auto manufacturers like Tesla, Ford, Volvo, and General Motors are making bold commitments to increase their electric vehicle (EV) fleets. Plus, Volkswagen is required to invest \$2 billion in EVs over the next decade. The push for autonomous vehicles will bring even more electric cars and trucks onto the road. EVs are currently a marginal percentage of passenger cars in the U.S. so uncertainties remain about consumer interest in the absence of subsidies. This panel will tackle the latest in EV policy and technology, along with implications for a clean energy future. Attendees will learn whether EVs can be leveraged to provide a more resilient and reliable grid and how states and utilities are planning for EV integration. Additionally, they will be able to cite how consumers can be engaged in EV deployment.

Moderator: Hon. Willie Phillips, DC

- The Hon. Harold Gray, DE
- Paula Carmody, Consumer Advocate, Maryland
- Matthew Goetz, Electric Vehicle Program Manager, Georgetown Climate Center
- Nikki Hall, Pepco Holdings
- Paul Hemmersbaugh, Chief Counsel and Policy Director,
 Transportation as a Service, General Motors

 Scott Phillippi, Senior Director of Maintenance and Engineering – International Operations, Corporate Automotive Engineering, UPS

12:30 - 1:45 pm

Lunch Break (On Own)

2:00 - 4:15 pm

Double Header General Session! Collaborating on Customer Solutions

Garden Terrace Ballroom

2:00 - 3:00 pm

As customers seek individualized and increasingly customizable energy products and services they look for assistance from energy companies and 3rd parties. Energy companies and distributed energy providers (DER) are collaborating on innovative solutions to meet these requests. This panel will explore issues of customer sustainability, reliability, and security while sharing "real-life" examples of how energy companies and DER providers are working collaboratively in the MACRUC region.

Moderator: Hon. Gladys Brown, PA

- Cristina Coltro, Manager, Demonstration Projects, ConEd
- Rick Counihan, Head of Energy Regulatory and Governmental Affairs, Nest Labs
- Wayne Morrison, Principal, Emerging Technology, NRG Energy
- Mike Innocenzo, President and CEO, PECO

3:15 - 4:15 pm

Dynamic Rates – Regulatory and Rate Design Mechanisms to Facilitate Customer Solutions

The second part of this general session will be an interactive discussion on dynamic rates. The panel will drill down on a menu of regulatory and rate design mechanisms to facilitate investment in customer solutions and assist in meeting expectations. Join us

for a lively discussion with lots of opportunity for audience participation.

Moderator: Hon. Obi Linton, MD

- Phil Hanser. Principal, The Brattle Group
- Brian Greene, Greenehurlocker, LLC
- Karl Rabago, Executive Director, Pace Energy and Climate Center
- Raja Sundararajan, Vice President, Regulatory Services, American Electric Power

7:00 - 9:00 pm

Installation Cookout/Dinner

Join us for our Annual Installation Dinner as we welcome our 2018-2019 Officers. The event is casual. Flat shoes are suggested as this event is scheduled to be outside and on the lawn (weather permitting). Tickets available for purchase for those not staying at The Hotel Hershey and for guests.

Dinner registration desk will be open 6:45 -7:30. Tickets required for entry and will be redeemed for beverage tickets.

MACRUC 23rd Annual Education Conference Wednesday, June 27, 2018

9:00 - 10:00 am E-1

Ethics: Ex Parte – Ethical Considerations (one (1) hour of Ethics CLE)

Castilian Room – 3rd Floor

Ex parte [Latin "from the part"] – Done or made at the instance and for the benefit of one party only, and without notice to, or argument by, any person adversely interested; of or relating to court action taken by one party without notice to the other, usually for temporary or emergency relief. Black's Law Dictionary.

While many attorneys have a vague understanding of the term, this session will get into the specifics of what it means and how to avoid and handle such situations.

Attendees will learn:

- What does ex parte mean in your state?
- What Commissioners and Commission staff must consider.
- How to handle certain communications: Parties of Record, Legislators, Press, and Public.
- When ex parte is permissible?
- How to cure ex parte.

Facilitator: Hon. David Sweet, PA

- Rosemary Chiavetta, Esq. Secretary, Pennsylvania Public Utility Commission
- Jennifer Murphy, Director of Energy Policy and Senior Counsel, NARUC

9:00 - 10:00 am E- 2

RTOs - 20 Years Later

Starlight Room

RTOs and ISOs around the country have been in existence for 20-plus years. Over this time the energy landscape has evolved significantly; centralized energy market development has moved to natural gas and renewables, consumer trends now seek more empowerment via distributed energy and smart-grid, and state policies comprise a gamut of interest from economic development to de-carbonization to resiliency. Under these circumstances it is only logical to ask, are RTOs/ISOs providing the results envisioned when these marketplaces officially formed in the 90s? This session will discuss the success, or lack thereof, of RTOs/ISOs over the course of the last 20-plus years to foster an effective, reliable, competitive, and economic energy marketplace. We further will critique RTOs/ISOs ability to adapt and accommodate their design and operations to reflect the changing desires of utilities, generators, and consumers. Attendees will learn about market designs that have succeeded, those that have failed, and those on the horizon that will need to be formulated properly to accommodate this fluid market.

Moderator: Hon. Talina Mathews, KY

- Hon. Beth Trombold, OH
- Rob Gramlich, President, Grid Strategies LLC

- Bill Malcolm, Senior Legislative Representative-State Advocacy and Strategy, AARP
- Darlene Phillips, Director, Strategic Policy and External Affairs, PJM

9:00 - 10:00 am E- 3

System Sprawl: Reliably Operating the Grid with a Less Centralized and Broader Set of Resources

Garden Terrace Ballroom

The proliferation of energy resources dispersed across the distribution system has made electric system operations more complex. Attendees will learn how this complexity creates opportunities and challenges for electric utilities, customers, and other stakeholders. They will hear about operational benefits that have been or will likely be realized as well as be able to describe challenges have already been met and key challenges that remain?

Moderator: Hon. John Rhodes, NY

- Tanuj Deora, EVP and Chief Content Officer, SEPA
- Denise Foster, VP, State & Member Services, PJM
- William Hederman, Senior Fellow, Kleinman Center for Energy Policy, University of Pennsylvania
- Stuart Nachmias, VP, Energy Policy & Regulatory Affairs, Con Edison

10:00 - 10:15 am

Networking Break

10:15 - 11:30 am

Commissioner Roundtable

Garden Terrace Ballroom

Plan to stay for our Sweet Ending! This session is informative, enlightening and often entertaining! We saved the best for last.... and allowed plenty of time to check-out.

Commissioners representing each member state will participate.

Attendees will hear about challenges commissions are facing and

will learn about the strategies commissions are employing to protect the consumer interest.

Facilitator: Greg White, NARUC Executive Director, Commissioner Emeritus, Michigan

Participants:

- Hon. Gladys Brown
- Hon, Robert Cicero
- Hon. Joseph Fiordaliso
- Hon. Harold Gray
- Hon. Judy Jagdmann
- Hon. Betty Ann Kane
- Hon. Brooks McCabe
- Hon. Michael Richard
- Hon. John Rhodes
- Hon. Beth Trombold
- Hon. Raymond Williams