



# NARUC

## Summer Committee Meetings

July 24-27, 2016 | Omni Nashville Hotel



# Welcome to the 2016 Summer Committee Meetings

Thank you for joining NARUC in Music City: Nashville, Tennessee. We are pleased to present a slate of panels featuring speakers and topics focused on the energy, utility, transportation, and telecommunications issues that are most relevant today.

Regulating in the public interest is both complex and challenging. You'll find that the speakers we have assembled will present information that will help you to address these challenges. As always, NARUC's goal is to provide a forum that facilitates meaningful exchanges.

We will have an excellent lineup of committee meetings focused on issues of supplier diversity, consumer affairs, rate design, natural gas procurements, federal updates, wireless broadband, and pipeline safety. The hot topics of community solar and customer protections and grid resiliency will be featured as well. You may also take great interest in the International Committee's panels on international cybersecurity challenges and the geopolitics of liquefied natural gas. Also, look for the net metering debate, which should be a lively conversation!

Monday's general session starts off with a Q&A with Exelon President & CEO Christopher M. Crane. The leader of the largest electricity company in the United States will be engaged in a probing dialogue concerning technology, clean energy supplies, and customer-focused solutions. This is followed by a panel addressing the role of States versus markets in procuring electric generation. On Tuesday, Commissioner Brien Sheahan of Illinois will lead a 'big data' panel. During this session, you will get the answers you need to get up to speed on big data. Mark Bridgers, with Continuum Capital, completes our general session with a presentation on workforce issues in the gas, electric, water/sewer, and telecom sectors.

We are honored to once again have the Hon. Norman Bay, Chairman of the Federal Energy Regulatory Commission join us for Wednesday's joint session for a roundtable discussion on electric transmission. This two-part session begins by asking if we are focused on building what we need, followed by a discussion on inter-regional planning and competition.

Of course, none of these sessions would be possible without the hard work of our committees and subcommittees—we appreciate the extra mile put in by the chairs and staff members to ensure that NARUC continues to provide an exceptional meeting experience for all attendees.

We look forward to interacting with you here in Nashville and continuing these conversations afterward.



Sincerely,

Hon. Travis Kavulla of Montana



Greg White, NARUC  
Executive Director



# 2016 NARUC Officers

**Travis Kavulla, President**  
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**David E. Ziegner, Treasurer**  
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National Association of Regulatory Utility Commissioners



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## General Information

### Hotel Information

#### **Omni Nashville Hotel**

250 Fifth Avenue South  
Nashville, TN 37203  
tel: (615) 782-5300

#### **Hyatt Place Nashville Downtown**

301 3rd Avenue South  
Nashville, TN 37201  
tel: (615) 687-9995

### Registration and Information Desk

The NARUC registration and information desk will be open the following hours:

<b>Sunday</b>	<b>8:00 a.m.–6:30 p.m.</b>
<b>Monday</b>	<b>8:00 a.m.–5:00 p.m.</b>
<b>Tuesday</b>	<b>8:00 a.m.–5:00 p.m.</b>
<b>Wednesday</b>	<b>8:00 a.m.–12:00 p.m.</b>

### Badge Color Identification

Badges must be worn and visible at all times when attending a NARUC meeting or event.

**Blue:** Commissioners

**Green:** Industry

**Red:** Commission Staff

**Tan:** Public Interest/Consumer Groups/Federal/State Agencies (non-members)

**Purple:** Media

### Program Printing

This program was printed using information as of June 25. Some information may have changed by the time the meeting occurs.



### Suggested Attire

- Friday - Wednesday: Business
  - Welcome Reception: Business
- Meeting rooms have a tendency to be cool. We suggest you bring a sweater or jacket for your comfort.

### Event Tickets

Tickets are required from everyone for entry to the NARUC Welcome Reception. There are no additional charges for this event. Tickets will be exchanged at the door for 2 beverage tickets. See the registration desk for guest ticket information and fees. NARUC encourages all individuals to drink responsibly and not to drink and drive.

### Electronic Devices

In consideration of the speakers and your colleagues, please turn off all cellular phones and other communication devices while in any of the sessions. Your cooperation and courtesy is appreciated.

### Twitter users

Use the **#NARUCSummer16** hashtag when tweeting from our meetings. Follow us at <http://twitter.com/naruc>. Ensure that you stay connected and stop by the Qualcomm booth for the Internet conference code.



### Taping/Video Policy

Unless you receive prior approval from NARUC, only credentialed members of the press are allowed to tape or video NARUC sessions. This policy gives comfort to our speakers and protects NARUC from potential legal action. If you wish to tape or record any portion of the NARUC meeting, please contact Regina Davis at [rdavis@naruc.org](mailto:rdavis@naruc.org) for permission.

# Daily Schedule at a Glance

## SUNDAY, JULY 24

TIME	EVENT	LOCATION
9:00 a.m. - 10:15 a.m.	Staff Subcommittee on Rate Design	Ballroom E
9:00 a.m. - 10:15 a.m.	Staff Subcommittee on Water	Ballroom E
9:00 a.m. - 10:30 a.m.	Staff Subcommittee on Consumer Affairs	Cumberland 1
9:00 a.m. - 11:45 a.m.	Subcommittee on Utility Marketplace Access	Broadway F
9:00 a.m. - 5:00 p.m.	Staff Subcommittee on Telecommunications	Broadway A/B
9:30 a.m. - 2:30 p.m.	Staff Subcommittee on Gas	Broadway C/D
10:00 a.m. - 11:30 a.m.	Staff Subcommittee on Critical Infrastructure (Closed Meeting)	Broadway G/H
10:15 a.m. - 10:30 a.m.	Networking Break	Ballroom Foyer
10:30 a.m. - 12:00 p.m.	Washington Action (Closed Meeting)	Music Row 5
10:30 a.m. - 1:00 p.m.	New Commissioners Forum (Invitees Only)	Cumberland 2
1:00 p.m. - 2:25 p.m.	Committee on Consumer Affairs	Broadway F
1:00 p.m. - 2:30 p.m.	Staff Subcommittee on Energy Resources and the Environment	Ballroom E
1:00 p.m. - 3:00 p.m.	Staff Subcommittee on Pipeline Safety (Closed Meeting)	Music Row 6
1:00 p.m. - 3:00 p.m.	Subcommittee on Pipeline Safety (Closed Meeting)	Music Row 6
1:00 p.m. - 3:00 p.m.	Telecommunications Act Modernization	Music Row 5
1:00 p.m. - 5:00 p.m.	Committee on Critical Infrastructure	Broadway G/H
1:00 p.m. - 5:00 p.m.	Staff Subcommittee on Information Services	Cumberland 1
1:00 p.m. - 5:00 p.m.	Staff Subcommittee on Electricity & Electric Reliability	Broadway E
1:35 p.m. - 5:00 p.m.	Committee on International Relations	Broadway G/H
2:15 p.m. - 2:30 p.m.	Networking Break	Ballroom Foyer
3:00 p.m. - 5:00 p.m.	Task Force on Transportation	Broadway C/D
3:45 p.m. - 4:00 p.m.	Networking Break	Ballroom Foyer
3:45 p.m. - 4:45 p.m.	Committee on Gas	Broadway F
5:00 p.m. - 6:30 p.m.	Welcome Reception	Legends Ballroom

# Daily Schedule at a Glance

## MONDAY, JULY 25

TIME	EVENT	LOCATION
7:00 a.m. - 8:30 a.m.	National Regulatory Research Institute	Bass
7:00 a.m. - 8:30 a.m.	Organization of PJM States, Inc. (Invitees Only)	Acoustic
8:30 a.m. - 10:30 a.m.	General Session	Legends Ballroom
10:30 a.m. - 1:45 p.m.	Networking Break	Ballroom Foyer
10:45 a.m. - 5:00 p.m.	Committee on Electricity	Broadway E
10:45 a.m. - 5:00 p.m.	Committee on Energy Resources and the Environment	Broadway G/H
10:45 a.m. - 5:00 p.m.	Committee on Gas	Broadway E
10:45 a.m. - 5:00 p.m.	Committee on Telecommunications	Broadway A/B
10:45 a.m. - 5:00 p.m.	Staff Subcommittee on Information Services	Cumberland 1
10:45 a.m. - 4:00 p.m.	Staff Subcommittee on Pipeline Safety (Closed Meeting)	Music Row 6
11:45 a.m. - 1:00 p.m.	Lunch Break - On Your Own	
2:30 p.m. - 2:45 p.m.	Networking Break	Ballroom Foyer
3:45 p.m. - 4:00 p.m.	Networking Break	Ballroom Foyer
5:00 p.m. - 6:00 p.m.	MACRUC (Invitees Only)	Electric
5:00 p.m. - 6:00 p.m.	MARC (Invitees Only)	Mockingbird 2
5:00 p.m. - 6:00 p.m.	Western (Invitees Only)	Bass
5:00 p.m. - 6:00 p.m.	SEARUC (Invitees Only)	Acoustic
5:00 p.m. - 6:00 p.m.	NECPUC (Invitees Only)	Music Row 6


# Daily Schedule at a Glance

## TUESDAY, JULY 26

TIME	EVENT	LOCATION
8:30 a.m. - 10:30 a.m.	General Session	Legends Ballroom
10:30 a.m. - 10:45 a.m.	Networking Break	Ballroom Foyer
10:45 a.m. - 5:15 p.m.	Committee on Electricity	Broadway E
10:45 a.m. - 5:15 p.m.	Committee on Energy Resources and the Environment	Broadway G/H
10:45 a.m. - 5:15 p.m.	Committee on Gas	Broadway F
10:45 a.m. - 5:15 p.m.	Committee on Telecommunications	Broadway A/B
10:45 a.m. - 5:00 p.m.	Committee on Water	Broadway C/D
10:45 a.m. - 5:00 p.m.	Staff Subcommittee on Information Services	Cumberland 1
11:45 a.m. - 1:15 p.m.	Commissioner-Only Luncheon	Legends Ballroom
11:45 a.m. - 1:15 p.m.	Commissioner Emeritus Luncheon	Electric
2:30 p.m. - 2:45 p.m.	Networking Break	Ballroom Foyer
3:45 p.m. - 4:00 p.m.	Networking Break	Ballroom Foyer

## WEDNESDAY, JULY 27

TIME	EVENT	LOCATION
9:00 a.m. - 11:45 a.m.	Joint Meeting with FERC — Transmission Collaborative: A Roundtable Discussion	Broadway E
9:00 a.m. - 11:45 a.m.	Committee on Telecommunications	Broadway A/B
11:45 a.m. - 3:00 p.m.	Board of Directors	Broadway F



# MAKE A DIFFERENCE WITH NARUC

NARUC is working in emerging economies to advance energy regulation and improve people's lives. Regulators from the U.S. and around the world collaborate with NARUC to help solve some of the most pressing problems in energy today.

We need your help to continue this vital mission. NARUC staff have a wealth of experience facilitating international interactions, allowing you to focus on this fulfilling work. Opportunities are also available to share expertise remotely from the U.S.

Learn how you can make a difference today.

**Contact International Programs Director Erin Hammel at [ehammel@naruc.org](mailto:ehammel@naruc.org)**

# Thanks to our Elite Sponsors

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## Executive Level



## Platinum Level



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# General Sessions

**Monday, July 25 | 8:30 a.m. - 10:30 a.m.**

**General Session | Legends Ballroom**

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## Welcome and Introductions

**Moderator:** *Hon. Travis Kavulla, Montana*

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## Q&A with Christopher M. Crane, President and CEO, Exelon Corp.

**8:30 a.m. - 9:15 a.m.**

**Moderator:** *Hon. Travis Kavulla, Montana*

**Panelist:** *Christopher M. Crane, President and CEO, Exelon Corp.*

President Kavulla sits down with the leader of Exelon, which became the largest electric company in the United States this year. In addition, Exelon operates the nation's largest clean energy generation fleet and has been an outspoken advocate on behalf of its customers for rationalizing environmental and energy policy. The company and EEI have focused for the past year on three areas: smarter energy infrastructure using new technology, expanding clean energy supplies, and creating energy solutions customers want. Mr. Crane will be asked probing questions about all three, and then some, in this fast-paced dialogue.

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## The Role of States vs. Markets in Procuring Electric Generation

**9:15 a.m. - 10:30 a.m.**

**Moderator:** *Hon. Travis Kavulla, Montana*

**Panelists:** *Allison Clements, Director, Sustainable FERC Project, Natural Resources Defense Council*  
*Michael Haugh, Assistant Director of Analytics, Ohio Consumers' Counsel*  
*William Hogan, Professor, Harvard Kennedy School*  
*Thad Miller, Executive Vice President and Legal Officer, Calpine*  
*Jay Morrison, Vice President of Regulatory Issues, National Rural Electric Cooperative Association*

It is the hottest debate in electricity today. From resource adequacy to sustainability, rate stability to economic development, and of course old-fashioned pork-barrel politics: There are a lot of pure and not-so-pure motivations behind the State policy interventions that have forced this debate to the surface.

This panel will address two questions: Where *is* the dividing line between States and markets in electric generation, after three landmark U.S. Supreme Court cases and a multitude of FERC rulings and State legislative initiatives? And—perhaps more importantly—where *should* that line be drawn? Can markets deliver on the many things that consumers and policymakers are asking of them? Are States really capable of making efficient resource decisions? Our panelists tackle these controversial questions head on.

## Tuesday, July 26 | 8:30 a.m. - 10:45 a.m.

### General Session | Legends Ballroom

#### Getting from Data to Intelligence

8:30 a.m. - 10:00 a.m.

**Moderator:** *Hon. Brien Sheahan, Illinois*

**Panelists:** *Alex Laskey, President & Founder, Opower*

*Tim Healy, Chief Executive Officer, Chairman, Co-Founder, EnerNOC*

*Eric Dresselhuys, Executive Vice President of Global Development, Silver Spring Networks*

*Linda Sullivan, Executive Vice President & Chief Financial Officer, American Water*

*Dave Kolata, Executive Director, Citizens Utility Board*

In the past decade, companies that gather and understand data have transformed the global economy in almost every sector. Meanwhile, regulated utility industries operate the most extensive, interconnected networks on the planet. They are platforms for the creation and transmission of data, but they tend to lag behind other industries in putting that data to innovative use.

Unfortunately, many regulators have no idea of the practical implications of this. IoT. SaaS and PaaS. IT and OT convergence. Data analytics. Machine learning. The Cloud. "What on earth does any of that really mean, and what does it have to do with me?" you ask.

This panel has answers. The panelists explain in simple terms what is already possible, and what might be possible in the future as data is leveraged to improve the operating efficiencies of utilities and the experience of their customers.

Panelists will also discuss policy questions, including the lack of standardization that hampers the use of data in utility applications, regulatory barriers that deprive regulated parties of the incentive to transition to the age of "big data" as other industries have, privacy and the ownership of data, and security concerns.

#### Who Will Do The Work?: North American Utility Workforce Supply vs. Demand

10:00 a.m. - 10:30 a.m.

**Presenter:** *Mark Bridgers, Principal, Continuum Capital*

The last decade has seen a massive expansion in the volume of utility construction work. Looking forward, Mark Bridgers, a consultant to the design and construction industry, forecasts that the capacity of the energy and utility construction workforce to meet forecasted needs is in question.

Attendees at this General Session will:

- Obtain a picture of the current capacity of the combined utility and contractor workforce in the gas, electric, water/sewer, and telecom sectors.
- Review a forecast indicating where and when demand will exceed industry construction capacity.
- Learn the implications of the forecasted shortage in workforce supply, for ratepayers, Public Utility Commissioners, utility firms, and contractors.

#### Networking Break

10:30 a.m. - 10:45 a.m.

“ I’m developing innovative technology that recycles nuclear fuel to generate electricity. With nuclear energy, we can have both reliable electricity and clean air. ”

**Leslie Dewan**

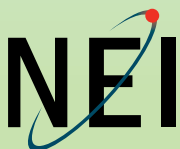
Technology Innovator, Forbes 30 Under 30



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**Sunday, July 24 | 9:00 a.m. - 10:15 a.m.**

**Committee on Rate Design | Ballroom E**

## Agenda TBA

9:00 a.m. - 10:15 a.m.

**Sunday, July 24 | 9:00 a.m. - 11:45 a.m.**

**Subcommittee on Utility Marketplace Access | Broadway F**

## Welcome and Opening Remarks

9:10 a.m. - 9:15 a.m.

**Moderator:** *Hon. Nikki Hall, South Carolina; Subcommittee on Utility Marketplace Access Chairwoman*

## Update on UMA Toolkit Project

9:15 a.m. - 10:15 a.m.

**Moderator:** *Laurie Dowling, Executive Director, National Utilities Diversity Council*

The Supplier Diversity Toolkit was formally launched at the NARUC Annual Meeting in San Francisco. Now, the UMA Committee members will receive a briefing from NUDC on the status of the Toolkit.

## Demonstrating Value and Leveraging Power through Employee Resource Groups

**Moderator:** *Hon. Sherina Maye Edwards, Illinois*

**Panelists:** *Hon. Colette Honorable, FERC*

*David Weaver, Vice President, Regulatory Affairs, AGL Resources*

*Janese Murray, Vice President, Diversity & Inclusion, Exelon*

*Laura Butler, Vice President, Talent Management & Chief Diversity Officer, PGE*

Though companies often advertise Employee Resource Groups (ERGs)—also called affinity groups—as evidence of their commitment to diversity, the purpose and focus of ERGs can vary drastically. Whereas some are used to promote diverse retention and promotion and career advancement, others are viewed as social clubs with little to no impact on success. This panel will explore the benefits and potential risks of ERGs and discuss how to successfully implement an ERG that promotes diversity and inclusion and professional development and advancement, while providing tangible value to the company.

# Board of Directors

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## MISO Presentation

10:15 a.m. - 10:30 a.m.

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## Commissioner Discussion – What’s in a Name – Should the Subcommittee recommend new name for the Utility Marketplace Access Subcommittee?

10:30 a.m. - 11:00 a.m.

**Moderator:** *Hon. Nikki Hall*, Subcommittee on Utility Marketplace Access Chairwoman and Chair, South Carolina

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## UPDATE: Minority Investment Bank Report

11:00 a.m. - 11:15 a.m.

**Moderator:** *Timothy Alan Simon*, Com. Emeritus, California; Founder, TAS STRATEGIES

A follow up to a report delivered at the 2016 NARUC Winter Committee Meetings regarding a national statistical report prepared by Loop Capital Markets on the frequency and level of participation by diverse firms in recent transactions.

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## Subcommittee Business and Closing Remarks

11:00 a.m. - 11:45

**Moderator:** *Hon. Nikki Hall*, South Carolina; Subcommittee on Utility Marketplace Access Chairwoman

## Sunday, July 24 | 1:00 p.m. - 3:00 p.m.

### Telecommunications Act Modernization (TeAM) | Music Row 5

Agenda TBA

## Sunday, July 24 | 3:00 p.m. - 5:00 p.m.

### Task Force on Transportation | Broadway C/D

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## The States of Rail Safety: State Involvement in Railroad Safety Issues?

3:00 p.m. - 4:00 p.m.

Leaders in railroad safety issues from the Federal Railroad Administration, the States of California and Illinois, and BNSF Railway discuss their views on the role of States in railroad safety issues, as well as several current federal rulemakings and studies involving notification to States, railroad liability for hazardous materials, and emergency response planning.

**Moderator:** *Hon. Ann Rendahl, Washington*

**Panelists:** *Robert Lauby, Associate Administrator for Safety, Federal Railroad Administration*  
*Patrick Brady, General Director Hazardous Materials Safety, BNSF Railway*  
*Paul King, California*  
*Joseph Klinger, Assistant Director, Illinois Emergency Management Agency*

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## Break

4:00 p.m. - 4:10 p.m.

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## Business Meeting

4:10 p.m. - 4:20 p.m.

Welcome Remarks

**Moderator:** *Hon. Ann Rendahl, Washington*

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## Working Group on Motor Carriers

4:20 p.m. - 4:40 p.m.

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## Working Group on Rail Safety

4:40 p.m. - 5:00 p.m.



**Sunday, July 24 | 9:00 a.m. - 12:00 a.m.**

**Staff Subcommittee on Consumer Affairs | Cumberland 1**

## **Pricing, Choice, and Customer Communications: Lessons Learned from Other Industries**

**9:00 a.m. - 10:00 a.m.**

**Moderator:** *Phil Boyle, Oregon, Vice-Chair, Subcommittee on Consumer Affairs*

**Panelists:** *Judith Schwartz, To The Point*  
*Nat Treadway, DEFG*

A guiding principle for regulators is to treat all customers fairly and equally. This often translates into policies that do not reflect divergent consumer priorities or limitations. Grid modernization advances allow collective goals (load shifting, efficiency, operational savings, carbon reduction) to be met by a mix of offerings beneficial to customers that have varied constraints and aspirations.

Research supports the idea that American consumers of all income levels appreciate choices. Many willingly pay premiums for goods and services that provide added value reflecting their priorities while welcoming discounts and loyalty programs. This panel provides insights into the distinct ways diverse customer segments evaluate price incentives including:

- A new framework for understanding low-income consumer populations based on ability and intention to pay.
- Marketing strategies predatory businesses use to reach disadvantaged communities and how these same tactics might be applied by utilities in a constructive manner.
- How popular non-utility industries communicate dynamic pricing and payment options.

The discussion will focus on how these insights are relevant to current challenges facing electric, gas, and water utilities and what simple adjustments and innovations could have tremendous positive impact.

## **Residential Demand Charges: Ready for Prime Time?**

**10:00 a.m. - 10:15 a.m.**

**Speaker:** *William Malcolm, Senior Legislative Representative, AARP*

Demand charges have been around for 100 years for commercial and industrial electric customers. Now some utilities think residential ratepayers should pay a demand charge as well. Indeed, in the last two years, utilities in Arizona, Colorado, Wisconsin, Kansas, Oklahoma, and Illinois have proposed them – some via PSC filings and some via legislation or as part of a legislative package. Are such charges appropriate for residential customers? Can customers respond to them? Are there other rate designs that could better address reducing household customer usage during the utility's high cost peak period? AARP has been active in the debate in a number of States and will review its efforts to address the interests of household consumers.

## **Networking Break**

**10:15 a.m. - 10:30 a.m.**

## Rural Wireless and Consumers on the Ground in the States: New Proposals and Issues

*(Joint with Staff Subcommittee on Telecommunications in the Telecom Meeting Room - Broadway A/B)*

**10:30 a.m. - 12:00**

**Moderator:** Joe Witmer, Esq., Counsel to Chairman Gladys M. Brown, Pennsylvania Public Utility Commission

**Panelists:** Hon. Catherine J.K. Sandoval, California  
John Evans, Small Business Advocate  
Dave LaFluria, Cost Quest Associates  
Representative TBA, Utilities Technology Council

The panel will examine recent proposals for a joint Federal-State approach to ensuring that rural wireless consumers have access to broadband networks and services comparable to those in urban areas. The panel will address broadband adoption in rural and, by extension, urban areas associated with rural broadband deployment.

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# Consumer Affairs

**Sunday, July 24 | 1:00 p.m. - 3:00 p.m.**

**Committee on Consumer Affairs | Broadway F**

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## Community Solar Customer Preferences and Customer Protections

**1:00 p.m. - 2:25 p.m.**

**Moderator:** *Hon. Maida J. Coleman, Missouri*

**Discussants:** *Hon. Tim G. Echols, Georgia*

*Hon. Gladys M. Brown, Pennsylvania*

**Panelists:** *Dan Chwastyk, Utility Strategy Manager, SEPA*

*Paula Carmody, People's Counsel, Maryland Office of People's Counsel*

*Jeff Cramer, Executive Director, Coalition for Community Solar Access*

*Carmine A. Tilghman, Senior Director - Energy Supply, UNS Energy*

Locally sited, customer-supported solar projects—known as “community solar,” “shared solar,” or “solar gardens”—have become an intriguing new deployment model allowing customers, including low- and moderate-income customers, to participate in the growth of solar power. This rapidly expanding model creates the opportunity for more deployment of solar energy.

The session will highlight the recent consumer preference research from Smart Electric Power Alliance (SEPA) and the Shelton Group that was funded by the U.S. Department of Energy, consumer protection regulations from Maryland's community solar program, and lessons learned from utilities and third-party providers. State Commissioners will provide an overview of the consumer protection and education tools available and discuss whether there are others that might need to be considered.

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## Business Meeting

**2:25 p.m. - 2:30 p.m.**

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## The Consumer-Centric Utility Model

**2:30 p.m. - 3:00 p.m.**

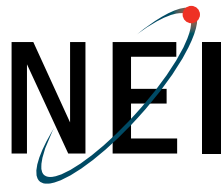
**Speaker:** *Jan Ahlen, Senior Regulatory Affairs Specialist, National Rural Electric Cooperative Association*

The National Rural Electric Cooperative Association will present its recently released report, “The Consumer-Centric Utility Future.” As the electric utility industry confronts changes in technology, economics, policy, and consumer expectations, America's electric cooperatives offer up the consumer-centric utility (CCU) as a model that will foster innovation that benefits all energy consumers. Cooperatives believe that the CCU model, a model that aligns the goals of the utility with the interests of consumers, both promotes innovation and mitigates the risks that come with rapid change. When co-ops and other utilities adhere to a CCU model, they thrive by meeting and exceeding their consumers' expectations, leveraging new technologies, offering new services, and ensuring affordable, reliable power.

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# Critical Infrastructure

**Sunday, July 24 | 10:00 a.m. - 11:30 a.m.**

**Staff Subcommittee on Critical Infrastructure | Broadway G/H**

## CI Subcommittee Closed Meeting

**10:00 a.m. - 11:30 a.m.**

**Moderator:** *Rebecca Beaton*, Washington UTC.

The CI Subcommittee will have a small group, closed meeting to discuss any topics of interest. Invited participants are State and federal regulatory and government entities only.

**Sunday, July 24 | 1:00 p.m. - 5:00 p.m.**

**Committee on Critical Infrastructure | Broadway G/H**

## Introductions

**1:00 p.m. - 1:15 p.m.**

*Hon. Richard Mroz*, New Jersey (CI Committee Chair)

## Updates from Federal Partners

**1:15 p.m. - 1:35 p.m.**

**Speaker:** *Matt Duncan*, Program Manager, U.S. Department of Energy

## International Cybersecurity Challenges: Implications for U.S. Public Utilities and their Regulators

**1:35 p.m. - 3:05 p.m.**

**Moderator:** *Hon. Arthur House*, Connecticut

**Panelists:** *Paul Stockton*, Managing Director, Sonecon LLC  
*Bill Bryan*, President, ValueBridge International, Inc.  
*Eric Slavinsky*, CIO, PPL Corporation

Panelists will discuss global cybersecurity threats affecting public utilities in the United States and other countries. Among the topics included are the sources and nature of international threats to U.S. public utilities; lessons learned from the Ukrainian penetration; the United Kingdom's regulatory structure and its cybersecurity defense capabilities; and finally, a review of cyber threat management in other countries.

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## Break

3:05 p.m. - 3:15 p.m.

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## Briefing on EPRI's Recently Launched EMP Program

3:15 p.m. - 3:35 p.m.

**Speaker:** *Rob Manning*, Vice President of Transmission, Electric Power Research Institute

In this briefing, EPRI will outline its recently launched EMP initiative, progress to date, and plans for the future. Electromagnetic radiation is a growing concern in the energy business. It can include intentional events—such as weaponized electromagnetic pulse (EMP) or intentional electromagnetic interference—or natural events, such as geomagnetic disturbances (GMD) from solar flares. Although the industry has worked to develop an effective response to GMD, less work has been centered on the effects of an EMP attack. EPRI is collaborating with electric utilities and the U.S. Department of Energy to develop a response to EMP threats. The intention of EPRI's research on EMP is to provide a sound, technical basis from which utilities can effectively evaluate potential impacts, mitigation, and recovery plans.

This three-year collaborative effort will:

1. Characterize specific EMP threats;
2. Assess substation component vulnerability;
3. Assess methodologies for determining system impact; and
4. Assess and develop mitigation strategies including hardening and recovery to enable utilities to make important decisions about system resiliency.

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## Grid Resiliency and Physical Security

3:35 p.m. - 4:40 p.m.

**Moderator:** *Hon. Phil Jones*, Washington

**Panelists:** *Michael Degendorf*, CEO, Grid Assurance  
*TBA*, North American Electric Reliability Corporation  
*Petter Fiskerud*, Program Manager, ABB Consulting

The North American bulk electric power grid is one of the most complex technological networks in the world. Recent events highlight that this interconnected network is encountering a new range of threats. In the event of large-scale and widespread damage to the U.S. transmission infrastructure, restoration of the grid could be hampered by long lead times required to build and deliver critical replacement equipment, including large power transformers, circuit breakers, and other specialized electrical equipment. Consumers benefit from opportunities that allow for economical access to critical equipment faster than traditionally possible. This session will explore areas where State and federal regulators and industry can and are working together to encourage, facilitate, and leverage actions taking place in the utility space to support a more resilient transmission grid. This panel aims to educate attendees on challenges and potential solutions in creating a more resilient grid.

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## Business Meeting

4:45 p.m. - 5:00 p.m.

**Sunday, July 24 | 1:00 p.m. - 5:00 p.m.**

**Staff Subcommittee on Electricity | Broadway E**

## How to Heat a Home

*(Joint Session with the Staff Subcommittees on Gas, Electric Reliability, and Energy Resources and the Environment.)*

**1:00 p.m. - 2:30 p.m.**

**Moderator:** *Kim Jones*, Chair, NARUC Staff Subcommittee on Electricity

**Panelists:** *Ron Edelstein*, Vice President, Government Affairs, Gas Technology Institute  
*Mark Schuling*, Consumer Advocate for the State of Iowa  
*Rafi Sohail*, Director of Technical Sales, CenterPoint Energy  
*Robert Stoyko*, Vice President, Marketing and Customer Relations, UGI Utilities, Inc.  
*Jeremy Susac*, Director, Government Affairs, Lennar Ventures  
*Barbara Tyrann*, Executive Director, Government & External Relations, EPRI

Today's new homes are built to meet more stringent building codes. And today we have new technologies for heating homes as well as new concerns about environmental and safety issues. This panel will explore how homes have changed and the best fuel and technology options for heating them. Panelists will explain what heating technologies are being installed in both single-family and multi-family residences and why, as well as the impact of the 2015 International Energy Code. Finally, panelists will discuss new technologies that are on the horizon for heating our homes in the future.

## Case Study: Integrated Forecasting of Weather, Customer Load, and Intermittent Generation Output

*(Joint Session with the Staff Subcommittee on Electric Reliability.)*

**3:00 p.m. - 3:30 p.m.**

**Moderator:** *Pat Poli*, Chair, NARUC Staff Subcommittee on Electric Reliability

**Panelist:** *Kerrick Johnson*, Vice President of Strategy & Communication, VELCO

Vermont Electric Power Company (VELCO) has worked with IBM to develop software that combines highly localized weather and load information to better forecast both load and intermittent resources.

## NERC's Short-Term Special Assessment: Operational Risk with increasing Gas-Electric Interdependencies

*(Joint Session with the Staff Subcommittee on Electric Reliability.)*

**3:30 p.m. - 4:00 p.m.**

**Moderator:** *Pat Poli*, Chair, NARUC Staff Subcommittee on Electric Reliability

**Panelist:** *John Moura*, Director of Reliability Assessment & System Analysis, NERC

NERC recently completed a special assessment of reliability impacts due to increasing dependence of natural gas-fueled electric generation. Four geographic areas were targeted for evaluation: ISO-NE; NYISO; ERCOT, and WECC-CA/MX (Aliso Canyon region). Hear the findings and recommendations, as

well as insights gleaned from the Aliso Canyon storage facility leak and the increasing risks to reliability from diminished diversity in fuel type and source.

## Discussion: The loss of the Aliso Canyon Storage Facility and the subsequent scramble to maintain reliability of the bulk electric system.

*(Joint Session with the Staff Subcommittee on Electric Reliability.)*

**4:00 p.m. - 5:00 p.m.**

**Moderators:** *Kim Jones*, Chair, NARUC Staff Subcommittee on Electricity  
*Pat Poli*, Chair, NARUC Staff Subcommittee on Electric Reliability

**Panelists:** *Hon. Catherine Sandoval*, California  
*TBD*, Southern California Edison

What to do when you unexpectedly lose more than 80 Bcf of natural gas capacity necessary to provide just-in-time fuel deliveries to 18 large electric power plants in the Los Angeles basin, just months before the summer heat wave begins? The answer: Everything you can think of!

Hear the details from Commissioner Catherine Sandoval.

## Monday, July 25 | 10:45 a.m. - 5:00 p.m.

**Committee on Electricity | Broadway E**

## Hedging and Long-Term Contracting: What Does it All Mean?

*(Joint Session with the Gas Committee.)*

**10:45 a.m. - 11:45 a.m.**

**Moderators:** *Hon. Diane Burman*, New York  
*Hon. Lamar Davis*, Arkansas

**Panelists:** *Hon. Eric Skrmetta*, Louisiana  
*Dr. Craig Pirrong*, University of Houston  
*Orlando Alvarez*, President and CEO, BP Energy  
*Tim Sherwood*, Vice President Gas Supply Operations, AGL

Price spikes can trigger howls of protests from customers. Long-term contracting for fuel supplies used to be the norm but has fallen out of favor in the last few decades. Hedging has become synonymous with the use of short-term market instruments to hedge short-term risk. Utilities have available a wide range of hedging instruments and strategies to keep price surprises at a minimum. This panel will discuss short-term hedging of market risk, long-term commodity supply contracts, and reserves investments (where the utility owns the resource-in-the-ground) and explore what State Commissions might want to consider when evaluating prudent hedging and contracting standards.

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## Clean Coal & Carbon Management Subcommittee

*(Joint Session with the full Electricity Committee.)*

**1:15 p.m. - 2:30 p.m.**

**Moderator:** *Hon. Brian Kalk, North Dakota*

**Panelists:** *Fred Eames, Partner, Hunton & Williams: Policy parity for carbon capture and storage technologies.  
David Malkin, Drax Biomass: Co-firing of pellets with coal to reduce CO<sub>2</sub> and other emissions at existing coal-fired power plants.  
Tom Clarke, President, Virginia Conservation Legacy Fund: Offsetting CO<sub>2</sub> emissions with reforestation.  
Evan Granite, NETL: Recovering rare earth metals from coal and coal ash. Preview of September NARUC visit to NETL in Pittsburgh.*

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## The Plains & Eastern Line: What's in the Public Interest?

**2:45 p.m. - 3:45 p.m.**

**Moderator:** *Hon. Ted Thomas, Arkansas*

**Panelists:** *Cary Kottler, General Counsel, Clean Line Energy Partners, LLC  
Sam Walsh, Deputy General Counsel, US Department of Energy  
Jordan Wimpy, Attorney, Gill Ragon Owen, PA*

In March of 2016 the U.S. Department of Energy (DOE) announced that it would directly participate by owning the Arkansas portion of the proposed Plains & Eastern high-voltage direct-current power line, and that it would use its eminent domain powers as necessary to ensure that the line gets built. This panel will tackle a host of issues that are raised by the Plains & Eastern project: How is the public interest defined in such cases? When should a federal agency's definition of public interest trump that of an affected State? What are the limits to DOE's authorities under Section 1222 of the 2005 Energy Policy Act? What has DOE done to make sure this line is needed and that State concerns are addressed? Will DOE play a similar role with other projects?

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## State Regulation of Physical and Cybersecurity of Utility Distribution Systems

*(Joint Session with the Water, Critical Infrastructure and Gas Committees | Legends Ballroom)*

**4:00 p.m. - 5:00 p.m.**

**Moderator:** *Hon. Phil Jones, Washington*

**Panelists:** *Hon. Cheryl LaFleur, Federal Energy Regulatory Commission  
Hon. Richard Mroz, New Jersey  
Hon. Arthur House, Connecticut*

Hear about the actions that two States have taken to address the increasing threats against utility distribution systems. Federal Energy Regulatory Commission Commissioner Cheryl LaFleur will provide a federal perspective on these State actions. The discussion will include how all parties may coordinate efforts and provide information sharing using, among other things, the Cybersecurity Act of 2015.

**Tuesday, July 26 | 10:45 a.m. - 5:15 p.m.**

**Committee on Electricity | Broadway E**

## Net Metering: The Debate Continues

*(Joint Session with the Energy Resources and the Environment Committee)*

**10:45 a.m. - 11:45 a.m.**

**Moderator:** *Hon. Edward Finley, North Carolina*

**Panelists:** *Dr. Charles Cicchetti, Pacific Economics Group and Professor of Economics at the University of Southern California*  
*Ashley Brown, Harvard Electricity Policy Group*

**Respondents:** *Hon. Beverly Heydinger, Minnesota*  
*Hon. David Noble, Nevada*  
*Hon. Audrey Zibelman, New York*

In December of 2015, *Public Utilities Fortnightly* published an article titled “Solar Battle Lines,” by Dr. Charles Cicchetti (former chair of the Wisconsin Commission) and Jon Wellinghoff (former chair of the Federal Energy Regulatory Commission). In February 2016, Ashley Brown (former Ohio Commissioner) challenged many of the Cicchetti/Wellinghoff assertions in a lengthy response that prompted a rebuttal by Cicchetti. In this panel, Brown and Cicchetti will explain their opposing positions and continue the debate about the costs and benefits of net-metering. Afterward, three committee members will provide “responses from the trenches.”

## Nuclear Issues Subcommittee: Carbon-Free Baseload Power— the Nuclear Options

*(Joint Session with the Full Electricity Committee)*

**1:15 p.m. - 2:30 p.m.**

**Moderator:** *Hon. Ann McCabe, Illinois*

**Panelists:** *Dr. Phil Ferguson, Oak Ridge National Laboratory (ORNL), Director of Fusion and Materials for Nuclear Systems Division*  
*Tina Taylor, Director of External Affairs—Nuclear, Electric Power Research Institute (EPRI)*  
*Jeffrey Perry, Program Manager, Tennessee Valley Authority*

Are Small Modular Reactors (SMRs) the future of nuclear? SMRs are small—300 megawatts or less—compared to a typical 1,000-MW nuclear power plant. They can generate emission-free electricity in remote locations or provide process heat to industrial applications. Their “modular” design means they can be manufactured completely in a factory and delivered and installed at the site in modules. What’s happening on the advanced nuclear front? Oak Ridge National Laboratory, TVA, and EPRI will overview SMR and advanced nuclear technology, research, and prospects. TVA’s Watts Barr Nuclear Plant Unit 2 began startup in May, and TVA submitted an Early Site Permit application with the NRC to build a new, smaller type of plant in Oak Ridge, Tennessee.

## Business Meeting

2:45 p.m. - 3:45 p.m.

**Committee Chair:** *Hon. Edward Finley, North Carolina*

**Updates:** *Hon. Beverly Heydinger, Minnesota*  
*Janet Sena, Executive Vice President, NERC*  
*Chris Mele, Legislative Director, NARUC*  
*Katrina McMurrian, Executive Director, Critical Consumer Issues Forum*

Consideration of Resolutions

## What's Up in Ohio?

4:00 p.m. - 5:15 p.m.

**Moderator:** *Hon. Audrey Zibelman, New York*

**Panelists:** *Steven Lesser, Sr. Counsel, Calfee, Halter & Griswold LLP*  
*Todd Snitchler, Principal, Vorys Advisors LLC*  
*Ari Peskoe, Sr. Fellow in Electricity Law, Harvard Law School*

The Buckeye State is ground zero in the debate about competitive electricity markets, at-risk baseload plants, retail competition, and the limits of State jurisdiction. In March 2016, the Ohio Commission approved applications by FirstEnergy and AEP for power purchase agreements that would allow their generation fleets to benefit from “non-bypassable surcharges” imposed on retail customers. By late April, the Federal Energy Regulatory Commission rescinded the two companies’ waivers of affiliate power sales restrictions. Back in Ohio, rehearing requests and new proposals add to the confusion. Two former Ohio Commissioners with different perspectives will explain the fast-paced goings-on. Our third panelist will discuss how State efforts to drive generation decisions lead to State-federal conflicts.

## Wednesday, July 27 | 9:00 a.m.-11:45 a.m.

**Committee on Electricity | Broadway E**

## Topics in Electric Transmission: A Roundtable Discussion

*(Joint Meeting with FERC)*

*(Joint Session with Electricity, ERE, Critical Infrastructure, and Gas)*

The Federal Energy Regulatory Commission has undertaken a number of reforms in the past decade to promote more regional and inter-regional transmission planning and to incorporate public policy requirements into that planning; to encourage new business models and competition in the electric-transmission sector; and to approve novel ratemaking and cost allocation proposals.

States, meanwhile, continue to play the key role in siting transmission, which often comes with a determination of need and questions about the requesting entity’s status as a public utility. Additionally, States have participated vigorously in transmission discussions in organized markets and elsewhere. They have asked questions about the modeling techniques that are used to identify transmission needs and about ways to discipline transmission costs, which in some regions are rising more quickly than other elements of customers’ utility bills.

FERC Chairman Norman Bay and President Travis Kavulla will convene the meeting and help facilitate the discussion. There will be two panels, one that features FERC's involvement, and one in which FERC, because of *ex parte* concerns, will leave NARUC members to discuss issues of concern among themselves. Each part will feature a panel, followed by roundtable discussion of commissioners.

## Part I: Are We Building What We Need?

9:00 a.m.-10:30 a.m.

**Moderators:** *Hon. Norman Bay*, Federal Energy Regulatory Commission  
*Hon. Travis Kavulla*, Montana

**Panelists:** *George Dawe*, Vice President, Duke-ATC  
*Colmon Elridge III*, Director, Council of State Governments' National Center for Interstate Compacts  
*Mark Vannoy*, Chairman, Maine Public Utilities Commission  
*Sam Walsh*, Deputy General Counsel, Dept. of Energy  
*Steve Whitley*, CEO, NYISO  
*TBA*, ARPA-E (invited)

- How to evaluate transmission needs
- Pathways for States, the federal government, RTOs, and utilities to work better together to identify and site projects

## Part II: Inter-Regional Planning & Competition

10:45 a.m.-11:45 a.m.

**Moderator:** *Hon. Travis Kavulla*, Montana

**Panelists:** *Terry Harvill*, President, ITC Grid Development  
*Anthony Ivancovich*, Deputy General Counsel, CAISO  
*Ted Thomas*, Chairman, Arkansas Public Service Commission

- Seams issues
- Competition in the transmission industry



# Energy Resources and the Environment

**Sunday, July 24 | 1:00 p.m. - 2:30 p.m.**

**Staff Subcommittee on Energy Resources and the Environment | Ballroom E**

## **How to Heat a Home?**

**1:00 p.m. - 2:30 p.m.**

*(Joint Session with the Staff Subcommittees on Gas, Electricity and Electric Reliability)*

**Monday, July 25 | 10:45 a.m. - 5:00 p.m.**

**Committee on Energy Resources and the Environment | Broadway G/H**

## **Business Meeting**

**10:45 a.m. - 11:45 a.m.**

**Introductions:** *Hon. Nancy Lange, Minnesota*  
*Hon. Donna Nelson, Texas*  
*Hon. Jeanette Mills, Maryland*

**Research Updates:** *Ron Edelstein, Gas Technology Institute*  
*Tom Stanton, National Regulatory Research Institute*  
*Barbara Tyrant, Electric Power Research Institute*

**Speaker:** *Molly Cripps, TN Department of Environment & Conservation, Office of Energy Programs*

Six U.S. States, The Climate Registry, and NASEO have secured a Department of Energy award to develop a national energy efficiency registry (NEER). The registry will allow States to track initiatives within their own programs as well as demonstrate compliance with existing State and federal regulations.  
<https://www.theclimateregistry.org/thoughtleadership/energy-efficiency>.

**Speaker:** *Katrina McMurrian, Executive Director, Critical Consumer Issues Forum*

CCIF will share information from its new report, "Consumer Solutions: Meeting Consumer Needs at All Levels," a collaborative effort of State Commissioners, consumer advocates, electric utility representatives, and large commercial customers. The next CCIF Kickoff Forum in November will also be announced.

## **Community Solar—Where Do We Go From Here?**

**1:15 p.m. - 2:30 p.m.**

**Moderator:** *Hon. Ellen Nowak, Wisconsin*

**Panelists:** *Jennifer Szaro, Senior Director, Programs, SEPA*  
*Lynn E. Thompson, President & CEO, Eau Claire Energy Co-op*  
*First Solar Representative*  
*Utility Representative*

Community solar is an increasingly popular option for deploying solar technology. This panel continues the discussion started at the Winter Committee Meetings on different ownership models, program design, best practices, and lessons learned, including how to tailor programs to include low- and mid-income customers.

# Energy Resources and the Environment

## Big Data and Energy Efficiency

2:45 p.m. - 3:45 p.m.

**Moderator:** *Hon. Lorraine Akiba, Hawaii*

**Panelists:** *Jordana Cammarata, Regulatory Affairs Manager, First Fuel*  
*Jessica Granderson, Deputy Director of Building Technology and Urban Systems Division, LBNL*  
*Julie Michals, Director, Northeast Energy Efficiency Partnership's Regional EM&V Forum*  
*Taren O'Connor, Rate Specialist, Connecticut Office of Consumer Counsel*  
*Jake Oster, Sr. Director of Regulatory Affairs, EnergySavvy*

Big data, analytics, and cloud software are modernizing energy efficiency programs and providing new ways to measure and monitor energy savings. These changes have significant ramifications for regulators: the measurement of energy efficiency is how regulators determine the costs, benefits, and value of demand-side management programs. Analytics tools are beginning to enable "Evaluation, Measurement and Verification (EM&V) 2.0" using large volumes of energy consumption data. EM&V 2.0 provides near real-time performance feedback and helps modernize and improve energy efficiency programs. Hear from practitioners, thought leaders, and researchers to learn about recent experiences from across the country.

## Who's on First: The Clean Power Plan and Market Forces

4:00 p.m. - 5:00 p.m.

**Moderator:** *Hon. Nancy Lange, Minnesota*

**Panelists:** *Pam Kiely, Senior Director of Regulatory Strategy, Environmental Defense Fund*  
*Jennifer Macedonia, Senior Advisor, Bipartisan Policy Center*  
*Cathy Woollums, Senior VP, Environmental & Chief Environmental Counsel, Berkshire Hathaway Energy*

As RTOs and others analyze the impacts of the Clean Power Plan, new modeling shows that sustained lower natural gas prices, dropping costs for renewable energy resources, and low growth in electricity consumption are driving utility carbon emissions down. This panel will discuss the key drivers behind decarbonization of the electric sector, including regulation and market forces. The panel will also tackle the challenging question: What is the role for the Clean Power Plan in an industry that is being reshaped by powerful market forces?

## Tuesday, July 26 | 10:45 a.m. - 5:15 p.m.

Committee on Energy Resources and the Environment | Broadway E

## NEM PART I Brown/Cichetti Debate

*(Joint Session with the Committee on Electricity - Broadway E)*

10:45 a.m. - 11:45 a.m.

# Energy Resources and the Environment

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## NEM PART II | Broadway G/H

**1:15 p.m. - 2:30 p.m.**

**Moderator:** *Rich Sedano, RAP*

**Panelists:** *Lena Hansen, Managing Director, Rocky Mountain Institute*  
*Barbara Lockwood, Vice President of Regulation, APS*  
*Bill Malcolm, Senior Legislative Representative, State Advocacy and Strategy, AARP*  
*Tom Starrs, Vice President for Global Market Strategy and Policy, SunPower*  
*Lisa Wood, Executive Director, Institute for Electric Innovation, Vice President, The Edison Foundation*

ERE continues the net metering conversation with a moderated panel discussion, led by Rich Sedano of the Regulatory Assistance Project. This panel of innovative thought leaders will reflect on what they heard in the NEM Part I panel, and engage in a robust discussion about the form, function, and future for net metering and alternative policies.

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## Going Green and Doing More for Le\$\$: Energy Efficiency Financing Models

**2:45 p.m. - 3:45 p.m.**

**Moderator:** *Jim Gardner, Commissioner Emeritus*

**Panelists:** *Cisco DeVries, CEO, Renew Financial*  
*Jeff Eckel, President and CEO, Hannon Armstrong*  
*Deborah Lebl, Program Strategy, Policy & Evaluation MA Department, National Grid*

Although improving energy efficiency or adding renewable energy technology in buildings can save consumers money, a significant barrier is financing the upfront capital costs. Upgrading a chiller, installing a solar PV system, or improving the efficiency of an entire building, requires upfront investments, followed by multi-year payback through savings in energy bills. This panel will explore options for overcoming those barriers, exchange lessons learned from private financing that might be translated to utility programs, and discuss the role of utility Commissioners in helping consumers save money through energy efficiency.

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## Who's TED and Why is He Talking about An All-Electric World?

**4:00 p.m. - 5:15 p.m.**

**Moderator:** *Hon. Donna L. Nelson, Texas*

**Panelists:** *Robert Bryce, Senior Fellow, Manhattan Institute*  
*Britta Gross, Director, GM Advanced Vehicle Commercialization Policy*  
*Leah Parks, co-author of All Electric America: A Climate Solution and the Hopeful Future*  
*Anda Ray, Senior Vice President, Energy, Environment and External Relations, Electric Power Research Institute*

Welcome to ERE's version of TED Talks, a panel devoted to sharing ideas on Technology, Electrification, and Distributed Energy and exploring the implications of a fully electrified economy. Leah Parks will outline the vision for an electric transportation sector as consumer demand for electric vehicles accelerates. Britta Gross will explain the regulatory and commercial hurdles faced by electric vehicle manufacturers. Anda Ray will discuss electrification in the transportation, industrial, commercial, and residential sectors. Robert Bryce will explore the continuing need for traditional fuels such as oil and gas to maintain reliability, a diverse portfolio, and baseload generation.

**Sunday, July 24 | 9:30 a.m. - 2:30 p.m.**

**Staff Subcommittee on Gas | Broadway C/D**

### **Vertical Arrangements for Natural Gas Procurement by Utilities.**

**9:30 a.m. - 10:30 a.m.**

**Presenter:** *Ken Costello*, Principal Researcher, Energy and Environment, National Regulatory Research Institute

Over the past few years, utilities and gas producers have given increased attention to long-term commercial commitments under a vertical arrangement to complement their current hedging initiatives that, today, are mostly short term in nature.

This interest in long-term transactions hinges on a variety of factors affecting the U.S. gas market. Changing conditions in the natural gas market have, again, made long-term commitments appear more palatable and potentially mutually beneficial for both gas producers and utilities.

### **State/FERC Updates**

**10:30 a.m. - 10:50 a.m.**

A discussion of current issues that are addressed in various States and a presentation of FERC-related matters.

### **Department of Energy Updates**

**10:50 a.m. - 11:30 a.m.**

**Presenter:** *Christopher J. Freitas*, Program Manager, Natural Gas Infrastructure Research & Development, United States Department of Energy, Office of Oil and Natural Gas

Presentation on the major gas-related topics trending at the DOE.

- Aliso Canyon Gas Storage National Lab Task Force and California PUC Regulatory Response
- Fossil Energy Methane Emissions Mitigation Research Program and Methane Emissions Quantification Program Solicitation Topic Areas
- DOE 2015 LNG Export Study evaluated exports in the range of 12 to 20 billion cubic feet (Bcf) per year
- Energy Water Nexus Crosscut and Induced Seismicity from the disposal of produced water (Post script to the 60-minute segment)

### **North American Midstream Infrastructure Through 2035**

**11:30 a.m. - 12:30 p.m.**

**Presenter:** *Richard R. Hoffmann*, Executive Director, The INGAA Foundation Inc.

Presentation on the recently released ICF study reviewing trends (exploration, production, supply) in natural gas and assessing the infrastructure needs through 2035.

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## Break

12:30 p.m. - 1:00 p.m.

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## How to Heat a Home?

*(Joint Session with the Staff Subcommittees on Gas, Electric Reliability, and Energy Resources and the Environment - Broadway E)*

1:00 p.m. - 2:30 p.m.

**Moderator:** *Kim Jones*, Chair, NARUC Staff Subcommittee on Electricity

**Panelists:** *Ron Edelstein*, Vice President, Government Affairs, Gas Technology Institute

*Mark Schuling*, Consumer Advocate for the State of Iowa

*Rafi Sohail*, Director of Technical Sales, CenterPoint Energy

*Robert Stoyko*, Vice President, Marketing and Customer Relations, UGI Utilities, Inc.

*Jeremy Susac*, Director, Government Affairs, Lennar Ventures

*Barbara Tyrn*, Executive Director, Government & External Relations, EPRI

Today's new homes are built to meet more stringent building codes. And today we have new technologies for heating homes as well as new concerns about environmental and safety issues. This panel will explore how homes have changed and the best fuel and technology options for heating them. Panelists will explain what heating technologies are being installed in both single-family and multi-family residences and why, as well as the impact of the 2015 International Energy Code. Finally, speakers will discuss new technologies that are on the horizon for heating our homes in the future.

## Sunday, July 24 | 1:00 p.m. - 3:00 p.m.

**Staff Subcommittee on Pipeline Safety | Music Row 6**

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## (Closed Meeting)

1:00 p.m. - 3:00 p.m.

Agenda TBA

**Sunday, July 24 | 3:45 p.m. - 4:45 p.m.**

**Committee on Gas | TBA**

## United States Natural Gas Exports (specifically, Liquefied Natural Gas) –The Implications for the Economy, Trade, and Geopolitics

*(Joint Panel with the International and Gas Committees)*

**3:45 p.m. - 4:45 p.m.**

**Moderator:** *Hon. Diane X. Burman, New York*

**Panelists:** *Hon. Jolette Westbrook, Massachusetts*

*Hon. Robert Pickett, Alaska*

*Sarah Ladislaw, Director and Senior Fellow, Energy and National Security Program, Center for Strategic and International Studies*

*William Hederman, Senior Advisor, Department of Energy*

*Charlie Riedl, Executive Director, Center for Liquefied Natural Gas*

The United States shale gas boom has provided new prospects for the energy future. With the shale gas “revolution,” natural gas prices have reached historic lows in recent years due to a surge in production. Low prices have sparked a debate within the United States about what to do with this glut of supply. Moreover, high prices for LNG in Europe and Asia create an opportunity for the United States. In fact, although traditionally the United States was seen as a net energy importer, the United States is poised to be in the foreseeable future to net energy exporter. Prudent and responsible processes and policies with regards to natural gas exports must consider the impact of exports on the national and regional economy, job creation, international trade flows, and the environment. This panel will take a critical look at the export debate, the domestic policies surrounding this debate, and the geopolitical implications of global shale gas development.

**Monday, July 25 | 10:45 a.m. - 5:00 p.m.**

**Committee on Gas | Broadway E**

## Hedging and Long-Term Contracting—What does it all mean?

*(Joint Session with the Committee on Electricity)*

**10:45 a.m. - 11:45 a.m.**

**Moderator:** *Hon. Diane X. Burman, New York*

*Hon. Lamar Davis, Arkansas*

**Panelists:** *Hon. Eric Skrmetta, Louisiana*

*Dr. Craig Pirrong, University of Houston*

*Orlando Alvarez, BP Energy President and CEO*

*Tim Sherwood, Vice President Gas Supply Operations for AGL*

Price spikes can trigger howls of protests from customers. Long-term contracting for fuel supplies used to be the norm but have fallen out of favor in the last few decades. Hedging has become synonymous with the use of short-term market instruments to hedge short-term risk. Utilities have available a wide range of hedging instruments and strategies to keep price surprises at a minimum. Evolving supply-

demand dynamics of the natural gas markets and its impact on the electric market are driving folks to look more at these options. Ongoing efforts to enhance hedging options reflect the need to understand the long-term supply contract structures. Education is needed on the differences between short-term hedging of market risk, long-term commodity supply contracts, and the reserves investments where the utility actually owns the resource-in-the-ground. This panel will explore what State Commissions may want to consider when evaluating prudent hedging and contracting standards that protect customers.

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## Presentation to the Gas Committee

**1:15 p.m. - 1:30 p.m.**

**Presenter:** *Hon. Colette D. Honorable, Federal Energy Regulatory Commission*

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## PHMSA Nuts and Bolts Part One | Broadway F

**1:30 p.m. - 2:15 p.m.**

**Discussants:** *Gas Committee Members PHMSA Working Group*

**Panelists:** *Talmadge R. Centers, Jr., Vice President, Safety and Gas System Integrity, CenterPoint Energy*  
*Lindsay Sander, Sander Resources*  
*Alan Mayberry, Acting Associate Administrator, Pipeline and Hazardous Materials Safety Administration, U.S. Department of Transportation*

Increases in U.S. natural gas production, usage, and commercialization of natural gas are changing the regulatory landscape for the U.S. natural gas industry and its customers. The safe, reliable, and cost-effective operation of the natural gas pipeline infrastructure is critical to our economy and security. The U.S. Department of Transportation (DOT) Pipeline Hazardous Material and Safety Administration's mission is to protect people and the environment by advancing the safe transportation of energy and other hazardous materials that are essential to our daily lives. To do this, PHMSA's stated mission is to establish national policy, set and enforce standards, educate, and conduct research to prevent incidents. PHMSA also prepares the public and first responders to reduce consequences if an incident does occur. In this two-part Nashville moderated series, we will explore all that is happening at PHMSA specifically as it concerns the proposed regulations and rules surrounding the safety of natural gas distribution and transmission pipelines. Attendees will be provided with the framework and tools necessary to explore and understand their respective roles and responsibilities in ensuring the delivery of natural gas to our communities safely, reliably, responsibly, and affordably. Part One will tee up the issues and lay the ground work for a deeper dive into the specific stakeholder viewpoints in Part Two on **Tuesday, July 26, 2:45 pm to 3:45 pm.**

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## Gas Crystal Ball

**2:30 p.m. - 3:45 p.m.**

**Moderators:** *Hon. Stan Wise, Georgia*  
*Hon. Dianne Solomon, New Jersey*

**Panelists:** *Pam Witmer, Vice President of Government Affairs, UGI Energy Services*  
*Julian Dumoulin-Smith, Executive Director, US Electric Utilities, Alt Energy and IPPs Group, UBS Investment Research*  
*Paul DeCotis, Senior Director, Energy and Utilities Practice, WestMonroe Partners, LLC*  
*Andy Weissman, CEO of EBW AnalyticsGroup*

Natural gas prices are at an all-time low in the midst of unprecedented technological innovation and modernization, which, in turn, has led to increased customer engagement with respect to managing

and participating in energy consumption. Although the “utility of the future” gets a lot of attention on the electric side of the industry, this panel will discuss the future of the natural gas industry. Issues such as the recovery of gas prices, natural gas expansion global climate change issues, and regulatory uncertainty around the natural gas sector. We will look at forecasts and implications for the electricity, industrial, and transportation sectors. Also, what are the real positive implications of increasing the natural gas industries footprint for carbon emissions and providing the backstop to increase renewable power? The focus will be on looking forward and planning for the uncertain future.

## State Regulation of Physical and Cybersecurity of Utility Distribution Systems

*(Joint Session with the Water, Critical Infrastructure, and Electricity Committees | Legends Ballroom)*

**4:00 p.m. - 5:00 p.m.**

**Moderator:** *Hon. Philip Jones, Washington*

**Panelists:** *Hon. Cheryl LaFleur, Federal Energy Regulatory Commission*

*Hon. Richard Mroz, New Jersey*

*Hon. Arthur House, Connecticut*

Hear about the actions that two States have taken to address the increasing threats against utility distribution systems. Federal Energy Regulatory Commission Commissioner Cheryl LaFleur will then provide a federal perspective on these State actions. The discussion will include how all parties may coordinate efforts and provide information sharing using, among things, the Cybersecurity Act of 2015.

## Tuesday, July 26 | 10:45 a.m. - 5:15 p.m.

**Committee on Gas | Broadway F**

## Natural Gas Pipeline Locators—Safety and Damage Prevention Power in Cooperation

**10:45 a.m. - 11:45 a.m.**

**Moderators:** *Hon. Julie Fedorchak North Dakota*

*Hon. Kara Brighton, Wyoming*

**Panelists:** *Rob Tullman, CEO of USIC*

*David Chislea, Pipeline Safety Program Manager, Michigan for National Association of Pipeline Safety Representatives*

*Bob Demarinis, VP of NY Gas Maintenance & Construction and COO for NY Gas Operations, National Grid*

*Kevin Hopper, Executive Director, Dig Safely NY*

*N. Jonathan Peress, Air Policy Director—Natural Gas, Environmental Defense Fund*

This TED talk panel will feature recent cutting-edge happenings/technologies to ensure that quality, efficient, safe, and innovative locator solutions are in place to protect our natural gas infrastructure and critical assets. Audience members will get to see up close and personal the actual cooperative partnership efforts to ensure that we are doing all we can to increase safety and damage prevention.

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## Business Meeting

**1:15 p.m. - 1:40 p.m.**

**Moderators:** *Hon. Stan Wise, Georgia*  
*Hon. Julie Fedorchak, North Dakota*  
*Hon. Diane X. Burman, New York*

Resolutions Presented by Gas Resolutions Working Group Team

- *Kara Brighton, Wyoming*
- *Diane Burman, New York*
- *Sherina Maye Edwards, Illinois*
- *Dianne Solomon, New Jersey*
- *Swain Whitfield, South Carolina*

New Business

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## Department of Energy Update

**1:40 p.m. - 1:50 p.m.**

**Presenter:** *James Bradberry, Department of Energy*

Update from DOE and Natural Gas Infrastructure Modernization Partnership.

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## One Potato, Two Potatoes

**1:50 p.m. - 2:30 p.m.**

**Moderator:** *Hon. Nick Wagner, Iowa*

Roundtable, fast-paced discussion where we will have an interactive session with the Commissioners and audience on hot topics. Invited speakers will make quick presentations on topics of interest, along with a discussion of hot topics in which people are interested, but didn't make it on to a panel but people want to discuss and perhaps engage on future panels. Discussion among participants is encouraged, but the hot potato holder will be focused on getting rid of it quickly so another participant can talk.

Sample of topics to be discussed:

Pipeline Safety Reauthorization Update, ISO Gas-Related Issues, 27th World Gas Conference 2018, State of the Industry Happenings, Electric-Gas Coordination, Workforce Development Initiatives, Gas Storage, and other Hot Topics.

## PHMSA Nuts and Bolts Part Two—Stakeholder Engagement Discussion

2:30 p.m. - 3:45 p.m.

**Discussants:** *Committee on Gas Members PHMSA Working Group*

**Panelists:** *Marc Huestis, Senior Vice President, Gas Operations, Consolidated Edison Company of New York, Inc.*  
*Lindsay Sander, Sander Resources*  
*Joel Kanvik, U.S. Law, Enbridge Energy*

Increases in U.S. natural gas production, usage, and commercialization of natural gas are changing the regulatory landscape for the U.S. natural gas industry and its customers. The safe, reliable, and cost-effective operation of the natural gas pipeline infrastructure is critical to our economy and security. The U.S. Department of Transportation (DOT) Pipeline Hazardous Material and Safety Administration's (PHMSA) mission is to protect people and the environment by advancing the safe transportation of energy and other hazardous materials that are essential to our daily lives. To do this, PHMSA's stated mission is to establish national policy, set and enforce standards, educate, and conduct research to prevent incidents. PHMSA also prepares the public and first responders to reduce consequences if an incident does occur. In this two-part Nashville moderated series, we will explore all that is happening at PHMSA specifically as it concerns the proposed regulations and rules surrounding the safety of natural gas distribution and transmission pipelines. This two-part series is very timely, as stakeholder comments will have just been submitted in accordance with the July 7<sup>th</sup> comment period. Attendees will be provided with the framework and tools necessary to explore and understand their respective roles and responsibilities in ensuring the delivery of natural gas to our communities safely, reliably, responsibly, and affordably. Part Two complements the Part One discussion held **Monday, July 25, 1:30 p.m. - 2:15 p.m.**, laying the groundwork for this moderated discussion. Attendance at Part One is not mandatory to understand Part Two.

## Transform the Energy Industry with New Gas-fueled Technologies

4:00 p.m. - 5:15 p.m.

**Moderators:** *Hon. Sherina May Edwards, Illinois*  
*Swain Whitfield, South Carolina*

**Panelists:** *Mark Bishoff, President & CEO, Lorax Systems Inc.*  
*J. Scott Kleppe, President and CEO, SENSIT Technologies, LLC*  
*Daphne D'Zurko, Vice President of Research, Development and Demonstration, Northeast Gas Association*  
*James Marean, Senior Program Manager, Gas Technology Institute*  
*Nate Gorence, Technology-to-Market Advisor at the Advanced Research Projects Agency-Energy (ARPA-E)*

In a TED-type talk, this group of dynamic speakers will explore new gas technologies from concept to marketplace helping to transform the energy industry. Over the past few decades, the natural gas industry has transformed into one of the most technologically advanced industries in the United States. New innovations have reshaped the industry into a formidable technology leader. This TED talk will discuss the role of technology in the evolution of the natural gas industry, focusing on technologies that can have a profound effect on the potential for natural gas and what some of the challenges have been in Research and Development and in manufacturing. The natural gas industry works with government agencies and laboratories, private research and development firms, environmental technology groups, and manufacturers to ensure that new technologies emerge in the natural gas space. This collaboration helps to improve the efficiency, cost-effectiveness, and environmental soundness of the natural gas industry.

# International Relations

**Sunday, July 24 | 2:00 p.m. - 5:00 p.m.**

## **Committee on International Relations | Broadway G/H**

*(International Cybersecurity Challenges: Implications for U.S. Public Utilities and their Regulators Joint meeting with Committee on Critical Infrastructure.)*

**1:35 p.m. - 3:05 p.m.**

**Moderator:** *Hon. Arthur House, Connecticut*

**Panelists:** *Paul Stockton, Managing Director, Sonecon LLC  
Bill Bryan, President, ValueBridge International, Inc.  
Eric Slavinsky, CIO, PPL Corporation*

Panelists will discuss global cybersecurity threats affecting public utilities in the United States and other countries. Among the topics included are the sources and nature of international threats to U.S. public utilities; lessons learned from the Ukrainian penetration; the United Kingdom's regulatory structure and its cybersecurity defense capabilities; and finally a review of cyber threat management in other countries.

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## **United States Natural Gas Exports (specifically Liquefied Natural Gas) —The Implications for the Economy, Trade, and Geopolitics**

*(Joint Session with the Committee on Gas - Broadway F)*

**3:45p.m. - 4:45 pm**

**Moderator:** *Hon. Diane X. Burman, New York*

**Panelists:** *Hon. Jolette Westbrook, Massachusetts  
Hon. Robert Pickett, Alaska  
Sarah Ladislaw, Director and Senior Fellow, Energy and National Security Program, Center for Strategic and International Studies  
William Hederman, Senior Advisor, DOE  
TBD, LNG Producer*

The United States shale gas boom has provided new prospects for the energy future. With the shale gas "revolution," natural gas prices have reached historic lows in recent years due to a surge in production. Low prices have sparked a debate within the United States about what to do with this glut of supply. Moreover, high prices for LNG in Europe and Asia create an opportunity for the United States. In fact, although traditionally the United States was seen as a net energy importer, the United States is poised to be in the foreseeable future, a net energy exporter. Prudent and responsible processes and policies with regards to natural gas exports must consider the impact of exports on the national and regional economy, job creation, international trade flows, and the environment. This panel will take a critical look at the export debate, the domestic policies surrounding this debate, and the geopolitical implications of global shale gas development.

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## **Committee on International Relations Business Meeting**

**4:45 pm – 5:00 p.m.**

**Moderator:** *Hon. Anne Hoskins, Maryland*

Approval of Minutes of Winter Meeting Resolutions

NARUC International Staff Report, *Erin Hammel*, NARUC Staff

**Sunday, July 24 | 9:00 a.m. - 5:00 p.m.**

**Staff Subcommittee on Telecommunications | Broadway A/B**

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## Reports by National Representatives

**9:00 a.m. - 10:15 a.m.**

- USAC
- FCC

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## Networking Break

**10:15 a.m. - 10:30 a.m.**

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## Panel III - Joint Panel with Consumer Affairs

### Wireless Broadband Buildout in High-Cost Rural Areas

*("We all want what we ain't got." - Jake Owens)*

**10:30 a.m - 12:00 p.m.**

**Moderator:** Joe Witmer, Pennsylvania

**Panelists:** Hon. Catherine J.K. Sandoval, California

John Evans, Advocate, Office of Small Business Advocate, Commonwealth of Pennsylvania

Grant Spellmeyer, Vice President, U.S. Cellular Corporation

Michael Oldak, VP of Strategic Initiatives & General Counsel, Utilities Technology Council

Regina Costa, Telecom Director, TURN California

CostQwest Associates

One of the primary goals of the Federal Communications Commission's (FCC) *Transformation Order* was to get wireless voice and broadband deployment to consumers in rural areas, particularly in areas where the high cost and low density preclude a purely market-driven approach. The FCC created the Mobility Fund I & II to be a permanent ongoing fund to support wireless services to consumers in these areas. However, the financing and how to achieve deployment have proven to be difficult issues. While the FCC continues to address this complex topic, stakeholders have recently proposed several novel ways to get wireless service to rural consumers. The panel will examine this issue, particularly a February 2016 proposal by U.S. Cellular and the role the States could play in getting wireless voice and broadband to rural consumers.

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## Lunch (On Your Own)

**12:00 p.m. - 1:15 p.m.**

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## Panel IV: Cyber Security Update—The State Experience

*("They want what you've got, don't give it to them." - Dirty Harry)*

**1:15 p.m. - 2:30 p.m.**

**Moderator:** *Hon. Philip Jones, Washington*

**Panelists:** *David Alexander, Pennsylvania*

*Sam Mackin, Associate Director for Operations, U.S. Department of Homeland Security*

*David Furth, Deputy Bureau Chief, Public Safety and Homeland Security Bureau, FCC*

*Robert Mayer, Vice President-Industry & State Affairs, USTelecom*

Telecommunications networks and services are at the core of the operations of virtually all commerce, educational, healthcare, and other functions in our world today. Protecting the critical infrastructure from cyber security threats and attacks is paramount to the health, wealth, and safety of our nation. In a telecom environment of mixed jurisdiction and limited market regulation, the role of State Commission's in assuring sound cyber policy and implementation can be complex. This panel will include an overview by State Commission experts on the experiences, successes, and issues in commencing telecom cybersecurity initiatives in their States. They will also highlight their work on and the need for establishing key relationships with State, federal, and industry partners, who will also join the panel to share their knowledge, perspective, and insight on how best to partner with the States.

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## Networking Break

**2:30 p.m. - 2:45 p.m.**

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## Panel V: Non-Geographic Number Portability - Educational Session

*("Here's my number, so call me maybe." - Carly Rae Jepsen)*

**2:45 p.m. - 4:00 p.m.**

**Moderator:** *Carolee Hall, Idaho*

**Panelists:** *Penn Pfautz, Director, AT&T Global Connection Management*

*Mary Retka, Director of Network Policy, CenturyLink*

*Gary Richenaker, Principal Solutions Architect, iconectiv*

As communications networks continue to evolve to a new technological infrastructure, the existing paradigm for number portability must also be examined. Are we at a point in the evolution where consumers want to and should be able to keep their assigned telephone numbers regardless of where they relocate within the United States? What is the relevance of the Rate Centers associated with the phone number's origin or the distance between the associated Rate Center and the end user's physical location in the future? With this in mind, this panel of technology experts will provide an overview and identify issues on how non-geographic number portability would work, what needs to be done to implement it, and what it looks like when implemented.

## Staff Final Resolution Discussion & Disposition

4:00 p.m. - 5:00 p.m.

**Monday, July 25 | 10:45 a.m. - 5:00 p.m.**

**Committee on Telecommunications | Broadway A/B**

## Connect America Fund (CAF) Phase II Auction

10:45 a.m. - 11:45 a.m.

**Moderator:** *Hon. Paul Kjellander, Idaho*

**Panelists:** *Robert Debroux, Director – Federal Affairs & Public Policy, TDS Telecom*  
*Michael Saperstein, VP Federal Regulatory Affairs, Frontier Telecom*  
*Chuck Keller, Partner, Wilkinson Barker Knauer, LLP*  
*Christopher Murphy, Associate General Counsel, Regulatory Affairs, ViaSat*  
*Bob Hance, CEO, MidWest Energy*

The primary goal for the next phase of CAF 2 funding is to use a competitive bidding process to ensure widespread participation from multiple providers that can deliver a high-quality service including non-traditional providers, increase competition between providers, and ensure the best use of the universal service funding. This panel will focus on how to use the CAF II auction funds to provide broadband to the greatest number of unserved households, businesses, and farms in rural high cost America. These funds will be distributed via a reverse auction to service areas where the first round of funding was declined by the incumbent telephone providers.

## 5G Wireless – Unleashing Possibilities and Avoiding Pitfalls

1:15 p.m. - 2:30 p.m.

**Moderator:** *Hon. Chris Nelson, South Dakota*

**Panelists:** *Brian Daly, AT&T - Director – Core Network & Government/Regulatory Standards*  
*Dr. Eshwar Pittampalli, CTIA – Director Wireless Technology*  
*John Kuzin, Qualcomm Incorporated - Vice President and Regulatory Counsel*  
*James Assey, National Cable & Telecommunications Association - Executive Vice President*  
*Paul Vasington, Verizon – Director of State Public Policy*

Fifth-generation wireless service—5G—offers nearly unlimited possibilities in the areas of speed, capacity, and performance. This timely panel will explore where we are in the 5G transition, the capabilities of a 5G system, and the opportunities 5G offers to consumers. Importantly, the panelists will also address infrastructure challenges in both the technical and regulatory arenas caused by increased need for spectrum, towers, small cells, and fiber backhaul. Come and explore the world of 5G with us!

## Perspectives on Chevron Deference: To what extent are courts applying this doctrine, has it been abused and does it provide value as a tool for judicial review of FCC decisions?

2:45 p.m. - 3:45 p.m.

**Moderator:** *Hon. Dan Lipshultz, Minnesota*

**Panelists:** *Jeffrey Lamken, Esquire, MoloLamken LLP*  
*Hank Kelly, Esquire, Managing Partner, Kelley Drye & Warren LLP, Chicago Office*  
Other panelists invited, but not confirmed

*Chevron* deference is a principle of administrative law requiring courts to defer to interpretations of statutes made by those government agencies charged with enforcing them, unless such interpretations are unreasonable. The principle is named for the 1984 Supreme Court case *Chevron U.S.A., Inc. v. Natural Resources Defense Council, Inc.*, which involved a dispute over the Environmental Protection Agency's interpretation of a provision of the Clean Air Act Amendments of 1977. Under *Chevron*, even if a court finds that another interpretation is reasonable, or even better than the agency's interpretation, it must defer to the agency's reasonable interpretation.

Panelists will discuss the modern application, relevance and merits of *Chevron* deference in the context of recent FCC decisions, including the *Open Internet Order*. They will address the pros and cons of proposals to change this review standard, including recently proposed legislation seeking to amend federal administrative law to require de novo review of agency decisions.

## 911 TO NG911: How Are We Doing?

4:00 p.m. - 5:00 p.m.

**Moderator:** *Hon. Tim Schram, Nebraska*

**Panelists:** *David Furth, Deputy Bureau Chief, Public Safety and Homeland Security Bureau, FCC*  
*Jim Goerke, CEO, Texas 911 Alliance*  
*Daryl Branson, Senior 911 Telecom Analyst, Colorado Public Utilities Commission*  
*Invited, Tennessee PSAP Director*

The panel will explore federal and State NG911 progress and report on the progress of the FCC's Task Force on Optimal Public Safety Answering Point Architecture (TFOPA) to expand on its first report. We will also discuss Text to 911 deployment and progress toward meeting the new 2017 caller location accuracy standards. In summary this panel will continue the discussion of where stakeholders are in implementing NG911 and what issues they are facing.

## Media Sponsors



**Tuesday, July 26 | 10:45 a.m. - 5:15 p.m.**

**Committee on Telecommunications | Broadway A/B**

## **From Local to Nationwide Telephone Number Portability – What Are the Policy Implications for Federal & State Regulators?**

**10:45 a.m. - 11:45 a.m.**

**Moderator:** *Hon. Scott Rupp, Missouri*

**Panelists:** *Mark Lancaster, Numbering Management Support; AT&T*  
*Helen Mickiewicz, Assistant General Counsel, Office of Rate Payer Advocates; California Public Utilities Commission*  
*Michele Thomas, National Director – State Regulatory Affairs & Numbering Policy; T-Mobile USA*  
*Richard Shockey, Chairman, SIP Forum*  
*National Cable & Telecommunications Association Representative*

On May 16, the North American Numbering Council submitted its “Report on Nationwide Number Portability” that recommended the Federal Communications Commission proceed with an Public Inquiry to address the technical and policy initiatives needed to implement porting of wireless and wireline telephone numbers on a nationwide basis without regard to State and local political boundaries, LATA, area or NXX code boundaries, or other geographic or technical boundaries. This panel will address what are the policy decisions that must be made by the FCC and State regulators to transition to Nationwide Number Portability, such as:

- What are the timing considerations to implement NNP in the context of the ongoing transition of the nation’s telecommunications infrastructure to IP technology?
- Whether a uniform nationwide ten-digit dialing plan is required to implement NNP?
- How to ensure that the implementation of NNP will not adversely impact the provision of 911/NG911 emergency response services?
- Whether the service providers benefitting directly from providing NNP to customers should bear the full responsibility for ensuring that NNP does not impose implementation costs to the customers of other service providers?
- What are the respective roles of Federal & State regulators in implementing NNP?
- What will be the impact of NNP implementation on State and local taxes, fees, surcharges, tariffs, and tolls and what are the remedies?

## **Rate of Return Reform Order - Who’s Getting What and Why in Rural Telecom**

**1:15 p.m. - 2:30 p.m.**

**Moderator:** *Hon. Crystal Rhoades, Nebraska*

**Panelists:** *Carol Matthey, FCC Wireline Competition Bureau*  
*Keith Oliver, Home Telecom*  
*Jeff Reynolds, Reynolds Schultheis Consulting*  
*Lynn Follansbee, USTelcom*

The panel will provide a basic overview of the order and how it will change the way money is distributed in high-cost areas. Discussion will highlight pros and cons of the order and how it changes the game for the industry.

# Telecommunications

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## Special Access

**2:45 p.m. - 3:45 p.m.**

**Moderator:** *Hon. Catherine Sandoval, California*

**Panelists:** *Mark Cooper, Research Director, Consumer Federation of America*  
*Pamela Hollick, Associated General Counsel, State Public Policy, Regulatory and Legislative Affairs, Level 3*  
*Steven Morris, Vice President and Associate General Counsel, NCTA*  
*Angie Kronenberg, Chief Advocate and General Counsel, Incompas*  
*Frank S. Simone, Vice President Federal Regulatory, AT&T*  
*Charles McKee, Sprint*

The Federal Communications Commission (FCC) made a “new start” in designing a regulatory framework for “Business Data Services” (BDS). The panel will examine the four principles the FCC applied: competition, technology neutrality, commitment to IP-based technology, and the FCC’s anticipation of “tomorrow’s” marketplace. How will the FCC “deregulate where competition exists” and regulate where it doesn’t? What hurdles does the FCC face in testing markets for competition? What are the implications of the FCC’s finding that all BDS providers are “common carriers”? How does the BDS Order relate to the recently upheld Open Internet Order? What questions should State regulators ask, given that the FCC is silent about its role under its new special access regime?

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## Committee on Telecommunications Business Meeting

**4:00 p.m. - 5:15 p.m.**

**Chairman:** *Hon. Chris Nelson, South Dakota*

**Co-Vice Chairman:** *Hon. Paul Kjellander, Idaho*

**Co-Vice Chairwoman:** *Hon. Catherine Sandoval, California*

Conversation with Alison Kutter, Bureau Chief, FCC Bureau of Consumer Governmental Affairs.

## Wednesday, July 27 | 9:00 a.m. - 11:45 a.m.

**Committee on Telecommunications | Broadway A/B**

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## Lifeline Open House with USAC

**9:00 a.m. - 10:15 a.m.**

**Moderator:** *Hon. Karen Charles Peterson, Massachusetts*

**USAC Representative:** *Michelle Garber, Vice President, Lifeline Program*

Hear from USAC staff about USAC’s work to implement the new Lifeline Order and answer questions from your State regarding implementation.

## Throwing Broadband a Lifeline: Will the New Lifeline Program Sink or Swim?

10:30 a.m. - 11:45 a.m.

**Moderator:** *Hon. Karen Charles Peterson, Massachusetts*

**Panelists:** *David Avila, TracFone*  
*Regina Costa, Telecom Director, TURN California*  
*Matthew DelNero, FCC Wireline Bureau Chief*  
*David Hostetter, AT&T*  
*TBD, PUC Representative*

By encouraging broadband providers to become Lifeline providers, the Lifeline program and universal service are being upended. States and Lifeline Providers must navigate the new management and design of the program. This panel will explore the FCC's Order through the viewpoints of wireless providers, PUCs, the FCC, and consumers.



**ATTENTION:  
ENERGY POLICY  
LEADERS**



**The Direct Energy Innovation to Inspiration™ Tour is coming to Nashville!**

**TUESDAY, JULY 26**

Exhibit open from 9 am – 3:30 pm

Cocktail reception onboard from 5 – 7pm



The Direct Energy Innovation to Inspiration™ mobile exhibit showcases Direct Energy's products and services which help to empower and manage energy usage for energy customers. The exhibit features interactive touchscreen displays, a 3D house where visitors can demo the Direct Your Plan experience and a customized video game.

Learn more at [directenergy.com](http://directenergy.com)



**Sunday, July 24 | 9:00 a.m. - 10:15 a.m**

**Staff Subcommittee on Water | Ballroom E**

## **The Art of Water Utility Rate Design**

*(Joint Panel with Staff Subcommittee on Rate Design)*

**9:00 a.m. - 10:15 a.m.**

**Moderator:** *Don Lomoljo*, Utilities Hearing Officer, Public Utilities Commission of Nevada

**Panelists:** *Jim Busch*, Manager, Water and Sewer Department, Missouri Public Service Commission  
*Anne-Marie Cuneo*, Director of Regulatory Operations, Public Utilities Commission of Nevada  
*Sue Daly*, Senior Utilities Specialist, Public Utilities Commission of Ohio  
*Denise Schmidt*, Water Policy Advisor, Public Service Commission of Wisconsin

Tiered rates to encourage conservation, allocation of revenue requirement between fixed and commodity rates, and decoupling concepts all present unique challenges and fairness considerations. The panelists will discuss the challenges of water utility rate design and ideas to address those challenges.

**Monday, July 25 | 10:45 a.m. - 5:00 p.m.**

**Committee on Water | Broadway C/D**

## **Conserving a Precious Resource**

**10:45 a.m. - 11:45 a.m.**

**Moderator:** *Hon. Alaina Burtenshaw*, Nevada

**Panelists:** *Hon. John W. Betkoski*, Connecticut  
*Hon. Catherine J.K. Sandoval*, California  
*Eric Sabolsice*, Director of Operations, California American Water

Various jurisdictions have taken unique approaches to conserving water resources. Regional drought has amplified efforts to conserve water as well. The panelists will discuss some approaches to water conservation and addressing drought situations.

## **Failing Flint: An Overview and Analysis of the Water Crisis**

**1:15 p.m. - 2:30 p.m.**

**Moderator:** *Hon. Alaina Burtenshaw*, Nevada

**Panelist:** *Janice A. Beecher*, Director of the Institute of Public Utilities at Michigan State University

In 2014 and 2015, thousands of families in the distressed community of Flint, Michigan, were exposed to lead and other contaminants in their drinking water subsequent to switching water sources. The public health, fiscal, and governance consequences are staggering and ongoing. This session will provide an overview and analysis of the crisis with a focus on regulatory issues.

## Flint Fallout: Is Mandatory Lead Pipe Replacement on the Horizon?

*(Joint Panel with Consumer Affairs)*

**2:45 p.m. - 3:45 p.m.**

**Moderator:** Hon. Randy Randall, South Carolina

**Panelists:** Hon. Mary-Anna Holden, New Jersey  
 Michael Deane, Executive Director, National Association of Water Companies  
 Denise Schmidt, Water Policy Advisor, Public Service Commission of Wisconsin  
 Lisa Sparrow, President and Chief Executive Officer, Utilities, Inc.  
 Walter Lynch, Chief Operation Officer, Executive Vice President, American Water

Is it likely that water utility lead pipe replacement will be mandated as a result of the recent events in Flint, Michigan? What are the challenges involved with lead pipe replacement? What operational, liability, and rate issues should be considered?

## State Regulation of Physical and Cybersecurity of Utility Distribution Systems

*(Joint Panel with Electricity, Critical Infrastructure, and Gas | Legends Ballroom)*

**4:00 p.m. - 5:00 p.m.**

**Moderator:** Hon. Philip Jones, Washington

**Panelists:** Hon. Cheryl LaFleur, Federal Energy Regulatory Commission  
 Hon. Richard Mroz, New Jersey  
 Hon. Arthur House, Connecticut

Hear about the actions that two States have taken to address the increasing threats against utility distribution systems. Federal Energy Regulatory Commission Commissioner Cheryl LaFleur will then provide a federal perspective on these State actions. The discussion will include how all parties may coordinate efforts and provide information sharing using, among things, the Cybersecurity Act of 2015.

## Tuesday, July 26 | 10:45 a.m. - 5:00 p.m.

**Committee on Water | Broadway C/D**

## Small, but a Mighty Challenge: Small Water Utilities

**10:45 a.m. - 11:45 a.m.**

**Moderator:** Hon. Daniel Y. Hall, Missouri

**Panelists:** Hon. Art Graham, Florida  
 Kathy Pape, President, Pennsylvania American Water  
 Marc Lucca, Vice President of Production, Aqua America

Small water utilities often face difficult circumstances including deteriorating infrastructure, environmental compliance issues, minimal rate base, and limited access to financing among others. How have regulators approached these issues? Are there unique approaches that balance the interests of the utility and its customers?

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## To Acquire or Not to Acquire? That is the Question

**1:15 p.m. - 2:30 p.m.**

**Moderator:** *Hon. Kenneth C. Hill, Tennessee*

**Panelists:** *Hon. Sherina Maye Edwards, Illinois*

*Hon. Doug Little, Arizona*

*Shawn Bradford, Vice President, Corporate Services, EPCOR Water*

Challenged water systems often do not have the resources to address the issues they are facing. Due to those challenges, those systems are not attractive for acquisition by utilities with greater resources to address the challenges. Some jurisdictions have implemented policies and practices intended to ease and even encourage acquisition of challenged water systems.

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## Commissioners' Roundtable

**2:45 p.m. - 3:45 p.m.**

**Moderator:** *Hon. Alaina Burtenshaw, Nevada*

The Commissioners' Roundtable is an opportunity for Commissioners to have an open discussion regarding current issues, water utility trends, and ideas for the future of water utility regulation. Commissioners are also invited to suggest topics for upcoming meetings.

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## Business Meeting

**4:00 p.m. - 5:00 p.m.**

Items of Business of the Water Committee will be covered including discussion and action on Resolutions and approval of the minutes from the Winter Committee Meetings. Additionally, updates from the various partners of the Water Committee will be given, including NAWC, NARUC, WRF, NRRI, and NARUC's Rate School. Members of the Committee will also have time to brief the Committee on activities of interest in their States.

### NARUC STAFF SUBCOMMITTEE ON ACCOUNTING AND FINANCE

**Fall 2016 Conference**

*September 18 - 22, 2016*

**Indianapolis, Indiana**

Contact Paul Schulz, CPA, Meeting Registrar (406) 444-9749 for more information.



**Monday, July 25 | 7:00 a.m. - 8:30 a.m.**

**National Regulatory Research Institute | Bass**

## **National Regulatory Research Institute Colloquium (Breakfast)**

**7:00 a.m. - 8:30 a.m.**

**Moderator:** *Rajnish Barua*, PhD, Executive Director, NRRI

## **Accommodating Electric Service Customers: Plain Vanilla or 31 Flavors?**

**Presenter:** *Ken Costello*, Principal Researcher-Energy & Environment, NRRI

The benefits from customer activism are a major motive for transformation of the U.S. electric industry. Utilities face the task of accommodating active customers while not jeopardizing the welfare of other (e.g., core) customers. The regulator's challenge is to assure both active and other customers that their utility will treat them fairly.

## **Telecommunications Update 2016**

**Presenter:** *Sherry Lichtenberg*, PhD, Principal Researcher-Telecommunications, NRRI

State legislators continued to modify telecommunications regulation in 2016, focusing on broadband and continuing changes to carrier of last resort and basic service requirements. Legislators in California, Maine, and Minnesota proposed three key bills addressing telecommunications regulation, limiting regulation in two cases and maintaining commission oversight in the third. These bills will have a significant impact on commissions, customers, and carriers.

## **The Ecology of Community Solar Gardening: A 'Companion Planting' Guide for State Regulators**

**Presenter:** *Tom Stanton*, Principal Researcher-Energy & Environment, NRRI

Community-shared solar projects are proliferating all over the country, in States with enabling legislation and commission rules and elsewhere. The U.S. DOE forecasts that, by 2020, shared solar could represent as much as half of all distributed solar. Well over 1GW of projects are in various stages of planning, and more and more utilities want a piece of the action. What qualities should commissions look for in good, better, or best community solar projects? This research provides an update about actions throughout the States; plus, offers ideas about regulatory considerations.

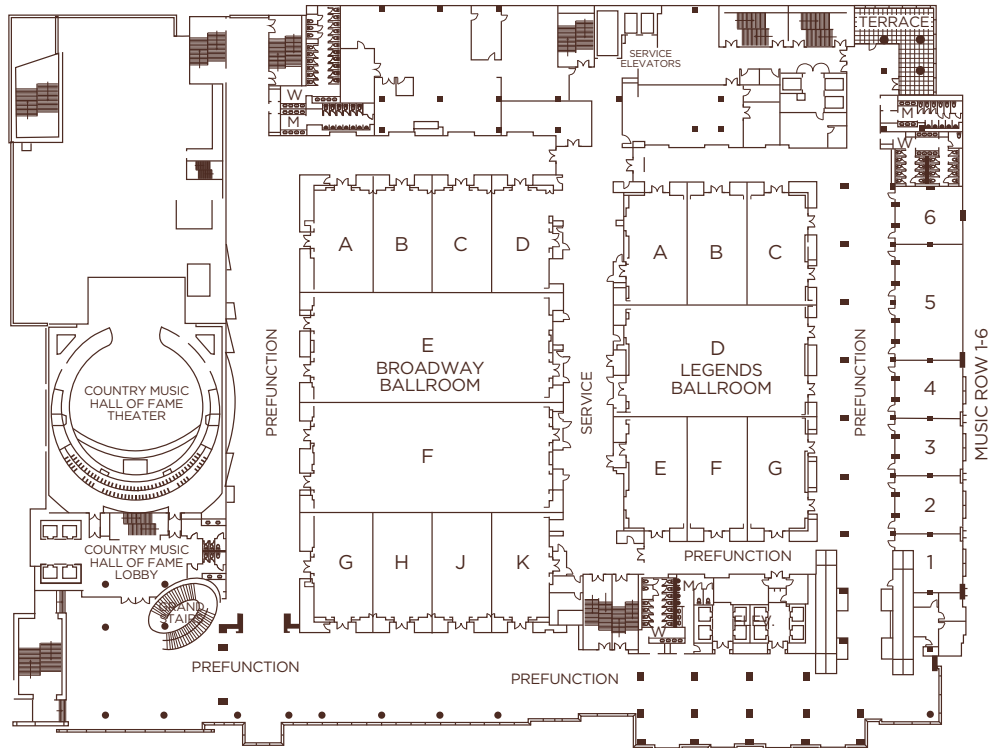
**Organization of PJM States, Inc. | Acoustic**

## **OPSI Breakfast (invitees only)**

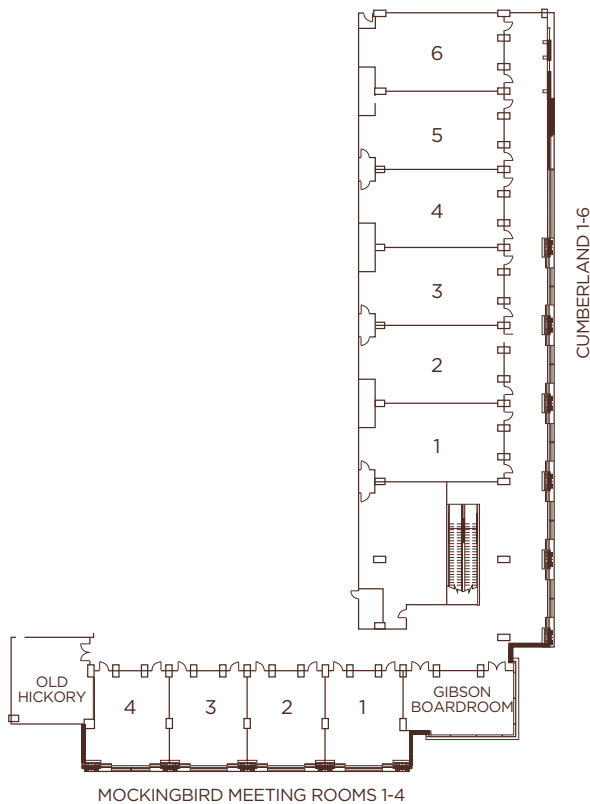
**7:00 a.m. - 8:30 a.m.**

# Hotel Floor Maps

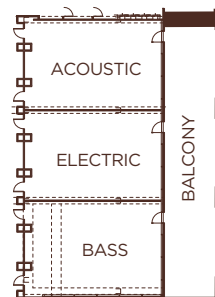
LEVEL TWO



LEVEL THREE



LEVEL FOUR



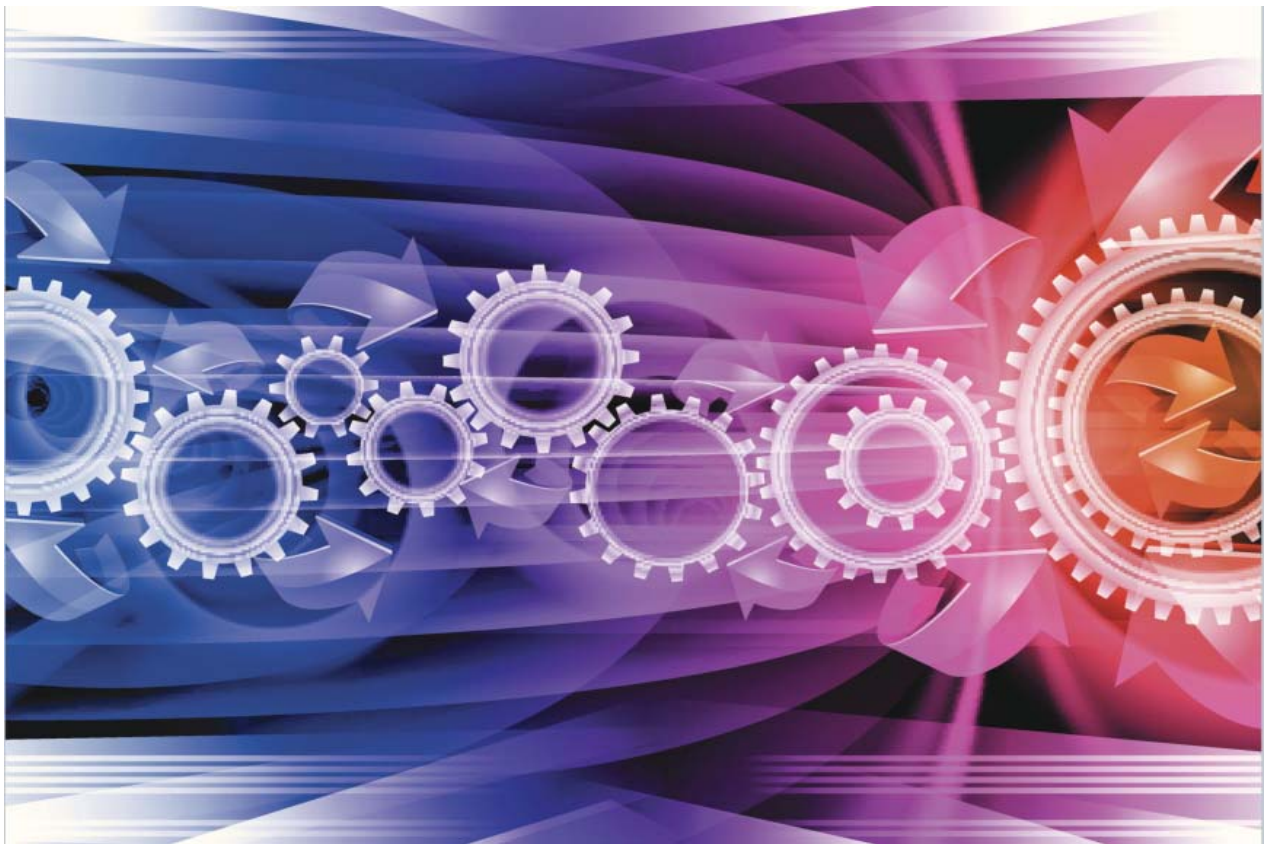


**Thank you for attending the 2016 Summer  
Committee Meetings.**

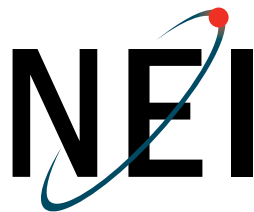
**We look forward to seeing you at the 128th Annual Meeting.**

**Mark your calendars!  
Registration Opens in August**

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