Welcome

During the webinar:

• This webinar is being recorded.
• Type in Questions to Kerry anytime in the Zoom Q&A Box.
  • Relevant clarifying questions will be asked immediately.

After the webinar:

• Presentation and recording posted on www.electricitypolicy.org.
• Unanswered questions will be sent to panelists for follow up.
• Join our listserv by checking off NCEP as an interest area in your MYNARUC account at www.naruc.org/mynaruc/ or e-mail Kerry Worthington at Kworthington@naruc.org after your profile has been created.
| Time   | Item                                                                 | Speaker                                                      |
|--------|----------------------------------------------------------------------|---------------------------------------------------------------|
| 2:00 ET| Welcome and NCEP                                                     | Kerry Worthington, NCEP/NARUC Staff                          |
| 2:10 ET| National Association of Regulatory Utility Commissioners (NARUC)     | Danielle Sass Byrnett, NARUC Center for Partnerships & Innovation Director |
| 2:20 ET| National Governors Association (NGA)                                | Dan Lauf, NGA Energy Program Director                        |
| 2:30 ET| National Conference of State Legislatures (NCSL)                    | Dan Shea, NCSL Energy Policy Specialist                      |
| 2:40 ET| National Association of State Energy Officials (NASEO)              | Kirsten Verclas, Program Director                            |
| 2:50 ET| National Association of State Utility Consumer Advocates (NASUCA)   | David Springe, NASUCA Executive Director                     |
| 3:00 ET| Adjourn                                                             |                                                               |
National Council on Electricity Policy
The National Council on Electricity Policy (NCEP)

• NCEP is a peer-learning platform to examine the ways new technologies, policies, regulations, and markets impact state resources and the bulk power system.

• NCEP is currently exploring the evolving interface between the transmission and distribution systems as the resource mix on the grid changes (planning, operations, and markets).

• All NCEP resources are available at www.electricitypolicy.org.

• NCEP thanks the U.S. Department of Energy for its ongoing support. NCEP is an affiliate project of NARUC.
NCEP Executive Committee

Hon. **Paul Kjellander**, Idaho Public Utility Commission

Hon. **ToNola Brown-Bland**, North Carolina Utility Commission

Hon. **Dave Danner**, Washington Utility and Transportation Commission

Hon. **Ted Thomas**, Arkansas PSC

Hon. **Upendra Chivukula**, New Jersey BPU

**Mike Dowd**, Virginia Department of Environmental Quality

**John Chatburn**, Governor’s Office of Energy Resources, Idaho

Senator **Eric Koch**, Indiana State Senate

Hon. **Sarah Freeman**, Indiana Regulatory Utility Commission

**Jeremy Tarr**, Office of Governor Roy Cooper

Thank you for your service

**Tanya McCloskey**, Office of Consumer Advocate, Pennsylvania

Hon. **Sarah Hofmann**, Vermont Public Service Commission
In 2021, the NCEP community will explore developments in modern planning techniques and tools to align planning processes across distribution, resources, and transmission planning. NCEP will explore:

• What is a state’s role in aligning planning for maintaining a well-managed, efficient electricity system, now with rapidly changing requirements and many more participants?

• What planning capabilities exist and are needed?

• What coordination opportunities exist?

State and system examples (case studies) and resources will be highlighted.
Available and Upcoming Resources
www.electricitypolicy.org/resources

Updates ongoing:
T&D Resource Catalog – over 150 public resources and examples (case studies) of planning, operations, and markets at the T&D intersection.

Available: Mini-Guide Series
Local Government Engagement with Public Utility Commissions (PUCs)
State Agency Coordination During Energy-Related Emergencies
Engagement between PUCs and State Legislatures
Engagement between PUCs and State Energy Officials

Mini-Guides Coming in 2021
States and Regional Transmission Operators
(RFP announced) Engagement between PUCs and Consumer Advocates
(RFP announced) Engagement between PUCs and Siting Boards
National Council on Electricity Policy
National Association of Regulatory Utility Commissioners (NARUC)
NARUC

• The National Association of Regulatory Utility Commissioners (NARUC) is a non-profit organization founded in 1889.

• Our members are the state regulatory commissions in all 50 states, DC, and the territories. FERC & FCC Commissioners are also members. NARUC has Associate Members in over 20 other countries.

• NARUC member agencies regulate electricity, natural gas, telecommunications, and water utilities.
The NARUC Center for Partnerships & Innovation (CPI) builds relationships, develops resources, and delivers training that provides answers to state commissioners’ questions.

Find the CPI fact sheet with recent publications & upcoming events on NARUC’s website

www.naruc.org/cpi-1/
(First item in Quick Links)
| RECENT RESOURCES  | WWW.NARUC.ORG/CPI |
|-------------------|----------------------|
| **Smart Grid**    | **Advanced Metering Infrastructure – Unlocking Resilience**, Mar. 2021  |
|                   | **Cybersecurity for the Smart Grid: Questions for Utilities**, Dec. 2020 |
|                   | **Financial Toolbox Series: Cloud Computing Brief**, Dec. 2020 |
| **Electricity Systems Planning** | **NARUC-NASEO Task Force on Comprehensive Electricity Planning**, Feb. 2021 |
|                   |  • **Blueprint for State Action** |
|                   |  • **Cohort Roadmaps** |
|                   |  • **Improving Analytical Capabilities Working Paper** |
|                   |  • **Western (Virtual) Regional Training on Integrated Distribution Systems Planning**, Feb-Mar. 2021 |
| **Stakeholder Engagement** | **PUC Stakeholder Engagement: A Decision-Making Framework**, Jan. 2021 |
| **Microgrids**    | **User Objectives and Design Approaches for Microgrids: Options for Delivering Reliability and Resilience, Clean Energy, Energy Savings, and Other Priorities**, Jan. 2021 |
|                   | **Private, State, and Federal Funding and Financing Options to Enable Resilient, Affordable, and Clean Microgrids**, Jan. 2021 |
| **Cybersecurity** | **A Guide for PUCs: Recruiting and Retaining a Cybersecurity Workforce**, February 2021 |
|                   | **Cybersecurity for the Smart Grid: Questions for Utilities**, Dec. 2020 |
## CPI Innovation Webinar Series
(monthly, Thursdays 3-4pm ET)
www.naruc.org/cpi-1/emerging-issues/innovation-webinars/

- **Staffing the Evolving PUC Workforce: Exploring Recruitment, Retention, and Alternative Tactics**, May 13, 2021
- **Initiative on Cybersecurity in Solar Projects: Cybersecurity Advisory Team for State Solar (CATSS)**, April 15, 2021 (NARUC & NASEO)
- **Data for the Public Interest: Utility and Regulatory Possibilities for Empowering Energy Equity with Data**, March 11, 2021

## NARUC-NASEO Microgrids State Working Group
www.naruc.org/cpi-1/critical-infrastructure-cybersecurity-and-resilience/microgrids/

- **NARUC-NASEO Briefing Reports on Microgrid Financing and Use Cases**, Jan. 13, 2021
- **Strategies for Resilient Microgrid Deployment**, April 7, 2021

## Electric Vehicles State Working Group
www.naruc.org/cpi-1/energy-infrastructure-modernization/electric-vehicles/

- **Heavy Duty Truck Charging**, March 3, 2021

## NARUC-DOE Nuclear Energy Partnership
www.naruc.org/cpi-1/energy-infrastructure-modernization/nuclear-energy/

- **The State of Nuclear: Challenges and Opportunities**, May 7, 2021
- **Introduction to Advanced Nuclear**, June 4, 2021
## NEW PROJECTS / FORTHCOMING RESOURCES

| CPI Innovation Webinar Series | • **Balancing the Clean Grid: Reliability and Renewable Energy**, June 17, 2021  
| | • **Virtual Power Plants In The 20s: Moving From Theory To Practice**, August 12, 2021  
| Bulk Power System Virtual Training | NARUC, NASEO, and NASUCA have partnered with Energy Systems Integration Group to offer a series of virtual training sessions on the reliability of the bulk power system (BPS). Recorded sessions available:  
| | • **May 6: Resource Adequacy**  
| | • **May 20: System Balancing**  
| | Remaining live sessions (members only) – request registration link in the chat:  
| | • June 10, 2-5pm ET: System Stability  
| | • June 22, 2-5pm ET: Impacts of Distributed Energy Resources on the BPS  
| Carbon Capture Storage and Utilization Partnership publications | • The Role of State Utility Regulators in a Just and Reasonable Energy Transition: Examining Regulatory Approaches to the Economic Impacts of Coal Retirements  
| Cybersecurity publications | • Energy Sector Cybersecurity Partnerships and Information Sharing (NARUC, NASEO, NGA)  
| | • Cybersecurity Risk Management: Understanding the Role of Cyber Insurance  

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www.naruc.org/cpi-1/emerging-issues/innovation-webinars/  
www.naruc.org/cpi-1/electricity-system-transition/bulk-power-system-issues/bulk-power-system-learning-modules/  
www.naruc.org/cpi-1/energy-infrastructure-modernization/carbon-capture-utilization-and-storage/  
www.naruc.org/cpi-1/critical-infrastructure-cybersecurity-and-resilience/cybersecurity/
NRRI Author Spotlight

Professor Paul Joskow will provide a retrospective discussion of his classic book: *Markets for Power*. This talk will be followed by a discussion of the challenges of wholesale market design.

**Thursday, July 15th 1-2:30pm ET**

- Dr. Susan Tierney (Analysis Group)
- Dr. Karl Hausker (World Resources Institute)
- Karen Palmer (Resources for the Future)
- Dr. Peter Fox-Penner (Boston University)

*Registration available through the NARUC Summer Policy Summit website*
National Association of Regulatory Utility Commissioners (NARUC)
National Governors Association (NGA)
What is NGA?

Founded in 1908, the National Governors Association is the nonpartisan organization of the nation’s 55 governors. Through NGA, governors share best practices, address issues of national and state interest and share innovative solutions that improve state government and support the principles of federalism.
Provide governors state-based energy solutions that enhance outcomes for: economic and workforce development, sustainability, equity, reliability, resilience, health, and safety.
Recent Resources
Addressing Cybersecurity for Critical Energy Infrastructure through State Governance Bodies

Executive Summary
This paper reviews eight states that have made a concerted effort to address vulnerabilities facing the cybersecurity of the critical energy sector through a statewide governance body. These statewide governance bodies are tasked with developing recommendations for policymakers on a host of issues; identifying best practices; providing strategic direction on cybersecurity plans for state agencies; recommending training for state employees; and addressing cybersecurity workforce or professional development issues in the state. This paper addresses practices Governors can follow to establish effective cybersecurity governance bodies that support critical infrastructure cybersecurity, with a focus on the energy sector.

Overview
Governors often use governance bodies – also commonly referred to as councils, task forces, boards, working groups or commissions – to address important and complex subjects such as cybersecurity. These bodies can serve a variety of purposes – from making recommendations, advising the Governor on an issue, and crafting the state’s strategic plan. As the cybersecurity threat landscape continues to evolve and our dependence on technology grows, Governors are sharpening their focus on addressing cybersecurity vulnerabilities in their states. With malicious actors continually attempting to access parts of our nation’s critical infrastructure, some states have expanded the breadth of their statewide homeland security advisory council or cyber governance body to include critical infrastructure protection, specifically focusing on the energy sector. Others have created a statewide task force to engage specifically on energy sector cybersecurity.

- Approaches to improve energy cybersecurity through state governance structures
- Profile of eight state governance bodies

Report available at:
https://www.nga.org/center/publications/addressing-cybersecurity-for-critical-energy-infrastructure-through-state-governing-bodies/
Executive Summary
Governors, state policymakers, utilities and other stakeholders across the country are increasingly aware of the connection between energy and water production and use, and the need to conserve both resources to meet economic and environmental goals. It requires substantial amounts of water to produce energy and considerable amounts of energy to treat and deliver water.

The critical interdependence between energy and water was clearly illustrated during the recent winter storm in Texas and other parts of the South in February 2021. Initial power outages contributed to a longer-term water crisis. Power outages led to water pump failures while water demand increased from frozen water pipes that burst. This caused low water pressure that can lead to harmful bacteria growth in the water. The power outages also prevented water treatment plants from properly treating the water for several days, thereby leaving many residents without clean drinking water and worsening the storm’s impacts.1

The National Governors Association has been working with states on this connection between water and energy and strategies for conserving those resources for several years. NGA held a Water-Energy Nexus Learning Lab in September 2020. This event invited two leading states in the water-energy nexus space, Arizona and Wisconsin, to showcase some of their model policies and programs to other states, Maryland, Nevada, North Carolina, North Dakota, and Washington, looking for greater savings opportunities.

State Insights on the Water-Energy Nexus and Policy Ideas to Achieve Greater Savings

- Funding and Financing
- Education and Technical Assistance
- Communications, Data, and Structural Improvements

Report available at: https://www.nga.org/center/publications/state-insights-on-the-water-energy-nexus-and-policy-ideas-to-achieve-greater-savings/
2021 Areas of Focus
Clean Energy and Grid Modernization

Clean Energy Deployment
- Education Series and State Resource Guide on Regional Energy Markets (August-Sept 2021)

Nuclear Energy Generation Development and Support
- Learning Collaborative
- Ongoing Technical Assistance

Energy Efficiency
- Energy/water nexus white paper
- Energy efficiency in a modernized energy system (primer for governors)
Energy Security and Resilience

Public Health, COVID-19, and State Energy Policy
• Forthcoming whitepaper on disconnection moratoriums and affordability solutions
• Executive Authorities for Energy Emergencies: Public Health Considerations

Energy Cybersecurity Preparedness
• Addressing Cybersecurity for Critical Energy Infrastructure through State Governing Bodies
• Whitepapers on cybersecurity information sharing (with NARUC and NASEO)
• State participation in GridEx VI – State-focused content and planning assistance (with NARUC)
• Distribution Grid and Distributed Energy Resource Supply Chain Security
• Foreign Influence in Critical Energy Infrastructure

Energy Infrastructure Resilience
• Workshop and whitepaper on state resilience planning and funding (with NASEO)
• SRAP Tool implementation
Governors’ Advisors
Energy Policy Institute

VIRTUAL EVENT Scheduled for June 24, July 13-15

Dedicated afternoon sessions on:
• State policy updates and interstate coordination
• Clean energy and climate
• Energy security and resilience
• Energy workforce, economic development, and recovery

PRE-EVENT: Bootcamp for Governors’ New Energy Policy Advisors on June 22

Contact Dan Lauf (dlauf@nga.org) with any questions or interest
Thank You!

Dan Lauf
dlauf@nga.org
202-624-5427
National Governors Association (NGA)
National Conference of State Legislatures (NCSL)
NCSL Overview

- **Bipartisan Organization**
  - Serves the 7,383 legislators and 30,000+ legislative staff of the nation's 50 states, commonwealths and territories

- **Activities**
  - Research and information on topics of interest to the states
  - Technical assistance and training
  - Opportunities for policymakers to exchange ideas
  - Lobbying at the federal level for states' interests
○ Report: “Energy Storage for a Modern Electric Grid: Technology Trends and State Policy Options”

○ Report: “2020-2021 Legislative Energy Trends”

○ NCSL Public-Private Partnership on Disaster Mitigation and Recovery:
  • “2019-2020 State Legislative Report on Natural Disasters”
  • “Natural Disaster State Policy Recommendations”

Recent NCSL Resources

Written reports and other publications
Two new resources on energy emergency planning:

- “Energy Emergencies: The State Legislative Role in Planning and Response”
- “Energy Emergencies: Tribal-State Coordination in Planning and Response”

Two magazine articles:

- “Texas Energy Crisis: What is Resilient Power Worth?”
- “State Lawmakers Driving EV Policies in 2021”

Plugged In newsletter

The News Reactor newsletter
Other Activities & Important Dates

- NCSL Policy 101 Series
  - Energy Policy 101

- Natural Resources and Infrastructure Spring 2021 webinar series:
  - “Energy You Can Count On: State & Federal Efforts to Enhance Energy Resilience” – April 29
  - “Energy Security: Planning for Every Threat” – June 24
    - Register here

- Legislative Bill Tracking
  - Energy Database
  - COVID-19 Database

- NCSL Base Camp (virtual) – August 3-5
- NCSL Legislative Summit (Tampa, in-person) – November 3-5
  - More info on both can be found here

- Energy Supply Task Force
- Nuclear Legislative Working Group
- Legislative Energy Horizon Institute
  - October 19-23, Washington, DC
Contact & Popular Links

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Recent Energy Publications
A list of recent NCSL energy-related publications, sorted by energy topic.

Plugged In Newsletter
Subscribe to NCSL’s monthly energy newsletter, offering the latest in federal and state energy news

Energy Legislative Database
Tracking all state legislation impacting the energy sector

Federal Energy Updates
Lists all energy-related executive orders, Congressional updates and other federal news
National Conference of State Legislatures (NCSL)
National Association of State Energy Officials (NASEO)
About NASEO

- Only national non-profit organization whose membership includes the 56 governor-designated energy officials from each state and territory
- Six regions across the nation to aid in sharing lessons learned for successful policy and program replication
- Committee structure includes, Electricity, Energy Security, Buildings, Financing, Transportation, Government Affairs
- Acts as a repository of information on issues of particular concern to the states and their citizens (e.g., grid modernization, energy resilience, energy security, cybersecurity, energy equity, energy-air integration)
- Improves the effectiveness of state energy programs and policies
- Serves as the voice of State Energy Offices in Washington, D.C.
## NASEO Program Areas

### Buildings
- Building Energy Codes
- Grid-Interactive Efficient Buildings WG
- Home Energy Labeling

### Electricity
- Microgrids State WG
- Resilience and the Electricity Sector
- Transition to a Cleaner Electricity Sector

### Energy Financing
- Energy Savings Performance Contracting
- Property Assessed Clean Energy
- On-bill Financing

### Equity
- Elevating the value of equity in policy making
- Equitable community engagement

### Energy Security
- Energy Assurance Planning
- Active Responses
- Cybersecurity
- Hazard Mitigation

### Solar
- Solar Soft Costs
- Solar Cyber
- Low-Income Solar

### State Energy Planning
- State Energy Planning Guidelines
- Best Practices

### Technology Innovation
- Technology Innovation Processes
- Validation and Deployment Activities
- Federal Activities

### Transportation
- EV policy and program guidance
- Regional EV infrastructure deployment support (REV West, SE REVI)
- Volkswagen Settlement

**Crosscutting Issues:** Resilience, Energy Jobs, COVID-19 and Economic Recovery, etc.
NASEO Program and Activities Spotlight

Cybersecurity Advisory Team for State Solar (CATSS)

Transportation Program

Energy Emergency Response and Resilience Planning and Funding

Grid Interactive Efficient Buildings Working Group

State Microgrid Working Group

NASEO NARUC Task Force on Comprehensive Electricity Planning
NASEO Most Recent Publications

- NASEO, BW Research and HBCU CDAC, Diversity in the U.S. Energy Workforce, April 2021
- NASEO, Manufactured Housing in Rural America, April 2021
- NASEO and Utah Clean Cities, Electric Vehicle Charging Needs Assessment
- NASEO, EFI & BW Research, Wages, Benefits, and Change
- NASEO and Cadmus, Plug-In Electric Vehicle Policy Impact Rubric, March 2021
- NASEO, State and Local Building Policies and Programs for Energy Efficiency and Demand Flexibility, February 2021
- NASEO and NARUC, Task Force on Comprehensive Electricity Planning, Resources for Action, February 2021
- NASEO, Wringing More Value from Building Energy Operations and Upgrades: Monetizing Demand Flexibility in Public and Institutional Buildings, February 2021
NASEO Upcoming Projects and Events

Upcoming Events and Webinars

- 2021 NASEO Regional Meeting Series (dates see websites)
- NARUC-NASEO Microgrids State Working Group Webinar: Microgrids for LMI Communities, June 24 (webinar)
- NASEO-NGA Resilience Workshop (June 28, 29, August 2, 3)
- NASEO BRIC Workshop, August 24-26

(see NASEO website for additional upcoming events)

Upcoming Publications

- NASEO NARUC Microgrid Papers
  - Unlocking Resilience with Microgrids
  - Renewable Energy Microgrids
- Carbon Capture, Utilization, and Storage: Overview and Considerations for State Planning
- Hydrogen: Overview and Considerations for State Planning
- Cyberinformation Sharing White Paper (with NARUC)
Questions and Contact

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NASEO Staff List: [https://www.naseo.org/naseo-staff](https://www.naseo.org/naseo-staff)
National Association of State Energy Officials (NASEO)
National Association of State Utility Consumer Advocates (NASUCA)

David Springe

www.nasuca.org
National Association of Clean Air Agencies (NACAA)

Miles Keogh, Executive Director

www.4cleanair.org
National Association Coordination
Tuesday, June 8, 2021
Virtual Meeting

www.electricitypolicy.org
all resources

www.naruc.org/mynaruc
to be placed on the listserv