

Governors' Advisors Energy Policy Institute

June 24 & July 13-15, 2021

NGA Center for Best Practices

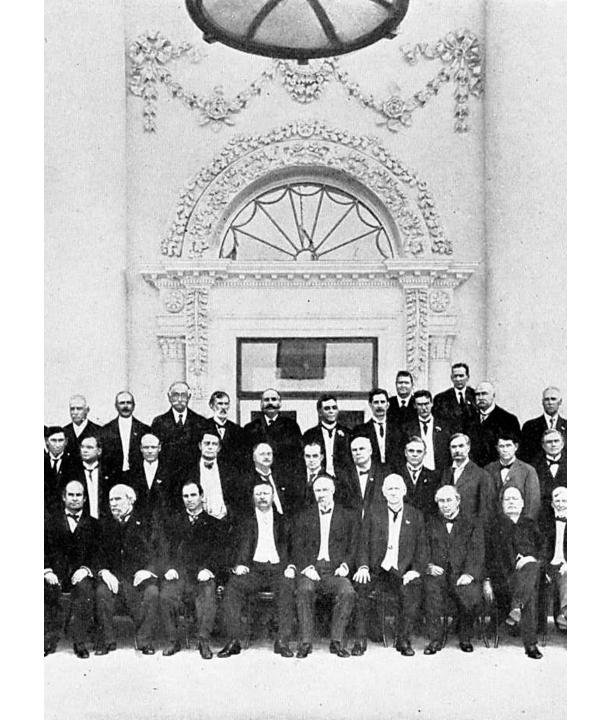
Welcome & Opening Remarks

Dan Lauf, Program Director, NGA Center for Best Practices



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.



Program Directors









Dan Lauf



Matthew Rogotzke



Jessica Rackley



VACANT



Cara Dougherty

Additional support from NGA's Infrastructure, **Environment, Workforce, Economic Development,** Homeland Security, and **Cybersecurity Teams**



Timothy Schoonhoven



Memorandum on State Utility Disconnection Moratoriums and Utility Affordability

Background

Financial Impacts on Utilities and Utility Customers

As a result of the COVID-19 pandemic and its economic effect, unemployment across the United States reached unprecedented levels, peaking at 14.8 percent in April 2020 before decreasing to a still-elevated 6.0 percent nationally as of March 2021. As a result of this increase in unemployment and resulting wage loss, many households found themselves unable to pay energy, water and telecommunications utility bills, resulting in potentially high utility debt and financial impacts to utilities. Estimates of financial impacts to utilities include:

- \$32 billion in electric and gas utility bill arrearages at the end of 2020, with as many as 20 percent of households behind on utility payments²
- \$13.9 billion in aggregate financial impact to drinking water utilities^{1,3}
- \$12.5 billion in revenue losses to wastewater utilities⁴

Governors, state legislatures and utility regulators in 34 states responded by issuing moratoria on utility disconnections and fees on late bill collection, providing temporary relief for households. Further, many utilities voluntarily adopted temporary restrictions on customer disconnection and collection of arrearages resulting from the pandemic. As these protections expire, mounting arrearages continue, saddling many utility customers with debt and threatening the financial stability of utilities, particularly small energy and water utilities. *As we near the end of the pandemic, many of these protections have ended as states move to ramp up recovery efforts.

While disconnection moratoria offered temporary relief from utility bills for customers, Governors and utility regulators will ultimately need to determine how to address accrued bill arrearages, whether by authorizing utility cost recovery of accrued debt through rate adjustment mechanisms, allowing utilities to collect unpaid bills from customers, implementing payment plans, offering

State Utility Disconnection Moratoriums and Utility Affordability

Report available at:

https://www.nga.org/center/publications/memorandum -on-state-utility-disconnection-moratoriums-andutility-affordability/

ⁱ The financial impact estimate includes the impacts of eliminating disconnections for non-payment, increased delinquencies because of high unemployment rates, reductions in non-residential water demands and lower customer growth offset by a small increase in revenue from increased residential use.

ii In the U.S., 27 percent of electric customers are served by municipal power companies and rural electric cooperatives and 88 percent of households are served by public drinking water systems. Many of these utilities are smaller, with few staff and little ability to weather a significant decrease in revenue when compared to larger investor-owned utilities. Further, many of these are not rate-regulated by state utility commissions, potentially limiting state authority to intervene.

State Resilience Assessment & Planning Tool (SRAP Tool)

Self-assessment led by Governor's Offices, completed with input from other agencies and state officials.

Energy and infrastructure focus, with five sections:

- 1. Establishing Effective Governance
- 2. Evaluating and Mitigating Risk
- 3. Assessing Vulnerabilities to Critical Infrastructure
- 4. Mitigating Economic Consequences and Financing Resilience
- 5. Strengthening Community Ties

Download the tool at: https://www.nga.org/center/publications/state-resilience-assessment-planning-tool/





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 dependency 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.



Addressing Cybersecurity for Critical Energy Infrastructure through State Governance Bodies

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

Report available at:

https://www.nga.org/center/publications/addressingcybersecurity-for-critical-energy-infrastructurethrough-state-governing-bodies/



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

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.

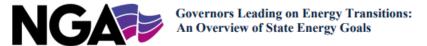


State Insights on the Water-Energy Nexus and Policy Ideas to Achieve Greater Savings

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

Report available at:

https://www.nga.org/center/publications/state-insights-onthe-water-energy-nexus-and-policy-ideas-to-achievegreater-savings/

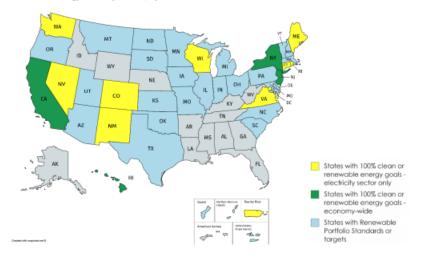


Emma Cimino & Jessica Rackley - NGA Center for Best Practices - September 1, 2020

Governors are leading on incentivizing and investing in clean energy. As of this writing, 30 states, Washington, D.C., and three territories have adopted a mandatory Renewable Portfolio Standard (RPS), while 7 states and one territory have set renewable energy goals. Of these, 14 Governors and D.C. have ordered or signed into law 100 percent clean energy or zero-carbon electricity generation goals. This paper provides an overview of current Governor leadership on advancing clean energy. It provides a background on recent Governors' actions ahead of a workshop that NGA will be hosting this fall that will help Governors' energy advisors and other state energy policymakers explore, develop, and refine strategies to achieve their energy goals.

2016 and 2019 were the warmest years on record,² and 2020 is on track to be even warmer.³ As a result, states are seeing extreme weather events such as hurricanes, heat waves, wild fires, and winter storms increase in severity and frequency. Scientists attribute increases in extreme weather events to rising global temperatures, largely resulting from emissions from increased energy use. At the same time, the price of clean energy technologies⁴ is dropping and consumer demand for renewable and on-site generation is increasing. These factors, coupled with a desire for more diverse power generation and a greater focus on resilience, are driving many Governors to focus on clean energy resources.

U.S. Clean Energy Goals by State: July 2020



Governors Leading on Energy Transitions: An Overview of State Energy Goals

- Enhancing clean energy and storage targets
- Modernizing energy infrastructure
- Rethinking traditional regulatory structures

Report available at:

https://www.nga.org/center/publications/governors-leading-energy-transitions/

The Road Ahead: Planning for Electric Vehicles by Managing Grid Interactions





The Road Ahead: Planning for Electric Vehicles by Managing Grid Interactions

- Deploying Charging Infrastructure
- Managed Charging
- Vehicle-to-Grid Technologies

Report available at: https://www.nga.org/wp-content/uploads/2020/12/EV-Grid-Interaction.pdf

Select Upcoming Opportunities

- Energy Policy Institute (days 2-4):
 - July 13 Climate & Clean Energy
 - July 14 Energy Resilience & Security
 - July 15 Energy Workforce & Economic Development
- Energy Resilience Planning and Funding Workshop (July 28-29; Aug 3-4)
- Learning collaborative on new *nuclear generation* (summer & fall 2021)
- *Electricity markets* training and resource guide educational series (August/September 2021)
- Legislative Energy Horizons Institute (Oct. 20-23)
- State support for participation in *GridEx VI* (Nov. 16-17)

Ongoing Projects

- Energy Efficiency in a Modernized Energy System (Primer for Governors
- Executive Authorities for Energy Emergencies: Public Health Update
- Whitepapers on cybersecurity information sharing (with NARUC and NASEO)
- Distribution Grid and Distributed Energy Resource Supply
 Chain Security
- Foreign Influence in Critical Energy Infrastructure

On-demand technical assistance



Preview of Today's Agenda

- 1:00 to 1:15 PM ET Welcome and Opening Remarks
- 1:15 to 2:15 PM State Introductions and Updates
- 2:15 to 2:45 PM Energy Developments Overview
- 2:45 to 3:00 PM Break
- 3:00 to 3:15 PM Federal Stimulus, Funding, and News from the Hill
- 3:15 to 4:00 PM Updates from U.S. Department of Energy Leadership
- 4:00 PM End of Day One



State Introductions and Updates

Please introduce yourselves and provide brief (~2 minute) updates highlight recent energy policy developments and ongoing Gubernatorial priorities.

- What are your Governor's top energy priorities this year?
- Are there any new energy policy challenges you are responding to?
- What questions do you have for NGA or your state peers?



Energy Developments Overview

Stanley Porter, Vice Chairman, U.S. Energy, Resources and Industrials, Deloitte



Federal Stimulus, Infrastructure Funding, and Other News from the Hill

Alex Whitaker, Legislative Director, NGA Office of Government Relations



Updates from U.S. Department of Energy Leadership

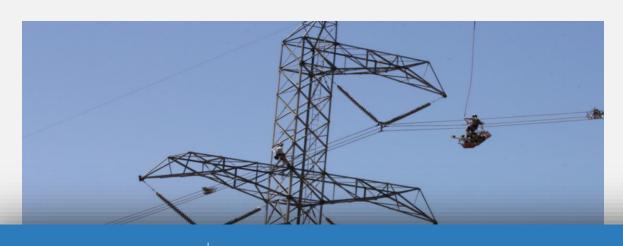
Puesh Kumar, Principal Deputy Assistant Secretary, Office of Cybersecurity, Energy Security, and Emergency Response (CESER)

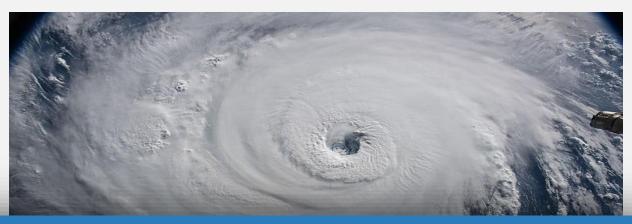
Patricia Hoffman, Acting Assistant Secretary and Principal Deputy Assistant Secretary, Office of Electricity (OE)

Dr. Kathryn Huff, Acting Assistant Secretary and Principal Deputy Assistant Secretary, Office of Nuclear Energy (NE)

Moderator. **Dan Lauf**, Program Director, NGA Center for Best Practices







U.S. DEPARTMENT OF ENERGY

Cybersecurity, Energy Security, and Emergency Response

NGA Energy Policy Institute

Puesh Kumar

Acting Principal Deputy Assistant Secretary, CESER

June 24, 2021





CESER Overview

Mission: To enhance the security of U.S. critical energy infrastructure to all hazards, mitigate the impacts of disruptive events and risk to the sector overall through preparedness and innovation, and respond to and facilitate recovery from energy disruptions in collaboration with other Federal agencies, the private sector, and State, local, tribal, and territory governments.

Evolving Threats to Critical Infrastructure



Energy Infrastructure: Risks and Hazards

NERC 2021 Summer Reliability Assessment



Figure 1: Energy Emergency Risk Areas





NOAA 2021 Atlantic Hurricane Season Outlook





CESER Collaboration Across the Energy Sector

State, Local, Tribal, and Territorial (SLTT) Government Coordination













Electricity Subsector Coordinating Council

Who

Utility and trade CEOs and CISOs/CIOs

Purpose

Coordinate efforts to prepare for and respond to nationallevel disasters or threats to critical infrastructure.

Working Groups

- Vision and Planning
- Threat Information Sharing
- Industry-Government Coordination
- Research & Development
- Cross-Sector Liaisons



Who

Oil & natural gas trade associations and their members

Purpose

Coordinate security strategies, policy, and communications across the sector to support the nation's security mission.

Working Groups

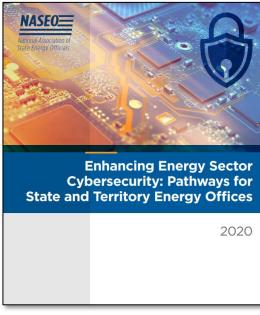
- Cyber
- Information Sharing
- Emergency Management
- Law Enforcement Engagement
- Pipelines

SLTT Resources

NGA Cybersecurity Governing Bodies Report

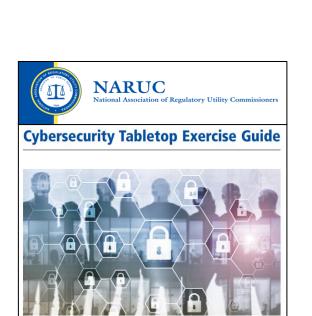


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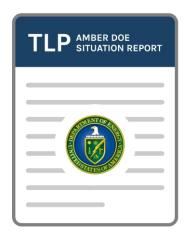


NASEO Cybersecurity Report











CESER Contact Information



Puesh Kumar
Acting Principal Deputy Assistant Secretary,
CESER

puesh.kumar@hq.doe.gov
202-586-9044



Kate Marks Deputy Assistant Secretary, ISER <u>Kate.Marks@hq.doe.gov</u> 202-586-9842



Brandi Martin
SLTT Program Manager
Brandi.Martin@hq.doe.gov
202-586-7983

www.energy.gov/ceser



Updates from U.S. Department of Energy Leadership

Puesh Kumar, Principal Deputy Assistant Secretary, Office of Cybersecurity, Energy Security, and Emergency Response (CESER)

Patricia Hoffman, Acting Assistant Secretary and Principal Deputy Assistant Secretary, Office of Electricity (OE)

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Moderator. **Dan Lauf**, Program Director, NGA Center for Best Practices



Join us for Days 2-4!

- July 13 Clean Energy and Climate
- July 14 Energy Resilience and Security
- July 15 Energy Workforce, Economic Development and Recovery



End of Day One

