



NARUC

National Association of Regulatory Utility Commissioners

Federal Technical Assistance Available for Commissions

January 20, 2023

U.S. Department of Energy
NARUC Center for Partnerships & Innovation

Speakers



Gil Bindewald
Acting Principal Deputy
Assistant Secretary,
Office of Electricity,
U.S. Department of
Energy



Alejandro Moreno
Acting Assistant Secretary,
Deputy Assistant Secretary
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Office of EERE, U.S.
Department of Energy



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Senior Director, Center for
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DOE EERE & OE Technical Assistance

Technical Assistance

- [Grid Solutions Program](#)
 - Integrated Distribution & Bulk-Power System Planning
 - Resource Adequacy
 - Electricity Market Design & Assessing Organized Markets
- [Energy Storage](#)
- [Integrated Distribution System Planning](#)
- [EVGrid Assist](#)
- [Interconnection Innovation e-Xchange \(i2x\)](#)
- [GMLC Technical Assistance for PUCs](#)
- [Solar Energy Innovator & Clean Energy Innovator Fellowship](#)
- [Clean Energy to Communities \(C2C\)](#)



Technical Assistance types

- Workshop & Engagement
- Guidance Development
- Provide Topical Data & Analysis
- Education & Training
- Direct Assistance

Federal Points of Contact

Office of Electricity:

- Joe Paladino [Grid Solutions] (joseph.paladino@hq.doe.gov)
- Eric Hsieh [Energy Storage] (eric.hsieh@hq.doe.gov)
- Dan Ton [Microgrids] (dan.ton@hq.doe.gov)
- Chris Irwin [EVGrid Assist] (christopher.irwin@hq.doe.gov)

Office of Energy Efficiency and Renewable Energy

- Paul Spitsen [Grid Solutions] (paul.spitsen@ee.doe.gov)
- Michele Boyd [i2x & CEIF] (michele.boyd@ee.doe.gov)
- Kevin Lynn [GMI/GMLC & C2C] (kevin.lynn@eere.doe.gov)
- Kara Podkaminer [EVGrid Assist] (kara.Podkaminer@ee.doe.gov)

EERE-OE Grid Solutions Program

Technical Assistance subtopics

- Integrated Distribution & Bulk-Power System Planning
- Resource Adequacy
- Electricity Market Design & Potential Benefits of Joining Organized Markets

Technical Assistance types

- Conferences & Workshop Engagement
- New Data, Tools, Methods Developed by Subject Matter Experts
- Trainings & Educational Materials for Staff
- Direct Technical Assistance



Eligibility

- Available to state entities (PUCs, SEOs, governors, legislature, etc.), utilities, ISO/RTOs, and others
- Currently providing assistance on a rolling basis

Federal Points of Contact

- Office of Electricity: Joe Paladino (joesph.paladino@hq.doe.gov)
- Office of Energy Efficiency & Renewable Energy (paul.spitsen@ee.doe.gov)

NARUC Point of Contact

- Danielle Sass Byrnett (dbyrnett@naruc.org)

Integrated Distribution System Planning

Technical Assistance subtopics

- Staged strategies for grid modernization
- DER integration and utilization
- Grid architecture
- Cost-effectiveness framework
- Resilience & equity
- Operational coordination

Technical Assistance types

- IDSP Guidelines Available
- Direct technical assistance on establishing IDSP practices
- Cohort-based training on IDSP and grid modernization
- Education and training via NARUC



Program Website

- [Integrated Distribution System Planning | Electricity Markets and Policy Group \(lbl.gov\)](#)

Eligibility

- Available to state and territory public utility commissions through webinars and cohort/regional based training

Federal Points of Contact

- Office of Electricity: Joe Paladino (joseph.paladino@hq.doe.gov)
- Office of Energy Efficiency & Renewable Energy (paul.spitsen@ee.doe.gov)

LBNL Point of Contact

- Lisa Schwartz (lcschwartz@lbl.gov)

NARUC Point of Contact

- Jeff Loiter (jloiter@naruc.org)

OE Technical Assistance for Energy Storage

Technical Assistance subtopics

- Energy storage performance and costs
- Strategies to address equity concerns,
- Demonstration support

Technical Assistance types

- Workshops
- Stakeholder-Convended Discussions
- Education & Training
- Consultations & Analysis



Program Website

[Energy Storage | Department of Energy](#)

Eligibility

- Available to State PUCs, SEOs, Utilities, Other

Federal Point of Contact

- Office of Electricity: Imre Gyuk [energy storage], (imre.gyuk@hq.doe.gov)
- Office of Electricity: Erich Hsieh [energy storage],(eric.hsieh@hq.doe.gov)

NARUC Point of Contact

- Sarah Fitzpatrick (sfitzpatrick@naruc.org)

EVGrid Assist

Technical Assistance subtopics

- EV Adoption Forecasting
- Vehicle-to-Grid Infrastructure
- Vehicle-to-X (V2X)
- Rate Impacts
- Policy & Regulatory Support

Technical Assistance types

- Monthly Educational Webinars
- Engagement via Conferences & Workshops
- Guidance Documents
- Additional Analysis & Direct Assistance



Program Website

- <https://www.energy.gov/eere/evgrid-assist-accelerating-transition>

Eligibility

- Available to PUCs, utilities, and other relevant stakeholders
- Rolling assistance available

Federal Point of Contact

- Office of Electricity: Chris Irwin (joesph.paladino@hq.doe.gov)
- EERE: Kara Podkaminer (kara.Podkaminer@ee.doe.gov)

NARUC Point of Contact

- Danielle Sass Byrnett (dbyrnett@naruc.org)

Interconnection Innovation e-Xchange (i2X)

Technical Assistance subtopics

- DER Interconnection
- Utility-Scale interconnection
- Codes & Standards
- Policy & Regulatory Support
- Access to Clean Energy & Equity

Technical Assistance types

- Conferences & Workshops
- Office Hours with National Labs
- Direct Assistance



Program Website

- <https://www.energy.gov/eere/i2x/interconnection-innovation-e-xchange>

Eligibility

- Available to PUCs and other grid decision makers
- Rolling Office Hours

Federal Point of Contact

- DOE EERE: Jian Fu, (jian.fu@ee.doe.gov)
- DOE EERE: Michele Boyd, (michele.boyd@ee.doe.gov)

NARUC Point of Contact

- Jeff Loiter (jloiter@naruc.org)

GMLC Technical Assistance for Public Utility Commissions

Technical Assistance subtopics

- Grid planning
- Resilience
- DER Integration
- Performance Based Ratemaking
- Equity and Environmental Justice

Technical Assistance types

- Awardees receive direct technical assistance from a group of national laboratory and other experts
- Where possible, awardees have been organized into cohorts to facilitate peer-to-peer learning



Program Website

- <https://www.energy.gov/eere/articles/doe-announces-technical-assistance-state-utility-regulators-address-challenges>

Eligibility

- Targeted state PUCs
- Over 20 awards made in 2021
- Work ongoing

Federal Point of Contact

- DOE EERE: Michele Boyd, (michele.boyd@ee.doe.gov)

NARUC Point of Contact

- Danielle Sass Byrnett (dbyrnett@naruc.org)

Solar Energy Innovator/Clean Energy Innovator Fellowship

Technical Assistance subtopics

- Grid Modernization
- Resilience
- Interconnection
- Equity/Access to Clean Energy & Energy Efficiency
- Integration of EVs & Building Electrification
- Rate Design

Technical Assistance types

- 2-years of direct assistance helping a hosting entity work through a critical challenge



Program Website

- <https://www.energy.gov/eere/clean-energy-innovator-fellowship>

Eligibility

- Open to recent grads and professionals
- PUCs, SEOs, utilities, and other institutions can host fellows
- 2022 cohort announced in September 2022

Federal Point of Contact

- DOE EERE: Michele Boyd, (michele.boyd@ee.doe.gov)

NARUC Point of Contact

- Danielle Sass Byrnett (dbyrnett@naruc.org)

Clean Energy To Communities (C2C)

Technical Assistance subtopics

- Integrated Planning
- Cross-sectoral modelling
- Decarbonization Pathways & Trade-Offs
- Policy & Regulatory Support

Technical Assistance types

- Expert Match (Short-term – 60 hours)
- Peer-Learning Cohorts (Medium-term, 6-month)
- In-Depth Partnerships (Long-term, 3-yr)



Program Website

- <https://www.nrel.gov/state-local-tribal/clean-energy-to-communities.html>

Eligibility

- Available to local governments, tribes, electric utilities, and community based organizations
- Just made \$50 million announcement earlier this week

Federal Point of Contact

- DOE EERE: Kevin Lynn, (kevin.lynn@ee.doe.gov)

NARUC Point of Contact

- TBD

U.S. Department of Energy

Acting Assistant Secretary EERE Alejandro Moreno

Acting Principal Deputy Assistant Secretary OE Gil Bindewald

THE NARUC CENTER FOR PARTNERSHIPS & INNOVATION

- NARUC staff team dedicated to providing technical assistance to members.
- CPI identifies emerging challenges and connects state commissions with expertise and strategies to inform their decision making.
- CPI builds relationships, develops resources, and delivers trainings.
- All CPI support is federally funded via cooperative agreements with DOE and NIST.



Regularly updated CPI fact sheet with recent publications & upcoming events under Quick Links at: www.naruc.org/cpi-1/

Recent Publications

- [Mini Guide on Engagement between States and RTOs](#) (Mar. 2022)
- [Mini Guide on Transmission Siting Decision Making](#) (Feb. 2022)
- [Valuing Resilience for Microgrids: Challenges, Innovative Approaches, and State Needs](#) (Feb. 2022)
- [Mini Guide on Engagement between Public Utility Commissions and State Consumer Advocates](#) (Jan. 2022)
- [State Approaches to Intervenor Compensation](#) (Jan. 2022)
- [Cyber Issue Brief: Log4j Vulnerability](#) (Dec. 2021)

Recordings from Recent Events

- [Bulk Power System Issues Training Series. Recordings and presentations](#) on resource adequacy, system balancing, system stability, and impacts of DERs on the bulk power system. *Contact Danielle*
- [Electricity System Planning Training Series. Recordings and presentations](#) from spring 2022 sessions on coordinating distribution, transmission, and resource planning and more; **July 25** on Beneficial Electrification. *Contact Jessica*
- [Electric Vehicle State Working Group. Recordings and presentations](#) on equity, interoperability, school bus electrification, pilot programs, and more. New webinar series starts Aug 11 through Nov 10. *Contact Danielle*
- [Microgrids State Working Group: Recordings and presentations](#) on resilience planning and valuation, renewable energy microgrids, and Bipartisan Infrastructure Law resilience funding. *Contact Kiera*
- [Nuclear Energy Partnership Webinars: Recordings and presentations](#) on advanced nuclear fuel, small modular reactors, nuclear energy impacts of war in Ukraine, and mitigating risks of new nuclear. *Contact Kiera*
- [Performance-Based Regulation Webinars. Recording and presentations](#) on establishing metrics. *Contact Elliott*
- [Resilience for Regulators Webinar Series: Recordings and presentations](#) on critical infrastructure resilience in light of climate change; defense energy resilience partnerships, and more. *Contact William*

Virtual Learning Opportunities

- [Innovation Webinar Series. Aug. 25:](#) Energy Storage in Integrated Resource Plans. **Sept. 15:** Innovative Wildfire Mitigation Technologies. **Oct. 20:** Long Duration Storage. [Register and see recordings](#) of past events. *Contact Jessica*
- [Commission Staff Surge Calls.](#) NARUC hosts peer sharing calls for commission staff to discuss different states' approaches to emerging issues. **Aug. 8:** Customer Data Access. View past [summaries](#) online. *Contact Jeffrey*
- [On-Demand, Video-Based Learning Modules.](#) Dozens of training videos are now available in English and Spanish on [distribution systems and planning, smart grid and EV interoperability](#), and more. *Contact Danielle*

Upcoming In Person Events (travel stipends available)

- [Regional Cybersecurity Training, Denver, CO. Sept. 7-9:](#) Join a Western-focused training exclusively for members on cybersecurity topics through the lens of a public utility regulator. (Open to commissioners/staff only) *Contact Hyieah*
- [NARUC-NASEO DER Interconnection Workshop, Washington, DC. Sept. 20-21:](#) Join the new DER Integration & Compensation Initiative for expert and peer support on designing rules and adopting standards to interconnect and integrate DERs. Other topics include equity in distribution planning, market operator needs, and more. *Contact Tanya*
- [National Council on Electricity Policy Annual Meeting, Washington, DC. Sept. 22-23:](#) Join fellow policy makers from governors' offices, consumer advocates, state legislatures, air regulators, and energy offices to explore pressing electricity issues from the customer perspective and find valuable opportunities for coordination. *Contact Tanya*
- [Coal and Carbon Management Partnership Site Visit to National Energy Technologies Lab. Oct. 24-26:](#) Tour NETL's Morgantown, WV and Pittsburgh, PA campuses to see the latest on carbon capture, utilization, storage and strategies and technologies to increase the efficiency of coal resources. (Open to commissioners only) *Contact Kiera*

Forthcoming Publications

- Compendium of State Cyber Breach Reporting Requirements
- Black Sky Playbook
- Defense Energy Resilience Key Resources Guide & FAQ for Commissioners
- Electric Vehicle Briefs: Equity; Interoperability
- Regulator's Financial Toolboxes: Community Solar for LMI Customers; Electrification
- Potential State Regulatory Paths to Facilitate Low-Carbon Fuels
- Renewable Energy Microgrids
- Nuclear as a Keystone Clean Energy Resource
- State Approaches to Energy Justice: Arrearages, Affordability, Participation, Metrics

In partnership with DOE, NIST, and members NARUC CPI work spans five key topical areas

Energy Generation	Energy Transmission	Energy Distribution	Energy Customers
<ul style="list-style-type: none"> • Coal & Carbon Management* • Nuclear Energy* • Natural Gas* • Hydrogen • Utility-Scale Renewables 	<ul style="list-style-type: none"> • Transmission Infrastructure • Transmission-Distribution Coordination* • Storage • Comprehensive Electricity Planning 	<ul style="list-style-type: none"> • Integrated Distribution Planning • Smart Grid / Grid Modernization • Microgrids* • Performance-Based Regulation* 	<ul style="list-style-type: none"> • DER Integration & Compensation* • Demand Flexibility* • Electric Vehicles* • Stakeholder Engagement • Energy Justice
<p><i>Contact Kiera Zitelman</i></p>		<p><i>Contact Jeffrey Loiter</i></p>	

Critical Infrastructure Preparedness, Response, and Resilience

- Cybersecurity for Utility Regulators*
- Energy Emergency Preparedness
- System Resilience
- Defense Community Partnerships

Contact Lynn Costantini

*NARUC CPI facilitates a working group or partnership for regular member learning and peer exchange opportunities.

Smart Grid Interoperability Technical Assistance (NIST)

Technical Assistance subtopics

- Interconnection / IEEE 1547-2018
- AMI
- Demand flexibility
- Smart grid
- Electric vehicles

Technical Assistance types

- Stakeholder working group facilitation
- Rules review
- Strategic planning
- Education / training for staff



Program Website

- www.naruc.org/cpi-1/energy-infrastructure-modernization/smart-grid/

Eligibility

- Available to any state PUC
- 1st round 2022; 2nd round rolling applications
- All support must be completed by Aug 31, 2023

External Point of Contact

- NIST: Cuong Nguyen (Cuong.Nguyen@nist.gov)

NARUC Point of Contact (primary POC)

- Jeff Loiter (jloiter@naruc.org)

Workforce Development Peer Advisory Group

Technical assistance

subtopics:

- Recruitment / Retention Challenges
- Review of Recruitment and Marketing Materials
- Importance of Diversity, Equity, and Inclusion
- Career and Growth Opportunities within PUCs
- Brainstorming Innovative Pathways to Obtaining Qualified Talent

Peer Group Activities:

- Group discussion every two months (bi-monthly)
- Quarterly peer sharing webinars (attendance and/or optional panelist opportunity)
- Occasional feedback/review on publications



Eligibility:

- Interested Commissioners and Commission Staff
- Deadline: Rolling
- First Peer Advisory Meeting: January 25, 2023
1pm-2pm EST (*email Hyleah for information*)

NARUC Point of Contact:

- Hyleah O'Quinn (hoquinn@naruc.org)

Existing Resources

- Workforce Development Toolbox www.naruc.org/cpi-1/critical-infrastructure-cybersecurity-and-resilience/

Advanced Nuclear State Collaborative (ANSC)

Technical Assistance subtopics: Support states moving towards the deployment of new nuclear generation

Technical Assistance types

- Facilitated peer sharing
- Access to experts
- Input to toolkit resources produced by NARUC, NASEO and / or National Labs
- Education / training for PUCs



Program Website

- <https://www.naruc.org/cpi-1/energy-infrastructure-modernization/nuclear-energy/>

Eligibility

- PUCs or State Energy Offices
- Expressions of interest due in March
- Rollout at NASEO and NARUC winter meetings, Feb. 7 - 10 and Feb. 12 - 15

Others Involved

- NASEO (partner)
- Idaho National Laboratory (technical assistance)

NARUC Point of Contact (primary POC)

- Kiera Zitelman (kzitelman@naruc.org)

Coordinated Grid Resilience TA Opportunity through IJA

Technical Assistance subtopics

- Energy resilience metrics
- Strategic planning
- Guidance on threat-based risk assessments

Technical Assistance types

- Stakeholder identification & working group facilitation
- Literature review / state best practices summary
- Education / training for staff
- Direct support for individual PUCs



Federal Program Website

- <https://www.energy.gov/gdo/grid-resilience-statetribal-formula-grant-program>

Eligibility

- Interested Commissioners & Commission Staff
- **Rolling deadline:** Accepting initial letters of interest starting April 1, 2023.

NARUC Point of Contact

- William McCurry (wmccurry@naruc.org)

NARUC Program Website

- Energy Resilience Reference Guide www.naruc.org/cpi-1/critical-infrastructure-cybersecurity-and-resilience/

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<i>Contact Kiera Zitelman</i>		<i>Contact Jeffrey Loiter</i>	

Critical Infrastructure Preparedness, Response, and Resilience

- Cybersecurity for Utility Regulators*
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Contact Lynn Costantini

*NARUC CPI facilitates a working group or partnership for regular member learning and peer exchange opportunities.

NARUC Staff

We're here to help with direct assistance, resources, or connections to experts

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www.naruc.org/cpi-1