







# Training for States on Distribution System and Distributed Energy Resources Planning

## March 20, 2024 Nashville, Tennessee Agenda

8:30 a.m. Welcome and Agenda Review

Ram Narayanamurthy, U.S. Department of Energy, Building Technologies Office

Jeff Loiter, NARUC, and Catherine Reed, NASEO

Lisa Schwartz, Berkeley Lab

8:45 a.m. Integrated Distribution System Planning Overview

Natalie Mims Frick and Lisa Schwartz, Berkeley Lab

**10:00 a.m. Break** (refreshments provided)

10:15 a.m. Load Forecasting

Julieta Giraldez, Julieta Energy

- Forecasting tools and methods for greater temporal and spatial granularity
- Scenario-based forecasting
- Electrification and extreme weather impacts

11:15 a.m. Group Exercise – State Objectives and Priorities for Distribution System and

**Distributed Energy Resources Planning** 

Facilitated by National Association of Regulatory Utility Commissioners and National

Association of State Energy Officials

12:00 p.m. Lunch and networking

12:45 p.m. Distributed Energy Resources Planning

Cody Davis, Electric Power Engineers

- DER forecasting
- Hosting capacity analysis
- Non-wires alternatives

Continued —

#### 1:45 p.m. Group Exercise - State Challenges and Opportunities for Distribution and DER Planning

Facilitated by National Association of Regulatory Utility Commissioners and National

Association of State Energy Officials

2:00 p.m. **Break** 

2:10 p.m. **Group Exercise** (continued)

#### **Identifying Grid Needs and Evaluating Investment Options** 2:30 p.m.

Samir Succar, ICF

- Grid needs assessment
- Technology investment strategies for grid modernization, DERs and electrification
- Valuation methods
- Technology roadmap

#### 3:45 p.m. **Break** (refreshments provided)

#### 4:00 p.m. **Recovering and Allocating Costs**

Ronny Sandoval, Regulatory Assistance Project

- Regulatory challenges
- Treatment of projects that receive federal funding
- Ratepayer vs. taxpayer funding
- Proactive distribution upgrades for distributed energy resources and electrification
- Resilience investments

#### 5:00 p.m. Adjourn









# **Training for States on Grid Resilience Planning**

# March 21, 2024 Nashville, Tennessee Agenda

8:30 a.m.	Wolcome and Agenda Pavious
8:30 a.m.	Welcome and Agenda Review Tom King, U.S. Department of Energy, Grid Deployment Office
	Jeff Loiter, NARUC, and Blake Kinney, NASEO
	Lisa Schwartz, Berkeley Lab
8:45 a.m.	Introduction to Resilience for Electricity Systems
	Gayathri Krishnamoorthy, National Renewable Energy Laboratory
9:15 a.m.	Identifying Threats, Predicting Vulnerabilities, and Assessing Risks <sup>1</sup>
	Tom Wall, Argonne National Laboratory
10:15 a.m.	Break (refreshments provided)
10:30 a.m.	Example Utility Vulnerability Assessment Cynthia Klein, Duke Energy, and Neil Weisenfeld, ICF
	Cyntina Kiem, Dake Energy, and Neil Weisenjela, ICF
11:15 a.m.	What Should Grid Resilience Plans Include? <i>Planning Requirements, Emerging Best Practices, and Template</i>
	Josh Schellenberg, Berkeley Lab affiliate
12:00 p.m.	Lunch (provided) and Networking
12:45 p.m.	Group Exercise – Engaging Stakeholders and Building Equity in Resilience Planning
	Facilitated by National Association of Regulatory Utility Commissioners and National Association of State Energy Officials
1:30 p.m.	Strategies for Valuing and Prioritizing Resilience Investments and Measuring Progress Peter Larsen, Berkeley Lab
2:30 p.m.	Mitigation, Rapid Restoration Strategies, and Best Practices — with Case Studies  Josh Schellenberg, Berkeley Lab affiliate
	Josh Schellenberg, Berkeley Lab affiliate

Continued —

<sup>&</sup>lt;sup>1</sup>This training will not cover cybersecurity and kinetic attacks. See Lawrence Livermore National Laboratory's <u>presentation</u> at the Southeast resilience training as well as <u>NASEO</u> and <u>NARUC resources</u> on the topic.

**3:15 p.m. Break** (refreshments provided)

### 3:30 p.m. State Criteria for Evaluating Resilience Projects

Presenter and panel moderator: *Tom Wall, Argonne National Laboratory* 

Panelists:

Kari Heinrich, Wisconsin State Energy Office - Office of Energy Innovation Ben Bolton, Tennessee Office of Energy Programs / Emergency Response

Avery Ashby, Middle Tennessee Electric

### 4:30 p.m. Adjourn