



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

January 24, 2024

University of California Irvine, 6210 Donald Bren Hall [\[map\]](#)

### Agenda

- 8:30 a.m. Welcome and Agenda Review**  
*Ram Narayanamurthy, U.S. Department of Energy, Building Technologies Office  
Jeff Loiter, NARUC, and Blake Kinney, 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, Kevala*
- 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**
- 12:40 p.m. Welcome From University of California, Irvine**  
*Jack Brouwer, Professor of Mechanical and Aerospace Engineering and Director of the National Fuel Cell Research Center and Advanced Power and Energy Program*

— Continued —

*The U.S. Department of Energy's Office of Electricity and Building Technologies Office provided support for this training.*

- 12:45 p.m.**      **Distributed Energy Resources Planning**  
*Cody Davis, Electric Power Engineers*
- DER forecasting
  - Hosting capacity analysis
  - Non-wires alternatives
- 1:50 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)**
- 2:30 p.m.**      **Identifying Grid Needs and Evaluating Investment Options**  
*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

January 25, 2024

University of California Irvine, 6210 Donald Bren Hall [[map](#)]

### Agenda

- 8:30 a.m. Welcome and Agenda Review**  
*Dave Parsons, 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**  
*Sara Peterson, 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 Vulnerability Assessment**  
*Stephen Torres, Southern California Edison*
- 11:15 a.m. Strategies for Valuing and Prioritizing Resilience Investments and Measuring Progress**  
*JP Carvallo, Berkeley Lab*
- 12:15 p.m. Lunch (provided) and Networking**
- 1:00 p.m. Mitigation, Rapid Restoration Strategies, and Best Practices — with Case Studies**  
*Nichole Hanus, Berkeley Lab*
- 1:45 p.m. Engaging Stakeholders and Building Equity in Resilience Planning**  
*NARUC and NASEO interactive exercise*
- 2:30 p.m. Break (refreshments provided)**
- 2:45 p.m. What Should Grid Resilience Plans Include? Planning Requirements, Emerging Best Practices, and Template**  
*Josh Schellenberg, Berkeley Lab affiliate*

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<sup>1</sup>This training will not cover cybersecurity and kinetic attacks. See Lawrence Livermore National Laboratory's [presentation](#) at the Southeast resilience training as well as [NASEO](#) and [NARUC resources](#) on the topic.

*The U.S. Department of Energy's Grid Deployment Office provided support for this training.*

**3:30 p.m.**

**State Criteria for Evaluating Resilience Projects**

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

Panelists:

*David Erne, California Energy Commission*

*John Parks, Colorado Energy Office*

*Rob Del Mar, Oregon Department of Energy*

**4:30 p.m.**

**Adjourn**