

U.S. Department of Energy Clean Energy Innovator Fellows Training

Grid Resilience Planning

September 26, 2024

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Today's Training – Grid Resilience Planning

- Welcome – Lisa Schwartz, Berkeley Lab, and Cory Felder, U.S. Department of Energy (2:00-2:10 ET)
- Introduction to Resilience for Electricity Systems – Gayathri Krishnamoorthy, National Renewable Energy Laboratory (2:10-2:30 ET)
- Identifying Threats, Predicting Vulnerabilities, and Assessing Risks – Tom Wall, Argonne National Laboratory (2:30-3:00 ET)
- Strategies for Valuing and Prioritizing Resilience Investments and Measuring Progress –Myles Collins, Berkeley Lab (3:00-3:30 ET)
- Break (3:30-3:35 ET)
- Mitigation, Rapid Restoration Strategies, and Best Practices – Josh Schellenberg, Berkeley Lab affiliate (3:35-4:05 ET)
- Grid Resilience Data, Metrics and Analyses – Myles Collins, Berkeley Lab (4:05-4:35 ET)
- What Should Grid Resilience Plans Include? – Josh Schellenberg, Berkeley Lab affiliate (4:35-5:00 ET)

Q&A follows each presentation (except for *Introduction to Resilience*).

Enter your questions in the chat box at any time.

Slides are posted [here](#). A recording will be posted at that site shortly.



Today's Trainers

- **Myles Collins** is a Policy Researcher in the Energy Markets and Policy Department at Berkeley Lab. He conducts research on resilience planning and valuation and benefit-cost analysis for innovative utility programs. He has 17 years of experience in energy policy, strategy, and analytics, including 13 years in the utility industry. He served as the Energy Services and Utility Rates Manager at Burbank Water and Power, Principal Consultant at Nexant (now Resource Innovations), and Manager of Customer Service Business Planning at Southern California Edison. He holds a Ph.D. in Policy Analysis from the Pardee RAND Graduate School, a Master of Public Policy from UCLA, and a B.S. in Environmental Engineering from Northwestern University.
- **Gayathri Krishnamoorthy** is a Researcher in the Grid Planning and Analysis Center at National Renewable Energy Laboratory. Her research focuses on large-scale power distribution grid modeling and analysis, transmission and distribution co-simulation, DER planning, integration and impact assessment, and distribution grid resilience valuation. She holds a Ph.D. and M.S. in Electrical Power Engineering from Washington State University.
- **Josh Schellenberg** is a Berkeley Lab Affiliate with more than 15 years of experience in the electric utility industry. His expertise includes benefit-cost analyses for utility resilience plans and major transmission investments designed to mitigate the risks of climate change, natural disasters, physical security, and other threats, as well as the value of reliability, including development of Berkeley Lab's Interruption Cost Estimate Calculator, which has informed over \$50B of grid modernization investments. Josh holds an M.B.A. from The Wharton School and an M.A. in International and Development Economics from the University of San Francisco.
- **Tom Wall** is the Director of Argonne National Laboratory's Center for Climate Resilience and Decision Science. The Center combines Argonne's deep capabilities in climate science and modeling, advanced computing, infrastructure risk analysis, and decision science to translate climate science and model data into actionable information for decision-makers. He has extensive experience in critical infrastructure analysis and protection and leads infrastructure-focused projects for the U.S. Department of Homeland Security, FEMA, and state and local governments. Tom has an Honors B.S. in Civil Engineering from Oregon State University and an M.S. and Ph.D. in Civil Engineering from Georgia Tech.



Forthcoming Clean Energy Innovator Fellows Webinar Trainings

- October 31 - Best Practices for Integrated Resource Planning
 - ▣ Register [here](#)
- November 14 – Integrated Distribution System Planning
- December 19 – Transportation Electrification
- Additional training topics (dates TBD)
 - ▣ Building Electrification
 - ▣ Equity
 - ▣ National labs technical assistance and resources

All trainings from 2–5 p.m. Eastern



In-person Regional Trainings on Integrated Distribution System Planning *Including electrification and demand flexibility*

- Hosted by the National Association of Regulatory Utility Commissioners (NARUC), National Association of State Energy Officials (NASEO) and Lawrence Berkeley National Laboratory, with funding from the U.S. Department of Energy
- Dates
 - ▣ December 11-12, 2024 - Charlotte, NC
 - ▣ March 11-12 Detroit
 - ▣ April 23-24, 2025 - Salt Lake City
- Registration for the trainings will be announced soon

