



Mid-Atlantic Distribution Systems and Planning Training With NARUC-NASEO Task Force on Comprehensive Electricity Planning

D.C. Public Service Commission
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PRESENTER BIOS

Michael Coddington is Principal Engineer and Principal Investigator at National Renewable Energy Laboratory (NREL). Before coming to NREL in 2007, Michael spent 19 years working in the electric utility industry. His work at NREL has focused on the integration of distributed energy resources with the electric distribution grid, including interconnection of high penetrations of solar PV systems. He has supported and led various standards and codes activities that are related to the interconnection of distributed energy resources. Michael received his Electrical Engineering degree from Colorado State University and is a licensed master electrician and licensed electrical contractor.

Paul De Martini is Managing Director at Newport Consulting. He is a recognized industry thought leader and consultant on the business, policy and technology dimensions of a more distributed power system. Paul has played a leading role in grid modernization efforts in California, Hawaii and New York. He is co-project manager for DOE's modern distribution grid initiative (DSPx). Paul is a visiting scholar at Caltech's Resnick Institute and member of the National Academy of Sciences committee on T&D reliability. Previously, he was CTO for Cisco's Energy Internet of Things business unit and VP, Advanced Technology, at Southern California Edison responsible for grid modernization, energy storage and transportation electrification.

Joe Eto is a Staff Scientist at Lawrence Berkeley National Laboratory (Berkeley Lab), in the Electricity Markets and Policy Group and Grid Integration Group. Among other things, Joe has spent the past 15+ years conducting research on reliability metrics and trends, and on the economic value of reliability to electricity customers. Joe has been a long-time contributor to NARUC and state public utility commission (PUC) activities. In 1988, he co-authored NARUC's Handbook on Least Cost Utility Planning, and in the 1990s he organized yearly training seminars for state PUC staff on technical aspects of utility integrated resource plans.

Lavelle Freeman is a Technical Director in GE's Energy Consulting group. He leads activities related to distribution planning, engineering, systems analysis, DER/microgrid applications and grid modernization. He also manages the DSTAR consortium (Distribution System Testing, Application and Research, www.dstar.org), a group of utilities in North America that fund distribution R&D of common interest. Previously, Lavelle spent several years in R&D and systems consulting at ABB. He has an M.S. in Power Engineering from the University of North Carolina at Charlotte and an M.S. in Computer Engineering from North Carolina State University.

Juliet Homer is a professional engineer in the Energy Policy and Economics Group at Pacific Northwest National Laboratory (PNNL). Her work supports national and international projects in the areas of integrated energy planning, advanced distribution system planning and grid modernization. Before joining PNNL, Juliet was a Utility Analyst at the Oregon Public Utility Commission where she managed electric and natural gas utility resource planning dockets and performed economic analyses of proposed utility investments. She previously worked as a consultant with Greeley and Hansen, LLC, a multi-national engineering consulting firm, where she was a project manager leading planning and engineering design projects for water and wastewater systems.

Dr. Debra Lew is a Technical Director at GE Energy Consulting, focusing on utility integration of wind, solar and distributed energy resources. Previously, she spent 16 years at NREL, where she initiated and led the Western Wind and Solar Integration Study, which examined impacts of high penetrations of wind and solar in the Western Interconnection. In 2009-2010, she was seconded to the Hawaiian Electric Company to work on integrating high levels of wind and solar in Hawaii. She has a B.S. from MIT in Electrical Engineering and Physics and a Ph.D. from Stanford in Applied Physics.

Dr. Barry Mather joined the Power Systems Engineering Center at NREL in 2010. Until 2015, he led a project focusing on the technical impacts of the integration of high penetrations of solar PV in Southern California Edison's service territory and authored the High-Penetration PV Grid Integration Handbook for Distribution Engineers. He currently leads a group of about 20 researchers focused on power electronics, system-level control, standards, and national- and state-level interconnection issues related to the integration of renewable energy sources at ever higher levels. He received a Ph.D. in electrical engineering from the University of Colorado, Boulder.

Kevin McCabe is a member of the Distributed Systems and Storage Group in NREL's Strategic Energy Analysis Center since 2016. He has experience in modeling customer adoption of distributed energy resources, studying the effect of market and policy changes on deployment forecasts, and analyzing geospatial considerations of distributed energy resource adoption. He has performed analysis in a variety of capacities, including as lead modeler for distributed geothermal systems for the U.S. Department of Energy's Geothermal Vision Study (GeoVision), for two case studies evaluating the economic viability of behind-the-meter distributed wind in several U.S. states, and for investigating the future of the growth of distributed energy resources in California, partnering with the California Energy Commission. He holds a B.S. in Mechanical Engineering and M.S. in Petroleum Engineering, both from Stanford University.

Dr. Kevin P. Schneider is a Principal Research Engineer at PNNL, working at the Battelle Seattle Research Center. He received his B.S. in Physics and M.S. and Ph.D. degrees in Electrical Engineering from the University of Washington. His main areas of research are distribution system analysis and power system operations. Kevin is an Adjunct Faculty member at Washington State University, an Affiliate Associate Professor at University of Washington, and a licensed Professional Engineer in Washington state. He is the past Chair of IEEE's Distribution System Analysis Subcommittee and the current Vice Chair of the Analytics Methods for Power Systems Committee.

Lisa Schwartz is Deputy Leader of the Electricity Markets and Policy Group at Berkeley Lab. She manages the energy efficiency team, utility regulation projects, and training and education for states on distribution system planning. Previously, she was Director of the Oregon Department of Energy, where earlier in her career she was a Senior Policy Analyst. At the Oregon Public Utility Commission for seven years, she led staff work on resource planning and procurement, demand response, and distributed and renewable energy resources. She also was a Senior Associate with the Regulatory Assistance Project, providing assistance to government officials on energy issues.

Dr. Emma Stewart is Deputy Associate Program Leader for the Infrastructure Systems, Cyber and Infrastructure Resilience Program and serves as Distribution System Lead at Lawrence Livermore National Laboratory. Before joining Livermore, she worked at Berkeley Lab for several years, including in the area of distribution measurement and analysis techniques for smart grid applications. Earlier in her career, Emma was a visiting researcher at Sandia National Laboratories and a Power Systems Engineer at BEW Engineering (now DNV KEMA). She led distribution modeling and analysis and high renewable penetration studies for customers such as Hawaiian Electric Companies and Sacramento Municipal Utilities District, developing methods for quantifying the impacts of high solar PV penetration on feeders. Emma holds a degree in Electrical and Mechanical Engineering from University of Strathclyde and a Ph.D. in Electrical Engineering.

Tim Woolf is a Senior Vice President at Synapse Energy Economics. He has more than 35 years of experience conducting technical and economic analyses of energy and environmental issues on behalf of consumer advocates, environmental advocates, regulators and government agencies. Tim's primary areas of focus include electricity industry regulation and planning, power sector transformation, energy efficiency program design and policy analysis, renewable resource technologies and policies, and benefit-cost analyses. He served as a commissioner at the Massachusetts Department of Public Utilities from 2007-2011.