Training Webinars on Electricity System Planning

Speaker Bios

Dan Boff is an economist at Pacific Northwest National Laboratory (PNNL). His work focuses on the economics of energy storage and renewable energy. Dan has written and presented on a wide variety of topics related to renewable energy policies, including value-based tariffs for distributed generation, renewable energy goals and standards, and innovative financing for clean energy. Prior to joining PNNL, Dan worked as an energy market analyst, advising clients in industry and government on the energy transition. Dan received his Bachelor's degree from George Washington University and a Master's degree from the London School of Economics.

Alan Cooke is a Senior Economist at PNNL. His current research areas include industry trends in distribution system planning, coordination between utility resource planning and distribution planning, treatment of batteries in resource planning, and benefit-cost analyses for valuing distributed energy resources (DERs). His work also has included analyzing life-cycle benefits and costs associated with appliance and equipment efficiency standards on behalf of the U.S. Department of Energy (DOE). Before joining the lab, Alan worked for eight years at an electric utility. He led a utility team working to demonstrate compliance with NERC reliability standards, developed wheeling rates for an open access transmission tariff, and performed economic analyses of transmission and distribution issues. He also worked as a consultant on integrated resource planning, demand-side management planning, and retail rate studies for U.S. utility clients.

Kimberly Cullen is the Manager of Distribution Planning for Central Maine Power. Previously, she was Superintendent of Metering at Santee Cooper in Myrtle Beach, South Carolina. Kimberly has worked in the utility business for nearly 18 years, with all of her experience in Distribution including serving in Planning, Design, Relaying, and Metering departments. She has a B.S. in Physics from the College of Charleston, a B.S. in Electrical Engineering from the University of South Carolina, and an M.B.A. from Webster University. She is a registered Professional Engineer in both Maine and South Carolina.

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 several states including California, Hawaii, and New York. He is co-project manager for DOE's modern distribution grid initiative (DSPx). Previously, Paul was Chief Technology Officer 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 activities.

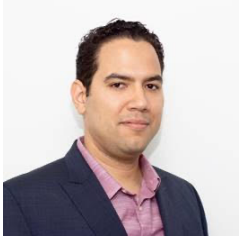
Lavelle Freeman is Director of Distribution System Planning at Eversource Energy, overseeing system planning and DER interconnection activities in Connecticut, Massachusetts, and New Hampshire. Prior to joining Eversource, he was Technical Director at GE Energy Consulting, leading Distribution-related activities with an emphasis on advanced distribution planning, DER integration, microgrids, and grid modernization. Lavelle received a B.S. in Electrical Engineering from the University of Alabama, an M.S. degree in Computer Engineering from North Carolina State University, and an M.S.E.E. in Power Systems from the University of North Carolina at Charlotte. He has published over 35 technical and conference papers and holds a patent and an invention disclosure.

Natalie Mims Frick is an Assistant Leader and Program Manager in the Electricity Markets and Policy Department at Berkeley Lab. She conducts research and manages projects on energy efficiency and other DERs, including policies, program design and implementation, and state technical assistance. Before joining the lab, Natalie was the principal at Mims Consulting, LLC, where she served as an expert witness in demand-side management regulatory proceedings across the country. Earlier, she was an Energy Efficiency Director at the Southern Alliance for Clean Energy and a Senior Consultant at Rocky Mountain Institute.

Juliet Homer is a professional engineer and the leader of the Energy Policy Analytics Team at PNNL. Her work focuses on resilience and the energy-water nexus, how DERs fit within changing electric power grids, integrated grid planning, and utility regulation. Previously, Juliet was a consulting water engineer in the Phoenix area and then a staff member at the Oregon Public Utility Commission, where she was responsible for overseeing dockets on energy efficiency and renewable energy programs and integrated resource planning. She holds B.S. and M.S. degrees in Civil and Environmental Engineering from Arizona State University.

Dr. Fredrich (Fritz) Kahrl is an independent consultant and Berkeley Lab affiliate. He has 15 years of experience in the energy sector, providing strategy and analytical support for energy regulators, research institutes, utilities, and energy producers. His expertise covers electricity markets, utility resource planning, regulatory economics, transmission pricing, DERs, and rate design. Fritz received M.S. and Ph.D. degrees from the Energy and Resources Group at the University of California, Berkeley.

Jody Londo is a Regulatory Policy Manager at Xcel Energy, focused on integrated resource planning, grid security, customer data privacy, and integrated distribution planning — including grid modernization, hosting capacity analysis, and non-wires alternatives analysis. She engages with stakeholders and develops strategies, reports, engagement plans, expert testimony, and other regulatory filings. She led the development of Minnesota's first Integrated Distribution Plan for Xcel Energy, led the Company through development of customer data and grid information access and release frameworks, and is engaged at the national level on the emergent issues of grid information security balanced with access to further DER integration.



Juan F. Martinez is the Distribution Planning Manager at Eversource Energy, currently focusing on the changing needs of the distribution system based on the long-range outlook of load growth, electric vehicle penetration, and photovoltaic systems growth — among other evolving technologies. Before joining the company in 2019, he worked for 15 years at ConEdison. His last role was Manager of Distribution Engineering, where he led engineering design efforts for risk reduction, asset replacement, and capital expansion projects. He has a Bachelor's degree in Electrical Engineering from The City College of New York and a Master's degree in Electrical Engineering from Manhattan College.

Dr. Ron Melton is a Senior Technical Advisor in PNNL's Electricity Infrastructure and Buildings Division. He is a member of the core team for DOE's Grid Architecture project, leads its Distribution Transformation and Coordinate Storage Network, and is the GridWise® Architecture Council Administrator. Earlier, he led the lab's Distributed Systems Group, was the Principal Investigator for DOE's Advanced Grid Research project for an ADMS Open-Source Platform, and was Project Director of the Pacific Northwest Smart Grid Demonstration. Ron is a Senior Life Member of the Institute of Electrical and Electronics Engineers (IEEE), a Senior Member of the Association for Computing Machinery, and co-chair of the Grid Architecture Working Group of the Smart Electric Power Alliance (SEPA). He holds a B.S.E.E. from the University of Washington and M.S. and Ph.D. degrees in Engineering Science from the California Institute of Technology.

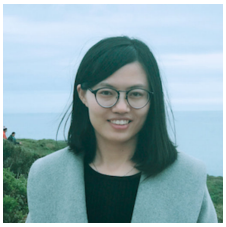
Rebecca O'Neil is an advisor for PNNL. She was the lab relationship manager for DOE's renewable energy portfolio, served a rotation in DOE's Water Power Technologies Office to develop a hydropower-grid research program, and led the lab's regulatory area for energy storage. Her current research interests include advancing energy equity in electricity planning. In her previous position at the Oregon Department of Energy, Rebecca represented the agency on matters related to water power development and the state's renewable portfolio standard. She also ran a multi-million dollar portfolio of federal grants for renewable energy feasibility studies, agricultural efficiency measures, energy assurance and woodstove replacement programs. Earlier, she managed the Energy Trust of Oregon's multifamily energy efficiency program and represented a coalition of river conservation and recreation organizations in federal hydropower dam licensing. She earned a B.A. from Rice University.

Dr. Seemita Pal is a Senior Research Engineer and Leader of the Systems Engineering Team in PNNL's Distributed Systems Group. Her interests include grid architecture, grid cybersecurity, synchrophasor technologies, and power systems. She is part of PNNL's Grid Architecture core team and served on the Grid Architecture project team for DOE's Grid Modernization Laboratory Consortium. She has served as a Principal Investigator and task lead for projects related to grid architecture concepts and methodologies to transform the electric grid. As a member of SEPA's working group on grid architecture, she is leading development of a practical introductory guide to the discipline. Seemita earned the IEEE Member and Geographic Activities Achievement Award in 2019 and was featured in DOE's Women @ Energy: STEM Rising series. She received M.S. and Ph.D. degrees in Electrical Engineering from Rensselaer Polytechnic Institute and a B.E. in Electrical Engineering from the Indian Institute of Engineering Science and Technology.

Elton Prifti is a Director of Engineering in the Distribution Planning and Asset Management Department at National Grid. He manages the team responsible for DER and large load interconnection studies and long- and short-term planning of the distribution system from a reliability, asset condition, and loading perspective. He joined the Company in 2005 and has served in various roles within the department. He holds a B.S.E.E. in Electrical and Electronics Engineering and an M.S.E.E. in Power Systems from Northeastern University. He is a licensed Professional Engineer in the state of Massachusetts.

Lisa Schwartz is a senior manager for Berkeley Lab's Electricity Markets and Policy Department. She directs work spanning utility regulation, electricity system planning, energy efficiency and demand flexibility, and leads training for states on integrated distribution system planning. In 2018, she received NARUC's Mary Kilmarx award, which recognizes "individuals who have gone above and beyond in the name of good governance, clean energy, and the environment." Before joining the lab, she was Director of the Oregon Department of Energy, where earlier in her career she was a Senior Policy Analyst. Other state service includes the Oregon Public Utility Commission, where she led staff work on resource planning, resource procurement, and distributed and renewable energy resources, as well as Oregon State University's Extension Energy Program. She also served as a Senior Associate at the Regulatory Assistance Project. Lisa received an M.S. in Land Resources from the University of Wisconsin and a B.S. in Environmental Studies from George Washington University.

Tim Woolf is a Senior Vice President at Synapse Energy Economics with 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. He served as a commissioner at the Massachusetts Department of Public Utilities from 2007–2011. Tim holds an M.B.A. from Boston University, a Diploma in Economics from the London School of Economics, and a B.S. in Mechanical Engineering and a B.A. in English from Tufts University.



Xiangqi Zhu is an electrical engineer at National Renewable Energy Laboratory. Among her areas of research are distribution system load modeling for time-series simulation, improving control of aggregated DERs, and analyzing the increased grid value of DERs that use back-to-back converters to reduce curtailment, reduce storage needs and improve hosting capacity. She earned a Bachelor's degree in Electrical Engineering from Shandong University and a Ph.D. in Electrical Engineering from North Carolina State University.