

Electricity Advisory Committee (EAC)

Panelist and Speaker Bios, October 2022

Update on the DOE Office of Electricity Programs and Initiatives



Gil Bindewald

Acting Principal Deputy Assistant Secretary, Office of Electricity
U.S. Department of Energy

Mr. Bindewald is the Acting Principal Deputy Assistant Secretary for the U.S. Department of Energy's Office of Electricity and co-Chair of the Grid Modernization Initiative. He leads activities to help transform the system that powers our homes and businesses, and increasingly even fuels our cars. He received his B.S. in Electrical Engineering from Union College, and an M.P.A. in International Development from Harvard University. Mr. Bindewald is a registered Professional Engineer in the state of New York.

Updates from the DOE Grid Deployment Office



Maria Robinson

Director, Grid Deployment Office
U.S. Department of Energy

Maria Duaine Robinson is the Director of DOE's Grid Deployment Office. She was the first Korean American elected to the Massachusetts General Court, where she served in the House of Representatives from 2019-2022. While in office, she led the bicameral Clean Energy Caucus and was the Massachusetts state lead for the National Caucus of Environmental Legislators where she also served on the board and was the only state legislator on the U.S. EPA Clean Air Act Advisory Committee. She holds an S.B. in Chemical Engineering from the Massachusetts Institute of Technology and a Master of Jurisprudence in Energy Law from the University of Tulsa.

Energy Storage Panel



Charles Hanley

Senior Manager, Grid Modernization and Energy Storage
Sandia National Laboratories

Mr. Hanley is Senior Manager of the Grid Modernization and Energy Storage Group at Sandia National Laboratories. His group conducts research on enhancing the resilience of our critical energy infrastructures, including grid-scale optimization, controls, and microgrids; energy storage technologies; renewable energy integration; power electronics; cyber security; and advanced analytics for complex systems. He joined Sandia in 1988 and has been working in Sandia's renewable energy and electric grid programs since 1994. He received his B.S. in Engineering Science from Trinity University in San Antonio, Texas, and his M.S. in Electrical Engineering from Rensselaer Polytechnic Institute, in Troy, New York.



Dr. Imre Gyuk

Energy Storage Program Manager, Office of Electricity
U.S. Department of Energy

Imre Gyuk directs the energy storage research program at DOE, which funds work on a wide variety of technologies such as advanced batteries, flywheels, super-capacitors, and compressed air energy storage. Applications include seamless continuity of power supply for high-tech industry during outages, making renewables dispatchable, and helping to increase the capacity factor and ease congested distribution lines. Dr. Gyuk has a B.S. from Fordham University, and he did graduate work at Brown University where he was a research assistant to Nobel Laureate Leon Cooper. He has a Ph.D. in Theoretical Physics from Purdue University and became a research associate at Syracuse. Dr. Gyuk has taught Physics, Civil Engineering, and Architecture at the University of Wisconsin and Kuwait University.

North American Electric Reliability Corporation 2022 Winter Assessment



Howard Gugel (EAC Member)

Vice President, Engineering and Standards
North American Electric Reliability Corporation

Howard Gugel is the Vice President of Engineering and Standards at the North American Electric Reliability Corporation (NERC). In this role he is responsible for providing engineering analysis and support for NERC activities and directing all aspects of NERC's continent-wide standards development process by providing oversight, guidance, coordination, and industry education of the development of Reliability Standards. Mr. Gugel has more than 29 years of experience in the electric utility industry, and his background includes management experience in operations and energy marketing. He has worked for two investor-owned utilities, a rural electric cooperative, and an energy marketing firm. Mr. Gugel earned his bachelor's and master's degree in Electrical Engineering from the University of Missouri – Rolla. He is a licensed professional engineer in the state of Missouri.

Energy Information Administration 2022 Outlook

Laura Martin

Operations Research Analyst

U.S. Energy Information Administration, Office of Long-Term Energy Modeling

Laura Martin is an Operations Research Analyst in the Office of Long-Term Energy Modeling for the U.S. Energy Information Administration's (EIA) Office of Energy Analysis. She is the lead modeler for the Electricity Market Module of the National Energy Modeling System and is responsible for the research, analysis, and modeling of issues affecting the electric power sector supply and dispatch to support EIA's long-term U.S. projections. Ms. Martin holds a M.S. in Industrial Engineering from Purdue University.

Improving Planning Processes for Electric Vehicle Infrastructure Deployment



Dr. Tom Bialek (EAC Member)

Chief Technology Officer
Toumetis

Tom Bialek serves as Chief Technology Officer for Toumetis, and his present responsibilities involve applying utility transmission and distribution knowledge of equipment, operations, planning and time-series data with data science and machine learning to provide business value to clients. He previously worked at San Diego Gas & Electric Company as Chief Engineer, where his responsibilities involved technology strategy and policy for transmission and distribution issues, including equipment, operations, planning, distributed generation, and development of new technologies. Dr. Bialek holds a PhD in Electrical Engineering from Mississippi State University, as well as a BS and MS in Electrical Engineering from the University of Manitoba, Canada.



Dr. David Rapson

Chancellor's Leadership Professor, UC Davis Economics
Department
Policy Advisor & Senior Research Economist, Federal Reserve
Bank of Dallas

David Rapson is a Chancellor's Leadership Professor in the UC Davis Economics Department, Policy Advisor & Senior Research Economist at the Federal Reserve Bank of Dallas, and Co-Director of the Davis Energy Economics Program (DEEP). At the moment, Professor Rapson's research primarily focuses on the transportation and electricity sectors, where decarbonization is challenging due to the centrality of fossil fuels as the main energy input. He is an expert on electric vehicles, energy markets, as well as climate policy and regulation, and his research appears in the American Economic Review, Science, Nature, and other academic journals. He earned degrees from Dartmouth College (AB), Queen's University (MA) and Boston University (PhD).



Alex Schroeder

Chief Technology Officer
Joint Office of Energy and Transportation
DOE & U.S. Department of Transportation (DOT)

Alex Schroeder is the Chief Technology Officer for the Joint Office of Energy and Transportation. He is on assignment from the National Renewable Energy Laboratory (NREL), where he leads a research group that focuses on electric vehicle charging, grid integration, and commercial vehicle decarbonization. During his time at NREL, he has helped conceptualize DOE's Energy Efficient Mobility Systems Program and aligned efforts between DOE and DOT to accelerate transportation systems research. He holds a master's degree in engineering and technology management from the Colorado School of Mines and a bachelor's degree in engineering from the University of Illinois at Urbana-Champaign.



Alan Dulgeroff

Director of Electric System Planning
San Diego Gas & Electric

Alan Dulgeroff is the Director of Electric System Planning for San Diego Gas and Electric (SDG&E). In over twenty years at SDG&E, Mr. Dulgeroff has served in leadership and technical positions in strategy and finance, HR, IT, and nine areas of electric and gas transmission and distribution engineering, construction, operations, and maintenance. He is a graduate of San Diego State University with a Master of Engineering and Bachelor of Science in Electrical Engineering with a minor in Computer Science. He is licensed in California as a Professional Engineer in Electrical Engineering.