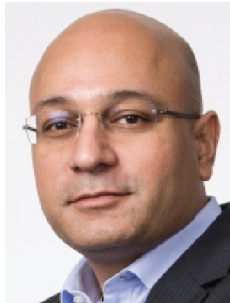


**State Clean Energy Policies/Resources in Wake of FERC MOPR Decision;  
Carbon Pricing in PJM Footprint; and New PJM President/CEO Keynote**

April 28, 2020

Bios of Speakers/Moderator



**Manu Asthana** is the president and CEO of PJM Interconnection, where he oversees the largest power grid in North America and the largest electricity market in the world.

Most recently, he served as president of Direct Energy Home in North America, where he led a team of over 2,600 to combine the company's retail electricity and home-services businesses, creating a leading energy and home-services provider serving over 3.4 million customers. He previously led power generation operations at Direct Energy, energy trading at both Direct Energy and at the TXU group of companies, as well as generation optimization and dispatch at TXU. In addition, he served as chief risk officer of TXU Corporation, where he helped senior management and the board quantify and manage risk in TXU's businesses.

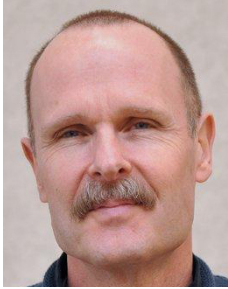
Manu earned a Bachelor of Science in economics from The Wharton School at Penn, where he was a Benjamin Franklin Scholar and a Joseph Wharton Scholar.



**Jason M. Stanek** was appointed Chairman of the Maryland Public Service Commission by Governor Larry Hogan in July 2018. Previously, he served as Senior Counsel to the Energy Subcommittee of the U.S. House of Representatives' Committee on Energy and Commerce, advising on matters involving national energy policy, with a specific focus on electricity issues and the operations of the regional power markets. Prior to that, he served in senior positions at the Federal Energy Regulatory Commission and also held legal positions with the National Fuel Gas Company in Buffalo, NY, and with the Commodity Futures Trading Commission in NYC.

Jason is a member of the Committee on Electricity and the Committee on International Relations for the National Association of Regulatory Utility Commissioners. He also serves on the Board of Directors for the Regional Greenhouse Gas Initiative, is a member of the Center for Public Utilities Advisory Council and the Critical Consumer Issues Forum Advisory Committee.

Jason earned his law degree from SUNY Buffalo and his BA from Tulane.



**Dr. Joseph Bowring** is the President of Monitoring Analytics. Since 1999, he has been the Independent Market Monitor for PJM, responsible for all market monitoring activities of PJM Interconnection. He has extensive experience in applied energy and regulatory economics and has taught economics as a faculty member at Bucknell and Villanova.

Previously, he served as senior staff economist for the New Jersey Board of Public Utilities and as Chief Economist for the New Jersey Department of the Public Advocate's Division of Rate Counsel. Joe has also worked as an independent consulting economist. He holds a PhD in Economics from U Mass Amherst.



**Sarah Novosel** is Senior Vice President of Government Affairs and Managing Counsel in Calpine's Washington, D.C. office, overseeing Calpine's federal regulatory practice. Sarah has been practicing energy law for more than 25 years. She began her career in 1991 with the law firm of Bracewell & Patterson in Washington, D.C., where she represented natural gas and power marketing clients. She later joined Enron Corp. and then worked for American Electric Power. Sarah joined Calpine as Senior Regulatory Counsel in 2004 and was promoted a few years later to her

present position.

A graduate of the University of Maryland with a BA in Government and Politics, Sarah earned her law degree from Georgetown. She is a member of the Maryland State Bar, the District of Columbia Bar and the Energy Bar Association.



**Rob Gramlich** is the founder and president of Grid Strategies LLC, where he provides economic policy analysis for clients on electric transmission and power markets in pursuit of low-cost decarbonization. His clients include state commissions, large electricity consumers, renewable energy industries, and environmental advocates. He also serves as Executive Director of Americans for a Clean Energy Grid and Executive Director of the WATT Coalition.

Previously, Rob held the positions of Senior Vice President for Government and Public Affairs, Interim CEO, and Policy Director at the American Wind Energy Association. Prior to that he was Economic Advisor to FERC Chairman Pat Wood III, and Senior Economist at PJM Interconnection.

Rob holds a Master of Public Policy degree from UC Berkeley and a BA from Colby College.



**Karen Palmer** is a Senior Fellow and Director of the Future of Power Initiative at Resources for the Future. She specializes in the economics of environmental and public utility regulation at the intersection of climate policy and the electricity sector.

Karen is President-Elect of the Association of Environmental and Resource Economists, serves on the Environmental Advisory Council to the New York ISO and the National Academies Panel on the Future of the Electricity Grid. Karen received the Public Utility Research Center's Distinguished Service Award and was elected as a Fellow of the Association of Environmental and Resource Economists. Her published papers have appeared in a number of academic journals, including the American Economic Review, the RAND Journal of Economics, The Journal of Political Economy, The Energy Journal, and The Journal of Environmental Economics and Management.

Karen holds a PhD in economics from Boston College, and a BA in economics from Brandeis.



**Dr. Susan Tierney** is Senior Advisor at Analysis Group in Denver. An expert on energy policy and economics, she specializes in the electric and gas industries. She has consulted to companies, governments, nonprofits, and other organizations on energy markets, as well as economic and environmental regulation and strategy. Her expert witness and business consulting services have involved industry restructuring, market analyses, utility ratemaking and regulatory policy, clean energy regulatory policy, transmission issues, wholesale and retail market design, and resource planning and procurement.

Sue is a former Assistant Secretary for Policy at the US Department of Energy, state cabinet officer for environmental affairs, and state public utility commissioner. She chairs the Boards of Resources for the Future and ClimateWorks Foundation and is a Trustee of the Barr Foundation and a director of World Resources Institute and of the Energy Foundation.

Sue holds a Ph.D. in regional planning from Cornell and a BA from Scripps.



**Dr. Emanuel Bernabeu** is Director of the Applied Innovation & Analytics department at PJM Interconnection: a cross silo team that focuses on Research and Development, Analytics, and Market Surveillance. His team embraces innovation and fosters collaboration with PJM's members, national laboratories, industry, and universities, to operationalize emerging technologies; for example: synchrophasors, enhanced situational awareness, cascading outages analysis, etc. The team also conducts Special Studies that require advanced modeling techniques: fuel security, EMP, GMD, physical attacks, carbon pricing, etc.

Prior to joining PJM, Emanuel spent five years with Dominion Virginia Power in Richmond, Virginia, holding a consultant engineering position. He has a B.S. in Electronics from the Universidad Catolica de Cordoba in Argentina, an M.S. in Power Systems, an M.S. in Applied Economics, and a Ph.D. in Power Systems from Virginia Tech.



**Ken Kulak** is a partner in Morgan Lewis' Energy Practice. He counsels energy companies in regulatory proceedings, including ratemaking proceedings, before public utility commissions and in transactional matters. He advises public utilities, project developers, investors, and corporate energy users on retail and wholesale electricity markets, renewable portfolio standards and renewable energy projects, distributed generation, energy storage, and energy efficiency.

Ken is also a Senior Fellow at the University of Pennsylvania's Kleinman Center for Energy Policy and an Adjunct Professor of Law at the University of Pennsylvania Law School, where he teaches a seminar on energy law and climate change.



**Dr. Jonathan Raab**, President of Raab Associates, is the convener and moderator of the Energy Policy Roundtable in the PJM Footprint. Since 1996, he has also run the New England Electricity Restructuring Roundtable. A national leader in applying consensus building processes to energy, environmental, and regulatory issues, some of his major cases include: the Regional Greenhouse Gas Initiative (RGGI); the New England Demand Response Initiative (NEDRI); market rules for Alberta; the stakeholder process redesigns for PJM and MISO; and Grid Modernization in several states. He has also run stakeholder processes for U.S. DOE, U.S.

Fish & Wildlife, and U.S. EPA.

Prior to establishing Raab Associates, Jonathan was the Assistant Director of the Electric Power Division at the Massachusetts Department of Public Utilities. He holds a Ph.D. from MIT, and an M.S. and A.B. from Stanford. Jonathan has taught courses at the University of Oregon, Stanford, UMass (Boston) and MIT. He is the author of *Using Consensus Building to Improve Utility Regulation*.