



California Customer Choice En Banc Speaker Biographies June 22, 2018

Listed in Alphabetical Order



DAVE ASHUCKIAN

Dave Ashuckian is the deputy director of the California Energy Commission's Efficiency Division. The division is responsible for designing, developing, and implementing programs, policies, and regulations that achieve California's energy efficiency goals. These include efficiency standards for new buildings and appliances and achieving greater energy efficiency in existing buildings.

The division is also responsible for implementing efficiency funding and financing programs that help public buildings and schools, including the California Clean Energy Jobs Act (Proposition 39) funding for K-12 schools.

Prior to his current position, Mr. Ashuckian served as deputy director of the Division of Ratepayer Advocates (Office of Ratepayer Advocates) at the California Public Utilities Commission. Mr. Ashuckian is a registered professional mechanical engineer.



SEVERIN BORENSTEIN

Severin Borenstein is E.T. Grether Professor of Business Administration and Public Policy at the Haas School of Business and a Research Associate of the Energy Institute at Haas. He is also Director emeritus of the University of California Energy Institute (1994-2014) and the Energy Institute at Haas (2009-2014). He received his A.B. from U.C. Berkeley and Ph.D. In Economics from M.I.T. His research focuses on business competition, strategy, and regulation. He has published extensively on the airline industry, the oil and gasoline industries, and electricity markets. His current research projects include the economics of renewable energy, economic policies for reducing greenhouse gases, alternative models of retail electricity pricing, and competitive dynamics in the airline industry. Borenstein is also a research associate of the National Bureau of Economic Research in Cambridge, MA. He served on the Board of Governors of the California Power Exchange from 1997 to 2003. During 1999-2000, he was a member of the California Attorney General's Gasoline Price Task Force. In 2010-11, Borenstein was a member of U.S. Secretary of Transportation Ray lahood's Future of Aviation Advisory Committee. In 2012-13, he served on the Emissions Market Assessment Committee, which advised the California Air Resources Board on the operation of California's Cap and Trade market for greenhouse gases. In 2014, he was appointed to the

California Energy Commission's Petroleum Market Advisory Committee, which he chaired from 2015 until the Committee was dissolved in 2017. Since 2015, he has served on the Advisory Council of the Bay Area Air Quality Management District.



RALPH CAVANAGH

Ralph Cavanagh is co-director of NRDC's energy program, which he joined in 1979. Ralph has been a Visiting Professor of Law at Stanford and UC Berkeley (Boalt Hall), and a Lecturer on Law at the Harvard Law School; he has also been a faculty member for the University of Idaho's Public Utility Executives Course for more than twenty years. From 1993-2003 he served on the U.S. Secretary of Energy's Advisory Board. His current board memberships include the Alliance to Save Energy, the Bipartisan Policy Center, the Bonneville Environmental Foundation, the Center for Energy Efficiency and Renewable Technologies, and Renewable Northwest. Ralph has received the Heinz Award for Public Policy, the National Association of Regulatory Utility Commissioners' Mary Kilmarx Award, the Yale Law School's Preiskel-Silverman Fellowship, the Lifetime Achievement in Energy Efficiency Award from California's Flex Your Power Campaign, the Northwest Energy Coalition's Headwaters Award, and the Bonneville Power Administration's Award for Exceptional Public Service. He is a graduate of Yale College and the Yale Law School.



COLIN CUSHNIE

Colin Cushnie is vice president of the Energy Procurement & Management organization at Southern California Edison (SCE). He is responsible for SCE's wholesale energy contracting and management activities, energy and emissions trading, wholesale energy market operations, and energy contract and organized market settlements operations.

Previously, Cushnie was director of Portfolio Planning & Analysis in the Power Supply unit at SCE, responsible for the company's wholesale energy solicitation valuations, energy portfolio analysis and risk assessment, and demand and price forecasting.

Cushnie also served as a director of Regulatory Affairs for SCE, based in the company's San Francisco office. He was responsible for representing SCE before the California Public Utilities Commission and other agencies on matters relating to wholesale energy procurement and market design.

Cushnie joined SCE in 1987, serving in a variety of management and analyst positions related to wholesale energy procurement, natural gas fuel supply, contract management, and construction and material procurement.

Cushnie graduated cum laude from Whittier College with a bachelor degree in both economics and business administration.



TOM DALZELL

Tom Dalzell was initiated into Local 1245 of the International Brotherhood of Electrical Workers, ALF-CIO in 1981. He joined the Staff of Local 1245 as a Staff Attorney and was promoted to Senior Assistant Business Manager in 2001. Tom was elected Business Manager of Local 1245 in 2007 and re-elected in 2010, 2013 and 2016.



DEB EMERSON

As Director of Power Services, Deb Emerson has a significant role in shaping Sonoma Clean Power, and ensuring the agency's success. She oversees and directs all aspects of Sonoma Clean Power (SCP) Power Services, including procurement and compliance.

Deb has over 17 years in the energy trading industry. Previously she worked as an energy trader with Constellation Energy where she managed a variety of portfolios in hydropower, natural gas, wind facilities and capacity markets. Prior to working at Constellation, Ms. Emerson was an energy trader at Williams Energy Marketing and Trading. She graduated from Oklahoma State University with an undergraduate degree and received her MBA from The University of Chicago Booth School of Business. Having been named one of Maryland's Top 100 Women in recognition of her work with mentoring inner-city youth, Ms. Emerson believes in "doing well and doing good for others." Ms. Emerson is also active in a number of philanthropic efforts including The Women's Leadership Council for the United Way; Co-chair for The Diversity Council at Oklahoma State University; and KIPP Baltimore.



MATTHEW FREEDMAN

Matthew Freedman became TURN's staff attorney specializing in electricity in January 2000. He handles diverse issues including renewable energy, utility ratemaking, distributed generation, state legislation and consumer complaints.

Prior to working for TURN, Freedman served as a policy analyst for the Massachusetts Public Interest Research Group on a campaign to persuade state regulators to clean up dirty power plants throughout New England. His work on electricity issues includes five years as a senior energy policy analyst and consultant with Public Citizen's Critical Mass Energy Project. During his tenure at Public Citizen, he authored five major reports, testified several times before Congress and lobbied against state legislation to deregulate the electric industry in Massachusetts.

Freedman received a BA magna cum laude from Columbia University and

a JD cum laude from Harvard Law School where he was awarded a 1999 Irving Kaufman Public Service Fellowship for promising public interest law graduates.



BARBARA HALE

Barbara Hale is the Assistant General Manager responsible for the San Francisco Public Utilities Commission Power functions. That includes San Francisco's Municipal Power Utility, serving 3,000 accounts with a peak demand of 150 MW, and CleanPowerSF, San Francisco's Community Choice program, serving about 80,000 accounts with a peak demand of 100 MW. Ms. Hale oversees all aspects of the sales of electricity to retail and wholesale customers; needed purchases of energy, transmission and distribution services; development and implementation of energy efficiency and renewable generation projects and programs; and maintenance and operation of City-owned and located streetlights, switch gear and substations. Prior to her employment with the San Francisco Public Utilities Commission, Barbara worked for the State of California Public Utilities Commission in progressively responsible positions, including Advisor to President, Administrative Law Judge, and Director of Strategic Planning.



ARTHUR HAUBENSTOCK

Arthur Haubenstock is the Executive Director of California Efficiency and Demand Management Council. He has helped shape the current energy landscape through legislation, regulation and policy, in addition to negotiating power purchase and energy storage contracts, obtaining project approvals and financing, and addressing strategic and project-specific regulatory and transactional matters. He has worked for independent power producers, technology innovators, major utilities, and governmental agencies, and several national law firms. Arthur has served on the boards of a number of energy-related organizations, including leadership roles as President of the Large-scale Solar Association and Chair of the Solar Energy Industries Association's Utility-Scale Power Division. His focus on navigating the complexities of energy markets and market design has contributed to the success of a wide range of energy interests.



ROBERT S. KENNEY

Robert S. Kenney is VP, Regulatory Affairs at Pacific Gas and Electric Company. In this role, he is responsible for executive management of all aspects of PG&E's interactions with the California Public Utilities Commission (CPUC), the Federal Energy Regulatory Commission (FERC), and the California Energy Commission (CEC), including all regulatory filings and proceedings.

Robert is responsible for providing overall strategic guidance for the company's interactions with the CPUC, the FERC, and the CEC, ensuring compliance with regulatory mandates, and facilitating positive regulatory outcomes. He leads a team of regulatory professionals responsible for developing and implementing regulatory strategy, supporting the implementation of PG&E's business objectives.

Robert has over 25 years of experience developing, analyzing and implementing public policy at the local and state levels and over 15 years of experience litigating complex cases in federal and state courts and administrative tribunals.

Prior to joining PG&E, Robert was Chairman of the Missouri Public Service Commission, where he led a 190-person agency, presiding over numerous complex proceedings deciding rate increases, mergers and acquisitions, transmission siting, resource adequacy, and implementation of Missouri's Renewable Energy Standard and Energy Efficiency Investment Act. During his tenure, he emerged as a nationally recognized leader in public utility law and regulation and public policy development and implementation, serving on the Board of Directors of the National Association of Regulatory Utility Commissioners (NARUC) and as President of the Organization of MISO States (OMS). While at the Missouri PSC, Robert lead efforts to institute best practices in consumer education and outreach and to enhance legal education related to public utility law and regulation.

Prior to his appointment to the Missouri PSC, Robert served as Chief of Staff to the Missouri Attorney General. Previously, Robert was a shareholder at the Polsinelli law firm, where he practiced in the commercial and business litigation practice group.

Robert remains committed to public service and civic engagement, serving on the board of the Museum of the African Diaspora (MoAD). Robert holds a bachelor's degree in political science from Hampton University and a law degree from Saint Louis University School of Law.



DANIELLE OSBORN MILLS

Danielle Osborn Mills has over a decade of experience on complex California energy and environmental challenges. As Principal of Renewable Energy Strategies and Director of the American Wind Energy Association California Caucus, she coordinates member companies in the development of policy priorities and positions, and advocates for policies that promote the development of utility-scale wind as part of a balanced portfolio. Danielle has a B.S. in Natural Resources from the University of Michigan and her Masters in Public Administration from the University of Washington. She is most interested in upholding a strong connection between science and policy and ensuring policies that allow for an efficient and equitable transition to a clean and sustainable energy system.



SAM LICCARDO

Mayor Sam Liccardo took office in January 2015, and at the age of 44, became one of the youngest mayors in San Jose's modern history.

In his two-year tenure, Sam has:

- forged a historic pension reform agreement with 11 unions that will save taxpayers \$3 billion over the next three decades;
- launched "San José Works," an initiative that will provide jobs to more than 1,000 teenagers living in gang-impacted neighborhoods this year;
- crafted innovative programs to reduce homelessness, from rehabilitating decaying motels to incentivizing landlords to house homeless veterans;
- announced five new international flights at Mineta San José International Airport, and expanded air service by more than 30 percent;
- created after-school programs for hundreds of low-income children, boosted library services in every neighborhood, and expanded youth learning opportunities for coding and STEM skills;
- ushered a major expansion of tech employers into San José, from corporate titans like Amazon, Apple and Google to fast-growing innovators such as Silver Spring Networks, Splunk and SuperMicro;
- led a regional effort to concurrently lift the minimum wage among a half-dozen cities;
- pushed to make San José the nation's largest city to launch a "Community Choice Energy" program, enabling consumer choice in electric power to boost renewables at competitive rates;
- sparked Downtown's revitalization, using fee reductions, accelerated permit approvals and parking incentives to fill empty storefronts with restaurants and amenities, expand co-working space, build thousands of high-rise apartments and lure key tech employers; and
- launched San Jose's "Smart City Vision," forging partnerships with the tech community to leverage technology and data to improve safety and services, with the ambition of making San José the most innovative city in America.

In Sam's prior public service, he prosecuted a range of felony cases as a federal and local criminal prosecutor, from sexual assault and child exploitation to international narcotrafficking. In 2006, voters elected Sam to the first of his two terms on the City Council, where he led efforts to revitalize its downtown, preserve San José's hillsides and open space, boost funding for affordable housing and open a world-class soccer stadium for the San José Earthquakes.

Additionally, Sam serves on a number of boards of directors, including the Metropolitan Transportation Commission, the Valley Transit Authority Board, the Bay Area Water Supply and Conservation Agency. Sam also is the co-chair for Joint Venture Silicon Valley and a founding board member for Cristo Rey High School. He also holds senior fellowships for the American Leadership Forum and the Aspen Institute and is a member of the U.S. Conference of Mayors.

Sam graduated from San José's Bellarmine College Prep and Georgetown University, prior to receiving a law degree from Harvard Law School and a master's degree from Harvard's John F. Kennedy School of Government. Sam and his wife, Jessica, live in the Northside neighborhood, east of Downtown, within blocks of Jessica's childhood home, where Sam's father also grew up, and where Sam's grandparents operated a neighborhood grocery store. Sam descended from the first Mexican settlers in the Bay Area, as well as from Sicilian and Irish immigrants.



SUE MARA

Sue Mara has been active in energy and electricity markets for more than 40 years. Since 2002, Ms. Mara, Principal at RTOAdvisors, L.L.C., has provided consulting services on regulatory matters to a variety of wholesale and retail clients on California and western energy markets. Ms. Mara has extensive experience regarding California competitive retail and wholesale markets. For example, from 1994 to 1996, she led a team from Pacific Gas and Electric Company (PG&E) that obtained approval from the Federal Energy Regulatory Commission to establish the California Independent System Operator (CAISO) and Power Exchange. Following PG&E, Ms. Mara was Sr. Director in Government Affairs for Enron Corp, during which she lead the Company's efforts to ensure the timely opening of California's retail market and the initiation of CAISO operations in 1998. On the retail side, she successfully led the effort for adoption of reasonable and non-discriminatory rules for licensing competitive retail electricity providers, switching customers, billing customers, and customer protections. Much of her recent work has focused on California requirements applicable to retail electricity providers, including resource adequacy, renewable portfolio standards, integrated resource planning, and congestion revenue rights. In these activities, she has concentrated on ensuring that any approved regulatory and operational requirements support competitive markets and avoid competitively advantaging the utilities. Ms. Mara has a BS in Geology from SUNY Fredonia and a MS in Water Resources Management from the University of Wisconsin.



Based in San Francisco, Scott main role is supporting his company's teams in front of all California regulatory agencies that manage sales of power to its direct access customers, as well as wholesale power, renewables and resource adequacy to community choice aggregators. He also provides guidance and input for Direct Energy's Western environmental commodity supply, retail gas and distributed generation initiatives. Scott has over 20 years experience in energy markets and technologies, including 15 years as a consultant at both Nexant and Black & Veatch, focused on utility strategic planning, renewable energy project development, and analysis of Western US energy policy. He has an undergraduate degree in chemical engineering and a masters in energy and environmental policy.

SCOTT OLSON



KATE SEARS

Supervisor Kate Sears is Southern Marin's elected representative on the Marin County Board of Supervisors.

Kate had a career in both the public and private sectors prior to being appointed by Governor Jerry Brown to the District Three Supervisorial seat in May of 2011, winning election in June 2012, and re-election on June 7, 2016.

Kate was an attorney in private practice for 16 years before joining the Consumer Law Section of the California Attorney General's Office in 2005. As a Supervising Deputy Attorney General, she negotiated a multibillion dollar settlement with Countrywide for predatory lending and supervised legal teams investigating a wide range of fraudulent conduct relating to the financial crisis.

Kate's work in local government is about bringing people together to find common ground and develop collaborative, creative and effective solutions to the issue we face every day, as well as future challenges.

Her goals include creating healthy and equitable communities, improving public transit options, taking care of our aging community, addressing our housing affordability crisis, enhancing renewable energy and protecting our environment. A key initiative is planning for sea level rise and climate change in Southern Marin and the County of Marin. This work is a grassroots and grass-tops effort to understand the challenges, explore options and plan for a resilient future.



MICHAEL SHAW

Michael Shaw spent the last 18 years advocating for California businesses representing companies from the biggest to the smallest in the cauldron of California's Capitol.

For the California Manufactures & Technology Association (CMTA), Mr. Shaw leads a team of lobbyists to advance an agenda that grows manufacturing investments and jobs in California. In addition to running the Association's overall advocacy program, he works with CMTA members to develop legislative and regulatory policy in the areas of climate change, energy, and tax. In 2017, Mr. Shaw led a coalition to extend California's Cap-and-Trade program.

At the California Trucking Association, Mr. Shaw oversaw legislative advocacy, eternal communications, grassroots and political action committee (PAC) development, and management. During his tenure, government relations efforts resulted in significant accomplishments on several key public policy issues, including a major revision of state transportations safety programs.

He also served as the lead California lobbyist for the National Federation of Independent Business (NFIB) for eight years and three years with the California Chamber of Commerce.

Mr. Shaw graduated from California State University, Sacramento with a B.A. in Government and is a licensed Emergency Medical Technician (EMT).



DAN SKOPEC

Dan Skopec is vice president of regulatory affairs for San Diego Gas & Electric and Southern California Gas Company.

Skopec is responsible for all regulatory affairs, and is the primary representative before the California Public Utilities Commission.

Skopec holds a master's degree in international economics from The George Washington University and a bachelor's degree in political science and European history from the University of California, San Diego.

Skopec serves on the board of directors of the California Foundation on the Environment & the Economy, the California Council for Environmental and Economic Balance, and the California Carbon Capture and Sequestration Coalition.



MONA TIERNEY-LLOYD

Mona has been active in the development of energy policy in the Western US for nearly 20 years and has 30 years of energy experience. She has been employed by EnerNOC, Inc., an Enel Group Company, since 2008.

Mona is a Board Member of the Center for Energy Efficiency and Renewable Technologies (CEERT) and Chair of the Board of the California Energy Storage Alliance (CESA). She is the Energy Committee Co-Chair for Silicon Valley Leadership Group and the Chair of the California Committee of the Advanced Energy Management Alliance.

Prior to her employment with EnerNOC, Mona was a Regional Vice President of Government Affairs for Constellation NewEnergy and Director of Government Affairs for Enron Energy Services. She also worked for San Diego Gas & Electric and Elizabethtown Gas Company, and a natural gas utility in New Jersey. Mona began her career working for a natural gas and petroleum exploration and development company (Atlas Energy Group). She has a BS Degree in Petroleum and Natural Gas Engineering from Penn State. She received the "Woman of the Year" Award by California Women in Energy in 2017.



PAT WOOD III

Pat Wood, III has a long career in energy. He is the past Chairman of the Federal Energy Regulatory Commission (FERC) and of the Public Utility Commission of Texas. The son of a small businessman, Wood has been a forceful advocate throughout his career for replacing government-centered regulation with customer-focused competition.

Today, Wood's development focus is on clean power generation, independent power transmission and new energy technologies. Wood led a successful effort with Sharyland Utilities to expand the Texas power grid (ERCOT) into the Texas Panhandle to attach 8,000 MW of new highquality renewable resources. He remains involved with Sharyland/Hunt Power/InfraREIT (NYSE: HIFR) in the further development of energy infrastructure throughout the Southwestern U.S.

Wood is the Lead Independent Director of integrated solar company SunPower (NASDAQ: SPWR) and Director of utility construction firm Quanta Services (NYSE: PWR). He also served as Board Chairman of independent power producer Dynegy, until its recent merger with Vistra Energy.

In 1995, Governor George W. Bush named Wood to head the Public Utility Commission of Texas, with a mandate to free up power and telecom customers from monopoly utility control. The resulting restructured Texas electric market (ERCOT) is considered to be the most robustly competitive energy market in the country, with high infrastructure investment, diverse service and technology offerings, and customer prices well below what they were under regulation. Texas leads the nation in renewable energy investment; the state's orderly regulatory environment, reliable energy supplies and open markets underpin its economic development. During his four years at the helm of the FERC, under President George W. Bush, Wood led the responses to the 2000-2001 California energy crisis, the bankruptcy of Enron, and the 2003 North American power blackout. By 2005, over two-thirds of the country was served by the organized wholesale power markets he championed. Under his leadership, the FERC promoted the development of a cleaner, more competitive power generation fleet, natural gas infrastructure expansions, and a more robust power transmission grid -- all in the context of well-ordered competitive energy markets.

Wood holds a B.S. degree from Texas A&M University and a J.D. from Harvard Law School. Prior to his public service, Wood was a project engineer for ARCO Indonesia, and an attorney with Baker & Botts law firm. Today, Wood serves on the Executive Board of Big Brothers Big Sisters Lone Star, The Joy School Board of Trustees and is co-chair of the Strake Jesuit College Preparatory Annual Fund. He is a member of the National Petroleum Council, the National Renewable Energy Laboratory External Advisory Council, and the Texas A&M Smart Grid Council. He and his wife, Kathleen, are the parents of four sons, and they are proud to call Houston home.