

# **Electricity Advisory Committee 2020 Membership Roster**

#### Sharon Allan

Chief Innovation Officer
Smart Electric Power Alliance

#### **Christopher Ayers**

Executive Director North Carolina Utilities Commission Public Staff

#### **Tom Bialek**

Chief Engineer
San Diego Gas & Electric Company

#### **Daniel Brooks**

Vice President of Integrated Grid Electric Power Research Institute

#### **Laney Brown**

Vice President, Retail E-Solutions Avangrid Inc.

#### **Paul Cicio**

President Industrial Energy Consumers of America

#### **Robert Cummings**

Principal
Red Yucca Power Consulting

#### Ann Delenela

Vice President and Chief Information Security Officer Entergy

#### Kimberly Denbow

Senior Director of Security, Operations & Engineering Services American Gas Association

#### Joy Ditto

President and CEO
American Public Power Association

#### Andrew (Drew) Fellon

President Alliance Advisory Services

#### Flora Flygt

Strategic Planning & Policy Advisor American Transmission Company (Ret.)

#### **Sheri Givens**

Vice President, U.S. Regulatory & Customer Strategy
National Grid

#### **Dave Herlong**

Senior Director, Central Maintenance and Construction Florida Power & Light Company

#### Michael Heyeck

Founder
The Grid Group LLC
Committee Vice Chair

#### Paul Hudson

President
General Infrastructure LLC

#### Lola Infante

Senior Advisor, External Relations and Strategic Initiatives Electric Power Research Institute



#### **Jordan Karem**

President Red Arrow Strategies

#### Mladen Kezunovic

Regents Professor and Eugene E. Webb Professor, Department of Electrical & Computer Engineering Director, Smart Grid Center Texas A&M University

#### **Clay Koplin**

CEO

Cordova Electric Cooperative

#### **Arthur Kressner**

Principal and President Grid Connections LLC

#### **David Lebeter**

Chief Operating Officer Hydro One

#### Robert M. Lee

CEO

Dragos

#### Nicole Lowen

Member

Hawaii House of Representatives

#### **Jay Morrison**

Chief Legal Officer

ElectriCities of North Carolina

#### Richard S. Mroz

Managing Director

Resolute Strategies LLC

#### **Delia Patterson**

Senior Vice President of Advocacy and Communications and General Counsel American Public Power Association

#### **Don Parsons**

Member

Georgia House of Representatives

#### **Darlene Phillips**

Senior Director, Operations Engineering Support

PJM Interconnection

#### Wanda Reder

President and CEO Grid-X Partners LLC Committee Chair

#### **Paul Stockton**

President

Paul N Stockton LLC

#### **David Wade**

President and CEO

Electric Power Board of Chattanooga

#### Craig J. Wiener

**Technical Fellow** 

**MITRE Corporation** 

#### **Tom Weaver**

Manager, Distribution System Planning American Electric Power (Retired)

#### Jim Yacone

Mission and Partnership

SANS Institute





# Sharon Allan Chief Innovation Officer, Smart Electric Power Alliance

#### PROFESSIONAL EXPERIENCE

- Chief Innovation Officer, Smart Electric Power Alliance, April 2017

  –present
- CEO, Smart Grid Interoperability Panel, November 2014–April 2017
- Advisor to Enertech Venture Capital, February 2013–present
- Managing Director/Partner, Accenture, May 2009

  –January 2013
- President, Elster Integrated Solutions, October 2006–May 2009
- President, AMCO, January–Oct 2006 (AMCO rolled into Elster)
- Chief Knowledge Officer, Elster/ABB, November 1997

  –January 2006
- Senior Manager, IBM, June 1989–November 1997

#### **ENERGY OR ENERGY MANAGEMENT EXPERIENCE**

- First in industry to speak on AMI mesh networks and commercialize an AMI mesh network.
- At ABB, developed one of the first meter data management (MDM) systems for the market and led a team that contributed to the creation of VEE (validation, estimation, and editing) rules in California. This paved the way for AMI across the United States.
- Have been an expert witness and testified on AMI before FERC and states.
- Commercialized over 40 offerings in the sector through work at ABB, Elster, Accenture, and Enertech.
- In summary, experience expands 20-plus years of bringing together groups to assist in driving transformation in the industry in areas undergoing change and to commercialize technology solutions to aid in that transformation.

#### **AFFILIATIONS AND AWARDS**

- Senior Member, IEEE
- 50 Key Women in Energy
- Named one of Smart Grid's Three Most Powerful Women, Smart Grid News

- M.B.A., Duke University Fugua School of Business
- B.S., Electrical Engineering, University of Florida, Gainesville
- Graduate courses in Electrical Engineering (Control and Communications), University of South Carolina, Columbia
- Graduate courses in Electrical Engineering, North Carolina State, Raleigh





### **Christopher Ayers**

**Executive Director, North Carolina Utilities Commission Public Staff** 

#### PROFESSIONAL EXPERIENCE

- Executive Director, North Carolina Utilities Commission Public Staff
- Partner, Land Use, Utilities, Government, Environment and Real Estate Practice Group, Poyner Spruill, LLP
- Associate Attorney, Regulated Industry and Governmental Relations Practice Group, Hunton & Williams, LLP

#### **ENERGY OR ENERGY MANAGEMENT EXPERIENCE**

- Appointed July 2013 to serve a six-year term as Executive Director of the Public Staff, an independent state agency that represents the using and consuming public in all matters before the Utilities Commission. Responsible for developing and implementing Public Staff policies and procedures; overseeing the investigation of filed cases and prosecution of the Public Staff's legal positions in proceedings before the Utilities Commission; leading negotiations with parties in Utilities Commission dockets; interfacing with the General Assembly, Governor's Office, state and federal agencies, and the media regarding utilities matters; and managing the Public Staff's personnel and budget.
- Mr. Ayers' legal practice focused on the representation of electric, water and wastewater public utilities regulated by the Utilities Commission. Practice areas also included environmental, zoning and land use, real estate, regulatory compliance and appellate law. He appeared on behalf of clients before the North Carolina Department of Environment and Natural Resources, Office of Administrative Hearings, local zoning boards and commissions, and North Carolina state and federal courts.

#### AFFILIATIONS AND AWARDS

- Board of Directors, State Employees Credit Union Executive Committee, National Association of State Utility Consumer Advocates
- Executive Committee, Consumer Advocates of the PJM States, Inc.
- Commissioner, North Carolina Environmental Management Commission, Raleigh

- J.D. (with honors), University of North Carolina School of Law, Chapel Hill
- A.B., Political Science and Sociology, Duke University





# Tom Bialek Chief Engineer, San Diego Gas & Electric Company

#### PROFESSIONAL EXPERIENCE

Chief Engineer, San Diego Gas & Electric Company

#### **ENERGY OR ENERGY MANAGEMENT EXPERIENCE**

Mr. Bialek is currently employed by San Diego Gas & Electric Company (SDG&E) as Chief Engineer. His responsibilities involve technology strategy and policy for transmission and distribution issues, including equipment, operations, planning, distributed generation and development of new technologies. His experience includes electric utility design, planning and operation and equipment design, development and manufacturing.

#### **AFFILIATIONS AND AWARDS**

- Member, Institute of Electrical and Electronics Engineers Dielectrics and Electrical Insulation Society
- Former Chair, Failure Mechanism Technical Committee
- Former Secretary, Dielectrics and Electrical Insulation Society
- Former Working Group Member, Surge Arresters

- Ph.D., Electrical Engineering, Mississippi State University
- M.S., Electrical Engineering, University of Manitoba, Canada
- B.S., Electrical Engineering, University of Manitoba, Canada





#### **Daniel Brooks**

Vice President of Integrated Grid, Electric Power Research Institute

#### PROFESSIONAL EXPERIENCE

- Manager, Grid Operations and Planning Research Group, Electric Power Research Institute (EPRI)
- Manager, Renewables Integration Research Team, EPRI
- Electrotek Concepts

#### **ENERGY EXPERIENCE**

- More than 25 years of experience in the energy industry in various research and development, consulting, and technology innovation management roles.
- Leads the teams responsible for EPRI's research involving integrated energy systems
  planning, system operations, and integration of renewables, energy storage, and distributed
  energy resources.
- Managed the Grid Operations and Planning research group at EPRI. Responsible for transmission and distribution system operations and planning research, including the integration of variable renewable generation and distributed resources (e.g., distributed solar, energy storage, electric vehicles, and demand response), system resiliency and restoration, system protection and control, system stability and dynamic modeling, and advanced situational awareness and operator decision support tools.

- B.S., Electrical Engineering, Mississippi State University
- M.S., Electrical Engineering, Mississippi State University
- M.B.A., University of Tennessee at Martin



# Laney Brown Vice President, Retail E-Solutions, Avangrid, Inc.



#### PROFESSIONAL EXPERIENCE

- Vice President, Retail E-Solutions, Avangrid, Inc.
- Vice President, Concentric Energy Advisors
- Vice President, Grid Modernization Strategy, Modern Grid Partners
- Director, Smart Grid Planning and Programs, Iberdrola USA Management Company
- Director, Advanced Metering Infrastructure (AMI) Program, Central Maine Power, affiliate of Iberdrola USA
- Manager, Marketing, Central Maine Power, affiliate of Iberdrola USA
- Director of Marketing, LinxTelecom

#### **ENERGY OR ENERGY MANAGEMENT EXPERIENCE**

- Ms. Brown works with clients to provide guidance and strategy on the changing energy industry. In this role, she support the development of REVConnect, a platform to support collaboration between New York utilities and innovative startups.
- She is recognized as a national thought leader in the smart grid industry. Currently, she provides strategy consulting support with a focus on Future of Energy initiatives, including grid modernization for utilities in Canada and the United States. She also develops and verifies smart grid business cases for internal and external stakeholder review. She previously led Iberdrola (now Avangrid) USA's Future Utility strategy, including concept development of its innovative demonstration projects.

#### **AFFILIATIONS AND AWARDS**

- Chair, University of Southern Maine Applied Energy Education Advisory Council
- Advisory Committee, Gulf of Maine Research Institute PowerHouse NY State Energy
- Research and Development Agency (NYSERDA) Grid Modernization Advisory Committee

- Harvard Executive Program on Negotiation, Cambridge, MA
- Iberdrola Leadership Essentials Program, Madrid, Spain
- M.B.A., (double, global energy industry focus), University of Strathclyde Business
   School, Glasgow, Scotland and University Pontificas Comillas ICADE, Madrid, Spain
- B.A., Colby College





# Paul Cicio President, Industrial Energy Consumers of America

#### PROFESSIONAL EXPERIENCE

- President, Industrial Energy Consumers of America
- The Dow Chemical Company, retired with nearly 30 years of service

#### **ENERGY OR ENERGY MANAGEMENT EXPERIENCE**

- Mr. Cicio has been president of the Industrial Energy Consumers of America (IECA) since its founding 12 years ago. IECA is recognized in Washington as the "voice of the industrial energy consumer" and testifies on energy and environmental issues before Congress and relevant regulatory agencies more than any other manufacturing-based trade association in the country.
- Mr. Cicio is a well-known consumer advocate for the industrial sector on issues related to energy and the environment and is recognized for his efforts within national and international circles. He testifies regularly before Congress, the Federal Energy Regulatory Commission, and the Commodity Futures Trading Commission.

#### **AFFILIATIONS AND AWARDS**

United States Energy Association

#### **EDUCATION**

B.S., Business Administration and Economics, Youngstown State University, OH





### Robert Cummings President, Red Yucca Power Consulting

#### PROFESSIONAL EXPERIENCE

 Senior Director of Engineering and Reliability Initiatives, North American Electric Reliability Company, 22 years

#### **ENERGY OR ENERGY MANAGEMENT EXPERIENCE**

- Mr. Cummings has extensive experience in the industry in system planning, operations engineering, and wide-area planning. His geographically diverse experience includes Central Vermont Public Service Corporation in System Planning (generation and transmission), Public Service Company of New Mexico in Operations Engineering and Wide-area Planning, and the East Central Area Reliability Coordination Agreement (ECAR) regional office of NERC as the Manager of Transmission Services.
- He was a principal investigator of the 2003 Northeast Blackout and the more recent Arizona-Southern California outage of September 8, 2011. He directed the NERC event analysis program for five years, leading or working on 12 major system disturbance analyses.
- Mr. Cummings is the "father" of power interchange transaction "tagging" and the Interchange Distribution Calculator for the Eastern Interconnection, which is known as the Enhanced Curtailment Calculator in the Western Electricity Coordination Council.

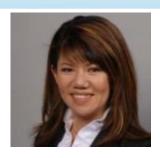
#### **AFFILIATIONS AND AWARDS**

- Senior Member, Institute of Electrical and Electronics Engineers
- Member, Scientific Advisory Board of CURENT (Center for Ultra-wide Area Resilient Electric Energy Transmission Networks
- Senior Staff Technical Advisor for the NERC System Analysis and Modeling Subcommittee
- Technical Advisor to the North American Synchro-Phasor Initiative
- Technical Director of the NERC System Protection Improvement Initiative, the Modeling Improvements Initiative, and the Frequency Response Initiative

#### **EDUCATION**

B.S., Power System Engineering, Worcester Polytechnic Institute





#### Ann Delenela

Vice President and Chief Information Security Officer, Entergy

#### PROFESSIONAL EXPERIENCE

- Vice President and Chief Information Security Officer, Ameren
- Chief Security Officer, ERCOT
- Director, Critical Infrastructure Security, ERCOT
- Information Security Manager, ERCOT
- Principal Consultant/Technical Manager, Internet Security Systems

#### **ENERGY OR ENERGY MANAGEMENT EXPERIENCE**

- Ms. Delenela has over 25 years of experience covering information technology, information security, and cyber/physical security management. As Vice President and Chief Information Security Officer for Ameren, she is responsible for cybersecurity covering Ameren's electricity, nuclear, and gas operations. Ms. Delenela was Chief Security Officer of the Electric Reliability Council of Texas (ERCOT) and developed, implemented, and matured ERCOT's information and physical security organization to become a nationally recognized center of excellence.
- She participated in the development of the NERC Critical Infrastructure Protection (CIP)
   Cyber Security Standards and the NIST Cybersecurity Framework.
- Ms. Delenela was appointed member of the NERC EISAC Member Executive Committee and prior chairman of its Operations, Tools and Technology Working Group. She was previously elected chair for the North American Independent System Operator/Regional Transmission Organization Security Working Group; previously appointed to the Texas Private Sector Advisory Council representing the Electricity sector; and serves on the advisory board for Gartner's Security & Risk Management Summit.

#### **AFFILIATIONS AND AWARDS**

- Working Groups: ISO/RTO Council Security, NIST Smart Grid Task Force, Texas Critical Infrastructure Protection, FBI Energy Sector, and Texas DPS Security
- Associations: ISC2, ISSA, ISACA, and HTCIA
- North American Electric Reliability Corporation, Critical Infrastructure Protection Committee

#### **EDUCATION**

B.A., Computer Science, University of North Texas, Denton



### **Kimberly Denbow**

Managing Director, Security & Operations
American Gas Association



#### PROFESSIONAL EXPERIENCE

 Senior Director of Security, Operations & Engineering Services, American Gas Association (AGA), 20+ years

#### **ENERGY OR ENERGY MANAGEMENT EXPERIENCE**

As industry liaison to numerous U.S. Department of Homeland Security and Department of Energy-sponsored programs targeting natural gas utility physical and cybersecurity operations, Ms. Denbow helps lead efforts that drive the coordination of multiple federal security initiatives—all designed to benefit the oil and natural gas sector.

#### **AFFILIATIONS AND AWARDS**

- Served as staff executive for multiple AGA Operating Section technical committees, including the AGA Natural Gas Security Committee and the AGA Board-appointed Cybersecurity Strategy Task Force
- Member, Oil & Natural Gas Sector Coordinating Council (ONG SCC)
- Chair, ONG/Pipeline SCC Joint Cybersecurity Working Group
- Former Chair, ONG SCC Intelligence Sharing Task Group and ONG SCC Metrics Working Group

- M.S., Environmental Engineering, University of Michigan, Ann Arbor
- B.S., Marine Biology, University of Florida, Gainesville





### Joy Ditto President and CEO, American Public Power Association

#### PROFESSIONAL EXPERIENCE

- President and CEO, Utilities Technology Council
- Senior Vice President for Legislative and Political Affairs, American Public Power Association

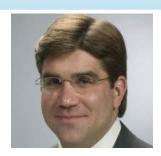
#### **ENERGY EXPERIENCE**

- Ms. Ditto became the American Public Power Association's president and CEO in January 2020.
- She was president and CEO of the Utilities Technology Council, a global trade association representing electric, gas, and water utilities on their mission-critical information and communications technologies.
- Ms. Ditto spent seven years on Capitol Hill as legislative assistant to then-U.S. Representatives Joe McDade and Don Sherwood (R-Pennsylvania), as well as to Senator Chuck Hagel (R-Nebraska). In these roles, Ms. Ditto advised on issues involving natural resources, agriculture, trade, tax, banking, the justice system, environment, and energy.

- B.A., History, Vanderbilt University
- Executive Certificate, Nonprofit Management, Georgetown University



# Andrew Fellon President, Alliance Advisory Services



#### PROFESSIONAL EXPERIENCE

- Business Leader, Trane's Energy Services & Controls
- President and CEO, Fellon-McCord & Associates LLC
- Business Leader, Trane's Energy Services & Controls, Energy Supply Services business unit known as Trane Building Advantage
- Senior Vice President, National Accounts, Centran Corporation

#### **ENERGY OR ENERGY MANAGEMENT EXPERIENCE**

- Mr. Fellon continuously held senior positions with major energy companies. These included serving as president and CEO of Alliance Gas Services, a company which Mr. Fellon cofounded in 1993 and developed in conjunction with the nonregulated subsidiary of Consumers Power. Alliance Gas ultimately became a general partner with Conoco Inc. through the formation of Alliance Energy Services (AES) in 1995 until its sale to Allegheny Energy, Inc. in 2001. Alliance Energy was the cornerstone of what is known today as Constellation NewEnergy Gas (CNEG).
- AES was acquired by Constellation Energy Group (CEG) in 2003. Mr. Fellon served as president and CEO of CNEG from 2003 to 2008. In 2008, Mr. Fellon acquired Fellon-McCord and led the development of what are today Trane's Energy Supply Service and Trane Energy Choice businesses. In 2008, Fellon-McCord acquired DaCott Power, creating a 24/7 Power Control Center to allow Fellon-McCord's customers to buy directly from the U.S. wholesale power markets.

#### **AFFILIATIONS AND AWARDS**

- Member, Board of Directors, The Aluminum Association, 2011–14
- Past Chairman, Associate Member Committee, and Member, Finance Committee, The Aluminum Association
- Chairman, Audit Committee, and Member, Real Property Investment, Conservation and Management Committee, The American Life and Accident Insurance Company of Kentucky/Hardscuffle, Inc.
- Energy and Environmental Cabinet, Kentucky Chamber of Commerce

#### **EDUCATION**

B.S., Industrial and Management Systems Engineering, Pennsylvania State University,
 State College





### Flora Flygt

Strategic Planning & Policy Advisor, American Transmission Company (retired)

#### PROFESSIONAL EXPERIENCE

- Strategic Planning and Policy Advisor, American Transmission Company
- Director of Planning, American Transmission Company
- Director of Corporate Research and Market Development, Alliant Energy
- Manager of Market and Competitive Research, Alliant Energy
- Principal—EnerPlan Energy Consulting
- Supervisor of Load Forecasting, Analyst, Madison Gas and Electric

#### **ENERGY OR ENERGY MANAGEMENT EXPERIENCE**

- Retired electric utility professional with almost 35 years of experience in a variety of leadership and planning roles, with an emphasis on developing and implementing innovative analytical approaches to utility planning and research issues. Pioneered the implementation of econometric and end-use load forecasting, integrated resource planning, and use of scenarios in making electricity resource and transmission decisions.
- Areas of focus: transmission planning (reliability, economic and public policy), scenario development, integrated resource planning, energy efficiency and demand-side planning, stakeholder management, strategy development, corporate research and competitive analysis, and long-term load forecasting.

#### **AFFILIATIONS AND AWARDS**

- Eastern Interconnection Planning Collaborative
- Chair (2014–15), Industry Advisory Board—Power Systems Engineering Research Center (PSERC)
- Presented at and chaired many industry conferences

- M.S., Land Resources, University of Wisconsin–Madison
- B.A., Economics, University of Michigan

  Ann Arbor
- Master's Certificate, Energy Analysis & Policy, University of Wisconsin–Madison





#### **Sheri Givens**

Vice President, U.S. Regulatory & Customer Strategy, National Grid

#### PROFESSIONAL EXPERIENCE

- President, Givens Consulting LLC
- Public Counsel/Executive Director, Texas Office of Public Utility Counsel
- Assistant General Counsel, Office of General Counsel, Texas Workforce Commission
- Senior Attorney, Commission Advising and Policy Development, Public Utility Commission of Texas

#### **ENERGY OR ENERGY MANAGEMENT EXPERIENCE**

- President of Givens Consulting LLC, a Texas-based energy consulting firm formed in 2013. Ms. Givens focuses on utility consumer education and regulatory policy in energy markets nationwide. She works with consumer advocate and nonprofit organizations, trade associations, governmental entities, and utilities.
- In addition to serving as the governor-appointed executive director of the Texas Office of Public Utility Counsel, Ms. Givens served on the board of directors for both the Electric Reliability Council of Texas (ERCOT) and Texas Reliability Entity for four years.
- She was elected, by fellow nationwide advocates, to serve on the Executive Committee of the National Association of State Utility Consumer Advocates (NASUCA). Other experience includes attorney positions with the Public Utility Commission of Texas, Texas Workforce Commission, and the Texas legislature.

#### AFFILIATIONS AND AWARDS

- Association of Women in Energy, Director
- Energy Bar Association
- Women's Council on Energy and the Environment
- Citation for Exceptional Service in Support of National Defense, Association of the United States Army (2013)

- J.D., University of Houston Law Center, Houston
- B.A., Government, University of Texas–Austin





### **Dave Herlong**

Senior Director, Central Maintenance and Construction, Florida Power & Light Company

#### PROFESSIONAL EXPERIENCE

- Senior Director, Control Center and Smart Grid Operations, Florida Power & Light Company
- Director, Smart Grid and Innovation, Florida Power & Light Company

#### **ENERGY EXPERIENCE**

- Lead diverse team of large-scale, enterprise-wide grid resiliency efforts. Manage \$2B of annual capital investments to improve Florida's hurricane response efforts.
- Responsible for the safe, 24/7 emergency operations and restoration efforts for over 10 million people, including the intelligent ecosystem of smart grid devices and data.
- Create measurable business value to improve customer reliability and operations and maintenance efficiency. Drive value-capture by leveraging technologies in innovative ways through collaborative cross-functional teams.

- Executive Certificate, Strategy & Innovation, MIT Sloan School of Management
- B.S., Industrial & Systems Engineering, University of Florida
- United States Marine Corps Officer Candidate School





## Michael Heyeck Founder, The Grid Group LLC

#### PROFESSIONAL EXPERIENCE

- Founder, The Grid Group LLC
- Senior Vice President—Transmission & Other Roles, American Electric Power (AEP)

#### **ENERGY OR ENERGY MANAGEMENT EXPERIENCE**

Mr. Heyeck founded The Grid Group LLC in June 2013 to provide strategic advisory and business development services for executives and boards in the electric utility industry and associated industries, tapping nearly 40 years of industry experience. He retired in 2013 as Senior Vice President of Transmission for AEP. He was responsible for AEP's 11-state transmission system, including officer and board positions for several AEP affiliates. He also held leadership positions in AEP's Corporate Planning & Budgeting department. He joined AEP in 1976.

#### **AFFILIATIONS AND AWARDS**

- Board Member, CE Power Holdings Inc.
- Board Member, Caravels LLC (dba Georgia Transformer Corp.)
- Board Member, Virginia Transformer Corp.
- Associate Board Member, Commonwealth Associates Inc.
- Member of CIGRE, Senior Member of the Institute of Electrical and Electronics Engineers (IEEE)
- Licensed Professional Engineer, State of Ohio
- IEEE Power & Energy Society—Leadership in Power Award (2013)
- National Society of Professional Engineers—Professional Engineers in Industry Engineer of the Year Award (2013)

- Executive Program, University of Virginia's Darden School, Charlottesville
- M.B.A., University of Dayton
- B.S., M.S., Electrical Engineering, New Jersey Institute of Technology, Newark







#### PROFESSIONAL EXPERIENCE

- President, General Infrastructure LLC
- Founder and Managing Partner, Stratus & Osprey Energy Group
- Chairman/Commissioner, Texas Public Utility Commission
- Director of Policy and Deputy Director of Policy, Office of Texas Governor Rick Perry
- Advisor to Commissioner Brett Perlman, Texas Public Utility Commission

#### **ENERGY OR ENERGY MANAGEMENT EXPERIENCE**

- Mr. Hudson currently serves as president of General Infrastructure, a company launched in 2017 to identify and develop investment opportunities for Blackstone.
- Mr. Hudson previously spent nine years as managing partner of two boutique advisory firms providing strategic guidance on emerging issues in ERCOT and on utility regulation.
- Prior to entering the private sector in 2008, Mr. Hudson spent almost a decade as a state energy and telecommunications regulator—including five years as an appointee of the governor— serving as commissioner and chairman of the three-member Texas Public Utility Commission (PUCT).
- Mr. Hudson also served in a variety of other policy roles, including Director of Policy and Deputy Director of Policy to Texas Governor Rick Perry; advisor to Texas Commissioner Brett Perlman, and member of the Commission policy development staff under former FERC and PUCT Chair Pat Wood.

#### **AFFILIATIONS AND AWARDS**

- Board of Directors of ERCOT, 2003–08
- Service on FERC/NARUC Collaborative on Demand Response
- AWEA National State Leadership Award, 2009
- Western Governors' Association Working Group on Cross Border Energy Issues
- Board Chair, Center for the Commercialization of Electricity Technology, 2008–16

- M.P.A., Public Affairs, Arizona State University, Tempe
- B.A., Government, University of Texas, Austin





Senior Advisor, External Relations and Strategic Initiatives, Electric Power Research Institute

#### PROFESSIONAL EXPERIENCE

- Senior Advisor, External Relations and Strategic Initiatives, Electric Power Research Institute
- Senior Director, Clean Energy Technology and Policy, EEI
- Senior Director, Generation Fuels and Market Analysis, EEI
- Director, Generation Fuels and Market Analysis, EEI
- Manager, Generation Fuels and Market Analysis, EEI
- Senior Research Fellow, Center for the Advancement of Energy Markets
- Chief, Marketing, Analysis and Research, GAB Robins

#### **ENERGY OR ENERGY MANAGEMENT EXPERIENCE**

- Led EEI's Storage and Microgrid Initiative. Dr. Infante's work provided the foundation and framework for establishing three additional focus areas for EEI—data analytics, data and distribution grid security, and electrification and smart cities.
- Extensive knowledge in the nexus of policy, industry, and technology, particularly in the areas of electricity generation (fossil as well as clean and alternative energy solutions), energy and environmental policy, corporate strategy and planning, evolving business models, and regulatory frameworks.

#### **AFFILIATIONS AND AWARDS**

- International Association for Energy Economics
- Women's Council on Energy and the Environment
- Power Gen International Conference Planning Committee
- Power Gen International Woman of the Year Committee—Founding member

#### **EDUCATION**

- Ph.D. with Distinction, International Relations/Political Economy, School of Advanced International Studies, Johns Hopkins University, Washington, DC
- M.A., Energy, Environment, Science and Technology, School of Advanced International Studies, Johns Hopkins University, Washington, DC
- DEA (M.A. Equivalent), International Economics and Finance, Universite de Paris IX, Paris,
   France

B.A., Economics and Finance, Sciences—Po, Paris, France



# **Jordan Karem**President, Red Arrow Strategies



#### PROFESSIONAL EXPERIENCE

- Director of Oval Office Operations and Personal Aide to the President of the United States
- Deputy Director of Advance and Trip Director for the President
- Chief of Staff to the Chairman and CEO, Pinnacle West Capital Corporation /Arizona Public Service

#### **ENERGY OR ENERGY MANAGEMENT EXPERIENCE**

- Mr. Karem has more than a decade of experience at the highest level of national politics, public affairs, and government relations. Mr. Karem currently serves as President of Red Arrow Strategies in Washington, DC. Red Arrow is a full-service public affairs and government relations firm, which represents Fortune 500 companies and trade associations, with a focus on the energy sector.
- Prior to serving in the White House from 2017-2019, Mr. Karem spent four years with Pinnacle West Capital Corporation/Arizona Public Service in Phoenix. The Arizona Public Service employs more than 6,200 people, operates the nation's largest nuclear power plant, and is the largest electric utility in Arizona. Mr. Karem joined the company as spokesperson in 2012 before becoming chief of staff to the company's chairman and CEO.

#### **EDUCATION**

University of Hartford





#### Mladen Kezunovic

Regents Professor, Eugene E. Webb Professor, Texas A&M University

#### PROFESSIONAL EXPERIENCE

- Regents Professor, Eugene E. Webb Professor, Electrical and Computer Engineering
- Director, Smart Grid Center, Texas A&M Engineering Experiment Station
- Director, Power Systems Control and Protection Laboratory, Texas A&M University
- Site Director, Power Systems Engineering Research Center
- President & CEO, Principal Consultant, XpertPower Associates

#### **ENERGY OR ENERGY MANAGEMENT EXPERIENCE**

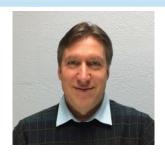
- Dr. Kezunovic has been employed by Texas A&M for 31 years. His expertise is in protective relaying, automated power system disturbance analysis, computational intelligence, data analytics, and smart grids.
- Dr. Kezunovic has published over 550 papers; given over 120 seminars, invited lectures and short courses; and consulted for over 50 companies worldwide.
- In 1979–1980, he worked for Westinghouse Electric in the United States as a systems engineer on developing the first all-digital substation design. In 1980–86, he worked at Energoinvest Company in Europe as technical lead for substation automation development.
- He was a consultant for EdF's Research Centre in Clamart, France (1999–2000) and a visiting professor at the University of Hong Kong in fall 2009.

#### **AFFILIATIONS AND AWARDS**

- Institute of Electrical and Electronics Engineers (IEEE) Life Fellow
- CIGRE-International Council on Large Electric Systems, Fellow and Honorary Member
- Professional Engineer in Texas
- CIGRE Technical Committee Award for "remarkable technical contribution to the study committee B5, protection and automation" in 2013

- Ph.D., Electrical Engineering, University of Kansas, Lawrence
- M.Sc., Electrical Engineering, University of Kansas, Lawrence
- Diploma of Engineering, Electrical Engineering, University of Sarajevo, Bosnia





### Clay Koplin CEO, Cordova Electric Cooperative

#### PROFESSIONAL EXPERIENCE

- CEO, Cordova Electric Cooperative
- Mayor, City of Cordova
- Manager of Engineering and Operations, Cordova Electric Cooperative
- Staff Engineer, Kodiak Electric Association

#### **ENERGY OR ENERGY MANAGEMENT EXPERIENCE**

Mr. Koplin became CEO for Cordova Electric Cooperative (CEC) in 2007. He manages the generation, transmission, and distribution of electricity to the community of Cordova, Alaska, an electrically isolated (island grid) utility. CEC is a leader in class, with a large renewable energy generation portfolio, 100% underground lines, 100% community LED street lighting, and affordable rates for its location.

#### **AFFILIATIONS AND AWARDS**

- State of Alaska Marine Transportation Advisory Board
- Prince William Sound Economic Development District Board
- Cordova Chamber of Commerce Board President
- Northwest Public Power Association Board of Trustees
- Alaska Statewide Electric Utility Manager's Forum Chairman
- Alaska Center for Energy and Power Advisory Board

- M.B.A., Indiana University's Kelly School of Business, Bloomington
- B.S., Electrical Engineering, University of Alaska–Fairbanks





# Arthur Kressner Principal and President, Grid Connections, LLC

#### PROFESSIONAL EXPERIENCE

- Principal and President, Grid Connections LLC
- Director, Research and Development, Power Supply, Con Edison
- Plant Manager, Con Edison
- Chief Chemical Engineer, Con Edison

#### **ENERGY OR ENERGY MANAGEMENT EXPERIENCE**

- Mr. Kressner is working to advance grid-scale energy storage, on-site and renewable generation, electric vehicle infrastructure integration, the future transmission and distribution grid, resilient infrastructure development, and end-use optimization. He is retired from Con Edison in New York City with over 40 years of varied experience in power generation, transmission, distribution, and customer end-use.
- He was Director of Research and Development for Power Supply at Con Edison. He managed a diverse research portfolio of over \$150 million in directly funded and co-funded projects. The program resulted in commercialized advanced technologies used for operations and maintenance in the world's largest and most complex electric power grid.
- Mr. Kressner now serves as a consultant and advisor, and participates in the strategic
  planning and business operations of several early stage technology companies, as well as
  working with major corporate clients and universities.

#### **AFFILIATIONS AND AWARDS**

 Serves on the boards of several not-for-profit and for-profit companies dedicated to achieving business and environmental objectives for the advancement of a flexible and secure future electricity grid.

- M.S., Chemical Engineering, New York University
- BSChE, Chemical Engineering, New York University

  —Polytechnic School of Engineering, Brooklyn



# **David Lebeter**Chief Operating Officer, Hydro One



#### PROFESSIONAL EXPERIENCE

- Senior Vice President of Safety, BC Hydro
- Vice President Field Operations & Safety, BC Hydro
- Director of Generation Operations, BC Hydro

#### **ENERGY EXPERIENCE**

- Mr. Lebeter is responsible for transmission and distribution at Hydro One, including construction, maintenance, vegetation management, and system operations. He is also responsible for Hydro One Remote Communities, which serves remote communities in Ontario's far north region.
- Mr. Lebeter has over 38 years' experience in the utility and forestry sectors, and has been a vocal leader and strong advocate for a safe and engaged workforce. He spent 23 years in the forest industry prior to joining the utility sector, working in leadership positions responsible for operations.
- He has served as an executive board member for Smart Grid Northwest, as an operations board member for Western Energy Institute, and as the chairman of the Distribution Council with the Canadian Electricity Association. He holds his ICD.D designation from the Institute of Corporate Directors.

- Executive M.B.A., Simon Fraser University
- B.S., Forest Engineering, University of British Columbia





### Robert M. Lee CEO, Dragos

#### PROFESSIONAL EXPERIENCE

- Advisor, Resilient Energy Delivery Consortium
- Senior Instructor, SANS Institute

#### **ENERGY EXPERIENCE**

- Mr. Lee is a recognized pioneer in the industrial security incident response and threat intelligence community. He gained his start in security as a U.S. Air Force Cyber Warfare Operations Officer tasked to the National Security Agency where he built a first-of-its-kind mission identifying and analyzing national threats to industrial infrastructure. He went on to build the industrial community's first dedicated monitoring and incident response class at the SANS Institute (ICS515) and the industry-recognized cyber threat intelligence course (FOR578).
- Mr. Lee helped lead the investigation of the 2015 cyberattack on Ukraine's power grid. He and his team at Dragos helped identify and analyze the CRASHOVERRIDE malware that attacked Ukraine's grid in 2016 and the TRISIS malware deployed against an industrial safety system in the Middle East in 2017.

- M.S., Cybersecurity, Computer Forensics, Utica College
- B.S., Social Sciences, United States Air Force Academy





## Rep. Nicole Lowen State Representative, Hawaii

#### PROFESSIONAL EXPERIENCE

- Legislative Researcher/Committee Clerk, Hawaii State Legislature
- Policy Researcher, University of Hawaii Department of Urban and Regional Planning
- Legislative Liaison, University of Hawaii Environmental Center

#### **ENERGY EXPERIENCE**

- Rep. Lowen is currently the chair of the Hawaii House of Representatives Committee on Energy and Environmental Protection, and a member of the committee on Water and Land.
- She has served as a member of the Ke Kai Ola Advisory Board, the Sierra Club Hawaii
   Chapter Executive Committee, and the Kona-Kohala Chamber of Commerce.

- M.A., Urban Planning, University of Hawaii at Manoa
- B.A., History, University of Pennsylvania





### Jay Morrison

Chief Legal Officer, ElectriCities of North Carolina

#### PROFESSIONAL EXPERIENCE

- Vice President, Regulatory Issues, National Rural Electric Cooperative Association (NRECA)
- Senior Associate Director, Regulatory Counsel, NRECA
- Associate Director, Regulatory Counsel, NRECA
- Senior Regulatory Counsel, NRECA
- Regulatory Counsel, NRECA
- Associate, Paul, Hastings, Janofsky & Walker LLP
- Counsel, U.S. Senate Committee on Labor and Human Resources

#### **ENERGY OR ENERGY MANAGEMENT EXPERIENCE**

Mr. Morrison leads the Regulatory Issues unit of NRECA's government relations department. He works with a staff of professional advocates representing NRECA and its members on matters relating to federal and state utility regulation, power supply, and delivery. Since joining NRECA in 1998, Mr. Morrison has worked extensively on issues relating to wholesale market design, power supply and delivery, industry restructuring, renewable energy, energy efficiency, distributed generation, and the smart grid.

#### **AFFILIATIONS AND AWARDS**

- Energy Bar Association
- American Bar Association, Infrastructure and Regulated Industries Section
- American Bar Association, Section of Environment, Energy, and Resources, Energy Markets and Finance Committee
- Electric Cooperative Bar Association
- Lawrence Berkeley National Laboratory Future of Electric Utility Regulation Advisory Group
- Harvard Electricity Policy Group

- J.D., Harvard Law School
- M.P.P., John F. Kennedy School of Government
- B.A., Political Science, University of California, Los Angeles







#### PROFESSIONAL EXPERIENCE

- Managing Director, Resolute Strategies
- Commissioner, New Jersey Board of Public Utilities
- Managing Director, Archer Public Affairs in Trenton, NJ, and Of Counsel to Archer & Greiner P.C.

#### **ENERGY OR ENERGY MANAGEMENT EXPERIENCE**

- Mr. Mroz was Commissioner of the New Jersey Board of Public Utilities (NJBPU). He was nominated to the position on September 18, 2014, and was confirmed by the state Senate on September 22, 2014. Commissioner Mroz was president of the NJBPU October 2014–January 2018, serving as chairman and chief administrative officer of the agency, and functioning as the chief energy officer for New Jersey.
- Mr. Mroz is a thought leader on regular issues of the Electricity Advisory Committee, including cybersecurity, workforce development, and infrastructure improvements in all industries.

#### **AFFILIATIONS AND AWARDS**

- Former Chair of the Critical Infrastructure Committee for the National Association of Regulatory Utility Commissioners (NARUC)
- Member of NARUC's Subcommittee on Nuclear Issues and Nuclear Waste Disposal
- NARUC Board of Directors
- New Jersey's Representative to the Organization of PJM States, Inc.
- Member, New Mexico State University Center for Public Utilities Advisory Council
- Member, Electric Power Research Institute (EPRI) Advisory Board

- J.D., Villanova School of Law
- B.A., University of Delaware, Newark





# Rep. Don Parsons State Representative, Georgia

#### PROFESSIONAL EXPERIENCE

- Operations Manager, BellSouth
- First Sergeant, U.S. Army Reserve and Army National Guard

#### **ENERGY EXPERIENCE**

- Rep. Parsons was first elected to the House of Representatives in 1994. He is the chairman
  of the Energy, Utilities, and Telecommunications Committee. He also serves on the Health
  and Human Services, Appropriations, and Ways and Means committees.
- Rep. Parsons is a long-time member of the Marietta Kiwanis Club. He serves on numerous advisory boards including the Northwest Georgia Law Enforcement Academy Board, the Cobb County Library Foundation Board, the Cobb Community Service Board and the Cobb Safety Village Board. He is a Major in the Civil Air Patrol.

#### **EDUCATION**

Bachelor's degree, West Virginia State University



#### **Delia Patterson**

Senior Vice President of Advocacy and Communications and Ge. American Public Power Association

#### PROFESSIONAL EXPERIENCE

- Senior Vice President of Advocacy and Communications and General Counsel, American Public Power Association (APPA)
- General Counsel and VP, Regulatory Affairs, APPA
- Associate, Dewey & LeBoeuf LLP

#### **ENERGY OR ENERGY MANAGEMENT EXPERIENCE**

- Ms. Patterson oversees APPA's regulatory, government relations, and communications functions. She helps with energy policy formulation and advocates before the Federal Energy Regulatory Commission (FERC), federal courts, and other energy policy forums. Delia heads APPA's Public Power Forward initiative to prepare member utilities for the evolving energy future.
- Before joining APPA, Ms. Patterson was a senior associate at a large law firm, where she
  represented energy companies in a broad range of matters before FERC and worked on
  energy-related project finance deals for nearly seven years.

#### AWARDS AND AFFILIATIONS

- Recognized by Trending 40 as one of Washington, DC's top 40 in-house lawyers for corporations and nonprofits.
- Board of Directors, Energy Bar Association
- Member, Lawrence Berkeley National Laboratory Future Electric Utility Regulation Advisory Group

- J.D., Georgetown University Law Center
- M.S., Systems Engineering, Virginia Tech, Blacksburg
- Nonprofit Management Executive Certificate, Georgetown University
- B.S., United States Naval Academy, Annapolis





### **Darlene Phillips**

Senior Director, Operations Engineering Support, PJM Interconnection

#### PROFESSIONAL EXPERIENCE

- Senior Director, Operations Engineering Support, PJM Interconnection
- Director, Strategic Policy and External Affairs, PJM Interconnection
- Senior Director, Policy Issues Management, Communications, and External Training, MISO
- Manager, Energy Practice, BearingPoint Consulting
- Manager, National Energy Business Consulting Group

#### **ENERGY OR ENERGY MANAGEMENT EXPERIENCE**

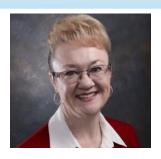
- Ms. Phillips leads state government policy, regulatory, and legislative efforts, and drives strategic communication efforts on key industry matters. Her previous roles with PJM include serving as director of strategic policy communications supporting PJM's regulatory, legislative, and stakeholder outreach by leading strategic communication efforts on key industry matters.
- Prior to joining PJM, Ms. Phillips was on the senior leadership team in MISO's external affairs division. Leading the issues management, corporate communications, and external training departments, she was responsible for synthesizing MISO's complex business functions and strategies for decision-makers, driving media and other outreach strategies, and leading external education efforts.

#### **AWARDS AND AFFILIATIONS**

- Licensed attorney in Indiana
- Member, Indiana State and Energy Bar Associations

- J.D., cum laude, Indiana University School of Law
- M.B.A., Stephen M. Ross School of Business, University of Michigan
- B.S.E, Electrical Engineering, University of Michigan





#### **Wanda Reder**

### President and Chief Executive Officer, Grid-X Partners LLC

#### PROFESSIONAL EXPERIENCE

- President and Chief Executive Officer, Grid-X Partners LLC
- Chief Strategy Officer, S&C Electric Company
- Vice President, Power Systems Services, S&C Electric Company
- Vice President, Engineering and System Planning and Vice President of Asset Management, Exelon Energy Delivery
- Vice President of Engineering and Planning, ComEd
- Vice President–Energy, Davies Consulting
- Started and led Ultra Power Technologies Inc.

#### **ENERGY OR ENERGY MANAGEMENT EXPERIENCE**

- Has served on the Institute of Electrical and Electronics Engineers (IEEE) Power & Energy Society (PES) governing board since 2002.
- Researched the maturing workforce of the power industry to prepare a roadmap for actions to be taken. In response to Ms. Reder's efforts, a Power & Energy Engineering Workforce Collaborative was initiated, and a career website for engineering students seeking employment in power and energy was developed.

#### **AWARDS AND AFFILIATIONS**

- President, IEEE Power & Energy Society (President-Elect in 2006 and 2007, President in 2008 and 2009, and Past President in 2010 and 2011)
- Fellow, IEEE

- M.B.A., College of St. Thomas, St. Paul, MN
- B.S.A.E., South Dakota State University, Brookings





### Dr. Paul Stockton President, Paul N Stockton LLC

#### PROFESSIONAL EXPERIENCE

- Assistant Secretary of Defense for Homeland Defense and Americas' Security Affairs, U.S.
   Department of Defense
- Member, Science and Technology Committee, Battelle Energy Alliance
- Senior Fellow, The Johns Hopkins University Applied Physics Laboratory
- Member, Homeland Security Advisory Council

#### **ENERGY EXPERIENCE**

- As Assistant Secretary of Defense, Dr. Stockton was responsible for Department of Defense (DOD) initiatives to strengthen security in the Western hemisphere and help partner nations build their capacities to meet emerging security challenges. He also guided the Defense Critical Infrastructure Protection program, served as DOD's domestic crisis manager, and helped lead the Department's response to Hurricane Sandy, Deepwater Horizon, and other disasters.
- From 2010 until January 2013, Dr. Stockton served as Executive Director of the Council of Governors, where he helped governors, the National Guard, the DOD, the Department of Homeland Security, and FEMA adopt initiatives to strengthen federal—state collaboration and unity of effort. These initiatives were codified into law in the National Defense Authorization Act of 2012, Section 515.

- Ph.D., Government, Harvard University
- B.A., Dartmouth College





### David Wade

President and CEO, Electric Power Board of Chattanooga

#### PROFESSIONAL EXPERIENCE

- President and CEO, Electric Power Board of Chattanooga
- Executive Vice President and COO, Electric Power Board of Chattanooga
- Senior Vice President Electric System Operations, Electric Power Board of Chattanooga
- Vice President Engineering and Construction, Electric Power Board of Chattanooga
- Various other roles at Electric Power Board of Chattanooga

#### **ENERGY OR ENERGY MANAGEMENT EXPERIENCE**

• Mr. Wade was named president and CEO of the Electric Power Board of Chattanooga after serving in various roles at the company for 30 years. His contributions range from hands-on construction in his early career to engineering and executive leadership roles. As the Electric Power Board's executive vice president and COO, David led the company's effort to develop one of the country's most sophisticated smart electric distribution systems and advanced communication networks.

#### **EDUCATION**

B.S., Engineering Management, University of Tennessee, Chattanooga





#### **Tom Weaver**

Manager, Distribution System Planning, American Electric Power

#### PROFESSIONAL EXPERIENCE

- Manager, Distribution System Planning, American Electric Power (AEP)
- Various roles in Transmission and Distribution, Engineering, Metering, Communications, Customer Services, and Line Supervision, Kentucky Power Company, AEP

#### **ENERGY OR ENERGY MANAGEMENT EXPERIENCE**

Mr. Weaver has been with AEP for 40 years. His first 23 years were at Kentucky Power Company, where he worked in T&D engineering, metering, communications, customer service, and line supervision positions. In 2000, he transferred to the AEP Service Corporation in the distribution planning function. As manager of distribution system planning, Mr. Weaver has responsibility for system planning, network planning and engineering, and grid management deployment. He has been actively involved in developing and applying deployment plans for gridSMART Technologies on the AEP distribution system since 2005.

#### **AFFILIATIONS AND AWARDS**

- Member, Institute of Electrical and Electronics Engineers
- Advisor, Distribution Programs, EPRI
- Chair, Distribution System Subcommittee, EEI

- M.B.A., Morehead State University, KY
- B.S., Electrical Engineering, West Virginia University, Morgantown





### Dr. Craig J. Wiener Technical Fellow, MITRE Corporation

#### PROFESSIONAL EXPERIENCE

- Senior Counterintelligence Cyber Analyst/Senior Technical Analyst—U.S. Department of Energy
- Adjunct Professor of International Security, George Mason University Schar School of Government and Policy
- Principal Consultant for Strategic Planning and Analysis, National Nuclear Security Administration

#### **ENERGY OR ENERGY MANAGEMENT EXPERIENCE**

- Dr. Wiener is recognized as a central analytic figure in U.S. intelligence community efforts to assess major foreign adversary espionage, sabotage, and strategic capabilities that pose threats to the U.S. government and North Atlantic Treaty Organization (NATO).
- He previously was senior technical analyst for the Department of Energy's (DOE) Office of Intelligence and Counterintelligence, where he served as DOE's lead all-source cyber threat analyst; the Department's representative to the National Security Council for Cyber Operations; a key member of National Intelligence Council Special Analytic Groups; and a government briefer and/or advisor for Defense Science Board studies on cyber as a strategic capability, homeland defense, strategic surprise and the future of U.S. military superiority, among other topics.
- Dr. Wiener initiated and led studies for special nuclear weapons-related threat and vulnerability analyses and advanced technical security threats to U.S. government equities by foreign adversaries. He engaged in the development, planning, and operationalization of counter-adversary strategies across multiple domains of operations.
- Dr. Wiener joined MITRE Corporation as a Technical Fellow in early 2020, where he supports key national security initiatives.

- Ph.D., Biodefense, George Mason University
- M.S., Biodefense, George Mason University
- B.A., Politics and History, New York University





### **Jim Yacone Mission and Partnership, SANS Institute**

#### PROFESSIONAL EXPERIENCE

- Assistant Director for the Critical Incident Response Group (CIRG), FBI
- Special Agent in Charge (SAC), Denver Division, FBI

#### **ENERGY EXPERIENCE**

- As assistant director for CIRG, Mr. Yacone oversaw personnel who provided expertise in crisis management, tactical operations, crisis negotiations, hostage rescue, hazardous devices mitigation, critical incident intelligence, surveillance and aviation, behavioral analysis, and special events management.
- Mr. Yacone joined the FBI in 1995 as a special agent. He was first assigned to the Philadelphia division, where he investigated violent drug trafficking organizations, organized crime, and financial institution fraud. He was later selected to serve with CIRG as a member of the hostage rescue team. Mr. Yacone was promoted to supervisory special agent and then to unit chief. He was deployed to multiple critical incidents and major investigations around the world in support of the global fight against terrorism.

- M.S., Criminal Justice and Public Administration, Virginia Commonwealth University
- B.A., Mechanical Engineering, United States Military Academy