

SPEAKERS



John M. Benavente, P.E.
General Manager
Guam Power Authority



John J. Cruz Jr., P.E.
Assistant General Manager,
Engineering & Technical Services
Guam Power Authority
Clean Energy Transition Architect



Melvyn Kwek, CISA, GICSP
Chief Information Technology
Officer (CITO)
Information Technology
(IT) Division
Guam Power Authority



Michael Murphy
Engineer I
E&TS/SPORD
Guam Power Authority



Louis C. Camacho, P.E.
Engineer Supervisor
E&TS/ Engineering Division/
Distribution Section
Guam Power Authority



Victor A. Torres
Engineer III
E&TS/SPORD/Demand-Side
Management & Green Programs
Guam Power Authority



Brian San Nicolas
Engineer I
E&TS/SPORD
Guam Power Authority



Harvey Camacho
Management Analyst III
E&TS/SPORD/Demand-Side
Management & Green Programs
Guam Power Authority



Jaelene Renae U. Manibusan, E.I.T.
Engineer I
E&TS/SPORD
Guam Power Authority



Christian Chargualaf
Engineer I
E&TS/SPORD
Guam Power Authority



Randall V 'Ben' Wiegand Jr, E.I.T.
Engineer I
Engineering/Distribution
Section
Guam Power Authority



Laurie Tumaneng
Management Analyst III
Executive Office
Guam Power Authority



SPEAKERS



James Rosenberg II
Director of Business
Development Asia Pacific
Blink Charging



Logan Weber
Chief Engineer
Mana Pacific Inc.



Thad Haines
Senior Member of Technical Staff
Sandia National Laboratories



Aaron Savatti
Senior Utility Consultant
EnergyX



Dr. Andrea Copping
Oceanographer and Senior Advisor
PNNL



Brooke Marshall Garcia, P.E.
Manager
Sandia National Laboratories



Dr. Charles Doktycz
Climate Risk and
Resilience Analyst
Argonne National
Laboratory



Fleurdeliza (Fleur) de Peralta, P.E.
Senior Advisor in the Energy
and Environment Directorate
PNNL



Francois Rogers
Executive Director
Blue Planet Alliance



Timothy Allen, P.E.
CEO & President
PXiSE Energy Solutions



Dan Rueckert, P.E., CISM
Vice President - Strategy
Sheffield Scientific, LLC



Jeff Grasberger
R&D Mechanical Engineer
Sandia National Laboratories



SPEAKERS



Murali Baggu, Ph.D.
Laboratory Program
Manager
NREL



Phil Voss
Senior Project Leader
NREL



Joe Reed
CEO
Mana Pacific



Dr. Bastian Bentlage
Associate Professor of
Bioinformatics
University of Guam



Ashton Raffety
Energy Policy and Strategy Analyst
Decision and Infrastructure
Sciences Division
Argonne National Laboratory



Allison Rutter, P.E.
Regional Energy Program Director
Joint Region Marianas



Larry Greene
Senior Vice President of
Project Development
Hanwha Energy USA
Holdings Corp, dba
174 Power Global



Zachariah Taylor, Ph.D.
Senior ESS Engineer
Hanwha Energy USA
Holdings Corp, dba
174 Power Global



Jim Beighley
Pacific Group CEO / Head of Strategy
and Mergers & Acquisitions
Citadel Pacific Ltd.



George Zhou, Ph.D., P.E.
Manager, Consulting and
Analytical Services
S&C Electric Company



Chuck Weissenborn
Public Sector Chief Technology
Officer
DRAGOS



Justin Cooksey
Advisor for Industry Analysis and Response
Policy in the Office of Cybersecurity, Energy
Security, and Emergency Response (CESER)
U.S. Department of Energy (DOE)



SPEAKERS



Andy Hoke, Ph.D., P.E.
Principal Engineer in the
Power Systems Engineering
Center
NREL



George D. Gamble, PMP, Six Sigma
Cybersecurity Director
Sheffield Scientific



Anupam Gopal
Founder and CEO
Energinx, LLC.



Tulkki Ville, D.Sc
SMR Technology Lead
VTT Technical Research
Centre of Finland



Dr. Edgar Casale
Senior Consulting Engineer
Consulting and Analytical Services
S&C Electric Company



Rajib Datta, Ph.D.
Chief Engineer
GE Vernova Advanced Research (GEVAR)



SPEAKER BIOS

John M. Benavente, P.E., is the General Manager of the Guam Power Authority (GPA). His expertise spans over four decades of technical, engineering, operations and executive leadership in the power and water utility-related fields; across both the government and private sectors. He has held the position of General Manager serving Guam's utilities for over 27 years during this period.

John's current efforts include addressing GPA's core value strategies of providing a sustainable, affordable energy supply for Guam, hardening the utility's electric grid infrastructure, workforce development and management, commissioning GPA's new, combined cycle 198 megawatt Ukudu power plant under an IPP contract with KEPCO/EWP, and achieving aggressive renewable energy goals.

Through his leadership efforts, the Guam Power Authority has improved its resiliency and recovery against catastrophic natural disasters; built a smart-energy grid, including a state-of-the-art SCADA system; adding over 140 megawatts of renewable energy and energy storage; and maintained favorable investment-grade bond status.

John is a licensed Professional Engineer. He holds a Master of Science in Engineering Management from the University of Missouri (Rolla) and a Bachelor of Science Mechanical Engineering degree from the University of Dayton. He is immediate past Director of the American

Public Power Association, representing Guam, CNMI, American Samoa, Virgin Islands, Puerto Rico, and Canada.

John J. Cruz Jr., P.E. C.E.M, C.E.A. is the Assistant General Manager of Engineering & Technical Services (AGMETS) at the Guam Power Authority. Engineering, IT/OT, Planning & Regulatory Divisions report to him. He is GPA's Smart Grid Architect, Clean Energy Transition Architect, and Communications Network Architect. He rose through the ranks as a Communications Engineer, System Planning Supervisor, SPORD manager, and AGMETS. As SPORD Manager, his and his staff's work set GPA on the path towards renewable energy transition for GPA in 2008. GPA is now 12-13% renewable energy. GPA has committed to 50% and 100% renewable energy by 2030 and 240, respectively. He and Roel A. Cahinhinan, P.E. were the Project Leads and Technical architects for GPA's Smart Grid Initiative Grant. Under his direction, GPA started its progression to using Battery Energy Storage Systems (BESS) for fast frequency regulation and rapid reserve. NREL lists fast frequency regulation and rapid reserve as emerging technologies for grid services provided by BESS. GPA is at the forefront of BESS Technology for Grid Services. John wrote a significant portion of GPA's Clean Energy Master Plan. All four Engineering & Technical Services (E&TS) Divisions participated in the development of the Clean Energy Master Plan.

John holds a B.S.E.E, B.A. in Mathemat-

ics, and a minor in business (Gonzaga University) and a M.B.A. (UOP). John Holds a registered professional engineer on Guam. He holds the Certified Energy Manager and Certified Energy Auditor certification from the Association of Energy Engineers. He is a SEI Solar Professionals Certificate Program (SPCP) Graduate in Residential and Commercial Photovoltaics Systems (Online). <https://www.solar-energy.org/solar-professionals-certificate-program-graduate-list/> John has unique skills and experience in radar systems engineering, power systems engineering, systems engineering, operations research, statistics and probability, software programming, software development, renewable energy, utility systems planning, computer and communications networks, cybersecurity, strategic planning, and Information Technology and Operations Technology.

He worked at Hughes Aircraft Company for 7 years in the Mode Development Department in El Segundo California where he worked on the Magellan Radar Project, Special Access Projects, and Low-probability of Intercept Studies. He has three radar modes flying on the B2. He returned to Guam in 1991 on a year leave of absence and met his future wife, Barbara Camacho. He remained on Guam and has worked for Guam Power Authority for over 32 years.

Melvin Kwek is the Chief Information Technology Officer for the Guam Power Authority (GPA) and has overseen the

Agency's technology resources for the last 10 years. He has been integral in implementing Smart Grid Technology, Digitalization of Services and IT & Operational Technology (OT) Improvements for the Authority.

Before that Melvyn has worked for over 12 years with Ernst & Young Guam as a senior manager for their Information Technology Risk & Assurance (ITRA) department performing IT Audits, Security Audits and Advisory work. He graduated from Washington State University with a degree in Management Information Systems (MIS) and is a Certified Information Systems Auditor (CISA) and Global Industrial Cyber Security Professional (GICSP).

Michael Murphy, After graduating from the University of San Diego in 2021 with a degree in Electrical Engineering with significant work experience in the fields of electromagnetics, embedded systems, and biomedical engineering, Michael Murphy came home to Guam to work for the Guam Power Authority, dealing primarily with contracts for renewables. Crucial projects include the Hagatna and Talofofo Energy Storage Systems, Phase IV, and Fadian Solar Canopy. With passions for Physics, computers, and neuroscience, Michael's career goal is to lead Guam's grid into the future with grid automation and cutting-edge and resilient renewable technology. Being half Palauan, Michael's purpose through designing and building projects is to foster a sense of curiosity and love for STEM in Micronesia. He was a software engineer for the Northrop Grumman Corporation and a research



SPEAKER BIOS

assistant in the UCSD Department of Bioengineering.

Louis C. Camacho, P.E., is a Distribution Engineer for Guam Power Authority. Louis joined the Guam Power Authority (GPA) in 2009. He was the first successful GPA Engineering Scholarship recipient. Louis graduated in 2009 from Sacramento State University with a Bachelor of Science degree in Electrical and Electronic Engineering with an emphasis in power.

At GPA, Mr. Camacho initiated the LED streetlight project on Guam writing a grant under the DEED program (preceding the ARRA grant), Faulted Circuit Indicators to reduce troubleshooting times, switched capacitor banks, and actively conducts power system analyses for the islands distribution system.

While attending college, Mr. Camacho worked as an electrician apprentice and installed solar panel systems. In 2014, Mr. Camacho became both a Certified Energy Manager (CEM) and Certified Energy Auditor (CEA). One year later, in 2015, Mr. Camacho became a Professional Engineer (PE).

Victor Torres is a skilled utility engineer with 10 years of experience at the Guam Power Authority. He earned his Bachelor's degree in Mechanical Engineering from the University of Portland, Oregon. Victor's expertise includes power generation, project management, and energy efficiency. Throughout his career, he has been involved in prime mover capex projects and demand-side management programs. Victor is committed to promoting sustainable energy practices and has worked to educate communities about the benefits of conservation and

renewable energy. Today, he continues to work as a utility engineer, focused on creating innovative solutions to promote sustainability while maintaining reliability and affordability.

Brian San Nicolas is an Engineer I at the Guam Power Authority. He received his Bachelor of Science in Petroleum Engineering from Louisiana State University. Since joining the Authority in 2022, he's contributed to many significant projects including the contract management of the 198 MW Ukudu Power Plant and the development of a 20-MW temporary power plant. Brian is also directly involved in the development of the Authority's innovative Solar Virtual Power Plant (SVPP) program. His commitment to sustainable energy solutions is further evidenced by his research into the feasibility of diverse clean fuel sources, including the acquisition of LNG, clean hydrogen, and renewable diesel.

Harvey Camacho is a Management Analyst with the Guam Power Authority. He has a cumulative 15 years of working experience stemming from 5 years with the power utility and 10 years within the telecommunications industry. His professional skills range from product development, marketing, business sales, data analytics, and project management. Harvey has been instrumental in leading the recent digitalization of GPA's Energy Sense Rebate Program. This project converted the conventional paper application processes and digitalized them through the utilization of frontend and backend web-based portals. He is

currently working on the development of other digital transformation projects to help improve current operational procedures and provide expanded energy efficiency services and offerings.

Jaelene Renae U. Manibusan, E.I.T. is an Engineer I in the Guam Power Authority's Strategic Planning & Operations Research Division (SPORD). She has a Bachelor of Science in Civil Engineering from the University of Guam. In her two years at the Authority, she has been heavily involved with GPA's communication network systems. These networks integrate many devices that the Authority uses in their effort to provide clean, reliable, affordable, and sustainable energy. She is excited about the technological advancements in this industry and is looking forward to the integrations and implementations of these technologies in the near future.

Christian N.A. Chargualaf is a dynamic and dedicated engineer with a firm foundation in mathematics and engineering principles from the University of Guam and the University of Alaska Anchorage. Through extensive experiences in the Strategic Planning and Operation Research Division at the Guam Power Authority, he has developed significant expertise in technical reporting, data analysis, and continuous improvement initiatives, demonstrating his capability to apply engineering solutions in theoretical and practical settings. His ambition and vision-focused approach drive him towards becoming a pioneer in engineering, aiming to contribute innovative solutions to the island's communities.

Randall V 'Ben' Wiegand Jr gained 1 year's experience working as an electrician's assistant in construction before graduating in 2022 with a Bachelor of Science in Engineering from Bob Jones University, South Carolina. In his 2 years working for GPA he has been focused on customer analytics and load simulation. "I'm excited to be a part of integrating new technology into Guam's power system."

Laurie Tumaneng is a Management Analyst III at the Guam Power Authority. Prior to joining GPA, she served as the Chief of Staff for Vice Speaker Tina Muna Barnes. She also worked as a Policy Advisor for Governor Lou Leon Guerrero. She received her Masters in Political Science from Pennsylvania State University and Bachelors in Sociology and Political Science from the University of Guam.

Aaron Savatti - Senior Utility Consultant, Aaron is passionate about all aspects of sustainability and energy efficiency, with rounded experience in Energy Management, HVAC, Electrical, & Facility Management. Aaron graduated honors at York University with a Bachelor of Environmental Studies, Environmental Management. He holds a Certificate in Sustainable Energy. Prior to EnergyX, Aaron has been an Energy Consultant, Professor - Building Loads at Humber College, a Director at Energy Insight Group, and President Of the Sustainable Ontario Community Co-op.

Dr. Andrea Copping is an oceanographer



and senior advisor at PNNL, and a faculty member at the University of Washington. She focuses on the environmental effects of marine energy and offshore wind development, and the role that these effects play in technology development and project initiation across the nation. She leads international projects that share information on environmental effects of wave and tidal (Ocean Energy Systems-Environmental) to benefit from progress made around the world. Andrea also leads research and development for the use of marine energy devices to power blue economy applications. Dr. Copping serves as an Associate Editor of Coastal Management Journal, on the editorial board for International Marine Energy Journal, and as a advisor to marine energy consortia in Ireland, Chile, Australia, and France.

Brooke Marshall Garcia, P.E., is a manager at Sandia National Laboratories. She is a licensed civil engineer with extensive experience in energy resilience analysis and energy system adaptation planning. She has an advanced business degree in Policy and Planning. Both her BSCE (2001) and her MBA (2007) are from the University of New Mexico. As a senior member of the Renewable Energy and Distributed Systems Integration department, she has been a leader on Sandia's microgrid course design team, and a field facilitator for vulnerable community outreach and support. Her research is focused on helping communities improve resilience through standardized, measurable approaches.

Dr. Charles Doktycz is a Climate Risk and Resilience Analyst for Argonne National Laboratory. He received his BS in Chemistry at the University of Illinois at Urbana-Champaign, and his PhD in Civil and Environmental Engineering at Vanderbilt University, focusing on climate change and the cost of inaction due to the rising threats of extreme weather. Charles' primary areas of focus at Argonne consist of climate change risk to critical infrastructure and development of climate change related data and indicators to help recognize climate and community vulnerabilities.

Fleurdeliza (Fleur) de Peralta, P.E. is a Senior Advisor in the Energy and Environment Directorate (EED) at PNNL. Ms. de Peralta has over 35 years of professional experience in various projects involving nuclear power design and operation; cybersecurity for energy generating systems (e.g., nuclear, solar, wind, marine/ocean energy, biomass/biofuel) and integration to electricity grids/microgrids at US Army installations; development of cloud-based digital engineering ecosystem and network infrastructure for US Space Force and Space Systems Command; environmental assessments and NEPA analyses for installation of small modular reactors and disposition alternatives of surplus plutonium; probabilistic risk assessments; fire modeling; and hydrogen generation and safety. She joined PNNL in 2014 and supports projects for the DOE, DoD, Nuclear Regulatory Commission (NRC), and National Nuclear Security Administration (NNSA). Prior to joining PNNL, she owned and

managed an engineering services consulting firm for 25 years working with nuclear power plant licensees across the United States to comply with Nuclear Regulatory Commission design, operational, and regulatory requirements.

Ms. de Peralta has a B.S. in Mechanical Engineering from the University of California, Los Angeles (UCLA), with emphasis on Thermal Science and Power Systems, M.A. in Mental Health Counseling from Argosy University. She also has Certificates in Engineering Management and Fire Protection Engineering from UCLA Extension and Cybersecurity for Information Systems from Harvard University's Office of Vice Provost. Ms. de Peralta is a licensed Professional Engineer (Mechanical) in the State of California. She spent majority of her childhood (12 years) in Guam before her whole family moved to California in 1980. She still considers Guam her "home."

Francois Rogers, passionate about the environment, has been Executive Director of Blue Planet Alliance (BPA) since its inception in 2020. BPA is working to end the use of carbon-based fuel.

Francois was born in New York City to a Dutch-Indonesian family, and was raised and educated in Japan and the Philippines. The family eventually settled in Hawaii, where he has lived for decades, and where he has been an integral player in climate and energy issues for the Aloha State.

He was part of the original Blue Planet

Foundation team in 2007, the local nonprofit organization based in Hawaii that is best known for its role in passing a 100% renewable-energy mandate by 2045, making Hawaii the first state in the United States to set such an ambitious goal. During his involvement from 2006-2020, he served as the Special Projects Director where he was directly involved in developing education programs, ideating community-based solutions, and executing operational logistics.

In 2020, he helped launch Blue Planet Foundation's sister organization, Blue Planet Alliance, which is driving climate ambition across island nations and territories in the Pacific, Caribbean, and Atlantic Oceans. BPA's game-changing idea is its Fellowship program, which is poised to bring representatives of 50 islands to Hawaii over the next three years and help put each on its own path to 100% renewable energy, creating momentum that can catalyze a global transition to renewable energy by shaping policies, empowering youth, and providing pathways to community-based solutions.

Francois began his career working in the travel industry with the Asia-Pacific Market. During his time working at the largest Japanese wholesale-travel company from 1988-2005, he specialized in destination marketing and management, which involved planning and organizing citywide conventions, multi-nation annual festivals, and promoting the educational tour market, all while promoting



SPEAKER BIOS

Hawaii as the #1 destination. He is a fluent speaker of Japanese and Tagalog, and lives in Hawaii with his family.

James Rosenberg II has extensive experience in business operations in the Asia Pacific markets for consumer automotive and technology companies. Since joining Blink in 2021, he works as a primary point of contact between the company and large clients. In his role, he works alongside the executive, engineering, procurement, sales, and fleet teams for new market expansion, contracting new clients, and identifying new equipment and software solutions.

James has served in various executive functions across Korea, Japan, Guam, and the United States to identify opportunities for growth and expansion of emerging and rapidly growing companies. His work includes project management, market analysis, research, and due diligence for strategic international expansion.

Logan Weber leads project design and industry evaluation for Mana Pacific, a social impact-focused renewable energy project developer based in Hawaii. He has a wide range of technical expertise in energy storage and renewable energy which he has developed over the past decade of experience in industry and academia. Prior to joining Mana Pacific, Logan spent several years at Powin, a leading utility scale energy storage system integrator where he held multiple positions across product development, project management, and application

engineering. During this time he designed and deployed over 1,000 MWh of lithium-based energy storage projects across the world and built a keen eye for recognizing the intricacies of well-designed products. Logan's developed a specific expertise in the use of Battery Energy Storage Systems (BESS) in complex and challenging applications such as microgrids, remote locations, and advanced grid support functionalities such as fast frequency response.

Thad Haines is a senior member of technical staff with the Renewable Energy and Distributed Systems Integration department at Sandia National Laboratories where his work contributes to better understanding issues related to resilience, stability, and controllability of electrical power systems due to increased renewable energy adoption and electrification of transportation. He has studied distribution system impacts associated with high levels of rooftop solar adoption, as well as mitigation approaches using advanced inverter controls and storage. Additionally, he has contributed to researching alternatives for fossil-based generation in an island setting, helped identify critical infrastructure to benefit community resilience, developed and simulated plant-wide inverter-based resource controls, and added long-term dynamic power system simulation via variable time-step integration into an open-source software package. Thad holds a Master of Science and a Bachelor of Science in Electrical Engineering from Montana Technological University,

Butte America.

Daniel Rueckert, P.E., CISM has 30+ years of experience in information technology, project management and utilities business consulting. He is responsible for the Security, Risk & Compliance Management business line within Sheffield Scientific along with technology partnerships and the go-to-market strategy. Mr. Rueckert has worked with enterprise security program implementation at TVA, Pacific Gas & Electric, Xcel Energy, Salt River Project (SRP), Guam Power Authority and Iberdrola USA involving NRC/NEI, NERC, EPRI-TAM and NIST. Mr. Rueckert prior to joining Sheffield Scientific held positions at Black & Veatch and Hewlett-Packard where he was Global Practice Director for Service Management (ITIL®) and Security & Risk services within the consulting and integration organization.

He has had "Hands On" leadership and management in the successful deployment of large scale Enterprise Asset Management (EAM) implementations within the utilities sector at Duke Energy, Ontario Hydro Nuclear, Generation Victoria and Exelon. He had 15 years of experience at Pacific Gas & Electric (PG&E) Company at Diablo Canyon Power Plant in implementation of first generation work management systems and held other engineering and technology management positions.

As CEO, Tim Allen is focused on honing PXiSE's strategic direction, growing and developing the organization, and strengthening partnerships. Tim brings more than 22 years of experience across utility-scale solar, wind and energy storage projects, software controls, in-

vestor-owned utility, independent power producer and pure developer realms. His unique set of skills, beginning with an Electrical Engineering degree from CalPoly, San Luis Obispo, CA, offers seasoned perspectives and relationships positioning him perfectly to lead PXiSE into the future. During his tenure at PXiSE as COO, Tim offered guidance and expertise as PXiSE readied to become a global leader.

Jeff Grasberger joined Sandia National Laboratories as a mechanical engineering researcher in 2022 after completing his M.S. from Virginia Tech with a focus on numerical modeling and software development for wave energy converters (WECs). Wave energy conversion has the potential to be a significant part of the transition to renewable energy, and Jeff is passionate about understanding its varying capabilities and applications within his research. Jeff has about 3 years of experience designing and modeling wave energy converters, which includes development of the open-source software Wave Energy Converter Simulator (WEC-Sim), application of WEC co-design and optimization techniques, and wave energy resource assessments for powering various applications including aquaculture. Jeff has been part of a team of Sandia researchers completing a wave energy resource assessment in Guam to determine the feasibility of wave energy conversion implementation.

Murali Baggu is the Laboratory Program Manager for grid integration at NREL. In this role, he manages the Department of Energy Office of Electricity, Grid Deployment Office and Grid Modernization Initiative programs at NREL. He currently leads NREL's Advanced Distribution



SPEAKER BIOS

Management Systems (ADMS) research and Puerto Rico Grid Recovery and Resilience efforts. He is also one of the principal investigators for the Puerto Rico Grid Resilience and Transitions to 100% Renewable Energy Study (PR100) by the U.S. Department of Energy's Grid Deployment Office and six national laboratories to comprehensively analyze stakeholder-driven pathways to Puerto Rico's clean energy future. Baggu has extensive experience in advanced grid control and evaluation for future power systems with high levels of distributed energy resources (DERs). This includes ADMS, microgrid applications, and energy-storage applications.

Before joining NREL, Baggu worked as a lead power systems engineer at GE Global Research, where he developed advanced Volt/VAR control and DER management algorithms. At GE, he also led the technology development and deployment of large-scale energy storage integration with photovoltaic systems for the U.S. Marine Corps. Baggu's research interests include grid integration of distributed energy systems, energy storage system integration, distribution automation and grid operations and control. He has five patents and more than fifty publications in these areas of research. He holds a Ph.D. in power engineering from Missouri S&T.

Phil Voss is a Senior Project Leader in NREL's Accelerated Deployment and Decision Support (ADDS) Center. Phil manages NREL's technical support to the US Territories funded by the U.S. Department of the Interior's Office of Insular Affairs and is the Project Lead for the Guam 100 Initiative to support the clean energy transition. He also provides technical assistance to federal

agencies for energy performance contracting and is Senior Advisor to the NREL FEMP Laboratory Program Manager and to the U.S. DOE FEMP Performance Contracting programs. His work includes project management and coordination of technical resources, direct project assistance and training, and project measurement and verification (M&V) support. Previously, Phil established and managed a DOE-NREL temporary office in New Orleans, directing DOE's post-disaster residential and commercial energy efficiency design assistance resulting in lower operating costs for schools and low-income homes, and municipal energy policy support resulting in development of the city's first ever energy policy. He has also managed strategic energy planning assistance and renewable energy assessments for various island nations. Phil returned to NREL after 7 years of travel, managing a dive center, and working as a dive instructor in Indonesia and Honduras. He has a B.S. in architectural engineering from North Carolina A&T State University.

Joe Reed has served as CEO of Mana Pacific, a Hawaii Renewable Energy company focused solely on Pacific Islands, since September 2020. He was also selected in 2023 as the Allied Chair for the Pacific Power Association. Prior to joining Mana Pacific, Joe was Managing Director of Corporate Development at Canadian Solar since September 2015 and was responsible for strategic development activities, including M&A processes, due diligence, and related strategic investment activities.

Joe brings over 35 years of leadership experience in a diverse range of operational and business development

executive positions. This includes over 14 years of specific U.S. government federal contracting programs serving a range of Department of Defense, Department of Homeland Security, and joint intelligence and law enforcement activities. Specific efforts also include surveillance and networking solutions for Secure Border Initiatives, Drug Enforcement Agency, and Immigration and Customs Enforcement.

Joe has also taught executive leadership at both West Point and Santa Clara Universities. His experience includes roles as CEO/Founder of a technology startup, COO, VP of IT, VP of Sales, VP of Programs and numerous managerial and director level roles.

Additionally, Joe has served on the Board of Directors for three separate companies. These companies have focused on power generation from alternative energy sources, as well as other innovative technology solutions related to renewable energy. Living in Pleasanton, California, his hobbies include golf and obstacle course adventure racing (Spartan, Tough Mudder, Rugged Maniac, etc).

Reed finished a full career as a U.S. Army officer commanding both American and British military units including combat operations worldwide and assignments on military operations, training, and doctrine staffs. With a ranger and parachutist qualification, his service spanned the globe, including Cuba, South Korea, Saudi Arabia, Kuwait, Panama, and several European countries. He received a B.S. with a concentration in Nuclear Engineering and Physics from West Point and an MBA with a focus on leadership from Long Island University.

Dr. Bastian Bentlage is Associate Professor of Bioinformatics at the University of Guam (UOG) in the western tropical Pacific. Dr. Bentlage earned a PhD in Ecology and Evolutionary Biology from the University of Kansas and conducted postdoctoral research at the University of Maryland and Smithsonian Institution where he built his skill-set in bioinformatic data analysis, focusing on genetics of marine organisms. In 2016, Dr. Bentlage took a tenure track appointment at UOG, joining the leadership team of Guam NSF EPSCoR where he has served as co-PI and research coordinator for programs totaling more than \$20 million in funding to facilitate upgrades of laboratories, networking and high throughput computing, and hires of personnel. At UOG, Dr. Bentlage's research focuses on the impacts of environmental degradation and climate change on corals and their symbiotic algae and bacteria.

Ashton Raffety is an Energy Policy and Strategy Analyst within Argonne National Laboratory's Division of Decision and Infrastructure Sciences. His work focuses on energy security programming efforts for states and territories, risk analysis studies on critical energy infrastructure systems, and the impact of climate change on utility operations. Prior to Argonne, he worked on critical infrastructure protection issues with the Washington, DC based National Association of Regulatory Utility Commissioners (NARUC), and prior to that he worked as a consultant supporting industry and state/local engagement programs within the U.S. Department of Energy's (DOE) Office of Cybersecurity, Energy Security, and Emergency Response (CESER). Mr. Raffety received a B.S. in Economics from Northwest Missouri



SPEAKER BIOS

State University and holds a Master of Public Policy (MPP) degree from the University of Maryland.

Allison Rutter, P.E. is an efficiency focused professional with over eighteen years of experience in high performance building design and carbon pollution-free energy. Her career spans roles in industry, academia, and government, focusing on finding resilient and sustainable solutions to improve the built environment. With projects ranging from community centers in Hawaii to the Empire State Building, Allison has dedicated her career to deep energy retrofits and sustainable development.

As the Regional Energy Program Director for Joint Region Marianas, Allison oversees energy and water efficiency, resiliency, and reliability efforts across Department of Defense assets on Guam. She leads strategic energy planning for major bases, aligning with the U.S. Government's goals for energy and climate, and works closely with partners like Guam Power Authority. Her responsibilities include serving as a technical expert on renewable energy, water resources, climate change mitigation, and policy development. Allison also coordinates recovery efforts for energy, water, and fuel infrastructure post-natural disasters.

Allison earned her Professional Engineering license in the state of Colorado, holds a BS in Mechanical Engineering from the University of Portland, and is a Certified Energy Manager.

Larry Greene has 36 years of experience in the energy development business, the last 24 of which has been exclusively in renewable energy project development

(solar PV, solar thermal, wind, biomass, biodiesel, energy storage). From 1988 through 2000 Larry developed petroleum resources for Unocal (now Chevron) primarily overseas in Thailand and Indonesia. From 2001 through 2010, Larry served as the Vice President of Development for both Vestas Corporation and Acciona Energy, two of the world's largest sustainability companies. He has developed 3.5 GW of utility-scale wind and solar energy projects now operating in the United States and Canada.

With Hanwha Energy since 2010, Larry has built a team of development professionals responsible for land lease, solar resource assessment, interconnection, power purchase, environmental permitting, and project acquisition that has resulted in a 5.2 GW project pipeline for Hanwha in North America.

Larry holds an M.S. in Geology from University of California, Davis, and an MBA from UCLA's Anderson School of Management.

Zachariah Taylor, PhD has 10+ years of technical experience in battery energy storage engineering, with a specific focus on Lithium Ion and LFP projects.

Zach has worked for Hanwha Energy for the last 5 years, serving as the technical ESS subject matter expert for several GWHrs of projects. These projects include DC coupled ESS, AC coupled ESS collocated with PV, and standalone storage projects. Before joining 174 Power Global he served as the Chief Engineer for Enerblu, a US based ESS manufacturer and system integrator.

Academically, Zach holds a Doctor of Philosophy (PhD) in Electrical and Electronics Engineering from the

University of California, Riverside, where he studied in the Smart Grid lab. Zach is a contributing member of IEEE, with several published journal papers related to ESS and optimal ESS operation.

Jim Beighley oversees the business portfolio for Citadel in the Pacific Islands which includes IT&E, IP&E Holdings, IP&E Solar, Citadel Data Centers, and Prospector Properties. He has held this position upon returning to Guam in 2020. He has been a member of IT&E's Board of Directors since 2011.

Prior to joining Citadel, Jim held various positions within DFS and the LVMH Group in Guam, Singapore and Hong Kong including Managing Director of the Pacific Division of DFS (Guam, Saipan, Hawaii, Palau, and Tokyo) and Executive Vice President for Strategy and Business Development for DFS globally. He has served as Vice Chairman of the Guam Visitor's Bureau and currently serves on the Board of Directors for the Guam Chamber of Commerce. Jim is a graduate of the University of California, Santa Barbara with a degree in Economics and Chinese studies.

George Zhou Manager, Consulting and Analytical Services, S&C Electric Company
Dr. Zhou has three decades of professional experience in power engineering in industry and academia and is a power system consulting expert. He is currently Manager of Consulting and Analytical Services at S&C Electric Company. Previously, he was a Principal Consultant with Siemens Power Technologies International. He manages and provides consulting services to world-wide energy industry clients including electric utilities, independent system operators,

renewable generation developers, and regulatory organizations. His expertise includes transmission and distribution system planning and operations, renewable resource integration and modeling, smart grid, energy storage, distributed energy resources, real time control, electric utility software system development, reliability risk assessment, and NERC Reliability Standards regulatory compliance. Dr. Zhou is a Senior Member of the IEEE and a registered Professional Engineer in California. He received his PhD degree in Electrical Engineering from Iowa State University.

Matthew Tarduogno is the Assistant Director for Situational Awareness, Analysis, and Technical Capabilities in the Office of Cybersecurity, Energy Security, and Emergency Response (CESER) at the U.S. Department of Energy (DOE). In this role, Matt manages all-hazard situational awareness and analysis for DOE's responsibilities as the Sector Risk Management Agency for the energy sector and as the coordinating agency for Emergency Support Function #12, under the National Response Framework. Matt also oversees the development of situational awareness tools and response capabilities, as well as coordinating DOE's efforts during a cyber incident impacting the energy sector. Prior to joining CESER, Matt was a Senior Advisor in DOE's Office of International Affairs and a Special Advisor at the Advanced Research Projects Agency – Energy (ARPA-E).

Matt earned B.A. degrees in Economics and International Relations from Hobart College and a MBA from the Fuqua School of Business at Duke University.

Justin Cooksey is the Advisor for Indus-



try Analysis and Response Policy in the Office of Cybersecurity, Energy Security, and Emergency Response (CESER) at the U.S. Department of Energy (DOE). In his role Justin supports CESER's efforts on various interagency national security policy lines of work, while also supporting incident reporting and cyber technical assistance programs. Justin also supports DOE's responsibilities as the Sector Risk Management Agency for the energy sector and as the coordinating agency for Emergency Support Function #12 during response operations through the planning section. The planning section supports CESER response efforts by collecting, evaluating, disseminating, and using information about the incident and the status of resources to inform CESER's course of action. Prior to joining DOE, Justin was a Senior Energy Sector Specialist at ICF International.

Justin earned a B.A. degree in Economics from the University of Virginia and an M.P.P. from the Batten School of Leadership and Public Policy at the University of Virginia.

Chuck Weissenborn works at Dragos, an industrial (OT/ICS/IIoT) cybersecurity company on a mission to Safeguard Civilization. As the Public Sector Chief Technology Officer, he leads the company's efforts to support Public Sector organizations around the world and their efforts to secure control systems and associated operational technologies. Prior to joining Dragos, Chuck worked at Symantec (later a Broadcom Corporation) where he was responsible for all business operations supporting the US Army worldwide.

Chuck is also a member of the Army National Guard as a member of the

Critical Infrastructure Protection Battalion (CIPBN), West Virginia National Guard. The CIPBN provides mission assurance assessments and risk reduction recommendations across the DoD with teams aligned to HQDA G3-5-7, DISA, and others. In his Guard role, he often supports Joint, Army, and Inter-agency efforts to bring together community partners alongside private sector utilities to ensure the successful execution of public sector mission sets that rely on operational technology.

Prior to joining West Virginia, Chuck was a member of the Texas National Guard for over 18 years, with assignments that included the S6 NCOIC for the 36th Combat Aviation Brigade and the Texas Defensive Cyber Operations Element. He most recently returned from a deployment to the CENTCOM AOR where supported the Long-Range Precision Fires mission.

Chuck is an avid supporter of several non-profit organizations, and is the co-chair for the Critical Infrastructure / Control Systems cybersecurity committee at the National Defense Industrial Association (NDIA). NDIA supports engagement and collaboration efforts between the Defense Department and the Defense & Organic Industrial Base.

Chuck has deployed four times in support of military operations since 9/11. Chuck lives in Annapolis, Maryland with his wife Caitlin, and children: Eleanor, Bruce, Wally, and Calleigh.

Andy Hoke is a principal engineer in the Power Systems Engineering Center at the National Renewable Energy Laboratory (NREL), where he has worked for the past 14 years. He received the

Ph.D. and M.S. degrees in Electrical, Computer, and Energy Engineering from the University of Colorado, Boulder, in 2016 and 2013, respectively. Dr. Hoke's expertise is in grid integration of power electronics and inverter-based renewable and distributed energy. His work includes advanced inverter controls design, hardware-in-the-loop testing and model development, power systems modeling and simulation, and standards development. He has served as Chair of IEEE 1547.1 and P2800.2, which contain the test and verification procedures to ensure DERs and inverter-based resources conform to the grid interconnection requirements of IEEE Standards 1547 and 2800, respectively. He is a registered professional engineer in the State of Colorado.

George D. Gamble, PMP, Six Sigma, an accomplished international cybersecurity leader, has made significant contributions to safeguarding critical infrastructure worldwide. His expertise spans the energy utility and water sectors, where he collaborates with scholars and communities. As the Cybersecurity Director at Sheffield Scientific, George has been instrumental in pioneering several groundbreaking initiatives:

Reference Architectures: He played a key role in developing and launching the first Information Technology (IT), Operational Technology (OT), and Internet of Things (IoT) Cybersecurity Reference Architectures. **Risk-Based Cybersecurity Programs:** George's passion and dedication are evident in his work with ISO, NERC CIP, and NIST Cybersecurity Standards. He ensures the identification and protection of Critical Assets, Critical Facilities, and Critical Cyber Systems. **Scenar-**

io-Based Risk Assessments: George's innovative approach involves dynamic Scenario-Based Risk Assessments. By exploring hypothetical scenarios, he uncovers hidden threats and vulnerabilities, crafting resilient strategies for the unknown challenges of tomorrow. **Advocacy for the Utility of the Future:** As a forward-thinking leader, George champions the concept of the utility of the future. His adaptability, innovation, and collaborative spirit contribute to securing critical infrastructure in an ever-evolving landscape. His unique blend of strategic thinking, imagination, and technical expertise positions him as a trailblazer in the field of cybersecurity. George Gamble's impact extends far beyond the present, as he prepares clients to navigate the complexities of securing our critical infrastructure in the future.

Anupam Gopal is the founder and CEO of Enerzinx, LLC. Under his leadership, Enerzinx has led the development of over 120 GW of renewable energy projects across 6 continents, in the last 10 years. In his current role, Anupam advises stakeholders in the renewable energy value chain, specifically in the fields of engineering, strategy, and technology.

Mr. Gopal has over 21 years of wide-ranging experience in the field of power system engineering. His experience ranges from commissioning equipment in the field to cutting-edge research in the area of high-performance computing. He has served in various positions in the United States and abroad. Prior to founding Enerzinx, Mr. Gopal served as Vice President of Transmission and Interconnection services at Energyzt Analytics. Anupam is the author of several equipment mathemati-



SPEAKER BIOS

cal models and has been associated with the renewable energy industry in various capacities since its infancy.

Tulkki Ville, D.Sc, Senior Scientist, VTT Technical Research Centre of Finland. Tulkki Ville has worked at VTT Technical Research Centre of Finland Ltd. since 2009 in the field of nuclear safety. His current position is research team leader of Reactor Analysis Team. His main research topics have been nuclear fuel behaviour analysis and the prospects and future applications of small modular reactors.

Dr. Edgar Casale, Senior Consulting Engineer, Consulting and Analytical Services at S&C Electric Company. Dr. Casale has over 30 years of experience in the electric power industry and academia. He is a Senior Consulting Engineer in the Consulting and Analytical Services department in the Power Systems Solutions unit of S&C Electric Company. His primary work areas include transmission planning, transient and dynamic simulations, application of energy storage systems, system interconnection studies, renewable energy integration, reliability improvement, model development and validation, among others. Dr. Casale is author/co-author of several journal papers and conference articles in different areas of power system engineering. Dr. Casale is a Senior member of the IEEE and currently the Chair of the IEEE PES GM WG on Dynamic Performance of Renewable Energy Systems. He received his Ph.D. degree in electrical engineering from The Ohio State University, in Columbus, Ohio in 2001. He is also a Senior Lecturer at The Ohio State University since 2012.

Dr. Rajib Datta is the Chief Engineer,

Power Electronics, at GE Vernova Advanced Research (GEVAR) in Niskayuna, NY. He has over 24 years of experience in power electronics and electrical systems in a broad range of industrial applications and is currently leading R&D projects for GE's energy related businesses. His specific interests are in the integration of renewables, energy storage, FACTS, high voltage DC transmission (HVDC), and utility-scale power conversion and application of new power electronic devices. After finishing his PhD from Indian Institute of Science, Bangalore, he started his career at ABB Corporate Research, Germany in 2000. Since joining GE Research in 2002, he has held various positions, including manager of the power electronics lab and technology leader for silicon carbide power device applications. Dr. Datta has over 50 patents in power conversion and has authored more than 35 publications in international conferences and journals.

