<u>Day 1</u> Update on DOE Office of Electricity Programs and Initiatives



Patricia Hoffman, Acting Assistant Secretary, Office of Electricity, U.S. Department of Energy

Serving as the Acting Assistant Secretary for the Office of Electricity (OE) at the U.S. Department of Energy (DOE), Ms. Patricia A. Hoffman also served as Acting Under Secretary for Science and Energy from January 2017 until November 2017 when the U.S. Senate confirmed Mark Menezes as Under Secretary of Energy. Ms. Hoffman served as Acting Assistant Secretary for OE from January 2017 until October 2017 when the OE Assistant Secretary was confirmed by the U.S. Senate.

Ms. Hoffman was named Assistant Secretary for OE from June 2010 to January 2017, after serving as Principal Deputy Assistant Secretary since November 2007. The focus of her responsibility was to provide leadership on a national level to modernize the electric grid, enhance the security and reliability of the energy infrastructure and facilitate recovery from disruptions to the energy supply both domestically and internationally.

Ms. Hoffman holds a Bachelor of Science and a Master of Science in Ceramic Science and Engineering from Pennsylvania State University.

Federal Energy Regulatory Commission Activities Update



Allison Clements, Commissioner, Federal Energy Regulatory Commission

Commissioner Allison Clements has two decades of public and private sector experience in energy regulation and policy, representing utilities, independent power producers, developers and lenders, nonprofits and philanthropies on grid policy issues. Commissioner Clements is the founder and president of Goodgrid, LLC, an energy policy and strategy consulting firm. Previously she spent two years as director of the energy markets program at Energy Foundation. Prior to her time at Energy Foundation and Goodgrid, Commissioner Clements worked

for a decade at Natural Resources Defense Council in New York City as the organization's corporate counsel and then as director of the Sustainable FERC Project.

Commissioner Clements has served as a federal energy expert in several capacities, including as a member of a National Academies of Sciences committee on grid resilience, as co-chair of the Bipartisan Policy Center's electric grid initiative, and as a clinical visiting lecturer at Yale Law School.

Commissioner Clements has a Bachelor of Science from the University of Michigan and a Juris Doctorate from The George Washington University Law School.



Panel Discussion: Facilitating the Integration and Commercialization of Energy Storage: How DOE can Leverage its Role and Resources

Moderators



Ramya Swaminathan, CEO, Malta

Ms. Swaminathan led the spin-out of Malta from X, Alphabet's Moonshot Factory (formerly Google X) in 2018 and has been the company's CEO since its founding. She has led Malta through multiple rounds of corporate venture funding and has recruited a multi-disciplinary team focused on commercializing Malta's thermal storage technology. She currently serves as a US Department of Energy Clean Energy Education and Empowerment (C3E)

Ambassador and was appointed by the US Secretary of Commerce to the Renewable Energy and Energy Efficiency Committee (REEAC) to advise the Commerce Department on US competitiveness in these sectors. She was also named a Business Insider's 2020 list of 21 Rising Stars in clean energy.

Before founding Malta as an independent company, Ms. Swaminathan was the CEO of Rye Development, a hydropower development firm that she grew to be the leading developer of new hydropower projects in the United States. She was responsible for the expansion of Rye's platform into energy storage, with the addition of two sizable pumped storage hydro development projects in the Pacific Northwest. Prior to her work in the hydropower space, she was a public finance banker, most recently as a Director at UBS where she focused on public power clients and senior managed more than \$10 billion in financings. She holds a Master's in Public Policy from the Harvard John F. Kennedy School of Government and a BA in Anthropology from Amherst College.



Lisa Frantzis, Partner in Energy, Sustainability, and Infrastructure, Guidehouse

Lisa Frantzis is a partner in Guidehouse's Energy, Sustainability and Infrastructure segment, responsible for decarbonization go to market initiatives such as clean hydrogen, e-mobility, and renewable energy solutions. Throughout her 40 years of consulting experience, she has determined clean energy integration options for utility companies; identified energy program

options for international government agencies; developed business strategies for clean energy manufacturers; and conducted due diligence for financial firms considering clean energy investments. Most recently, she is leading Guidehouse's Hydrogen Consortium, Building the Clean Hydrogen Economy with over 20 companies working together to create and launch innovative pilot projects/hubs that use clean hydrogen to decarbonize heavy transport, increase renewables integration, and decrease emissions in the U.S. energy sector.



Lisa was also a senior managing director at Advanced Energy Economy (AEE) from 2013 - 2022, a national business association whose mission is to transform state and Federal policy to ensure a more secure, clean, and affordable U.S. energy system. At AEE, she led the Utility Advisory Committee and CEO/Executive Forums that addressed business model reforms and regulatory changes needed to accelerate the transition to a 21st century energy and transportation system. These initiatives convened utility executives, public utility commissioners, and advanced energy companies to develop a vision for reform that is responsive to the needs of each state and drives concrete action.

Lisa was appointed to the Department of Energy's Electricity Advisory Committee in 2021 and is an Ambassador for the U.S. Clean Energy, Education & Empowerment (C3E). She was given the New England Women in Energy and the Environment Leadership Award in 2019 and serves on the Boards for the Northeast Clean Energy Council and LineVision. She is a former Board member for the American Council on Renewable Energy; Smart Electric Power Alliance (SEPA); and Solar Business Association of New England.

Panelists



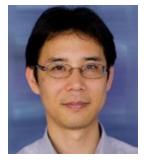
Godart van Gendt, Senior Expert, McKinsey

Mr. van Gendt is a senior expert in McKinsey's Sustainability and Electric Power & Natural Gas Practices. He leads work on energy transition with a focus on power and mobility, supporting businesses and investors to identify and capture business opportunities aligned to the energy transition.

In addition to his client work, Mr. van Gendt has co-led research on "net-zero Europe" and is a leader in the development of McKinsey's sustainability analytics

capabilities—including the decarbonization pathway optimizer. He is a board member of the Asia–Pacific Hydrogen Association.

Mr. van Gendt worked in Asia–Pacific from 2013–2020, based out of Australia and New Zealand, and recently moved back to the Netherlands. He received a MSc in physics at Delft University of Technology, majoring in nuclear physics, and an MBA with distinction at INSEAD.



Yoh Kawanami, Director, Hawaiian Electric

Dr. Kawanami is the Director of Customer Energy Resources Operations at Hawaiian Electric Company in Honolulu, Hawaii. He is responsible for the operationalizing the customer-sited energy resource programs to enhance grid reliability and support the integration of additional renewable energy through adoption of distributed energy resources. Dr. Kawanami is the recipient of 2019 EPRI Technology Transfer Award for his research in utilizing water heaters as a grid resource. Fluent in Japanese, he serves as company's liaison to Japanese

government, utilities, and national labs.



Dr. Kawanami holds a D.Eng in Engineering Management from George Washington University, Master's in Engineering Management from Duke University and a B.S.in Aeronautics and Astronautics Engineering from University of Washington. He is a fellow of two leadership programs, Pacific Century Fellow, and TOMODACHI Mitsui Leadership Fellow. A certified Project Management Professional (PMP), he serves on multiple boards and volunteers for various non-profit organizations focused on topics ranging from education, US-Japan relation to local community development. He was recently selected as the "20 of the next 20" by Hawaii Business Magazine.



Roger Kranenburg, Vice President of Strategy and Policy, Eversource

Mr. Kranenburg is responsible for developing and overseeing the execution of Eversource's long-term clean energy and growth strategy and policies along with leading the transportation electrification and battery storage initiatives.

Prior to joining Eversource, Mr. Kranenburg was with IHS Markit (formerly CERA or Cambridge Energy Research Associates and now S&P Global) advising the top electric utilities and power sector owners/operators and suppliers in

North America, Europe, and globally on energy sector transformation, investment and operations. Clients included the major global petroleum, automotive and technology companies. In addition, in his innovation and technology role, he led the application of data analytics to power sector data and information.

A CFA charter holder, Mr. Kranenburg holds a BSc and an MSc (plus PhD course requirements) in electrical engineering/ applied physics and an MBA from the University of Houston. In addition, he has completed the Leadership for Senior Executives and Preparing to Be a Corporate Director programs at the Harvard Business School. He serves on the Board of Directors for the Woodwell Climate Research Center – finance and investment committees.



Matt Ballew, Technology Strategist, Luminant

Mr. Ballew manages a multi-billion-dollar Long Term Service Agreement portfolio, leads commercial dispatch optimization initiatives, and provides strategic technical direction for business planning activities including the research, development, and integration of emerging decarbonization technologies. He currently serves as chairman of the Electric Power Research Institute's Gas Turbine Advanced Components and Technologies Program, is an advisor to EPRI's Bulk Energy Storage

Program, is an advisor to the Mechanical Engineering Advisory Council at Baylor University, and is a board member of the Emerson Ovation Users' Group.





Eric Dresselhuys, CEO, ESS Tech

Mr. Dresselhuys is the CEO of ESS Tech and joined the company in March 2021. He has over 25 years of leadership experience and is an accomplished energy, technology and market development pioneer with a demonstrated background in growing both public and private companies.

Prior to joining ESS Inc., Mr. Dresselhuys founded Silver Spring Networks, which became the leading provider of smart grid networking and data

solutions, leading to an IPO in 2013 and an eventual sale to Itron. Other experience includes a variety of leadership positions at Procter & Gamble and Smart Energy Water, where he helped build up the companies on a global scale.

As an active member of the energy industry, he currently serves as the Chairman of Enian, LTD. in London and on the board of directors of Autogrid, Inc. He is also a frequent speaker at industry events and author on issues related to the energy transition. Mr. Dresselhuys holds a B.S. in Economics from the University of Wisconsin and earned an Executive Certificate from the Sloan School at MIT.

Panel Discussion: Data Interoperability for a Smooth Transition of EV Deployment

Moderator



Chris Irwin, Program Manager for Transactive Energy, Communications, and Interoperability in Smart Grid, DOE OE

Mr. Irwin has spent over 24 years in a diverse spectrum of high technology fields from HVAC to semiconductor manufacturing, communication networks, and Smart Grid infrastructure.

At the DOE Office of Electricity, he has managed over \$1.7B in grid modernization projects. Chris leads DOE's Smart Grid standards and interoperability efforts, DOE's role in the Green Button consumer data access

initiative, and the OE Dynamic Controls program, which includes Transactive Energy.

Chris holds a B.S. in Mechanical Engineering from the University of Maryland, College Park, and an M.B.A. from the W.P. Carey School of Business at Arizona State University.

Panelists





Ivo Steklak, Chief Technology Officer, EvGo

Mr. Steklac is the Chief Technology Officer at EVgo, responsible for the design and development of EVgo's products, systems, and services. With more than three decades of experience at the intersection of technology and energy, Mr. Steklac joined EVgo in August 2018, coming from True North Venture Partners, where he served as an Operating Partner and Chief Executive Officer of AquaHydrex, Inc., a Green Hydrogen company. Prior roles include General

Manager of SunPower Corporation, Chief Customer Officer at C3 Energy, and Chief Operating Officer of Tendril Networks, Inc.

Mr. Steklac holds degrees in Electrical Engineering and Computer Science from Queen's University in Kingston, Ontario.



Nate Hill, Head of Energy Policy for North America, Amazon

Mr. Hill leads energy policy at the local, state, and federal levels in North America in support of Amazon's Climate Pledge commitment to meet the goals of the Paris Agreement 10 years early. He focuses on gaining access to cost competitive renewable energy and deploying electric vehicles and infrastructure. Prior to Amazon, he led regulatory initiatives at Puget Sound Energy, an investor-owned utility, and worked in the U.S. Senate as an energy policy advisor. Mr. Hill has a master's degree in Environmental Policy from the

London School of Economics.



Jake Navarro, Director of Clean Transportation, National Grid

Mr. Navarro is the Director of Clean Transportation at National Grid. His team creates programs for National Grid's customers in Massachusetts, New York, and Rhode Island that get more electric vehicles on the road.



Brian Martinez, Commissioner of Finance, City of Poughkeepsie

Since 2019, Dr. Martinez has served as the Commissioner of Finance and Chief Technology Officer for the City of Poughkeepsie, New York. Prior to that, he served in the Office of the Chairman, Joint Chiefs of Staff, at the Department of Defense. His professional interests include understanding the nexus between people in public organizations and the administrative practices and



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technologies they use. Dr. Martinez holds a PhD in Public Administration and Policy from Old Dominion University.



<u>Day 2</u> Panel Discussion: National Cyber-Informed Engineering Strategy Moderator



Zach Tudor, Associate Laboratory Director, Idaho National Laboratory

Mr. Tudor is the Associate Laboratory Director of Idaho National Laboratory's National and Homeland Security Science and Technology Science and Technology directorate, a major US center for national security technology development and demonstration, employing 700 scientists and engineers across \$500M in programs for the Department of Defense (DOD), Department of Homeland Security (DHS), and the Intelligence Community. At INL, he is responsible for INL's Nuclear Nonproliferation, Critical Infrastructure

Protection and Defense Systems missions. He has served as a member of (ISC)2's Application Security Advisory Board and the NRC's Nuclear Cyber Security Working Group, as well as the Vice Chair of the Institute for Information Infrastructure Protection at George Washington University. He is a Professor of Practice in the Computer Science Departments of the University of Idaho and Idaho State University, is the chair of the Board of Directors of the International Information Infrastructure Systems Security Certification Consortium (ICS)2, and a member of the Commonwealth Cyber Initiative advisory board (Virginia). A retired U.S. Navy Submarine Electronics Limited Duty Officer and Chief Data Systems Technician, Tudor holds an M.S. in Information Systems from George Mason University concentrating in cybersecurity, where he was also an adjunct professor teaching graduate courses in information security.



Frank Cilluffo, Director of McCrary Institute for Cyber & Critical Infrastructure Security, Auburn University

Mr. Cilluffo is the Director of Auburn's McCrary Institute for Cyber and Critical Infrastructure Security. He serves on the U.S. Cyberspace Solarium Commission and previously led efforts on cyber, supply chain, economic security, and counterterrorism for DHS' Homeland Security Advisory Council.

He is routinely called upon to advise senior officials in the executive branch, U.S. Armed Services, and state and local governments on an array of matters related to national and homeland security strategy and policy. He has publicly testified before Congress on dozens of occasions, serving as a subject matter expert on policies related to cyber threats, counterterrorism, security and deterrence, weapons proliferation, organized crime, intelligence and threat assessments, emergency management, and border and transportation security. He has presented at a number of bi-lateral and multi-lateral summits on cybersecurity and countering terrorism, including the U.N. Security Council.





Howard Grimes, CEO, Cybersecurity Manufacturing Innovation Institute

Dr. Howard Grimes is a noted research scientist and author with 25 years of success in directing complex university and National Laboratory research programs and entrepreneurial start-up initiatives. Currently, Dr. Grimes serves as the Chief Executive Officer for the Cybersecurity Manufacturing Innovation Institute (CyManII), a pioneering institute led by The University of Texas at San Antonio (UTSA) and funded by the U.S. Department of Energy. Dr. Grimes also serves as the Associate Vice Provost and Associate Vice President for

Institutional Initiatives at UTSA. Previously, he was Director for Innovation and Industry Partnerships (3 years) at Idaho National Laboratory's Center for Advanced Energy Studies (CAES).



Rob Lee, CEO, Dragos

Mr. Lee is a recognized pioneer in the industrial security incident response and threat intelligence community. He gained his start in security as a US 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 is also a Course Author and Instructor at SANS.

Panel Discussion: Executive Order 14017 DOE Reports to the White House on the Energy Sector Industrial Base

Moderator



Paul Stockton, EAC Member, President, Paul N. Stockton LLC

Dr. Paul N. Stockton is the President of Paul N Stockton LLC, a strategic advisory firm in Santa Fe, NM. From 2009-2013, Dr. Stockton served as Assistant Secretary of Defense for Homeland Defense and Americas' Security Affairs, where he helped lead the Department's response to Hurricane Sandy. He was responsible for Defense Critical Infrastructure Protection, Western Hemisphere security policy, domestic crisis management, continuity of

operations planning, and a range of other responsibilities. While Assistant Secretary, Dr. Stockton also served as Executive Director of the Council of Governors. After serving as Assistant Secretary, Dr. Stockton was the Managing Director of Sonecon LLC, an advisory firm in Washington, DC, from 2013-2020.

In September 2013, Secretary of Defense Chuck Hagel appointed Dr. Stockton to co-chair the Independent Review of the Washington Navy Yard Shootings, which recommended major changes to the Department's security clearance system that are now being implemented.



Dr. Stockton was appointed to the EAC in 2020 and is Chair of the Grid Resilience for National Security subcommittee of the Department of Energy's Electricity Advisory Committee. He also serves on the Homeland Security Advisory Council for the Department of Homeland Security and is Co-Chair of the Council's Cybersecurity Subcommittee. He is a Senior Fellow at the Johns Hopkins University Applied Physics Laboratory. He also serves on the Board of Directors for Analytic Services Inc. and the National Institute for Hometown Security, and on advisory boards for the Idaho National Laboratory, the Center for Cyber and Homeland Security Studies at the Auburn University, and other organizations.

Panelists



Cheri Caddy, Senior Advisor for Cybersecurity, DOE Office of Cybersecuirty, Energy Security and Emergency Response

Ms. Caddy is the Senior Advisor for Cybersecurity in the Office of Cybersecurity, Energy Security & Emergency Response (CESER) within the Department of Energy. In this role she leads strategy and execution of cybersecurity operations, technology, and critical infrastructure protection programs, implementing DOE's role as the Sector Risk Management Agency

for the Energy Sector. Ms. Caddy leads the Department's program for supply chain security and cyber vulnerability testing of digital components, CyTRICS™, efforts to ensure cybersecurity of renewable technologies under the Clean Energy Cyber Accelerator, and is the Executive Director of the Securing Energy Infrastructure Executive Task Force.

Previously, Ms. Caddy spent five years as the National Security Agency's Executive Director of Enduring Security Framework, a joint program among the Department of Defense, the Department of Homeland Security, the Intelligence Community, and industry leaders in the defense, IT, and communications sectors to collectively address technical and operational cyber vulnerabilities and risks to national security systems and critical infrastructure.

Ms. Caddy has been a non-resident Senior Cybersecurity Fellow at the McCrary Institute for Cybersecurity & Critical Infrastructure at Auburn University since 2017. Ms. Caddy holds a B.A. in International Studies from Norwich University, Military College of Vermont; an M.A. in Foreign Affairs from the University of Virginia; and an M.P.A. in Public Administration from the American University in Washington, DC.



Gina Coplon-Newfield, Chief of Staff, DOE Office of Policy

Most recently, Gina Coplon-Newfield was the founding Director of Sierra Club's Clean Transportation for All Campaign where she led the organization's advocacy for policies that accelerate the electrification of cars, trucks, and buses as well as those that defend public transit and clean car standards. Previously, she has run campaigns and programs at Physicians for Human



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Rights, the US Campaign to Ban Landmines, and a Boston-based lead poisoning prevention initiative. She previously served on the Massachusetts Zero Emission Vehicle Commission. She earned a B.A. from Tufts University and a Master's in Public Administration at Harvard University's Kennedy School of Government.



Scott Aaronson, Senior Vice President of Security and Preparedness, Edison Electric Institute

Mr. Aaronson is Vice President, Security and Preparedness for EEI. He joined EEI in 2009 in the government relations department focusing on security and technology issues, and most recently served as executive director of security and business continuity. He leads the EEI teams focused on cyber and physical security, storm response and recovery, and associated regulatory policy.

In addition to his role at EEI, Mr. Aaronson also serves as the Secretary for the Electricity Subsector Coordinating Council (ESCC). The ESCC serves as the primary liaison between senior government officials and industry leaders representing all segments of the electric power sector. This partnership is held up as a model for how critical infrastructure sectors can work with government, yielding dramatic improvements in security and preparedness for the industry and the nation.

Mr. Aaronson received a Bachelor's Degree in journalism from the University of Colorado at Boulder for his undergraduate studies, and a Master's Degree from The George Washington University in political management. He lives on Capitol Hill in Washington, DC with his wife, two daughters, a mutt, and a not-so-Great Dane.

Energy Cyber Sense Program

Cheri Caddy, Senior Advisor for Cybersecurity, DOE CESER

See biography above.

Cybersecurity Current Events

Cheri Caddy, Senior Advisor for Cybersecurity, DOE CESER

See biography above.

Paul Stockton, EAC Member, President, Paul N. Stockton LLC

See biography above.



Update and Discussion on Section 8008 Voluntary Model Pathways Development



Joe Paladino, Program Manager, DOE OE

Mr. Paladino has worked for most of his career in the advancement and commercialization of technology to address energy and environmental issues. His efforts in both private and public organizations have focused on waste management, energy efficiency, and energy infrastructure modernization. Over the past several years, he led efforts to convey the impact of the smart grid technologies advanced in projects funded by the American Recovery and Reinvestment Act of 2009. His current focus is to leverage this information to help decision-makers, including regulators, make informed infrastructure

investments given the rapid advancement in technology, particularly with regard to the function and structure of the electric distribution system.

Mr. Paladino has a B.A. in Biology from Middlebury College and an M.S. in Civil Engineering from the University of Pittsburgh. He also holds a patent for a design for a low-level radioactive waste disposal facility.



Tom Bialek, Chief Technology Officer, Toumetis

Dr. Bialek is currently serves as Chief Technology Officer for Toumetis. His present responsibilities involve applying utility transmission and distribution knowledge of equipment, operations, planning and time-series data with data science and machine learning to provide business value to clients.

He previously worked at San Diego Gas & Electric Company as Chief Engineer. His responsibilities involved technology strategy and policy for transmission and distribution issues, including equipment, operations, planning, distributed generation and development of new technologies. Other experiences with manufacturers and utilities included electric utility design, planning and operation and equipment design, development and manufacturing.

Dr. Bialek holds a PhD in Electrical Engineering from Mississippi State University, as well as a BS and MS in Electrical Engineering from the University of Manitoba, Canada.



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Darlene Phillips, Executive Director of Operations Engineering Support, PJM

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.

Ms. Phillips holds a J.D., cum laude, from Indiana University School of Law, an MBA from the University of Michigan Stephen M. Ross School of Business, and a BSE in Electrical Engineering from the University of Michigan.

