10th Anniversary

ENERGY POLICY CONFERENCE

FROM DISRUPTION TO MEGATRENDS

October 14 - 15, 2021

Online | Mtn Daylight Time

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The Policy Arm for the Center for Advanced Energy Studies

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WELCOME TO THE ENERGY POLICY CONFERENCE!

We are proud to be hosting the 10th Anniversary Energy Policy Conference. This leading event in energy policy brings together members of national laboratories, public agencies, industry, thinktanks and academic communities from around the US and globally to advance new thinking and strengthen professional relationships.

A great deal has changed since the 2019 conference. With this now all-virtual event, we are pleased to feature research and discussion, focusing on Disruption and Megatrends in Energy. Over the course of the two days, you will meet five leaders in the energy field: John Wagner (Idaho National Laboratory), Jennifer Fordham (Energy Market Strategist), William Magwood IV (Nuclear Energy Agency), Abigail Ross Hopper (Solar Energy Industry Association) and Jon Wellinghoff (Grid Policy, Inc/formerly, Federal Energy Regulatory Agency). You will also hear from contributors about energy policy implications and/or action in areas including resilience, decarbonization and work force change.

The team with the CAES Energy Policy Institute is hosting this event. The Institute is a non-partisan and evidence-based research and advising center that specializes in bridging engineering and economic understanding of energy systems with applied, social and technical analysis. As the policy body of the Center for Advanced Energy Studies consortium, we work with policymakers, industry, and communities to advance understanding of trade-offs that are inherent in energy choices. Our team and partners draw on integrative strengths in policy & regulation, science & engineering, as well as business & economics to advance planning and policy.

We hope you will join the many networking opportunities to connect with colleagues, explore expo booths, talk with poster presenters, and compete in Energy Trivia. We encourage you to engage fully with this community to advance thinking on energy.

All the best,
The Energy Policy Institute team

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The Policy Arm for the Center for Advanced Energy Studies

AGENDA AT A GLANCE

THURSDAY, OCTOBER 14, 2021

8:00 – 9:30 am Networking

9:30 – 10:30 am Welcome Address & Keynote Speakers

Kathleen Araújo, Director, CAES Energy Policy Institute and Boise State University
Jon Wellinghoff, CEO and Founder at Grid Policy, Inc
William D. Magwood IV, Director General of the Nuclear Energy Agency

10:45 am – 12 pm Research & Roundtable Sessions

- Governance of a Changing Power Grid
- Geologic Thermal Energy Storage (GeoTES)
- Solar-Green Hydrogen Opportunities and Challenges
- Prospects for Planning More Resilient Systems
- Urbanization and Global Potential

12:00 – 1:15 pm Lunch Break

1:15 – 2:30 pm General Assembly Panel - Challenges & Opportunities for Power Resilience

Branden Sudduth, VP, Reliability Planning & Performance Analysis, Western Electricity Coordinating Council
Kenneth Seiler, Vice President Planning, PJM
Mark Olsen, Manager, Reliability Assessments, North American Electric Reliability Corporation
Gregg Carrington, Chief Operating Officer, Northwest Power Pool

2:45 – 4:00 pm Research & Roundtable Sessions

- Policy Solutions to Advance Solar Deployment on Tribal Land
- Extreme Weather and Ecosystem Resilience
- Bridges to a Low Carbon Future
- Economics and Access in Energy

4:00 – 6:00 pm Open Networking

4:45 – 5:45 pm Energy Trivia—All Are Welcome

AGENDA AT A GLANCE

FRIDAY, OCTOBER 15, 2021

8:00 – 9:00 am Networking

9:00 – 10:00 am Remarks, Awards & Keynotes

Kathleen Araújo, Director, CAES Energy Policy Institute and Boise State University
Abigail Ross Hopper, President & CEO of Solar Energy Industries Association
Jennifer Fordham, Energy Market Strategist, Independent Consulting

10:15 – 11:30 pm General Assembly Panel - Electric Vehicles: Road to an Electric Future

Diane Turchetta, Transportation Specialist, USDOT-FHWA
Joe Britton, Executive Director, Zero Emission Transportation Association
Britta Gross, Rocky Mountain Institute
Nick Nigro, Atlas Public Policy

11:45 am – 1:00 pm Research & Roundtable Sessions

- The Future of Energy Skills
- Resilient Energy Architecture Transformation
- Measuring Equity in Clean Energy Investments
- Markets, Models and Decarbonization Goals
- Policy and Regulation Intricacies in US Energy Issues

1:00 – 2:15 pm Lunch Break

2:30 pm – 3:00 pm Keynote Address

John Wagner, Director, Idaho National Laboratory

3:15 pm – 4:30 pm Research & Roundtable Sessions

- Municipal Clean Energy Action and Politics
- Putting Climate-Informed Infrastructure Resilience Engineering to Work
- COVID-19 and Energy
- Renewable Energy Transition
- Diverse Approaches to Addressing Decarbonization

4:30 – 4:45 pm Conclusion and Wrap-up

KEYNOTE SPEAKERS

ABIGAIL ROSS HOPPER

President & CEO, Solar Energy Industries Association

Abigail Ross Hopper is the President and CEO of the Solar Energy Industries Association (SEIA), the national trade organization for America's solar energy industries. She oversees all of SEIA's activities, including government affairs, research, communications, and industry leadership, and is focused on creating a marketplace where solar power will constitute a significant percentage of America's energy generation.

Before joining SEIA, Abby was the Director of the Department of Interior's Bureau of Ocean Energy Management, where she led the agency that oversaw the leasing and development of all offshore energy, from oil and natural gas to offshore wind.

Abby also served formerly as the Director of the Maryland Energy Administration (MEA), beginning in 2012 as Acting Director, and then as Director starting in June 2013. She also served concurrently as Energy Advisor to Maryland Governor Martin O'Malley since 2010. In those roles, she had significant engagement with the state's electric distribution utilities on matters ranging from resiliency and reliability of the grid to multiple mergers of the state's utilities.

Abby previously spent over two years as Deputy General Counsel with the Maryland Public Service Commission. Before embarking on a career in public service, Abby spent nine years in private practice. Abby graduated Cum Laude from the University of Maryland School of Law and earned a Bachelor of Arts Degree from Dartmouth College.

JENNIFER FORDHAM

Energy Market Strategist, Independent Consultant

Jennifer Fordham is an Energy Market Strategist in independent consulting. She formerly was the senior vice president of government affairs for the Natural Gas Supply Association (NGSA). She joined NGSA in 2005. As senior vice president of government affairs, Jennifer directed the association's competitive energy market policy advocacy. She represented the association with the administration, the Federal Energy Regulatory Com-mission (FERC), the Commodity Futures Trading Commission (CFTC), U.S. Congress, media, industry and the public, serving as a spokeswoman for the association on energy market issues.

Fordham's diverse 29-year energy career provides commercial relevance that is characteristic of her work. Prior to joining NGSA, Fordham led the state and regulatory affairs team for Washington Gas Light Company (WGL), the natural gas utility serving the Washington, DC metropolitan area; held a seat on the WGL Political Action Committee Board of Directors; and was a fuels consultant for Pace Global Energy Services. Fordham's expertise is further augmented by her investor relations and financial planning experience for NiSource, Inc.'s predecessor, Columbia Energy Group. Her experience negotiating energy contracts, working with investors on energy project valuation and implementing corporate compliance standards for market behavior rules make her insights distinctive.

Jennifer specializes in creating long-term strategic partnerships that broaden policymaker support for commercially significant positions. Fordham created the first "agriculture and energy" partnership, NGSA and the National Corn Growers Association, credited with securing the end user protections in Dodd-Frank financial reform legislation. Jennifer's work established the association as an industry leader on CFTC Dodd-Frank implementation advocacy often covered by S&P Platts Gas Daily and Energy Risk magazine.

Fordham graduated cum laude from Shepherd University where she received a Bachelor of Science degree in economics and political science. She is a 2017 graduate of the Women in Technology Leadership Foundry, is a National Association of Corporate Directors Governance Fellow and recently completed the Harvard Kennedy School Executive Education class Leadership Decision Making. She is an Advocate Member of the Committee of Chief Risk Officers and is a Governance Fellow with the National Association of Corporate Directors.

KEYNOTE SPEAKERS

WILLIAM D. MAGWOOD, IV

Director-General, OECD Nuclear Energy Agency

Mr. Magwood commenced duties as Director-General of the Nuclear Energy Agency (NEA) on September 1, 2014. He has extensive experience in both the regulatory and developmental aspects of nuclear energy, including at the international level.

From 2010 to 2014, he served as one of the five Commissioners appointed by the US President and confirmed by the US Senate to the U.S. Nuclear Regulatory Commission (NRC). While a commissioner, he advocated for the importance of nuclear regulatory independence and the necessity of maintaining strong, credible and technically sound nuclear regulation in the United States and all countries that use nuclear power.

Prior to his appointment at the NRC, from 2005 to 2010 he provided independent strategic and policy advice to American and international clients on energy, environment, education, and technology policy issues. From 1998 to 2005, Mr. Magwood was Director of the U.S. Government's civilian nuclear energy program at the U.S. Department of Energy (DOE). During his tenure, he established the Idaho National Laboratory; created activities that reversed the decline of U.S. nuclear technology education; and launched important initiatives such as the Generation IV International Forum (GIF) and the U.S. "Nuclear Power 2010," which helped restart nuclear plant construction in the United States. He was also actively involved in the work of the NEA, serving as a Steering Committee Bureau member from 1999 to 2005, including a term as Chair of the Steering Committee from 2004 to 2005.

Prior to his experience at the DOE, Mr. Magwood managed electric utility research and nuclear policy programs at the Edison Electric Institute in Washington, DC, and was a scientist at Westinghouse Electric Corporation in Pittsburgh, Pennsylvania. Mr. Magwood holds Bachelor degrees in Physics and English from Carnegie Mellon University and a Master of Fine Arts from the University of Pittsburgh.

JON WELLINGHOFF

Former Chair, Federal Energy Regulatory Commission

Jon Wellinghoff is CEO and Founder of Grid Policy, Inc. which enables progress at the intersection of policy and distributed energy technologies, helping energy tech companies get to market and expand markets by addressing critical policy barriers to business success. He was formerly Chief Policy Officer at SolarCity and oversaw regulatory and legislative affairs on federal and state policy for the company. Jon was the longest serving Chairman of the Federal Energy Regulatory Commission (FERC/2009-2013), where he was known for his international expertise and thought leadership in energy policy, electric markets and the interface of disruptive energy systems with traditional utility structures. During this time, Jon worked to formulate new policies and rules to improve electric market efficiency and integrate new disruptive energy resources into wholesale energy markets.

Prior to joining SolarCity, Jon served as partner at the law firm Stoel Rives, where he provided knowledge and experience in energy law and the development of clean energy technology, consulting on energy policy with leaders in the U.S., China, Australia and Europe. While at Stoel Rives, Jon represented clients in emerging energy technology fields including energy storage, demand response, big energy data analytics and distributed generation.

Jon holds a Bachelor of Science degree in mathematics from University of Nevada, a Master of Science degree in teaching mathematics from Howard University and a Juris Doctor degree from Antioch School of Law.

KEYNOTE SPEAKERS

JOHN WAGNER

Director of Idaho National Laboratory

Dr. John C. Wagner is the laboratory director of INL's Nuclear Science & Technology (NS&T) directorate. His previous roles included director of Domestic Programs in NS&T as well as director of the Technical Integration Office for the DOE-NE Light Water Reactor Sustainability Program at INL. Wagner initially joined INL as the chief scientist at the Materials and Fuels Complex in 2016. He has more than 20 years of experience performing research, and managing and leading research and development projects, programs and organizations.

Wagner received a B.S. in nuclear engineering from the Missouri University of Science and Technology in 1992, and M.S. and Ph.D. degrees from the Pennsylvania State University in 1994 and 1997, respectively. Following graduate school, Wagner joined Holtec International as a principal engineer, performing criticality safety analyses and licensing activities for spent fuel storage pools and storage and transportation casks. Wagner joined the Oak Ridge National Laboratory (ORNL) as an R&D staff member in 1999, performing research in the areas of hybrid (Monte Carlo/deterministic) radiation transport methods, burnup credit criticality safety, and spent nuclear fuel characterization and safety.

While at ORNL, Wagner held various technical leadership positions, including technical lead for postclosure criticality in support of DOE OCRWM's Lead Laboratory for Repository Systems, Radiation Transport Methods Deputy Focus Area lead for the Consortium for Advanced Simulation of Light Water Reactors (CASL), and national technical director of the DOE Office of Nuclear Energy's Nuclear Fuels Storage and Transportation Planning Project. Wagner also held various management positions, including group leader for the Criticality and Shielding Methods and Applications, Radiation Transport, and Used Fuel Systems groups.

In 2014, Wagner became director of the Reactor and Nuclear Systems Division (RNSD), with responsibility for management direction and leadership to focus and integrate the seven RNSD R&D groups (Advanced Reactor Systems and Safety, Nuclear Data and Criticality Safety, Nuclear Security Modeling, Radiation Transport, Reactor Physics, Thermal Hydraulics and Irradiation Engineering, and Used Fuel Systems) and the Radiation Safety Information Computational Center.

Wagner is a Fellow of the American Nuclear Society and recipient of the 2013 E.O. Lawrence Award. He has authored or co-authored more than 170 refereed journal and conference articles, technical reports, and conference summaries. He was the original developer of the A3MCNP and ADVANTG codes and led the development of the CADIS and Forward-Weighted CADIS hybrid transport methods.

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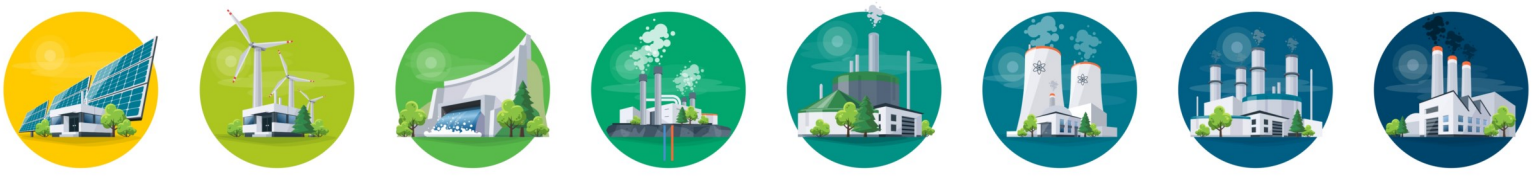

EPC 10 AGENDA

Thursday October 14, 2021			
8:00 - 9:30 am	**Meet and network with participants**		
9:30 - 10:30 am	**Welcome Address & Keynote Speakers** Opening remarks by Kathleen Araújo, CAES Energy Policy Institute and Boise State University Keynote Address by Jon Wellinghoff, CEO and Founder of Grid Policy, formerly Federal Energy Regulatory Commission Keynote Address by William Magwood IV, Nuclear Energy Agency, OECD		
10:45 am - 12:00 pm	**Research & Roundtable Sessions**		
	Prospects for Planning More Resilient Systems **Moderator: David Shropshire**, Idaho National Laboratory **Leah Kunkel**, Arizona State University; Why do cities adopt 100% renewable energy policies? Exploring state and local factors **Juan Pablo Carvallo,** Lawrence Berkeley National Laboratory; Implications of a regional resource adequacy program for utility integrated resource planning **Sydney Forrester**, Lawrence Berkeley National Lab; Opportunities and barriers for capturing distributed battery system value via retail utility rates and programs	**Solar-Green Hydrogen Opportunities and Challenges** **Moderator: Hanna Breetz**, Arizona State University **Robert Lindner**, Kyushu University; Towards a global green hydrogen economy? Exploring opportunities and barriers for developing countries. **James Hyungkwan Kim**, Lawrence Berkeley National Laboratory; Enhancing the Value of Solar Electricity as Solar and Storage Penetrations Increase? **Sharlissa Moore**, Michigan State University; Developing Solar Power on Agricultural Lands: Pollinator Habitat and Other Multi-Use Developments **Iftikhar Shahid**, National University of Sciences and Technology, Pakistan; Rooftop solar adoption among populations and markets outside the US and Europe—a case from Pakistan	**Urbanization and Global Potential** **Moderator: Fouad Khan**, Nature Energy **Eric O'Shaughnessy**, Lawrence Berkeley National Laboratory; Income and demographic trends among U.S. residential rooftop solar adopters **Galen Barbose**, Lawrence Berkeley National Laboratory; The importance of well-designed net metering reform for distributed storage adoption and dispatch **Muez Ali**, UCL; The effect of urbanisation on energy consumption in Sub-Saharan Africa **Julia Le Maitre**, Cork University Business School; Will community benefit funds support the social acceptance of onshore wind energy? Results from a national survey.
	Roundtable*: Governance of a Changing Power Grid **Moderator: Kate Konschnik**, Duke University **Seth Blumsack**, Pennsylvania State University **Douglas Howe**, Western Grid Group **Stephanie Lenhart**, Boise State University **Mark James**, Vermont Law School		**Roundtable: Geologic Thermal Energy Storage (GeoTES): A Grid-Scale Energy Storage Solution** **Moderator: Robert W. Smith**, University of Idaho **Travis L. McLing**, Idaho National Laboratory **Patrick Dobson**, Lawrence Berkeley National Laboratory **Hari Neupane**, Idaho National Laboratory

*Roundtables are discussion-based sessions

EPC 10 AGENDA

12:00 – 1:15 pm	**Lunch break, live poster session and opportunity to explore our sponsors' expo booths!**		
1:15 – 2:30 pm	**General Assembly Panel - Challenges & Opportunities for Power Resilience** **Speakers**: Greg Carrington, NW Power Pool; Mark Olson, North American Electric Reliability Corporation; Branden Sudduth, Western Electricity Coordination Council; Kenneth Seiler, PJM Interconnection **Moderators**: Stephanie Lenhart, CAES Energy Policy Institute and Boise State University, and Seth Blumsack, Pennsylvania State University		
2:45 – 4:00 pm	**Research & Roundtable Sessions**		
	Extreme Weather and Ecosystem Resilience **Moderator: Dakota Roberson**, University of Idaho **Lionel R Orama-Exclusa**, University of Puerto Rico-Mayaguez; Adaptive Microgrid Protection to Enhance Disaster Recovery **James Adams,** University of California-Irvine; Emergency Preparedness for Energy Service Disruptions: Where Does Philadelphia Stand? **Tam Kemabonta**, Arizona State University; Resilience analysis and planning of electric power systems: Lessons Learned from the Texas electricity crises caused by the 2021 Winter storm Uri.	**Roundtable: Policy Solutions to Accelerate Deployment of Solar Project on Tribal Land** **Moderator: Karin Wadsack**, National Renewable Energy Laboratory **Leonard Gold**, Gila River Indian Community Utility Authority **Kevin Blaser,** Migizi Economic Development Company **Sara Drescher**, Forest County Potawatomi Community	**Economics and Access in Energy** **Moderator: JP Carvallo**, Lawrence Berkeley National Laboratory **Christina Simeone**, Colorado School of Mines & NREL; Pass-through in Residential Retail Electricity Competition: Evidence from Pennsylvania **Andrew Satchwell**, Lawrence Berkeley National Laboratory; Disaggregating Future Retail Electricity Rates **Jennifer Wilson**, Georgia Institute of Technology; Understanding the Impact of State-Level Financial Incentives on the Deployment of Renewable Energy at Colleges & Universities

CHALLENGES & OPPORTUNITES FOR POWER RESILIENCE

Panelists

Gregg Carrington, Northwest Power Pool

Mark Olson, North American Electric Reliability Corporation (NERC)

Branden Sudduth, Western Electricity Coordination Council

Kenneth Seiler, PJM Interconnection

EPC 10 AGENDA

2:45 – 4:00 pm	Research & Roundtable Sessions
	Bridges to a Low Carbon Future **Moderator: Sharlissa Moore**, Michigan State University **Robert Cudd**, UCLA California Center for Sustainable Communities; Gas Bans and Residential Building Electrification: Limitations of Traditional Policy Instruments for Accomplishing a Socio-Technical Energy Transition **William Liss**, Gas Technology Institute; Assessment of Residential Natural Gas and Electric Decarbonization Pathways **Joel Gordon,** Cranfield University; Conceptualising the social acceptance of domestic hydrogen: A critical review of theoretical and empirical evidence **Michael Colvin**, Environmental Defense Fund; Aligning Gas Regulation and Climate Goals: A Road Map for State Regulators
4:00 – 6:00 pm	Open Networking
4:45 – 6:00 pm	**Energy Trivia** Hosted by Andy Giacommazzi, Boise State University, School of Public Service All are welcome. It's fine if you haven't registered for this.

ELECTRIC VEHICLES: ROAD TO AN ELECTRIC FUTURE

Panelists

Diane Turchetta, Transportation Specialist, USDOT-FHWA

Joe Britton, Executive Director, Zero Emission Transportation Association

Britta Gross, Managing Director: Carbon Free Mobility Global Program, Rocky Mountain Institute

Nick Nigro, Founder, Atlas Public Policy

EPC 10 AGENDA

<table>
<tr><th colspan="4">Friday October 15, 2021</th></tr>
<tr><td>8:00 - 9:00 am</td><td colspan="3">Meet and network with participants</td></tr>
<tr><td>9:00 - 10:00 am</td><td colspan="3">Remarks, Awards & Keynotes
Remarks and Poster/Energy Trivia Awards given by Kathleen Araújo,
CAES Energy Policy Institute and Boise State University
Keynote Address by Abigail Ross Hopper, Solar Energy Industry Association
Keynote Address by Jennifer Fordham, Energy Market Strategist, Independent Consulting</td></tr>
<tr><td>10:15 – 11:30 am</td><td colspan="3">General Assembly Panel - Electric Vehicles: Road to an Electric Future
Speakers: Diane Turchetta, U.S. Dept of Transportation; Joe Britton, Zero Emission Transportation Association; Britta Gross, Rocky Mountain Institute; Nick Nigro, Atlas Public Policy
Moderators: David Gattie, University of Georgia, and John Gardner, Boise State University, emeritus</td></tr>
<tr><td>11:45 am - 1:00 pm</td><td colspan="3">Research & Roundtable Sessions</td></tr>
<tr><td></td><td><u>Resilient Energy Architecture Transformation</u>

Moderator/Presenter: Paul Roege, Advanced Nuclear and Production Experts Group; Evolving Character of our Energy System

Charles Forsberg, Massachusetts Institute of Technology; Addressing the Low-Carbon Million-Gigawatt-Hour Storage Challenge

Sarah Davis, S. R. D. Consulting; Planning for Resilient Energy Locally: Place-Based Solutions and How to Engage Communities Around Emerging Energy Solutions</td><td rowspan="2"><u>Markets, Models and Decarbonization Goals</u>

Moderator: Wesley Cole, National Renewable Energy Laboratory; Pathways for Rapid Power Sector Decarbonization

James Hyungkwan Kim, Lawrence Berkeley National Laboratory; Rethinking the Role of Financial Transmission Rights in Wind-Rich Electricity Markets in the Central U.S.

Timothy Fitzgerald, Texas Tech University; Retire, repair, or repower? Wind investments in a maturing industry

Cody Warner, Lawrence Berkeley National Laboratory; Empirical Benefits of Large-Scale Solar-Storage Hybrid Installations: System Impacts, Reliability, and Market Value</td><td><u>Policy and Regulation Intricacies in US Energy Issues</u>

Moderator: Carol Battershell, C3E, Formerly BP

Craig Jones, Oglethorpe Power; Weaponizing the EPA: Wicked Problems and Presidential Control

Dakota Roberson, University of Idaho; Risk Assessment for FERC 2222 Aggregators in Power System Operations

David Gattie, University of Georgia; Implications of Energy and Climate Policy on the US Industrial Base

Janetta McKenzie, University of Waterloo; Cheap, Local, Ethical: The characterization of energy security in the regulation of oil pipelines</td></tr>
<tr><td></td><td><u>Roundtable: The Future of Energy Skills</u>

Moderator: Matt Evans, Julius Education

Tom Reddoch, Electric Power Research Institute (EPRI)

Jennifer Szaro, Association of Energy Services Professionals (AESP)

Don Von Dollen, EPRI

Daniel Goldsmith, Julius Education</td><td><u>Roundtable: Measuring Equity in Clean Energy Investments: The Case for a Universal Equity Measurement Framework</u>

Moderator: Justin Schott, University of Michigan

Jamal Lewis, Green & Healthy Homes Institute (GHHI)

Marti Frank, Efficiency for Everyone

Michael Colgrove, Energy Trust of Oregon</td></tr>
</table>

EPC 10 AGENDA

1:00 – 2:15 pm	**Lunch break, posters, and opportunity to explore our sponsors' expo booths!**		
2:30 – 3:00 pm	**Keynote Address by John Wagner, Idaho National Laboratory**		
3:15 – 4:30 pm	**Research & Roundtable Sessions**		
	COVID-19 and Energy **Moderator: Brittany Brand,** Hazard and Climate Resilience Institute/Boise State University **Anna Kelly**, Power TakeOff; Measuring Persistence of Energy Savings After COVID-19 **Gabriel Pacyniak**, University of New Mexico School of Law; Lessons for an Equitable Clean Energy Transition from the COVID -19 Disconnection Crisis: A Legal Survey of State Policy Options **Jack Gregory**, University of California, Davis; Covid restrictions, federal assistance and small businesses: What can we learn from electricity data?	**Diverse Approaches to Addressing Decarbonization** **Moderator: Robert Borrelli,** University of Idaho **Nathan Parker**, Arizona State University; Who saves money buying electric vehicles and who faces high burdens in a gasoline vehicle sales ban? **Jenny Frank**, The State University of New York College of Environmental Science and Forestry; Evaluating the financial and cumulative greenhouse gas emission impacts of diverse carbon abatement pathways for the Northeastern United States. **Juan Pablo Carvallo**, Lawrence Berkeley National Laboratory; A framework to measure the technical, economic, and rate impacts of distributed solar, electric vehicles, and storage **Shardul Tiwari**, Michigan Technological University; Examining Policies to Inform A Legal Framework for Energy Storage Technologies in the U.S: A Case of Pumped Underground Hydro Storage	**Renewable Energy Transition** **Moderator: Kipp Coddington,** University of Wyoming **Chen-Hao Tsai**, Midcontinent Independent System Operator; Estimating Transmission Capital Costs and Their Impact to Siting Utility-Scale Wind and Solar Projects in the U.S. Midcontinent Electric Market: A Practical Case Study **Liza Reed**, Niskanen Center; How Are We Going to Build All That Clean Energy Infrastructure? Considering Private Enterprise, Public Initiative, and Hybrid Approaches for the Case of Electricity Transmission **Jairo Ramirez Torres**, Arizona State University; Assessing Employment Vulnerability in United States' Counties to Renewable Energy Transitions
	Roundtable: Municipal Clean Energy Action and Politics **Moderator: Sharlissa Moore**, Michigan State University **Missy Stults**, City of Ann Arbor **Matthew Popkin**, RMI **Kevin Daehnke**, Center for Strategic Policy Innovation **Van Vincent**, VLV Development **Tim Werner**, City of Traverse City, Michigan		**Roundtable: Putting Climate-informed Infrastructure Resilience Engineering to work at DOE and DHS** **Moderator: Andy Bochman**, Idaho National Laboratory **Gavin Hawkley**, Idaho National Laboratory **Carlo Melbihess**, Idaho National Laboratory **Mikhail Chester**, Arizona State University
4:30 – 4:45 pm	**Conclusion and Conference Wrap-Up** Kathleen Araújo, CAES Energy Policy Institute and Boise State University		


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SPEAKER BIOS

James Adams, University of California - Irvine
James Adams is a PhD candidate in the University of California–Irvine's department of anthropology. His research examines the complex of socionatural systems, temporalities, and scales of activity that condition contemporary energy challenges and opportunities. The focus of his dissertation research is energy transition in Austin, Texas.

Muez Ali, University College London (UCL), United Kingdom
Muez Ali is a doctoral researcher at the UCL Energy Institute and a research associate at the Ministry of Finance and Economic Planning in Sudan. Muez also collaborates on a research project on social protection in Sudan at London School of Economics.

Kathleen Araújo, CAES Energy Policy Institute/Boise State University
Dr. Kathleen Araújo is the Director of the CAES Energy Policy Institute, and Associate Professor of Sustainable Energy Systems, Innovation & Policy at Boise State. She is also the Book Series Editor for *Routledge's Studies in Energy Transitions,* and Co-Chair for the Sustainability Governance Council. She specializes in policy and decision-making associated with energy system change and resilience. Her book, *Low Carbon Energy Transitions: Turning Points in National Policy and Innovation* (Oxford University Press), examines the history of decarbonization in countries following the 1973 oil crisis. Dr. Araujo's current work evaluates regional revitalization strategies in fossil fuel-based economies that are diversifying, repurposing in energy industry clusters, nuclear regulation, and resilience of critical energy infrastructure, such as with wildfires-extreme weather events. Dr. Araújo consults for industry and inter-governmental organizations. She earned her PhD at MIT, and completed post-doctoral research at the Harvard Kennedy School of Government.

Trevor Atkinson, Idaho National Laboratory
Trevor A. Atkinson is a research subsurface scientist at Idaho National Laboratory, performing research and development design and modeling to evaluate geological properties associated with the movement, heat transfer, water transport, and solid mechanics of geological systems. His work supports field and laboratory activities within the Subsurface Energy and Water Systems group, including running hydrothermal water-rock interaction experiments to understand geothermal and heat storage potential. Prior to joining the INL he was an environmental scientist for the Idaho Department of Environmental Quality, conducting groundwater sampling with government officials and subcontractors for the department's INL Oversight Program.

Galen Barbose, Lawrence Berkeley National Laboratory
Galen Barbose is a Research Scientist in the Electricity Markets and Policy Group at Lawrence Berkeley National Laboratory. Galen has worked at the lab for 20 years, conducting research on issues in the electricity industry surrounding renewable energy, energy efficiency, and electric system planning. Galen is one of the principal investigators leading the group's solar energy-related research activities, with a focus on PV system pricing dynamics, adoption trends, and utility rates and regulatory policy.

Carol Battershell, C3E
Carol Battershell served ten years (2008-2018) in the U.S. Department of Energy. She led multi-billion dollar technical programs in both the Bush and Obama Administrations; ran the Energy Efficiency and Renewable Energy field operations office, which at its peak was responsible for approximately $7 billion of grants, research and construction; was a key contributor on two multi-Agency energy policy reviews; and served as Acting Director of the Policy Office during the Trump Administration transition. Carol also worked for 25 years (1983-2008) in the energy industry for BP and Standard Oil holding roles in operations management, strategy development, finance, and policy development, and spent ten years living and working in Europe.

Hitesh Bindra, Kansas State University
Dr. Hitesh Bindra, is the Steve Hsu Keystone Faculty Research Scholar and Associate Professor at Kansas State University. He has several years of experience as a nuclear power plant engineer and thermal analysis engineer. He has led projects involving fluid mechanics and thermal transport problems related to water-cooled or advanced nuclear reactors. He has invented multiple energy storage technologies for grid scale integration.

Kevin Blaser, Migizi Economic Development Company
Kevin Blaser is Business Growth/Development & Energy Specialist for the Migizi Economic Development Company of the Saginaw Chippewa Indian Tribe of Michigan. He is responsible for all aspects of energy development for the Tribe, and manages the electricity needs for Tribal operations and the non-Tribal commercial and industrial tenants located within the Tribe's trust lands. He was instrumental in creating Tribal Ordinance 35, establishing a Tribal Electric Authority. Migizi's primary driver in economic development strategy is the ability to source low-cost wholesale energy. He previously co-founded a consulting firm specializing in business formation, strategy, capital sourcing, and commercialization of intellectual property.

SPEAKER BIOS

Seth Blumsack, Pennsylvania State University
Seth Blumsack is Professor of Energy Policy and Economics and International Affairs, and Associate Department Head in the John and Willie Leone Family Department of Energy and Mineral Engineering at The Pennsylvania State University. At Penn State he also directs the Center for Energy Law and Policy; serves as a faculty member in the Operations Research program; and is Co-Director of the Penn State Energy and Environmental Economics and Policy Initiative. He also holds a position on the External Faculty of the Santa Fe Institute and is an Adjunct Research Professor with the Carnegie Mellon Electricity Industry Center. He earned a B.A. in Mathematics and Economics from Reed College in 1998, an M.S. in Economics from Carnegie Mellon in 2003, and a Ph.D. in Engineering and Public Policy from Carnegie Mellon in 2006.

Andy Bochman, Idaho National Laboratory
Andy Bochman provides strategic guidance on topics at the intersection of grid security and infrastructure resilience to senior U.S. and international government and industry leaders. A Non-Resident Senior Fellow at the Atlantic Council's Global Energy Center, in early 2021 he published the book: *Countering Cyber Sabotage: Introducing Consequence-based Cyber-Informed Engineering.* Andy began his career as a communications officer in the US Air Force, and prior to joining INL was the Energy Security Lead at IBM. Mr. Bochman received a BS degree from the U.S. Air Force Academy and an MA from Harvard University.

Robert Borrelli, University of Idaho
Professor R. A. Borrelli (Ph.D., UC-Berkeley, Nuclear Engineering) is an Associate Professor with tenure in the Department of Nuclear Engineering and Industrial Management at the University of Idaho, Idaho Falls Center for Higher Education. He has expertise with the back-end of the fuel cycle through dissertation and postdoctoral research. He also has expertise in the front end of the fuel cycle with current research entailing computational modeling of the fuel cycle with safeguards-by-design and risk assessment. He is a proud affiliate of the Boise State University Energy Policy Institute. He was an NRC-licensed senior reactor operator at the Leslie C. Wilbur Nuclear Reactor Facility, Worcester Polytechnic Institute.

Brittany Brand, Boise State University
Brittany Brand, Ph.D. is an Associate Professor in Geosciences and Director of the Hazard and Climate Resilience Institute (HCRI). She works to bridge the gap between science and society through outreach, education, and research. Her research in natural hazard communication strategies and preparedness behavior explores the influence of cultural variables, perceptions, and adequacy of hazard information on household emergency preparedness. Additional research interests include eruption dynamics, sediment transport in volcanic flows and volcanic hazard assessment. The foundation of Brand's research is field-based observation and measurements, which are used for development and validation of experimental and numerical models.

SPEAKER BIOS

Hanna Breetz, Arizona State University
Hanna Breetz is an assistant professor in the School of Sustainability at Arizona State University, where she directs the interdisciplinary PhD program in Sustainable Energy. Her research focuses on the political dynamics of energy policymaking, including in biofuels, synthetic fuels, electric vehicles, and renewable electricity. Prior to ASU, she completed her PhD in political science at MIT and a post-doctoral fellowship in public policy at University of California, Berkeley.

Joe Britton, Zero Emission Transportation Association (ZETA)
Joe Britton is the Executive Director of the Zero Emission Transportation Association. ZETA was launched alongside 35 member companies in November 2020. Prior to working with ZETA, Joe spent fifteen years in the U.S. Senate, serving as Chief of Staff for U.S. Senator Martin Heinrich (D-NM), as Deputy Chief of Staff and Legislative Director for Senator Mark Udall (D-CO), and with Senator Ben Nelson (D-NE) serving as a Legislative Assistant. Joe also served as a Senior Advisor to USDA Secretary Tom Vilsack, helping to oversee the Natural Resources Conservation Service, Farm Service Agency, and the Forest Service. He holds Bachelor of Arts degrees in Economics and American Government from the University of Virginia, and a Master of Arts in Government and a Master of Business Administration from Johns Hopkins University.

Gregg Carrington, Northwest Power Pool
Gregg Carrington has over 37 years experience in the electric utility industry. Gregg is currently the Chief Operating Officer for the Northwest Power Pool. The Northwest Power Pool Corporation, the non-profit that helps coordinate electric grid operations for the Northwestern United States and Western Canada. As COO, Gregg supports regional program development activities, including the Northwest Power Pool's development of a regional Resource Adequacy program, as well as day-to-day functions of the NWPP, including system operations and the NWPP's implementation of contingency reserve and western frequency reserve sharing programs. Formerly, Gregg was the Managing Director of Energy Resources at Chelan Public Utility District. Highlights from his career include directing energy planning and trading, energy conservation, regulatory and government affairs, environmental resources, engineering, and licensing and compliance. Gregg holds a bachelor and masters degree in Engineering from Clarkson University.

Juan Pablo Carvallo, Lawrence Berkeley National Laboratory
Mr. Carvallo is a Principal Scientific Engineering Associate in the Electricity Markets and Policy department at Lawrence Berkeley National Laboratory. His research areas at the lab focus on long-term power system planning modeling, modeling and impact of distributed resources, and resilience and reliability of the power system. Mr. Carvallo holds Ph.D. and M.S. degrees in Energy and Resources from the University of California, Berkeley, as well as P.E. and B.S. degrees in Electronics Engineering from Universidad Técnica Federico Santa Maria, Chile.

Mikhail Chester, Arizona State University
Dr. Chester is the Director of the Metis Center for Infrastructure and Sustainable Engineering at Arizona State University where he runs a research program focused on preparing infrastructure and their institutions for the challenges of the coming century. His work spans climate adaptation, disruptive technologies, innovative financing, cybersecurity, and modernization of infrastructure management. He is broadly interested in how we need to change infrastructure governance, design, and education for the Anthropocene, an era marked by acceleration and uncertainty. He has recently led several large networks to advance infrastructure in the face of unpredictable and increasingly complex environments including the NSF Urban Resilience to Extremes Sustainability Research Network and the NSF Resilience Convergence project. Dr. Chester founded ASU's Metis Center as well as the Infrastructure Misfits network to build transdisciplinary efforts to modernize infrastructure for the Anthropocene. In 2017 he was awarded the American Society of Civil Engineer's early career researcher Huber prize. He has recently published two books: The Rightful Place of Science: Infrastructure in the Anthropocene, and Urban Infrastructure: Reflections for 2100, both available on Amazon.

Kipp Coddington, University of Wyoming
Kipp Coddington is the Director for the Center for Energy Regulation & Policy Analysis, with the University of Wyoming. A chemical engineer and lawyer, Mr. Coddington is a low-carbon technology and climate policy expert with commercial project and academic research leadership experience. He is an international expert in Carbon Capture, Utilization and Storage (CCUS), based at the University of Wyoming's School of Energy Resources.

Wesley Cole, National Renewable Energy Laboratory
Wesley Cole is a senior energy modeler and analyst at the National Renewable Energy Laboratory (NREL). His work is centered around improving understanding of how the U.S. power system might evolve. He focuses on renewable energy integration, the role of energy storage, and the impacts of high renewable energy futures. He earned his Ph.D. at the University of Texas at Austin and his B.S. at Brigham Young University, both in chemical engineering.

Michael Colgrove, Energy Trust of Oregon
Michael Colgrove is Executive Director of Energy Trust of Oregon, a nonprofit dedicated to helping Oregonians save energy and generate renewable power. Michael joined Energy Trust after 15 years with the NY Energy Research and Development Authority (NYSERDA) where he directed the NYC office and Multifamily Programs. Prior to NYSERDA, Michael spent nearly six years working with low-income multifamily programs, promoting electricity reduction measures, developing environmental education programs for inner-city youth and providing building energy assessments. He holds a Masters in Energy Management from NY Institute of Technology's and a B.S. in Environmental Science from University of Alaska Fairbanks.

Michael Colvin, Environmental Defense Fund
Michael Colvin is the Director of Legislative and Regulatory Affairs, California Energy Program at Environmental Defense Fund. Based out of EDF's San Francisco office, Michael focuses on building decarbonization, gas utility business models, wholesale electricity markets and transportation electrification matters. Across each of these issues, Michael's focuses on minimizing investment risk and aligning utility incentives with affordable, clean and safe energy services. Prior to joining EDF, Michael spent 10 years at the California Public Utilities Commission working on various energy and utility safety matters. Michael was energy advisor to former Commissioners Mark J. Ferron and Catherine J.K. Sandoval. Michael holds a Masters in Public Policy and a Bachelors of Science in Environmental Economics, both from the University of California, Berkeley.

Robert Cudd, UCLA California Center for Sustainable Communities
Robert Cudd is a research analyst whose work focuses on energy policy, urban planning, and the de-carbonization of thermal energy. His previous projects include a study of how partisan control of state and local governments influences sea level rise adaptation efforts, and measuring the extent to which climate change has reversed the progress made by vehicle use and emissions policy in Mexico City. Robert is currently conducting an ethnographic study of a state-funded technical demonstration project to install distributed renewable energy systems in a historically disadvantaged community in the San Gabriel Valley. He holds a bachelor's degree in Molecular Biology from Pitzer College and a Masters of Public Policy from the University of Southern California Price School of Public Affairs.

Kevin Daehnke, Center for Strategic Policy Innovation
Kevin Daehnke is Founder and President of the Center for Strategic Policy Innovation. He is also an environmental lawyer, first at large law firms in the Los Angeles area, and then for more than 25 years at Daehnke Cruz Law Group, a law firm he founded. In 2018, Mr. Daehnke founded the Center for Strategic Policy Innovation and created the Renewable Energy/ Smart Grid Buildout Initiative. This new Initiative has resulted in the creation of the Clean Growth Incubator, a collaborative nationwide effort designed to kick-start significant economic development by helping to infuse capital for renewable energy and smart grid projects into mid-size cities and impacted communities across America.

SPEAKER BIOS

Sarah Davis, S. R. D. Consulting
Sarah R. Davis is the CEO of S. R. D. Consulting, a land use planning firm committed to developing sustainable energy infrastructure. Previously, Sarah served as Tesla's Market Lead of EV Infrastructure- deploying 500+ chargers nationwide and developed over 250MW of solar PV with Juwi Solar. Holding a Master of Urban and Regional Planning and a bachelor's in Public and Urban Affairs, from Virginia Tech, Sarah serves as an advisor to the DOE-funded Solar@Scale initiative, co-chairs the Micromobility Subgroup of the Colorado EV Coalition, and is a member of the American Planning Association and American Institute of Certified Planners (AICP).

Patrick Dobson, Lawrence Berkeley National Laboratory
Patrick Dobson, Ph.D. is a geological staff scientist and the lead for the Geothermal Systems program at LBNL, and has more than 30 years of experience studying geothermal systems. He received his MS and PhD in geology from Stanford University, followed by postdoctoral stints at Caltech and UC Santa Barbara. He worked for Unocal for ten years in their research laboratory and as a geologist in their geothermal division, exploring for resources in the US, Indonesia, Central America, and Chile. Dr. Dobson currently works on a variety of geologic and geochemical research projects associated with geothermal energy and radioactive waste disposal.

Christine Doughty, Lawrence Berkeley National Laboratory
Christine Doughty, Ph.D. is a Staff Scientist in the Energy Geosciences Division at Lawrence Berkeley National Laboratory. She received a Ph.D. (1995) in hydrogeology from the Department of Material Science and Mineral Engineering at the University of California, Berkeley. Her current research focuses on mathematical modeling, using numerical and analytical methods, of multi-component, multi-phase fluid flow and heat transport in geologic media, from core scale to basin scale. Applications include the geologic storage of carbon dioxide (GCS) and nuclear waste, groundwater and vadose-zone contaminant remediation, optimal utilization of geothermal and petroleum reservoirs, and study of watershed and groundwater-basin hydrologic cycles.

Sara Drescher, Forest County Potawatomi Community
Sara Drescher is an attorney for the Forest County Potawatomi Community, and also serves as the interim General Manager of the Community's biomass power plant in Milwaukee. Prior to joining the Community, she was an attorney at Gonzalez Saggio & Harlan LLP and at Godfrey & Khan, S.C. Sara has been instrumental in the Community's development of 2MW of solar photovoltaic projects distributed across several Tribal facilities.

Matt Evans, Julius Education
Matt Evans is the Managing Principal at Julius Education, where he is responsible for strategy and client success. Prior to joining Julius Education, Matt was Senior Vice President of Pearson Online Learning Services where he was responsible for delivering on the strategic goals of 40 university partners across 250 online degree programs, serving 80,000 adult learners annually. In addition, he was a member of the Executive Committee, responsible for allocating $1 billion of investment into Pearson partners. Earlier in his career, Matt served as head of national expansion at New Leaders, a non-profit that recruits & trains principals for public schools across the US. Matt is a graduate of Amherst College and Harvard.

Timothy Fitzgerald, Texas Tech University
Timothy Fitzgerald is an Associate Professor of Business Economics in the Rawls College of Business at Texas Tech University. A senior economist, his areas of expertise include energy and the environment.

Marti Frank, Efficiency for Everyone
Marti Frank is a Principal Consultant with Efficiency for Everyone, a woman-owned clean energy consultancy, and Director of the Shift Consortium, a collaboration of seven electric utilities dedicated to increasing equity in the appliance market. Marti has been working in clean energy for 18 years and focuses on energy equity research, policy, and program design.

Sydney P. Forrester, Lawrence Berkeley National Lab
Sydney P. Forrester is a Scientific Engineering Associate working in the Electricity Markets and Policy Department at Berkeley Lab. Sydney broadly focuses on distributed energy resources, energy affordability and equity, and new utility business models. More specifically, her work includes studying both the quantitative and policy-driven aspects of low income PV solar adoption as well as the impacts of distributed energy resources on the grid. She currently works with Shalanda Baker, DOE Deputy Director of Energy Justice, on Justice 40.

Charles Forsberg, Massachusetts Institute of Technology
Dr. Charles Forsberg is a principal research scientist at MIT in the Department of Nuclear Science and Engineering. Before joining MIT, he was a corporate fellow at Oak Ridge National Laboratory. His current research interests include (1) Fluoride-salt-cooled High-temperature Reactors coupled to gas-turbine power cycles with peaking capabilities, (2) 100-GWh crushed-rock heat storage systems and (3) Firebrick Resistance Energy Storage (FIRES) to convert electricity to stored heat in firebrick above 1400 C. He is a fellow of the American Nuclear Society and American Association for the Advancement of Science.

SPEAKER BIOS

Jenny Frank, The State University of New York, College of Environmental Science and Forestry
Jenny Frank is a Sustainable Energy Ph.D. Candidate at the State University of New York, College of Environmental Science and Forestry – SUNY ESF (Syracuse, New York). Jenny's research quantifies both the technical and financial impacts of diverse renewable energy pathways using techno-economic analysis methodology. Her research incorporates the life cycle greenhouse gas emission impacts of different energy technologies and feedstocks.

John Gardner, Ph.D., P.E.
Dr. Gardner recently retired as professor emeritus of mechanical and biomedical engineering at Boise State University. His research in the applications of control system theory spans a broad range of fields from robotics to smart grids. He has published more than 60 peer-reviewed research publications, 2 textbooks, and is co-inventor of 3 US Patents. John serves on the Engineering Accreditation Commission of ABET and is a member of the Committee on Engineering Accreditation for the American Society of Mechanical Engineers. He is a registered professional engineer in the state of Idaho and a Fellow of the American Society of Mechanical Engineers.

David Gattie, University of Georgia
David Gattie is an Associate Professor of Engineering in the University of Georgia's College of Engineering, and a Senior Fellow in the University of Georgia's (UGA) Center for International Trade and Security, and School of Public & International Affairs. His research is in the area of energy policy and integrated energy resource planning for the power sector with a focus on the national security implications of U.S. nuclear power. He teaches graduate and undergraduate courses in energy systems and energy security, and has provided testimony before the U.S. House Energy and Commerce Committee on energy, climate and nuclear power policy.

Leonard Gold, Gila River Indian Community Utility Authority
Leonard Gold, is the General Manager of the Gila River Indian Community Utility Authority (GRICUA). Mr. Gold has over 49 years of utility and consultant experience in utility operations and maintenance, power supply, service agreements, scheduling and dispatching, metering, reserve requirements, energy banking, future power requirements and rate structures. Mr. Gold authored the handbook, *Establishing A Tribal Utility Authority* (2012). Mr. Gold is also the President of the Arizona Tribal Energy Association and the Southwest Public Power Agency. Mr. Gold holds a B.S. Electrical Engineering, Northeastern University and a M.S. Engineering Science, Rensselaer Polytechnic Institute.

Daniel Goldsmith, Julius Education
Daniel Goldsmith is the Managing Principal at Julius Education, where he is responsible for company strategy and client success. Prior to joining Julius Education, Daniel was the Senior Vice President of Analytics & Innovation at Pearson, a global education company. In that role, Daniel built and ran the AI and product innovation practice across Pearson's $2.5 billion North America division. Daniel also worked at Eduventures, a leading education consultancy firm, and was an Energy Cybersecurity Researcher at MIT. Daniel started his career working on the Senate Armed Services Committee. Daniel is a graduate of the University of Virginia and Brandeis University.

Joel Gordon, Cranfield University, United Kingdom
Joel Gordon recently graduated with Distinction from the 'MESPOM' Program (MSc in Environmental Sciences, Policy and Management) where he specialised in the energy transitions and climate change, writing his thesis on Europe's offshore wind transition. Joel is currently pursuing his PhD at Cranfield University's Centre for Energy Systems and Strategy (CESS), housed in the Department of Energy and Power. His research examines the decarbonisation of gas networks via the use of hydrogen in support of the UK's net zero target, aiming to develop socially acceptable and cost-effective deployment pathways for securing a socio-technical transition to 'hydrogen homes'.

Jack Gregory, University of California, Davis
Jack Gregory is currently a PhD Candidate at the University of California, Davis. His doctorate is in Agricultural and Resource Economics, where his main areas of interest are energy economics, industrial organization, and applied microeconomics. His research focuses on how market power and public policy shape liberalized electricity markets. His previous professional experience includes market monitoring positions at the California Independent System Operator and the Australian Energy Regulator.

Britta Gross, Rocky Mountain Institute
Britta Gross is managing director of RMI's Carbon Free Mobility Global Program, focusing on the market-driven strategies, technologies, and policies required to accelerate towards carbon-free mobility solutions. Ms. Gross was formerly the director of advanced vehicle commercialization at General Motors, responsible for the energy strategies, partnerships, and policies required to enable the wide-scale commercialization of battery electric and hydrogen fuel cell electric vehicles. Ms. Gross is also currently a commissioner for the Orlando Utility Commission, Orlando, Florida's electric and water utility. Before transitioning into the automotive industry, Britta began her career with Hughes Space & Communications in Los Angeles, leading mission design and systems engineering teams developing communication and weather satellite programs. Ms. Gross has an electrical engineering degree from Louisiana State University in Baton Rouge and studied language arts at the University of Wurzburg in Germany.

SPEAKER BIOS

William Guo, High School Student Researcher with Oregon State University
William Guo is a high school senior and student researcher at Oregon State University. His research concerns the performance targets necessary for zero-carbon hydrogen production methods to produce cheaper hydrogen than nonrenewable methods. He has used techno-economic modeling to analyze the commercial viability of electrolyzers being studied by OSU's Feng Research Group. He is working on a research project at Portland State University to make 3D tracking technology more accessible for physics classrooms and is the CEO of the Oregon Middle School Speech and Debate League.

Gavin Hawkley, Idaho National Laboratory
Dr. Gavin manages INL's Systems Science and Engineering department with responsibility for building teams and capabilities that increase our energy security and the resilience of our critical infrastructure and supply chains. He leads multidisciplinary teams of experts across a variety of technical domains, including: climate-informed infrastructure resilience engineering and mission assurance; energy security and embedded intelligence; and systems modeling and decision science. He serves as a member of the INL Resilience Optimization Center leadership team, and as a member of the INL Culture Integration Team. Gavin is also a technical leader for the INL Nuclear Safety program, serving as subject matter expert for consequence analysis calculation methodologies, including radiation physics, physical chemistry, aerosol propagation, and atmospheric dispersion modeling. Gavin earned a Ph.D. in Applied Physics, M.S. in Physics, and B.S. in Biological Sciences, from Idaho State University.

Douglas Howe, Western Grid Group
Dr. Douglas Howe is a Director of the Western Grid Group and a Member of the Board and Treasurer for the New Mexico Renewable Energy Transmission Authority. He has over 40 years of experience in the global utilities industries serving as a consultant and advisor to the global power industry, as a U.S. state utility regulator, and as a utility executive. Dr. Howe is a former chair of the Governing Body of the Western Energy Imbalance Market. He continues to serve as a senior consultant on environmental and regulatory matters and has provided expert witness testimony in proceedings in Arizona, New Mexico, Colorado, Nevada, and Michigan. In 2011, the New Mexico governor appointed Dr. Howe as Commissioner of the Public Regulation Commission which adjudicates utility matters. Dr. Howe received his Ph.D. and M.S. degrees from the University of Pennsylvania and is a graduate of the Duke University Fuqua School of Business Advanced Management Program.

SPEAKER BIOS

Mark James, Vermont Law School
Mark James is a Visiting Assistant Professor at Vermont Law School and a Senior Energy Fellow in the Institute for Energy and the Environment. Mark has published on a variety of energy issues including RTO stakeholder governance, energy data privacy, and distribution system cybersecurity. He also serves as an expert witness on energy efficiency programs in utility commission hearings. Mark received his J.D. from the University of Ottawa and his LL.M in Energy Law from Vermont Law School where he was a Global Energy Fellow.

Bryant Jones, Boise State University
Bryant Jones is a Truman National Security Fellow and PhD candidate at Boise State University. His research investigates agenda setting, narratives, and policy communities at the nexus of public policy, energy policy, and international affairs.

Craig Jones, Oglethorpe Power
Craig Jones has more than three decades of experience in the energy sector and is currently the Director of Environmental Policy at Oglethorpe Power, where he focuses on energy and climate policy, including emerging regulations, industry electrification trends, and the laws and policies affecting them. Along with extensive experience in the electric utility industry, Craig holds a PhD in Public Policy and Administration from Boise State's School of Public Service. His research focuses on how presidents use rhetorical and administrative tools of presidential control to expand and reinforce executive power, primarily at the expense of Congressional deliberation.

Anna Kelly, Power TakeOff
Anna Kelly is a policy evaluator working in energy efficiency program implementation with Power TakeOff. In her role as head of Measurement and Verification, she leads the evaluation of more than 500 commercial building energy models each month. She recently authored a paper for ACEEE on detecting savings under 10% using international performance measurement and verification protocol (IPMVP).

Tam Kemabonta, Arizona State University
Tam Kemabonta has extensive experience in global energy poverty, renewable energy project development, substation engineering, energy policy and electricity markets. He was a member of the Minnesota Public Utility Commission (MN PUC), Distributed Generation Working Group (DGWG) Technical Subgroup (TSG) in 2018. He has published many papers, articles and has filed technical comments and presented expert testimony before the MN PUC and the Minnesota state house of representatives committee on energy and climate finance and policy. He was a 2017 Clinton Global Initiative University Fellow and a 2019 member of the Union of Concerned Scientists (UCS) Early Career Scientist (ECS) cohort.

James Hyungkwan Kim, Lawrence Berkeley National Laboratory
James Hyungkwan Kim is an Energy Policy Project Scientist in the Electricity Markets and Policy Department at Lawrence Berkeley National Laboratory. He conducts research on the value and costs of power system technologies and related market policy as well as develop methods to estimate dispatch of flexible resources in response to grid needs.

Fouad Khan, Nature Energy
Fouad Khan is Senior Editor at Nature Energy handling manuscripts in the area of social sciences and economics. He is also Director Sustainability at Enzo Advisors consulting on Environmental, Social and Governance reporting and climate risk in the energy sector. He has a PhD in urban energy and sustainability plus fifteen years of experience in consulting, sustainable development and sustainability communications. He has worked on projects for the World Bank, UNOPS, WWF, Korea Water Resources Corporation and other entities from the energy, development and public sectors. His research has focused on voluntary urban emissions reporting and targets.

Kate Konschnik
Kate Konschnik directs the Climate & Energy Program at the Nicholas Institute for Environmental Policy Solutions at Duke University, and is a Senior Lecturing Fellow at Duke Law School. Konschnik's work focuses on options for public electric utility regulation and electricity market reforms given emerging technologies and de-carbonization goals. Konschnik has also worked extensively on effective governance of unconventional oil and gas production and transport. Konschnik joined Duke from Harvard Law School, where she founded and directed the Harvard Environmental Policy Initiative and taught as a Lecturer on Law. Previously, Konschnik was Chief Environmental Counsel to U.S. Senator Sheldon Whitehouse, and an Environmental Enforcement Trial Attorney at the U.S. Department of Justice. Konschnik holds a law degree from the University of California, Hastings College of the Law, cum laude, and a bachelor's degree in political science from Tufts University.

Leah Kunkel, Arizona State University
Leah Kunkel is a PhD Candidate in the Sustainable Energy program at Arizona State University. Her research focuses on urban energy policy, specifically city commitments to 100% renewable energy within the US. This includes both qualitative and quantitative analyses of motivations for adoption, implementation progress, and outcomes. Leah has a background in sustainability and mechanical engineering, and teaches courses on energy and sustainable cities.

Isac Lee, University of California, San Diego
Isac Lee is an undergraduate studying data science at the University of California, San Diego. Isac's interests in renewable energy has motivated him to take the role as an undergraduate research assistant for Professor Michael Davidson and his lab, focusing on research related to deploying renewable energy at scale. After graduating, Isac hopes to become further involved in renewable energy and help facilitate the world's transition to a low-carbon economy.

Julia le Maître, Cork University Business School, Ireland
Julia le Maitre is a Marie Skłodowska-Curie Actions early stage researcher focused on the social acceptance of onshore wind energy with particular interest in the design of financial incentives and co-investment opportunities for citizens. As part of a collaborative effort between Horizon 2020-funded MISTRAL and SEAI-funded Co-Wind at Cork University Business School, this research aims to enhance understanding of the ways in which community participation in wind energy can be improved. Specific focus is given to host community engagement, co-investment and enhancing current best practice by developers in establishing community benefits schemes.

Stephanie Lenhart, Boise State University
Stephanie Lenhart is a Senior Research Associate at the Energy Policy Institute and faculty in the School of Public Service at Boise State University. Her work examines institutional designs, stakeholder participation, policy implementation, and the negotiation of authority. Her research focuses on the governance of electricity systems and the exercise of power and agency in energy transitions. Recent work explores regional transmission organization decision making practices, grid integration of storage and other distributed energy resources, and decision-making by electric cooperative and public power utilities.

Jamal Lewis, Green & Healthy Homes Institute (GHHI)
Jamal Lewis is the Director, Climate, Energy and Health at GHHI, where he supports the organization's efforts to advance its work connecting climate, energy and health. Jamal works with states and localities around the country to incorporate best practices into their energy efficiency, lead poisoning prevention, and other healthy housing programs and policies. Jamal represents GHHI on the Energy Efficiency and Housing Advisory Panel of the NYS Climate Leadership and Community Protection Act. He is also an active participant of both the Network for Energy, Water, and Health in Affordable Buildings (NEWHAB) and the Energy Efficiency for All (EEFA) coalitions.

SPEAKER BIOS

Robert Lindner, Kyushu University, Japan
Robert Lindner is an Associate Professor for International Relations at Kyushu University's Platform for Inter-/Transdisciplinary Energy Research (Q-PIT). He is a political scientist with a particular interest in energy and environmental governance.

William Liss, Gas Technology Institute
William Liss has a 34-year career at Gas Technology Institute, the nation's leading independent natural gas R&D organization. He leads a broad-based group of energy professionals focused on technology development and market adoption of new energy solutions for natural gas pipeline delivery and end use applications – residential, commercial, industrial, onsite power, and transportation. He has a Chemical Engineering degree and Masters in Business Administration.

Janetta McKenzie, University of Waterloo, Canada
Janetta is a PhD candidate in the Department of Geography & Environmental Management at the University of Waterloo. Her research interests include regulatory governance in the energy sector, the changing dimensions of energy security, and the dynamics of just transitions.

Travis L. McLing, Idaho National Laboratory
Travis L. McLing, Ph.D. has been working in the field of geology and hydrogeochemistry for more than 30 years. He has expertise in the fields of groundwater characterization and fingerprinting, rare earth element geochemistry, carbon sequestration, nuclear waste disposal, geologic mapping, fieldwork, geomicrobiology and hydrochemistry. Dr. McLing serves as the INL Laboratory Relationship Manager for DOE's Geothermal Technology and Fossil Energy Offices and is also the INL Lead for DOE's Energy Water Nexus. He has been conducting research and public outreach in the field of water research and human impacts since 1996. Travis has authored or co-authored more than 50 papers.

Carlo Melbihess, Idaho National Laboratory
Carlo Melbihess is a career Battelle employee. He leads an organization of some 600 staff providing a wide range of facility and support services across the INL. These services include facility management, site-wide utility operations, logistics, property management, infrastructure planning, engineering and construction services, fleet management and logistics, precision machining, calibration services, landfill operations, and food services. He has over 22 years of experience managing a wide variety of laboratory support functions such as facilities management, operations and maintenance, fabrication, roads and grounds services, facility design, construction, renovation and demolition project management, and laboratory protection and security services. Prior to joining INL, Mr. Melbihess worked in facilities and operations directorates at the U.S. Department of Energy's Pacific Northwest National Laboratory, Oak Ridge National Laboratory and Brookhaven National Laboratory. He holds a bachelor's degree in civil engineering from the University of Washington in Seattle and is a certified facility manager through the International Facility Manager Association.

Sharlissa Moore, Michigan State University
Sharlissa Moore studies the social, policy, equity, and security dimensions of energy systems, particularly those that cross nation-state borders and are undergoing dramatic change. She is on the expert advisory panel for the Clean Growth Incubator, an organization helping small and medium-sized cities with clean energy deployment. She has been assisting with the development of a ground-mount solar system in a low-income community in Lansing, Michigan by conducting stakeholder interviews and surveys, to tailor the design of the project to the community's needs and aspirations.

Hari Neupane, Idaho National Laboratory
Ghanashyam "Hari" Neupane, Ph.D. is a Subsurface Research Scientist at INL with over 15 years of experience in geosciences related research projects. His research ranges from characterization of engineered fractures with tracers to measuring the minute levels of rare earth elements in geothermal and oil-and-gas produced brines. He uses field tests, geochemical sampling and analysis, high-temperature water-rock interaction experiments, geochemical modeling, and earth modeling applications for investigating geothermal resources. Currently, he is conducting laboratory experiments to explore the geochemical consequences of thermal energy storage in deep sedimentary formations in the Green River Basin, Wyoming and the Gulf Coast Basin in Mississippi.

Nick Nigro, Atlas Public Policy
Nick Nigro is the founder of Atlas Public Policy. Nick has over 15 years of experience managing projects of various disciplines, size, and scope. He is an expert on alternative fuel vehicle financing, policy, and technology. He has led the development of several complex financial and policy analysis tools, convened large groups of diverse stakeholders nationwide, managed a comprehensive analysis of greenhouse gas mitigation from U.S. transportation, is a frequent public speaker on advanced vehicle technology and other transportation-related energy and environmental issues, and has expert knowledge in web and other computer-related technology. Nick holds a Master of Public Policy from the University of California Berkeley's Goldman School of Public Policy and a Bachelor of Science in Electrical and Computer Engineering from Worcester Polytechnic Institute.

SPEAKER BIOS

Mark Olson, North American Electric Reliability Corporation
Mark Olson is the Manager of Reliability Assessments at the North American Electric Reliability Corporation (NERC) where he leads the development of the NERC's long-term, seasonal, and special reliability assessments. Upon joining NERC in 2012, Mark oversaw several projects resulting in new standards to enhance the reliability and security of the North American electric grid. He coordinates NERC's research partnerships and data collection program aimed at reducing the risk of electric grid disruption from severe space weather. Before joining NERC, Mark was a career officer in the U.S. Navy where he served in positions related to the operations and management of surface ships and personnel. He has a master's degree in electrical engineering from the Naval Postgraduate School and a bachelor's degree from the U.S. Naval Academy. He holds a Professional Engineer license in the State of Georgia.

Eric O'Shaughnessy, Consultant
Eric O'Shaughnessy is a renewable energy research consultant working on projects for the Lawrence Berkeley National Lab, the National Renewable Energy Lab, and the World Resources Institute. Eric specializes in analysis of distributed energy resource and voluntary green power markets. He received his Ph.D. from the Nelson Institute for Environmental Studies at the University of Wisconsin-Madison.

Gabriel Pacyniak, University of New Mexico School of Law
Gabriel Pacyniak is an associate professor at the University of New Mexico School of Law. He teaches primarily in the school's natural resources and environmental law clinic, which provides law and policy representation to low-income and underserved communities on a broad range of environment, energy, and natural resources issues. In addition to his work in the clinic, Gabe's teaching, scholarship, and policy work focuses on climate change and clean energy issues. Gabe previously managed the climate change mitigation program at the Georgetown Climate Center. Gabe holds a J.D. from Georgetown Law and B.A. from the New College of Florida.

Nathan Parker, Arizona State University
Dr. Nathan Parker is an assistant professor in the School of Sustainability. He develops simulation models to shed light on the economic viability and environmental implications of alternative transportation fuels and biomass-based systems. His research combines aspects of engineering, economics and geographic information systems (GIS). In addition, his work analyzes policies aimed at catalyzing transitions to renewable energy, working to improve both the methodologies and quality of policy analysis in this area. He studied physics as an undergraduate at Wake Forest University in North Carolina and got his PhD. in Transportation Technology and Policy at University of California, Davis.

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SCHOOL OF PUBLIC SERVICE

SPEAKER BIOS

Matthew Popkin, Rocky Mountain Institute (RMI)
Matthew Popkin advises cities on clean energy procurement and utility engagement strategies to reduce emissions and increase resilience as a part of RMI's Urban Transformation program. Since 2019, he has led RMI's technical assistance with major U.S. cities through the American Cities Climate Challenge. Matthew also leads RMI's research on brightfields, landfill solar, and community solar. Before RMI, he helped small cities and towns secure funding for community revitalization, sustainability, transportation, and infrastructure priorities. Matthew received his Master's in Public Policy with a focus on energy policy from the University of Maryland School of Public Policy.

Lionel R. Orama-Exclusa, University of Puerto Rico-Mayaguez
Lionel Orama earned his doctoral degree at Polytechnic University of Puerto Rico in 1997. His interests include transient phenomena, power systems protection, microgrids, renewable energy and energy efficiency. A pioneer in biodiesel research in Puerto Rico through projects with the DOE and the SSEB, he worked with DOE on Islandwide energy efficiency studies and collaborated with disadvantaged communities and community aqueducts under the EPA Pollution Prevention program. He is a founding member of the National Institute for Energy and Island Sustainability at the UPR and belongs to its Steering Committee. He also is a founding member of the RISE Network.

Liza Reed, Niskanen Center
Dr. Liza Reed is the research manager for low carbon technology policy at the Niskanen Center that is based in Washington DC. She is an expert in High Voltage Direct Current, electricity transmission, and technology innovation. Before joining the Niskanen Center, she worked on energy funding at the Great Lakes Energy Institute at Case Western Reserve University, wireless communication technology development at inmobly, and business analysis at Capital One Finance. She holds a PhD from Carnegie Mellon University in Engineering and Public Policy and a master's degree and a bachelor's degree in Electrical and Computer Engineering from The Ohio State University.

Dakota Roberson, University of Idaho
Dakota Roberson is Assistant Professor of Electrical & Computer Engineering, where he leads a research team that studies power system stability, high-performance control and signal processing. He is a member of the Defense Science Board and holds a joint appointment with the Idaho National Laboratory.

Paul Roege, Advanced Nuclear and Production Experts Group (ANPEG)
Mr. Paul Roege directs the Advanced Nuclear and Production Experts Group (ANPEG). He has over 40 years of experience as an engineer and leader in engineering, construction, and research, primarily in the energy field. As a US Army engineer officer, Paul managed construction projects around the world and guided service-wide strategies related to energy and resilience. As a civilian engineering and project manager, he led engineering, safety, and training efforts in petrochemical, nuclear, and other industrial facilities. Paul is a registered professional engineer and a West Point alumnus with graduate degrees from Boston University (MBA) and the Massachusetts Institute of Technology (SM and Nuclear Engineer).

Tom Reddoch, Electric Power Research Institute (EPRI)
Dr. Thomas (Tom) Reddoch is a Principal Technical Executive at the Electric Power Research Institute (EPRI) in the Power Delivery and Utilization sector. His areas of responsibility include EPRI's consumer-based activities known as utility customer-facing programs. This includes programs, such as Energy Efficiency, Demand Response, Electric Transportation, Customer Behavior, Analytics, Electrification, Distributed Generation, Energy Storage, and Power Quality. Over the past seven years, he has led a DOE initiative on education and training for developing the next generation of electric power engineers by working with universities and utilities.

Andy Satchwell, Lawrence Berkeley National Laboratory
Andrew Satchwell is a Research Scientist and Deputy Leader in the Electricity Markets and Policy Department at Lawrence Berkeley National Laboratory where he leads the financial analysis of electric utility regulatory and business models. His current work quantifies the financial impacts of distributed energy resources on utility profitability and customer rates and bills. Andy also presently leads and supports research on the value of demand response and energy efficiency to the utility system and utility investments in electric vehicle infrastructure.

Justin Schott, University of Michigan - School for Environment and Sustainability
Justin Schott serves as Project Manager of the Energy Equity Project (EEP), with the University of Michigan. He is honored to work with justice-minded colleagues and allies and is fascinated by conversations about how to drive and measure equity in clean energy investments. Prior to joining EEP, Schott was Executive Director of EcoWorks, a Detroit non-profit, from 2015-2020. He is an avid social entrepreneur and a recognized sustainability leader in Detroit. Before becoming Executive Director, Schott designed and managed numerous community programs, including the Youth Energy Squad (founder) in 2009, which grew to a district -wide partnership with 50+ schools and 800 students annually.

SPEAKER BIOS

Kenneth Seiler, PJM
Mr. Seiler, Vice President Planning, leads PJM's System Planning Division and is responsible for all activities related to resource adequacy, generation interconnection, interregional and transmission planning, including the development of the Regional Transmission Expansion Plan. Previously, Mr. Seiler was Executive Director, System Operations and was responsible for the reliable operation and coordination of the bulk power system including PJM's real time dispatch operations and near-term reliability studies. Mr. Seiler oversaw the dispatcher training and certification functions as well as the markets coordination function to ensure the efficient and most cost effective dispatch of the generation fleet. Prior to joining PJM, Mr. Seiler was employed by Metropolitan Edison Co./GPU for nearly 14 years in various operations and engineering areas. Mr. Seiler earned a Master of Business Administration from Lebanon Valley College and a Bachelor of Science in electrical engineering from Pennsylvania State University.

Iftikhar Shahid, National University of Sciences and Technology, Pakistan
Iftikhar Shahid received his BE degree from NED University of Engineering and Technology, Karachi, and his MS degree, from University of Engineering and Technology, Taxila, Pakistan. He served in the Pakistan Army in various capacities and retired as a Brigadier. In Pakistan, he served as Director of vocational training institutes (May 2017-March 2019) and was Principal, Aviation Engineering School (September 2013-October 2015). He is currently pursuing his Ph.D. in Energy Policy at the US-Pakistan Centre for Advanced Studies in Energy, National University of Sciences and Technology, Pakistan in collaboration with Arizona State University. His research interests include, among others, energy-poverty interplay, energy and environment, sustainable energy transitions and socio-economic dimensions of energy technologies.

David Shropshire, Idaho National Laboratory
Mr. David Shropshire is a Nuclear Energy Economist/ Relationship Manager with Idaho National Lab. He returned to INL in 2019 after working at the International Atomic Energy Agency (2012-2018) as Section Head of Planning and Economic Studies, Consultant to the Nuclear Energy Agency (2012), and Grant Holder at the European Commission-JRC (2010-2012). David's INL experience (1989-2010) spans multiple programs and roles. His current focus is on the economics and markets for Small Modular Reactors and Microreactors. Mr. Shropshire's recent publications include energy system resilience, global microreactor markets, and advanced reactor cost reduction. He holds a MS in Radioactive Waste Management, an MBA, and is a registered Professional Engineer.

Christina E. Simeone, Colorado School of Mines & NREL
Christina Simeone is a doctoral student in advanced energy systems, a joint program offered by the Colorado School of Mines and the National Renewable Energy Laboratory. She is also a Senior Fellow at the Kleinman Center for Energy Policy at the University of Pennsylvania. Mrs. Simeone holds a master's degree in environmental studies from the University of Pennsylvania, a B.A. in economics from the University of Miami, and B.S. in music industry from Drexel University (with a concentration in opera and piano performance).

Robert W. Smith, University of Idaho
Dr. Robert (Bob) Smith holds a faculty rank of Distinguished Professor with the University of Idaho. He is a Biogeochemist with over 30 years of experience in industry, national laboratories, and academia contributing to and leading complex multi-institutional interdisciplinary educational research and engineering projects focused on energy development, production and utilization and their environmental consciences.

Missy Stults, City of Ann Arbor, Michigan
Dr. Missy Stults is the Sustainability and Innovations Manager for the City of Ann Arbor. In this role, she works with all city operations, residents, businesses, the University of Michigan, nonprofits, and others to make Ann Arbor one of the most sustainable and equitable cities in America and to implement the A2ZERO Carbon Neutrality Plan. Prior to joining the City, Missy worked with local and tribal communities around the nation to advance their climate and sustainability goals, including during her time as the Climate Director at ICLEI-Local Governments for Sustainability and as a consultant to philanthropic organizations. Missy has a PhD in urban resilience from the University of Michigan, a Masters in Climate and Society from Columbia University, and undergraduate degrees in Marine Biology and Environmental Science from the University of New England.

Branden Sudduth, Western Electricity Coordinating Council (WECC)
Branden Sudduth, Vice President of Reliability Planning and Performance Analysis, is responsible for WECC's technical and analysis functions, including Reliability Planning and Assessments, Standards Development, Performance Analysis, Event Analysis, and Situation Awareness. Prior to becoming a Vice President at WECC, Branden served as Director of Reliability Risk Management. In that role, he provided leadership and strategic direction for the Performance Analysis and Event Analysis/Situation Awareness departments and was responsible for supporting several industry stakeholder efforts through WECC's Operating and Market Interface Committees. Branden holds a Bachelor of Science degree in electrical engineering from Brigham Young University, a Master of Engineering degree in electrical engineering from the University of Idaho, and an MBA from Weber State University.

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SPEAKER BIOS

Jennifer Szaro, Association of Energy Services Professionals (AESP)
Jennifer Szaro currently serves as President and CEO of the Association of Energy Services Professionals (AESP). Within her role, she focuses on educating and empowering AESP's members on such topics as energy efficiency technologies, conservation strategies, demand response program design and implementation, demand flexibility strategies, grid edge technology deployment, beneficial electrification and demand-side focused customer engagement strategies. Prior to her current role, she served as Vice President of Research and Education at the Smart Electric Power Alliance (SEPA), where she led her team in the development of industry research as well as in the creation of educational offerings for SEPA's membership base.

Shardul Tiwari, Michigan Technological University
Shardul Tiwari (MSc) is a PhD Student in Environmental and Energy Policy and a research scholar at Michigan Technological University. He is currently pursuing his research on energy justice, energy policy, and looking at the integration of renewable energy technologies in the U.S. electricity market. Mr. Tiwari has over seven years of experience in the field of renewable energy and energy efficiency policy formulation in the least developing countries. In his first career, he has worked both at the district level and with the Ministry in energy policy formulation. He has been associated with the Indian Madhya Pradesh Government think tank, TATA TRUSTS, Sterlite Technologies Limited, and German Development Cooperation. His work with the German Development Cooperation (GIZ) as an energy policy expert under the Nepal Energy Efficiency Programme (NEEP) in Nepal, involved the development of energy efficiency, and biomass energy strategy for the country. He has also worked on energy efficiency and demand-side management projects for the vertically integrated utilities.

Jairo Ramirez Torres, Arizona State University
Jairo Ramireaz Torres is an undergraduate student entering his fourth year as an Electrical Engineering and Economics major at Arizona State University. His interest lies in the intersection between social and technical challenges faced by the renewable energy sector. His research includes technical and social work, ranging from power devices to food-energy nexus. His academic goals include enrolling in an Economics Master's program focused on Economic Development, to understand how to leverage energy systems for economic development. Jairo is Puerto Rican and would love to continue his professional career there, enjoying the beach as he seeks to improve his country's energy woes.

Chen-Hao Tsai, Midcontinent Independent System Operator
Chen-Hao Tsai received his B.S. degree in Civil Engineering from the National Taiwan University in 2001, and Ph.D. in Energy and Mineral Engineering (with an option in Energy Management and Policy) from Pennsylvania State University in 2015. He is currently Senior Policy Studies Planner at the Midcontinent Independent System Operator, supporting corporate service lines in Market & Grid Strategy, Transmission Planning and Resource Adequacy.

Diane Turchetta, U.S. Department of Transportation (DOT), Federal Highway Administration (FHWA)
Diane Turchetta is a Transportation Specialist in FHWA's Office of Natural Environment (HEPN), and primarily works on transportation and sustainability issues. Diane has been with FHWA for over 20 years in various positions working on a variety of transportation-related air quality matters including energy use, alternative fuels and freight emissions. She holds a Bachelor of Science degree in Public Administration from the Pennsylvania State University and a Masters Degree in Public Administration from Virginia Polytechnic Institute and State University. Before joining the U.S. DOT, Diane worked at the U.S. Environmental Protection Agency on fuel-related issues.

Van L. Vincent, VLV Development
Van L. Vincent is a climate change specialist and urban developer who collaborates with community leaders, housing portfolio owners, utilities, and educational institutions, to bring resilience and economic benefit to low-income communities. He believes that corrective climate action and wealth creation go together. As President & CEO of VLV Development, a certified Minority Business Enterprise (MBE), veteran-owned firm, Van leads efforts to deliver impactful renewable energy, sustainable housing, and clean energy projects in urban centers. Embracing the idea that clean energy, climate security and economic development are intertwined, he founded VGI Energy Solutions, LLC to invest in renewable energy projects in disenfranchised communities.

Don Von Dollen, Electric Power Research Institute (EPRI)
Don Von Dollen has 30+ years of experience in electric utility research and development. He has worked with over 20 North American utilities to develop company-specific grid modernization strategic roadmaps. He led a team of industry experts to create a roadmap for the development and harmonization of Smart Grid interoperability standards under contract to the National Institute of Standards and Technology (NIST), as well as EPRI's Information and Communication Technology research program which focuses on enabling the efficient data communications, integration and analysis through leadership, collaboration, standards and technology innovation.

SPEAKER BIOS

Karin Wadsack, National Renewable Energy Laboratory
Karin Wadsack is a program manager for the National Renewable Energy Laboratory, where she leads multiple tribal renewable energy projects and performs applied analysis for energy system decarbonization and resilience projects around the world. She has over a decade of experience working with tribes across the United States on energy analysis, policy, and project development. Her background includes experience in international development, business management, and more than 20 years developing and executing projects. Karin holds a PhD in Engineering Sustainable Systems, a certificate in Applied Statistics, master's degrees in Environmental Science & Policy and Journalism, and a bachelor's degree in Government.

Cody Warner, Lawrence Berkeley National Laboratory
Cody Warner is a researcher in the Electricity Markets and Policy Group at Lawrence Berkeley Lab and a PhD student at UC Berkeley's Energy and Resources Group. Cody conducts research on renewable energy policy and wholesale electricity markets in the U.S. His recent work focuses on utility-scale PV paired with battery-electric storage systems, the price dynamics of high renewable futures, retail electricity rate design, and industrial production of hydrogen. Prior to joining Berkeley Lab, Cody received a BA in Economics from Northwestern University and was a Senior Research Analyst at The Brattle Group in San Francisco.

Tim Werner, City of Traverse City, Michigan
Tim Werner is a city commissioner for the City of Traverse City, Michigan. As a commissioner, he has helped establish a 100% renewable energy goal for both city government and the municipal utility company. His responsibilities include setting public policy for the city through ordinances, allocating public funds, setting the City Budget, and overseeing the city's resources. Tim Werner has a PhD in Chemical Engineering from University of Michigan.

Jennifer Wilson, Georgia State University
Jennifer Wilson is currently pursuing a Masters in Sustainable Energy & Environmental Management at Georgia State University. She also currently runs the Office of Sustainability at Kennesaw State University, where her focus includes managing a public-facing energy dashboard and working to deploy renewable energy. Prior to joining KSU, she worked for the Georgia State Energy Office, where she oversaw nine energy programs providing $42 million in energy efficiency and renewable energy grants to over one hundred subrecipients. Additionally, she served as the Director of Environmental Sustainability at CIFAL Atlanta, where she organized seven workshops on land use, solid waste, energy efficiency and water resource management.

CAES Center for Advanced Energy Studies

CAES is a research, education, and innovation consortium consisting of the Department of Energy's Idaho National Laboratory (INL) and the public research universities of Idaho: Boise State University, Idaho State University, and University of Idaho. CAES harnesses the power of collaboration, closely integrating the universities and national laboratory to solve critical energy challenges while providing workforce training opportunities and encouraging economic development in communities throughout the region. CAES accomplishes this through cutting-edge research and programming that pair university students with INL researchers and industry partners.

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