

2024 GWAC Symposium Agenda

Grid Transformation:
Building the Energy Future

GRIDWISE

Architecture Council

SYMPOSIUM 2024

Monday, September 9

Pre-Symposium Tutorials 1-4 PM (open to all RE+ attendees)

Room 204B, Level 2

Welcome

Ron Bernstein, GWAC Chair, RBCG Consulting, CEO

Afternoon Session

Moderator: Ron Bernstein, GWAC Chair, RBCG Consulting, CEO
Ron Ambrosio, Independent Energy Transformation Professional
Kay Aikin, Dynamic Grid, Founder and Chief Product Officer
Farrokh Rahimi, Open Access Technology International Inc., Executive Vice President
Jaime Kolln, Pacific Northwest National Lab (PNNL), Senior Power System Engineer

Plenary Panel: Pathways to Decentralized Energy

10:30 a.m. – 11:45 a.m.

Moderator: Lorenzo Kristov, Principal, Electric System Policy, Structure, Market Design
Samuel Golding, Community Choice Partners, President
Alex Papalexopoulos, Ph.D., ECCO International Inc., President and CEO
Shaun Tsabetsaye, Alliance for Tribal Clean Energy, Head of Tribal Technical Assistance and Project Development

Decentralized electricity is more possible and more promising today than ever before, as the performance and cost-effectiveness of distributed resources keep improving rapidly. This panel will feature presentations by three practitioners who are working at the leading edge on innovative approaches to unlock the greatest benefits of decentralized energy.

Moderated Open Forum 11:45 a.m. – 12 p.m.

Lunch 12 p.m. – 1 p.m.

Parallel Sessions 1 p.m. – 2:30 p.m.

Grid Transformation - Scaling for the Grid of the Future

Moderator: Mark Ortiz, Schneider Electric, Lead Architect, Distributed Energy Systems
Jim Ogle, PNNL, Research Principal
Anthony James, Southern California Edison, Senior Engineer/Data Scientist
Payam Yeganah, Black and Veatch, Managing Director, Operational Technology
Ron Bernstein, GWAC Chair, RBCG Consulting, CEO

The complexity of planning and operating the electric grid is ever increasing as the electric grid becomes more integrated and automated. This grid transformation will require a higher level of business and technical capabilities to drive operational optimization. The panelists will discuss innovative architectural approaches that help enable a more open, interoperable, and flexible grid of the future.

Policies for a Flourishing Grid Transformation: A Balanced Value Proposition for Stakeholders

Moderator: Marc Costa, The Energy Coalition, Director of Policy and Planning
Myron Katz, ProRate Energy, Vice President
Allie Detrio, Reimagine Power Inc., Chief Strategist
Anne Hoskins, Generac, Senior Vice President Policy & Market Development, Energy Technology

Decision-makers in the regulatory space currently grapple with long-term planning and immediate power system needs. This panel serves to ground these decisions by examining practical solutions to enable distributed energy resources (DER), load, and grid growth simultaneously. The panelists will discuss rate design, microgrids, regulatory approaches, and system planning needs solved in parallel to reach a decarbonized future.

Break 2:30 p.m. – 2:45 p.m.

Wednesday, September 11

All sessions will take place in Room 304ABC, Level 3

Coffee & Networking 8 a.m. – 8:30 a.m.

Opening Intro 8:30 a.m. – 9 a.m.

Ron Bernstein, GWAC Chair, RBCG Consulting, CEO

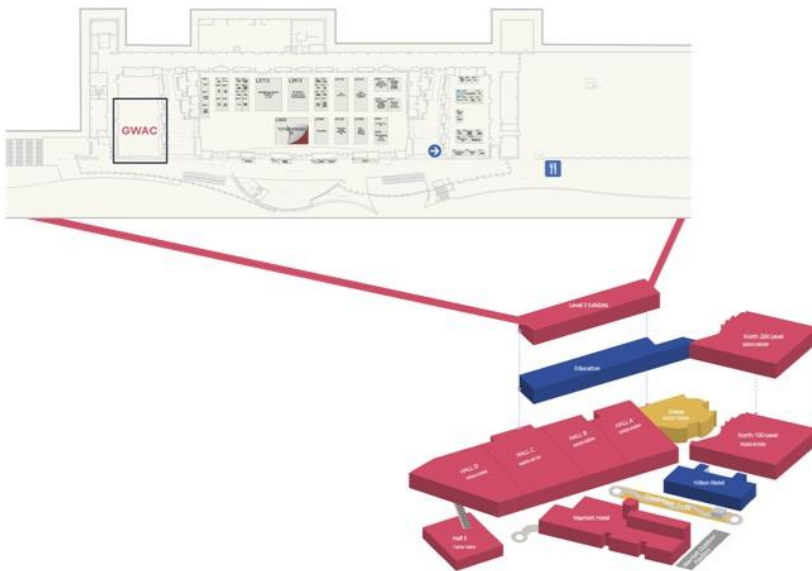
GWAC Foundational Session 9 a.m. – 10 a.m.

Moderator: David Forfia, Utilicast, Senior Consultant
GWAC Emeritus Steve Widergren, PNNL Retired
Christopher Irwin, U.S. Department of Energy Office of Electricity
Aaron Snyder, EnerNex, Director of Grid Technology Consulting

Keynote Presentation 10 a.m. – 10:30 a.m.

Gene Rodrigues, Assistant Secretary for Electricity for the U.S. Department of Energy Office of Electricity

Break 10:30 a.m. – 10:45 a.m.



2024 GWAC Symposium Agenda

Wednesday, September 11 (cont.)

All sessions will take place in 304 ABC, Level 3

Parallel Sessions 2:45 p.m. – 4:30 p.m.

Grid Edge: Using Flexibility to Address Grid Constraints

Moderator: Mark Ortiz, Schneider Electric, Lead Architect, Distributed Energy Systems
Chris Morris, Pacific Gas & Electric Company, Chief Architect
Guillaume Aman, Uplight, Director of Product Management
Deepti Kodeboyina, Schneider Electric, Senior Director, Prosumer Software

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New Industry Structures

Moderator: Shawn Chandler, Guidehouse, Director
Aarash Saidi, Los Angeles Department of Water and Power, Power Engineer Manager of Distribution Resources
Matt McDonnell, Current Energy Group, Managing Partner
Dr. Stephanie Pincetl, UCLA, Professor and Researcher
Dr. Eric Fournier, UCLA, California Center for Sustainable Communities, Research Director

Utilities currently face many challenges as they seek to respond to societal, technological, and environmental change. New architecture demands have been added to the electric system, including new competitive structures and partners dealing with grid-edge customers, all alongside new social and regulatory pressures for rapid change. These include challenges with coordination and management of distributed energy resource (DER) operations from customers to aggregators, aggregators to utility operations, and between markets, regulators, customers, and other external system stakeholders. Regulators and operations stakeholders in the industry have emerging needs for transparency in data and processes regarding sustainability interests and/or requirements. This session will explore these topics and solutions in a hybrid workshop, with three thought-leading panelists first representing industry, academia, and government stakeholder perspectives, followed by a collaborative session where attendees will contribute to the discussion and help evaluate and formulate paths forward.

Wrap Session 4:30 p.m. – 5 p.m.

Thursday, September 12

All sessions will take place in 304 ABC, Level 3

Coffee & Networking 8 a.m. – 8:30 a.m.

Opening Intro 8 a.m. – 8:30 a.m.

Ron Bernstein, GWAC Chair, RBCG Consulting, CEO

Global Perspectives 8:30 a.m. – 9:30 a.m.

Moderator: Jaime Kolln, PNNL, Senior Power System Engineer
Aaron Snyder, EnerNex, Director of Grid Technology Consulting
Mark Paterson, Energy Catalyst, Managing Director and Lead Systems Architect

Break 9:30 a.m. – 9:45 a.m.

Parallel Sessions 9:45 p.m. – 12 p.m.

Information and Communication

Moderator: Andrew Bordine, Grid Automation Practice Head, T&D Utilities
Steve Widergren, GWAC Emeritus
Robby Simpson, Enetrics, Research Principal
Brian Seal, EPRI, Senior Program Manager, DER Integration

Enabling diverse grid components to interact effectively requires standardization and accurate data interpretation. This session will explore the critical role of seamless data exchange and communication in modern energy systems. The benefits of semantic framework will be highlighted including interoperability to improve grid efficiency, real time decision making, and grid resilience.

Coordination and Dynamics

Moderator: Kay Aikin, Dynamic Grid, Founder and Chief Product Officer
Santosh Veda, Dominion Energy, Manager Grid Solutions
Julieta Giraldez, Ph.D., Electric Power Engineers, Director of Integrated Grid Planning
Kaveh Aflaki, Ph.D., IEMS Solutions, Chief Executive Officer

This panel and workshop will explore the future dynamics of the system and talk about new ways to coordinate power flow dynamically to manage these new system dynamics and what they mean for grid operators and consumers.

Lunch 12 p.m. – 1 p.m.

Parallel Sessions 1 p.m. – 3 p.m.

Grid Edge Technology, Integration, and Implementation

Moderator: Farrokh Rahimi, Open Access Technology International, Inc., Executive Vice President
Daniel Shepard, Dewberry Engineering, Lead – Control System Cybersecurity Design Center
Hani Alarian, California Independent System Operator, Executive Director Power Systems Technology Operation
Phillippe Phanivong, California Institute for Energy & Environment, Post-doctoral Scholar

The panel session will cover a two-pronged approach to Grid Edge Technology, Integration, and Implementation. At the grid edge, it will cover a CEC-funded demonstration project on deployment of renewable microgrids on individual urban residential blocks (ECoBlock project). As to integration with grid operation, the panel will address how DERs whether within the Point of Common Coupling of microgrids or aggregated as Virtual Power Plants (VPPs) are integrated into grid operation to provide grid services for enhanced grid reliability and resilience.

Customer Perspective

Moderator: Marc Costa, The Energy Coalition, Director of Policy and Planning
Eric Bornstein, Resource Innovations, Senior Manager
Sean Higbee, California State University Office of the Chancellor, Energy Procurement Manager
Daniel Boff, PNNL, Economist

Large customers face choices about simultaneously managing affordability, reliability, and organizational objectives. This panel will cover perspectives from large institutional, public, and private sector consumers and building representatives. A discussion will include their experience navigating the deployment of DERs, grid interactive solutions, and options on the path forward of resilience and autonomy.

Break 3:15 p.m. – 4:30 p.m.

Wrap Session 4:30 p.m. – 5 p.m.