2024 Electric Program Investment Charge (EPIC) Symposium Agenda

Monday, October 28, 2024

8AM – 5PM

Format: In-person at CNRA Building in Sacramento with livestream of auditorium, plus livestream or recording of breakout sessions to be posted later.

MONDAY – OCTOBER 28, 2024	
Time	**Session Title and Description**
8:00 – 8:45 AM	**MORNING CHECK-IN, COFFEE, NETWORKING, AND TECHNOLOGY SHOWCASE VIEWING**
8:45 – 9:00 AM	**WELCOME AND INTRODUCTORY REMARKS** **Room: CNRA First Floor Auditorium** – **David Hochschild**, Chair, California Energy Commission, CEC – **Karen Douglas**, Commissioner, California Public Utilities Commission, CPUC
9:00 – 10:00 AM	**LIVING ROOM CHAT: AN EPIC TRANSITION – HOW PUBLIC RESEARCH IS ENABLING ELECTRIFICATION AND A CONNECTED GRID** **Room: CNRA First Floor Auditorium** Propelled by over a decade of EPIC-funded public research, California's electricity sector has made impressive strides toward a decarbonized future. The state has also experienced increasingly severe climate impacts, leading to new challenges and opportunities for the electric grid and its ratepayers. Light-duty zero emission vehicles (ZEVs) comprise a quarter of all sales in the state, which alongside increasing deployment of medium- and heavy-duty ZEV fleets, add new sources of flexible electric loads and storage. Distributed energy resources with more sophisticated communications and controls are promoting a more decentralized grid, driven by customer participation. Greater attention and commitments are unlocking technologies in areas such as long-duration energy storage, advanced building envelope and heat pump applications, floating offshore wind development, industrial decarbonization, and more. Join CEC Chair David Hochschild in a panel discussion with CPUC Commissioner Karen Douglas, SDG&E President and CFO Bruce Folkmann, CAISO President Elliot Mainzer, California Chair of Assembly Committee on Utilities and Energy Cottie Petrie-Noris, and U.S. DOE's Office of Energy and Equity Senior Policy Advisor James Strange for a discussion on how EPIC has supercharged the state's transition and can continue to address the gaps needed to provide ratepayers with a 100% clean, safe, reliable, and affordable electric system. (CPUC Proceedings R.21-06-017, Modernize the Electric Grid; R.16-02-007, Integrated Resource Plan and Long-Term Procurement Plan)

	Moderator: David Hochschild, Chair, CEC **Panelists:** • **Karen Douglas**, Commissioner, CPUC • **Bruce Folkmann**, President & CFO, SDG&E • **Elliot Mainzer**, President, CAISO • **Cottie Petrie-Norris**, California Assemblymember, Chair of Assembly Committee on Utilities and Energy • **James Strange**, Senior Policy Advisor, Office of Energy Justice and Equity, U.S. Department of Energy
10:00 – 10:10 AM	**TRANSITION – VIDEO BREAK** **Room: CNRA First Floor Auditorium and Conference Room 2-221 B-C** Video features from EPIC grant recipients.
10:10 – 11:10 AM	**PLENARY SESSION: PARTNERING WITH TRIBAL NATIONS TO PROVIDE ENERGY RESILIENCE THROUGH MICROGRIDS** **Room: CNRA First Floor Auditorium** Many tribal nations throughout California are in rural areas and service locations that experience disproportionately high energy outages. Renewable energy deployments in the form of small-scale electrical systems or microgrids can mitigate the impacts of these outages by providing a reliable and resilient energy supply, lower energy cost burden, and greater energy self-reliance in support of tribal energy sovereignty. Microgrid deployments can also help California reach its clean energy goals by reducing greenhouse gas emissions, enhancing grid reliability, and supporting higher levels of deployed distributed renewable generation. To date, through EPIC and other programs, the CEC has awarded over $100 million to California Native American tribes to train their workforces and install microgrids, often connected to energy storage systems and renewable generation, that provide resilient power and support statewide grid reliability during emergencies. This session will discuss approaches to advance tribal energy resiliency, affordability, and sovereignty while simultaneously helping the state reach its objectives for clean energy and energy equity. (CPUC Proceedings R.20-08-022, Clean Energy Financing; R.18-04-019, Climate Change Adaptation) **Moderator: Darcie Houck,** Commissioner, CPUC **Panelists:** • **Isaiah Vivanco**, Chairman, Soboba Band of Luiseño Indians • **Bo Mazzetti**, Chairman, Rincon Band of Luiseño Indians • **Jason Ramos**, Tribal Councilmember, Blue Lake Rancheria Tribe • **Linnea Jackson,** General Manager, Hoopa Valley Public Utilities District • **Peter Alstone,** Faculty Scientist at the Schatz Energy Research Center

<table>
<tr><td>11:10 AM – 12:30 PM</td><td colspan="2">LUNCH WITH NETWORKING AND TECHNOLOGY SHOWCASE VIEWING

Attendees are invited to network while exploring EPIC-funded exhibitors. Lunch options for in-person attendance are available onsite or at nearby restaurants.</td></tr>
<tr><td>12:30 – 1:10 PM</td><td colspan="2">PITCHFEST
Room: CNRA First Floor Auditorium
Hear a series of exciting technology pitches from startups who have received CalSEED funding.

Moderator: Rebecca Lee, Managing Director, New Energy Nexus

Pitchers:
• Brad Hines, CEO, Planet A Energy
• Barna Bhattacharyya, Co-Founder and CEO, Climformatics
• Talieh Zarger, Co-Founder and CTO, GridWrap, Inc.
• G.J. la O’, Co-Founder and CEO, Tyfast</td></tr>
<tr><td>1:15 – 2:15 PM</td><td>BREAKOUT SESSION: ACCELERATING MEDIUM- AND HEAVY-DUTY TRANSPORTATION ELECTRIFICATION
Room: CNRA First Floor Auditorium

State policies requiring a rapid transition of medium- and heavy-duty vehicles to zero-emission vehicles could significantly increase charging loads. This session will highlight how EPIC projects are innovating on high-power charging technologies, public access charging business models, and distributed energy resource integration for grid-supportive truck charging. EPIC demonstration projects advance clean energy goals, advancing use cases and applications for zero-emission vehicles and reducing cost and air pollution impacts for ratepayers. (CPUC Proceeding 23-12-008, Transportation Electrification)

Moderator: Lori Wilson, Assemblymember, Chair of Assembly Transportation Committee</td><td>BREAKOUT SESSION: UNLOCKING THE NEXT WAVE OF LOAD FLEXIBILITY AND DER INTEGTRATION
Room: CNRA Conference Room 2-221 B-C

California has made significant strides in adding more energy storage, smart electric appliances, and bi-directional electric vehicle charging to the grid. These devices have the capability to reduce or increase their loads on demand and, in some cases, dispatch energy back to the system in response to grid or price signals. EPIC projects are overcoming existing barriers to customer participation in load flexibility opportunities to deliver significant economic, environmental, and quality of life benefits to California ratepayers. (CPUC Proceedings R.21-06-017, Modernize Electric Grid; R.22-07-005, Demand Flexibility)

Moderator: Mary Ann Piette, Associate Lab Director of the Energy Technologies Area, Lawrence Berkeley National Lab</td></tr>
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	Panelists: • **Emil Youssefzadeh**, Chair of the Board, WattEV • **Watson Collins,** Senior Technical Executive, EPRI • **Vince Wong,** Co-founder & COO, ElectricFish • **Stephane Fosso,** Director of Fleet Technology and Electrification, Sysco Riverside	**Panelists:** • **David Meyers,** Founder & CEO, Gridtractor • **Vipul Gore,** President & CEO, Gridscape • **Alexandria Moffat,** Director of Clean Transportation & Policy Initiatives, SDGE – V2x Resiliency at Community Resource Centers Pilot • **Nicole Collette**, Principal Project Manager, PG&E – Microgrid Strategy Implementation
2:15 – 2:20 PM	**TRANSITION – VIDEO BREAK** **Room: CNRA Auditorium** and **CNRA Conference Room 2-221 B-C** Video features from EPIC grant recipients.	
2:20 – 3:20 PM	**BREAKOUT SESSION: BRINGING BUILDING ELECTRIFICATION TO ALL** **Room: CNRA First Floor Auditorium** CEC investments are pivotal in supporting California's progression to a clean energy future that benefits all ratepayers. Ambitious and actionable commitments to scaling the development and deployment of clean energy technologies to fight climate change – including the six million electric heat pumps installed by 2030 agreement – can catalyze unprecedented collaborative efforts and leverage transformative research and development innovations to explore affordable, reliable, and equitable pathways to electrifying buildings. Building decarbonization leaders in this session will discuss the successes, challenges, and opportunities in public investment in California and how the EPIC program is helping accelerate the deployment of clean energy benefits to all. (CPUC Proceeding R.19-01-011, Building Decarbonization) **Moderator: J. Andrew McAllister**, Commissioner, CEC	**BREAKOUT SESSION: EXPLORING NEW PATHWAYS TO INDUSTRIAL DECARBONIZATION** **Room: CNRA Conference Room 2-221 B-C** Industry processes are varied and often require site-specific or sector-specific solutions, and companies have difficulty adopting new technologies given the need to minimize disruption and continue output. EPIC funds in recent years have made inroads in industrial decarbonization and are now capitalizing upon an influx of dollars at the federal level and new private-sector funding opportunities. This session will bring together top innovators to discuss how EPIC projects are leveraging these opportunities to help companies reduce their energy output and decarbonize important processes, thereby benefiting industrial ratepayers while also paving the way for potentially significant follow-on effects benefiting the grid and air quality for all ratepayers. (CPUC Rulemaking 11-03-012) **Moderator: Matt Baker**, Commissioner, CPUC

	Panelists: • **John Neal**, Director of Zero-Carbon Buildings, AEA • **Nick Jiles**, Manager of REALIZE-CA, RMI • **Curtis Harrington**, R&D Engineering Supervisor, UC Davis Western Cooling Efficiency Center • **Jane Melia**, CEO & Co-Founder, Harvest Thermal	**Panelists:** • **Noah Long,** Director of State and Regulatory Affairs, Antora Energy • **Elhay Farkash**, CEO, Zira • **Arun Gupta**, CEO, Skyven Technologies • **Scott McNally**, Vice President of Development, RedoxBlox
3:20 – 3:30 PM	**TRANSITION – VIDEO BREAK** **Room: CNRA First Floor Auditorium** and **CNRA Conference Room 2-221 B-C** Video features from EPIC grant recipients.	
3:30 – 4:30 PM	**PLENARY SESSION: DEVELOPING THE CALIFORNIA LITHIUM ECONOMY & ENERGY STORAGE MANUFACTURING** **Room: CNRA First Floor Auditorium** Developing lithium-ion batteries sustainably and affordably will be critical as the state greatly increases the use of clean energy technologies such as electric vehicles and stationary energy storage in the years ahead. California has the potential to grow a robust lithium and energy storage economy within its borders, working with the Salton Sea region to explore its lithium recovery potential, coordinating with communities and innovators on equitable workforce and technology opportunities, and supporting the many innovative firms in California advancing innovations in battery components, materials, manufacturing, repurposing, and recycling. This plenary session will discuss how EPIC research and demonstration projects are helping to advance lithium recovery and battery manufacturing toward the electrified economy of the future, and how they can serve to benefit California ratepayers now and in the decades to come. (CPUC Proceeding R.21-06-017, Grid Modernization for High Distributed Energy Resources) **Moderator: Noemí Gallardo,** Commissioner, CEC **Panelists:** • **Steve Padilla**, California State Senator, Senate District 18 • **Sanjiv Malhotra**, Co-founder & CEO, Sparkz • **Virginia Klausmeier**, President & CEO, Sylvatex • **Zheng Chen**, Associate Professor of Chemical and Nano Engineering, Sustainable Materials & Energy Laboratory, UC San Diego	
4:30 – 4:40 PM	**CLOSING REMARKS** **Room: CNRA First Floor Auditorium** • **Leuwam Tesfai,** Deputy Executive Director for Energy and Climate Policy, CPUC	
4:40 – 5:00 PM	**LAST CHANCE NETWORKING** **Room: CNRA First Floor Lobby**	