



SOUTHERN CALIFORNIA
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2025 Electric Program Investment Charge (EPIC) Symposium Agenda

Tuesday, October 7, 2025: 8:00 am – 5:00 pm

California Natural Resources Agency Building, 715 P Street, Sacramento, CA 95814

In-person event with sessions livestreamed from the auditorium stage.
Concurrent breakout sessions in Conference Room 2-221 (2nd floor) are in-person only.

Time and Session Details

8:00 – 8:45 AM

Registration and Refreshments

Location: 1st Floor Lobby

- Registration desk opens
- Refreshments and networking

8:45 – 9:05 AM

Welcome and Introductory Remarks

Location: Auditorium

Symposium Welcome

- Welcome and housekeeping announcements

EPIC Introductions

- **David Hochschild**, Chair, California Energy Commission
- **Karen Douglas**, Commissioner, California Public Utilities Commission

9:05 – 10:00 AM

Living Room Chat: What's Next for EPIC?

Location: Auditorium

Description: The EPIC program is nearing the end of the EPIC 4 investment cycle, which spanned from 2021-2025 and leveraged both available state funding and federal tax credits to spur innovations. Since then, installation and adoption of clean energy technologies have grown in the state, such as with the case of building decarbonization, transportation electrification, and energy storage. Grid resilience and reliability remain primary focuses as the electric grid continues to operate and evolve in response to extreme weather events, but affordability has become the most critical issue as the state plans for an equitable clean energy transition in which all Californians can participate. As EPIC administrators begin to scope strategic initiatives and solicitations for the next five years, hear what key topics and issues clean energy public research can help address. (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, California Energy Commission

Speakers:

- **Karen Douglas**, Commissioner, California Public Utilities Commission
- **Josh Becker**, California State Senator (Senate District 13)
- **Michael Delaney**, Vice President of Utility Partnerships and Innovation, Pacific Gas and Electric Company
- **Arnab Pal**, Co-founder and Executive Director, Deploy Action; former Principal Advisor & Consultant to Director Jigar Shah and the Loan Program Office, U.S. Department of Energy

10:00 – 10:15 AM

EPIC Action Reel

Location: Auditorium

Description: EPIC awardee videos highlighting how their innovations are making a real-world impact.

Introductory Remarks: **Leuwam Tesfai**, Deputy Executive Director of Energy and Climate Policy, California Public Utilities Commission

10:15 – 11:00 AM

Plenary Session: Improving Affordability and Lowering Barriers to Clean Energy

Location: Auditorium

Description: A key barrier to residential and transportation electrification is the limiting potential of home and utility infrastructure when adding new electric loads. Panel replacements typically cost several thousand dollars and take weeks to months to implement. Furthermore, significantly increasing peak home electrical demand can result in a need for expanded utility infrastructure, the cost of which is borne by ratepayers. This is particularly important for low-income and vulnerable communities that are most impacted by these higher costs. An industry-wide shift in perspective is needed to consider power efficient design (PED) as well as current energy efficiency approaches. While technologies and home electrification strategies exist to adopt PED, they are rarely used due to lack of familiarity for electricians, code authorities, and home occupants. Learn how EPIC-funded technologies and planning tools are offering solutions to electrification installation with existing infrastructural limitations. (CPUC Decision D.20-07-032; CPUC Proceeding R.21-06-017, Modernize the Electric Grid)

Moderator: **Noemí Otilia Osuna Gallardo**, Commissioner, California Energy Commission

Speakers:

- **Patrick Varuzza**, Expert Product Manager, Pacific Gas and Electric Company
- **Jenny Low**, Sr. Program Manager, Build It Green
- **Agatha Kazdan**, Principal Technical Leader, Electric Power Research Institute (EPRI)
- **Doug Davenport**, CEO, Prospect Silicon Valley

11:00 – 11:30 AM

Networking and Technology Showcase

Location: 1st Floor Lobby and 2nd Floor

Description: Network while exploring EPIC-funded demonstrations.

11:30 AM – 12:45 PM

Lunch

Location: 1st Floor cafeteria, outside seating areas, and off-site eateries.

12:45 – 1:30 PM

Plenary Session: Battery Safety Future-proofing

Location: Auditorium

Description: Energy storage remains an essential technology in securing the electric grid's reliability and resiliency, while also enabling the continued proliferation of renewable generation sources and load flexibility. The vast majority of at-scale energy storage utilizes lithium-ion battery technology that requires proper charging and handling practices to minimize hazards, such as risk of fire caused by thermal runaway. Improving battery storage safety is critical to maintain momentum developing additional battery capacity in the state. This session will feature innovative battery components and manufacturing solutions advancing the safety of lithium-ion batteries. (CPUC Proceedings R.21-06-017, Modernize Electric Grid; CPUC Resolution ESRB-13)

Moderator: **Eric Wu**, Program Manager, Safety and Enforcement Division, California Public Utilities Commission

Speakers:

- **An Huang**, CEO, Sonocharge
- **Jared O'Leary**, CEO and Co-founder, SirenOpt
- **Joe Papp**, CTO and Co-founder, Anthro Energy
- **Patricia McNeil**, CEO, Westwood Aerogel

1:30 – 1:40 PM

Transition Break

1:40 – 2:40 PM

Breakout Session 1.1: Next-Generation Vehicle Charging Technologies

Location: Auditorium

Description: Thoughtful transportation electrification is key to achieving California's climate and energy goals while ensuring benefits to ratepayers. That means siting and planning for EV charging in the right sizes and places, managing charging load to avoid increasing peak demand, and harnessing the potential of bidirectional charging to enable EVs to provide backup and additional load flexibility. Learn how EPIC projects are advancing solutions and fostering fruitful collaborations between industry, academia, utilities, and government to get the most out of the EV transition for ratepayers. (CPUC Proceeding R.23-12-008, Transportation Electrification)

Moderator: **John Reynolds**, Commissioner, California Public Utilities Commission

Speakers:

- **Keith Graeber**, Director of Engineering, U.C. Davis
- **Apoorv Bhargava**, CEO & Co-founder, WeaveGrid, Inc.
- **Watson Collins**, Sr. Technical Executive, Electric Power Research Institute (EPRI)

Breakout Session 1.2: Improving the Performance of Large Buildings

Location: Conference Room 2-221 B-C

Description: Improving efficiency and reducing emissions from large existing buildings presents a major opportunity for meeting California's climate and energy goals but remains a complex challenge. Emerging technologies, such as large-scale heat pumps, provide ways to electrify heating and cooling—partially or fully—without requiring major structural modifications. New refrigerants with lower global warming potential (GWP) can help cut emissions from existing appliances over time, while direct substitution with low and ultra-low GWP alternatives can deliver reductions well before full equipment replacement is needed. This panel will showcase the latest EPIC-funded innovations advancing cost-effective, emissions reduction solutions in this sector. (CPUC Proceeding R.19-01-011, Building Decarbonization)

Moderator: **Andrew McAllister**, Commissioner, California Energy Commission

Speakers:

- **Paul Raftery**, Professional Researcher at the Center for the Built Environment, UC Berkeley
- **Doug Black**, Grid Integration Group Leader, Lawrence Berkeley National Lab
- **Jane Melia**, CRO and Co-founder, Harvest

2:40 – 2:50 PM

Transition Break

2:50 – 3:50 PM

Breakout Session 2.1: Integration of Climate Data Products into Electricity Sector Planning & Policy

Location: Auditorium

Description: Climate modeling information is optimizing grid system planning and infrastructure buildout, which can lower ratepayer costs by avoiding unnecessary installations and upgrades that are then passed down as fixed charges. Modeling tools can provide insights into potential future grid and weather conditions, enabling public interest research to then transform these insights into improved resilience planning and climate-informed investments. Learn how EPIC-funded modeling and data are being integrated into decisions in both the public and private sectors to ensure reliable, cost-effective energy services. (CPUC Proceedings R.16-02-007, Integrated Resource Plan and Long-Term Procurement Plan; R.18-04-019, Climate Change Adaptation)

Moderator: **Elea Becker Lowe**, California Climate Assessment Program Manager, Land Use and Climate Innovation

Speakers:

- **Owen Doherty**, Principal Research Scientist, Eagle Rock Analytics
- **Amber Mahone**, Managing Partner, Energy & Environmental Economics, Inc.
- **Julie Kalansky**, Climate Scientist, Scripps Institute of Oceanography, UC San Diego

Breakout Session 2.2: Affordability Enabled by Utility Grid Modernization

Location: Conference Room 2-221 B-C

Description: California's electric grid continues to evolve at an increasingly fast pace. Innovations are helping utilities better build out, survey, and manage grid resources at the transmission and distribution level. This, in turn, can lower infrastructure development and maintenance costs. Hear how utilities are monitoring and improving throughput of electricity in existing assets while adding battery

energy storage systems to increase capacity and avoid upgrades. Additionally, learn about new modeling tools that are supporting the buildout of electricity infrastructure for future distributed energy resources. (CPUC Proceedings R.21-06-017, Modernize Electric Grid)

Moderator: **Laura Klivans**, Reporter and Host, KQED

Speakers:

- **Aaron Louie**, Senior Consulting Engineer, Pacific Gas and Electric Company
- **Franz Stadtmueller**, Principal Electrical Engineer, Grid & Electrification Innovation, Pacific Gas and Electric Company
- **Farzad Khalilpour**, Senior Technical Lead, Southern California Edison Company

3:50 – 4:00 PM

Transition Break

4:00 – 4:45 PM

Plenary Session: Entrepreneurial Journeys Crossing the Valleys of Death

Location: Auditorium

Description: EPIC funding has helped create a robust entrepreneurial ecosystem supporting the development of clean energy technologies across technology readiness levels, from concept to manufacturing to commercialization. These innovations, at scale, will be crucial to supporting California meet its clean energy and climate goals, particularly in addressing near-term electricity system and consumer needs. Key strategies of the ecosystem are providing business support for innovators, as well as critical funding for early-stage companies in testing and validation phases. Hear from recipients about how EPIC funding enabled them to develop and scale their innovations, continued challenges encountered by entrepreneurs, and the anticipated ratepayer benefits of their clean energy technologies. (CPUC Proceeding R.20-08-022, Clean Energy Financing)

Moderator: **Jon Bonanno**, Managing Partner, Factor

Speakers:

- **Justin Briggs**, COO and Co-founder, Antora Energy
- **Vince Wong**, COO and Co-founder, ElectricFish
- **Shaurjo Biswas**, CEO, CTO, & Co-founder, Liminal Insights
- **Chris Graves**, CEO & Co-founder, Noon Energy

4:50 – 5:00 PM

Closing Remarks and Summary of the Day

Location: Auditorium

Closing Remarks: **Jonah Steinbuck**, Director of Energy Research and Development, California Energy Commission