



California Energy Commission

Vice Chair Janea Scott

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Climate Center Community Energy Resilience Policy Summit



Electric Program Investment Charge (EPIC)

- Established in 2012 by the California Public Utilities Commission to fund:
 - Applied research and development,
 - Technology demonstration and deployment, and
 - Market facilitation
- EPIC projects are designed to produce electricity ratepayer benefits in the areas of increased reliability, improved safety, and reduced electricity costs.
- In 2019, the CEC approved 29 new EPIC projects totaling nearly \$74.0 million.



Advancing Equity

Through December 2019:

- **29%** of CEC EPIC technology demonstration and deployment funds have been invested in communities determined to be disadvantaged based on environmental, health, and socioeconomic factors; and
- An **additional 36%** has been invested projects in communities that are considered low-income but not disadvantaged.



Source: IEPR Joint Agency Workshop on Advancing Energy Equity, July 30, 2019



Microgrid Technology



**RESILIENCY
AND SAFETY**

Blue Lake Rancheria



- Microgrids have the ability to provide islands of electricity when surrounding areas do not have access to electricity.
- CEC EPIC funded Blue Lake Rancheria microgrid in Humboldt County.
- Provided power supply for firefighting command operations during a 2017 wildfire.
- Provided power for over 10,000 people during a PSPS event in 2019.



Energy Storage

Rincon Band of Luiseño Indians

- Over \$7 million in grant funds to demonstrate flow battery combined with flywheel storage technology connected to solar.
- Resiliency and cost savings for:
 - Waste water treatment plant
 - Gas station and convenience store
 - Office building, and
 - Casino and resort, which also serves as emergency operation center and shelter.



Soboba Band of Luiseño Indians

- \$1.7 million in funding to demonstrate a flow battery with solar to provide fire station support.
- Validate system performance, such as duration, load shifting, peak shaving, and resiliency during utility power outages.
- Collect data on cost, performance, and lessons learned to support commercial deployment.

Viejas Band of Kumeyaay Indians

- Over \$1 million in funding to demonstrate flywheel storage technology.
- In conjunction with microgrid technology, will provide pumping power for water wells and uninterrupted power for operation of medical equipment and temperature control for elderly residents.



Energy Efficiency

- Retrofitting existing buildings to be energy efficient is challenging, especially multifamily buildings.
 - Grant to fund prefabricated building envelope panels optimized for low-rise wood-frame buildings, a common multifamily building type in California.
- Can all-electric water heating and space conditioning systems achieve zero net energy in a cost-effective manner?
 - Grant to fund all-electric water heating and space conditioning systems in new construction multifamily buildings.





Thank You!