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:
  o Applied research and development,
  o Technology demonstration and deployment, and
  o 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 in communities that are considered low-income but not disadvantaged.

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