



# ENERGY STORAGE REBATE PROGRAM

## Strategic Initiatives

### Board of Public Utilities

March 23, 2026

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## BACKGROUND

1. Required by state law to establish energy efficiency goals and **administer energy efficiency programs** funded through the state-mandated Public Benefits Charge.
2. Assembly Bill (AB) 1890 (Brulte, 1996) required that 2.85% of electric revenue be utilized to fund public benefits programming in at least one of four areas: **demand side management (energy efficiency)**, renewable energy, low-income assistance, or research, development, and demonstration.
  - a. In January 1998, RPU began collecting the State mandated Public Benefits Energy Surcharge on customer utility bills.
3. SB 350 (De Leon, 2015) establishes annual targets for statewide energy efficiency savings and demand reduction that will achieve a cumulative doubling of statewide energy efficiency savings in electricity and natural gas by January 1, 2030. The bill requires local POU's to establish annual targets for **energy efficiency savings and demand reduction** consistent with this goal.



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## RESEARCH

1. Reviewed existing RPU rebates and programs to determine that a new program was needed
2. Maximizes benefit of existing programs – Air Conditioning Rebate, Heat Pump Rebate, Electrify Riverside Program, and Solar Self-Generation Rate
3. Researched available technology
4. Compared other utility programs
5. Analyzed avoided cost of load shifting



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## AVOIDED COST OF LOAD SHIFTING

1. Performed avoided cost of load shifting analysis
  - a. Utility level avoided costs evaluated buying additional electricity during load peaks and throughout the year at peak times
  - b. Distribution level analysis evaluated the avoided costs of upgrading circuits to accommodate additional peak loads
2. Assumed a 13.5 kWh capacity battery with an average system cost of \$8,200 (~battery pricing varies depending on brand and size)
3. RPU's analysis determined an avoided cost of almost \$465/kWh
4. Proposed rebate rounds up to \$500/kWh
  - a. Example: Total rebate of \$6,750 for a traditional 13.5 kWh battery storage system (covers 82% of the total system cost)



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## METHODOLOGY COMPONENTS

1. Based on avoided cost of energy for solar PV resources and CPUC 2024 Distributed Energy Resources Avoided Cost Calculator
2. Utility level avoided cost components include avoided local energy costs, avoided system capacity costs, avoided GHG carbon credit, and avoided distribution system losses

Avoided Cost of Load Shifting Value

*Avoided Distribution Infrastructure Costs + Avoided System Capacity Costs + Avoided GHG Carbon Credit + Avoided Distribution System Losses = Loss Adjusted Annual \$ Value*

Potential Rebate Amount

*Loss Adjusted Annual \$ Value x 10 years – Battery Degradation = approximately \$465 per kWh*



## OTHER UTILITY PROGRAMS

Utility	Program Name	Incentive	Technology	Size	Requirements
Anaheim Public Utilities	Residential Energy Storage Pilot Program	Up to \$3,000 per household	Eligible energy storage unit must meet the size minimum requirement	Minimum size of 5 kWh	Must be on a TOU rate, part of existing solar system, and sign up for DR program
Silicon Valley Power	Battery Storage Rebate	Up to \$2,700 per household and extra \$2,000 for low-income	Approved list of equipment brands	Minimum size of 3 kWh	Must have existing solar system or install solar with battery storage
Sacramento Municipal Utility District	My Energy Optimizer Partner+ Incentive (aka Battery Storage Incentive Program)	Enrollment incentive varies by brand and size with maximum up to \$10,000 per household	Approved list of equipment brands	No minimum, based on the approved list of eligible brands	Must be on a TOU rate and sign up for DR program
Fort Collins Utilities (Colorado)	Residential Battery Storage	\$300/kWh capacity up to \$6,000 maximum incentive	Approved list of equipment brands	Minimum size of 6 kWh	Must be sold and installed by approved contractor and be on a TOU rate
Duke Energy	PowerPair Solar and Battery Installation Pilot Program	\$400/kWh up to 13.5 kWh size; maximum incentive of \$9,000 based on PV system size and battery capacity	Approved list of equipment brands limited to maximum capacity of 13.5 kWh	No minimum, but limited to maximum size of 13.5 kWh	Must be new solar installation with battery storage, be on a TOU rate, and use approved contractor



## PROPOSED ENERGY STORAGE REBATE

- **Program Budget:** \$5 million
- **Residential Rebate Amount:** \$500/kWh capacity (\$850/kWh for low-income)
- **Maximum Rebate Potential:** Up to \$10,000 per rebate (\$17,000/rebate for low-income) not to exceed total project cost; limited to one rebate per year (if customer has moved from property initial system was installed on and system remained at prior property)
- **Retroactive:** Upon approval, customers from fiscal year July 1, 2025 – June 30, 2026 qualify
- **Technology:** No restrictions on brand or type of energy storage system
- **Size:** No restrictions on kWh capacity of equipment
- **Eligibility:** Customers with existing solar, new solar installs, standalone energy storage system install
- **Rate:** Must be on or switch to time-of-use rate



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## BENEFITS

Utilizes Public Benefits Energy Surcharge Fund

Peak Reduction and Peak Shaving

Combine with other existing rebates

Demand Side Management (Pilot program)

No restrictions on type of energy storage technology or sizing



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## NEXT STEPS

1. Commercial energy storage rebate program
  - a. Additional analysis and research needed
  - b. Need to update time-of-use rate
  - c. More restrictions due to capacity and impact on grid reliability
2. Other demand response programs
3. Tracking and reassessment of new program



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## RECOMMENDATIONS

That the Board of Public Utilities recommends that the City Council:

1. Approve implementation of a new energy storage rebate program for residential demand side management incentives;
2. With at least five affirmative votes, authorize the Chief Financial Officer, or designee, to record a supplemental appropriation in the total amount of \$5,000,000 from the Public Benefits Energy Surcharge Fund Available Reserves and appropriate expenditures to the Energy Storage Rebate Program Account; and
3. Authorize the City Manager, or designee, to execute the Energy Storage Rebate Program and take all necessary actions required or advisable to implement, administer, fund, and carry out the City of Riverside's responsibilities under the Energy Storage Rebate Program, including making minor and non-substantive changes to the program, and to execute future amendments to the Energy Storage Rebate Program incentive amounts under substantially similar terms and conditions.



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