

Item 12: Build Momentum, dba Momentum

April 10, 2025 Business Meeting

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Industry & Carbon Management Branch



Benefits to Californians





Solicitation Overview

- Demonstrate and deploy demand flexibility technologies for industrial, agriculture, and water (IAW)
- Technology commercialization
- Enroll in demand response or pricing program
- Project Funding:
 - Build Momentum, Inc.
 - \$17,000,000 in EPIC funds
 - \$10,602,855 initial phase
 - \$5,241,093 in match funds



Source: City of Santa Barbara website

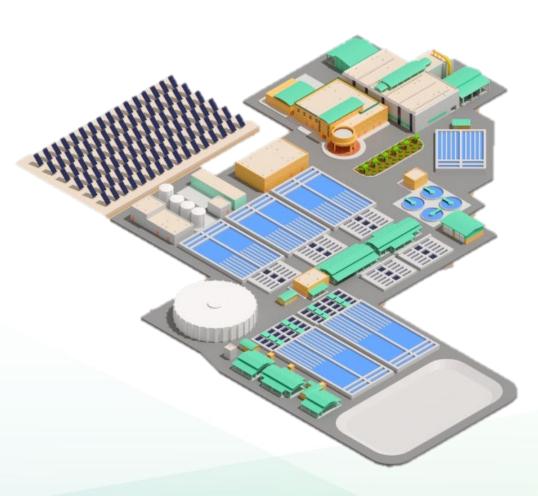


Development of Tariffs to Incentivize Load Shifting in the Water Sector

- Lead: UC Davis
- Location: Irwindale

Project Focus:

- Alternative rate structures that incentivize electric load shift
- Leverage water systems to reduce renewable curtailment
- Shift water consumption to periods of renewable overgeneration



Source: Metro Water District of Southern California website



Demand Flexibility Tools for Water Utilities

- Lead: Stanford University
- Location: Charles E. Meyer Desalination Plant in Santa Barbara

Project Focus:

- Demand flexibility digital tools for water treatment and supply facilities
- Pilot demonstration
- Deliver an estimated 17% bill savings from partial flexible load summer operation



Source: City of Santa Barbara website



Flexible Load Controls at an All-Electric Manufacturing Facility

- <u>Lead:</u> Lawrence Berkeley National Laboratory
- Location: Siemens in Pomona
- Project Focus:
 - Load management and asset optimization control
 - Market readiness
 - Deliver an estimated 30% reduction in peak power costs



Source: Siemens website



Enhanced Demand Flexibility for Cold Storage

- Lead: UC Davis
- Location: Innovative Cold in San Diego

• Project Focus:

- Optimize system load for blast freezing and storage
- Validate controls for refrigeration load management
- Deliver 5-13% estimated reduction in annual energy costs



Source: CREE Lighting website



Market Potential

- According to the California Demand Response Potential Study Phase
 4, California IAW market load shift potential in 2050 is 5 GWh.
- If realized, contribute about 17% of total CA load shift potential.



Staff Recommendation

 Adopt staff's recommendation that these actions are exempt from CEQA

Approve the IAW FlexHub grant agreement (EPC-24-045)