

Are California's battery energy storage systems going up?

For Immediate Release: October 24, 2023 SACRAMENTO -- New data show California is surging forward with the buildout of battery energy storage systems with more than 6,600 megawatts (MW) online, enough electricity to power 6.6 million homes for up to four hours.

Does California need more energy storage?

The state is projected to need 52,000 MW of energy storage capacity by 2045. Today, it's a quarter of the way there. Increasing storage allows California's grid to store energy from clean energy sources like solar during the day and use it during peak demand in the evening.

Why are California's energy storage grants important?

"These grants are really putting a marker around California's commitment to ensuring we're going to get long-duration energy storage to complement battery storage on the grid to meet our goals," CEC Commissioner Patty Monahan said during the agency's June 12 meeting.

Which energy companies are building long-duration storage projects in California?

The California Energy Commission approved grants for long-duration storage projects to be built by Redflow, RedoxBlox and Noon Energy. Four Redflow zinc-bromine flow batteries in Mossel Bay, South Africa.

Should California increase battery storage?

Increasing storage allows California's grid to store energy from clean energy sources like solar during the day and use it during peak demand in the evening. Ramping up battery storage is a key part of Governor Newsom's energy roadmap for achieving the state's ambitious climate goals and a 100% clean electric grid.

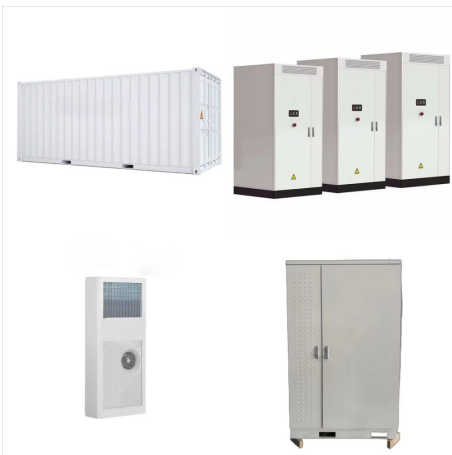
How do energy storage projects work?

Energy storage projects capture power produced by wind and solar resources and discharge the energy back to the electric grid during times of peak demand. In California, electricity demand is highest in the late afternoon and early evening hours when the sun sets, causing solar resources to drop off before winds pick up later in the evening.

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When fully charged, the 100MW battery facility will be capable of holding 400MWh of electricity, which will be enough to power approximately 80,000 homes and businesses for four hours.. Location and site details. The Ventura energy storage project is being developed near the city of Oxnard, north of Los Angeles in the Ventura County of California.



Luna Storage and LAB are standalone, lithium-ion battery storage projects located in the City of Lancaster, in Los Angeles County, California. Their ability to store clean energy for use during periods of high demand, and when the sun is not shining or the wind is not blowing, is critical to California's clean energy transition. The Luna and



The state is projected to need 52,000 MW of energy storage capacity by 2045. Today, it's a quarter of the way there. helping to fast-track projects needed to meet California's climate and energy goals. Governor Newsom has taken unprecedented action to streamline clean energy infrastructure and invest billions of dollars to build more

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The California Energy Commission (CEC) has approved a \$30 million grant to Form Energy to build a long-duration energy storage project that will continuously discharge to the grid for 100 hours. The 5 MW / 500 MWh iron-air battery storage is the largest long-duration energy storage project to be built in California and the first in the state to

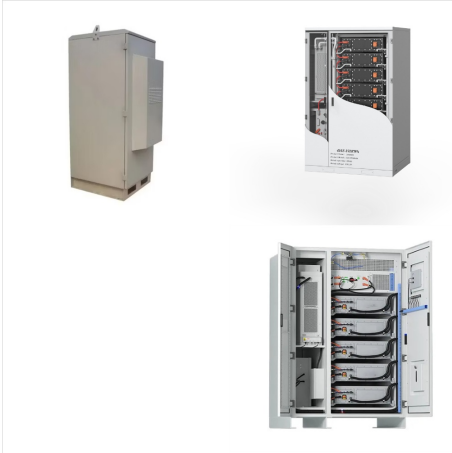


Battery storage can be an important component of a more robust emergency preparedness plan in the event of a power outage. In preparation for the next wildfire season, the CPUC has authorized funding of more than \$1 billion through 2024 for SGIP.



WHAT YOU NEED TO KNOW: The state has increased its battery storage capacity over tenfold since the beginning of the Newsom Administration. Adding batteries is critical to achieving the state's ambitious goal of 100% clean electricity by 2045. WINTERS ??? California has notched a major victory on its path to 100% clean electricity: surpassing 10,000 ???

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The primary components of the project include an up to 3,200-megawatt-hour (MWh) battery energy storage system (BESS) facility, an operations and maintenance (O& M) building, a project substation, a 500-kilovolt (kV) overhead intertie transmission (gen-tie) line, and interconnection facilities within the Pacific Gas and Electric Company (PG& E



The California Energy Commission last week approved \$26.7 million in funding for three long-duration energy storage projects that will be built by Redflow, RedoxBlox and Noon Energy to serve



PALM SPRINGS, Calif. ??? The Bureau of Land Management has approved the Sunlight Storage II Battery Energy Storage System in Riverside County to add up to 300 megawatts for a total 530 megawatts of energy storage capacity provided to the state power grid from the Desert Sunlight Solar Farm, another step toward meeting the Biden-Harris ???

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A 230MW battery energy storage system (BESS) from NextEra Energy Resources, part of a large solar-plus-storage project, has come online in California. The Bureau of Land Management (BLM), which manages the land on which the 94-acre project is located in Riverside County, announced the start of commercial operations on the Desert Sunlight



DOE OE GLOBAL ENERGY STORAGE DATABASE Page 1 of 17 CALIFORNIA ENERGY STORAGE POLICY STORAGE POLICY SNAPSHOT Does California have an renewables mandate? YES. 50 percent renewables by 2026 and 60 percent renewables by 2030 Does California have a state mandate or target for storage? YES. 1,325 MW by 2020 Does ???



An energy storage project in Southern California will provide resource adequacy (RA) and ancillary services to the state's power grid, adding more reliability and resiliency for electricity in

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The project in Goleta, California, as it looks under construction. Image: Gridstor. Updated 8 June 2023: Gridstor VP of policy and strategy Jason Burwen offered some more details on the project to Energy-Storage.news. The Goleta facility is a merchant resource, but has a resource adequacy (RA) contract with utility Southern California Edison (SCE), he said.



operations of existing bulk energy storage projects in California. This paper summarizes the presentations and public comments from the bulk energy energy storage projects that will help meet the 1,325 MW target can provide important benefits to the grid, long-duration bulk energy storage projects larger



Berkeley, CA ??? December 13, 2023 ??? Today, the California Energy Commission (CEC) voted to award Form Energy a \$30 million grant to support the deployment of a 5 megawatt (MW) / 500 megawatt-hour (MWh) multi-day energy storage system in California. Form Energy will build the project at the site of a Pacific Gas and Electric Company (PG&E) electric substation in ???



Sacramento, CA???SMUD's long-duration battery storage project in partnership with ESS Tech, Inc. has been awarded a \$10 million grant from the California Energy Commission to demonstrate a groundbreaking 3.6-megawatt, 8-hour iron flow battery project and set the foundation for future large-scale battery deployments and manufacturing at energy



California is a world leader in energy storage with the largest fleet of batteries that store energy for the electricity grid. megawatts (MW) to more than 13,300 MW, with an additional 3,000 MW planned to come online by the end of 2024. The state projects 52,000 MW of battery storage will be needed by 2045. A CAISO Hybrid system located



Calpine is at the forefront of California's clean energy revolution, investing in battery storage projects SANTA ANA ENERGY STORAGE PROJECT Location: Santa Ana, California Capacity: 80 MW, powering 80,000 homes for up to 4 ???

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WHAT TO KNOW: California has increased battery storage by 757% in only four years, and now has enough to power 6.6 million homes for up to four hours ??? essential progress in cutting pollution, fighting climate change, and creating a more reliable grid.



-megawatt lithium-ion battery bank is big even for California, which boasts about 55% of the nation's power storage capacity, according to data from the U.S. Energy Information Administration.



For Immediate Release: December 13, 2023.
SACRAMENTO ??? The California Energy Commission (CEC) today approved a \$30 million grant to Form Energy to build a long-duration energy storage project that will continuously discharge to the grid for an unprecedented 100 hours.. The 5 megawatt (MW) / 500 megawatt-hour iron-air battery storage project is the ???

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The California Energy Commission, or CEC, last week approved a \$30 million grant to long-duration energy storage developer Form Energy to build its first project in California capable of



Sacramento ??? A \$31 million grant from the California Energy Commission (CEC) will be used to deploy a cutting-edge, long-duration energy storage system that will provide renewable backup power for the Viejas Tribe of Kumeyaay Indians and support statewide grid reliability in the event of an emergency. The project, which is funded by one of the largest state grants ever ???



Calpine and GE Renewable Energy completed the Santa Ana Storage Project in southern California. The project contains a 20MW/80MWh (4 hour) standalone battery energy storage system using GE's Reservoir energy storage technology. The system is supported by a 20-year Resource Adequacy Power Purchase Agreement (PPA).

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State and local energy leaders joined company representatives to celebrate the launch of the 68.8 MW/275.2 MWh system, one of the largest energy storage systems in Southern California. News Today