

How will the CPUC's directive impact California's energy supply strategy?

By 2037, the CPUC's directive could lead to the completion of this procurement strategy, if bid costs are found to be reasonable and contracts are approved, enhancing California's grid storage by up to 2 GW and increasing energy production by up to 8.6 GW.

Does energy storage meet local and system capacity requirements?

R. 13-12-010: This rulemaking determined that energy storage can meet local and system capacity requirements. R. 14-08-013: This rulemaking determined that energy Storage may be included as a distribution upgrade deferral asset. R. 14-10-010: This rulemaking determined that energy storage's ramping attributes can provide flexible capacity.

What is CPUC decision d13-10-040?

CPUC Decision D.13-10-040 requires CPUC staff to conduct a comprehensive program evaluation of the CPUC energy storage procurement policies and AB 2514 energy storage projects. The final study, conducted by Lumen Energy Strategy, was released on May 31, 2023. The final study and its appendices are posted below:

What does the CPUC do?

The CPUC regulates services and utilities, protects consumers, safeguards the environment, and assures Californians access to safe and reliable utility infrastructure and services. Visit [for more information](#). News Release

What is the capacity value of energy storage?

The capacity value of energy storage is dependent on the volume of renewable capacity in the system. The following tables summarize the projected wind and solar capacity and energy in the CAISO system in 2022. These amounts were derived from resource portfolios being developed in the CPUC's IRP process as of November 2019.

How does the CPUC use the solve capacity expansion model?

The CPUC uses the RESOLVE capacity expansion model as a core analytical tool to develop a Reference

# CPUC ENERGY STORAGE PROCEEDING



## System Portfolio.



Visit the Docket Card (R.20-11-003) to view proceeding documents and make a comment on the proceeding. For information on what occurs when the California Independent System Operator (CAISO) calls a Flex Alert, information on rotating December 16, 2021: CPUC Approves Energy Storage Contract for SCE (CPUC Press Release) December 2, 2021:



California Public Utilities Commission February 18, 2022 Energy Division Study for Proceeding R.21-10-002 Loss of Load Expectation and Effective Load Carrying Capability Study solar, storage, and hybrid resources, and 2. Current NQC counting with forced outage derates (applied to resources whose NQC is



The CPUC adopted a Resource Adequacy (RA) policy framework (Public Utilities Code section 380) in 2004 to in order to ensure the reliability of electric service in California. The CPUC established RA obligations applicable to all Load Serving Entities (LSEs) within the CPUC's jurisdiction, including investor-owned utilities (IOUs), energy

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: CPUC hosts a workshop on the results of the 2016 Energy Storage Impact Evaluation. For a zip file containing the presentations made at the workshop, please click [here](#). October 13, 2017: CPUC issues Resolution E-4887 updating the definition of "developer" for the purpose of the SGIP developer cap. October 13, 2017: CPUC issues



Notably, there are four potential resource types that the CPUC has already identified: offshore wind, geothermal, long duration energy storage, and out-of-state wind. The ruling also mentions other emerging technologies as potential resources that fit the criteria to be considered for central procurement: non-lithium-ion battery energy storage



The Commission initiated Rulemaking (R.) 17-07-007 on July 13, 2017 to consider refinements and, if necessary, revise the rules and regulations governing the interconnection of generation, distributed energy resources (DERs) and storage facilities to the electric distribution systems of the Large IOUs. The proceeding is divided into three phases.

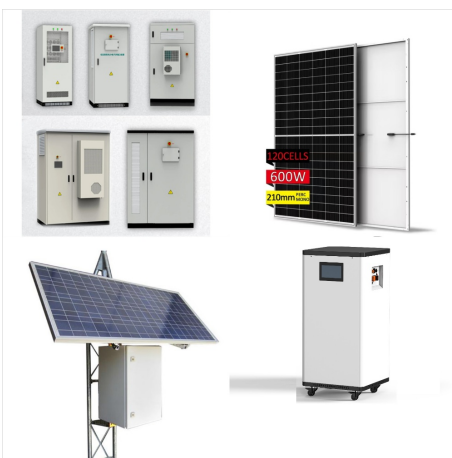
# CPUC ENERGY STORAGE PROCEEDING



The California Public Utilities Commission (CPUC), in its ongoing efforts to help the State achieve a 100 percent clean energy future, today adopted Version 2.0 of its Distributed Energy Resources (DER) Action Plan. The Plan helps the CPUC guide its utility infrastructure planning and improve coordination across proceedings related to grid



The CPUC has two open proceedings addressing transportation electrification issues: Rulemaking (R.)23-12-008, focused on Transportation Electrification Policy and Infrastructure, and Clean Energy and Pollution Reduction Act of 2015. AB 1082. Burke. 2017. Electric Vehicle Charging Infrastructure: School Facilities and other Educational



An Order Instituting Rulemaking to Modernize the Electric Grid for A High Distributed Energy Resources (DER) Future issued on July 2, 2021 and is available here. The Order Instituting Rulemaking presents a preliminary scope and schedule for proceeding R.21-06-017 (the "High DER" proceeding). The new proceeding is the successor to the Distribution ???



# CPUC ENERGY STORAGE PROCEEDING



The CPUC's Self-Generation Incentive Program (SGIP) offers rebates for installing energy storage technology at both residential and non-residential facilities. These storage technologies include battery storage systems that can function during a power outage.



Lastly, the CPUC approved nine energy storage contracts for a total of 1,598.7 MW of new capacity for PG& E to come online from August 2023 through June 2024. The contracts will contribute to meeting PG& E's portion of the 11,500 MW of clean energy capacity ordered by CPUC in the integrated resource planning (IRP) proceeding.

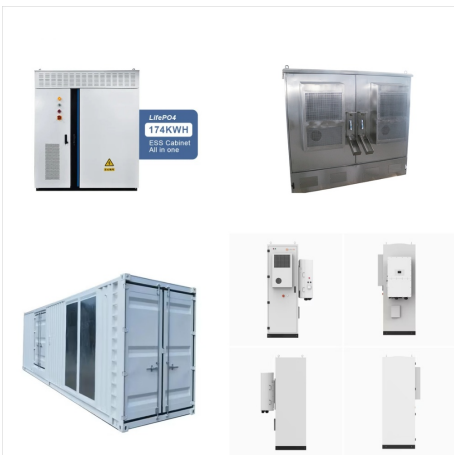


California Public Utilities Commission. Near - and mid - term planning and procurement activities at CPUC ???In Nov. 2019, CPUC ordered . 3,300 MW . of reliability procurement for years . 2021-2023 (D.19 - 11 - 016) ???In March 2020, CPUC adopted a "Reference System Plan" for CPUC-jurisdictional LSEs showing a need for ~18,000 MW of new

# CPUC ENERGY STORAGE PROCEEDING



CPUC Energy Storage Use Case Analysis [Bulk Storage] [Pumped Hydroelectricity] Version 7.1 | Page 15 of 31  
g c SB GT& S 0185631. R.10-12-007 Contents 1. Overview Section 3 2. Use Case Description 2.1 Objectives 2.2 Actors 2.3 Regulatory Proceedings and Rules that Govern Procurement Policies and Markets for This Use 2.4 Location 2.5 ???



DNV KEMA Modeling for CPUC Energy Storage Proceeding Energy Storage Panel, EAC Meeting June 6, 2013 . Common Pitfalls Using historical prices - Prices are likely to change due to rule modifications, changes in regulation supply resources over time, changes in ???



Background: On March 10, 2020 the CPUC Contracts" Office posted the CPUC energy storage program and projects evaluation Request for Information (RFI) which included: the desired scope of work, Energy Storage Proceedings.  
R.10-12-007: In December 2010, the CPUC opened a Rulemaking to set policy for California Load Serving Entities (LSEs) to

# CPUC ENERGY STORAGE PROCEEDING



The CPUC regulates investor-owned utility (IOU) ratepayer-funded energy efficiency programs. The CPUC works with the IOUs, other program administrators, and vendors to develop programs and measures to transform technology markets within California using ratepayer funds. CPUC's role in regulating Energy Efficiency; Proceeding Information



and energy storage. 4. California Public Utilities Commission HOW ARE PROCEEDINGS INITIATED? R. ulemaking. A. pplications. C. omplaints. I. nvestigations. participation in CPUC proceedings. 2022-2023-Commission has or will hold series of tribal consultations and workshops within Tribal OIR. CPUC Tribal Land Transfer Policy (TLTP)



The California Public Utilities Commission (CPUC), in ongoing efforts to ensure electricity reliability in the state and meet clean energy goals, today approved a historic decision ordering ???

# CPUC ENERGY STORAGE PROCEEDING



Stakeholders in the CPUC storage proceeding have identified several different potential use cases of energy storage. These use cases are listed in the table below. Net Present Value over Storage Life under CPUC Assumptions. Bulk Energy Storage Distribution Energy Storage A/S Only. Figure ES-2 Benefit-to-Cost Ratios of All Analysis Runs. x



On February 15, 2024, the California Public Utilities Commission (CPUC) issued its final decision in an ongoing proceeding concerning the Integrated Resource Planning (IRP) framework for Load-Serving Entities (LSEs) in California and the Resource Adequacy (RA) procurement targets set by the Legislature in Senate Bill (SB) 350 and SB 100 (Final ???)



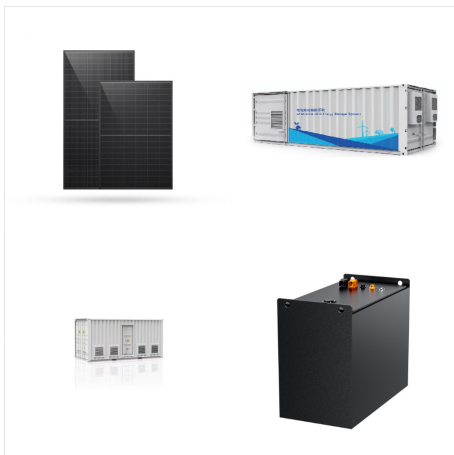
Microgrids Legislation. SB 1339, a bill enacted in 2018, directs the California Public Utilities Commission, in consultation with the California Energy Commission and California Independent System Operator, to undertake a number of activities to further develop policies related to microgrids. The legislation added Chapter 4.5, Sections 8370-8372 to California's Public ???



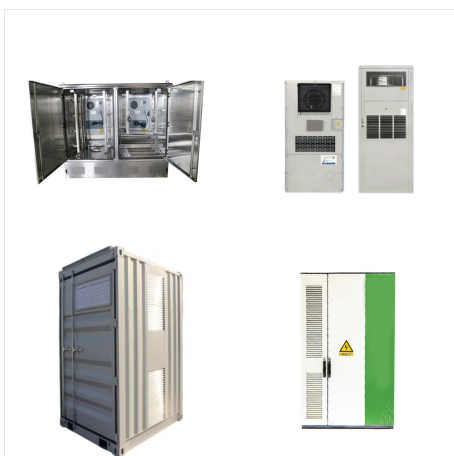
# CPUC ENERGY STORAGE PROCEEDING



In a new decision in the CPUC's Integrated Resource Planning proceeding, the CPUC adopted a plan to advance clean energy production while prioritizing affordability. These investments are crucial for integrating more than 56 GW of new generation and storage into California's evolving energy landscape by 2035. About the California



The CPUC approved five energy storage contracts for a total of 497 megawatts (MW) of capacity, are expected to provide 462 MW of capacity towards SCE's portion of the 11,500 MW of clean energy capacity ordered by the CPUC in June 2021 in the integrated resource planning (IRP) proceeding. CPUC President Alice Reynolds noted, "These energy



Energy Storage Safety at CPUC 2010-2017 The Energy Storage Safety Forum February 22-24, 2017. Arthur O'Donnell - Supervisor, Risk Assessment & Safety Advisory. Energy Storage Procurement Proceeding ??? Decision 16- 01-017 requires "all applications to identify all relevant

# CPUC ENERGY STORAGE PROCEEDING



CPUC's Resource Adequacy proceeding will eventually have to confront as deployment of energy storage resources continues???namely, the declining marginal ELCC of energy storage at increasing levels of penetration???so while the specific numeric analysis may not be applicable in



Proceeding A.22-05-022 began in May 2022 and included the legislative directives of AB 2316 (Ward, 2022) and AB 2838 (O'Donnell, 2022), which required the Commission to review its existing customer renewable energy subscription programs including DAC Green Tariff, Community Solar Green Tariff and Green Tariff Shared Renewables programs.



BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF CALIFORNIA Application of  
Pacific Gas and Electric Company for Approval of its  
2020 Energy Storage Procurement Plan (U39E).  
Application 20-03-002 And Related Matters. Based  
on ALJ ruling issued in proceeding number:  
R.19-01-011 Verified 6. Date of ALJ ruling: July 26,  
2019 ???