



# California rule 21 energy storage

What is Electric Rule 21?

Electric Rule 21 (Rule 21) is a tariff that describes the interconnection, operating and metering requirements for generation facilities to be connected to an investor-owned utility's (IOUs) distribution system and transmission system over which the California Public Utilities Commission (Commission) has jurisdiction.

Does California have a Rule 21 tariff?

Each of California's large investor-owned utilities (IOUs) has its own Rule 21 tariff as part of its electric rules; however, they are largely equal in content. For the latest news and regulatory developments on Rule 21, please visit the CPUC Rule 21. The remaining information on this page serves as a reference for SCE's Rule 21.

Where can I find the latest news and regulatory developments on Rule 21?

For the latest news and regulatory developments on Rule 21, please visit the CPUC Rule 21. The remaining information on this page serves as a reference for SCE's Rule 21. The guidelines in this section are provided with the intent to help customers understand SCE's interconnection procedures under Rule 21.

What changes are acceptable for Rule 21?

Changes that a manufacturer is already making to comply with IEEE 1547 will be acceptable for Rule 21. 1741 is still the basis for the testing procedures. - Testing requirements were updated to be compatible with changes in UL 1741 and IEEE 1547-1. Self-Gen program has funded many more of 30 kW and larger PV systems. IEEE 929. States/Utilities?

What is the AB 2514 energy storage procurement policy?

In 2013, the CPUC issued Decision (D.) 13-10-040 which set an AB 2514 energy storage procurement target of 1,325 megawatts (MW) by 2020. The CPUC's energy storage procurement policy was formulated with three primary goals: Greenhouse gas (GHG) reductions in support of the State's targets.

Does Rule 21 reflect changes to the tariff pending before CPUC?

Note that the currently posted Rule 21 at SCE.com may not reflect updates to the tariff that may be pending before the CPUC.

On September 24, the California Public Utilities Commission (CPUC) issued sweeping changes to Rule 21, the rules under which distributed energy resources, like solar power and energy storage, may interconnect to California's electric grid. The changes represent a radical shift in how states handle interconnection policy, with a number of ...

CPUC's Rule 21 Interconnection Stakeholder Process o Rule 21 governs the interconnection, operation, and metering requirements for CPUC-jurisdictional generating facilities (NEM, non-export, and PURPA) - Rule 21 allows for interconnection of both export and non-export to utility grid 2015 1995 2000 2005 2010 1975



# California rule 21 energy storage

1980 Public Utility ...

This report describes the framework of deploying and integrating California Rule 21-compliant smart inverters into the grid. The project successfully demonstrated that smart ...

the California Energy Commission, the Commission undertook a redesign of Rule 21 to establish a more standardized and transparent engineering analysis for the interconnection of distributed generation, especially generation that ... such as energy storage. R.17-XX-XXX COM/MP6/ek4 PROPOSED DECISION - 4 - On September 22, 2011, the Commission ...

Interconnection Process Transparency: The CPUC has mandated clearer interconnection processes, which translates to a more predictable and navigable experience for renewable energy developers. Energy Storage Systems Integration: With energy storage solutions gaining prominence, Rule 21 now explicitly outlines how these systems should ...

PV Installations must comply with California's Rule 21 requirements to be permitted and approved. Utilities have begun asking for proof of compliance. Enphase has you covered! Visit our Rule 21 page to learn how to program Enphase smart microinverters to comply with this new regulation, and how to generate a report to demonstrate compliance.

The Interconnection Discussion Forum (IDF), established by Resolution ALJ-347 (approved October 12, 2017), is intended to meet the following objectives:. Foster proactive, constructive communication between utilities, developers, and other impacted stakeholders about issues related to implementation of Rule 21 and other interconnection rules

Distributed energy resources, typically consisting of solar photovoltaic and energy storage systems on homes and commercial buildings, are a growing source of power on the electric grid. Paired with smart inverters, distributed resources have vast potential as a controllable resource for the grid. This report describes the framework of deploying and ...

This rulemaking considers recommendations included in the California Energy Storage Roadmap, an interagency guidance document which was jointly developed by the California Independent System Operator, the California ... This review resulted in CPUC D. 12-09-019 which updated Electric Rule 21 Interconnection tariff for the modern era. R. 13 ...

Design and implementation of interoperable communications between distributed energy resources and other grid systems support flexible, integrated, reliable, and renewable grid operations. This project updated current communications standards to meet distributed energy resource monitoring and control requirements in California Rule 21 and Institute of Electrical ...

Rule 21 update Storage devices should be treated as generators for Rule 21 interconnection purposes. ... (D.)

## California rule 21 energy storage

19-03-103, PG& E has expanded the existing Screen Q exemption for net energy metering (NEM) facilities with net export less than or equal to 500 kilowatts (kW) by increasing the exemption size threshold to all NEM and inverter-based non ...

Procedural History of California's Interconnection Rule 21 (Past) o Rule 21 is the distribution grid interconnection rule for generation (and storage) devices that fall under CPUC jurisdiction. o Early 2000s - Rule 21 Working Group developed to create a tariff that is size and technology neutral, offers simplified interconnection,

Interconnection, operating and metering requirements are described in electric Rule 21, approved by the California Public Utilities Commission (CPUC). ... (SLD) Template Rule 21 Energy Storage  $\leq 10$  KW/KVA Paired with PV  $\leq 30$  KW/KVA DC Coupled (Single Inverter for PV and ES) Simplified Single Line Diagram (SLD) Template Rule 21 Non-Export ...

An interesting article from CALSSA (California solar storage association) on how the proposed NEM-3 decision would affect solar and battery storage in California (Note: This blog has more information on how you can help fight for solar in California.) Rule 21 is an added piece that the solar industry hasn't had to manage before.

California enacted "Rule 21" in the fall of 2017, a tariff which sets specifications on the types of inverters that can be used in both residential and commercial solar installations around the state going forward. Rule 21 has major implications for PV installers both in California and throughout the country, since many states will likely adopt their own versions of Rule 21 ...

California's "Rule 21" tariff specifies the interconnection, operating, and metering requirements for behind-the-meter (BTM) generation facilities that are connected to a utility's distribution system. ... The maps are a valuable tool for developers looking to site new solar and energy storage projects that can be easily and quickly ...

Notification-Only Interconnection. The most notable change introduced in this regulatory proceeding is the establishment of a two-year pilot program for a "notification-only" interconnection process for certain small non-export energy storage projects. This means that qualifying projects by eligible installers would not have to submit an interconnection application ...

In particular, energy storage systems can be designed with the capability to limit or prevent the export of energy onto the grid altogether. This new rule provides much needed clarity for these "limited-exporting" systems and will increase access to lower-costs methods for controlling export. ... With these changes to Rule 21, California ...

CA Rule 21 specifies how distributed energy resources (DERs) such as Solar PV and battery storage interconnect to the grid. To address smart inverters, the updated Rule is organized into three implementation

## California rule 21 energy storage

phases that correlate to three distinct parts of the testing and certification of the inverters and communications systems for California.

Energy Storage System Buyer's Guide 2024; Solar PV Module Buyer's Guide 2023; Videos open dropdown menu. ... Learning from the German experience, California Rule 21 includes ride-through of off-nominal frequency excursions. This will keep inverters operating for as long as possible before tripping due to frequency to continue producing kWhs ...

The California Energy Commission (CEC) has listed multiple SMA solar inverters under the updated Grid Support Solar Inverter compliance list for the California Rule 21 requirements. The approved inverters listed as compliant with Rule 21 phase two and phase three functions are the Sunny Boy-US, Sunny Tripower CORE1 US and Sunny Boy Storage-US ...

Energy Storage Safety Inspection Guidelines. In 2016, a technical working group comprised of utility and industry representatives worked with the Safety & Enforcement Division's Risk Assessment and safety Advisory (RASA) section to develop a set of guidelines for documentation and safe practices at Energy Storage Systems (ESS) co-located at electric utility substations, ...

It is important to note that D.20-09-035 did not mandate reporting for net energy metering (NEM) systems smaller than 30 kVA (i.e., ~30 kW) installed capacity, which, per the March 2021 Rule 21 Interconnection Program Evaluation (overview below on this webpage), represent the majority of the Rule 21 Interconnections in California.

Electric Rule 21 describes the interconnection, operating, and metering requirements for generation facilities to be connected to a utility's distribution system, over which the California ...

23a. Rule 21 does not apply to the interconnection of electric vehicle service equipment (EVSE) connected as V1G.2 23b. Rule 21 applies to the interconnection of both stationary and mobile storage systems. 23c. Vehicle-to-grid (V2G) direct current (DC) EVSE may be interconnected under the existing Rule 21 tariff so long as it meets all ...

The California Public Utilities Commission (CPUC) just issued sweeping changes to Rule 21, the rules under which distributed energy resources, like solar power and energy storage, may interconnect to the grid. The revisions encompass many issues but three of the most noteworthy include:

Grid Interconnection & Contract Development - Rule 21 Non-Export, Rule 21 Export, Wholesale Distribution Access Tariff (WDAT) and Transmission Owner Tariff (TOT) Email: [interconnectionQA@sce](mailto:interconnectionQA@sce) Phone: (909) 274-1106 Mailing Address: Grid Interconnection & Contract Development Southern California Edison 2244 Walnut Grove Ave Rosemead, CA 91770

California Rule 21 Phase 2 Goes Into Effect This Month. Jun 10, 2020. ... After that time, any solar inverter or

## California rule 21 energy storage

energy storage system installed in California must have "demonstrated the capability" to communicate using IEEE 2030.5 ...

1. Maximize the use of solar and energy storage to benefit ratepayers and the grid. 2. Update existing industry documents to incorporate these new opportunities and meet ...

Web: <https://jfd-adventures.fr>

Chat online: <https://tawk.to/chat/667676879d7f358570d23f9d/1i0vbu11i?web=https://jfd-adventures.fr>