

Section 1: Title. This act shall be known and cited as the **Renewable Energy Acceleration Law of 2024.**

Section 2: Statement of Purpose

The purpose of this legislation is to rapidly accelerate the development of new solar electricity generating projects without taxing an overburdened transmission grid by allowing farms to build and operate independent microgrids. This will help California reach its renewable energy goals by making many more agricultural properties commercially viable for privately funded solar farms, while at the same time providing neighboring properties with lower cost energy as well as local electric vehicle charging.

This law will also advance climate equity in agricultural areas, some of which already have the worst air pollution in the country, by bringing low cost EV charging stations to speed the transition from heavily polluting diesel trucks and farm vehicles to zero emission electric vehicles.

Section 3: Chapter 1, Section 218 of the Public Utilities Code is amended to add a new subdivision (b)(4), exempting “solar family farms” from being regulated as “electrical corporations.” The new provisions to be added are printed in underlined type to indicate they are new.

(b) “Electrical corporation” does not include a corporation or person employing cogeneration technology or producing power from other than a conventional power source for the generation of electricity solely for any one or more of the following purposes:

...

(4) The use of or sale of renewable energy generated on a solar family farm, provided that:

(A) The solar family farm finances, safely builds, and maintains both the photovoltaic energy generating facility, associated battery storage, and the new microgrid distribution power lines between its photovoltaic energy generating system and the contiguous properties choosing to participate as customers, located within the two-mile radius service area that it sells power to.

(B) The solar family farm does not use the existing distribution power lines owned by a utility company for the distribution of its power without an explicit written agreement.

Section 4: A new Chapter 5.5 of the Public Utilities Code is added to read:

Chapter 5.5. Renewable Energy Acceleration Law of 2024.

Public Utilities Code Section 1110. Findings and Declarations.

- a. Human-caused climate change is a major threat to human health and well-being.
- b. Human-made greenhouse gases, such as carbon dioxide, emitted into the atmosphere cause climate change.
- c. Greenhouse gas emissions can be reduced, called decarbonization, by producing electric energy with renewable energy sources such as solar energy and wind energy.
- d. California's government has enacted multiple laws to decarbonize the electrical grid by 2045. California needs to triple the current deployment rate of renewable energy projects to meet its 2045 greenhouse gas emissions goals.
- e. Transmission gridlock hampers faster deployment. Developers of new renewable energy projects must apply to the California Independent Systems Operator (CAISO) for permission to access transmission lines, but a backlog for approvals now stretches up to eight years. In 2022, CAISO did not accept any new applications for solar projects.
- f. Due to the falling price of solar generation and battery storage, as well as generous federal tax incentives, tens of billions of dollars of private investment capital are available to build solar farms at no expense to the state government.
- g. State law provides utilities with a monopoly on transmission lines. This limitation worked well during the 20th century but now impedes 21st century energy technology. Farmers are prohibited from selling the electricity they generate from photovoltaic panels to neighboring properties, known as "over the fence" sales, so they are unable to pool the cost and benefits of low cost solar power from their land.
- h. The deployment of privately financed decentralized power systems and microgrids is being blocked by antiquated regulations that prevent communities, businesses, farms and industry from sharing clean energy technologies.
- i. The United States Department of Energy has found that decentralized power and microgrids are safe and proven technologies, and encourages their rapid expansion.
- j. Decentralized power systems and microgrids provide urgently needed resilience and safety from transmission grid breakdowns caused by fires, earthquakes, criminal ransomware, terrorism or cyber warfare.

- k. Due to climate change and long-term drought, as much as 900,000 acres of farmland in the San Joaquin Valley alone will need to be fallowed.
- l. Loss of farmland to drought is expected to have significant environmental consequences in areas of the state that already suffer from some of the worst air quality in the United States. If this fallowed land is left barren, air quality in the region will worsen due to increased dust emissions leading to adverse consequences for human health.
- m. Loss of farmland due to drought is also expected to have significant economic consequences leading to increased income inequality and injustice.
- n. Placing solar panels on drought-fallowed farmland will provide jobs for those who lost farm-related jobs, will provide income to farmers, and will reduce dust emissions from fallowed farmland.
- o. As current fossil-fueled farm vehicles, such as trucks and tractors, are replaced with electric vehicles, electric energy usage will increase dramatically.
- p. Generating the growing electricity needs of agriculture from on-site solar will reduce the pressure on the grid, both in terms of transmission and in reducing the total electric energy generation needs of the state.
- q. Because generating solar electricity on farms would cost less than the agricultural rate farmers currently pay to utility companies for electricity, solar farms can sell energy to participating neighbors for a significant discount, and lock in those rates against future utility rate increases.
- r. Developing solar farms on agricultural land and allowing for the sale of energy in a limited geographical neighborhood will create a market mechanism to spur the development of electric vehicle charging in rural areas for use by both residential and commercial entities. Rural air quality will improve as farm vehicles and water pumps transition.
- s. As heavy duty transportation vehicles transition to electric vehicles, there will be a need for an extensive network of fast charging stations for heavy-duty trucks along corridors such as I-5 and CA-99. Many of these corridors are in rural areas far from where electric vehicle charging stations are being developed. This regulation will enable renewable energy to be used to charge electric vehicles along these and other transportation corridors in California.

Public Utilities Code Section 1111. Definitions.

(a) "Agricultural land" means land which is zoned for agriculture.

(b) "Distribution power line" means an electricity carrying power line used to distribute energy within the service area of the solar family farm.

(c) “Participating neighbor” means property owners located on contiguous property within a two-mile radius of solar family farm photovoltaic array that choose to participate in the solar family farm’s electrical distribution network.

(d) “Service area” means participating neighbors to whom the solar family farm can sell and or distribute the energy it generates, located on contiguous properties within a two-mile radius of a solar family farm photovoltaic array. Intervening public roads shall not limit the size of the service area or prevent distribution of energy if all other conditions are met.

(e) “Solar family farm” means a photovoltaic array, sited on agricultural land no larger than 100 acres in size, with a service area no larger than allowed by this act. The solar family farm solar energy generating system is an interconnected system of loads and energy resources, that may include, but is not limited to, distributed energy resources, energy storage, demand response tools, or other management, forecasting, and analytical tools, appropriately sized to meet customer needs, within a service area that can act as a single, controllable entity, and can connect to, disconnect from, or run in parallel with, larger portions of the electrical grid, or can be managed and isolated to withstand larger disturbances and maintain electrical supply to connected critical infrastructure.

(f) “Solar family farm electrical distribution network” means the microgrid consisting of the electricity generating photovoltaic array, associated electric storage, and the distribution power lines and metering system providing power to participating neighbors in the service area.

Public Utilities Code Section 1112. Requirements applicable to solar family farms.

(a) Properties served by solar family farms shall maintain their customer accounts with the local utility company that currently serves them. These utility companies shall be required to provide existing utility company customers within a solar family farm service area with the same terms for the purchase of electricity and the sale of excess electricity that they provide to the nearest existing rooftop solar system within the local utility company’s service territory.

(b) Solar family farms shall be required to adhere to all county codes related to electric power systems owned by other property owners in the same county. These power systems must be inspected and approved by the county government in the same manner as it inspects and approves any electric power system in the county. The county government shall streamline such inspection and approval to the maximum extent practicable.

(c) Utility companies shall be required to provide existing utility company customers within a solar family farm service area with the same timely schedule for connection approvals that they provide to the nearest existing rooftop solar system within the local utility company's service territory.

Section 5: Severability. The provisions of this act are severable. If any portion, section, subdivision, paragraph, subparagraph, clause, sentence, phrase, word, or application of this act is for any reason held to be invalid by a decision of any court of competent jurisdiction, that decision shall not affect the validity of the remaining portions of this act. The people of the State of California hereby declare that they would have adopted this act and each and every portion, section, subdivision, paragraph, subparagraph, clause, sentence, phrase, word, and application not declared invalid or unconstitutional without regard to whether any part of this act or application thereof would be subsequently declared invalid.

Section 6: Liberal Construction. This act is an exercise of the initiative power of the people of the State of California pursuant to Article II and Article IV of the California Constitution, and shall be liberally construed to effectuate the purposes set forth in this act.

Section 7: Standing. Notwithstanding any other provision of law, if the state or any of its officials fail to defend the constitutionality of this act, following its approval by the voters, any other state or local government agency of this state shall have the authority to intervene on behalf of the State of California in any court action challenging the constitutionality of this act for the purpose of defending its constitutionality, whether that action is in state or federal trial court, on appeal, or on discretionary review by the Supreme Court of California or the Supreme Court of the United States. The reasonable fees and costs of defending the action shall be a charge on funds appropriated to the Department of Justice, which shall be satisfied promptly.