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**SENATE COMMITTEE ON ENERGY, UTILITIES AND  
COMMUNICATIONS**

**Senator Josh Becker, Chair  
2025 - 2026 Regular**

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<b>Bill No:</b>	AB 531	<b>Hearing Date:</b>	7/1/2025
<b>Author:</b>	Rogers		
<b>Version:</b>	2/11/2025	Introduced	
<b>Urgency:</b>	No	<b>Fiscal:</b>	Yes
<b>Consultant:</b>	Nidia Bautista		

**SUBJECT:** Geothermal powerplants and geothermal field development projects: certification and environmental review

**DIGEST:** This bill expands an existing voluntary state permitting program to include geothermal powerplants of any size and geothermal field development projects, in lieu of permitting by local agencies.

**ANALYSIS:**

Existing law:

- 1) Establishes and vests in the State Energy Resources Conservation and Development Commission (known as the California Energy Commission (CEC)) various responsibilities with respect to developing and implementing the state's energy policies. (Public Resources Code §25000 *et seq.*)
- 2) Authorizes persons proposing specified electrical generation, electrical transmission, hydrogen production, and energy storage projects to apply, on or before June 30, 2029, to the CEC to certify sites and related facilities as environmental leadership development projects, known as the AB 205 "Opt-in Permitting or Certification" program. (Public Resources Code §25545 *et seq.*)
- 3) Makes a site and related facility certified by the CEC subject to streamlining benefits related to California Environmental Quality Act (CEQA) with no further action by the applicant or the Governor. (Public Resources Code §25545.13)
- 4) Provides the CEC's certification is in lieu of any permit, certificate, or similar document required by any governmental agency and supersedes any applicable statute, ordinance, or regulation, except as specified. (Public Resources Code §25545.1)

- 5) Excludes from the definition of a “thermal powerplant,” and its appurtenant facilities subject to the permitting of the CEC, exploratory, development, and production wells, resource transmission lines, and other related facilities used in a connection with a geothermal exploratory project or a geothermal field development project. (Public Resources Code §25120)
- 6) Requires, pursuant to CEQA, lead agencies with the principal responsibility for carrying out or approving a proposed project to prepare a negative declaration, mitigated negative declaration, or environmental impact report (EIR) for this action, unless the project is exempt from CEQA. (Public Resources Code §21000 *et seq.*)
- 7) Establishes a framework for providing certain infrastructure projects with expedited judicial review of appeals and litigation related to the CEQA, subject to specified conditions. Limits eligibility for these streamlining provisions to certain energy, transportation, water, and semiconductor projects. (Public Resources Code §21189.80)
- 8) Provides a geothermal exploratory project is separate and distinct from geothermal development field project for purposes of the CEQA. (Public Resources Code §21090.1)
- 9) Defines “geothermal development field project” to mean a development project which is composed of geothermal wells, resource transportation line, production equipment, roads, and other facilities which are necessary to supply geothermal energy to any particular heat utilization equipment for its productive life. (Government Code §65928.5)

This bill:

- 1) Expands the types of facilities eligible to be certified as environmental leadership development projects and eligible for the AB 205 “Opt-in Permitting” program by the CEC to include geothermal powerplants, of any size, and geothermal field development projects.
- 2) Makes additional minor clean-up of the code section to remove outdated references to legislation, SB 867 (Allen, Chapter 83, Statutes of 2024) that enacted the Safe Drinking Water, Wildfire Prevention, Drought Preparedness, and Clean Air Bond Act of 2024, which authorized a \$10 billion bond to be placed before the state’s voters for approval, and which has been subsequently passed by the voters at the November 5, 2024, statewide general election.

## Background

*Geothermal energy.* Geothermal energy is defined as heat from the Earth. It is a clean, renewable resource that provides energy in the United States and around the world in a variety of applications and resources. Geothermal resources are reservoirs of hot water that are naturally occurring or are manufactured to operate at varying temperatures and depths below the earth's surface. To develop electricity from geothermal resources, wells are drilled into a geothermal reservoir. The wells bring the geothermal water to the surface, where its heat energy is converted into electricity at a geothermal power plant. Geothermal energy is considered a renewable resource because the heat emanating from the interior of the Earth is essentially limitless. A geothermal system requires heat, permeability, and water.

*Geothermal energy in California.* California contains one of the largest amounts of geothermal electric generation capacity in the United States due to its location on the Pacific's "ring of fire," where the state encompasses some of the edges of the tectonic plates. Currently, there are roughly 40 operating geothermal power plants in California with an installed capacity of 2,700 megawatts (MW). In 2023, geothermal energy produced 11,000 gigawatt-hours (GWh) of the state's electricity, which has remained relatively steady for over a decade, and represents roughly five percent of the state's total system power. The largest concentration of geothermal plants are located north of San Francisco in the Geysers Geothermal Resources Area in Lake and Sonoma Counties. However, there are efforts to expand development of additional geothermal energy resources in the Salton Sea area and active areas in Inyo County. As noted by the CEC in the SB 423 Emerging Renewable Energy and Firm-Zero Carbon Resources Report, "...geothermal energy has room for growth, especially given its ability to provide clean, baseload power without relying on large land areas or fuel imports." Geothermal energy's potential has been further bolstered by the California Public Utilities Commission which has issued decisions 21-06-035 (June 24, 2021), Decision Requiring Procurement to Address Mid-Term Reliability (2023-2026), and 24-08-064 (August 22, 2024), Decision Determining Need for Centralized Procurement of Long Lead-Time Resources, directing California's load-serving entities and the Department of Water Resources to procure significant amounts of new geothermal energy over the years to come.

*Application for Certification (AFC).* The Warren-Alquist Act, enacted in 1974, established the CEC as the state's primary energy policy and planning agency. One of its key provisions is to grant the CEC the authority to license and certify thermal power plants with a generating capacity between 50 and 100 MW. This approval process, known as the AFC, ensures that proposed power plants meet

environmental, public health, and safety standards while aligning with California's broader energy and environmental policies. The AFC process involves rigorous evaluation, including environmental impact assessments, public participation, and coordination with local, state, and federal agencies to ensure responsible energy development. The thermal plants covered by the act include:

- Natural gas-fired power plants (including combined-cycle and peaking plants).
- Geothermal plants.
- Solar thermal power plants (e.g., concentrated solar power or CSP plants).
- Biomass or biogas facilities (waste-to-energy plants).

*AB 205 "Opt-in" Certification/permitting program.* AB 205 (Committee on Budget, Chapter 61, Statutes of 2022) expanded the CEC's authority to oversee the streamlined permitting of certain clean and renewable energy facilities through an opt-in certification program until June 30, 2029. This program allows the following eligible projects to undergo a consolidated, one-stop shop, of state-level review:

- Solar photovoltaic or terrestrial wind power plants with a generating capacity of 50 MW or more.
- Energy storage systems capable of storing 200 MW hours or more of electrical energy.
- Any stationary power plant using any source of thermal energy, excluding fossil or nuclear fuels, 50 MW or greater (includes geothermal energy).
- Specified facilities that cost at least \$250 million and are for the manufacturing, production, or assembly of an energy storage system.
- Electric transmission lines carrying electric power from a facility described the above generating and storage facilities.
- Hydrogen production facilities (not derived from fossil fuel feedstock) and associated onsite storage and processing facilities.

*Streamlined Review Process:* Under the AB 205 "Opt-in" permitting program, the CEC serves as the lead agency for the CEQA review, conducting a comprehensive environmental assessment equivalent to an EIR. This consolidated process aims to complete the environmental review and reach a certification decision within 270 days of accepting a complete application, with certain exceptions. Additionally, the program mandates the CEC to carry out ongoing public participation and tribal consultation through engagement with local communities and California Native American tribes. Within five days of deeming an application complete, the CEC invites tribal consultations. A public scoping meeting is held within 30 days, and a draft EIR is released by day 150, followed by a public meeting and a 60-day comment period. To obtain certification, applicants must demonstrate that the

project will provide a net positive economic benefit to the local community. This includes entering into a community benefits agreement, ensuring payment of prevailing wages, and using a skilled and trained workforce for construction. As such, if a developer submits an application, a certification from the CEC under AB 205 serves in lieu of most other state, local, or regional permits, streamlining the approval process. The CEC's website notes nine projects with submitted applications to participate in the AB 205 "Opt-in" permitting program, of which one (the first) was recently approved by the CEC through this new limited authority process, a 1,150 MW solar and 1,150 MW battery energy storage project in Fresno County.

### Comments

*Need for this bill.* Proponents of this bill express enthusiasm for further development of geothermal energy resources in the state. They acknowledge the efforts to increase demand for geothermal energy. However, they express concerns that "the perceived regulatory challenges nonetheless mean that many geothermal developers are choosing to site their projects in places like Nevada and Utah and sell into the California market." As noted by the author:

Encouraging more geothermal development in California could have several benefits, including reinvesting customer money and creating well-paid, highly skilled jobs locally; building reliability and energy independence in our communities, not elsewhere; and avoiding transmission costs associated with shipping power across the West. More broadly, California should also be the tip of the spear in terms of incubating the next generation of clean energy technologies and where possible should avoid relying on local governments in other states to approve projects in order for our climate ambitions to become reality.

*Concerns about usurping local authority.* As noted above, the AB 205 "Opt-in" permitting process is relatively new with the CEC approving the very first project to receive certification through that process earlier this month. Although some anticipated the CEC process would be a quick process, so far, it seems the CEC is working carefully and diligently to certify and permit eligible energy projects (likely to the concerns of many who expected a more expedited process). Nonetheless, the opposition to this bill expresses concerns about the expansion of the AB 205 program to encompass smaller geothermal energy projects which would otherwise be permitted and certified by local jurisdictions. They contend that local jurisdictions are generally better suited to address local needs and concerns. Both Inyo County and the Rural County Representatives of California recommend requiring language in this bill to require the local jurisdiction where

project would otherwise be sited to have their governing body adopt a letter supporting the AB 205 process for the proposed project.

*Need for amendments.* The language in this bill references “geothermal field development project.” However, existing law prohibits the geothermal field development project from the definition of the thermal energy for CEC siting and certification purposes. Understandably, the CEC does not have capacity and expertise on siting the subsurface wells and related facilities which fall under the jurisdiction of the Geologic Energy Management Division (Cal-GEM) at the Department of Conservation. *As such, the author and committee may wish to amend this bill to delete reference to “geothermal field development project” and replace with “a project composed of multiple geothermal powerplants located on a single site.”*

*Dual Referral.* Should this bill be approved by this committee, it will be re-referred to the Senate Environmental Quality Committee.

### **Prior/Related Legislation**

SB 254 (Becker) of 2025, among its many provisions, made changes to further streamline the administration of the AB 205 “Opt-in” permitting program. The bill is pending in the Assembly Utilities and Energy Committee.

SB 1420 (Caballero, Chapter 608, Statutes of 2024) added hydrogen production facilities and onsite storage and processing facilities, as specified, to the types of facilities that existing law makes eligible for the CEC’s AB 205 permitting process and expedited review under CEQA.

AB 205 (Committee on Budget, Chapter 61, Statutes of 2022) among its many provisions, establishes a new certification process at the CEC, known as the “AB 205 Opt-in Permitting,” for 50 MW or more solar photovoltaic, terrestrial wind electrical generation powerplant, or thermal powerplant that does not use fossil or nuclear fuels, or energy storage system of 200 MW hours or more.

**FISCAL EFFECT:** Appropriation: No Fiscal Com.: Yes Local: No

### **SUPPORT:**

California-Nevada Conference of Operating Engineers (Co-Sponsor)  
Fervo Energy Company (Co-Sponsor)  
Sonoma Clean Power (Co-Sponsor)  
Advanced Energy United

California Chamber of Commerce  
California Community Choice Association  
California State Association of Electrical Workers  
California State Pipe Trades Council  
City of San Jose  
Geothermal Rising  
Independent Energy Producers Association  
Invenergy LLC  
State Building & Construction Trades Council of California  
Western States Council of Sheet Metal Workers

**OPPOSITION:**

County of Inyo  
Rural County Representatives of California

**ARGUMENTS IN SUPPORT:** The sponsor of this bill, Sonoma Clean Power, a community choice aggregator run by participating counties of Sonoma and Mendocino and various cities of those counties, states:

Today, renewable energy developers can choose to site and permit their projects through what is called the “opt-in” process at the California Energy Commission. The idea is that the Energy Commission serves as a “one-stop shop” for all siting, permitting, and environmental review in order to expedite projects necessary to meet the state’s ambitious climate goals. A high level of community engagement and review are still required. Developers of new geothermal power plants can technically use the opt-in process today. ...Unfortunately, however, because only projects 50 MW in size or greater can use this process, most geothermal power plants (which are typically more in the range of 20, 30 or 40 MW in size) are functionally excluded. This is even though a geothermal power plant running around the clock can produce as much energy as a far larger solar or wind project that is intermittent. AB 531 will simply clarify that a geothermal power plant of any size can be approved through the opt-in process, allowing faster deployment of this urgently needed renewable energy resource.

**ARGUMENTS IN OPPOSITION:** The Rural County Representatives of California states:

Local governments are invested with authority over local land use decisions and permitting. Unfortunately, the AB 205 process usurps that authority by allowing the CEC to issue permits even over local objections. Local governments are

best suited to make these decisions because they know the communities impacted; are tasked with balancing competing land use, and are situated closest to those residents and communities that will be impacted by the projects. In the local permitting process, local decision makers can identify and compel mitigation of the project's impacts on the affected community. AB 531 takes these crucial responsibilities away from local governments and hands them to the CEC, which is far removed from being held accountable by impacted residents.

**-- END --**