

Date of Hearing: April 2, 2025

ASSEMBLY COMMITTEE ON UTILITIES AND ENERGY

Cottie Petrie-Norris, Chair

AB 526 (Papan) – As Introduced February 10, 2025

SUBJECT: Energy: new in-state geothermal energy generation

SUMMARY: Requires the California Energy Commission (CEC) in coordination with other relevant state, federal, and local agencies to develop a strategic plan for the development of new in-state geothermal energy in California.

Specifically, **this bill:**

- 1) Requires the CEC, in coordination with the Department of Conservation, the State Lands Commission, the Office of Land Use and Climate Innovation, the Department of Fish and Wildlife, the Governor's Office of Business and Economic Development, the Independent System Operator, the Public Utilities Commission, and any other relevant federal, state, and local agencies, as needed, to develop a strategic plan for the development of new in-state geothermal energy in California.
- 2) Requires the CEC to submit the strategic plan to the Natural Resources Agency and the Legislature on or before June 30, 2027.
- 3) Requires the plan to include, at minimum, all of the following:
 - a) Identification of suitable and recommended locations for the development of new in-state geothermal energy. This includes state lands leasing goals for new in-state geothermal energy development for 2035 and 2045, and identification of the necessary levels of exploratory well drilling, technology piloting, and other data acquisition to derisk potential opportunities.
 - b) Economic and workforce development, including an analysis of occupational safety requirements, the need to require the use of a skilled and trained workforce to perform all work, and the need for the Division of Apprenticeship Standards to develop curriculum for in-person classroom and laboratory advanced safety training for workers. Requires consultation with representatives of key labor organizations and apprenticeship programs that would be involved in dispatching and training the workforce to develop this analysis.
 - c) Ratepayer affordability benefits and impacts, including the necessity of identifying and constructing new renewable or carbon-free reliability resources that can provide energy at lower costs than what has been historically available.
 - d) An assessment, in consultation with the California Public Utilities Commission (CPUC), and California Independent System Operator (CAISO), of transmission investments and upgrades necessary to support the 2035 and 2045 new in-state geothermal energy planning goals, and designating new in-state geothermal energy as a long lead-time resource in CPUC's input to the CAISO interconnection queue prioritization. Additionally, requires the reservation of appropriate capacity for new

- in-state geothermal energy in CAISO's transmission plan deliverability allocation to accommodate the planning goals.
- e) Recommendations on geothermal permitting, including identifying opportunities to work with the Bureau of Land Management and other relevant federal agencies on the timing, scope, and prioritization of geothermal lease sales to support geothermal development on federal lands within California; making recommendations regarding potential significant adverse environmental impacts and use conflicts; and specified considerations in identifying suitable locations.
 - f) An assessment of the level at which geothermal rentals and royalties would best support California's long-term renewable energy and greenhouse gas emissions reduction goals, while maintaining competitiveness with rentals and rates on federal lands and in other states.
 - g) Assessment of known impacts to Native American and indigenous peoples and biological resources, and strategies for addressing those impacts.
- 4) Requires the CEC in coordination with the Department of Conservation, the Department of Fish and Wildlife, the State Lands Commission, other relevant federal, state, and local agencies, as needed, California load-serving entities, interested Native American tribes, and the geothermal energy industry, to develop and produce a permitting roadmap that describes timeframes and milestones for a coordinated, comprehensive, and efficient permitting process for new in-state geothermal energy exploration and field development and associated electricity and transmission infrastructure.
- 5) Requires the permitting roadmap update relevant rules and regulations to reflect emerging next-generation technologies and include goals for relevant permitting timeframes, clearly define local, state, and federal agency roles, responsibilities, and decision-making authority, and include interfaces with federal agencies, including timing, sequence, and coordination with federal permitting agencies, and coordination between reviews under the California Environmental Quality Act.
- 6) Requires the CEC provide an opportunity for stakeholder input in the development and communication of the permitting roadmap and an opportunity for public comment on a draft permitting roadmap.

EXISTING LAW:

- 1) Outlines the financial obligations—specifically, rentals and royalties—for geothermal resource leases on state lands to ensure fair compensation for the state. (Public Resources Code § 6913)
- 2) Specifically requires prospecting permits and leases include a royalty of at least 10% of the gross revenue from selling steam, brines (with no minerals extracted), and associated gases. Leases from a competitive sale may include a royalty of up to 16 2/3% of the gross revenue from selling steam, brines (without extracted minerals), and associated gases. (Public Resources Code § 6913 (a)).

- 3) Includes a royalty of at least 2% of the gross revenue from selling any mineral products or chemical compounds recovered from geothermal fluids, based on their first marketable form. (Public Resources Code § 6913 (b)).
- 4) Requires leases and prospecting permits that existed before January 1, 1979, be subject to royalty renegotiation 30 years after the lease begins, and every 10 years after that. The first renegotiated royalty rate can be no higher than 30%, and future increases are limited to no more than 50% above the previous rate. (Public Resources Code § 6913 (e)).
- 5) Allows the States Land Commission to take its share of geothermal resources in kind, rather than receiving monetary royalties. If additional facilities are needed for the state to take its share, the state or its purchaser must provide these at their own expense. Alternatively, if the lessee agrees to provide the facilities, they must be compensated for direct labor and material costs by the state's purchaser or through deductions from royalties due to the state. (Public Resources Code § 6913 (e)).
- 6) Requires the CPUC to adopt a process for each load-serving entity (LSE) serving end-use customers in the state, to file an integrated resource plan (IRP) and schedule periodic updates to the plan to ensure that LSEs accomplish specified objectives. Requires each LSE to prepare and file an IRP consistent with those objectives on a time schedule directed by the CPUC and subject to CPUC review. (Public Utilities Code § 454.52)
- 7) Establishes a state policy that eligible renewable energy resources and zero-carbon resources supply 90% of all retail sales of electricity to California end-use customers by December 31, 2035, 95% of all retail sales of electricity to California end-use customers by December 31, 2040, 100% of all retail sales of electricity to California end-use customers by December 31, 2045, and 100% of electricity procured to serve all state agencies by December 31, 2035, as provided. (Public Utilities Code § 454.53)
- 8) Requires that the IRP of each LSE contribute to a diverse and balanced portfolio of resources needed to ensure a reliable electricity supply that provides optimal integration of renewable energy resources in a cost-effective manner, meets the emissions reduction targets for GHG emissions established by CARB for the electricity sector, and prevents cost-shifting among LSEs. (Public Utilities Code § 454.54)
- 9) Requires the CPUC, CEC, and California State Air Resources Board (CARB) to issue a joint report to the Legislature by January 1, 2021, and every 4 years thereafter that includes specified information relating to the implementation of that state policy.
- 10) Requires the CEC to submit to the Legislature an assessment by December 31, 2023, of firm zero-carbon resources that support a clean, reliable, and resilient electrical grid and will help achieve the existing statutory goal of ensuring renewable energy and zero-carbon resources supply 100% of all retail sales of electricity to California customers by December 31, 2045. (Public Resources Code § 25216.7)
- 11) Defines “firm zero-carbon resources” as electrical resources that can individually, or in combination, deliver zero-carbon electricity with high availability for the expected duration of multiday extreme or atypical weather events, including periods of low renewable energy generation, and facilitate integration of eligible renewable energy

resources into the electrical grid and the transition to a zero-carbon electrical grid. (Public Resources Code § 25216.7 (d)(2))

12) Requires the CEC to adopt the Integrated Energy Policy Report (IEPR) every two years, which must contain an overview of major energy trends and issues facing the state, including, but not limited to, supply, demand, pricing, reliability, efficiency, and impacts on public health and safety, the economy, resources, and the environment. (Public Resources Code §§ 25300-25327)

13) Requires the CEC to timely incorporate firm zero carbon resources in to the IPER. (Public Resources Code § 25305.5)

FISCAL EFFECT: Unknown. This bill is keyed fiscal and will be referred to the Committee on Appropriations for its review.

CUSTOMER COST IMPACTS: This measure requires the CEC in coordination with other relevant state, federal, and local agencies to develop a strategic plan for the development of new in-state geothermal energy in California. While the bill does not directly affect consumers, it lays the ground work for procurement of in-state geothermal that could eventually affect utility rates.

BACKGROUND:

Planning for a Clean Energy Transition – California has a complicated but robust electric planning and procurement regime spread across the CPUC, CEC, and CAISO. This regime guides the current procurement the LSEs conduct, and informs mid- and long-term procurement strategies. The regime is complementary, where one resource may count toward meeting many facets of an LSE’s procurement requirements and planning goals. The main pieces of the regime include the IRP, the related SB 100 Report, and the IEPR.

The IRP (CPUC, every 2 years) – SB 350 (De León, Chapter 547, Statutes of 2015) mandates the CPUC to adopt a process for each regulated LSEs – electrical corporations, community choice aggregators, and electric service providers – file an IRP. The goal is to reduce the cost of achieving GHG emission reductions by looking broadly at system needs, rather than at individual LSEs or resource types. The IRP process begins with the CPUC developing a Reference System Plan (RSP), which estimates what LSEs should procure to meet clean energy and climate goals cost-effectively.

In February 2024, the CPUC adopted a decision within its IRP process to align the state's electric sector with an ambitious greenhouse gas (GHG) reduction target of 25 million metric tons (MMT) by 2035.¹ This target represents the most aggressive target within the range identified by CARB, and reflects the state’s commitment to decarbonize the power sector. To meet this target, the CPUC has determined that 56 GW of new clean energy resources will be needed by 2035 of which up to 2 GW is for geothermal, 7 GW for in-state wind, and 20 GW of solar, among other resources.²

¹ California Public Utilities Commission; “CPUC Drives California Toward a Clean Energy Future”; Accessed March 29, 2025

² Proposed Decision 24-02-047 issued 2/15/2024 in IRP Proceeding, Rulemaking 20-05-003

SB 100 Report (Joint Agencies, every 4 years) – While the IRP focuses on what energy mix is best suited to meet our GHG and reliability goals 10-15 years into the future, the Joint Agency SB 100 Report looks at a planning horizon 24 years out, to determine how best to implement the 100%-clean-electricity-by-2045 policy enacted under SB 100 (De León, Chapter 312, Statutes of 2018). The first SB 100 report was finalized in March 2021, and included analyses of many pathways to achieve the state’s 2045 clean energy goal, including a study scenarios examining “zero-carbon firm resources.”³ The report is required to include an evaluation of costs and benefits to customer rate impacts, as well as, barriers to achieving the SB 100 policy. Additionally, the report will be updated every four years, with the next edition anticipated soon and focused on system reliability⁴ among other considerations.

IEPR (CEC, every 2 years) – a forecast of all aspects of energy industry supply, production, transportation, delivery, distribution, demand, and pricing. The CEC is then required to use these assessments and forecasts to develop energy policies that conserve resources, protect the environment, ensure energy reliability, enhance the state's economy, and protect public health and safety. The CEC is also required to publish a strategic plan for California’s transmission grid and weave it into the broader IEPR framework.⁵ The CEC adopts an IEPR every two years with updates every other year.

Geothermal Energy – Geothermal is a form of renewable energy defined as heat energy from the earth. 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. Wells, ranging from a few feet to several miles deep, can be drilled into underground reservoirs to tap steam and hot water that can be brought to the surface for use in electricity generation, direct heating, and industrial processes.⁶ The United States is the world’s largest producer of geothermal electricity and California has the highest geothermal capacity of all states.⁷ “The Geysers” geothermal steam field, located within Lake, Mendocino, and Sonoma Counties, contains 349 out of California’s 563 high-temperature geothermal wells within the state. Imperial County (including the Salton Sea) houses 194 of these wells, and the remaining 20 are located in Lassen, Modoc, and Mono Counties.⁸ California has installed a 2,627 MW of geothermal nameplate capacity—accounting for 72% of the total geothermal plant capacity in the United States.⁹

Firm Zero-Carbon Report – “Firm power” generally refers to electricity resources that can deliver electricity at any time, for as long as needed.¹⁰ These resources may include anything from fossil fuel plants (coal, biomass, natural gas, etc.) to nuclear energy to geothermal or

³ Pg.12, SB 100 Joint Agency Report;” March 2021

⁴ Pg. 1, *SB 100 Joint Agency Report*. March 2021

⁵ California Public Resources Code Section 25324

⁶ Pg. 16; SB 423 Report “Emerging Renewable and Firm Zero-Carbon Resources”; December 2024

⁷ Pg. ii; “California Energy Commission, California Department of Conservation, California Geologic Energy Management Division (CalGEM), “Assessing California’s Population of Low-Temperature Geothermal Wells for Plugging and Abandonment” September 2023

⁸ Pg. E-2; “SB 423 Emerging Renewable and Firm Zero-Carbon Resources”; December 2024

⁹ Robins, Jody C., Amanda Kolker, Francisco Flores-Espino, Will Pettitt, Brian Schmidt, Koenraad Beckers, Hannah Pauling et al. 2021. U.S. Geothermal Power Production and District Heating Market Report. <https://www.nrel.gov/docs/fy21osti/78291.pdf>

¹⁰ Long, JCS, et al., “Clean Firm Power is the Key to California’s Carbon-Free Energy Future,” *Issues in Science and Technology*, March 24, 2021.

hydropower. Much of the firm power currently in use in California is from natural gas.¹¹ However, as California transitions to a decarbonized grid, there are studies that highlight the need for clean firm power to support the state’s clean transition.¹² Recognizing the need, the Legislature adopted SB 423 (Stern, Chapter 243, Statutes of 2021) which requires the CEC in consultation with CPUC, CAISO, and CARB to submit by December 31, 2023, an assessment of firm zero-carbon resources that support a clean, reliable, and resilient electrical grid. SB 423 provided a statutory definition of “firm zero-carbon resources” as electrical resources that can individually, or in combination, deliver zero-carbon electricity with high availability for the expected duration of multiday extreme or atypical weather events, including periods of low renewable energy generation, and facilitate integration of eligible renewable energy resources into the electrical grid and the transition to a zero-carbon electrical grid. This definition could apply to a variety of generation and storage technologies, both known and nascent, from geothermal to green electrolytic hydrogen to long-duration storage.

Technology Advancement. Natural geothermal systems develop in regions where hot rocks, fluid, and underground permeability naturally coexist. These three factors enable the development of conventional geothermal systems, which harness heat from underground reservoirs without altering ecological conditions.¹³ However, in areas lacking one or more of these elements, modifications are necessary to create viable geothermal resources. One such approach is Enhanced Geothermal Systems (EGS), which involve injecting fluid into hot rocks to reopen fractures and enhance underground fluid circulation, effectively creating engineered reservoirs. Currently, all geothermal projects in the U.S. utilize conventional geothermal resources. However, according to the SB 423 report, EGS is expected to play a dominant role in future geothermal development, offering greater scalability and accessibility for clean energy production. The report also notes that the Department of Energy recognizes that only a small portion of the existing geothermal energy potential in the U.S. is accessible with conventional technology and asserts that R&D to advance EGS can unlock new reservoirs domestically.

Permitting Challenges. Geothermal projects in California must comply with both federal and state-level environmental regulations, specifically the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA).

- i) NEPA— Mandates federal agencies to evaluate the environmental impacts of proposed projects. Depending on the project’s potential effects, developers must complete either an Environmental Assessment (EA) or a more comprehensive Environmental Impact Statement (EIS), which can significantly extend approval timelines
- ii) CEQA— Mandates state and local agencies to identify and mitigate significant environmental impacts of proposed projects. If a project is found to have substantial environmental effects, developers must prepare an Environmental Impact Report (EIR), outlining potential risks and mitigation strategies. The California Department of Conservation’s Geologic Energy Management Division (CalGEM) oversees compliance with CEQA for geothermal projects, ensuring responsible resource development.

¹¹ Roughly 42 MW; Long, JCS, et al. “Clean Firm...,” *Issues*.

¹² Long, JCS, et al. “Clean Firm...,” *Issues* (citation 1), and E3, “Long-Run Resource Adequacy under Deep Decarbonization Pathways for California,” June 2019;

¹³ Pg. 17; California Energy Commission; “Report: SB 423 Emerging Renewable Firm and Firm Zero-Carbon Resources Report”, December 2024

These regulatory requirements, while essential for environmental protection, contribute to prolonged permitting timelines and increased costs, making geothermal project development in California more challenging compared to other states with more streamlined approval processes.

The SB 423 report notes that the geothermal permitting process is often time-consuming and often plagued by delays part of which is caused by heavy workloads on agencies who are already short staffed.¹⁴ The report recommends that agencies develop an interagency Memoranda of Understanding (MOUs) that clearly define agency responsibilities and align permitting processes to reduce duplication and streamline approvals.¹⁵

COMMENTS:

- 1) *Author's Statement.* According to the author, “Geothermal energy is essential to California’s carbon-free and renewable future. Unfortunately, the state does not have enough geothermal facilities. They require substantial investment and infrastructure. Without state direction as to a geothermal plan, these challenges are hindering the growth of geothermal and developers are shifting their attention to other states. AB 526 is about doing the necessary planning to facilitate the growth of geothermal energy. It requires the Energy Commission to develop a statewide strategic plan that will guide the expansion of geothermal energy. By setting clear objectives and providing a roadmap for future geothermal projects, the plan will help attract investment, spur job creation, and stimulate economic development in California’s clean energy sector.”
- 2) *Procurement Goal.* The strategic plan requires the CEC to evaluate and quantify the maximum feasible capacity of new in state geothermal energy, including establishing megawatt in state next-generation geothermal planning goals for 2035 and 2045. Such provisions assumes a procurement goal. Procurement decisions are best developed by state regulators as they require technical analysis, regulatory coordination, and the flexibility to adapt to market conditions. Moreover, the Legislature in adopting the IRP process in 2015 as mentioned earlier in the background, established a framework through which all procurement decisions are meant to be channeled, in order to optimize the best GHG reducing resources for the least cost. The feasible capacity targets of this measure would exist outside of this multiagency planning regime, and only through the lens of one resource, greatly diminishing the benefits of the IRP. *As such, the author and the committee recommend deleting provisions related to establishing megawatt in-state next-generation geothermal planning goals for 2035 and 2045, and striking the entirety of Section 25993.2.*
- 3) *Benefit of a Strategy.* By requiring the CEC in coordination with other relevant state, federal and local agencies to develop a strategic plan for the development of new in-state geothermal energy in California, this measure aims to scale up the development of new in state geothermal. As previously noted, geothermal energy, can supply power even when intermittent resources – such as solar and wind – are offline (such as at night or on cloudy days), and therefore support California in its transition to a 100% clean electricity by

¹⁴ E-6; California Energy Commission; “Report: SB 423 Emerging Renewable Firm and Firm Zero-Carbon Resources Report”, December 2024

¹⁵ Ibid

2045 and maintain system reliability. Recognizing the need, California has authorized procurement orders for geothermal energy through various channels:

- I) Integrated Resource Plan (IRP): As denoted earlier in the background, the IRP is California's procurement strategy used by California's electric providers and the CPUC to ensure the state's electricity system remains reliable, cost-effective and aligned with clean energy goals.¹⁶ In February 2024, the CPUC adopted the 2023 Preferred System Plan which estimated that at least 2 GW of geothermal energy is needed to meet the GHG reduction target of 25 million metric tons (MMT) by 2035.¹⁷
- II) In June 2021, the CPUC issued a major procurement order – Decision 21-06-035, also known as the Mid-Term Reliability (MTR) requiring utilities to procure 11,597 MW between 2023 and 2026.¹⁸ Of this quantity, about 1,000 MW of geothermal energy was ordered¹⁹ with an additional 4,000 MW of net qualifying capacity (NQC) ordered in early 2023²⁰ following an updated load forecasting by the CEC.
- III) In 2023, the legislature adopted AB 1373 which authorized the CPUC through a central procurement mechanism to work with the Department of Water Resources (DWR) to procure offshore wind, geothermal and long lead time resources aiming to facilitate the development of clean energy resources and meet the state's 100% clean energy goals.²¹ The decision identified four types of Long Lead Time resources for DWR to seek procurement solicitations; the total solicitation cap was 10.6 GW, with about 1 GW geothermal energy.²²

These procurement orders reflect California's progress and intention to expand geothermal energy generation. However, geothermal energy struggles to scale in-state primarily due to its high capital costs and extended development timelines. Many geothermal developers opt to construct projects outside of California and contract with California's LSEs to meet the above procurement obligations. Fervo Energy, a company focused on harnessing heat energy through enhanced geothermal systems, is currently developing a 400 MW geothermal plant in Cape Station, Utah and has already secured two power purchase agreements (PPAs) totaling 320 MW with Southern California Edison (SCE).²³ Similarly, Fervo Energy has entered into a 20MW power purchase agreement with a group of nine California-based

¹⁶ Integrated Resource Plan, <https://www.cpuc.ca.gov/irp/>

¹⁷ Pg. 68; CPUC ; Decision 24-02-047; February 15, 2024

¹⁸ Page 25, Decision 21-06-035 June 24, 2021, California Public Utilities Commission.

¹⁹ <https://fervoenergy.com/fervo-energy-announces-320-mw-power-purchase-agreements-with-southern-california-edison/>, June 25, 2024

²⁰ <https://www.cpuc.ca.gov/news-and-updates/all-news/cpuc-augments-historic-clean-energy-procurement-goals-to-ensure-electric-reliability-2023>, February 23, 2023

²¹ <https://legiscan.com/CA/text/AB1373/id/2815509>, Bill text CA AB1373, 2023-2024, LegiScan

²² Bernier P. et al, CPUC Authorizes Procurement of 10.6 GW of Clean Energy Resources Under AB 1373, <https://www.mayerbrown.com/en/insights/publications/2024/08/cpuc-authorizes-procurement-of-106-gw-of-clean-energy-resources-under-ab-1373>

²³ Ciampoli P., Recent Developments in Texas, California Mark New Milestones for Geothermal Energy, American Public Power Association, <https://www.publicpower.org/periodical/article/recent-developments-texas-california-mark-new-milestones-geothermal-energy>, August 28, 2024.

community choice aggregators (CCAs) to provide them with geothermal energy. Fervo also has partnered with East Bay Community Energy to provide 40 MW of geothermal energy. Additionally, Fervo Energy will add 18 MW of geothermal power to the Clean Power Alliance (CPA) energy portfolio. This is built on a previous contract for 30 MW for a total of 48 MW of geothermal energy to CPA.

As discussed earlier, the recent procurement orders require LSEs to procure a specified amount of geothermal energy as part of their long-term resource planning obligations. These existing procurement orders suggest that the limitation to in-state geothermal development is not for want of procurement direction. This legislation explores other barriers in requiring the State Land Commission, in coordination with the CEC, and other specified agencies to establish state lands leasing goals for new in-state geothermal energy development. However, these land leasing goals are not informed by the existing procurement activities or directions.

As such, the committee recommends that the state leasing goals shall be aligned to procurement obligations established under IRP, MTR, and DWR.

Given the potential of other, nascent geothermal technologies, the supporters of the bill contend that the evaluation of all types of geothermal resources could unlock greater geological potential and help identify where and how much geothermal energy could be developed in the future. *To achieve this aim, the committee recommends that the Division of Geologic Energy Management lead an assessment of all in-state geothermal resources potential utilizing the best available data. This assessment shall support the state lands leasing goals for new in-state geothermal energy development for 2045 as called for in this measure.*

4) *Adjust Geothermal Rentals and Fees.* This measure requires the CEC, the States Land Commission, and other specifies agencies to assess the level at which geothermal rentals and royalties would best support California's renewable energy, and greenhouse gas emission reductions goals. Rentals refer to the annual fees paid for by geothermal developers for the right to lease land for exploration or development. Geothermal royalties are payments made by developers to the government for the right to extract and use geothermal resources (like steam or hot water) from public lands. Public Resources Code § 6913, outlines the financial obligations—specifically, rentals and royalties—for geothermal resource leases on state lands to ensure fair compensation for the state. This legislation specifies that the State Lands Commission may reduce the geothermal rentals and royalties independently, based on the findings of the assessment in the strategic plan. Such provision both presupposes the report's outcome as one that will recommend a reduction in such payments, and undermines the Legislature's fiscal authority. *As such, the committee recommends striking Section 25993.6 (b) of this bill.*

5) *Additional Clean-Up.* *This bill contains two definitions, minor inaccuracies, and various provisions in its findings and declarations that the committee recommends striking due to inconsistencies or lack of clarity.*

6) *Related Legislation*

AB 531 (Rogers) would expand the types of facilities eligible to be certified as environmental leadership development projects by the Energy Commission to include

geothermal power plants and geothermal field development projects, as defined. Status: Assembly Utilities and Energy Committee

AB 527 (Papan) would allow geothermal exploratory projects that meet the same environmental standards, as determined by the lead agency overseeing the project, to be considered compliant with California Environmental Quality Act (CEQA). Status: Assembly Natural Resources Committee

7) *Prior Legislation*

AB 1359 (Papan), authorizes the Geologic Energy Management Division (CalGEM) in the Department of Conservation (DOC) to delegate lead agency authority under the California Environmental Quality Act (CEQA) for geothermal exploratory projects, as provided. Status: Chaptered by Secretary of State - Chapter 678, Statutes of 2024.

AB 1373 (Garcia), authorizes the Department of Water Resources (DWR) to serve as a central procurement entity to procure energy resources to include offshore wind, long-duration storage, and geothermal in order to help the state meet its renewable and zero-carbon energy resources and reliability goals. Status: Chaptered by Secretary of State - Chapter 367, Statutes of 2023.

AB 205 (Committee on Budget), among its many provisions, established the SRR at DWR to fund procurement of backstop resources to provide reliability to CAISO's grid. Status: Chapter 61, Statutes of 2022.

AB 1161 (E. Garcia, 2021) would have required DWR to procure newly developed eligible renewable energy resources or zero-carbon resources, and energy storage associated with those resources, in an amount that satisfies 100% of the electricity procured to serve all state agencies by December 31, 2030. Status: Died – Assembly Committee on Utilities and Energy.

SB 423 (Stern) requires the CEC to submit to the Legislature an assessment by December 31, 2023, of firm zero-carbon resources that support a clean, reliable, and resilient electrical grid and will help achieve the existing statutory goal of ensuring renewable energy and zero-carbon resources supply 100 percent of all retail sales of electricity to California customers by December 31, 2045. Status: Chapter 243, Statutes of 2021.

AB 56 (E. Garcia, 2019) would have required the CPUC to empower the CAEATFA to undertake backstop procurement of electricity that would otherwise be performed by an electrical corporation to meet state resource adequacy, integrated resource planning, and renewable portfolio standard goals not satisfied by retail sellers or load-serving entities. Status: Died – Senate Committee on Energy, Utilities, and Communications.

SB 350 (De León), among its many provisions, requires the CPUC to adopt a process for each LSE to file an IRP starting in 2017 and updating periodically. Additionally requires POUs to file an IRP by January 1, 2019. Status: Chapter 547, Statutes of 2015.

SB 100 (De León) established the 100 Percent Clean Energy Act of 2018 which increases the RPS requirement from 50% by 2030 to 60%, and creates the policy of planning to

meet all of the state's retail electricity supply with a mix of RPS-eligible and zero-carbon resources by December 31, 2045, for a total of 100% clean energy. Status: Chapter 312, Statutes of 2018.

- 8) *Double Referral*. This bill is double-referred; upon passage in this Committee, this bill will be referred to the Assembly Committee on Natural Resources.

REGISTERED SUPPORT / OPPOSITION:

Support

350 Humboldt
 350 Sacramento
 Active San Gabriel Valley
 American Clean Power Association
 California Environmental Voters
 California Nurses for Environmental Health and Justice
 California State Association of Electrical Workers
 California State Pipe Trades Council
 Citizens' Climate Lobby Santa Rosa and North
 City of Cloverdale
 City of San Jose
 Clean Air Task Force
 Climate Action California
 Climate Center; the
 Climate Reality Project
 County of Imperial
 County of Sonoma
 Eavor INC.
 Environmental Defense Fund
 Facts Families Advocating for Chemical and Toxics Safety
 Fervo Energy
 Geothermal Rising
 International Brotherhood of Boilermakers, Western States Section
 International Union of Operating Engineers, Cal-nevada Conference
 Move LA
 Norcal Elder Climate Action
 Northern Sonoma County Air Pollution Control District
 Ormat Technologies, INC.
 San Francisco Bay Physicians for Social Responsibility
 Santa Cruz Climate Action Network
 Sierra Club California
 Sonoma Clean Power
 Us gbc California
 Western States Council Sheet Metal, Air, Rail and Transportation
 Xgs Energy

Opposition

None on file.

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