
SENATE COMMITTEE ON NATURAL RESOURCES AND WATER

Senator Monique Limón, Chair
2025 - 2026 Regular

Bill No:	AB 915	Hearing Date:	July 16, 2025
Author:	Petrie-Norris		
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Urgency:	No	Fiscal:	Yes
Consultant:	Genevieve Wong		

Subject: Dam safety: state supervision: exceptions

SUMMARY

This bill would exempt from Division of Safety of Dams oversight water storage facilities, structures, and activities associated with an energy storage system facility using compressed air technology if the facility, structure, or activity meets certain requirements.

BACKGROUND AND EXISTING LAW

Division of Safety of Dams (DSOD). The State has regulated dams since 1929 to prevent failure, safeguard life, and protect property. DSOD provides oversight to the design, construction, and maintenance of over 1,200 jurisdictional sized dams in California. A “dam” is any artificial barrier, together with appurtenant works. If the dam height is more than six feet and it impounds 50 acre-feet or more of water, or if the dam is 25 feet or higher and impounds more than 15 acre-feet of water, it is under the jurisdiction of DSOD (“jurisdictional dams”), unless it is exempted.

DSOD ensures dam safety by:

- Reviewing and approving dam enlargements, repairs, alterations, and removals to ensure that the dam appurtenant structures are designed to meet minimum requirements.
- Performing independent analyses to understand dam and appurtenant structures’ performance. These analyses can include structural, hydrologic, hydraulic, and geotechnical evaluations.
- Overseeing construction to ensure work is being done in accordance with approved plans and specifications.
- Inspecting each dam on an annual basis to ensure it is safe, performing as intended, and is not developing issues. Roughly one-third of these inspections include in-depth instrumentation reviews of the dam surveillance network data.
- Periodically reviewing the stability of dams and their major appurtenances in light of improved design approaches and requirements, as well as new findings regarding earthquake hazards and hydrologic estimates in California.

CEC Power Plant Certification Processes. The California Energy Commission (CEC) has exclusive authority to certify all thermal power plans 50 megawatts (MW) and larger and related facilities proposed in California. The Application for Certification (AFC) process is a certified regulatory program under the California Environmental Quality Act

(CEQA). As a certified regulatory program, the CEC does not prepare environmental impact reports (EIRs) but instead prepares environmental assessment documents that are functionally equivalent to EIRs. A certificate issued by CEC is in lieu of any permit, certificate, or similar document otherwise required by any state, local or regional agency, or federal agency to the extent permitted by federal law, and supersedes any applicable statute, ordinance, or regulation of any state, local, or regional agency, or federal agency to the extent permitted by federal law.

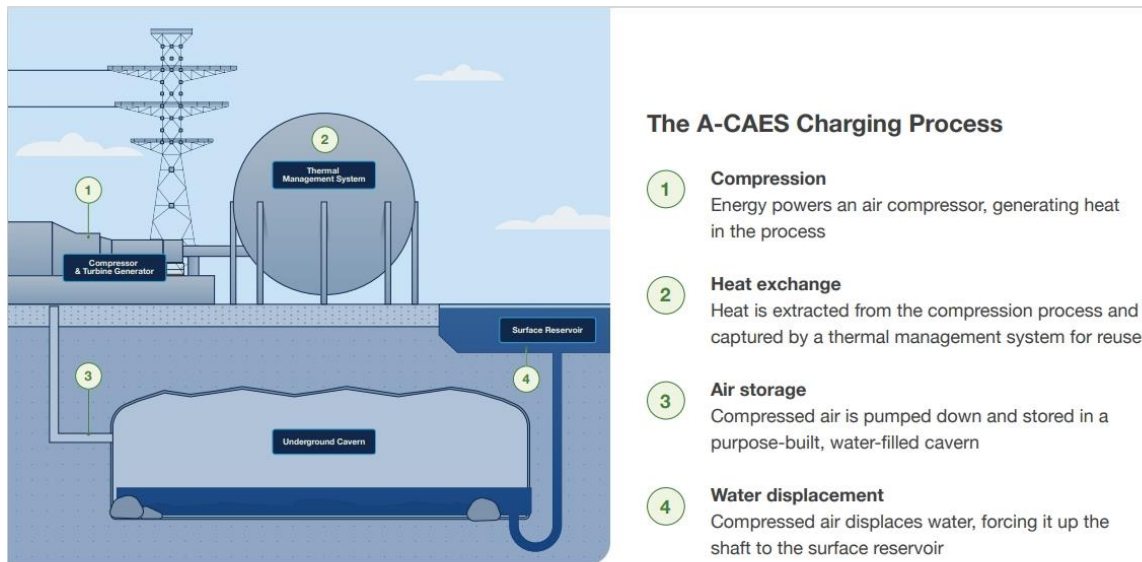
Willow Rock Energy Storage Center. According to the CEC, the Willow Rock Energy Storage Center (Willow Rock) is a proposed compressed air storage energy storage facility in Kern County. The project site is on undeveloped land in an area zoned Limited Agriculture (A-1) District. The area surrounding the project boundary is largely undeveloped with very sparse residential development; the nearest residence is approximately 0.8 mile northwest of the northwest corner of the Willow Rock project site. The two graphics below show the proposed location and a project rendering.¹



¹ Willow Rock Energy Storage Center slide deck presented by AV Edge for Hydrostor; October 2024; <https://avedgeca.org/wp-content/uploads/2024/11/Willow-Rock-and-ACAES-Overview-AV-EDGE-Oct-2024-FINAL.pdf>; last accessed July 7, 2025.

Willow Rock would be a 520-megawatt (MW) gross (500 MW net) and 4,160 megawatt-hour (MWh) gross (4,000 MWh net) facility using Hydrostor, Inc.'s proprietary, advanced compressed air energy storage technology. The overall facility would consist of four 130 MW (gross) power turbine trains, outputting a total of 500 MW net at the point of interconnection. Each train would contain an electric motor-drive air compressor drivetrain, heat exchangers, an air turbine generator, air exhaust stacks, and ancillary equipment. Each train would share a common set of thermal storage tanks (hot and cold water), as well as the air storage cavern. Willow Rock would interconnect to Southern California Edison's Whirlwind Substation located southwest of Willow Rock via a new approximately 19-mile 230-kilovolt generation-tie line.

According to Willow Rock's fact sheet, provided by the bill's sponsor Hydrostor, "Hydrostor's technology relies on a man-made, fully lined retention pond which maintains the pressure of the compressed air in the underground cavern. The pond has no hydrologic connection to surface water or groundwater, will contain less than 600 acre feet of water, and will have a small berm six feet high from finished grade. 45 acre feet of water, or 15 million gallons of water, will be held above the finished grade, and all water in the pond can be emptied into the cavern if necessary." Although Hydrostor argues that this pond is not a dam, it does fall within the definition of a dam, subjecting it to DSOD oversight. Additionally, according to the fact sheet, CEC staff have asserted that DSOD jurisdiction applies to the reservoir. A rendering of the advanced compressed air energy storage (A-CAES), including the surface reservoir, or pond, can be found below.



Rendering provided by Willow Rock fact sheet, produced by Hydrostor.

Reception to Willow Rock has been mixed, with the project receiving support from individuals and the California City Chamber of Commerce and concerns from environmental groups including Center for Biological Diversity and Defenders of Wildlife. Both Center for Biological Diversity and Defenders of Wildlife have expressed their concerns through CEC's AFC process and copies of their comments can be found on the CEC website.

Existing law:

- 1) Subjects all dams and reservoirs to regulation and oversight by DSOD within Department of Water Resources (DWR) (Water Code (WAT) §6075).
- 2) Defines “dam” as any artificial barrier, together with additional appurtenant structures (including training walls, spillways, outlets, tunnels, channels, pipelines, or dikes) that may impound or divert water and is either (a) 25 feet or greater in height from the natural stream bed to the top of the barrier/maximum storage elevation, or (b) impounds a capacity of 50 acre-feet of water or more (WAT §6002).
- 3) Excludes any barrier not in excess of six feet or a barrier with a storage capacity of 15 acre-feet or less, regardless of height, from the definition of dam (WAT §6003).
- 4) Excludes certain structures from the definition of “dam,” including an obstruction in a canal as a barrier across a stream channel, watercourse, or natural drainage area from consideration as a dam if the structure is no greater than 15 feet in height (WAT §6004).
- 5) Excludes certain waste water treatment and storage ponds constructed as part of a waste water control facility from the requirements for state regulation and supervision of safety of dams (WAT §6025.5).
- 6) Requires DSOD to inspect dams, reservoirs, and appurtenant structures to verify their safety in accordance with a prescribed schedule depending on the hazard classification, as determined by DSOD, of the facility (WAT §6102.5).

PROPOSED LAW

This bill would exempt from the requirements for state regulation and supervision of safety of dams water storage facilities, structures, and activities associated with an energy storage system facility using compressed air technology that meet all of the following:

- 1) A maximum water pool height of 25 feet or less from the final engineered grade and a maximum storage capacity of 1,500 acre-feet or less;
- 2) Designed by, and constructed under, the supervision of a registered civil engineer; and
- 3) Are not across a stream channel or watercourse; and
- 4) Are approved by a lead agency pursuant to CEQA, including, but not limited to, approval by state regulatory agencies with a regulatory program certified by the Secretary of the Natural Resources Agency pursuant to CEQA.

ARGUMENTS IN SUPPORT

According to the author, “In order to meet its clean energy and climate change goals, California must find efficiencies in the permitting process wherever possible while maintaining high standards of safety and environmental protection. To this end, AB 915 streamlines the permitting of long duration, non-lithium renewable energy storage facilities. Because the California Energy Commission is best suited to process and

review compressed air energy storage projects and their various components, including retention ponds, AB 915 provides clarity in the law about which agency has the authority to process and review compressed air energy storage project permit applications.”

ARGUMENTS IN OPPOSITION

None received

COMMENTS

But is it really a dam? The definition of “dam” was last amended in 1965. It is likely that when this definition was crafted, facilities such as the Willow Rock project were not contemplated.

If not DSOD, then who? According to the Willow Rock fact sheet, and information provided by the author’s office, CEC had asked the Willow Rock project team to work through the DSOD process although, according to the fact sheet, CEC has made clear that it is the sole jurisdictional authority for the Willow Rock project. Because the DSOD project can be costly and lengthy, an exemption from DSOD oversight is sought instead.

As discussed above, DSOD ensures dam safety by, among other things, annually inspecting each dam, evaluating structural performances, and periodically reviewing the stability of dams in light of improved design approaches. In an email dated January 13, 2025, between DSOD staff and CEC staff discussing whether the Willow Rock project would be subject to DSOD jurisdiction, DSOD staff noted that “DSOD would have concerns at this location with respect to seismic loading and foundation conditions for an embankment and its appurtenances. The level of concern will depend on the consequences of embankment failure.”²

If, under AB 915, DSOD would no longer be responsible for ensuring the safety of Willow Rock’s surface reservoir, it appears that CEC will have sole responsibility for the project. It is unclear if CEC has expertise in evaluating and ensuring the safety of reservoirs.

First of its kind. According to the sponsor, this energy storage facility is the first of its kind in California, and potentially the United States. While the Legislature, after considering the specific characteristics of the Willow Rock project, may feel it is appropriate to exempt Willow Rock from DSOD’s oversight it may not be prudent to provide a blanket exemption for any facility that meets the bill’s requirements.

The committee may wish to narrow the bill to apply only to the Willow Rock Energy Storage Center. *See Amendment 1.*

² Follow-Up Email from Division of Safety of Dams (DSOD) – Info Regarding Submittal and Notes on DSOD Jurisdiction, posted March 13, 2025, can be viewed at <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=21-AFC-02>

SUGGESTED AMENDMENT

AMENDMENT 1

Amend Water Code §6025.5(b) as follows:

(b) Water storage facilities, structures, and activities associated with an energy storage system facility using compressed air technology that ***is located in the County of Kern, north of Dawn Road between State Route 14 and Sierra Highway, and*** meet all of the following criteria:

(1) A maximum water pool height of 25 feet or less from the final engineered grade and a maximum storage capacity of 1,500 acre-feet or less.

(2) Designed by, and constructed under, the supervision of a registered civil engineer.

(3) Are not across a stream channel or watercourse.

(4) Are approved by a lead agency pursuant to the requirements of Division 13 (commencing with Section 21000) of the Public Resources Code, including, but not limited to, approval by state regulatory agencies that have been certified by the Secretary of the Resources Agency as meeting the requirements of Section 21080.5 of the Public Resources Code.

SUPPORT

Hydrostor (sponsor)

Ava Community Energy

OPPOSITION

None Received

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