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# Willow Rock Energy Storage Project (21-AFC-02)

November 6, 2024, Informational Hearing, Rosamond, CA

Leonidas Payne, Project Manager Siting and Environmental Branch Siting, Transmission, and Environmental Protection Division



# **CEC Staff Role in an AFC Proceeding**

- Lead CEQA Agency
- Independent party to the proceeding
- Point of contact for public, agency, and tribal input
- Initiates tribal consultation
- Hosts public workshop(s)
- Prepares objective environmental assessments
  - Preliminary Staff Assessment (PSA)
  - Final Staff Assessment (FSA)
- Provides expert witness testimony (technical expertise)



# Staff Discovery Efforts

- Data Request Set 1 (Alternatives, Cultural and Tribal Cultural Resources, and Socioeconomics): July 26, 2024
  - Applicant Response: August 23, 2024
- Data Request Set 2 (Air Quality, Hazardous Materials and Wildfire, Land Use, Agriculture, and Forestry, Public Health, and Transportation): August 22, 2024
  - Applicant Response: September 19, 2024
- Data Request Set 3 (Biological Resources, Greenhouse Gas Emissions, Hazardous Waste, Reliability, Transmission System Engineering, Water Resources, and Worker Safety and Fire Protection): September 23, 2024
  - Applicant Response: October 23, 2024
- Data Request Set 4 (Biological Resources, and Hazardous Materials and Worker Safety and Fire Protection): September 27, 2024
  - Applicant Response: October 28, 2024
- Future Data Request Sets: TBD



# **Staff Tribal Consultation Efforts**

- Tribal Consultation Letters Sent: July 26, 2024
- Electronic copies emailed: August 16, 2024
- Tribe responses with interest in consultation
  - Response from Yuhaaviatam of San Manuel Nation on August 15, 2024
  - Response from Kern Valley Indian Community on August 16, 2024
  - Response from Tejon Indian Tribe on August 16, 2024
- Tribes responding but not requesting consultation or deferring to local tribes
  - Response from Fernandeño Tataviam Band of Mission Indians on August 19, 2024
  - Response from Morongo Band of Mission Indians on August 19, 2024
  - Response from Fort Yuma Quechan Tribe on October 3, 2024
- Tribal consultation meetings with tribe[s]: TBD



# **Staff Assessment Topic Areas**

### **Engineering Analysis**

- Facility Design
- Power Plant Reliability
- Transmission System Engineering
- Worker Safety and Fire Protection

### **Environmental Impact Analysis**

- Air Quality
- •Biological Resources
- •Climate Change and Greenhouse Gas Emissions
- Cultural and Tribal Cultural Resources
- Energy
- Geology, Paleontology, and Minerals
- •Hazards, Hazardous Materials, and Wildfire
- Land Use, Agriculture, and Forestry
- Noise and Vibration
- Public Health

### **Environmental Impact Analysis (cont.)**

- Socioeconomics
- Solid Waste Management
- Transmission Safety and Nuisance
- Transportation
- Visual Resources
- Water Resources

### **Other Topics**

- Environmental Justice
- Public Benefits
- Alternatives
- Compliance Conditions



# **Issues Identified to Date**

## Biological Resources:

 Bio technical team has received the Western Joshua Tree Relocation Plan but still needs to review the plan and coordinate with California Department of Fish and Wildlife. Follow-up data requests possible.

### Cultural and Tribal Cultural Resources:

- Incomplete baseline data
- Still waiting on Phase II Cultural Resources Testing Plan
- Still waiting on Revised Cultural Resources Survey Report

Previously identified issues involving **Reliability** and **Water Resources** technical areas (technology scale up, waste discharge permitting) are no longer expected to impact PSA publication schedule following data request responses and information sharing.



# Key Dates Associated with Staff's Assessment of the Project

- Discovery Period Closes (last day to file data requests): January 13,
   2025
- Staff's PSA to be published by: April 14, 2025
- Comment deadline on PSA by: May 29, 2025, or 45 days after PSA publication
- Staff's FSA (includes response to comments) to be published by:
   July 14, 2025, or 45 days after PSA commenting deadline



# For More Information: CEC Project Webpage

Submit e-Comment 17

Docket Log (21-AFC-02) ™

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[https://www.energy.ca.gov/powerplant/caes/willow-rock-energy-storage-center]

### Willow Rock Energy Storage Center

This proceeding is for the certification of an energy storage project in Kern County, California.

PROJECT OWNER

Hydrostor

DOCKET NUMBER 21-AFC-02

CAPACITY

520 MW

8684 Sweetser Road in Rosamond, Kern County, California

LOCATION

TECHNOLOGY

A-CAES

PROJECT STATUS Under Review

PROJECT TYPE

Application for Certification

### **Project Description**

The Willow Rock Energy Storage Center (WRESC) is proposed compressed air storage energy storage facility by Gem A-CAES LLC (Applicant), a wholly owned subsidiary of Hydrostor, Inc.

On December 3, 2021, the Applicant filed its original Application for Certification (AFC) for the project located at 8684 Sweetser Road in Rosamond, Kern County, In March 2024, the Applicant filed a Supplemental AFC for the project, changing the location to 88.6 acres of private land immediately north of Dawn Road and between State Route (SR I 4 and Sierra Highway within unincorporated Kern County, California, approximately 4 miles north of Rosamond, California. The new project site is on undeveloped land in an area zoned Limited Agriculture (A-I) 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 WRESC site.

WRESC would be a nominal 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 (A-CAES) technology. The overall facility would consist of four nominal 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-driven 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. The WRESC would interconnect to Southern California Edison's Whirlwind Substation located southwest of the WRESC at the intersection of 170th Street W and Rosamond Boulevard, via a new approximately 19-mile 230-kilovolt (kV) generation-tie (gen-tie) line.



## PROJECT MANAGER Leonidas Payne

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#### PUBLIC PARTICIPATION OUESTIONS

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#### RELATED DOCUMENTS

Project Figures

#### SUBSCRIBE WILLOW ROCK ENERGY STORAGE CENTER

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