

<b>DOCKETED</b>	
<b>Docket Number:</b>	21-AFC-02
<b>Project Title:</b>	Willow Rock Energy Storage Center
<b>TN #:</b>	264132
<b>Document Title:</b>	Application for Certification Willow Rock Energy Storage Center 21-AFC-02
<b>Description:</b>	Preliminary Staff Assessment Workshop Community of Mojave, Kern County June 5, 2025 Presentation Slides
<b>Filer:</b>	susan fleming
<b>Organization:</b>	California Energy Commission
<b>Submitter Role:</b>	Commission Staff
<b>Submission Date:</b>	6/9/2025 4:40:08 PM
<b>Docketed Date:</b>	6/9/2025



# **Application for Certification Willow Rock Energy Storage Center 21-AFC-02**

**Preliminary Staff Assessment Workshop  
Community of Mojave, Kern County  
June 5, 2025**

**Eric Veerkamp, Project Manager  
Siting, Transmission, and Environmental Protection Division  
Siting and Environmental Branch**



# Meeting Logistics

- Workshop is a recorded hybrid meeting,
- Instruction for Zoom closed captioning service:
  - **Activate:** click on “live transcript” icon and then choose either “show subtitle” or “view full transcript.”
  - **Stop:** click “exit” from “live transcript” or select “hide subtitle” icon.
- Agenda includes time for public comment and input.
- Please be mindful of the audio for those participating online; speak slowly and clearly.



# Agenda

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- **Welcome**
- **CEC Staff Presentation**
  - Application Overview
  - Timeline of Proposed Project
  - Public Participation
- **Applicant Remarks**
- **Intervenor Remarks**
- **Government Comment**
  - California Native American tribes
  - Government Agencies
  - Elected Officials
- **Public Comment**
- **Break** (*if needed*)
- **Environmental Topics/Conditions of Certification Discussions**
- **Meal Break**
- **Continue Environmental Topics/Conditions of Certification Discussions**
- **Public Comment**
- **Next Steps**
- **Closing Comments**
- **Adjourn**



# Welcome



# Willow Rock Overview

- Unincorporated Kern County
  - High desert terrain
- Approximately 89 acres
- Advanced compressed air energy storage (A-CAES)
- Nominal 520-MW gross and 4,000 MWh net facility
- Project Components
  - Eight air compressors
  - Surface reservoir
  - Four turbine generators with 100' tall air exhaust stacks



Source: Willow Rock Energy Storage Center, Supplemental AFC, Volume 1, Part A, Page 30, TN 254806



# Willow Rock Overview, Continued

- Associated project components:
  - Cooling System
  - Underground air storage cavern
  - Transmission, conduits, connections
  - Substation
  - Permanent building



Source: Willow Rock Energy Storage Center, Supplemental AFC, Volume 1, Part A, Page 36, TN 254806



# Engineering Evaluation and LORS Conformance

Technical Area	Impacts Mitigated?	LORS Conformance
Facility Design	N/A	Yes
Facility Reliability	N/A	N/A
Transmission System Engineering	Yes	Yes
Worker Safety and Fire Protection	Yes	Yes

*LORS = laws, ordinances, regulations, and standards*

*N/A = not applicable (technical area not subject to CEQA consideration or has no applicable LORS the project must conform with.*





# CEQA Environmental Impacts and LORS Conformance

Technical Area	Impacts Mitigated?	LORS Conformance
Air Quality	Yes	Yes
Biological Resources	Yes	Yes
Climate Change and Greenhouse Gas Emissions	Yes	Yes
Cultural and Tribal Cultural Resources	Yes	Yes
Efficiency and Energy Resources	Yes	Yes
Geology, Paleontology, and Minerals	Yes	Yes
Hazards, Hazardous Materials/Waste, and Wildfire	Yes	Yes
Land Use, Agriculture and Forestry	Yes	Yes

Technical Area	Impacts Mitigated?	LORS Conformance
Noise and Vibration	Yes	Yes
Public Health	Yes	Yes
Socioeconomics	Yes	Yes
Solid Waste Management	Yes	Yes
Transmission Line Safety and Nuisance	Yes	Yes
Transportation	Yes	Yes
<b>Visual Resources</b>	<b>No</b>	<b>Yes</b>
Water Resources	Yes	Yes

*LORS = laws, ordinances, regulations, and standards*



# Timeline

Date	Project Milestones
March 1, 2024	Supplemental Application for Certification Filed (new project location)
July 16, 2024	CEC Determination of Application Completeness Issued
July 26, 2024 and August 16, 2024	Tribal Notification Inviting Consultation
November 6, 2024	Public Site Visit and Informational Hearing
April 29, 2025	Preliminary Staff Assessment Filed
<b>June 5, 2025</b>	<b>Preliminary Staff Assessment Workshop</b>



# Project Webpage

## 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

500 MW net

### LOCATION

North of Dawn Road between SR 14 and Sierra Highway, unincorporated Kern County, California

### TECHNOLOGY

Energy Storage System

### 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

### ORIGINAL PROCEEDING

[Submit e-Comment](#)

[Submit e-Filing](#)

[Docket Log \(21-AFC-02\)](#)

[Exhibit List](#)

[Proof of Service List](#)

[Search All Power Plant Documents](#)

### CONTACTS

#### PROJECT MANAGER

Eric Veerkamp

[STEPsiting@energy.ca.gov](mailto:STEPsiting@energy.ca.gov)

(Please enter project name in the email subject line)

916-661-8458

#### PUBLIC PARTICIPATION QUESTIONS

Public Advisor

[publicadvisor@energy.ca.gov](mailto:publicadvisor@energy.ca.gov)

916-269-9595

#### MEDIA INQUIRIES

Media & Public Communications Office

[mediaoffice@energy.ca.gov](mailto:mediaoffice@energy.ca.gov)

916-654-4989

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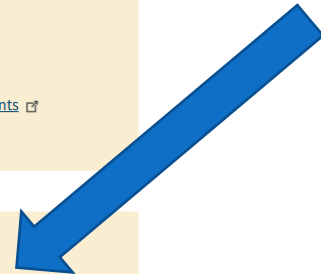
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916-654-4989



<https://www.energy.ca.gov/powerplant/energy-storage-system/willow-rock-energy-storage-center>



# Applicant Remarks



# **Intervenor Remarks**

## **California Unions for Reliable Energy**



# **Government Comment**

## **Tribal, Elected, Governmental**



# Public Comment



# Public Comment 3 minute timer

## Instruction

- 3 minutes or less per person
- 1 representative per organization

## Zoom App/Online

- Click “raise hand”

## Telephone

- Press \*9 to raise hand
- Press \*6 to mute and unmute

## When called upon

- CEC staff will open your line
- Unmute, spell name and state affiliation, if any

## 3-MINUTE TIMER







# **Environmental Topic Area Discussion**



# **Water Resources**

James Ackerman, PG #6493, Engineering Geologist  
Geosciences Unit



# Water Resources – Staff Conclusions

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## Regulatory Compliance

Project complies with all laws, ordinances, regulations, and standards (LORS), including:

- Federal Clean Water Act (CWA)
- California Porter-Cologne Act
- California Sustainable Groundwater Management Act (SGMA)
- California Water Code (CWC)
- Kern County Ordinance



# Water Resources – Staff Conclusions Continued

## Key Considerations

- Stormwater management:
  - **Construction:** following requirements of California's NPDES Construction General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities administered by the SWRCB.
  - **Operations:** following a drainage, erosion and sedimentation control plan.
- Drill cuttings would be contained within lined ponds and would be subject to SWRCB waste discharge requirements (WDRs).



# Water Resources – Staff Conclusions

## Key Considerations

### Key Considerations

- Industrial wastewater would be contained in tanks and disposed off-site.
- A septic leach-line system is proposed to address sanitary wastewater needs and would be designed in accordance with State and Local onsite wastewater treatment system (OWTS) requirements.
- The hydrostatic compensation (HC) reservoir embankment qualifies as a dam under Department of Water Resources (DWR), Division of Safety of Dams (DSOD) jurisdiction.
- Proposed project water use:
  - 1,400 AF over the 5-year construction period
  - 2 AFY for operation



# Water Resources – Staff Conclusions Conditions of Certification

COC	Environmental Impact	Mitigation
<b>WATER-1</b>	Stormwater runoff during construction	Coverage under the SWRCB NPDES General Construction Permit
<b>WATER-2</b>	Stormwater runoff during operation	Drainage, Erosion and Sedimentation Control Plan (DESCP)
<b>WATER-3</b>	Possible discharge from drill cutting ponds	WDRs per SWRCB Water Quality Order No. 2003-0003-DWQ
<b>WATER-4</b>	Possible industrial wastewater discharge	Documentation of off-site industrial wastewater
<b>WATER-5</b>	Water quality degradation from septic system	Septic system designed to State and Local OWTS requirements
<b>WATER-6</b>	HC reservoir embankment DSOD jurisdictional dam	Embankment design reviewed and approved by DSOD staff
<b>WATER-7</b>	CEC and DSOD staff coordination during construction	Clear roles defined for CEC and DSOD staff for project inspection
<b>WATER-8</b>	Project water supply	Water use limits, documentation of water use



# Water Resources Comments

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- Discussion
  - All Conditions of Certification, **WATER-1** thru **WATER-8**
  - **WATER-3** Attachment A
  - Timing of requirements/plans
  - Language and organization changes
  - Any additional items
- Public Comment



# **Biological Resources**

Chris Huntley, Senior Wildlife Biologist  
Aspen Environmental Group





# Biological Resources – Staff Conclusions

## **Sensitive Habitat and Species Impacts Evaluated:**

- Western Joshua tree woodland and other native vegetation communities.
- Federally and state-listed plants and wildlife and other special-status species.
- Aquatic features meeting the definition of waters of the state and/or California Department of Fish and Wildlife jurisdictional streambed.

## **Assessed potential conflicts of project with the following:**

- Kern County General Plan and specific plans,
- Desert Renewable Energy Conservation Plan, and
- West Mojave Plan



# Biological Resources – Staff Conclusions and COCs

## Biological Resources Summary

- Less than significant impacts to wildlife migratory corridors.
- Less than significant impacts with mitigation to western Joshua tree woodland and other native vegetation communities, special-status species, and jurisdictional features.
- Conflicts with existing local plans and conservation plans – less than significant impacts with mitigation.
- Conditions of Certification (COC) – 24 COCs to reduce or avoid impacts to biological resources.
- Includes COCs to address take of western Joshua tree, Crotch's bumble bee, and burrowing owl.



# Biological Resources CoC's

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- Discussion
  - Conditions of Certification: **BIO-8, BIO-12** thru **BIO-15, BIO-21**
  - Compensatory mitigation requirements (Crotch's Bumble Bee and burrowing owl)
  - Survey requirements and timing
  - Any additional items
- Public Comment



# Visual Resources

Mark Hamblin, MPA, Planner II  
Land Use and Public Services Unit



# Visual Resources – Staff Conclusions

## Existing Visual Character or Quality of Public View of Site and its Surroundings (CEQA Guidelines)

- Evaluated physical change to the condition of existing physical environment.
- Evaluated change to environment from a “key observation point” (KOP).
- Four KOPs reviewed.
- Adapted descriptive inventory methodology, formal aesthetic model helped.
- Project cannot be mitigated to a “less than significant effect on environment” from KOP 2, 3, and 4.



# Visual Resources Final

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- Discussion
  - Condition of Certification: VIS-1
  - KOP Unmitigable Significant Impact
  - Suggested Mitigation Options
  - Any additional items
- Public Comment



# **Cultural and Tribal Cultural Resources**

William (Bill) Larson, Senior Environmental Planner  
Cultural Resources Unit



# Cultural/Tribal Cultural Resources – Staff Conclusions

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## **165 cultural resources in the project area of analysis (PAA)**

- 48 Isolates (None eligible for CRHR)
- 82 Historic Built Environment Resources (6 eligible for the CRHR)
- 35 Archaeological Resources (16 eligible for the CRHR)

Finding for Cultural and Tribal Cultural Resources for this project is  
**Less than Significant with Mitigation Incorporated**





# Cultural/Tribal Cultural Resources

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- Discussion
  - Condition of Certification: **CUL/TRI-9**
  - Mitigation for Gen-Tie Line along Mojave Tropic Road
  - Any additional items
- Public Comment



# Other Environmental Topics

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- Discussion



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**Meal Break**

**Please return at**



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# **Break**

## **Please return at 4:30**



# Next Steps

Activity	Timeframe
Zoom-only follow up meeting, if needed	June 10, 2025
Public Comment Period Closes	June 16, 2025
Staff Files Final Staff Assessment	July 16, 2025
Committee Conducts Evidentiary Hearing	August 18/19, 2025
Committee Files Proposed Decision	October 2025 (tentative)
Final Commission Decision Issued	December 2025 (tentative)

# Thank You



Project Contact:

Eric Veerkamp, Project Manager

Siting, Transmission, and Environmental Protection Division

[STEPsiting@energy.ca.gov](mailto:STEPsiting@energy.ca.gov)