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HYDROSTOR

WILLOW ROCK
ENERGY STORAGE CENTER

Willow Rock Energy Storage Center: Project Overview

California Energy Commission Informational Hearing – November 2024

Agenda

1. Hydrostor Introduction
2. A-CAES Technology Overview
3. Willow Rock – Optimized Project Location
4. Site Photos, Plot Plan, and Rendering
5. Preferred Transmission Line Route
6. Project Development Timeline
7. Local Economic Benefits
8. Optimized Project Location – Advantages & Benefits

Curtis VanWalleghem

CEO and Co-Founder

Hydrostor at a Glance

Founded in 2010 | 100+ Employees | US $355M raised

We are a clean technology company dedicated to developing essential long duration energy storage infrastructure.

Our compressed air technology operates on a compact footprint with flexible siting to deliver utility-scale renewable energy storage capacity of eight hours or more.

Project highlights

1	2	15	7
Operational project	Late-stage projects	Projects in the pipeline	Total pipeline capacity (GW)

Key investors:

Goldman Sachs | Asset Management

CPP Investments

A-CAES is a Flexible Storage Solution

Proven Technology
Our systems use proven OEM equipment, including air compressors, turbo expanders, generators, and heat exchangers.

8+ Hours of Storage
A-CAES is the best positioned, commercially viable LDES solution for intraday applications

Flexible Siting
A higher geographic breadth of deployment is enabled by purpose-built, hydrostatically compensated rock caverns

Low-cost, Large Scale
A utility-scale LDES solution available today providing 500+ MWs of storage

Emission-free Operation
Allows renewable resources to be integrated onto the grid, without sacrificing reliability, as fossil fuel is replaced.

50+ Year Asset Lifetime
No efficiency degradation and low O&M

How The A-CAES Process Works

1 COMPRESSION
Off-peak or renewable electricity powers a compressor, that compresses the air and generates heat in the process

2 HEAT EXCHANGE
Heat generated during compression is extracted from the air and captured by the thermal management system for reuse

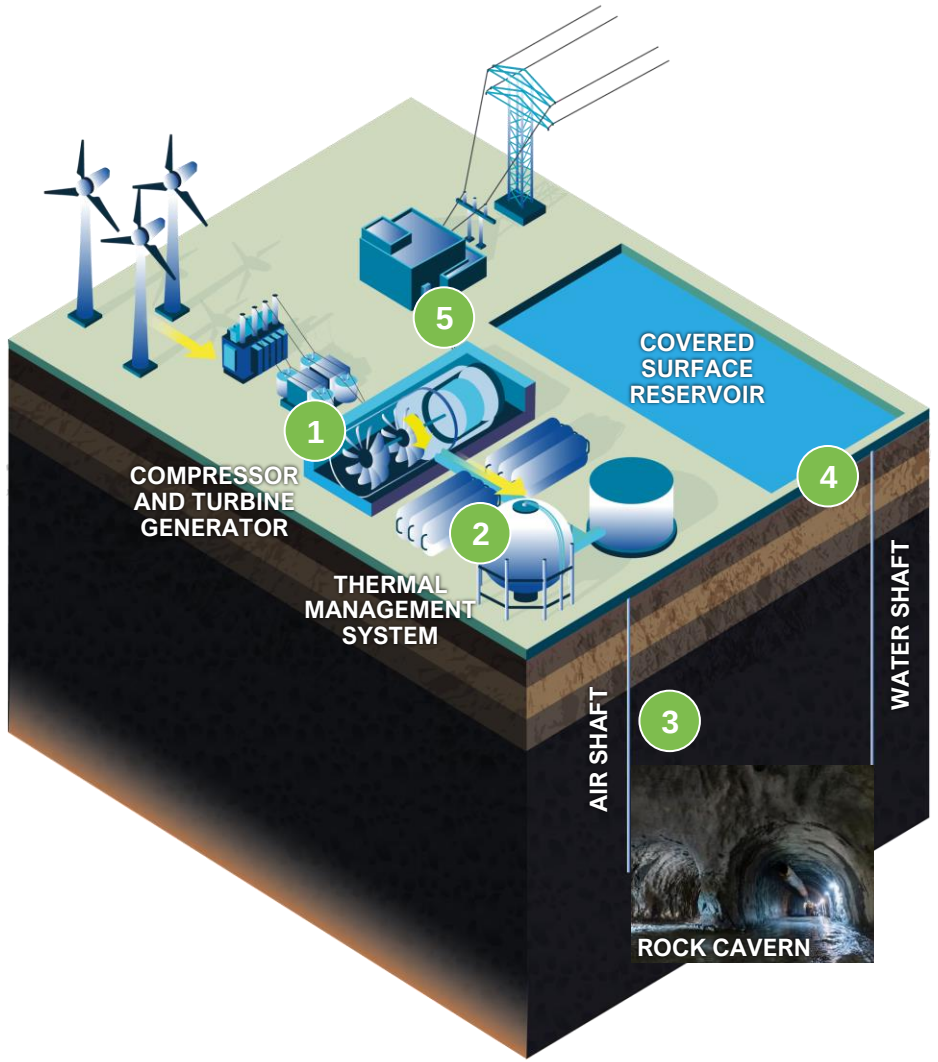
Hydrostor IP*: Adiabatic heat storage improves efficiency and makes the process emissions free

3 AIR STORAGE
Compressed air is pumped down and stored in a purpose-built, water-filled cavern

4 WATER DISPLACEMENT
Compressed air displaces water, forcing it up the shaft to the surface reservoir

Hydrostor IP*: Hydrostatic compensation maintains cavern pressure, improves efficiency, and enables siting flexibility, which minimizes cavern cost and size requirement

5 FULLY CHARGED STATE AND DISCHARGE
Once reservoir is filled, the plant is ready to provide energy on-demand by reversing the process and turning the above-ground turbine to generate electricity



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*Patented, proprietary technology

Curt Hildebrand

SVP, Commercial Affairs (California)

Willow Rock – Optimized Project Location

Site is located at the northwest intersection of Sierra Highway and Dawn Road near CA Highway 14.

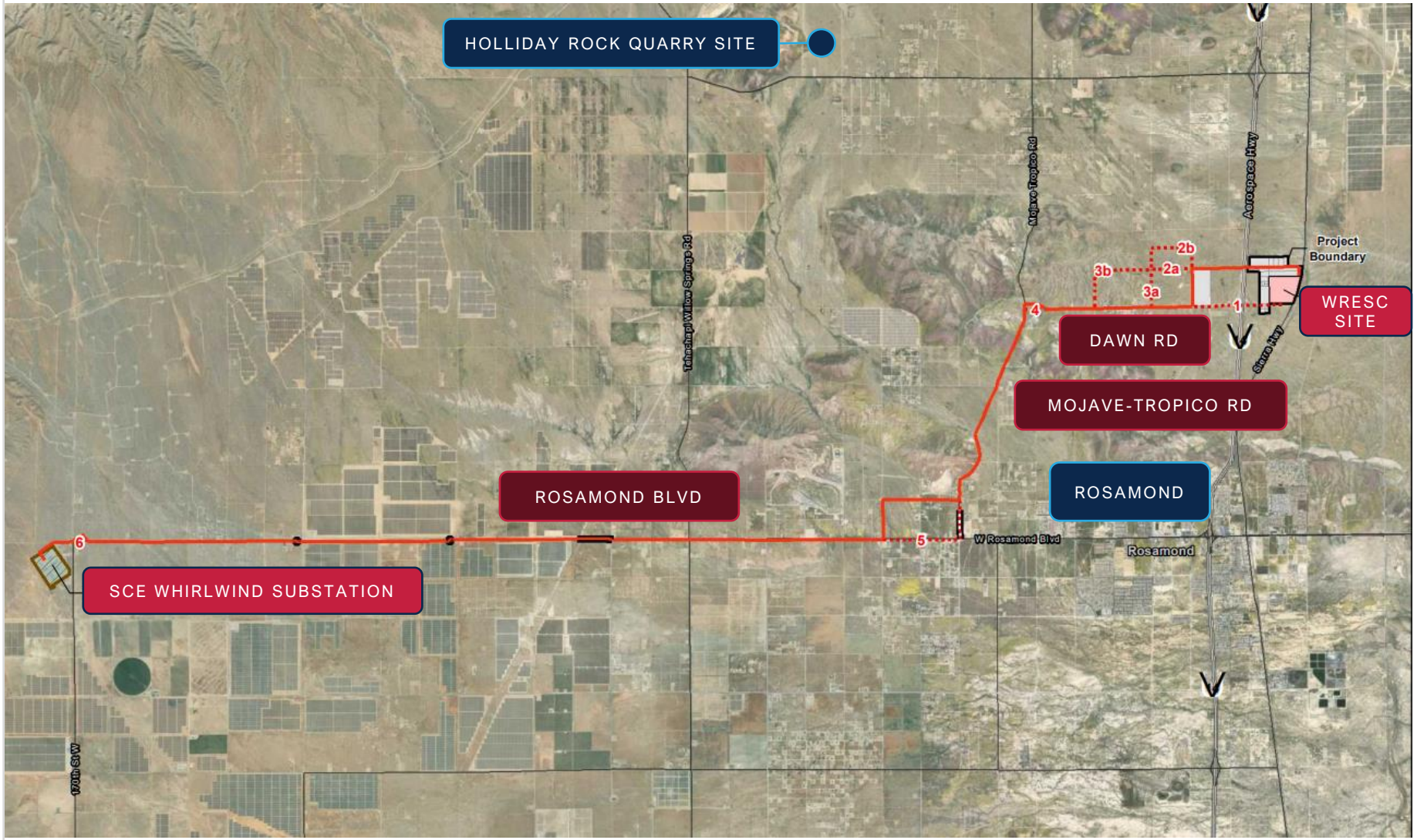
Project is located approximately 75 miles north of Los Angeles, CA.

Willow Rock – Site Photos

Willow Rock – Project Rendering

Rendering depicts proximity of nearby infrastructure including CA State Highway 14, Sierra Hwy., Dawn Road and the Union Pacific Railroad tracks.

Willow Rock – Preferred Transmission Route



Applicant's Proposed AFC Proceeding Schedule:

WILLOW ROCK ENERGY STORAGE CENTER	
Project Development Milestone	**Schedule Date**
Filed Supplemental AFC (SAFC) with CEC	**March 1-8, 2024**
SAFC Data Adequacy Reached	**July 16, 2024**
CEC Preliminary Staff Assessment Issued	**Early 2025**
CEC Final Decision	**Mid 2025**
Close of Project Financing & Commence Construction	**Late 2025**
Full Project Commercial Operation	**2030**

Willow Rock A-CAES: Economic and Fiscal Benefits

Total Construction Cost: ~$1.5 Billion

Construction jobs:
Average Construction Workforce: ~250 over 4+ years
Peak Construction Workforce: ~700
Total Construction Labor: ~2 million man-hours

Operations & Maintenance Jobs: 25-40 Full-time equivalent positions

Fiscal benefits: Over $500 million in Direct & Indirect Economic impacts to Kern County Region over the project's commercial lifespan

Property taxes: Unlike state-imposed solar tax exemptions, Willow Rock is not exempt and will make over $18 million annually in contributions through local property tax payments to Kern County

Community: Hydrostor is working with Kern County and local residents to ensure the project is compatible

Willow Rock A-CAES: Optimized Project Site Advantages

Less Impactful to Local Community: There are no residences or business located within close proximity to the optimized site

No Local Groundwater Impacts: Water to be supplied by AVEK; no new ground water wells will be required, and Willow Rock will actually be a net water producer over its lifetime

Project Access: The optimized site location has excellent ingress and egress to SR-14

Subsurface Geology: The subsurface geology has been determined to be optimal quality for cavern construction and Hydrostor has identified several offtake opportunities for beneficial use of the rock in the concrete aggregate market

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Thank You

www.hydrostor.ca/Willow-Rock

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