

DOCKETED

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**STATE OF CALIFORNIA
Energy Resources Conservation
and Development Commission**

In the Matter of:)
)
Application for Certification for the) Docket No. 21-AFC-02
Willow Rock Energy Storage Center)
)
_____)

**WILLOW ROCK ENERGY STORAGE CENTER
STATUS REPORT NO. 8**

Pursuant to the *Committee Scheduling Order* (“Scheduling Order”) docketed August 31, 2022,¹ GEM A-CAES LLC (“the Applicant”) hereby submits this status report to inform the Committee regarding the progress of the Application for Certification (“AFC”) proceeding for the Willow Rock Energy Storage Center (“Willow Rock”).²

GEOTECHNICAL PROGRAM AND PROJECT OPTIMIZATION

On March 27, 2023, the Applicant docketed the monthly geotechnical updates for February 2023. Responses to CEC Staff’s Data Requests Set 4 were docketed on March 29, 2023. Project optimization, which is dependent upon the evaluation of some data collection activities related to geological conditions, in addition to the possible acquisition of additional acreage and environmental analysis of such acreage, also remains ongoing. The pending full analysis of the results of the drilling program, lab results, and understanding of the expected geology are prerequisites to finalizing the project optimization.

Willow Rock must be located above or near suitable geological formations to construct and operate the subsurface air storage caverns. The air storage caverns are purpose-built, taking into account factors such as overburden characteristics, necessary depth of the cavern, hydraulic conductivity and permeability, and competent geological structural integrity to sustain an excavated storage cavern at depth intact indefinitely, allowing for repeated compressed air injection and discharge cycles over the life of the project. The project’s surface generation and thermal facilities must be located above or near the subsurface caverns, and the subsurface caverns need to be located at a sufficient depth to maintain project efficiency and generation output. In summary, geological conditions dictate the projected cavern design, which will in turn affect the overall design and location of the surface components of the facility.

Data collection focuses primarily upon a drilling program, involving highly specialized deep rock coring equipment for assessment and sampling. Physical data collection is the first important step. Once collected, rock drawn from the boreholes is sent out for analyses. Lab testing for two boreholes has been completed and summary reports are expected in May 2023. As noted in Status Report No. 7, the Applicant is continuing to explore the viability of additional

¹ TN#: 245754.

² TN#: 244313.

acreage as part of project optimization activities, including geological assessments thereof, which will be reflected in the AFC process as appropriate and if necessary to ensure the overall geological optimization and suitability of the subsurface conditions to the project purpose.

The Applicant is also currently assessing the next steps for the geotechnical program, as the conditional use permit issued by Kern County for the Willow Rock site expires in May. Per the terms of the conditional use permit, the Applicant will prepare and submit to the County a written report of all activities conducted on-site within 30 days following expiration of the conditional use permit authorization period in parallel with the ongoing laboratory analyses of the data collected through the borehole program.

BIOLOGICAL RESOURCES SURVEYS

The Applicant commenced a series of biological resources surveys at the end of March and the beginning of April, including protocol surveys for Swainson’s hawk, burrowing owl, desert tortoise, and rare plants. Once the surveys have been completed, summary reports will be prepared and docketed in this proceeding.

Due to persistent cold and windy weather conditions extending later into the year than are outside of the specifications of the approved burrowing owl survey protocol, the Applicant has been delayed in initiating the first set of protocol-conforming burrowing owl surveys. The Applicant has coordinated with California Department of Fish and Wildlife (“CDFW”) staff to request, and was informally granted, an extension of the initial survey window for the burrowing owl due to the extenuating circumstances of late winter conditions.

Based on the flowering status of vegetation, the Applicant currently expects that Crotch’s bumble bee surveys will commence in late April, again due to cold temperatures and extreme wind conditions. Finally, with respect to the Mohave ground squirrel, the Applicant has been working with CDFW staff to confirm survey coverage of the transmission line routes given that portions of the transmission line routes or survey buffer areas are located on roads or disturbed road shoulders, located on private property, or are comprised of unsuitable or low quality habitat.

The Applicant has been advised by CDFW and the Applicant has acknowledged agreement to document those areas where surveys were not performed on maps as part of the ultimate survey reporting effort, including justification for CDFW review.

Dated: April 24, 2023

Respectfully Submitted,

ELLISON, SCHNEIDER HARRIS & DONLAN LLP

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