

DOCKETED

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November 26, 2024

Curt Hildebrand
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Sacramento, CA 95814-4497

Data Requests Set 5 for Willow Rock Energy Storage Center (21-AFC-02)

Dear Curt:

Pursuant to California Code of Regulations, title 20, section 1716, California Energy Commission (CEC) staff is asking for the information specified in the enclosed Data Requests Set 5, which is necessary for a complete staff analysis of the Willow Rock Energy Storage Center (WRESC) under the Warren-Alquist Act and California Environmental Quality Act (CEQA).

Responses to the data requests are due to staff within 30 days. If you are unable to provide the information requested, need additional time, or object to providing the requested information, please send written notice to me and the Committee within 20 days of receipt of this letter. Such written notification must contain the reasons for not providing the information, the need for additional time, or the grounds for any objections (see California Code of Regulations, title 20, section 1716 subd. (f)).

If you have any questions, please email me at leonidas.payne@energy.ca.gov.

/S/

Leonidas Payne
Project Manager

Enclosure: Data Requests Set 5

WILLOW ROCK ENERGY STORAGE CENTER DATA REQUESTS SET 5

AIR QUALITY

BACKGROUND

The applicant's modeling files (from Data Request Set 2 Response [TN 259220]) indicate that the evaluation of the project's compliance with the 1-hour NO₂ California Ambient Air Quality Standard (CAAQS) uses a default federal processing procedure for 1-hour NO₂ concentrations, which is automatically enabled in AERMOD through the setting "POLLUTID NO2." This default setting is for federal NO₂ processing and staff is concerned that it may have underestimated the highest 1-hour NO₂ concentrations in the evaluation of exceedances against the 1-hour NO₂ CAAQS. In addition, the background concentrations of NO₂ in the evaluation of the 1-hour NO₂ CAAQS should capture the maximum single-hour background concentration or the maximum seasonal hour-of-day values (SEASHR) for the most recent three years available, rather than the 3rd highest seasonal hour-of-day values for 1-hour NO₂ National Ambient Air Quality Standard (NAAQS).

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103. Please confirm that use of the setting "POLLUTID NO2", as in the applicant's refined 1-hour NO₂ CAAQS analysis, provides a conservative result that matches or exceeds the result that would otherwise be obtained by setting "POLLUTID NO2 H1H." If not, please reevaluate 1-hour NO₂ impacts using "POLLUTID NO2 H1H."

104. Please ensure that the evaluation of 1-hour NO₂ impacts in relation to the CAAQS captures either the maximum single-hour background concentration or the maximum seasonal hour-of-day values for the most recent three years available.

105. Please support the selection of background NO₂ concentration values by submitting a copy of historical NO₂ monitoring data and the worksheet used in developing the seasonal hour-of-day values.

CLIMATE CHANGE/GREENHOUSE GASES

BACKGROUND

The applicant's responses to DR 48, DR 50 and DR 51 discusses the use of R-410A in the air conditioning system for the project. R-410A has a global warming potential (GWP) of 2,088. The regulation Prohibitions on Use of Certain Hydrofluorocarbons in Stationary Refrigeration, Stationary Air-conditioning and Other End-Uses (California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 10 Climate Change, Article 4, Subarticle 5, Section 95374) prohibits the use of refrigerants with a GWP greater than 750 as of January 1, 2025. Since the start of construction will begin in March 2025, R-410A will be prohibited from use.

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DATA REQUEST

106. Please exclude the use of R-410A in the air conditioning system, propose an alternative refrigerant, and provide updated greenhouse gas emission estimates associated with the newly proposed refrigerant.

HAZARDOUS MATERIALS, HAZARDOUS WASTE, and WILDFIRE

BACKGROUND: Diesel Fuel Storage

Part of the response to DR 27 states "The Applicant's contractor will have a maintenance yard (likely in the north laydown area) for construction equipment that would include a fuel yard and lube truck that would fill the equipment. The applicant's contractor anticipates that they will have a double-walled 10,000-gallon Aboveground Storage Tank (AST) during construction" to store diesel fuel. However, the response to DR 28 indicates that "the Applicant anticipates that a refueling truck will be used during construction. Off road refueling trucks typically carry between 200 and 1,000 gallons." Further Table DR 31-1 submitted by the applicant in response to DR 31 lists anticipated storage volumes of two types of diesel fuel during construction: 8,000 gallons of dyed diesel and 2000 gallons of clear diesel. There are some discrepancies due to the use of dyed and clear diesel.

DATA REQUESTS

107. Please clarify where the two different types of diesel fuel would be stored onsite and the size and types of storage containers for the two types of diesel fuel.

108. Please clarify what type of diesel fuel will be stored in the 10,000-gallon AST that the contractor anticipates using during construction (as stated in the DR 27 response).

109. Please clarify in what conditions and for what types of equipment refueling would occur in the construction refueling yard.

BACKGROUND: Storage and Disposal of Construction Related Hazardous Wastewater

The applicant's responses to data requests DR 52 and DR 53 are incomplete. DR 52 requested information about how and which State and local regulations would apply to testing, storage transportation, and disposal of hazardous wastewater. The applicant's response to DR 52 did not provide any of the requested information except to state that hazardous wastewater would be produced during the cleaning of pipes and vessels during construction and that no hazardous wastewater would be produced during project operation. DR 53 requested information on how hazardous wastewater would be segregated, potential volumes stored onsite, and how often it would be disposed of. The applicant's response to DR 53 states that "Hazardous wastewater is anticipated to only be generated during construction activities. The wastewater producers during

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construction will test the waste stream after its generation and will be disposed of in accordance with applicable laws, ordinances, regulations, and standards (LORS).” However, the response does not include the requested information.

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110. Please provide information on how disposal of construction generated hazardous wastewater would comply with State requirements, such as the Hazardous Waste Control Law, Porter-Cologne Act and related Water Code sections, and local requirements.

111. Please provide a summary of which State and local regulations and requirements would apply to the testing, storage, transportation, and disposal of hazardous wastewater generated during construction activities and how they would be applied.

112. Please provide information on how hazardous wastewater generated during construction activities would be segregated prior to testing and disposal. Additionally, please provide information on what volume of hazardous wastewater would be allowed to accumulate (be stored) onsite prior to disposal and how often hazardous wastewater would be disposed of.

BACKGROUND: Wildfire Ignition

Section 5.16.1.6 briefly discusses potential for increased risks of wildfire during project operation and increased potential for project construction to create a source of wildfire ignition. There is no detail given about what type of construction activities could ignite nearby dry vegetation other than “Heat or sparks from vehicles and equipment could ignite dry vegetation”. Further, the included Best Management Practices (BMPs) to reduce the likelihood of potential incidents involving wildfire (Section 5.16.3) do not include any BMPs related to construction activities that could ignite wildfire other than BMPs related to storage, handling, and use of explosives. Additionally, there is no information provided on what type of conditions, i.e. Red Flag Warning days or high wind, that would preclude or limit certain types of activities that could ignite a wildfire.

DATA REQUESTS

113. Provide a discussion of the anticipated types of construction activities that could ignite a wildfire such as welding or other hot work.

114. Please provide BMPs related to reducing risk of igniting a wildfire that address construction activities other than blasting safety.

115. Please provide a discussion of what, if any, conditions, such as Red Flag Warning days, would preclude or limit construction activities such as hot work and what construction activities would be allowed under high fire hazard days such as during Red Flag Warnings or high wind days.

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BACKGROUND: Fuel Models for Project site and Transmission line

Section 5.16.1.3.4 provides a discussion of fire fuel sources in the project area and the Tehachapi Management Area. Included in this section is a brief discussion of the Fuel Models present in the area and a table that describes the Fuel Models. However, the section does not indicate how the varying Fuel Models relate to varying portions of the project.

DATA REQUEST

116. Provide a discussion and map that indicates how each identified Fuel Model relates to the project specifically and where they are in relation to each component of the project, including the transmission line.

TRANSMISSION SYSTEM ENGINEERING

BACKGROUND

Data Request Response Set 3 (DRR Set 3) indicated that DR 67, the Large Generator Interconnection Agreement (LGIA attachment DR67-1), has been submitted under a repeated application for confidentiality (TN 259676); and the applicant is working on an amendment with Southern California Edison (SCE).

DATA REQUESTS

117. Please provide updates or amendments to the LGIA with SCE when they are available.

118. Please provide any Material Modification Agreements when they are available.

WORKER SAFETY/FIRE PROTECTION

BACKGROUND

The applicant's response to Worker Safety/Fire Protection data requests Set 3 (TN 259675) WS-70 states several times that "*The Applicant will comply with the regulations listed below as applicable to the topsides scope of work.*" Staff is requesting clarification of the use of the term "topside" as it appears to imply that the regulations discussed would only be applicable to surface work conditions, not to underground work and underground worker training. It is clear that workers would be entering the shaft and cavern (revised Section 5.17 Worker Health and Safety states that underground safety training and underground emergency response training would be given to all employees entering underground facilities), however, the use of the word "topside" in DRR WS-70 is causing confusion. Also, the use of diesel-fueled equipment stated in DDR-72 raises other concerns.

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119. Please clarify the applicant's intent to follow the listed regulations when conducting underground worker safety and training or provide an in-depth rationale why the applicant believes they apply only to surface ("topsides") activities.

120. Please provide a further discussion on how exhaust from the diesel-fueled load haul dump (LHD) vehicles will be removed from the cavern and not pose a risk to workers conducting underground activities. Please also describe the basis for using diesel-fueled LHD vehicles underground instead of electric LHD vehicles.