DOCKETED	
Docket Number:	21-AFC-02
Project Title:	Willow Rock Energy Storage Center
TN #:	257763
Document Title:	Staff's Data Adequacy Recommendation (Complete)
Description:	N/A
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Organization:	California Energy Commission
Submitter Role:	Commission Staff
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State of California Memorandum

California Natural Resources Agency

To: Commissioner J. Andrew McAllister, Ph.D. **Date:** July 16, 2024

Commissioner Noemi Gallardo

From: Drew Bohan, Executive Director

California Energy Commission

715 P Street

Sacramento, California 95814-6400

Subject: WILLOW ROCK ENERGY STORAGE CENTER (21-AFC-02), STAFF'S DATA ADEQUACY RECOMMENDATION (COMPLETE)

GEM A-CAES LLC ("Applicant") has filed a Supplemental Application for Certification (AFC) to construct and operate a compressed air energy storage facility, the Willow Rock Energy Storage Center (Willow Rock), to be located on approximately 88.6 acres of private land immediately north of Dawn Road and between State Route 14 and Sierra Highway within unincorporated Kern County, California, approximately 4 miles north of Rosamond, California. The proposed project site is on undeveloped land in an area zoned Limited Agriculture (A-1). 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 Willow Rock site.

The Willow Rock project 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 Willow Rock project would interconnect to Southern California Edison's Whirlwind Substation located southwest of Willow Rock at the intersection of 170th Street W and Rosamond Boulevard, via a new approximately 19-mile 230-kilovolt generation-tie (gentie) line.

On December 3, 2021, the Applicant filed its original AFC for the project previously located at 8684 Sweetser Road in Rosamond, Kern County. After receiving subsequent filings from the Applicant, the CEC deemed the original AFC complete on July 13, 2022, and an initial public hearing and site visit took place on August 11, 2022.

On August 9, 2023, the committee issued an order (TN 251599) suspending the Willow Rock proceeding "while Applicant completes its exploration of alternative sites, offsite properties, surface facility configurations and cavern engineering options." This order suspended the proceeding until the Applicant filed a certified, complete supplemental AFC that reflected changes to the project description and all project modifications as well as satisfied the information requirements for an AFC as detailed in Appendix B to Article 6 of title 20 in the California Code of Regulations. The Applicant was required to include in its supplemental AFC an attestation confirming completeness of the supplemental AFC. Last, the order required that, within 30 days of receipt of all required elements of the application, the CEC's Executive Director verify completeness of the supplemental AFC or docket staff's report indicating the deficiencies in the filing.

The Applicant filed its Supplemental AFC from March 1-4, 2024, and its Amended Cover Letter and Attestation of Completeness on March 8, 2024. The requested supplemental fee to process the Supplemental AFC was received on March 26, 2024, commencing the 30-day deadline for providing a completeness determination.

The Executive Director's prior recommendation that the Willow Rock Supplemental AFC was incomplete was docketed on April 23, 2024. The CEC staff has completed its second data adequacy review of the Supplemental AFC and subsequent filings submitted between May 31 and July 5, 2024, to address the list of application deficiencies. Staff has determined that the eleven topic areas that were identified as deficient are now complete. Attached is a summary table and the revised data adequacy worksheets for these topic areas. The Executive Director recommends that the Committee accept the Supplemental AFC as complete, and that the 12-month timeline to reach a decision on the AFC, as required by Public Resources Code section 25540.6, should begin.

For further information, please contact Leonidas Payne, Project Manager, at leonidas.payne@energy.ca.gov.

Attachments

Attachment A: Summary of Staff's Data Adequacy Review

Attachment B: Revised Data Adequacy Worksheets

ATTACHMENT A

Summary of Staff's Data Adequacy Review Willow Rock Energy Storage Project (21-AFC-02) Supplemental Application for Certification

Application Component/Topic	Complete?
EXECUTIVE SUMMARY	YES NO
PROJECT DESCRIPTION	YES NO
ALTERNATIVES	YES
AIR QUALITY	YES
BIOLOGICAL RESOURCES	YES NO
CULTURAL RESOURCES	YES NO
EFFICIENCY	YES
FACILITY DESIGN	YES
GEOLOGICAL HAZARDS	YES
HAZARDOUS MATERIALS	YES
LAND USE	YES
NOISE AND VIBRATION	YES
PALEONTOLOGICAL RESOURCES	YES
PUBLIC HEALTH	YES NO
RELIABILITY	YES
SOCIOECONOMICS	YES NO
SOILS	YES
TRAFFIC AND TRANSPORTATION	YES NO
TRANS LINE SAFETY & NUISANCE	YES NO
TRANSMISSION SYSTEM DESIGN	YES NO
VISUAL RESOURCES	YES NO
WASTE MANAGEMENT	YES
WATER RESOURCES	YES NO
WILDFIRE	YES
WORKER SAFETY	YES

ATTACHMENT B

Revised Data Adequacy Worksheets
Willow Rock Energy Storage Project (21-AFC-02)
Supplemental Application for Certification

Completeness:	Complete <u>X</u> Incomplete	<u> </u>			Revision No. <u>9</u> 1	Date: <u>April July 2</u> 024
Technical Area:	Executive Summary		Project:	Willow Rock Energy Storage Center	Technical Staff:	Renee Longman
Project Manager:	Leonidas Payne		Docket:	21-AFC-02	Technical Senior:	Eric Knight

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	Information Required to Make Application Conform With Regulations
Cal. Code Regs. Tit. 20 § 1704, (a) (4)	Each principal subject area covered in a notice or application shall be set forth in a separate chapter or section, each of which shall identify the person or persons responsible for its preparation.	Section 2.0 - 6.0 Appendix 1C	Yes	
Appendix B (a) (1) (A)	A general description of the proposed site and related facilities, including the location of the site or transmission routes, the type, size and capacity of the generating or transmission facilities, fuel characteristics, fuel supply routes and facilities, water supply routes and facilities, pollution control systems, and other general characteristics.	Section 1.2, pages 1-5 -1-6, Section 1.3, p. 1-10, Figures 1-4 to 1-6, pp. 1-7 to 1-9 Section 2.0, pp 2-1 to 2-36	Yes	
Appendix B (a) (1) (B)	Identification of the location of the proposed site and related facilities by section, township, range, county, and assessor's parcel numbers.	Section 1.2, pp. 1-5 to 1-6, Figure 1-4 to 1-5, pp. 1-7 to 1-8, Table 2-1 p. 2-2, Table 2-2, p. 2-3, Appendix 1A	Yes	
Appendix B (a) (1) (C)	A description of and maps depicting the region, the vicinity, and the site and its immediate surroundings.	Section 1.2, pp. 1-5 to 1-6, Figure 1-1, p. 1-2, Figures 1- 4 to 1-6, pp. 1-7 to 1-9	Yes	
Appendix B (a) (1) (D)	A full-page color photographic reproduction depicting the visual appearance of the site prior to construction, and a full-page color simulation or artist's rendering of the site and all project components at the site, after construction.	Figure 1-1 to 1-3, pp. 1-2 to 1-4	Yes	
Appendix B (a) (1) (E)	In an appendix to the application, a list of current assessor's parcel numbers and owners' names and addresses for all parcels within 500 feet of the proposed transmission line and other linear facilities, and within 1000 feet of	Appendix 1B Confidential Attachment ES-1 Property Owners List, TN 256860	No Yes	Several parcels are missing owners' names. Please provide a list of current assessor's parcel numbers and owners' names.

Completeness:	Complete X Incomplete	X			Revision No. $\theta 1$	Date: <u>April July</u> 2024
Technical Area:	Executive Summary		Project:	Willow Rock Energy Storage Center	Technical Staff:	Renee Longman
Project Manager:	Leonidas Payne		Docket:	21-AFC-02	Technical Senior:	Eric Knight

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	Information Required to Make Application Conform With Regulations
	the proposed powerplant and related facilities. Provide the direct mailing addresses for the owners and occupants of properties contiguous to the proposed power plant, related facilities, transmission lines, or other linear facilities as shown on the latest equalized assessment roll. Provide a map showing the parcels in the notice area.			Provide the direct mailing addresses for the occupants of properties contiguous to the proposed power plant, related facilities, transmission lines, or other linear facilities as shown on the latest equalized assessment roll.
Appendix B (a) (2)	Project Schedule: Proposed dates of initiation and completion of construction, initial start-up, and full-scale operation of the proposed facilities.	Table 2-8, p. 2-30	Yes	
Appendix B (a) (3) (A)	A list of all owners and operators of the site(s), the power plant facilities, and, if applicable, thermal host, the geothermal leasehold, the geothermal resource conveyance lines, and the geothermal re-injection system, and a description of their legal interest in these facilities.	Section 1.6, p. 1-12	Yes	
Appendix B (a) (3) (B)	A list of all owners and operators of the proposed electric transmission facilities.	Section 1.6, p. 1-12	Yes	
Appendix B (a) (3) (C)	A description of the legal relationship between the applicant and each of the persons or entities specified in (a)(3)(A) and (B).	Section 1.6, p. 1-12 Appendix 1D	Yes	

Completeness:	Complete X Incomplete X			Revision No. <u>9</u> 1	Date: April July 2024
Technical Area:	Project Description	Project:	Willow Rock Storage Center	Technical Staff:	Renee Longman, Steve Kerr, <u>Laiping Ng, Mark</u> <u>Hamblin</u>
Project Manager:	Leonidas Payne	Docket:	21-AFC-02	Technical Senior:	Eric Knight

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	Information Required to Make Application Conform With Regulations
Appendix B (b) (1)	In a section entitled, "Generation Facility Description, Design, and Operation" provide:			
Appendix B (b) (1) (A)	Maps at a scale of 1:24,000 (1" = 2000'), (or appropriate map scale agreed to by staff) along with an identification of the dedicated leaseholds by section, township, range, county, and county assessor's parcel number, showing the proposed final locations and layout of the power plant and all related facilities;	Figures 1-4 to 1-5, pp. 1-7 to 1-8; Figures 2-1 to 2-2, pp. 2-5 to 2-6; Figures 2-3 to 2-4, pp. 2-8 to 2-9 Willow Rock Data Adequacy Response, TN256622, submitted via Kiteworks, PD-1.	No- Yes	Please provide these maps for the transmission line.
Appendix B (b) (1) (B)	Scale plan and elevation drawings depicting the relative size and location of the power plant and all related facilities to establish the accuracy of the photo simulations required in sections (a)(1)(D) and (g)(6)(F);	Figures 2-3 to 2-6, pp. 2-8 to 2-11 Willow Rock Data Adequacy Response, TN256622, submitted via Kiteworks, PD-2.	No Yes	Please provide to-scale, legible, high resolution image files via Kiteworks of the figures. The submitted versions of the figures are poor quality with illegible plan notes and scales.
Appendix B (b) (1) (C)	A detailed description of the design, methods of construction (include depth of excavations and other ground disturbances) and operation of the facilities, specifically including the power generation, cooling, water supply and treatment, waste handling and control, pollution control, fuel handling, and safety, emergency and auxiliary systems, and fuel types and fuel use scenarios; and	Section 2.0, pp 2-1 to 2-36 Appendix 2A	Yes	
Appendix B (b) (1) (D)	A description of how the site and related facilities were selected, and the consideration	Section 6.2, p. 6-3	Yes	

Completeness:	Complete <u>X</u> Incomplete	<u>X</u>		Revision No. <u>91</u>	Date: April July 2024
Technical Area:	Project Description	Project:	Willow Rock Storage Center	Technical Staff:	Renee Longman, Steve Kerr, Laiping Ng, Mark
					<u>Hamblin</u>
Project Manager:	Leonidas Pavne	Docket:	21-AFC-02	Technical Senior:	Eric Knight

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	Information Required to Make Application Conform With Regulations
	given to engineering constraints, site geology, environmental impacts, water, waste and fuel constraints, electric transmission constraints, and other factors considered by the applicant.	Section 6.4.1, pp. 6-4 to 6-8 Table 6-2, pp. 6-16 to 6-17		
Appendix B (b) (2)	In a section titled, "Transmission Lines Description, Design, and Operation" provide:			
Appendix B (b) (2) (A)	Maps at a scale of 1:24,000 (or appropriate map scale agreed to by staff) of each proposed transmission line route, showing the settled areas, parks, recreational areas, scenic areas, and existing transmission lines within one mile of the proposed route(s);	Figure 6-2, p. 6-19 Willow Rock Data Adequacy Response, TN256622, submitted via Kiteworks, PD-3.	No- Yes	Provide maps at a scale of 1:24,000 (or appropriate map scale agreed to by staff) of each proposed transmission line route, showing the settled areas, parks, recreational areas, scenic areas, and existing transmission lines within one mile of the proposed route(s).
Appendix B (b) (2) (B)	A full-page color photographic reproduction depicting a representative above ground section of the transmission line route prior to construction and a full-page color photographic simulation of that section of the transmission line route after construction.	Appendix 5.13A, KOP 5 Willow Rock Data Adequacy Response, TN256622, submitted via Kiteworks, PD-4.	No Yes	Provided images are half page. Please provide full page images depicting a representative above ground section of the transmission line route prior to construction and a full page color photographic simulation of that section of the transmission line route after construction.
Appendix B (b) (2) (C)	A detailed description of the design, construction, and operation of any electric transmission facilities, such as power lines, substations, switchyards, or other transmission equipment, which will be constructed or modified to transmit electrical power from the proposed power plant to the load centers to be served by the facility. Such description shall include the width of rights-of-way and the physical and electrical characteristics of	Section 2.1.20, pp. 2-30 Section 3.0 pp. 3-1 to 3-13 TSD-1 F3-3 Rev1, submitted via Kiteworks	No-Yes	Please resubmit legible Electrical overall one-line diagram (Figure 3.5) Please provide a one-line diagram of the proposed substation or switchyard with breaker configuration and their ratings.

Completeness:	Complete X Incomplete X	_		Revision No. <u>01</u>	Date: April July 2024
					Renee Longman, Steve
Technical Area:	Project Description	Project:	Willow Rock Storage Center	Technical Staff:	Kerr, Laiping Ng, Mark
				_	<u>Hamblin</u>
Project Manager:	Leonidas Payne	Docket:	21-AFC-02	Technical Senior:	Eric Knight

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	Information Required to Make Application Conform With Regulations
	electrical transmission facilities such as towers, conductors, and insulators.			
Appendix B (b) (2) (D)	A description of how the route and additional transmission facilities were selected, and the consideration given to engineering constraints, environmental impacts, resource conveyance constraints, and electric transmission constraints; and	Section 6.5.1, pp. 6-18 to 6-21 Figure 6-2, p. 6-19	Yes	
Appendix B (e) (1)	A discussion of how facility closure will be accomplished in the event of premature or unexpected cessation of operations.	Sections 2.2.8 to 2.2.10, p. 2-36	Yes	

Completeness: **DATA COMPLETENESS WORKSHEET** Date: April 2024 Complete X Incomplete Revision No. 0 Technical Area: Air Quality Technical Staff: Project: Willow Rock Energy Storage Center Tao Jiang 21-AFC-02 Project Manager: Leonidas Payne Docket: Technical Senior: Joseph Hughes

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (A)	Descriptions of all significant assumptions, methodologies, and computational methods used in arriving at conclusions in the document.	Section 5.1, Subsection 5.1.6	Yes	
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (B)	Descriptions, including methodologies and findings, of all major studies or research efforts undertaken and relied upon to provide information for the document; and a description of ongoing research of significance to the project (including expected completion dates; and	Section 5.1, Subsection 5.1.6	Yes	
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (C)	A list of all literature relied upon or referenced in the documents, along with brief discussions of the relevance of each such reference;	Section 5.1, Subsection 5.1.6	Yes	
Appendix B (g) (1)	provide a discussion of the existing site conditions, the expected direct, indirect, and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation. Describe the approach, list or projection or a combination, used to develop the cumulative setting for the proposed project. Include any reference materials used such as general plan or other adopted local, regional, or statewide plan.	Section 2.0 Section 5.1 and Appendix 5.1A-F	Yes	

Completeness: **DATA COMPLETENESS WORKSHEET** Complete X Incomplete Revision No. Date: April 2024 0 Technical Area: Air Quality Willow Rock Energy Storage Center Technical Staff: Tao Jiang Project: 21-AFC-02 Project Manager: Leonidas Payne Docket: Technical Senior: Joseph Hughes

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
Appendix B (g) (8) (A)	The information necessary for the air pollution control district where the project is located to complete a Determination of Compliance.	Letter of completeness from the Eastern Kern Air Pollution Control District filed separately on 03/26/2024 (TN #255273).	Yes	
Appendix B (g) (8) (B)	The heating value and chemical characteristics of the proposed fuels, the stack height and diameter, the exhaust velocity and temperature, the heat rate and the expected capacity factor of the proposed facility.	Section 2, Subsection 2.2.2.1 Section 5.1, Subsection 5.1.6.8, Table 5.1-10 Appendix 5.1A Appendix 5.1D	Yes	
Appendix B (g) (8) (C)	A description of the control technologies proposed to limit the emission of criteria pollutants.	Section 5.1, Subsection 5.1.5	Yes	
Appendix B (g) (8) (D)	A description of the cooling system, the estimated cooling tower drift rate, the rate of water flow through the cooling tower, and the maximum concentrations of total dissolved solids.	Section 2.0	Yes	
Appendix B (g) (8) (E)	The emission rates of criteria pollutants and greenhouse gases (CO2, CH4, N2O, and SF6) from the stack, cooling towers, fuels and materials handling processes, delivery and storage systems, and from all on-site secondary emission sources.	Section 5.1, Subsection 5.1.4.4, Table 5.1-5 Appendix 5.1A	Yes	

Completeness: DATA COMPLETENESS WORKSHEET

Complete X Incomplete

Technical Area: Air Quality Project: Willow Rock Energy Storage Center

DATA COMPLETENESS WORKSHEET

Revision No. 0 Date: April 2024

Technical Staff: Tao Jiang

Project Manager: Leonidas Payne Docket: 21-AFC-02 Technical Senior: Joseph Hughes

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
Appendix B (g) (8) (F)(i)	A description of typical operational modes, and start-up and shutdown modes for the proposed project, including the estimated frequency of occurrence and duration of each mode, and estimated emission rate for each criteria pollutant during each mode.	Section 2.0 Section 5.1, Subsection 5.1.3.2, Subsection 5.1.4.3	Yes	
Appendix B (g) (8) (F)(ii)	A description of the project's planned initial commissioning phase, which is the phase between the first firing of emissions sources and the commercial operations date, including the types and durations of equipment tests, criteria pollutant emissions, and monitoring techniques to be used during such tests.	Section 5.1, Subsection 5.1.4.3, Subsection 5.1.6.9	Yes	
Appendix B (g) (8) (G)	The ambient concentrations of all criteria pollutants for the previous three years as measured at the three Air Resources Board certified monitoring stations located closest to the project site, and an analysis of whether this data is representative of conditions at the project site. The applicant may substitute an explanation as to why information from one, two, or all stations is either not available or unnecessary.	Section 5.1, Subsection 5.1.6.6, Table 5.1.8 Appendix 5.1 E	Yes	
Appendix B (g) (8) (H)	One year of meteorological data collected from either the Federal Aviation Administration Class 1 station nearest to the project or from the project site, or meteorological data approved by the California Air Resources Board or the local air pollution control district.	Section 5.1, Subsection 5.1.6.6 Appendix 5.1 D Appendix 5.1 E Appendix 5.1 F	Yes	

Completeness: **DATA COMPLETENESS WORKSHEET** Complete **X** Incomplete Revision No. Date: April 2024 0 Technical Area: Air Quality Willow Rock Energy Storage Center Technical Staff: Tao Jiang Project: 21-AFC-02 Project Manager: Leonidas Payne Docket: Technical Senior: Joseph Hughes

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
Appendix B (g) (8) (H) (i)	If the data is collected from the project site, the applicant shall demonstrate compliance with the requirements of the U.S. Environmental Protection Agency document entitled "On-Site Meteorological Program Guidance for Regulatory Modeling Applications" (EPA - 450/4-87-013 (August 1995)), which is incorporated by reference in its entirety.	Section 5.1, Subsection 5.1.6.6 Appendix 5.1 D Appendix 5.1 E Appendix 5.1 F	Yes	
Appendix B (g) (8) (H) (ii)	The data shall include quarterly wind tables and wind roses, ambient temperatures, relative humidity, stability and mixing heights, upper atmospheric air data, and an analysis of whether this data is representative of conditions at the project site.	Section 5.1, Subsection 5.1.6.6 Appendix 5.1 D Appendix 5.1 E Appendix 5.1 F	Yes	
Appendix B (g) (8) (I)	An evaluation of the project's direct and cumulative air quality impacts, consisting of:			
Appendix B (g) (8) (I) (i)	A screening level air quality modeling analysis, or a more detailed modeling analysis if so desired by the applicant, of the direct criteria pollutant impacts of project construction activities on ambient air quality conditions, including fugitive dust (PM ₁₀) emissions from grading, excavation and site disturbance, as well as the combustion emissions [nitrogen oxides (NO _x), sulfur dioxide (SO ₂), carbon monoxide (CO), and particulate matter less than 10 microns in diameter (PM ₁₀) and particulate matter less than 2.5 microns in diameter (PM2.5) from construction-related equipment;	Section 5.1, Subsection 5.1.6.8, Table 5.1-12, Table 5.1-13 Appendix 5.1 D, Table 5.1 D-2, Table 5.1D-3	Yes	

Completeness: DATA COMPLETENESS WORKSHEET

Complete X Incomplete
Technical Area: Air Quality Project: Willow Rock Energy Storage Center

DATA COMPLETENESS WORKSHEET

Revision No. 0 Date: April 2024

Technical Staff: Tao Jiang

Technical Area:Air QualityProject:Willow Rock Energy Storage CenterTechnical Staff:Tao JiangProject Manager:Leonidas PayneDocket:21-AFC-02Technical Senior:Joseph Hughes

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
Appendix B (g) (8) (I) (ii)	A screening level air quality modeling analysis, or a more detailed modeling analysis if so desired by the applicant, of the direct criteria pollutant (NOx, SO2, CO, PM10, and PM2.5) impacts on ambient air quality conditions of the project during typical (normal) operation, and during shutdown and startup modes of operation. Identify and include in the modeling of each operating mode the estimated maximum emissions rates and the assumed meteorological conditions;	Section 5.1, Subsection 5.1.6.8, Table 5.1-11 Appendix 5.1 D, Table 5.1 D-1	Yes	
Appendix B (g) (8) (I) (iii)	A protocol for a cumulative air quality modeling impacts analysis of the project's typical operating mode in combination with other stationary emissions sources within a 6-mile radius that have received construction permits but are not yet operational or are in the permitting process. The cumulative inert pollutant impact analysis should assess whether estimated emissions concentrations will cause or contribute to a violation of any ambient air quality standard; and	Section 5.1, Subsection 5.1.2 No significant sources located within a 6-mile radius. No cumulative modeling protocol was provided.	Yes	
Appendix B (g) (8) (I) (iv)	An air dispersion modeling analysis of the impacts of the initial commissioning phase emissions on state and federal ambient air quality standards for NOx, SO ₂ , CO, PM ₁₀ , and PM _{2.5} .	Section 5.1, Subsection 5.1.6.9	Yes	
Appendix B (g) (8) (J)	If an emission offset strategy is proposed to mitigate the project's impacts under (g)(1), provide the following information:	N/A	N/A	

Completeness:		DA	ATA COMPLETENESS WORKSHEET			
	Complete X Incomplete	e		Revision No. 0	Date: April 2024	
Technical Area:	Air Quality	Project:	Willow Rock Energy Storage Center	Technical Staff:	Tao Jiang	
Project Manager:	Leonidas Pavne	Docket:	21-AFC-02	Technical Senior:	Joseph Hughes	

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
Appendix B (g) (8) (J) (i)	The quantity of offsets or emission reductions that are needed to satisfy air permitting requirements of local permitting agencies (such as the air district), state and federal oversight air agencies, and the California Energy Commission. Identify by criteria air pollutant, and if appropriate, greenhouse gas; and	N/A	N/A	
Appendix B (g) (8) (J) (ii)	Potential offset sources, including location, and quantity of emission reductions;	N/A	N/A	
Appendix B (g) (8) (K)	A detailed description of the mitigation, if any, which an applicant may propose, for all projects impacts from criteria pollutants that currently exceed state or federal ambient air quality standards but are not subject to offset requirements under the district's new source review rule.	N/A	N/A	
Appendix B (i) (1) (A)	Tables that identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	Section 5.1, Subsection 5.1.7	Yes	

Completeness: DATA COMPLETENESS WORKSHEET

Complete X Incomplete
Technical Area: Air Quality Project: Willow Rock Energy Storage Center

DATA COMPLETENESS WORKSHEET

Revision No. 0 Date: April 2024

Technical Staff: Tao Jiang

Project Manager: Leonidas Payne Docket: 21-AFC-02 Technical Senior: Joseph Hughes

SITING REGULATIONS	Information	Application Page Number And Section Number	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
Appendix B (i) (1) (B)	Tables that identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies that would have permit approval or enforcement authority, but for the exclusive authority of the Commission to certify sites and related facilities.	Section 5.1, Subsection 5.1.7.2, Table 5.1-14	Yes	
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and provide the name of the official who will serve as a contact person for Commission staff.	Section 5.1, Subsection 5.1.7.2, Table 5.1-14	Yes	
Appendix B (i) (3)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Section 5.1, Subsection 5.1.2, Subsection 5.1.7.3	Yes	

Completeness:	Complete <u>X</u> Incomplete	<u> </u>		Revision No. <u>0</u> 1	Date: April July 2024
Technical Area:	Biological Resources	Projec	t: _ Willow Rock Energy Storage Center	Technical Staff:	Andrea Stroud, Carol Watson
Project Manager:	Leonidas Payne	Docke	t: 21-AFC-02	Technical Senior:	Eric Knight

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (A)	Descriptions of all significant assumptions, methodologies, and computational methods used in arriving at conclusions in the document;	Pp. 5.2-1 through 5.2-11 Section 5.2.1 Section 5.2.1.1 through 5.2.1.3 Pp. 5.2-22 through 5.2-37 Section 5.2.1.6 Figures 5.2-5-1 through 5.2-5-16, 5.2-6, 5.2-7, 5.2-4a, 5.2-4b, 5.2-6, 5.2-7 Appendix 5.2A Figures 5.3-4a and 5.3-4b	Yes	
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (B)	Descriptions, including methodologies and findings, of all major studies or research efforts undertaken and relied upon to provide information for the document; and a description of ongoing research of significance to the project (including expected completion dates; and	Pp. 5.2-2 through 5.2-48 Section 5.2.3 (cumulative)	Yes	
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (C)	A list of all literature relied upon or referenced in the documents, along with brief discussions of the relevance of each such reference.	Pp. 5.2-55 through 5.2-57 Pp. 74 through 76	Yes	
Appendix B (g) (1)	provide a discussion of the existing site conditions, the expected direct, indirect, and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation. Describe the	Pp. 5.2-2 through 5.2-48 Section 5.2.3 (cumulative)	Yes	

Completeness:	Complete <u>X</u> Incomplete	<u> </u>		Revision No. <u>9</u> 1	Date: April July 2024
Technical Area:	Biological Resources	Project:	Willow Rock Energy Storage Center	Technical Staff:	Andrea Stroud, Carol Watson
Project Manager:	Leonidas Payne	Docket:	21-AFC-02	Technical Senior:	Eric Knight

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
	approach, list or projection or a combination, used to develop the cumulative setting for the proposed project. Include any reference materials used such as general plan or other adopted local, regional, or statewide plan.			
Appendix B (g) (13) (A)	A regional overview and discussion of terrestrial and aquatic biological resources, with particular attention to sensitive biological resources within 10 miles of the project. In the discussion include a list of the USGS topographic quadrangle(s) utilized to search records from the California Natural Diversity Database (CNDDB), and a citation which includes the date the CNDDB was accessed. Include a map at a scale of 1:6,000 (under confidential cover) and at 1:350,000 (for public) showing sensitive biological resource location(s) in relation to the project site and related facilities and any boundaries of a local Habitat Conservation Plan or similar open space land use plan or designation. Label the biological resources and survey areas as well as the project facilities. Sensitive biological resources include:	Pp. 5.2-1 through 5.2-11 Section 5.2.1 Section 5.2.1.1 through 5.2.1.3 Pp. 5.2-22 through 5.2-37 Section 5.2.1.6 Figures 5.2-5-1 through 5.2- 5-16, 5.2-6, 5.2-7, 5.2-4a, 5.2-4b, 5.2-6, 5.2-7 Appendix 5.2A Figures 5.3-4a and 5.3-4b	Yes	
Appendix B (g) (13) (A) (i)	species listed under state or federal Endangered Species Acts;	Pp. 5.2-10 through 5.2-11 Pp. 5.2-30 through 5.2-37 Section 5.2.1.7 Tables 8, 9, 10	Yes	
Appendix B (g) (13) (A) (ii)	species receiving consideration during environmental review under CEQA Guidelines 14 CCR Section 15380;	Pp. 5.2-10 and 5.2-11 Pp. 5.2-3 through 5.2-37 Section 5.2.1.7	Yes	

Completeness:	Complete <u>X</u> Incomplete	<u> </u>		Revision No. <u>9</u> 1	Date: April July 2024
Technical Area:	Biological Resources	Project:	Willow Rock Energy Storage Center	Technical Staff:	Andrea Stroud, Carol Watson
Project Manager:	Leonidas Payne	Docket:	21-AFC-02	Technical Senior:	Eric Knight

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
		Tables 8, 9, 10		
Appendix B (g) (13) (A) (iii)	species identified as state Fully Protected;	Pp. 5.2-10 and 5.2-11 Pp. 5.2-3 through 5.2-37 Section 5.2.1.7 Tables 10	Yes	
Appendix B (g) (13) (A) (iv)	species covered by Migratory Bird Treaty Act;	Pp. 5.2-10 and 5.2-11 Pp. 5.2-3 through 5.2-37 Section 5.2.1.7 Tables 10	Yes	
Appendix B (g) (13) (A) (v)	species and habitats identified by local, state, and federal agencies as needing protection, including but not limited to those identified by the CNDDB, California Fish and Game Code, Title 14 of the California Code of Regulations, or where applicable, in Local Coastal Programs or in relevant decisions of the California Coastal Commission or other responsible agency;	Pp. 5.2-10 and 5.2-11 Pp. 5.2-3 through 5.2-37 Section 5.2.1.3 Section 5.2.1.7 Tables 8, 9, 10	Yes	
Appendix B (g) (13) (A) (vi)	locally significant species that are rare or uncommon in a local context such as county or region or is so designated in local or regional plans, policies, or ordinances;	Pp. 5.2-10 and 5.2-11 Pp. 5.2-30 through 5.2-37 Section 5.2.1.7 Table 8	Yes	
Appendix B (g) (13) (A) (vii)	plant species listed as rare under the California Native Plant Protection Act;	Pp. 5.2-10 and 5.2-11 Pp. 5.2-30 through 5.2-37 Section 5.2.1.7 Table 8	Yes	
Appendix B (g) (13) (A) (viii)	established native resident or migratory wildlife corridors or wildlife nursery sites.	Pp. 5.2-42 Section 5.2.2.2	Yes	

Completeness: Complete <u>X</u> Incomplete X Revision No. 0<u>1</u> Date: April <u>July</u> 2024 Technical Area: Project: **Biological Resources** Willow Rock Energy Storage Center Technical Staff: Andrea Stroud, Carol Watson 21-AFC-02 Eric Knight Project Manager: Leonidas Payne Docket: Technical Senior:

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
Appendix B (g) (13) (B)	Include a list of the species and habitat(s) observed and those with a potential to occur within 1 mile of the project site and 1,000 feet from the outer edge of linear facility corridors. Maps or aerial photographs shall include the following:	Tables 8, 9, 10 Appendix 5.2B Biological Resources Assessment Report Appendices C and D	Yes	
Appendix B (g) (13) (B) (i)	Detailed maps at a scale of 1:6,000 or color aerial photographs taken at a recommended scale of 1-inch equals 500 feet (1:6,000) with a 30 percent overlap (provided under confidential cover) and 1:350,000 (for public viewing) that show the proposed project site and related facilities, biological resources including, but not limited to, those found during project-related field surveys and in records from the CNDDB, and the associated areas where biological surveys were conducted. Label the biological resources and survey areas as well as the project facilities.	Figures 5.2-5-1 through 5.2-5-16, 5.2-6, 5.2-7, 5, 6, 9, 10, 5.2-6a, 5.2-6b	Yes	
Appendix B (g) (13) (B) (ii)	Provide an aerial map of the isopleth graphic depicting modeled nitrogen deposition rates. The geographical extent of the nitrogen deposition map(s) should include the entire plume and a radius of 6 (six) miles from the source, specifically identifying acres of sensitive habitat(s) within each isopleth Modeling parameters and files shall be provided.	Willow Rock Data Adequacy Response, TN256622, Attachment BIO-1	No Yes	Please provide a discussion of why nitrogen deposition is not applicable to this project, including a description of potential habitat(s) sensitive to nitrogen deposition within 6 miles.
Appendix B (g) (13) (B) (iii)	An aerial photo depicting state and federal jurisdictional features including state waters	Pp. 5.2-3 through 5.2-8 Section 5.2.1.1	No Yes	Please provide a revised Figure 5.2-1b and Figure 8 at a scale of 1:2400.

Completeness: Complete <u>X</u> Incomplete X Revision No. 0<u>1</u> Date: April <u>July</u> 2024 Technical Area: Project: **Biological Resources** Willow Rock Energy Storage Center Technical Staff: Andrea Stroud, Carol Watson 21-AFC-02 Docket: Eric Knight Project Manager: Leonidas Payne Technical Senior:

SITING REGULATIONS	Information	Application Page Number And Section Number	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
	and wetlands delineated on maps at a scale of (1:2,400) showing any potential jurisdictional features delineated out to 250 feet from the edge of disturbance if wetlands occur within 250 feet of the project site and/or related facilities that would be included with the U.S. Army Corps of Engineers Section 404 Permit application, Regional Water Quality Control Board (RWQCB) application, or California Department of Fish and Wildlife Section 1600 et seq. permit requirements. For projects proposed to be located within the coastal zone, also provide aerial photographs or maps as described above that identify wetlands as defined by the Coastal Act and under the jurisdiction of the California Coastal Commission.	Figure 5.2-1a and 5.2-1b Willow Rock Data Adequacy Response, TN256622, Figures submitted via Kiteworks, Attachment WA-2 Appendix E FEMA flood hazard map (TN256622), and Response BIO-2		Please provide a revised delineation that includes the full width (lateral extent) of the active floodplain (stream flow) in a high flood event for episodic streams in the Mojave Desert. Use the following references to help identify episodic streams: A Review of Stream Processes and Forms in Dryland Watersheds (Kris Vyverberg 1020) and Methods to Describe and Delineate Episodic Stream Processes on Arid Landscapes for Permitting Utility Scale Solar Power Plants and Appendix G: The MESA Field Guide, Mapping Episodic Stream (Brady Roland and Kris Vyverberg 2013). For more guidance on mapping state waters review data request set 1 (TN244203) provided 7-26-2022 for the old project location on the delineation of state waters (p. 8). Please provide a hydrologic analysis/data from a hydrologic study and/or FEMA floodplain mapping to confirm the number and lateral extent of streams within the project area including buffers.
Appendix B (g) (13) (B) (iv)	Provide Geographic Information System (GIS) data (shape and/or geodatabase files) for all data mapped for biological resources.	Shapefiles provided under confidential cover	Yes	
Appendix B (g) (13) (C)	A discussion of the biological resources at the proposed project site and related facilities. Related facilities include, but are not limited to,	Pp.5.2-22 through 5.2-39 Section 5.2.1.6	Yes	

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SITING REGULATIONS	Information	Application Page Number And Section Number	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
	laydown and parking areas, gas and water supply pipelines, transmission lines, and roads. The discussion shall address the distribution of vegetation community types, denning or nesting sites, population concentrations, migration corridors, breeding habitats, and other appropriate biological resources including the following:			
Appendix B (g) (13) (C) (i)	A list of sensitive species and habitats with a potential to occur (defined in (A) above) and include status (state, federal, California Native Plant Society, global rank, state rank, etc.)	Pp. 28 through 49 Section 4.5 Table 8, 9, 10	Yes	
Appendix B (g) (13) (C) (iii)	Perform nitrogen deposition modeling including the complete citation for references used in determining deposition rates and location. Specify the amount of total annual nitrogen deposition in kilograms of nitrogen per hectare per year (kg N/ha/yr) in special status species habitats and vegetation types for wet and dry deposition. Describe habitat and species potentially affected.	Willow Rock Data Adequacy Response, TN256622, Attachment BIO-1	No Yes	Please provide a discussion of why nitrogen deposition is not applicable to this project, including a description of potential habitat(s) sensitive to nitrogen deposition within 6 miles of the project site.
Appendix B (g) (13) (D)	A description and results of all field studies and specialized surveys (e.g., focused and protocol) used to provide biological baseline information about the project site and associated facilities. Include copies of the CNDDB records and field survey forms completed by the applicant's biologist(s). Identify the date(s) the surveys were completed, methods used to complete the	Pp. 5.2-3 through 5.2-8 Section 5.2.1.2 Pp. 5.2-10 and 5.2-11 Pp. 5.2-14 through 5.2-37 Section 5.2.1.5 Pp. 24 through 63	Yes	

Completeness: Complete <u>X</u> Incomplete X Revision No. 0<u>1</u> Date: April <u>July</u> 2024 Technical Area: Project: **Biological Resources** Willow Rock Energy Storage Center Technical Staff: Andrea Stroud, Carol Watson 21-AFC-02 Eric Knight Project Manager: Leonidas Payne Docket: Technical Senior:

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
	surveys, and the name(s) and qualifications of the biologists conducting the surveys. Include:			
Appendix B (g) (13) (D) (i)	Current biological resources surveys conducted using appropriate field survey protocols (include references) during the appropriate season(s). State and federal agencies with jurisdiction shall be consulted for field survey protocol guidance prior to surveys if a protocol exists.	Pp. 5.2-3 through 5.2-8 Pp. 5.2-14 through 5.2-33 Section 5.2.1.5 through 5.2.1.7 Confidential Technical Reports Willow Rock Data Adequacy Response, TN256622, pp. 7/55- 9/55	No Yes	Please revise Mohave ground squirrel surveys; consult with CEC biology staff and the Califiornia Department of Fish and Wildlife on the placement and number of grids and cameras used for the new project location including gen-tie and all options and inaccessible areas. Please revise Swainson's hawk (SWHA) surveys out to 5 miles around the WRESC location following the Swainson's Hawk Survey Protocols, impact Avoidance, and Minimization Measures for Renewable Energy Projects in the Antelope Valley of Los Angeles and Kern Counties, California guidance document to adequately determine the potential need for SWHA foraging habitat mitigation. Please conduct additional surveys for Crotch's bumble bee in areas that were inaccessible to
				determine the potential for presence, need for take and mitigation.
Appendix B (g) (13) (D) (ii)	If the project or any related facilities could impact federal or state jurisdictional wetland, provide completed Army Corps of Engineers wetland delineation forms or determination of wetland status pursuant to Coastal Act or CDFW requirements, as applicable to the location, name(s) and qualifications of	P. 5.2-3 Section 5.2.1.2	Yes	

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Technical Area:	Biological Resources	Project:	Willow Rock Energy Storage Center	Technical Staff:	Andrea Stroud, Carol Watson
Project Manager:	Leonidas Payne	Docket:	21-AFC-02	Technical Senior:	Eric Knight

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
	biologist(s) completing the delineation, the results of the delineation and a table showing jurisdictional features including state waters and wetland acreage amounts to be impacted.			
Appendix B (g) (13) (E))	Impacts discussion of all impacts (direct, indirect, and cumulative) to biological resources from project site preparation, construction activities, plant operation, maintenance, closure, and decommissioning. Discussion shall also address sensitive species habitat impacts from air emissions (i.e., nitrogen deposition);	Pp. 5.2-39 through 5.2-44 Section 5.2.2	Yes	
Appendix B (g) (13) (F)	A discussion of all feasible mitigation measures and an evaluation of their anticipated efficacy in reducing the level of impacts, including, but not limited to the following:	Pp. 5.2-45 and 5.2-46 Section 5.2.4.1	Yes	
Appendix B (g) (13) (F) (i)	All measures proposed to avoid and/or reduce adverse impacts to biological resources.	Pp. 5.2-45 and 5.2-46 Section 5.2.4.1	Yes	
Appendix B (g) (13) (F) (ii)	All off-site habitat mitigation such as habitat improvement or compensation including management, and an identification of appropriate agency contacts for coordination and verification of proposed habitat mitigation measures.	P. 5.2-47 Section 5.2.4.2	Yes	
Appendix B (g) (13) (F) (iii)	Educational programs to enhance employee awareness during construction and operation to protect biological resources.	Pp. 5.2-45 and 5.2-46 Section 5.2.4.1	Yes	
Appendix B (g) (13) (G)	A discussion of compliance and monitoring programs to ensure the effectiveness of impact	P. 5.2-45 Section 5.2.4	Yes	

Completeness: Complete <u>X</u> Incomplete X Revision No. 0<u>1</u> Date: April <u>July</u> 2024 Technical Area: **Biological Resources** Project: Willow Rock Energy Storage Center Andrea Stroud, Carol Watson Technical Staff: 21-AFC-02 Eric Knight Project Manager: Leonidas Payne Docket: Technical Senior:

SITING REGULATIONS	Information	Application Page Number And Section Number	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
	avoidance and mitigation measures incorporated into the project.			
Appendix B (g) (13) (H)	Submit copies of any preliminary correspondence between the project applicant and state and federal resource agencies regarding whether federal or state permits from other agencies such as the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, the U.S. Army Corps of Engineers, the CDFW, and the RWQCB will be required for the proposed project.	Supplemental AFC Cover Letter and Data Adequacy Worksheets (TN 254774), P. 31 Willow Rock Data Adequacy Response, TN256622, pp. 9/55- 11/55 and Attachment BIO-5	No <u>Yes</u>	Please provide names, agencies, dates, and times, and what was discussed during the teleconference calls.
Appendix B (i) (1) (A)	Tables that identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	P. 5.2-48 Section 5.2.5 Table 5.2-8 Willow Rock Data Adequacy Response, TN256622, Attachment BIO-6	No Yes	Please revise Table 5.2-8 to reference pages in the AFC where conformance with each applicable law or standard during both construction and operation is discussed. If there are no pages to reference provide the information needed to satisfy the requirement.
Appendix B (i) (1) (B)	Tables that identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies that would have permit approval or enforcement authority, but for the exclusive authority of the Commission to certify sites and related facilities.	Pp. 5.2-48 and 5.2-49 Section 5.2.5 Table 5.2-8	Yes	

Completeness: Complete <u>X</u> Incomplete X Revision No. 0<u>1</u> Date: April <u>July</u> 2024 Technical Area: Project: **Biological Resources** Willow Rock Energy Storage Center Andrea Stroud, Carol Watson Technical Staff: Leonidas Payne Docket: 21-AFC-02 Eric Knight Project Manager: Technical Senior:

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency,	P. 5.2-53 Section 5.2.7	Yes	
	and provide the name of the official who will serve as a contact person for Commission staff.	Table 5.2-9		
Appendix B (i) (3)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	P. 5.2-53 Section 5.2.6	Yes	

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Cultural Resources and Tribal

Technical Area: Cultural Resources Project: Willow Rock Energy Storage Center Technical Staff: P. Riordan, C. Travis

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (A)	Descriptions of all significant assumptions, methodologies, and computational methods used in arriving at conclusions in the document;	Subsection 5.3.2, pp. 5.3-9 to 5.3-19; Subsection 5.3.3, pp. 5.3-19 to 5.3-21; Confidential Appendix 5.3B, pp. 29–35	Yes	
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (B)	Descriptions, including methodologies and findings, of all major studies or research efforts undertaken and relied upon to provide information for the document; and a description of ongoing research of significance to the project (including expected completion dates; and	Subsection 5.3.2, pp. 5.3-9 to 5.3-19; Subsection 5.3.3, pp. 5.3-19 to 5.3-26; Confidential Appendix 5.3B, pp. 29–132	Yes	
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (C)	A list of all literature relied upon or referenced in the documents, along with brief discussions of the relevance of each such reference.	Subsection 5.3.9, pp. 5.3-31 to 5.3-33; Confidential Appendix 5.3B, pp. 33–35, 141–151	Yes	
Appendix B (g) (1)	provide a discussion of the existing site conditions, the expected direct, indirect, and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation. Describe the approach, list or projection or a combination, used to develop the cumulative setting for the proposed project. Include any reference	Subsection 5.0.1, pp. 5.0-4 to 5.0-7, Figure 5.0-2; Subsection 5.3.1, pp. 5.3-3 to 5.3-9; Subsection 5.3.2.2, pp. 5.3-12 to 5.3-19; Subsection 5.3.3.1, pp. 5.3-21 to 5.3-26; Confidential Cultural Resources Testing Plan, TN257035	No Yes	Provide CEQA significance evaluations, supported by testing plans and test excavations, of all archaeological resources in the project's direct impact areas. Test excavation of known cultural resources after CEQA review is not valid mitigation. Submit a report of significance evaluations suitable for public disclosure and a detailed report under request for confidential filling.

Completeness: Complete X Incomplete X Revision No. 91 Date: April July 2024

Cultural Resources and Tribal

Technical Area: Cultural Resources Project: Willow Rock Energy Storage Center Technical Staff: P. Riordan, C. Travis

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	materials used such as general plan or other adopted local, regional, or statewide plan.			
Appendix B (g) (2)	Cultural resources and tribal cultural resources together comprise objects, buildings, structures, sites, features, areas, places, records, sacred places, cultural landscapes, or manuscripts, all of which may have significance according to criteria outlined in sections 21074 and 21084.2 of the Public Resources Code.	Subsection 5.3.3, pp. 5.3-19 to 5.3-21	Yes	
Appendix B (g) (2) (A)	A summary of the ethnology, prehistory, and history of the region with emphasis on the area within no more than a 5-mile radius of the project location. This regional summary must address the potential for buried cultural resources and tribal cultural resources to occur in the project area. The summary, together with literature search results, must inform the field methods employed for identifying cultural resources and tribal cultural resources in the project area.	Subsection 5.3.1, pp. 5.3-3 to 5.3-9; Confidential Appendix 5.3B, pp. 60–61	Yes	
Appendix B (g) (2) (B)	The results of a literature search to identify cultural resources and tribal cultural resources within an area not less than a 1-mile radius around the project site and not less that than one-quarter (0.25) mile on each side of the linear facilities. Identify any cultural resources or tribal cultural resources listed pursuant to ordinance by a city or county or recognized by any local historical or archaeological society or	Section 5.3, p. 5.3-2; Subsection 5.3.2.2.1, pp. 5.3-12 to 5.3-18; Confidential Appendix 5.3B, pp. 36–60	Yes	

Completeness: Complete X Incomplete X Revision No. 01 Date: April July 2024

Cultural Resources and Tribal

Technical Area: Cultural Resources Project: Willow Rock Energy Storage Center Technical Staff: P. Riordan, C. Travis

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
	museum. Literature searches to identify the above cultural resources and tribal cultural resources must be completed by, or under the direction of, individuals who meet the Secretary of the Interior's Professional Standards for the technical area addressed.			
	Copies of California Department of Parks and Recreation (DPR) 523 forms (Title 14 CCR §4853) shall be provided for all cultural resources and tribal cultural resources (ethnographic, architectural, historical, and archaeological) identified in the literature search as being 45 years or older or of exceptional importance as defined in the National Register Bulletin Guidelines, (36CFR60.4(g)). A copy of the USGS 7.5-minute quadrangle map of the literature search area delineating the areas of all past surveys and noting the California Historical Resources Information System (CHRIS) identifying number shall be provided. Copies also shall be provided of all technical reports whose survey coverage is wholly or partly within 0.25 mile of the area surveyed for the project under section (g)(2)(C), or which report on any archaeological			
	excavations or architectural surveys within the literature search area.			

Completeness: Complete X Incomplete X Revision No. 01 Date: April July 2024

Cultural Resources and Tribal

Technical Area: Cultural Resources Project: Willow Rock Energy Storage Center Technical Staff: P. Riordan, C. Travis
Project Manager: Leonidas Payne Docket: 21-AFC-02 Technical Senior: Gabriel Roark

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
Appendix B (g) (2) (C)	The results of new cultural resource and tribal resource surveys or surveys less than 5 years old shall be provided if survey records of the area potentially affected by the project are more than 5 years old. Surveys to identify new cultural resources and tribal cultural resources must be completed by (or under the direction of) individuals who meet the Secretary of the Interior's Professional Standards for the technical area addressed. New pedestrian archaeological surveys shall be conducted inclusive of the project site and project linear facility routes, extending to no less than 200 feet around the project site, substations and staging areas, and to no less than 50 feet to either side of the right-of-way of project linear facility routes. New historic architecture field surveys in rural areas shall be conducted inclusive of the project site and the project linear facility routes, extending no less than 0.5 mile out from the proposed plant site and from the routes of all above-ground linear facilities. New historic architecture field surveys in urban and suburban areas shall be conducted inclusive of the project site, extending no less than one parcel's distance from all proposed plant site	Section 5.3, pp. 5.3-1 to 5.3-33; Confidential Appendix 5.3B, pp. iv, 33–35, 62–90, Appendix C, Figure C.2 a–b; Confidential Cultural Resources Testing Plan, TN257035	No Yes	Concerning Confidential Appendix 5.3B: Provide paleoenvironmental setting per ARMR, p. 8 Add a discussion of the Serrano Indians to the Ethnographic Context; their ancestral lands are closer to the project site than the Tataviam Provide archaeological survey coverage maps per ARMR, p. 10 A significant amount of the project area remains unexamined by cultural resources specialists. Obtain access to all properties within your archaeological study area, survey them for the presence/absence of cultural resources, and provide a supplemental report of methods and findings. The unsurveyed properties are described in Confidential Appendix 5.3B, pp. 63, 65, and 73. Provide bibliographic entries for these text citations: Kern County Gazette 1876; Kern-Antelope Historical Society 1936, 2018; Mayer and Laudenslayer 1988; Norwood and Kilanowski 1991; San Bernardino Museum n.d.; USGS 1963

Completeness: Complete X Incomplete X Revision No. 01 Date: April July 2024

Cultural Resources and Tribal

Technical Area: Cultural Resources Project: Willow Rock Energy Storage Center Technical Staff: P. Riordan, C. Travis

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	INFORMATION REQUIRED TO MAKE APPLICATION CONFORM WITH REGULATIONS
	boundaries. New historic architecture field reconnaissance ("windshield survey") in urban and suburban areas shall be conducted along the routes of all linear facilities to identify, inventory, and characterize structures and districts that appear to be older than 45 years or that are exceptionally significant, whatever their age. A technical report of the results of the new surveys, conforming to the Archaeological Resource Management Report format (CA Office of Historic Preservation Feb 1990), which is incorporated by reference in its entirety, shall be separately provided and submitted (under confidential cover if archaeological resource or other sensitive resource locations are included). Information included in the technical report shall also be provided in the application, except that confidential information (archaeological sites or other sensitive resources, or areas of religious significance) shall be submitted under a request for confidentiality pursuant to California Code of Regulations, title 20, section		TL3 OK NO	
	2501 et seq. At a minimum, the technical report shall include:			

Completeness: Complete X Incomplete X Revision No. 01 Date: April July 2024

Cultural Resources and Tribal

Technical Area: Cultural Resources Project: Willow Rock Energy Storage Center Technical Staff: P. Riordan, C. Travis

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
Appendix B (g) (2) (C) (i)	The summary from Appendix B (g)(2)(A) and the literature search results from Appendix B (g)(2)(B);	Confidential Appendix 5.3B, pp. 7–28, 36–61, and appendices A, D, & E	Yes	
Appendix B (g) (2) (C) (ii)	The survey procedures and methodology used to identify cultural and tribal cultural resources and a discussion of the cultural and tribal resources identified by the survey;	Confidential Appendix 5.3B, pp. 34–35 & 62–90	Yes	
Appendix B (g) (2) (C)(iii)	Copies of all new and updated DPR 523(A) forms. If a cultural resource or tribal cultural resource may be impacted by the project, also include the appropriate DPR 523 detail form for each such resource;	Confidential Appendix 5.3B, Appendix D	Yes	
Appendix B (g) (2) (C) (iv)	A map at a scale of 1:24,000 (U.S. Geological Survey topographic quadrangle) depicting the locations of all previously known and newly identified cultural and tribal cultural resources compiled through the research required by Appendix B (g)(2)(B) and Appendix B (g)(2)(C) (ii); and	Confidential Appendix 5.3B, Appendix A, Figures A4-1 to A4-8, Appendix C, Figures C1-1 to C1-7 Confidential Cultural Resources Testing Plan, TN257035	No <u>Yes</u>	The maps provided separate previously recorded and newly recorded cultural and tribal cultural resources into separate map series. In addition, although the maps use the specified base imagery, they are not at the correct scale. Please provide maps at the specified scale (1:24,000, or 1 inch = 2,000 feet) that depict all previously known and newly identified cultural and tribal cultural resources.
Appendix B (g) (2) (C) (v)	The names and qualifications of the cultural resources specialists who contributed to and were responsible for literature searches, surveys, and preparation of the technical report.	Confidential Appendix 5.3B, pp. 33–34	Yes	
Appendix B (g) (2) (D) (i)	A copy of the applicant's request to the Native American Heritage Commission (NAHC) for information on Native American sacred sites	Confidential Appendix 5.3B, Appendix B, pp. B1–B5.	Yes	

Completeness: Complete X Incomplete X Revision No. 01 Date: April July 2024

Cultural Resources and Tribal

Technical Area: Cultural Resources Project: Willow Rock Energy Storage Center Technical Staff: P. Riordan, C. Travis

SITING REGULATIONS	INFORMATION	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
	and lists of Native Americans interested in the project vicinity, and copies of any correspondence received from the NAHC.			
Appendix B (g) (2) (D) (ii)	A copy of all correspondence sent to Native American individuals and groups listed by the NAHC and copies of all responses. Notification to Native Americans shall include a project description and map.	Confidential Appendix 5.3B, Appendix B, pp. B6 to B28	Yes	
Appendix B (g) (2) (D) (iii)	A written summary of any oral responses.	Confidential Appendix 5.3B, p. 91; Appendix B, pp. B17–B21	Yes	
Appendix B (g) (2) (E)	Include in the discussion of proposed mitigation measures required by (g)(1):			
Appendix B (g) (2) (E) (i)	A discussion of measures proposed to mitigate project impacts to known cultural and tribal cultural resources;	Subsection 5.3.5 pp. 5.3-23 to 5.3-24; Confidential Appendix 5.3B, p. 137-140	Yes	
Appendix B (g) (2) (E) (ii)	A set of contingency measures proposed to mitigate potential impacts to previously unknown cultural and tribal cultural resources and any unanticipated impacts to known cultural or tribal cultural resources; and	Subsection 5.3.5.3, pp. 5.3-24 to 5.3-26; Confidential Appendix 5.3B, pp. 137–140	Yes	
Appendix B (g) (2) (E) (iii)	Educational programs to enhance employee awareness during construction and operation to protect cultural and tribal cultural resources.	Subsection 5.3.5.3.2, p. 5.3-25; Confidential Appendix 5.3B, p. 138	Yes	
Appendix B (i) (1) (A)	Tables that identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and	Subsection 5.3.6, pp. 5.3- 26 to 5.3-28, Table 5.3-4; Confidential Appendix 5.3B, pp. 132–134, Table 29	Yes	

Completeness: Complete X Incomplete X Revision No. 01 Date: April July 2024

Cultural Resources and Tribal

Technical Area: Cultural Resources Project: Willow Rock Energy Storage Center Technical Staff: P. Riordan, C. Travis

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
	a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and			
Appendix B (i) (1) (B)	Tables that identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the Commission to certify sites and related facilities.	Subsection 5.3.6, pp. 5.3-29 to 5.3-30, Table 5.3-5; Confidential Appendix 5.3B, p. 136, Table 30	Yes	
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and provide the name of the official who will serve as a contact person for Commission staff.	Subsection 5.3.7, pp. 5.3-29 to 5.3-30, Table 5.3-5; Confidential Appendix 5.3B, p. 136, Table 30	Yes	
Appendix B (i) (3)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Subsection 5.3.8, p. 5.3-30; Confidential Appendix 5.3B, p. 136	Yes	

Completeness:	Complete X	Incomplete			Revision No. 0	Date: April 2024
Technical Area:	Efficiency		Project:	Willow Rock Energy Storage Center	Technical Staff:	Kenneth Salyphone
Project Manager:	Leonidas Payne		Docket:	21-AFC-02	Technical Senior:	Shahab Khoshmashrab

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	INFORMATION REQUIRED TO MAKE APPLICATION CONFORM WITH REGULATIONS
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (A)	Descriptions of all significant assumptions, methodologies, and computational methods used in arriving at conclusions in the document.	Subsection 2.1.3 p. 2-13	Yes	
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (B)	Descriptions, including methodologies and findings, of all major studies or research efforts undertaken and relied upon to provide information for the document; and a description of ongoing research of significance to the project (including expected completion dates; and	N/A	N/A	
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (C)	A list of all literature relied upon or referenced in the documents, along with brief discussions of the relevance of each such reference;	N/A	N/A	
Appendix B (h) (4) (A)	Heat and mass balance diagrams for design conditions for each mode of operation.	Appendix 2C	Yes	
Appendix B (h) (4) (B)	Annual fuel consumption in BTUs for each mode of operation, including hot restarts and cold starts.	Subsection 2.1.3 p. 2-13 Table 5.1-2 p. 5.1-4	Yes	
Appendix B (h) (4) (C)	Annual net electrical energy produced in MWh for each mode of operation including starts and shutdowns.	Section 1.0 p. 1-1 Section 2.0 p. 2-1 Subsection 2.1.3 p. 2-13	Yes	
Appendix B (h) (4) (D)	Number of hours the plant will be operated in each design condition in each year.	Subsection 2.1.3 p 2-13	Yes	
Appendix B (h) (4) (E)	If the project will be a cogeneration facility, calculations showing compliance with applicable efficiency and operating standards.	N/A	N/A	
Appendix B (h) (4) (F)	A discussion of alternative generating technologies available for the project, including the projected efficiency of each, and an	Section 6.0 p. 6-1 through 6-26	Yes	

Completeness:	Complete X Incomplete			Revision No. 0	Date: April 2024
Technical Area:	Efficiency	Project:	Willow Rock Energy Storage Center	Technical Staff:	Kenneth Salyphone
Project Manager:	Leonidas Payne	Docket:	21-AFC-02	Technical Senior:	Shahab Khoshmashrab

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
	explanation why the chosen equipment was selected over these alternatives.			
Appendix B (i) (1) (A)	Tables that identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	N/A	N/A	
Appendix B (i) (1) (B)	Tables that identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the Commission to certify sites and related facilities.	N/A	N/A	
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and provide the name of the official who will serve as a contact person for Commission staff.	N/A	N/A	
Appendix B (i) (3)	A schedule indicating when permits outside the authority of the Commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	N/A	N/A	

Completeness:	Complete X	Incomplete			Revision No.	0	Date:	April 2024	
Technical Area:	Facility Design	1	Project:	Willow Rock Energy Storage Center		Techni	cal Staff:	Ardalan Raisi Sofi	
Project Manager	Leonidas Payne		Docket:	21-AFC-02		Techni	cal Senior:	Shahab Khoshmashrab	

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	INFORMATION REQUIRED TO MAKE APPLICATION CONFORM WITH REGULATIONS
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (A)	Descriptions of all significant assumptions, methodologies, and computational methods used in arriving at conclusions in the document.	Section 2.2, pp. 2-33 to 2-36 Appendix 2A	Yes	
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (B)	Descriptions, including methodologies and findings, of all major studies or research efforts undertaken and relied upon to provide information for the document; and a description of ongoing research of significance to the project (including expected completion dates; and	Section 2.2, pp. 2-33 to 2-36 Appendix 2A	Yes	
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (C)	A list of all literature relied upon or referenced in the documents, along with brief discussions of the relevance of each such reference;	Appendix 2A	Yes	
Appendix B (h) (1) (A)	A description of the site conditions and investigations or studies conducted to determine the site conditions used as the basis for developing design criteria. The descriptions shall include, but not be limited to, seismic and other geologic hazards, adverse conditions that could affect the project's foundation, adverse meteorological and climatic conditions, and flooding hazards, if applicable.	Section 1.2, pp. 1-5 to 1-10 Section 2.0, pp. 2-1 to 2-36 Section 5.4, pp. 5.4-1 Subsection 5.4, 2.2, pp. 5.4-14 to 5.4-15 Section 5.15, pp. 5.15-1 to 5.15-22 Section 5.0, p. 5-1 Figures 2-1, p. 2-5 Figures 2-2, p. 2-6 Figures 2-3, p. 2-8 Figures 2-4, p. 2-9 Figures 2-5, p. 2-10 Figures 2-6, p. 2-11	Yes	
Appendix B (h) (1) (B)	A discussion of any measures proposed to improve adverse site conditions.	Subsection 5.4.4, pp. 5.4-15 to 5.4-16 Subsection 5.15.1.4, p. 5.15-9	Yes	

Completeness:	Complete	X	Incomplete			Revision No.	0	Date:	April 2024
Technical Area:	Facility De	sign	l	Project:	Willow Rock Energy Storage Center		Techni	cal Staff:	Ardalan Raisi Sofi
Project Manager	Leonidas Pa	yne		Docket:	21-AFC-02		Techni	cal Senior:	Shahab Khoshmashrab

SITING REGULATIONS	INFORMATION	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
Appendix B (h) (1) (C)	A description of the proposed foundation types, design criteria (including derivation), analytical techniques, assumptions, loading conditions, and loading combinations to be used in the design of facility structures and major mechanical and electrical equipment.	Section 1.3, p. 1-10 Section 2.2, pp. 2-33 to 2-36 Section 5.4, pp. 5.4-1 to 5.4-18 Section 5.6, pp. 5.6-1 to 5.6-45 Section 5.11, pp. 5.11-1 to 5.11-15 Appendix 2A	Yes	
Appendix B (h) (1) (D)	For each of the following facilities or systems, provide a description including drawings, dimensions, surface-area requirements, typical operating data, and performance and design criteria for protection from impacts due to adverse site conditions:	Subsection 2.2.1, pp. 2-33 to 2-36 Appendix 2A Figures 2-1, p. 2-5 Figures 2-2, p. 2-6 Figures 2-3, p. 2-8 Figures 2-4, p. 2-9 Figures 2-5, p. 2-10 Figures 2-6, p. 2-11	Yes	
Appendix B (h) (1) (D) (i)	The power generation system;	Section 1.3, p. 1-10 Section 2.1, pp. 2-7 to 2-33 Figures 2-1, p. 2-5 Figures 2-2, p. 2-6 Figures 2-3, p. 2-8 Figures 2-4, p. 2-9 Figures 2-5, p. 2-10 Figures 2-6, p. 2-11	Yes	
Appendix B (h) (1) (D) (ii)	The heat dissipation system;	Section 2.0, Page 2-1 Subsection 2.1.9, p. 2-16	Yes	
Appendix B (h) (1) (D) (iii)	The cooling water supply system, and, where applicable, pre-plant treatment procedures;	Section 1.5, pp. 1-11 to 1-12 Section 2.0, p. 2-1 Subsection 2.1.9, p. 2-16	Yes	
Appendix B (h) (1) (D) (iv)	The atmospheric emission control system;	Section 1.5, pp. 1-11 to 1-12	Yes	

Completeness:	Complete	X	Incomplete			Revision No.	0	Date:	April 2024
Technical Area:	Facility De	sign	l	Project:	Willow Rock Energy Storage Center		Techni	cal Staff:	Ardalan Raisi Sofi
Project Manager	Leonidas Pa	yne		Docket:	21-AFC-02		Techni	cal Senior:	Shahab Khoshmashrab

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	INFORMATION REQUIRED TO MAKE APPLICATION CONFORM WITH REGULATIONS
Appendix B (h) (1) (D) (v)	The waste disposal system and on-site disposal sites;	Subsection 2.1.15, p. 2-23 Section 5.14, pp. 5.14-1 to 5.14-21	Yes	
Appendix B (h) (1) (D) (vi)	The noise emission abatement system;	Section 5.7, pp. 5.7-1 to 5.7-32	Yes	
Appendix B (h) (1) (D) (vii)	The geothermal resource conveyance and re-injection lines (if applicable);	N/A	N/A	
Appendix B (h) (1) (D) (viii)	Switchyards/transformer systems; and	Section 1.3, p. 1-10 Subsection 2.1.13, pp. 2-19 to 2-21 Section 3.0, pp. 3-1 to 3-13	Yes	
Appendix B (h) (1) (D) (ix)	Other significant facilities, structures, or system components proposed by the applicant.	Section 1.3, p. 1-10 Section 2.1, pp. 2-7 to 2-33 Appendix 2A	Yes	
Appendix B (i) (1) (A)	Tables that identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	Section 3.5, pp. 3-11 to 3-13	Yes	
Appendix B (i) (1) (B)	Tables that identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have	Section 3.5, pp. 3-11 to 3-13	Yes	

Completeness:	Complete	X	Incomplete			Revision No.	0	Date:	April 2024
Technical Area:	Facility De	sign	l	Project:	Willow Rock Energy Storage Center		Techni	cal Staff:	Ardalan Raisi Sofi
Project Manager	Leonidas Pa	yne		Docket:	21-AFC-02		Techni	cal Senior:	Shahab Khoshmashrab

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	INFORMATION REQUIRED TO MAKE APPLICATION CONFORM WITH REGULATIONS
	permit approval or enforcement authority, but for the exclusive authority of the Commission to certify sites and related facilities.			
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and provide the name of the official who will serve as a contact person for Commission staff.	N/A	N/A	
Appendix B (i) (3)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	N/A	N/A	

Completeness:	Complete X Incomplete			Revision No. 0	Date: April 2024
Technical Area:	Geological Hazards	Project:	Willow Rock Energy Storage Center	Technical Staff:	Michael Turner
Project Manager:	Leonidas Payne	Docket:	21-AFC-02	Technical Senior:	Karim Abulaban

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (A)	Descriptions of all significant assumptions, methodologies, and computational methods used in arriving at conclusions in the document.	Section 5.4, pp. 5.4-1 to 5.4-2; Subsection 5.11, p. 5.11-1	Yes	
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (B)	Descriptions, including methodologies and findings, of all major studies or research efforts undertaken and relied upon to provide information for the document; and a description of ongoing research of significance to the project (including expected completion dates; and	Section 5.4, pp. 5.4-1 to 5.4-2; Subsection 5.11, p. 5.11-1	Yes	
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (C)	A list of all literature relied upon or referenced in the documents, along with brief discussions of the relevance of each such reference;	Subsection 5.4.8, pp. 5.4-17 to 5.4-18; Table 5.11-1, pp. 5.11.2 to 5.11-3; Figures 5.11-1a and 5.11-1b, pp. 5.11-4 to 5.11-5	Yes	
Appendix B (g) (1)	provide a discussion of the existing site conditions, the expected direct, indirect, and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation. Describe the approach, list or projection or a combination, used to develop the cumulative setting for the proposed project. Include any reference materials used such as general plan or other adopted local, regional, or statewide plan.	Subsection 5.4.1, pp. 5.4-2 to 5.4-7; Subsection 5.4.2, pp. 5.4-14 to 5.4-15; Subsection 5.4.3, p. 5.4-15; Subsection 5.4.4, pp. 5-4.15 to 5.4-16	Yes	

Completeness:	Complete X Incomplete			Revision No. 0	Date: April 2024
Technical Area:	Geological Hazards	Project:	Willow Rock Energy Storage Center	Technical Staff:	Michael Turner
Project Manager:	Leonidas Payne	Docket:	21-AFC-02	Technical Senior:	Karim Abulaban

SITING REGULATIONS	INFORMATION	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
Appendix B (g) (17) (A)	A summary of the geology, seismicity, and geologic resources of the project site and related facilities, including linear facilities.	Subsection 5.4-1, pp. 5.4-2 to 5.4-6 and pp. 5.4-10 to 5.4-11; Subsection 5.4.1.5, pp. 5.4-11 to 5.4-14; Subsection 5.4.2.3, p. 5.4-15; Subsection 5.11.2.4, pp. 5.11-6 to 5.11-7	Yes	
Appendix B (g) (17) (B)	A map at a scale of 1:24,000 and description of all recognized stratigraphic units, geologic structures, and geomorphic features within two (2) miles of the project site and along proposed facilities. Include an analysis of the likelihood of ground rupture, seismic shaking, mass wasting and slope stability, liquefaction, subsidence, tsunami runup, and expansion or collapse of soil structures at the plant site. Describe known geologic hazards along or crossing linear facilities.	Figure 5.4-1a and 5.4-1b, pp. 5.4-2 to 5.4-3; Subsection 5.4.1.2, p. 5.4-4; Figure 5.4-2, p. 5.4-5; Subsection 5.4.1.4, pp. 5.4-4 to 5.4-11; Figure 5.8-1a to Figure 5.8-1f; Subsection 5.8.1.1, p. 5.8-3; Subsection 5.8.1.2.3, pp. 5.8-4 to 5.8-5	Yes	
Appendix B (g) (17) (C)	A map and description of geologic resources of recreational, commercial, or scientific value which may be affected by the project. Include a discussion of the techniques used to identify and evaluate these resources.	Subsection 5.4.1.5, p. 5.4-11, Figures 5.4-4 and 5.4-5, pp. 5.4-12 to 5.4-13	Yes	
Appendix B (i) (1) (A)	Tables that identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the	Subsection 5.4.5, pp. 5.4-16	Yes	

Completeness:	Complete X Incomplete			Revision No. 0	Date: April 2024
Technical Area:	Geological Hazards	Project:	Willow Rock Energy Storage Center	Technical Staff:	Michael Turner
Project Manager:	Leonidas Payne	Docket:	21-AFC-02	Technical Senior:	Karim Abulaban

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
	application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and			
Appendix B (i) (1) (B)	Tables that identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Subsection 5.4.6, pp. 5.4-16	Yes	
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and provide the name of the official who will serve as a contact person for Commission staff.	NA	Yes	
Appendix B (i) (3)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Subsection 5.4.7, p. 5.4-16	Yes	

Completeness: Complete X Incomplete Date: April 2024 Revision No. 0 Technical Area: Hazardous Materials Handling Technical Staff: Brett Fooks Project: Willow Rock Energy Storage Center 21-AFC-02 Project Manager: Leonidas Payne Docket: Technical Senior: **Brett Fooks**

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (A)	Descriptions of all significant assumptions, methodologies, and computational methods used in arriving at conclusions in the document.	Subsection 5.5.2.1, p. 5.5-6	Yes	
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (B)	Descriptions, including methodologies and findings, of all major studies or research efforts undertaken and relied upon to provide information for the document; and a description of ongoing research of significance to the project (including expected completion dates; and	Subsection 5.5.8, p. 5.5-23	Yes	
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (C)	A list of all literature relied upon or referenced in the documents, along with brief discussions of the relevance of each such reference;	Subsection 5.5.8, p. 5.5-23	Yes	
Appendix B (g) (1)	provide a discussion of the existing site conditions, the expected direct, indirect, and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation. Describe the approach, list or projection or a combination, used to develop the cumulative setting for the proposed project. Include any reference materials used such as general plan or other adopted local, regional, or statewide plan.	Section 5.5, p. 5.5-1 – 5.5-22	Yes	

Completeness: Complete X Incomplete Date: April 2024 Revision No. 0 Technical Area: Hazardous Materials Handling Technical Staff: Brett Fooks Project: Willow Rock Energy Storage Center 21-AFC-02 Project Manager: Leonidas Payne Docket: Technical Senior: **Brett Fooks**

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
Appendix B (g) (10) (A)	A list of all materials used or stored on-site which are hazardous or acutely hazardous, as defined in California Code of Regulations, title 22, § 66261.20 et seq., and a discussion of the toxicity of each material.	Subsection 5.5.1.2, p. 5.5-1 - 5.5-5, Table 5.5-1, Table 5.5-2, Table 5.5-3	Yes	
Appendix B (g) (10) (B)	A map at a scale of 1:24,000 depicting the location of schools, hospitals, daycare facilities, and long-term health care facilities, within the area potentially affected by any release of hazardous materials.	Figure 5.5-1	Yes	
Appendix B (g) (10) (C)	A discussion of the storage and handling system for each hazardous material used or stored at the site.	Subsection 5.5.2.3. p. 5.5-7	Yes	
Appendix B (g) (10) (D)	The protocol that will be used in modeling potential consequences of accidental releases that could result in off site impacts. Identify the model(s) to be used, a description of all input assumptions, including meteorological conditions. The results of the modeling analysis can be submitted after the application is complete.	Subsection 5.5.2.3.3, p. 5.5-7 – 5.5-8	Yes	
Appendix B (g) (10) (E)	A discussion of whether a risk management plan (Health and Safety Code § 25531 et seq.) will be required, and if so, the requirements that will likely be incorporated into the plan.	N/A	Yes	
Appendix B (g) (10) (F)	A discussion of measures proposed to reduce the risk of any release of hazardous materials.	Subsections 5.5.4.1.1 & 5.5.4.2.1, p. 5.5-11 – 5.5-13	Yes	
Appendix B (g) (10) (G)	A discussion of the fire and explosion risks associated with the project.	Subsection 5.5.2.3.4, p. 5.5-8, Subsection 5.5.4.1.2, p. 5.5-12	Yes	

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Completeness: Complete X Incomplete Revision No. 0 Date: April 2024 Technical Area: Hazardous Materials Handling Technical Staff: Brett Fooks Project: Willow Rock Energy Storage Center 21-AFC-02 Project Manager: Leonidas Payne Docket: Technical Senior: **Brett Fooks**

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
Appendix B (i) (1) (A)	Tables that identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	Table 5.5-4, p 5.5-15 – 5.5- 18	Yes	
Appendix B (i) (1) (B)	Tables that identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies that would have permit approval or enforcement authority, but for the exclusive authority of the Commission to certify sites and related facilities.	Table 5.5-4, p 5.5-15 – 5.5- 18	Yes	
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and provide the name of the official who will serve as a contact person for Commission staff.	Subsection 5.5.6, Table 5.5-5	Yes	
Appendix B (i) (3)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Subsection 5.5.7, Table 5.5-6	Yes	

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Technical Area:	Land Use	Project:	Willow Rock Energy Storage Center	Technical Staff:	Andrea Koch
Project Manager:	Leonidas Payne	Docket:	21-AFC-02	Technical Senior:	Steven Kerr

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (A)	Descriptions of all significant assumptions, methodologies, and computational methods used in arriving at conclusions in the document.	N/A	Yes	
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (B)	Descriptions, including methodologies and findings, of all major studies or research efforts undertaken and relied upon to provide information for the document; and a description of ongoing research of significance to the project (including expected completion dates; and	N/A	Yes	
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (C)	A list of all literature relied upon or referenced in the documents, along with brief discussions of the relevance of each such reference;	Section 5.6.8, pp. 5.6-44 to 5.6-45	Yes	
Appendix B (g) (1)	provide a discussion of the existing site conditions, the expected direct, indirect, and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation. Describe the approach, list or projection or a combination, used to develop the cumulative setting for the proposed project. Include any reference materials used such as general plan or other adopted local, regional, or statewide plan.	Section 1.2, pp. 1-5 to 1-6 Section 5.6.1, pp. 5.6-1 to 5.6-4 Section 5.6.2, pp. 5.6-6 to 5.6-15 Section 5.6.3, pp. 5.6-24 to 5.6-41 Section 5.6.4, p. 5.6-41	Yes	
Appendix B (g) (3) (A)	A discussion of existing land uses, general plan land use designations, and current zoning	Section 1.2, pp. 1-5 to 1-6	Yes	

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Technical Area:	Land Use	Project:	Willow Rock Energy Storage Center	Technical Staff:	Andrea Koch
Project Manager:	Leonidas Payne	Docket:	21-AFC-02	Technical Senior:	Steven Kerr

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
	districts (including any overlay districts) at the site, land uses and land use patterns within one mile of the proposed site and within one-quarter mile of any project-related linear facilities. Include:	Section 5.6.1, pp. 5.6-1 to 5.6-4 Section 5.6.2, pp. 5.6-6 to 5.6-23		
Appendix B (g) (3) (A) (i)	An identification of residential, commercial, industrial, recreational, scenic, agricultural, natural resource protection, natural resource extraction, educational, religious, cultural, and historic areas, and any other area of unique land uses;	Section 5.6.2.2, pp. 5.6-10 to 5.6-15	Yes	
Appendix B (g) (3) (A) (ii)	A discussion of any recent or proposed zone changes and/or general plan amendments; noticed by an elected or appointed board, commission, or similar entity at the state or local level;	Section 5.6.2.7, p. 5.6-23	Yes	
Appendix B (g) (3) (A) (iii)	Identification of all discretionary reviews by public agencies initiated or completed within 18 months prior to filing the application for those changes or developments identified in subsection (g)(3)(A)(ii); and	Section 5.6.2.8, p. 5.6-24	Yes	
Appendix B (g) (3) (A) (iv)	Legible maps of the areas identified in subsection (g)(3)(A) potentially affected by the project, on which existing land uses, jurisdictional boundaries, general plan designations, specific plan designations, and zoning have been clearly delineated.	Appendix 5.6A	Yes	
Appendix B (g) (3) (B)	A discussion of the compatibility of the proposed project with present and expected land uses, and conformity with any long-range	Section 5.6.3.2, pp. 5.6-25 to 5.6-37	Yes	

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Technical Area:	Land Use	Project:	Willow Rock Energy Storage Center	Technical Staff:	Andrea Koch
Project Manager:	Leonidas Payne	Docket:	21-AFC-02	Technical Senior:	Steven Kerr

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
	land use plans and policies adopted by any federal, state, regional, or local planning agencies. The discussion shall identify the need, if any, for land use decisions by another public agency or as part of the commission's decision that would be necessary to make the project conform to adopted federal, state, regional, or local coastal plans, land use plans, or zoning ordinances. Examples of land use decisions include general plan amendments, zoning changes, lot line adjustments, parcel mergers, subdivision maps, Agricultural Land Conservation Act contracts cancellation, and Airport Land Use Plan consistency determinations.	Section 5.6.3.3, pp. 5.6-37 to 5.6-40		
Appendix B (g) (3) (C)	A discussion of the legal status of the parcel(s) on which the project is proposed. If the proposed site consists of more than one legal parcel, describe the method and timetable for merging or otherwise combining those parcels so that the proposed project, excluding linears and temporary laydown or staging area, will be located on a single legal parcel. The merger need not occur prior to a decision on the Application but must be completed prior to the start of construction.	Section 5.6.1, pp. 5.6-1 to 5.6-2	Yes	
Appendix B (g) (3) (D)	A map at a scale of 1:24,000 and written description of agricultural land uses found within all areas affected by the proposed project. The description shall include:	Appendix 5.6A, Figures 5.6A-6.1 to 5.6A-6.6	Yes	

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Technical Area:	Land Use	Project:	Willow Rock Energy Storage Center	Technical Staff:	Andrea Koch	
Project Manager:	Leonidas Payne	Docket:	21-AFC-02	Technical Senior:	Steven Kerr	

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
Appendix B (g) (3) (D) (i)	Land classifications as shown on the California Department of Conservation's Farmland Mapping and Monitoring Program's Important Farmland maps, crop types, irrigation systems, and any special cultivation practices;	Section 5.6.2.2.3, p. 5.6-11	Yes	
Appendix B (g) (3) (D) (ii)	Whether agricultural land affected by the project was historically classified Farmland as defined by the California Department of Conservation (Prime Farmland, Farmland of Statewide Importance, or Unique Farmland) as specified in Public Resources Code section 21060.1; and	Section 5.6.2.2.3, p. 5.6-11	Yes	
Appendix B (g) (3) (D) (iii)	Direct, indirect, and cumulative effects on agricultural land uses. If the proposed site or related facilities are subject to an Agricultural Land Conservation contract, provide a written copy and a discussion of the status of the expiration or canceling of such contract.	Section 5.6.3.2.4, p. 5.6-37 Section 5.6.3.2.5, p. 5.6-37 Section 5.6.5.2.2, p. 5.6-42	Yes	
Appendix B (i) (1) (A)	Tables that identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	Section 5.6.3.2.2, pp. 5.6-25 to 5.6-36	Yes	
Appendix B (i) (1) (B)	Tables that identify each agency with jurisdiction to issue applicable permits, leases,	Section 5.6.5.3, pp. 5.6-42 to 5.6-43	Yes	

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Technical Area:	Land Use	Project:	Willow Rock Energy Storage Center	Technical Staff:	Andrea Koch
Project Manager:	Leonidas Payne	Docket:	21-AFC-02	Technical Senior:	Steven Kerr

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
	and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies that would have permit approval or enforcement authority, but for the exclusive authority of the Commission to certify sites and related facilities.			
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and provide the name of the official who will serve as a contact person for Commission staff.	Section 5.6.6, p. 5.6-43	Yes	
Appendix B (i) (3)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Section 5.6.7, p. 5.6-43	Yes	

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Technical Area:	Noise	Project:	Willow Rock Energy Storage Center	Technical Staff:	Ardalan Raisi Sofi
Project Manager:	Leonidas Payne	Docket:	21-AFC-02	Technical Senior:	Shahab Khoshmashrab

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (A)	Descriptions of all significant assumptions, methodologies, and computational methods used in arriving at conclusions in the document.	Subsection 5.7.3.2.1, p. 5.7-15 Subsection 5.7.3.3.3, p. 5.7-23	Yes	
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (B)	Descriptions, including methodologies and findings, of all major studies or research efforts undertaken and relied upon to provide information for the document; and a description of ongoing research of significance to the project (including expected completion dates; and	Subsection 5.7.1, pp. 5.7-1 to 5.7-3 Subsection 5.7.3.2.1, p. 5.7-15 Subsection 5.7.3.3.3, p. 5.7-23	Yes	
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (C)	A list of all literature relied upon or referenced in the documents, along with brief discussions of the relevance of each such reference;	Subsection 5.7.8, p. 5.7-32	Yes	
Appendix B (g) (1)	provide a discussion of the existing site conditions, the expected direct, indirect, and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation. Describe the approach, list or projection or a combination, used to develop the cumulative setting for the proposed project. Include any reference materials used such as general plan or other adopted local, regional, or statewide plan.	Subsection 5.7.2.1, p. 5.7-4 Subsection 5.7.2.2, pp. 5.7- 5 to 5.7-6 Subsection 5.7.3.2, pp. 5.7- 15 to 5.7-23 Subsection 5.7.3.2.1, pp. 5.7-15 to 5.7-19 Subsection 5.7.3.3, pp. 5.7- 23 to 5.7-27 Subsection 5.7.3.3.3, pp. 5.7-23 to 5.7-27 Subsection 5.7.4, p. 5.7-28 Subsection 5.7.5, p. 5.7-29 Subsection 5.7.5, p. 5.7-29 Subsection 5.7.5.1, p. 5.7-29	Yes	

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Technical Area:	Noise	Project:	Willow Rock Energy Storage Center	Technical Staff:	Ardalan Raisi Sofi
Project Manager:	Leonidas Payne	Docket:	21-AFC-02	Technical Senior:	Shahab Khoshmashrab

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
		Subsection 5.7.5.2, p. 5.7-29		
Appendix B (g) (4) (A)	A land use map which identifies residences, hospitals, libraries, schools, places of worship, or other facilities where quiet is an important attribute of the environment within the area impacted by the proposed project. The area potentially impacted by the proposed project is that area where, during either construction or operation, there is a potential increase of 5 dB(A) or more, over existing background levels.	Subsection 5.7.2.2, pp. 5.7-5 to 5.7-6 Figure 5.7-1, p. 5.7-7	Yes	
Appendix B (g) (4) (B)	A description of the ambient noise levels at those sites identified under subsection (g)(4)(A) which the applicant believes provide a representative characterization of the ambient noise levels in the project vicinity, and a discussion of the general atmospheric conditions, including temperature, humidity, and the presence of wind and rain at the time of the measurements. The existing noise levels shall be determined by taking noise measurements for a minimum of 25 consecutive hours at a minimum of one site. Other sites may be monitored for a lesser duration at the applicant's discretion, preferably during the same 25-hour period. The results of the noise level measurements shall be reported as hourly averages in Leq (equivalent sound or noise level), Ldn (day-night sound or noise level) or CNEL (Community Noise Equivalent	Subsection 5.7.2.2, pp. 5.7-5 to 5.7-14 Table 5.7-3, p. 5.7-5 Table 5.7-4, p. 5.7-8 Table 5.7-5, pp. 5.7-9 to 5.7-10 Table 5.7-6, pp. 5.7-10 to 5.7-11	Yes	

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Technical Area:	Noise	Project:	Willow Rock Energy Storage Center	Technical Staff:	Ardalan Raisi Sofi
Project Manager:	Leonidas Payne	Docket:	21-AFC-02	Technical Senior:	Shahab Khoshmashrab

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
	Level) in units of dB(A). The L ₁₀ , L ₅₀ , and L ₉₀ values (noise levels exceeded 10 percent, 50 percent, and 90 percent of the time, respectively) shall also be reported in units of dB(A).			
Appendix B (g) (4) (C)	A description of the major noise sources of the project, including the range of noise levels and the tonal and frequency characteristics of the noise emitted.	Subsection 5.7.3.2.1, pp. 5.7-15 to 5.7-19 Subsection 5.7.3.3, pp. 5.7-23 to 5.7-27 Subsection 5.7.3.3.3, pp. 5.7-23 to 5.7-27 Table 5.7-8, pp. 5.7-17 to 5.7-18 Table 5.7-11, p. 5.7-24	Yes	
Appendix B (g) (4) (D)	An estimate of the project noise levels, during both construction and operation, at residences, hospitals, libraries, schools, places of worship or other facilities where quiet is an important attribute of the environment, within the area impacted by the proposed project.	Subsection 5.7.3.2.1, pp. 5.7-15 to 5.7-19 Subsection 5.7.3.3.3, pp. 5.7-23 to 5.7-27	Yes	
Appendix B (g) (4) (E)	An estimate of the project noise levels within the project site boundary during both construction and operation and the impact to the workers at the site due to the estimated noise levels.	Subsection 5.7.3.2.1, pp. 5.7-15 to 5.7-19 Subsection 5.7.3.3, pp. 5.7-23 to 5.7-27 Subsection 5.7.3.3.1, p. 5.7-23 Subsection 5.7.3.3.3, pp. 5.7-23 to 5.7-27	Yes	

Completeness:	Complete X Incomplete			Revision No. 0	Date: April 2024
Technical Area:	Noise	Project:	Willow Rock Energy Storage Center	Technical Staff:	Ardalan Raisi Sofi
Project Manager:	Leonidas Payne	Docket:	21-AFC-02	Technical Senior:	Shahab Khoshmashrab

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
Appendix B (g) (4) (F)	The audible noise from existing switchyards and overhead transmission lines that would be affected by the project and estimates of the future audible noise levels that would result from existing and proposed switchyards and transmission lines. Noise levels shall be calculated at the property boundary for switchyards and at the edge of the rights-ofway for transmission lines.	Subsection 5.7.3.3.2, p. 5.7-23	Yes	
Appendix B (i) (1) (A)	Tables that identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	Subsection 5.7.6, pp. 5.7-29 to 5.7-30 Table 5.7-14, pp. 5.7-29 to 5.7-30	Yes	
Appendix B (i) (1) (B)	Tables that identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies that would have permit approval or enforcement authority, but for the exclusive authority of the Commission to certify sites and related facilities.	Subsection 5.7.6, pp. 5.7-29 to 5.7-30 Table 5.7-14, pp. 5.7-29 to 5.7-30	Yes	
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an	Subsection 5.7.7, p. 5.7-31	Yes	

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Technical Area:	Noise	Project:	Willow Rock Energy Storage Center	Technical Staff:	Ardalan Raisi Sofi
Project Manager:	Leonidas Payne	Docket:	21-AFC-02	Technical Senior:	Shahab Khoshmashrab

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
	official who was contacted within each agency,			
	and provide the name of the official who will			
	serve as a contact person for Commission staff.			
Appendix B	A schedule indicating when permits outside the	N/A	N/A	
(i) (3)	authority of the Commission will be obtained and the steps the applicant has taken or plans			
	to take to obtain such permits.			

Completeness:	Complete X Incomplete			Revision No. 0	Date: April 2024
Technical Area:	Paleontological Resources	Project:	Willow Rock Energy Storage Center	Technical Staff:	Michael Turner
Project Manager:	Leonidas Payne	Docket:	21-AFC-02	Technical Senior:	Karim Abulaban

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (A)	Descriptions of all significant assumptions, methodologies, and computational methods used in arriving at conclusions in the document.	Section 5.8, p. 5.8-14; Subsection 5.8.1.2, pp. 5.8-3 to 5.8-4; Subsection 5.8.1.2.4, pp. 5.8-5 to 5.8-6; Subsection 5.8.1.2.5, pp. 5.8-6 to 5.8-7; Subsection 5.8.1.2.6, pp. 5.8-7 to 5.8-9	Yes	
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (B)	Descriptions, including methodologies and findings, of all major studies or research efforts undertaken and relied upon to provide information for the document; and a description of ongoing research of significance to the project (including expected completion dates; and	Section 5.8, p. 5.8-14; Subsection 5.8.1.2, pp. 5.8-3 to 5.8-4; Subsection 5.8.1.2.4, pp. 5.8-5 to 5.8-6; Subsection 5.8.1.2.5, pp. 5.8-6 to 5.8-7; Subsection 5.8.1.2.6, pp. 5.8-7 to 5.8-9	Yes	
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (C)	A list of all literature relied upon or referenced in the documents, along with brief discussions of the relevance of each such reference;	Subsection 5.8.6, p. 5.8-19	Yes	
Appendix B (g) (1)	provide a discussion of the existing site conditions, the expected direct, indirect, and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation. Describe the approach, list or projection or a combination, used to develop the cumulative setting for the	Subsection 5.8.1.1, p. 5.8-3; Subsection 5.8.1.2.3, pp. 5.8-4 to 5.8-5; Subsection 5.8.1.2.4, pp. 5.8-5 to 5.8-6; Subsection 5.8.1.2.5, pp. 5.8-6 to 5.8-6; Subsection 5.8.2.2, pp. 5.8-12 to 5.8-13; Subsection 5.8.3, pp. 5.8-13 to 5.8-15	Yes	

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Technical Area:	Paleontological Resources	Project:	Willow Rock Energy Storage Center	Technical Staff:	Michael Turner
Project Manager:	Leonidas Payne	Docket:	21-AFC-02	Technical Senior:	Karim Abulaban

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
	proposed project. Include any reference materials used such as general plan or other adopted local, regional, or statewide plan.			
Appendix B (g) (16) (A)	Identification of the physiographic province and a brief summary of the geologic setting, formations, and stratigraphy of the project area. The size of the paleontological study area may vary depending on the depositional history of the region.	Figures 5.8-1a to 5.8-1f; Subsection 5.8.1.1, p. 5.8-3	Yes	
Appendix B (g) (16) (B)	A discussion of the sensitivity of the project area described in subsection (g)(16)(A) and the presence and significance of any known paleontological localities or other paleontological resources within or adjacent to the project. Include a discussion of sensitivity for each geologic unit identified on the most recent geologic map at a scale of 1:24,000. Provide rationale as to why the sensitivity was assigned.	Subsection 5.8.1.2, pp. 5.8-3 to 5.8-5; Subsection 5.1.1.2.6, pp. 5.8-7 to 5.8-11	Yes	
Appendix B (g) (16) (C)	A summary of all local museums, literature searches and field surveys used to provide information about paleontological resources in the project area described in (g)(16)(A). Identify the dates of the surveys, methods used in completing the surveys, and the names and qualifications of the individuals conducting the surveys.	Subsection 5.8.1.2.4, pp. 5.8-5 to 5.8-6; Subsection 5.8.1.2.5, pp. 5.8-6 to 5.8-7	Yes	
Appendix B (g) (16) (D)	Information on the specific location of known palaeontologic resources, survey reports, locality records, and maps at a scale of	Subsection 5.8.1.2.4, pp. 5.8-5 to 5.8-7	Yes	

Completeness:	Complete X Inc	complete			Revision No.	0	Date: _A	April 2024
Technical Area:	Paleontological Res	sources Pr	roject:	Willow Rock Energy Storage Center	Technical Sta	aff:	Michael	Turner
Project Manager:	Leonidas Payne	Do	ocket:	21-AFC-02	Technical Se	nior:	Karim A	bulaban

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
	1:24,000, showing occurrences of fossil finds, if known, within a 1-mile radius of the project and related facilities shall be included in a separate appendix to the Application and submitted to the Commission under a request for confidentiality, pursuant to California Code of Regulations, title 20, section 2501 et seq.			
Appendix B (g) (16) (E)	A discussion of any educational programs proposed to enhance awareness of potential impacts to paleontological resources by employees, measures proposed for mitigation of impacts to known palaeontologic resources, and a set of contingency measures for mitigation of potential impacts to unknown paleontological resources.	Subsection 5.8.3.2, pp. 5.8-13 to 5.8-14	Yes	
Appendix B (i) (1) (A)	Tables that identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	Subsection 5.8.4, pp. 5.8- 15 to 5.8-18	Yes	
Appendix B (i) (1) (B)	Tables that identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and	Subsection 5.8.4.4, p. 5-8-18	Yes	

Completeness:	Complete X Inc	complete			Revision No.	0	Date: _A	April 2024
Technical Area:	Paleontological Res	sources Pr	roject:	Willow Rock Energy Storage Center	Technical Sta	aff:	Michael	Turner
Project Manager:	Leonidas Payne	Do	ocket:	21-AFC-02	Technical Se	nior:	Karim A	bulaban

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	INFORMATION REQUIRED TO MAKE APPLICATION CONFORM WITH REGULATIONS
	agencies that would have permit approval or enforcement authority, but for the exclusive authority of the Commission to certify sites and related facilities.			
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and provide the name of the official who will serve as a contact person for Commission staff.	Subsection 5.8.4.4, p. 5-8-18	Yes	
Appendix B (i) (3)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Subsection 5.8.5, p. 5-8-18	Yes	

Completeness:	Complete X Incomplete	<u> </u>		Revision No. <u>0</u> 1	Date: April July 2024
Technical Area:	Public Health	Project:	Willow Rock Energy Storage Center	Technical Staff:	Huei-An (Ann) Chu
Project Manager:	Leonidas Payne	Docket:	21-AFC-02	Technical Senior:	Joseph Hughes

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (A)	Descriptions of all significant assumptions, methodologies, and computational methods used in arriving at conclusions in the document.	Subsection 5.9.2.4, pp. 5.9-6 to 5.9-7, and <u>Appendix</u> 5.9D, Table 5.9D-1	Yes	
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (B)	Descriptions, including methodologies and findings, of all major studies or research efforts undertaken and relied upon to provide information for the document; and a description of ongoing research of significance to the project (including expected completion dates; and	Subsection 5.9.2, and Appendix 5.9D, Table 5.9D-1	Yes	
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (C)	A list of all literature relied upon or referenced in the documents, along with brief discussions of the relevance of each such reference;	Subsection 5.9.2, pp. 5.9-3 to 5.9-12	Yes	
Appendix B (g) (1)	provide a discussion of the existing site conditions, the expected direct, indirect, and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation. Describe the approach, list or projection or a combination, used to develop the cumulative setting for the proposed project. Include any reference materials used such as general plan or other adopted local, regional, or statewide plan.	Subsection 5.9.1, pp. 5.9-1 to 5.9-2	Yes	

Completeness:	Complete <u>X</u>	Incomplete	_ X		Revision No. <u>0</u> 1	Date: April July 2024
Technical Area:	Public Health		Projec	: Willow Rock Energy Storage Center	Technical Staff:	Huei-An (Ann) Chu
Project Manager:	Leonidas Payne		Docke	: 21-AFC-02	Technical Senior:	Joseph Hughes

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
Appendix B (g) (9) (A)	An assessment of the potential risk to human health from the project's hazardous air emissions using the Air Resources Board Hotspots Analysis and Reporting Program (HARP) (Health and Safety Code §§44360-44366) or its successor and Approved Risk Assessment Health Values. These values should include the cancer potency values and noncancer reference exposure levels approved by the Office of Environmental Health Hazard Assessment (OEHHA Guidelines, Cal-EPA 2005).	Subsection 5.9.2.5, pp. 5.9-7 to 5.9-12, Table 5.9-7, 5.9-8 5.9-9 and 5.9-10.	Yes	
Appendix B (g) (9) (B)	A listing of the input data and output results, in both electronic and print formats, used to prepare the HARP health risk assessment.	Willow Rock Energy Storage Center Supplemental AFC (A2-AFC-02) Air Quality and Public Health Data Files	Yes	
Appendix B (g) (9) (C)	Identification of available health studies through the local public health department concerning the potentially affected population(s) within a six-mile radius of the proposed power plant site related to respiratory illnesses, cancers or related diseases.	Subsection 5.9.1, pp. 5.9-1 to 5.9-2	Yes	
Appendix B (g) (9) (D)	A map showing sensitive receptors within the area exposed to the substances identified in subsection (g)(9)(A).	Table 5.9-1, and Appendix 5.9A, Table 5.9A-1 Willow Rock Data Adequacy Response, TN256622, Attachment PH-1	No Yes	Table 5.9-1 and Table 5.9A-1 list the sensitive receptors within the Project Area, but there is no map.
Appendix B (g) (9) (E)	For this section, the following definitions apply:			

Completeness: Complete **X** Incomplete Revision No. 01 Date: April July 2024 Technical Area: **Public Health** Willow Rock Energy Storage Center Technical Staff: Huei-An (Ann) Chu Project: Project Manager: Docket: 21-AFC-02 Technical Senior: Joseph Hughes Leonidas Payne

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
Appendix B (g) (9) (E) (i)	A sensitive receptor refers to infants and children, the elderly, and the chronically ill, and any other member of the general population who is more susceptible to the effects of the exposure than the population at large;	Subsection 5.9.1.1, p. 5.9-2, Table 5.9-1, and Appendix 5.9A, Table 5.9A-1	Yes	
Appendix B (g) (9) (E) (ii)	An acute exposure is one that occurs over a time period of less than or equal to one (1) hour; and	Subsection 5.9.2.1.2, p.5.9-3, Subsection 5.9.2.5.4, p. 5.9-10	Yes	
Appendix B (g) (9) (E) (iii)	A chronic exposure is one that is greater than twelve (12) percent of a lifetime of seventy (70) years.	Subsection 5.9.2.1.2, p.5.9-3, Subsection 5.9.2.5.3, p. 5.9-10	Yes	
Appendix B (i) (1) (A)	Tables that identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	Subsection 5.9.5, pp.5.9-15 to 5.9-16 [Subsection 5.9.5 presents applicable laws, ordinances, regulations, and standards (LORS), permit requirements, schedules, and agency contacts, but not in the format of tables or matrix.]	Yes	
Appendix B (i) (1) (B)	Tables that identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies that would have permit approval or enforcement authority, but for the exclusive authority of the Commission to certify sites and related facilities.	Subsection 5.9.5, pp.5.9-15 to 5.9-16, Table 5.9-11 [Subsection 5.9.5 presents applicable LORS, permit requirements, schedules, and agency contacts, but not in the format of tables or matrix.]	Yes	

Completeness: Complete **X** Incomplete Revision No. 0<u>1</u> Date: April <u>July</u> 2024 Technical Area: **Public Health** Willow Rock Energy Storage Center Technical Staff: Huei-An (Ann) Chu Project: Project Manager: Docket: 21-AFC-02 Technical Senior: Joseph Hughes Leonidas Payne

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and provide the name of the official who will serve as a contact person for Commission staff.	Table 5.9-11, p.5.9-16	Yes	
Appendix B (i) (3)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Subsection 5.9.5.4, p. 5.9-16	Yes	

Completeness:	Complete X Incomplete			Revision No. 0	Date: April 2024
Technical Area:	Reliability	Project:	Willow Rock Energy Storage Center	Technical Staff:	Kenneth Salyphone
Project Manager:	Leonidas Payne	Docket:	21-AFC-02	Technical Senior:	Shahab Khoshmashrab

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	INFORMATION REQUIRED TO MAKE APPLICATION CONFORM WITH REGULATIONS
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (A)	Descriptions of all significant assumptions, methodologies, and computational methods used in arriving at conclusions in the document.	N/A	N/A	
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (B)	Descriptions, including methodologies and findings, of all major studies or research efforts undertaken and relied upon to provide information for the document; and a description of ongoing research of significance to the project (including expected completion dates; and	N/A	N/A	
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (C)	A list of all literature relied upon or referenced in the documents, along with brief discussions of the relevance of each such reference;	N/A	N/A	
Appendix B (h) (3) (A)	A discussion of the sources and availability of the fuel or fuels to be used over the estimated service life of the facilities.	Subsection 2.2.4 p. 2-35 Table 5.1-2 p. 5.1-4	Yes	
Appendix B (h) (3) (B)	A discussion of the anticipated service life and degree of reliability expected to be achieved by the proposed facilities on consideration of:	Subsection 2.2.2 pp. 2.34 to 2-35	Yes	
Appendix B (h) (3) (B) (i)	Expected overall availability factor, and annual and lifetime capacity factors;	Subsection 2.1.3 p. 2-13 Subsection 2.2.2.1 p. 2-34	Yes	
Appendix B (h) (3) (B) (ii)	The demonstrated or anticipated feasibility of the technologies, systems, components, and measures proposed to be employed in the facilities, including the power generation system, the heat dissipation system, the water supply system, the reinjection system, the atmospheric emission control system, resource	Subsection 2.1.3 pp. 2-13 to 2-16 TN# 242799 att DA20-1 A- CAES Historical Operational Summary	Yes	

Completeness:	Complete X Inc	complete		Revision No. 0	Date: April 2024
Technical Area:	Reliability	Project:	Willow Rock Energy Storage Center	Technical Staff:	Kenneth Salyphone
Project Manager:	Leonidas Payne	Docket:	21-AFC-02	Technical Senior:	Shahab Khoshmashrab

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
	conveyance lines, and the waste disposal system;			
Appendix B (h) (3) (B) (iii)	Geologic and flood hazards, meteorologic conditions and climatic extremes, and cooling water availability;	Section 5.4 pp. 5.4-1 to 5.4-16 Section 5.11 pp. 5.11-1 to 5.11-16 Section 5.15 pp. 5.15-1 to 5.15-19	Yes	
Appendix B (h) (3) (B) (iv)	Special design features adopted by the applicant or resource supplier to ensure power plant reliability including equipment redundancy; and	Subsection 2.2.3 pp. 2-34	Yes	
Appendix B (h) (3) (B) (v)	For technologies not previously installed and operated in California, the expected power plant maturation period.	TTN# 242799 att DA20-1 A-CAES Historical Operational Summary	Yes	
Appendix B (i) (1) (A)	Tables that identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	N/A	N/A	
Appendix B (i) (1) (B)	Tables that identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and	N/A	N/A	

Completeness:	Complete X Incomplete			Revision No. 0	Date: April 2024
Technical Area:	Reliability	Project:	Willow Rock Energy Storage Center	Technical Staff:	Kenneth Salyphone
Project Manager:	Leonidas Payne	Docket:	21-AFC-02	Technical Senior:	Shahab Khoshmashrab

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
	agencies that would have permit approval or enforcement authority, but for the exclusive authority of the Commission to certify sites and related facilities.			
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and provide the name of the official who will serve as a contact person for Commission staff.	N/A	N/A	
Appendix B (i) (3)	A schedule indicating when permits outside the authority of the Commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	N/A	N/A	

Completeness:	Complete X Incomplete	_ X		Revision No. <u>0</u> 1	Date: April July 2024
Technical Area:	Socioeconomics	Project:	Willow Rock Energy Storage Center	Technical Staff:	Ellen LeFevre
Project Manager:	Leonidas Payne	Docket:	21-AFC-02	Technical Senior:	Steven Kerr

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	INFORMATION REQUIRED TO MAKE APPLICATION CONFORM WITH REGULATIONS
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (A)	Descriptions of all significant assumptions, methodologies, and computational methods used in arriving at conclusions in the document.	Section 5.10.3.1, p. 5.10-11	Yes	
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (B)	Descriptions, including methodologies and findings, of all major studies or research efforts undertaken and relied upon to provide information for the document; and a description of ongoing research of significance to the project (including expected completion dates; and	NA	Yes	
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (C)	A list of all literature relied upon or referenced in the documents, along with brief discussions of the relevance of each such reference;	NA	Yes	
Appendix B (g) (1)	provide a discussion of the existing site conditions, the expected direct, indirect, and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation. Describe the approach, list or projection or a combination, used to develop the cumulative setting for the proposed project. Include any reference materials used such as general plan or other adopted local, regional, or statewide plan.	Section 5.10.4, 5.10.5, p. 5.10-22 to 5.10-23; Section 5.0, Table 5.0-2, pp. 5.0-5 to 5.0-7	Yes	
Appendix B	A description of the socioeconomic	Section 5.10.2, pp. 5.10-3 to	Yes	
(g) (7) (A)	circumstances of the vicinity and region	5.10-11		

Completeness:CompleteXIncompleteXTechnical Area:SocioeconomicsProject:Willow Rock Energy Storage CenterTechnical Staff:Ellen LeFevreProject Manager:Leonidas PayneDocket:21-AFC-02Technical Senior:Steven Kerr

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
	affected by construction and operation of the project. Include:			
Appendix B (g) (7) (A) (i)	The economic characteristics, including the economic base, fiscal resources, and a list of the applicable local agencies with taxing powers and their most recent and projected revenues;	Section 5.10.2.4, Table 5.10-6, pp. 5.10-8 to 5.10-9	Yes	
Appendix B (g) (7) (A) (ii)	The social characteristics, including population and demographic and community trends;	Section 5.10.2.1, Table 5.10-1, 5.10-2, pp. 5.10-3 to 5.10-4	Yes	
Appendix B (g) (7) (A) (iii)	Existing and projected unemployment rates;	Section 5.10.2.3, Table 5.10-5, pp. 5.10-7 to 5.10-8; Willow Rock Data Adequacy Response, TN256622	No <u>Yes</u>	Provide the projected unemployment rates.
Appendix B (g) (7) (A) (iv)	Availability of skilled workers by occupation required for construction and operation of the project;	Section 5.10.3.2.1, Table 5.10-10, p. 5.10-16; Section 5.10.3.3.2, pp. 5.10-20	Yes	
Appendix B (g) (7) (A) (v)	Availability of temporary and permanent housing and current vacancy rate; and	Section 5.10.2.2, Table 5.10-3, p. 5.10-7	Yes	
Appendix B (g) (7) (A) (vi)	Capacities, service standards, existing and expected use levels, and planned expansion of utilities (gas, water, and waste) and public services, including fire protection, law enforcement, emergency response, medical facilities, other assessment districts, school districts, parks and recreation facilities, libraries, and other public facilities. For projects outside metropolitan areas with a population of 500,000 or more, information for each school district	Section 5.10.2.5, 5.10.2.6.2, 5.10.2.6.1, 5.10.2.6.3, 5.10.2.7; Table 5.10-7, pp. 5.10-10 to 5.10-11; Willow Rock Data Adequacy Response, TN256622	No Yes	Provide the capacities, service standards, existing and expected use levels, and planned expansion of parks and recreation facilities, libraries, and other public facilities.

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SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
	shall include current enrollment and yearly expected enrollment by grade level groupings, excluding project-related changes for the duration of the project schedule.			
Appendix B (g) (7) (B)	A discussion of the socioeconomic impacts caused by the construction and operation of the project (note year of estimate, model, if used, and appropriate sources), including:	Section 5.10.3.2.4, p. 5.10-19; Willow Rock Data Adequacy Response, TN256622	No <u>Yes</u>	Provide the year of estimate used.
Appendix B (g) (7) (B) (i)	An estimate of the number of workers to be employed each month by occupation during construction, and for operations, an estimate of the number of permanent operations workers during a year;	Section 5.10.3.2.1, 5.10.3.3.1, Table 5.10-8, pp. 5.10-12 to 5.10-15, p. 5.10- 20	Yes	
Appendix B (g) (7) (B) (ii)	An estimate of the percentage of non-local workers who will relocate to the project area to work during the project construction and operation;	Section 5.10.3.2.3, 5.10.3.2.1, pg 5.10-12, pp. 5.10-16 to 5.10-17	Yes	
Appendix B (g) (7) (B) (iii)	An estimate of the potential population increase caused directly and indirectly by the project;	Section 5.10.3.2.2, 5.10.3.3.2, p. 5.10-16, p. 5.10-20	Yes	
Appendix B (g) (7) (B) (iv)	The potential impact of population increase on housing during the construction and operations phases;	Section 5.10.3.2.3, 5.10.3.3.3, p. 5.10-16, p. 5.10-20	Yes	
Appendix B (g) (7) (B) (v)	The potential impacts, including additional costs and ability to meet local service standards, on utilities (gas, water, and waste) and public services, including fire, law enforcement, emergency response, medical facilities, other assessment districts, and school districts.	Sections 5.10.3.2.3, 5.10.3.2.7, 5.10.3.2.8, 5.10.3.3.6, 5.10.3.3.7, 5.10.3.3.8, p. 5.10-19, p. 5.10-21;	No Yes	Provide the potential impacts, including additional costs and the ability to meet local service standards, for parks and recreation facilities, libraries, and other public facilities.

Completeness:	Complete X Incomplete	<u>X</u>		Revision No. <u>01</u>	Date: April July 2024
Technical Area:	Socioeconomics	Project:	Willow Rock Energy Storage Center	Technical Staff:	Ellen LeFevre
Project Manager:	Leonidas Payne	Docket:	21-AFC-02	Technical Senior:	Steven Kerr

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
	Include response times to hospitals and for police protection, fire projection, emergency services, parks and recreation facilities, libraries, and other public facilities. For projects outside metropolitan areas with a population of 500,000 or more, information on schools shall include project-related enrollment changes by grade level groupings and associated facility and staffing impacts by school district during the construction and operating phases;	Willow Rock Data Adequacy Response, TN256622		
Appendix B (g) (7) (B) (vi)	An estimate of applicable school impact fees;	Willow Rock Data Adequacy Response, TN256622	No Yes	Provide an estimate of the applicable school impact fees.
Appendix B (g) (7) (B) (vii)	An estimate of the total construction payroll and separate estimates of the total operation payroll for permanent and short-term (contract) operations employees;	Sections 5.10.3.2.4, 5.10.3.3.4, p. 5.10-17, p. 5.10-20	Yes	
Appendix B (g) (7) (B) (viii)	An estimate of the expenditures for locally purchased materials for the construction and operation phases of the project;	Section 5.10.3.2.4, p. 5.10-17; Gem Data Adequacy Master Response No 1, TN242776, p. 19	No Yes	Provide an estimate of the expenditures for locally purchased materials for the operation phase of the project.
Appendix B (g) (7) (B) (ix)	An estimate of the capital cost (plant and equipment) of the project;	Section 5.10.3.2.4, p. 5.10-17	Yes	
Appendix B (g) (7) (B) (x)	An estimate of sales taxes generated during construction and separately during an operational year of the project;	Section 5.10.3.2.5, p. 5.10- 19; Gem Data Adequacy Master Response No 1, TN242776, p. 19	No Yes	Provide an estimate of the sales taxes generated during an operational year of the project.
Appendix B (g) (7) (B) (xi)	An estimate of property taxes generated during an operational year of the project;	Section 5.10.3.3.5, p. 5.10- 21	Yes	

Completeness: Complete X Incomplete X Incomplete X Incomplete X Project: Willow Rock Energy Storage Center Technical Staff: Date: April July 2024

Technical Area: Socioeconomics Project Manager: Leonidas Payne Docket: 21-AFC-02 Technical Senior: Steven Kerr

SITING REGULATIONS	INFORMATION	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
Appendix B (g) (7) (B) (xii)	The expected direct, indirect, and induced income and employment effects due to construction and operation of the project; and	Section 5.10.3.2.4, 5.10.3.3.4, Tables 5.10-15, 5.10-16, pp. 5.10-18 to 5.10-21	Yes	
Appendix B (g) (7) (B) (xiii)	A discussion of impacts to environmental justice populations by technical areas and whether any impacts would disproportionately affect the environmental justice populations.	Section 5.10.3.3.9, pp. 5.10- 21 to 5.10-22; Appendix 5.10A	Yes	
Appendix B (i) (1) (A)	Tables that identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	Section 5.10.6, Table 5.10-18, pp. 5.10-23 to 5.10-4	Yes	
Appendix B (i) (1) (B)	Tables that identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies that would have permit approval or enforcement authority, but for the exclusive authority of the Commission to certify sites and related facilities.	Section 5.10.6, Table 5.10-18, pp. 5.10-23 to 5.10-24	Yes	
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency,	Section 5.10.7, Table 5.10-19, p. 5.10-25	Yes	

Completeness: Complete X Incomplete X Incomplete X Incomplete X Project: Willow Rock Energy Storage Center Technical Staff: Date: April July 2024

Technical Area: Socioeconomics Project Manager: Leonidas Payne Docket: 21-AFC-02 Technical Senior: Steven Kerr

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
	and provide the name of the official who will serve as a contact person for Commission staff.			
Appendix B (i) (3)	A schedule indicating when permits outside the authority of the Commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Section 5.10.8, p. 5.10-25	Yes	

Completeness: Complete X Incomplete

Technical Area: Soils Project: Willow Rock Energy Storage Center Technical Staff: James Ackerman

Project Manager: Leonidas Payne Docket: 21-AFC-02 Technical Senior: Abdel-Karim Abulaban

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (A)	Descriptions of all significant assumptions, methodologies, and computational methods used in arriving at conclusions in the document.	Subsection 5.11.1, p. 15.11-1. Subsection 5.11.2, Table 5.11-1, Figures 5.11-1a & 5.11-1b, p.p. 5.11-2 thru 5.11-9. Subsection 5.11.3, p.p. 5.11-9 thru 5.11-11. Subsection 5.11.4, p. 5.11-11. Subsection 5.11.5, p.p. 5.11-11 thru 5.11-12. Subsection 5.11.6, Table 5.11-2, p.p. 5.11-12 thru 5.11-13. Subsection 5.11.7, Table 5.11-3, p.p. 5.11-13 thru 5.11- 14. Subsection 5.11.8, p. 5.11- 14.	Yes	
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (B)	Descriptions, including methodologies and findings, of all major studies or research efforts undertaken and relied upon to provide information for the document; and a description of ongoing research of significance to the project (including expected completion dates; and	Subsection 5.11.1, p. 15.11-1. Subsection 5.11.2, Table 5.11-1, Figures 5.11-1a & 5.11-1b, p.p. 5.11-2 thru 5.11-9. Subsection 5.11.3, p.p. 5.11-9 thru 5.11-11. Subsection 5.11.4, p. 5.11-11. Subsection 5.11.5, p.p. 5.11-11 thru 5.11-12. Subsection 5.11.6, Table 5.11-2, p.p. 5.11-12 thru 5.11-13. Subsection 5.11.7, Table 5.11-3, p.p. 5.11-13 thru 5.11-14.	Yes	
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (C)	A list of all literature relied upon or referenced in the documents, along with brief discussions of the relevance of each such reference;	Subsection 5.11.9, p. 5.11-15.	Yes	

Completeness: Complete X Incomplete

Technical Area: Soils Project: Willow Rock Energy Storage Center Technical Staff: James Ackerman

Project Manager: Leonidas Payne Docket: 21-AFC-02 Technical Senior: Abdel-Karim Abulaban

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
Appendix B (g) (1)	provide a discussion of the existing site conditions, the expected direct, indirect, and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation. Describe the approach, list or projection or a combination, used to develop the cumulative setting for the proposed project. Include any reference materials used such as general plan or other adopted local, regional, or statewide plan.	Subsection 5.11.2, Table 5.11-1, Figures 5.11-1a & 5.11-1b, p.p. 5.11-2 thru 5.11-9. Subsection 5.11.3, p.p. 5.11-9 thru 5.11-11. Subsection 5.11.4, p. 5.11-11. Subsection 5.11.5, p.p. 5.11-11 thru 5.11-12. Subsection 5.11.6, Table 5.11-2, p. 5.11-12.	Yes	
Appendix B (g) (15) (A)	A map at a scale of 1:24,000 and written description of soil types and all agricultural land uses that will be affected by the proposed project. The description shall include:	Subsection 5.11.2, Figures 5.11-1a & 5.11-1b, Table 5.11-1, p.p. 5.11-2 thru 5.11-9. Subsection 5.11.2.1, p. 5.11-6. Subsection 5.11.2.3, p. 5.11-6.	Yes	
Appendix B (g) (15) (A) (i)	The depth, texture, permeability, drainage, erosion hazard rating, and land capability class of the soil;	Table 5.11-1, p.p. 5.11-2 thru 5.11-3.	Yes	
Appendix B (g) (15) (A) (ii)	An identification of other physical and chemical characteristics of the soil necessary to allow an evaluation of soil erodibility, permeability, re-vegetation potential, and cycling of pollutants in the soil-vegetation system;	Table 5.11-1, p.p. 5.11-2 thru 5.11-3.	Yes	
Appendix B (g) (15) (A) (iii)	The location of any proposed fill disposal or fill procurement (borrow) sites; and	Figure 1-2, p. 1-3. Figure 1-3, p. 1-4. Figure 1-4, p. 1-7. Figure 1-	Yes	

Completeness:CompleteXIncompleteTechnical Area:SoilsProject:Willow Rock Energy Storage CenterRevision No.0Date: April 2024Project Manager:Leonidas PayneDocket:21-AFC-02Technical Senior:Abdel-Karim Abulaban

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
		5, p. 1-8. Figure 2-1, p. 2-5. Figure 2-2, p. 2-6. Figure 2-3, p. 2-8. Figure 2-4, p. 2-9. Figure 5.11-1b, p. 5.11-5. Appendix 15.5B		
Appendix B (g) (15) (A) (iv)	The location of any contaminated soils that could be disturbed by project construction.	N/A	N/A	
Appendix B (g) (15) (B)	An assessment of the effects of the proposed project on soil resources and agricultural land uses. This discussion shall include:	Subsection 5.11.2.1, p. 5.11-6. Subsection 5.11.2.5, p. 5.11-7.	Yes	
Appendix B (g) (15) (B) (i)	The quantification of accelerated soil loss due to wind and water erosion; and	Subsection 5.11.2.1, p. 5.11-6. Subsection 5.11.2.5, p. 5.11-7.	N/A	
Appendix B (g) (15) (B) (ii)	The effect of power plant emissions on surrounding soil-vegetation systems.	N/A	N/A	
Appendix B (i) (1) (A)	Tables that identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	Subsection 5.11.6, Table 5.11-2, p.p. 5.11-12 thru 5.11-13.	Yes	
Appendix B (i) (1) (B)	Tables that identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted	Subsection 5.11.7, Table 5.11-3, p.p. 5.11-13 thru 5.11-14.	Yes	

Completeness:	Complete X Incomplete			Revision No. 0	Date: April 2024
Technical Area:	Soils	Project:	Willow Rock Energy Storage Center	Technical Staff:	James Ackerman
Project Manager:	Leonidas Payne	Docket:	21-AFC-02	Technical Senior:	Abdel-Karim Abulaban

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
	local, regional, state and federal land use plans, and agencies that would have permit approval or enforcement authority, but for the exclusive authority of the Commission to certify sites and related facilities.			
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and provide the name of the official who will serve as a contact person for Commission staff.	Subsection 5.11.7, Table 5.11-3, p.p. 5.11-13 thru 5.11-14.	Yes	
Appendix B (i) (3)	A schedule indicating when permits outside the authority of the Commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Subsection 5.11.8, p. 5.11-14.	Yes	

Completeness: Complete X Incomplete X Revision No. 01 Date: April July 2024

Tackwise A No. 2015 - April July 2024

Ashley Gutierrez,

Technical Area: Traffic and Transportation Project: Willow Rock Energy Storage Center Technical Staff: Ashley Gutterrez, Francisco Martin

Project Manager: Leonidas Payne Docket: 21-AFC-02 Technical Senior: Steven Kerr

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (A)	Descriptions of all significant assumptions, methodologies, and computational methods used in arriving at conclusions in the document.	Section 5.12.2.1, pp. 5.12-8 to 5.12-9 Section 5.12.2.2, pp. 5.12-11 to 5.12-12	Yes	
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (B)	Descriptions, including methodologies and findings, of all major studies or research efforts undertaken and relied upon to provide information for the document; and a description of ongoing research of significance to the project (including expected completion dates; and	Section 5.12.2.2, pp. 5.12-9 to 5.12-13	Yes	
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (C)	A list of all literature relied upon or referenced in the documents, along with brief discussions of the relevance of each such reference;	Section 5.12.8, p. 5.12-19	Yes	
Appendix B (g) (1)	provide a discussion of the existing site conditions, the expected direct, indirect, and cumulative impacts due to the construction, operation and maintenance of the project, the	Section 5.12.1, pp. 5.12-1 to 5.12-8	Yes	
	measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation. Describe the approach, list or projection or a combination, used to develop the cumulative setting for the proposed project. Include any reference materials used such as general plan or other adopted local, regional, or statewide plan.	Sections 5.12.2 and 5.12.3, pp. 5.12-8 to 5.12-14		

Completeness: Complete X Incomplete X

Revision No. <u>01</u> Date: <u>April **July** 2024</u>

Technical Area: **Traffic and Transportation**

Project: Willow Rock Energy Storage Center

Ashley Gutierrez, Francisco Martin

Project Manager: Leonidas Payne

Docket: 21-AFC-02

Technical Senior: Steven Kerr

Technical Staff:

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
Appendix B (g) (5) (A)	A regional transportation setting, on topographic maps (scale of 1:250,000), identifying the project location and major transportation facilities. Include a reference to the transportation element of any applicable local or regional plan.	Figure 5.12-1 and Figure 5.12-2, pp 5.12-4 to 5.12-5 Willow Rock Data Adequacy Response, TN256622, Figure 5.12-1, via KiteWorks	No Yes	Although truck route maps are provided on Figures 5.12-1 and 5.12-2, Section 5.12 excludes a figure identifying the project location and major transportation facilities in the vicinity of the project site. A regional transportation setting map should be provided.
Appendix B (g) (5) (B)	If the proposed project including any linear facility is to be located within four miles of an airport, a planned or proposed airport runway, or an airport runway under construction, discuss the project's compliance with the applicable sections of the current Federal Aviation Regulation Part 77 – Safe, Efficient Use, and Preservation of the Navigable Airspace, specifically any potential to obstruct or impede air navigation generated by the project during construction or operation; such as, a thermal plume, a visible water vapor plume, glare, electrical interference, or surface structure height. The discussion should include:	Section 5.12.1.1.6, pp. 5.12-2 to 5.12-3 Section 5.12.2.6, p. 5.12-13 Section 5.6.2.2.5, pp. 5.6-11 to 5.6-1. Section 5.6.2.2.6, p. 5.6-12 Appendix 5.6C Willow Rock Data Adequacy Response, TN256622, TRAN-2	No Yes	A portion of the WRESC gen-tic line passes along Mojave-Tropico Road within approximately 0.9 mile west of the closest runway edge at Rosamond Sky Park. FAA Section 77.9 (b)(1) requires notification to the FAA for, "Any construction or alteration that exceeds an imaginary surface extending outward and upward at any of the following slopes: 100 to 1 for horizontal distance of 20,000 feet from the nearest point of the nearest runway with its longest runway more than 3,200 feet in actual length, excluding heliports." The imaginary surface for a transmission line pole at approximately 0.9 mile west would be 48 feet tall. Determine which transmission poles would require a Notice of Construction and file a FAA Form 7460-1 to receive a no hazard determination from the FAA for each of them. File FAA determinations to the project docket upon receipt.

Willow Rock Energy Storage Center

Completeness: Date: April July 2024 Complete X Incomplete X Revision No. 01 Ashley Gutierrez, **Traffic and Transportation** Technical Staff:

Project:

Francisco Martin

21-AFC-02 Project Manager: Leonidas Payne Docket: Technical Senior: Steven Kerr

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
				The U.S. Department of Defense (DOD) has established a Military Aviation and Installation Assurance Siting Clearinghouse (Clearinghouse) to protect the Department's mission capabilities from incompatible energy development. The DOD conducts both formal and informal project reviews and encourages developers to request an informal review early in the process. The goal of the informal review process is to identify areas of potential impacts and refer proponents to the appropriate DOD stakeholders for further discussion before the project is submitted to the Federal Aviation Administration's (FAA's Obstruction Evaluation/Airport Airspace Analysis (OEAAA) process. For more information see: https://www.dodclearinghouse.osd.mil/Project-Review/https://www.dodclearinghouse.osd.mil/Project-Review/https://www.dodclearinghouse.osd.mil/Project-Review/https://www.dodclearinghouse.osd.mil/Project-Review/https://www.dodclearinghouse.osd.mil/Project-Review/https://www.dodclearinghouse.osd.mil/Project-Review/https://www.dodclearinghouse.osd.mil/Project-Review/https://www.dodclearinghouse.osd.mil/Project-Review/https://www.dodclearinghouse.osd.mil/Project-Review/https://www.dodclearinghouse.osd.mil/Project-Review/https://www.dodclearinghouse.osd.mil/Project-Review/https://www.dodclearinghouse.osd.mil/Project-Review/https://www.dodclearinghouse.osd.mil/Project-Review/https://www.dodclearinghouse.osd.mil/Project-Review/https://www.dodclearinghouse.osd.mil/Project-Review/https://www.dodclearinghouse.osd.mil/Project-Review/https://www.dodclearinghouse.osd.mil/Project-Review/https://www.dodclearinghouse.osd.mil/Project-Review/https://www.dodclearinghouse.osd.mil/Project-Review/https://www.dodclearinghouse.osd.mil/Project-Review/https://www.dodclearinghouse.osd.mil/Project-Review/https://www.dodclearinghouse.osd.mil/Project-Review/https://www.dodclearinghouse.osd.mil/Project-Review/https://www.dodclearinghouse.osd.mil/Project-Review/https://www.dodclearinghouse.osd.mil/Project-Review/https://www.dodclearinghouse.osd.mil/Project-Review/
				As noted in Appendix 5.6C, the project is near Edwards Air Force Base. To appropriately notify DOD through their federal channels, undertake and document an informal DOD Clearinghouse process prior to submission of FAA Airspace Analysis. The DOD Siting Clearinghouse— Informal Review Request Form is available at: https://www.dodclearinghouse.osd.mil/Portals/1 34/DOD Siting Clearinghouse Informal Request—Form 2023.pdf. In accordance with Public

Technical Area:

Completeness: Complete X Incomplete X

Date: April July 2024 Revision No. 01

Traffic and Transportation Technical Area:

Technical Staff:

Ashley Gutierrez,

Project: Willow Rock Energy Storage Center

Francisco Martin

Project Manager: Leonidas Payne

21-AFC-02 Docket:

Technical Senior: Steven Kerr

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
				Resources Code, section 25519.5, file information received from DOD to the project docket upon receipt.
Appendix B (g) (5) (B) (i)	A map at a scale of 1:24,000 that displays the airport or airstrip runway configuration, the airport influence area including all safety zones, and the proposed power plant site and related facilities.	in Appendix 5.6A, Figure 5.6A-7, Figure 5.6A-8	Yes	
Appendix B (g) (5) (B) (ii)	A thermal plume analysis that describes the plume's velocity;	N/A Willow Rock Data Adequacy Response, TN256622, TRAN-3 and Vertical Plume Velocity Assessment, TN257516	No Yes	WRESC would have five air powered turbine generators with air exhaust stacks, two emergency diesel-fired engines and fin fan coolers which would result in thermal plumes. Please provide a thermal plume analysis which describes the plumes velocity and provides the exhaust parameters to ensure thermal plumes would not impact aviation activities.
Appendix B (g) (5) (B) (iii)	A discussion of the project's conformance with applicable Airport Land Use Compatibility Plan policies; and	Section 5.6.2.6, p. 5.6-23 Section 5.12.2.6, p 5.12-13	Yes	
Appendix B (g) (5) (B) (iv)	Copies of FAA Form 7460-1, Notice of Proposed Construction or Alteration, that were submitted or approved for any project component requiring notice.	Section 5.6.2.2.5, pp. 5.6-11 to 5.6-12 Willow Rock Data Adequacy Response, TN256622, TRAN-2	No Yes	FAA Form 7460-1 has not been filed for the project's transmission poles. See discussion under siting regulations Appendix B (g) (5) (B)
Appendix B (g) (5) (C)	An evaluation of the project's potential impacts related to vehicle miles traveled (VMT) that may include:	Section 5.12.2.1, pp. 5.12-8 to 5.12-9	No Yes	A VMT analysis is provided for the construction phase, in addition to a VMT screening evaluation for Cumulative conditions. However, Section 5.12.2.1 does not adequately document the

Completeness: Complete X Incomplete X

Traffic and Transportation Technical Area: Project: Willow Rock Energy Storage Center

Francisco Martin 21-AFC-02 Project Manager: Leonidas Payne Docket: Technical Senior: Steven Kerr

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
		Section 5.12.2.2.2 VMT Impacts, pp 5.12-11 to 5.12-12		basis for the 27.7 VMT per capita significance threshold.
		Section 5.12.3, p. 5.12-14		
		Willow Rock Data Adequacy Response, TN256622, TRAN-6 p. 3		
Appendix B (g) (5) (C) (i)	The local jurisdiction's thresholds of significance;	Section 5.12.2.1, pp. 5.12-8 to 5.12-9 Willow Rock Data Adequacy Response TN256622, TRAN-6 p. 3	No Yes	Section 5.12.2.1 should specify if Kern Council of Governments (COG) has adopted VMT analysis guidelines and significance criteria. If not, it is appropriate to defer to the guidelines provided in the Technical Advisory on Evaluating Transportation Impacts in CEQA (OPR Technical Advisory, December 2018, California Governor's Office of Planning and Research).
				The OPR Technical Advisory recommends a significance threshold set at 85% of existing VMT per worker to evaluate VMT impacts for non-residential land use projects.
Appendix B (g) (5) (C) (ii)	Methodologies (such as local VMT Evaluation Tool);	Section 5.12.2.1, pp. 5.12-8 to 5.12-9	No Yes	The 27.7 VMT per capita threshold is not consistent with OPR guidance. The OPR Technical Advisory recommends a significance
		Willow Rock Data Adequacy Response TN256622, TRAN-6 pp. 3 to 6		threshold set at 85% of existing VMT per worker to evaluate VMT impacts for non-residential land use projects.

Date: April July 2024

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Revision No. 01

Technical Staff:

Completeness: Complete X Incomplete X

Traffic and Transportation Technical Area: Project: Willow Rock Energy Storage Center

Francisco Martin Docket: 21-AFC-02 Project Manager: Leonidas Payne Technical Senior: Steven Kerr

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
Appendix B (g) (5) (C) (iii)	VMT heat maps; and	Willow Rock Data Adequacy Response TN256622, p. 6	No Yes	Section 5.12.2.1 excludes discussion of VMT heat maps, which if available, would be provided by Kern COG. If Kern
Appendix B (g) (5) (C) (iv)	Transportation demand management plans and any documents supporting the project applicant's CEQA determination.	Section 5.12.2.2.2, pp. 5.12-11 to 5.12-12 Willow Rock Data Adequacy Response TN256622, TRAN-6	No Yes	The VMT impact analysis documented in Section 5.12.2.2.2 should be re-evaluated with a VMT significance threshold that is consistent with the recommended threshold per the OPR Technical Advisory. If the conclusion of a less than significant VMT impact remains the same, then mitigation measures such as transportation demand management (TDM) plans are not necessary. However, if the revised VMT analysis concludes that the VMT impact is significant, then a corresponding TDM plan should be prepared to adequately address potential VMT impacts.
Appendix B (g) (5) (D)	An identification, on topographic maps at a scale of 1:24,000, and a description of existing and planned roads, rail lines, (including light rail), bike trails, airports, bus routes serving the project vicinity, pipelines, and canals in the project area affected by or serving the proposed facility. For each road identified, include the following, where applicable:	Willow Rock Data Adequacy Response TN256622, Figure 5.12-1 (uploaded using KiteWorks)	No <u>Yes</u>	Provide a map of the regional transportation setting that includes all existing roads, railroad corridors and new roads planned as part of the project's construction.
Appendix B (g) (5) (D) (i)	Road classification and design capacity;	Summary of the LOS-Based Traffic Study Methodology to be Implemented for WRESC, TN257525	No Yes	Road classification and design capacity information is not included.

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Revision No. 01 Date: April July 2024

Technical Staff:

Ashley Gutierrez,

Completeness: Complete X Incomplete X

Technical Area:

Traffic and Transportation

Project: Willow Rock Energy Storage Center

Francisco Martin

Docket: 21-AFC-02 Project Manager: Leonidas Payne Technical Senior: Steven Kerr

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
Appendix B (g) (5) (D) (ii)	Current daily average and peak traffic counts;	Summary of the LOS-Based Traffic Study Methodology to be Implemented for WRESC, TN257525	No Yes	Current daily average and peak traffic counts are not included.
Appendix B (g) (5) (D) (iii)	Current and projected levels of service before project development, during construction, and during project operation;	Summary of the LOS-Based Traffic Study Methodology to be Implemented for WRESC, TN257525	No Yes	Current and projected levels of service before project development, during construction, and during project operation are not included. An intersection and roadway level of service analysis consistent with Kern County/Kern COG transportation impact study guidelines should be provided for the construction phase, which assumes up to 1,498 workers traveling during weekday AM and PM peak hours.
Appendix B (g) (5) (D) (iv)	Weight and load limitations;	Section 5.12.1.2, p. 5.12-3	Yes	
Appendix B (g) (5) (D) (v)	Estimated percentage of current traffic flows for passenger vehicles and trucks; and	Summary of the LOS-Based Traffic Study Methodology to be Implemented for WRESC, TN257525	No Yes	Estimated percentage of current traffic flows for passenger vehicles and trucks are not provided.
Appendix B (g) (5) (D) (vi)	An identification of any road features affecting public safety.	Summary of the LOS-Based Traffic Study Methodology to be Implemented for WRESC, TN257525	No <u>Yes</u>	An identification of any road features affecting public safety is not included. Furthermore, an evaluation of emergency vehicle access within the project site should be provided to confirm that on site emergency vehicle access is adequate.

Revision No. 01 Date: April July 2024

Technical Staff:

Ashley Gutierrez,

Completeness: Complete X Incomplete X

Technical Area:

Traffic and Transportation Project: Willow Rock Energy Storage Center

Francisco Martin Docket: 21-AFC-02 Project Manager: Leonidas Payne Technical Senior: Steven Kerr

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	INFORMATION REQUIRED TO MAKE APPLICATION CONFORM WITH REGULATIONS
Appendix B (g) (5) (E)	An assessment of the construction and operation impacts of the proposed project on the transportation facilities identified in (g)(5)(D). Also include anticipated project specific traffic, estimated changes to daily average and peak traffic counts, levels of service, and traffic/truck mix, and the impact of construction of any facilities identified in (g)(5)(D). Include:	Section 2.12.2.2.1, pp. 5.12-9 to 5.12-10 Summary of the LOS-Based Traffic Study Methodology to be Implemented for WRESC, TN257525	No Yes	Analysis assumptions state that all construction workers are expected to arrive to the project site during the AM peak hour and depart during the PM peak hour. Furthermore, the analysis assumes that all workers drive alone to the site. Table 5.12-2 assumes 749 workers arrive to the site during the AM peak hour and 749 workers depart the site during the PM peak hour, which suggests a total of 749 workers for the construction phase. This conflicts with the information in Figure 5.12-3 and Section 5.12.2.2.2, which estimates 1,498 total workers during the construction phase. Which is the correct number: 749 workers or 1,498 workers? If the number of construction workers is expected to reach 1,498, then the trip generation analysis summarized in Section 5.12.2.2.1 should be updated accordingly.
Appendix B (g) (5) (E) (i)	Estimated one-way trip lengths for workers, deliveries, and truck haul trips generated by the construction of the project.	Table 5.12-2, p. 5.12-9 Willow Rock Data Adequacy Response TN256622, TRAN-6 pp. 3 to 5	No Yes	For construction traffic, a qualitative analysis of VMT impacts is often appropriate. Please include heavy duty truck trips converted to passenger car equivalent (PCE) for general onsite construction activities as well as for the offsite fill removal option, as required under CEQA Guidelines section 15064.3 subdivision (b).
Appendix B (g) (5) (E) (ii)	Description of public roadways and intersections temporarily or permanently	Section 5.12.1.1.1, p. 5.12-2	No Yes	Provide a description of roadways and intersections temporarily or permanently altered by construction or operation of the project.

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Technical Staff:

Ashley Gutierrez,

Completeness: Complete <u>X</u> Incomplete <u>X</u>

Technical Area: Traffic and Transportation Project: Willow Rock Energy Storage Center Technical Staff:

Project Manager: Leonidas Payne Docket: 21-AFC-02 Technical Senior: Steven Kerr

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
	altered by construction and operation including the duration of activities.	Willow Rock Data Adequacy Response TN256622, p. 26		
Appendix B (g) (5) (F)	A discussion of project-related hazardous materials to be transported to or from the project during construction and operation of the project, including the types, estimated quantities, estimated number of trips, anticipated routes, means of transportation, and any transportation hazards associated with such transport.	Section 5.12.2.4, p. 5.12-13	Yes	
Appendix B (i) (1) (A)	Tables that identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	Section 5.12.5, pp. 5.12-14 to 5.12-1 Willow Rock Data Adequacy Response TN256622, TRAN-6 pp. 6 to 9	No Yes	The laws, ordinances, regulations, and standards are listed but do not include a table or matrix that explicitly references pages in the application where conformance with each during both construction and operation is discussed.
Appendix B (i) (1) (B)	Tables that identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies that would have permit approval or enforcement authority, but for the exclusive	Section 5.12.7, p. 5.12-18	Yes	

Revision No. 01 Date: April July 2024

Ashley Gutierrez,

Francisco Martin

Completeness: Complete X Incomplete X Revision No. 91 Date: April July 2024

Technical Area: Traffic and Transportation Project: Willow Rock Energy Storage Center Technical Staff: Ashley Gutierrez, Francisco Martin

Project Manager: Leonidas Payne Docket: 21-AFC-02 Technical Senior: Steven Kerr

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
	authority of the Commission to certify sites and related facilities.			
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and provide the name of the official who will serve as a contact person for Commission staff.	Section 5.12.6, p. 5.12-17	Yes	
Appendix B (i) (3)	A schedule indicating when permits outside the authority of the Commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Section 5.12.7, p. 5.12-18	Yes	

Completeness: Complete X Incomplete X Revision No. <u>θ1</u> Date: April July 2024

Transmission System Safety and

Technical Area: **Nuisance** Project: Willow Rock Energy Storage Center Technical Staff: Sudath Edirisuriya

Project Manager: Leonidas Payne Docket: 21-AFC-02 Technical Senior: Joseph Hughes

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (A)	Descriptions of all significant assumptions, methodologies, and computational methods used in arriving at conclusions in the document.	Subsection 2.1.19 Subsection 3.4.1 to 3.4.3 Pp. 3.9 to 3.13	Yes	
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (B)	Descriptions, including methodologies and findings, of all major studies or research efforts undertaken and relied upon to provide information for the document; and a description of ongoing research of significance to the project (including expected completion dates; and	N/A	N/A	
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (C)	A list of all literature relied upon or referenced in the documents, along with brief discussions of the relevance of each such reference.	Subsection 5.2.8, pp 5.2.55	Yes	
Appendix B (g) (1)	provide a discussion of the existing site conditions, the expected direct, indirect, and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation. Describe the approach, list or projection or a combination, used to develop the cumulative setting for the proposed project. Include any reference materials used such as general plan or other adopted local, regional, or statewide plan.	Subsection 3.2.1 to 3.2.2 Subsection 3.4.1 to 3.4.3 Pp. 3.9 to 3.13 Subsection 1, Figure 1-6 Subsection 2, Figure 2.4 Figure 6.2	Yes	

Completeness: Complete <u>X</u> Incomplete <u>X</u>

Transmission System Safety and

Revision No. <u>01</u>

Date: <u>April July</u> 2024

Technical Area: **Nuisance** Project: Willow Rock Energy Storage Center Technical Staff: Sudath Edirisuriya

Project Manager: Leonidas Payne Docket: 21-AFC-02 Technical Senior: Joseph Hughes

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
Appendix B (g) (18) (A)	The locations and a description of the existing switchyards and overhead and underground transmission lines that would be affected by the proposed project.	Subsection 3.2.1 to 3.2.2 Subsection 3.4.1 to 3.4.3 Pp. 3.9 to 3.13 Willow Rock Data Adequacy Response, TN256622, TSSN-1, Attachment TSSN-1	No Yes	Please resubmit legible Electrical overall one-line diagram (Figure 3.5) Please provide gen-tie conductor type, size, and current carrying capacity
Appendix B (g) (18) (B)	An estimate of the existing electric and magnetic fields from the facilities listed in (A) above and the future electric and magnetic fields that would be created by the proposed project, calculated at the property boundary of the site and at the edge of the rights of way for any transmission line. Also provide an estimate of the radio and television interference that could result from the project.	Subsection 3.2.1 to 3.2.2 Subsection 3.4.1 to 3.4.3 Pp. 3.9 to 3.13 Willow Rock Data Adequacy Response, TN256622, Attachment TSSN-2	No Yes	Please provide the expected Electro Magnetic Field and Electric Field values, below the gen-tie.
Appendix B (g) (18) (C)	Specific measures proposed to mitigate identified impacts, including a description of measures proposed to eliminate or reduce radio and television interference, and all measures taken to reduce electric and magnetic field levels.	Subsection 3.2.1 to 3.2.2 Subsection 3.4.1 to 3.4.3 Pp. 3.9 to 3.13	Yes	
Appendix B (i) (1) (A)	Tables that identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix	Appendix 2A Subsection 3.5.1.to 3.5.6 Willow Rock Data Adequacy Response, TN256622, Attachment TSSN-3	No Yes	Please discuss CPUC GO 95, 128,131-D and NESC standards in reference to the project design and construction process, such as grounding, capacitor banks, surge and lightning arrestors at the substation, voltage stability, volt-ampere reactive (VAR) support, etc. If there are any potential

Complete X Incomplete X Incomplete X Transmission System Safety and

Technical Area: Nuisance Project Manager: Leonidas Payne Project Safety and Docket: 21-AFC-02 Revision No. 91 Date: April July 2024

Revision No. 91 Date: April July 2024

Technical Staff: Sudath Edirisuriya

Technical Senior: Joseph Hughes

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
	shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and			consequences, then the applicant shall propose mitigation measures.
Appendix B (i) (1) (B)	Tables that identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies that would have permit approval or enforcement authority, but for the exclusive authority of the Commission to certify sites and related facilities.	Appendix 2A	Yes	
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and provide the name of the official who will serve as a contact person for Commission staff.	Appendix 1C	Yes	
Appendix B (i) (3)	A schedule indicating when permits outside the authority of the Commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	N/A	N/A	

Completeness:CompleteXIncompleteXTechnical Area:Transmission System DesignProject:Willow Rock Energy Storage CenterRevision No.91Date:April-JulyProject Manager:Leonidas PayneDocket:21-AFC-02Technical Senior:Technical Senior:Joseph Hughes

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (A)	Descriptions of all significant assumptions, methodologies, and computational methods used in arriving at conclusions in the document.	N/A	N/A	
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (B)	Descriptions, including methodologies and findings, of all major studies or research efforts undertaken and relied upon to provide information for the document; and a description of ongoing research of significance to the project (including expected completion dates; and	N/A	N/A	
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (C)	A list of all literature relied upon or referenced in the documents, along with brief discussions of the relevance of each such reference;	N/A	N/A	
Appendix B (h) (2) (A)	A discussion of the need for the additional electric transmission lines, substations, or other equipment, the basis for selecting principal points of junction with the existing electric transmission system, and the capacity and voltage levels of the proposed lines, along with the basis for selection of the capacity and voltage levels.	Section 2.0 Page 2-1	Yes	
Appendix B (h) (2) (B)	A discussion of the extent to which the proposed electric transmission facilities have been designed, planned, and routed to meet the transmission requirements created by additional generating facilities planned by the applicant or any other entity.	Section 2.1.19 Page 2-29 Section 3.2 Page 3-1 to 3-8	Yes	

Completeness:CompleteXIncompleteXTechnical Area:Transmission System DesignProject:Willow Rock Energy Storage CenterRevision No.91Date:April-JulyProject Manager:Leonidas PayneDocket:21-AFC-02Technical Senior:Technical Senior:Joseph Hughes

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
Appendix B (b) (2) (C)	A detailed description of the design, construction, and operation of any electric transmission facilities, such as power lines, substations, switchyards, or other transmission equipment, which will be constructed or modified to transmit electrical power from the proposed power plant to the load centers to be served by the facility. Such description shall include the width of rights of way and the physical and electrical characteristics of electrical transmission facilities such as towers, conductors, and insulators.	Section 3.1-3.3 Page 3-1 to 3-8 Figure 3-1a, 3-1b, 3-1c Figure 3-2, 3-3 Willow Rock Data Response, TN256622, TSD-1 F3-1a Rev1, TSD-1 F3-1c Rev1, TSD-1 F3-1c Rev1, TSD-1 F3-2 Rev1, TSD-1 F3-3 Rev1 via Kiteworks	No Yes	Please resubmit Figure 3-1a, 3-1b, 3-1c, 3-2 and, 3-3. These figures submitted are illegible.
Appendix B (b) (2) (D)	A description of how the route and additional transmission facilities were selected, and the consideration given to engineering constraints, environmental impacts, resource conveyance constraints, and electric transmission constraints.	Section 3.2 Page 3-1	Yes	
Appendix B (b) (2) (E)	A completed System Impact Study or signed System Impact Study Agreement with the California Independent System Operator and proof of payment. When not connecting to the California Independent System Operator controlled grid, provide the executed System Impact Study agreement and proof of payment to the interconnecting utility.	Section 3.3 Page 3-8 Phase II Interconnection Study Data Adequacy Response TN: 256824 TN: 256825	No Yes	Please submit the 2022 Generator Reassessment Report and the most recent updated Generator Reassessment Report from California ISO.

Completeness:CompleteXIncompleteXTechnical Area:Transmission System DesignProject:Willow Rock Energy Storage CenterRevision No.91Date:April-JulyProject Manager:Leonidas PayneDocket:21-AFC-02Technical Senior:Technical Senior:Joseph Hughes

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
	If the interconnection and operation of the proposed project will likely impact an transmission system that is not controlled by the interconnecting utility (or California Independent System Operator), provide evidence of a System Impact Study or agreement and proof of payment (when applicable) with/to the impacted transmission owner or provide evidence that there are no system impacts requiring mitigation.	TN: 256826		
Appendix B (i) (1) (A)	Tables that identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	Section 3.5 Page 3-11 to 3-13	Yes	
Appendix B (i) (1) (B)	Tables that identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies that would have permit approval or enforcement authority, but for the exclusive authority of the Commission to certify sites and related facilities.	Section 3.5.6 Page 3-13	Yes	

Completeness: Complete **X** Incomplete Revision No. **91** Date: April **July** 2024 Technical Area: Transmission System Design Technical Staff: Project: Willow Rock Energy Storage Center Laiping Ng 21-AFC-02 Project Manager: Docket: Technical Senior: Leonidas Payne Joseph Hughes

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and provide the name of the official who will serve as a contact person for Commission staff.	N/A	N/A	
Appendix B (i) (3)	A schedule indicating when permits outside the authority of the Commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	N/A	N/A	

Completeness:	Complete <u>X</u> Incomplete	X DATA C	UMPLETENESS WURKSHEET	Revision No. <u>0</u> 1	Date: April July 2024
Technical Area:	Visual Resources	Project:	Willow Rock Energy Storage Center	Technical Staff:	Mark Hamblin
Project Manager:	Leonidas Payne	Docket:	21-AFC-02	Technical Senior:	Steven Kerr

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (A)	Descriptions of all significant assumptions, methodologies, and computational methods used in arriving at conclusions in the document.	Section 5.13.3.1, p. 5.13-6; Section 5.13.3.2, p. 5.13-7; Section 5.13.3.2.5, pp. 5.13-9 to 5.13-10	Yes	
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (B)	Descriptions, including methodologies and findings, of all major studies or research efforts undertaken and relied upon to provide information for the document; and a description of ongoing research of significance to the project (including expected completion dates; and	Section 5.13, pp. 5.13-1 to 5.13-23; Section 5.13.3.2.5, pp. 5.13-9 to 5.13-10; Section 5.13.3, pp. 5.13-6 to 5.13-12	Yes	
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (C)	A list of all literature relied upon or referenced in the documents, along with brief discussions of the relevance of each such reference;	Section 5.13.3, pp. 5.13-6 to 5.13-12	Yes	
Appendix B (g) (1)	provide a discussion of the existing site conditions, the expected direct, indirect, and cumulative impacts due to the construction, operation, and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation. Describe the approach, list or projection (or a combination of) used to develop the cumulative setting for the proposed project. Include any reference materials used such as general plan or other adopted local, regional, or statewide plan.	Section 5.13, pp. 5.13-1 to 5.13-23	Yes	
Appendix B	Provide a description of the existing landscape (built or natural) where the proposed project is	Section 5.13.2.1 to	Yes	
(g) (6) (A)	(built of flatural) where the proposed project is	5.13.2.2, pp. 5.13-5 to		

Completeness:	Complete <u>X</u> Incomplete	X DATA	COMPLETENESS WORKSHEET	Revision No. 01	Date: April July 2024
Technical Area:	Visual Resources	Project	: Willow Rock Energy Storage Center	Technical Staff:	Mark Hamblin
Project Manager:	Leonidas Payne	Docket	21-AFC-02	Technical Senior:	Steven Kerr

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
	to be sited and the vicinity, and along the proposed routes for any aboveground project-related linear facilities. Include:	5.13-6		
Appendix B (g) (6) (A) (i)	Show on a map(s) (pinpoint) any designated or recognized scenic vista and scenic resource within a five-mile radius of the project and one-mile radius of a project-related linear facility. Include:	Figure 5.13-1, p. 5.13-2; Section 5.13.2.1, p. 5.13-5	Yes	
Appendix B (g) (6) (A) (i) a.	Any designated scenic vista and scenic resource in an adopted federal, state, county, or city government planning document, plan, or regulation.	Figure 5.13-1, p. 5.13-2; Section 5.13.2.1, p. 5.13-5	Yes	
Appendix B (g) (6) (A) (i) b.	A natural feature or object that is a part of the land, such as a geologic distinguishing characteristic (e.g., laccolith), geomorphologic feature (e.g., gorge), or other terrain feature (e.g., a water body, open space, or a tree recognized for its aesthetic, botanical and ecological value, or age, rarity, and size).	Figure 5.13-1, p. 5.13-2	Yes	
Appendix B (g) (6) (A) (i) c.	A man-made feature or object that embodies elements of architecture or engineering design, detail, materials or craftsmanship that represent a significant innovation or is unique, such as the California State Capitol, Golden Gate Bridge, or Hollywood Sign.	Section 5.13.2.1, p. 5.13-5	Yes	
Appendix B (g) (6) (A) (i) d.	Explain does the project eliminate or obstruct the public view (the visible area from a location where the public has a legal and physical right of access to real property) of a scenic vista and scenic resource? Is the project situated so that it	Section 5.13.3.6, p. 5.13-19	Yes	

Completeness:	Complete <u>X</u> Incomplete	<u>*</u>	AIA CU	MPLETENESS WORKSHEET	Revision No. <u>01</u>	Date: April July 2024
Technical Area:	Visual Resources	Pr	roject:	Willow Rock Energy Storage Center	Technical Staff:	Mark Hamblin
Project Manager:	Leonidas Payne	De	ocket:	21-AFC-02	Technical Senior:	Steven Kerr

SITING REGULATIONS	INFORMATION	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	INFORMATION REQUIRED TO MAKE APPLICATION CONFORM WITH REGULATIONS
	changes the visual aspect of a scenic resource by being different or in sharp contrast?			
Appendix B (g) (6) (A) (ii)	Describe the existing nighttime lighting on the project site and in the vicinity.	Section 5.13.3.2.6, p. 5.13-11	Yes	
Appendix B (g) (6) (B)	In accordance with CEQA Guidelines as found in 14 CCR Division 6, Chapter 3, Appendix G Environmental Checklist Form, I. Aesthetics c, if the project is to be constructed within an "urbanized area" as defined in Public Resources Code section 21071, explain the project's conformance with the city/county General Plan, and city municipal code or county government code (e.g., zoning) governing scenic quality.	Section 5.13.6, pp. 5.13-21 to 5.13-22	Yes	
Appendix B (g) (6) (C)	In accordance with CEQA Guidelines as found in 14 CCR Division 6, Chapter 3, Appendix G Environmental Checklist Form, I. Aesthetics c, if the project is to be constructed within a non-urbanized area provide the following:	See below.	Yes	
Appendix B (g) (6) (C) (i)	Show on a map the pinpoint location of the key observation point(s) (KOP) for the project. A KOP is a fixed position in a publicly accessible location where a public view of the project is analyzed and/or evaluated in the landscape. Objects of aesthetic significance are the primary focus in the KOP selection.	Figure 5.13-3, p. 5.13-4; Section 5.13.3.2.3, p. 5.13-7	Yes	
Appendix B (g) (6) (C) (ii)	If an object of aesthetic significance is not in the vicinity of the project, a KOP is to be selected based on importance to stakeholders, visibility, direct public selection, worst-case scenario, or other reason. Explain the reason the KOP was	pp. 5.13-8 to 5.13-9, section 5.13.3.2.4	Yes	

Completeness:	Complete X Incomplete	X	DATA CO	MPLETENESS WORKSHEET	Revision No. 01	Date: April July 2024
Technical Area:	Visual Resources		Project:	Willow Rock Energy Storage Center	Technical Staff:	Mark Hamblin
Project Manager:	Leonidas Payne		Docket:	21-AFC-02	Technical Senior:	Steven Kerr

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
	chosen. At a minimum two KOPs are to be selected.			
Appendix B (g) (6) (C) (iii)	Provide a color photograph(s) showing an actual line of sight at eye level during daytime and clear weather from the KOP to the project site prior to any alteration (existing condition). The photographer at the KOP is to use a standard lens. For each photograph provide the following information: camera type, lens focal length, viewing angle; date and time the photograph was taken, and the distance to the project site.	Appendix 513A-514A	Yes	
Appendix B (g) (6) (C) (iv)	Using the photograph from the KOP provide a spatially accurate and realistically photo manipulated computer simulated image of the project (photo-realistic simulation) one-year after completion of construction (existing condition plus proposed project).	Appendix 513A-514A	Yes	
Appendix B (g) (6) (C) (v)	The KOP photograph and the photo-realistic simulation are to be capable of 11" x 17" color print by a printer capable at a minimum 600 dots per inch output resolution.	<u>Via KiteWorks</u>	No Yes	See below.
Appendix B (g) (6) (C) (vi)	Provide a copy of the KOP photograph(s) and photo-realistic simulation(s) in an electronic file.	<u>Via KiteWorks</u>	No Yes	Provide an electronic file via Kiteworks or flash drive supplying a copy of all electronic images; KOPs (existing condition photos, photo realistic simulations, landscape photographs, KOP location map, etc.) for cartography insertion into Staff Assessment visual resources section.
Appendix B (g) (6) (D)	Show and describe the project in the landscape.	Section 5.13.3.4; pp. 5.13-4 to 5.13-19	Yes	

Completeness:	Complete <u>X</u> Incomplete	X DATA	COMPLETENESS WORKSHEET	Revision No. <u>0</u> 1	Date: April July 2024
Technical Area:	Visual Resources	Projec	t: Willow Rock Energy Storage Center	Technical Staff:	Mark Hamblin
Project Manager:	Leonidas Payne	Docke	t: 21-AFC-02	Technical Senior:	Steven Kerr

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
Appendix B (g) (6) (D) (i)	Provide an 8.5" x 11" sized scaled elevation(s) of project buildings, structures, and major equipment; a table listing their dimensions (height, length, width, diameter).	Section 2.1.1, pp. 2-7 to 2- 10; Figure 1-4 and Figure 1-5, pp. 1-7 to 1-8	Yes	
Appendix B (g) (6) (D) (ii)	Provide a table and description of the exterior surface treatments and finishes for the buildings, structures, major equipment (e.g., colors, flat and/or textured finishes), and structural materials.	Section 5.13.3.4.1, pp. 5.13-12 to 5.13-13	Yes	
Appendix B (g) (6) (D) (iii)	Describe project specific architectural treatment or design technique mitigation unique to the project's siting at the location (e.g., camouflage, disguise, screen), if any.	Section 5.13.3.5.2, pp. 5.13-17 to 5.13-18	Yes	
Appendix B (g) (6) (D) (iv)	Provide a project specific conceptual landscape design plan that conforms with the city municipal code or county government code. Include:	Section 5.13.3.4.4, p. 5.13-14, (no landscaping required in A-1 zone)	Yes	
Appendix B (g) (6) (D) (iv) a.	the type of plant and/or tree species, location, quantity, size, spacing at installation/planting, expected growth rates, and expected heights at one-year, five years, and maturity. Specify irrigation system components and show their locations.	NA (see above section	Yes	
Appendix B (g) (6) (D) (iv) b.	the calculated total pervious surface amount for the project site; include the surface to be replaced, the new surface, and the total area to be landscaped.	NA (see above section	Yes	
Appendix B (g) (6) (D) (v)	Provide a project specific conceptual outdoor lighting control and management plan (lighting plan) and explain the control of reflectance from	Section 5.13.3.5.3, pp. 5.13-18 to 5.13-19; Appendix 5.13B	Yes	

Completeness:	Complete X Incomplete	X	DATA CC	MPLETENESS WORKSHEET	Revision No. 01	Date: April July 2024
Technical Area:	Visual Resources		Project:	Willow Rock Energy Storage Center	Technical Staff:	Mark Hamblin
Project Manager:	Leonidas Payne		Docket:	21-AFC-02	Technical Senior:	Steven Kerr

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	INFORMATION REQUIRED TO MAKE APPLICATION CONFORM WITH REGULATIONS
	exterior surfaces offsite that conform with the city municipal code or county government code.			
Appendix B (g) (6) (D) (v) a.	Provide a list of the project-specific luminaires, identify the design (e.g., full cutoff, semi cutoff, non cutoff) and indicate if the luminaires have the International Dark-Sky Association Fixture Seal of Approval to the extent feasible consistent with safety and security considerations. Show the project-specific luminaires locations on a diagram or elevation.	Appendix 5.13B	Yes	
Appendix B (g) (6) (D) (v) b.	Describe reflectance, the intensity of the specular reflectance from the exterior surface of the project's large buildings, structures, and major equipment offsite to the surrounding area (e.g., the light reflected from the shiny surface). The reflectance of the object—how bright it shines—depends on the intensity of the light striking it and the materials from which it is made (e.g., glass, reinforced concrete, structural steel).	Sections 5.13.3.4.1 to 5.13.3.4.2, pp. 5.13-12 to 5.13-13	Yes	
Appendix B (g) (6) (E)	If the project is to use a cooling tower emitting a publicly visible water vapor plume (visible plume) in the atmosphere provide the following information:	NA (no cooling tower involved with project)	Yes	
Appendix B (g) (6) (E) (i)	Provide the cooling tower's number of fan cells, the fan cell stack height and diameter, the exhaust mass flow rate, heat rejection rate, and exhaust temperature.	NA	Yes	
Appendix B (g) (6) (E) (ii)	Provide fogging curves specific to the cooling tower's exhaust discharge for at least three	NA	Yes	

Completeness:	Complete <u>X</u> Incomplete	X DATA	COMPLETENESS WORKSHEET	Revision No. 01	Date: April July 2024
Technical Area:	Visual Resources	Project	: Willow Rock Energy Storage Center	Technical Staff:	Mark Hamblin
Project Manager:	Leonidas Payne	Docket	21-AFC-02	Technical Senior:	Steven Kerr

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
	ambient air temperature conditions (a low, average, and high temperature condition).			
Appendix B (g) (6) (E) (iii)	Explain if the project's forecasted visible plume emitted in the atmosphere by the cooling tower would eliminate or obstruct an existing public view of a designated or recognized scenic vista, scenic resource, and the existing visual character or quality of public views of the site and its surroundings.	NA	Yes	
Appendix B (i) (1) (A)	Tables that identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	Section 5.13.6, pp. 5.13-21 to 5.13-22	Yes	
Appendix B (i) (1) (B)	Tables that identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Section 5.13.7, p. 5.13-22	Yes	
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency,	Section 5.13.7, p. 5.13-22	Yes	

Completeness:	Complete X Incomplete	X DATA	COMPLETENESS WORKSHEET	Revision No. <u>0</u> 1	Date: April July 2024
Technical Area:	Visual Resources	Projec	t: Willow Rock Energy Storage Center	Technical Staff:	Mark Hamblin
Project Manager:	Leonidas Payne	Docke	:: 21-AFC-02	Technical Senior:	Steven Kerr

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
	and also provide the name of the official who will serve as a contact person for Commission staff.			
Appendix B (i) (3)	A schedule indicating when permits outside the authority of the Commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Section 5.13.8, p. 5.13-22	Yes	

Completeness:CompleteXIncompleteTechnical Area:Waste ManagementProject:Willow Rock Energy Storage CenterTechnical Staff:James AckermanProject Manager:Leonidas PayneDocket:21-AFC-02Technical Senior:Abdel-Karim Abulaban

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
Cal. Code Regs., tit. 20, § 1704, (a) (3) (A)	Descriptions of all significant assumptions, methodologies, and computational methods used in arriving at conclusions in the document.	Subsections 5.14.1 Tables 5.14-1 & 5.14-2 p.p. 5.14-1 thru 5.14-8, 5.14-2 Tables 5.14-3 & 5.14-4 p.p. 5.14-8 thru 5.14-12, 5.14-3 p. 5.14-12, 5.14-12 thru 5.14-16, 5.14-5.3.1 p. 5.14-19, 5.14-5.3.2 p. 5.14-20	Yes	
Cal. Code Regs., tit. 20, § 1704, (a) (3) (B)	Descriptions, including methodologies and findings, of all major studies or research efforts undertaken and relied upon to provide information for the document; and a description of ongoing research of significance to the project (including expected completion dates; and	Subsections 5.14.1 Tables 5.14-1 & 5.14-2 p.p. 5.14-1 thru 5.14-8, 5.14-2 Tables 5.14-3 & 5.14-4 p.p. 5.14-8 thru 5.14-12, 5.14-3 p. 5.14-12, 5.14-12 thru 5.14-16, 5.14-5.3.1 p. 5.14-19, 5.14-5.3.2 p. 5.14-20	Yes	
Cal. Code Regs., tit. 20, § 1704, (a) (3) (C)	A list of all literature relied upon or referenced in the documents, along with brief discussions of the relevance of each such reference;	Subsection 5.14.8 p. 5.14- 21	Yes	
Appendix B (g) (1)	provide a discussion of the existing site conditions, the expected direct, indirect, and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the	Subsections 5.14.1 Tables 5.14-1 & 5.14-2 p.p. 5.14-1 thru 5.14-8, 5.14.2 Tables 5.14-3 & 5.14-4 p.p. 5.14-8 thru 5.14-12, 5.14.3 p. 5.14-12, 5.14.4 Table 5.14-3 p.p. 5.14-12 thru 5.14-	Yes	

Completeness: Complete **X** Incomplete Date: April 2024 Revision No. 0 Technical Area: Technical Staff: James Ackerman **Waste Management** Project: Willow Rock Energy Storage Center Docket: 21-AFC-02 Project Manager: Leonidas Payne Technical Senior: Abdel-Karim Abulaban

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
	effectiveness of the mitigation. Describe the approach, list or projection or a combination, used to develop the cumulative setting for the proposed project. Include any reference materials used such as general plan or other adopted local, regional, or statewide plan.	16, 5.14.5.3.1 p. 5.14-19, 5.14.5.3.2 p. 5.14-20		
Appendix B (g) (12) (A)	A Phase I Environmental Site Assessment (ESA) for the proposed power plant site using methods prescribed by the American Society for Testing and Materials (ASTM) document entitled "Standard Practice for Environmental Site Assessments: Phase 1 Environmental Site Assessment Process" (Designation: E 1527-93, May 1993), which is incorporated by reference in its entirety; or an equivalent method agreed upon by the applicant and the CECStaff that provides similar documentation of the potential level and extent of site contamination. The Phase I ESA shall have been completed no earlier than one year prior to the filing of the application.	Subsections 5.14-1.1 p. 5.14-1, 5.14.4.1.1 p. 5.14-13, Appendix 5.14A	Yes	
Appendix B (g) (12) (B)	A description of each waste stream estimated to be generated during project construction and operation, including origin, hazardous or nonhazardous classification pursuant to Title 22, California Code of Regulations, § 66261.20 et seq., chemical composition, estimated annual weight or volume generated, and estimated frequency of generation.	Subsections 5.14-1.2.1 Table 5.14-1 p.p. 5.14-2 thru 5.14-5, 5.14-1.2.2 Table 5.14-2 p.p. 5.14-6 thru 5.14-8	Yes	

Completeness: Complete **X** Incomplete Revision No. 0 Date: April 2024 Technical Area: Technical Staff: James Ackerman **Waste Management** Willow Rock Energy Storage Center Project: Docket: 21-AFC-02 Project Manager: Technical Senior: Abdel-Karim Abulaban Leonidas Payne

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	INFORMATION REQUIRED TO MAKE APPLICATION CONFORM WITH REGULATIONS
Appendix B (g) (12) (C)	A description of all waste disposal sites which may feasibly be used for disposal of project wastes. For each site, include the name, location, classification under California Code of Regulations, Title 23, section 2530 et seq., the daily or annual permitted capacity, daily or annual amounts of waste currently being accepted, the estimated closure date and remaining capacity, and a description of any enforcement action taken by local or state agencies due to waste disposal activities at the site.	Subsections 5.14-2.3 Table 3 & Table 4 p.p. 5.14-9 thru 5.14-11, 5.14-2.4 p. 5.14-12	Yes	
Appendix B (g) (12) (D)	A description of management methods for each waste stream, including methods used to minimize waste generation, length of on- and off-site waste storage, re-use and recycling opportunities, waste treatment methods used, and use of contractors for treatment.	Subsections 5.14-1.2.1 Table 5.14-1 p.p. 5.14-2 thru 5.14-5, 5.14-1.2.2 Table 5.14-2 p.p. 5.14-6 thru 5.14-8, 5.14-2.4 p. 5.14-12, 5.14-3 p. 5.14-12, 5.14-4 p.p. 5.14-12 thru 5.14-16	Yes	
Appendix B (i) (1) (A)	Tables that identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	Subsection 5.14-5 Table 5.14-5 p.p. 5.14-2 thru 5.14-20	Yes	

Completeness: Date: April 2024 Complete **X** Incomplete Revision No. 0 Technical Area: Technical Staff: James Ackerman **Waste Management** Project: Willow Rock Energy Storage Center 21-AFC-02 Project Manager: Leonidas Payne Docket: Technical Senior: Abdel-Karim Abulaban

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
Appendix B (i) (1) (B)	Tables that identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies that would have permit approval or enforcement authority, but for the exclusive authority of the Commission to certify sites and related facilities.	Subsection 5.14-6 Table 5.14-6 p. 5.14-20	Yes	
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and provide the name of the official who will serve as a contact person for Commission staff.	Subsection 5.14-6 Table 5.14-6 p. 5.14-20	Yes	
Appendix B (i) (3)	A schedule indicating when permits outside the authority of the Commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Subsection 5.14-7 p. 5.14-20	Yes	

DATA ADEQUACY WORKSHEET

Completeness: Complete X Incomplete X Incomp

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (A)	Descriptions of all significant assumptions, methodologies, and computational methods used in arriving at conclusions in the document.	Willow Rock Data Adequacy Response, TN256622, WA-1, Attachment WA-1	No Yes	Descriptions of all significant assumptions, methodologies, and computational methods used not provided.
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (B)	Descriptions, including methodologies and findings, of all major studies or research efforts undertaken and relied upon to provide information for the document; and a description of ongoing research of significance to the project (including expected completion dates; and	Willow Rock Data Adequacy Response TN256622, WA-2, Attachment WA-2	No Yes	Descriptions not provided.
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (C)	A list of all literature relied upon or referenced in the documents, along with brief discussions of the relevance of each such reference;	Subsection 5.15.7, p. 5.15-23 Willow Rock Data Adequacy Response, TN256622, WA-3, Attachment WA-1k	No Yes	Brief discussions of the relevance of each such reference not provided.
Appendix B (g) (1)	provide a discussion of the existing site conditions, the expected direct, indirect, and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation. Describe the approach, list or projection or a combination, used to develop the cumulative setting for the proposed project. Include any reference materials used such as general plan or other adopted local, regional, or statewide plan.	Subsection 5.15.3, p. 5.15-18.	Yes	

Completeness: Complete X Incomplete X Project: Willow Rock Energy Storage Center Technical Staff: Adam White

Project Manager: Leonidas Payne Docket: 21-AFC-02 Technical Senior: Abdel-Karim Abulaban

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
Appendix B (g) (14) (A)	All the information required to apply for the following permits, if applicable, including:	See Below	Yes	
Appendix B (g) (14) (A) (i)	Waste Discharge Requirements; National Pollutant Discharge Elimination System Permit; and/or a Section 401 Certification or Waiver from the appropriate Regional Water Quality Control Board (RWQCB);	Subsection 5.15.5.1, 5.15.5.2, 5.15.5.3, pp. 5.15-20 to 5.15-22	Yes	
Appendix B (g) (14) (A) (ii)	Construction and Industrial Waste Discharge or Industrial Pretreatment permits from wastewater treatment agencies;	Subsection 5.15.5.2.3, 5.15.2.4, p. 5.15-21	Yes	
Appendix B (g) (14) (A) (iii)	Nationwide Permits and/or Section 404 Permits from the U.S. Army Corps of Engineers; and	Subsection 5.15.2.1, p.5.15-16	Yes	
Appendix B (g) (14) (A) (iv)	Underground Injection Control Permit(s) from the U.S. Environmental Protection Agency, California Division of Oil and Gas, and RWQCB.	Subsection 5.15.5.1, p. 5.15-20	Yes	
Appendix B (g) (14) (B)	A detailed description of the hydrologic setting of the project. The information shall include a narrative discussion and on maps at a scale of 1:24,000 (or appropriate scale approved by staff), describing the chemical and physical characteristics of the following nearby water bodies that may be affected by the proposed project:	Subsection 5.15.1.1, 5.15.1.2, pp. 5.15-1 to 5.15-7.	Yes	
Appendix B (g) (14) (B) (i)	Ground water bodies and related geologic structures;	Subsection 5.15.1.2, pp. 5.15-4 to 5.15-7.	Yes	
Appendix B (g) (14) (B) (ii)	Surface water bodies;	Subsection 5.15.1.1, pp. 5.15-1 to 5.15-2.	Yes	
Appendix B (g) (14) (B) (iii)	Water inundation zones, such as the 100- year flood plain and tsunami run-up zones;	Subsection 5.15.1.4, p. 5.15-9.	Yes	

Completeness: Complete X Incomplete X Project: Willow Rock Energy Storage Center Technical Staff: Adam White

Project Manager: Leonidas Payne Docket: 21-AFC-02 Technical Senior: Abdel-Karim Abulaban

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
Appendix B (g) (14) (B) (iv)	Flood control facilities (existing and proposed); and	Subsection 5.15.1.4, p. 5.15-9, 5.15.2.4, p. 5.15-17 Willow Rock Data Adequacy Response, TN256622, WA-4, Attachment WA-2	No Yes	Existing and proposed flood control facilities not provided.
Appendix B (g) (14) (B) (v) Appendix B	Groundwater wells within ½ mile if the project will include pumping. A description of the water to be used and	Subsection 5.15.1.2, Figure 5.15-3, p. 5.15-6. See Below	Yes	
(g) (14) (C)	discharged by the project. This information shall include:	See Below		
Appendix B (g) (14) (C) (i)	Source(s) of the primary and back-up water supplies and the rationale for their selection;	Subsection 5.15.1.5, p. 5.15-11, 5.15.2.2, p. 5.15-17.	Yes	
Appendix B (g) (14) (C) (ii)	The expected physical and chemical characteristics of the source and discharge water(s) including identification of both organic and inorganic constituents before and after any project-related treatment. For source waters with seasonal variation, provide seasonal ranges of the expected physical and chemical characteristics. Provide copies of background material used to create this description (that is, laboratory analysis);	Subsection 5.15.1.3, pp. 5.15-7 to 5.15-9, 5.15.1.5, pp. 5.15-11 to 5.15-13, Appendix 5.15A.	Yes	
Appendix B (g) (14) (C) (iii)	Average and maximum daily and annual water demand and waste water discharge for both the construction and operation phases of the project;	Subsection 5.15.1.5, 5.15.1.6, pp. 5.15-11 to 5.15-13.	Yes	
Appendix B (g) (14) (C) (iv)	A detailed description of all facilities to be used in water conveyance (from primary source to the power plant site), water	Subsection 5.15.1, pp. 5.15-1 to 5.15-13, Appendix 2D.	Yes	

Completeness: Complete X Incomplete X Project: Willow Rock Energy Storage Center Technical Staff: Adam White

Project Manager: Leonidas Payne Docket: 21-AFC-02 Technical Senior: Abdel-Karim Abulaban

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
	treatment, and wastewater discharge. Include a water mass balance diagram;			
Appendix B (g) (14) (C) (v)	For all water supplies intended for industrial uses to be provided from public or private water purveyors, a letter of intent or will-serve letter indicating that the purveyor is willing to serve the project, has adequate supplies available for the life of the project, and any conditions or restrictions under which water will be provided. If a will-serve letter or letter of intent cannot be provided, identify the most likely water purveyor and discuss the necessary assurances from the water purveyor to serve the project;	Subsection 5.15.1.5, p. 5.15-11. Willow Rock Data Adequacy Response, TN256622, WA-5, Attachment WA-1	No Yes	A letter of intent or will-serve letter not provided.
Appendix B (g) (14) (C) (vi)	For all water supplied which necessitates transfers and/or exchanges at any point, identify all parties and contracts/agreements involved, the primary source for the transfer and/or exchange water (that is, surface water, groundwater), and provide the status of all appropriate agencies' approvals for the proposed use, environmental impact analysis on the specific transfers or exchanges required to obtain the proposed supplies, a copy of any agency regulations that govern the use of the water, and an explanation of how the project complies with the agency regulation(s);	NA	NA	NA
Appendix B (g) (14) (C) (vii)	Provide water mass balance and heat balance diagrams for both average and maximum flows that include all process or ancillary water supplies and wastewater	Willow Rock Data Adequacy Response TN256622, WA-6, Attachment WA-6	No Yes	Heat balance diagram not provided. Water conservation measures not shown.

Completeness: Complete X Incomplete X Project: Willow Rock Energy Storage Center Technical Staff: Adam White

Project Manager: Leonidas Payne Docket: 21-AFC-02 Revision No. 01 Technical Staff: Adam White

Revision No. 01 Technical Staff: Adam White

Technical Senior: Abdel-Karim Abulaban

Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
streams. Highlight any water conservation measures on the diagram and the amount that they reduce water demand; and			
For all projects which have a discharge, provide a copy of the will-serve letter, permit or contract with the public or private entity that will be accepting the wastewater and contact storm water from the project. The letter, permit or contract, if possible, shall identify the discharge volumes and the chemical or physical characteristics under which the wastewater and contact storm water will be accepted. In the event that a will-serve letter, permit, or contract cannot be provided, identify the most likely wastewater/storm water entity and discuss why the applicant was unable to secure the necessary assurances to serve the project's wastewater/storm water needs. Also, discuss the term of the wastewater service to the project, whether the wastewater entity has adequate permit capacity for the volume of wastewater from the project and has adequate permit levels for the chemical/physical characteristics of the project's wastewater and storm water for the life of the project, and any issues or conditions/restrictions the wastewater entity	NA NA	NA	
	streams. Highlight any water conservation measures on the diagram and the amount that they reduce water demand; and For all projects which have a discharge, provide a copy of the will-serve letter, permit or contract with the public or private entity that will be accepting the wastewater and contact storm water from the project. The letter, permit or contract, if possible, shall identify the discharge volumes and the chemical or physical characteristics under which the wastewater and contact storm water will be accepted. In the event that a will-serve letter, permit, or contract cannot be provided, identify the most likely wastewater/storm water entity and discuss why the applicant was unable to secure the necessary assurances to serve the project's wastewater/storm water needs. Also, discuss the term of the wastewater service to the project, whether the wastewater entity has adequate permit capacity for the volume of wastewater from the project and has adequate permit levels for the chemical/physical characteristics of the project's wastewater and storm water for the life of the project, and any issues or	streams. Highlight any water conservation measures on the diagram and the amount that they reduce water demand; and For all projects which have a discharge, provide a copy of the will-serve letter, permit or contract with the public or private entity that will be accepting the wastewater and contact storm water from the project. The letter, permit or contract, if possible, shall identify the discharge volumes and the chemical or physical characteristics under which the wastewater and contact storm water will be accepted. In the event that a will-serve letter, permit, or contract cannot be provided, identify the most likely wastewater/storm water entity and discuss why the applicant was unable to secure the necessary assurances to serve the project's wastewater/storm water needs. Also, discuss the term of the wastewater service to the project, whether the wastewater entity has adequate permit capacity for the volume of wastewater from the project and has adequate permit levels for the chemical/physical characteristics of the project's wastewater and storm water for the life of the project, and any issues or conditions/restrictions the wastewater entity	streams. Highlight any water conservation measures on the diagram and the amount that they reduce water demand; and For all projects which have a discharge, provide a copy of the will-serve letter, permit or contract with the public or private entity that will be accepting the wastewater and contact storm water from the project. The letter, permit or contract, if possible, shall identify the discharge volumes and the chemical or physical characteristics under which the wastewater and contact storm water will be accepted. In the event that a will-serve letter, permit, or contract cannot be provided, identify the most likely wastewater/storm water entity and discuss why the applicant was unable to secure the necessary assurances to serve the project's wastewater/storm water needs. Also, discuss the term of the wastewater service to the project, whether the wastewater entity has adequate permit capacity for the volume of wastewater from the project and has adequate permit levels for the chemical/physical characteristics of the project's wastewater and storm water for the life of the project, and any issues or conditions/restrictions the wastewater entity

Completeness: Complete X Incomplete X Incomp

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
Appendix B (g) (14) (D)	Identify all project elements associated with stormwater drainage, including a description of the following:	See Below		
Appendix B (g) (14) (D) (i)	Monthly and seasonal precipitation and stormwater runoff and drainage patterns for the proposed site and surrounding area that may be affected by the project's construction and operation;	Appendix 5.15B Willow Rock Data Adequacy Response, TN256622, WA-7, Attachment WA-2	No <u>Yes</u>	Monthly and seasonal precipitation and stormwater runoff and drainage patterns for the proposed site and surrounding area not provided.
Appendix B (g) (14) (D) (ii)	Drainage facilities and the design criteria used for the plant site and ancillary facilities, including but not limited to capacity of designed system, design storm, and estimated runoff;	Appendix 5.15B Willow Rock Data Adequacy Response, TN256622, WA-8, Attachment WA-2	No <u>Yes</u>	
Appendix B (g) (14) (D) (iii)	All assumptions and calculations used to calculate runoff and to estimate changes in flow rates between pre- and post-construction; and	Appendix 5.15B Willow Rock Data Adequacy Response, TN256622, WA-9, Attachment WA-2	No <u>Yes</u>	
Appendix B (g) (14) (D) (iv)	A copy of applicable regional and local requirements regulating the drainage systems, and a discussion of how the project's drainage design complies with these requirements.	Appendix 5.15B Willow Rock Data Adequacy Response, TN256622, WA-10, Attachment WA-2	No <u>Yes</u>	
Appendix B (g) (14) (E)	An impacts analysis of the proposed project on water resources and a discussion of conformance with water-related LORS and policy. This discussion shall include:	Subsection 5.15.4, p. 5.15-19. Willow Rock Data Adequacy Response, TN256622, WA-11, Attachment WA-11	No <u>Yes</u>	Impacts analysis not provided.
Appendix B (g) (14) (E) (i)	The effects of project demand on the water supply and other users of this source, including, but not limited to, water	Willow Rock Data Adequacy Response, TN256622, WA-12	No Yes	Effects of project demand on the water supply and other users of this source not discussed.

Completeness: Complete X Incomplete X Incomplete X Project: Willow Rock Energy Storage Center Technical Staff: Adam White

Project Manager: Leonidas Payne Docket: 21-AFC-02 Technical Senior: Abdel-Karim Abulaban

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
	availability for other uses during construction or after the power plant begins operation, consistency of the water use with applicable RWQCB basin plans or other applicable resource management plans, and any changes in the physical or chemical conditions of existing water supplies as a result of water use by the power plant;			
Appendix B (g) (14) (E) (ii)	If the project will pump groundwater, an estimation of aquifer drawdown based on a computer modeling study shall be conducted by a professional geologist and include the estimated drawdown on neighboring wells within 0.5 mile of the proposed well(s), any effects on the migration of groundwater contaminants, and the likelihood of any changes in existing physical or chemical conditions of groundwater resources shall be provided;	Subsection 5.15.1.5, p. 5.15-1. Willow Rock Data Adequacy Response, TN256622, WA-13	No Yes	Antelope Valley East Kern Water Agency (AVEK) will provide water for the Project using groundwater. Information regarding water use impact on aquifer drawdown not provided.
Appendix B (g) (14)(E)(iii)	The effects of construction activities and plant operation on water quality and to what extent these effects could be mitigated by best management practices;	Subsection 5.15.1.3, p. 5.15-7. Willow Rock Data Adequacy Response, TN256622, WA-14	No Yes	Effect of Water Quality not discussed.
Appendix B (g) (14)(E)(iv)	If not using a zero liquid discharge project design for cooling and process waters, include the effects of the proposed wastewater disposal method on receiving waters, the feasibility of using pre-treatment techniques to reduce impacts, and beneficial uses of the receiving waters. Include an explanation why the zero liquid discharge	Subsection 5.15.1.6, p. 5.15-13. Willow Rock Data Adequacy Response, TN256622, WA-15	No <u>Yes</u>	Applicant says process will be zero waste discharge, but blowdown water from the reverse osmosis system will be discharged to on site reservoir. Please resolve inconsistency.

Completeness: Complete X Incomplete X Incomplete X Project: Willow Rock Energy Storage Center Technical Staff: Adam White

Project Manager: Leonidas Payne Docket: 21-AFC-02 Technical Senior: Abdel-Karim Abulaban

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
	process is "environmentally undesirable," or "economically unsound;"			
Appendix B (g) (14)(E)(v)	If using fresh water, include a discussion of the cumulative impacts, alternative water supply sources and alternative cooling technologies considered as part of the project design. Include an explanation of why alternative water supplies and alternative cooling are "environmentally undesirable," or "economically unsound;"	Subsection 5.15.5, p. 5.15- 11. Willow Rock Data Adequacy Response, TN256622, WA-16	No <u>Yes</u>	Discussion of the cumulative impacts, alternative water supply sources and alternative cooling technologies not provided.
Appendix B (g) (14)(E)(vi)	The effects of the project on the 100-year flood plain, flooding potential of adjacent lands or water bodies, or other water inundation zones; and	Subsection 5.15.1.4, p. 5.15-9. Willow Rock Data Adequacy Response, TN256622, WA-17, Attachment WA-2	No Yes	Effects of the project on flooding potential of adjacent lands, water bodies, or other water inundation zones not discussed.
Appendix B (g) (14)(E)(vii)	All assumptions, evidence, references, and calculations used in the analysis to assess these effects.	NA Willow Rock Data Adequacy Response, TN256622, WA-18, Attachment WA-2	No Yes	Assumptions, evidence, references, and calculations used in the analysis not provided.
Appendix B (i) (1) (A)	Tables that identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	Subsection 5.15.5, p.5.15- 19, Table 5.15-3. Willow Rock Data Adequacy Response, TN256622, WA-19, Attachment WA-11	No <u>Yes</u>	Discussion of the applicability of, and conformance with each law, regulation, ordinance, standard, adopted local, regional, state, and federal land use plan, lease, and permit and explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed not provided.

Completeness: Complete X Incomplete X Incomplete X Project: Willow Rock Energy Storage Center Technical Staff: Adam White

Project Manager: Leonidas Payne Docket: 21-AFC-02 Technical Senior: Abdel-Karim Abulaban

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
Appendix B (i) (1) (B)	Tables that identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies that would have permit approval or enforcement authority, but for the exclusive authority of the Commission to certify sites and related facilities.	Subsection 5.15.5, p.5.15-19, Table 5.15-3.	Yes	
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and provide the name of the official who will serve as a contact person for Commission staff.	Subsection 5.15.6, p.5.15-22, Table 5.15-4.	Yes	
Appendix B (i) (3)	A schedule indicating when permits outside the authority of the Commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Subsection 5.15.6, p.5.15-22, Table 5.15-4.	Yes	

Completeness:	Complete X Inc	complete	_		Revision No(0 Date:	April 2024
Technical Area:	Wildfire		Project:	Willow Rock Energy Storage Center	Technical Staff	f: Bret	t Fooks
Project Manager:	Leonidas Payne		Docket:	21-AFC-02	Technical Senio	or: Bret	t Fooks

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (A)	Descriptions of all significant assumptions, methodologies, and computational methods used in arriving at conclusions in the document.	Subsection 5.16.1.4, p. 5.16-4.	Yes	
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (B)	Descriptions, including methodologies and findings, of all major studies or research efforts undertaken and relied upon to provide information for the document; and a description of ongoing research of significance to the project (including expected completion dates; and	Subsection 5.16.7, p. 5.16-16 – 5.16-18	Yes	
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (C)	A list of all literature relied upon or referenced in the documents, along with brief discussions of the relevance of each such reference;	Subsection 5.16.7, p. 5.16- 16 – 5.16-18	Yes	
Appendix B (g) (1)	provide a discussion of the existing site conditions, the expected direct, indirect, and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation. Describe the approach, list or projection or a combination, used to develop the cumulative setting for the proposed project. Include any reference materials used such as general plan or other adopted local, regional, or statewide plan.	Section 5.16, p. 5.16-1 – 5.16-15	Yes	
Appendix B (g) (19) (A)	A map showing State Responsibility Areas (SRA,) as defined in Public Resources Code section 4102, relative to the proposed project.	Subsection 5.16.1.3.6, Figure 5.16-1	Yes	

Completeness:	Complete X	Incomplete			Revision No. 0	Date: April 2024
Technical Area:	Wildfire		Project:	Willow Rock Energy Storage Center	Technical Staff:	Brett Fooks
Project Manager:	Leonidas Payne		Docket:	21-AFC-02	Technical Senior:	Brett Fooks

SITING REGULATIONS	Information	Application Page Number And Section Number	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
Appendix B (g) (19) (B)	A map showing state Fire Hazard Severity Zones, as defined in 14 CCR section 1280.01, relative to the proposed project.	Subsection 5.16.1.3.6, Figure 5.16-2	Yes	
Appendix B (g) (19) (A)	If the project would be in the vicinity of an SRA or a Very High Fire Hazard Severity Zone, as defined in 14 CCR section 1265.00, provide:	Subsection 5.16.1.1, p. 5.16-1	Yes	
Appendix B (g) (19) (A)	Local emergency response or evacuation plans and a description of how the proposed project could influence their effectiveness.	Subsection 5.16.1.5, p. 5.16-8	Yes	
Appendix B (g) (19) (A)	A discussion of how potential project pollutants could be contained onsite during a wildfire event.	Subsection 5.16.1.6, p 5.16-8	Yes	
Appendix B (g) (19) (A)	A description of infrastructure that would be built or maintained (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate the risk of wildfire.	Subsection 5.16.1.7, p.5.16-9	Yes	
Appendix B (g) (19) (A)	Describe people or structures downslope or downstream of the proposed project that could be impacted by flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.	Subsection 5.16.1.8, p. 5.16-9	Yes	

Completeness:	Complete X	Incomplete			Revision No. 0	Date: April 2024
Technical Area:	Worker Safety		Project:	Willow Rock Energy Storage Center	Technical Staff:	Steve De Young
Project Manager:	Leonidas Payne		Docket:	21-AFC-02	Technical Senior:	Brett Fooks

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (A)	Descriptions of all significant assumptions, methodologies, and computational methods used in arriving at conclusions in the document.	Section 5.17.2.3, p. 5.17-7	Yes	
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (B)	Descriptions, including methodologies and findings, of all major studies or research efforts undertaken and relied upon to provide information for the document; and a description of ongoing research of significance to the project (including expected completion dates; and	Section 5.17.2.3, p. 5.17-7	Yes	
Cal. Code Regs. Tit. 20 § 1704, (a) (3) (C)	A list of all literature relied upon or referenced in the documents, along with brief discussions of the relevance of each such reference;	Section 5.17.2.3, p. 5.17-7	Yes	
Appendix B (g) (1)	provide a discussion of the existing site conditions, the expected direct, indirect, and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation. Describe the approach, list or projection or a combination, used to develop the cumulative setting for the proposed project. Include any reference materials used such as general plan or other adopted local, regional, or statewide plan.	Section 5.17.1, p. 5.17-1	Yes	

Completeness:	Complete X	Incomplete			Revision No. 0	Date: April 2024
Technical Area:	Worker Safety		Project:	Willow Rock Energy Storage Center	Technical Staff:	Steve De Young
Project Manager:	Leonidas Payne		Docket:	21-AFC-02	Technical Senior:	Brett Fooks

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
Appendix B (g) (11) (A)	A description of the safety training programs that will be required for construction and operation personnel.	Sections 5.17.2, 5.17.2.1, 5.17.2.2, p. 5.17-1; 5.17.2.3, 5.17.2.3.1, p. 5-17-7; 5.17.2.3.2, p. 5.17-13; 5.17.2.3.3, p. 5.17-18; 5.17.2.4, p. 5.17-21	Yes	
		Tables 5.17-1, p. 5.17-2; 5.17-2, p.5.17-5, 5.17-3, p. 5.17-19; 5.17-4, p. 5.17-20		
Appendix B (g) (11) (B)	A complete description of the fuel handling system and the fire suppression system.	Section 5.17.2.4, p. 5.17-20 Tables 5.17-5, p.5.17-21; 5.17-6, p. 5.17-21; 5.17-7,	Yes	
Appendix B (g) (11) (C)	Provide draft outlines of the Construction Health and Safety Program and the Operation Health and Safety Program, as follows:	p. 5.17-22 Section 5.17.2.3, p. 5.17-7	Yes	
	Construction Health and Safety Program: Injury and Illness Prevention Plan (8 Cal. Code Regs., § 1509);	Section 5.17.2.3.1, p. 5.17-7 Table 5.17-3, p. 5.17-19	Yes	
	Fire Protection and Prevention Plan (8 Cal. Code Regs., section 1920);	Section 5.17.2.3.1, p. 5.17-7	Yes	
	Personal Protective Equipment Program (8 Cal. Code Regs., §§ 1514-1522)	Table 5.17-3, p. 5.17-19 Section 5.17.2.3.1, p. 5.17-7	Yes	

Completeness:	Complete X	Incomplete			Revision No. 0	Date: April 2024
Technical Area:	Worker Safety	_	Project:	Willow Rock Energy Storage Center	Technical Staff:	Steve De Young
Project Manager:	Leonidas Payne		Docket:	21-AFC-02	Technical Senior:	Brett Fooks

SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
		Table 5.17-3,		
		p. 5.17-19		
	Operation Health and Safety Program:	Section 5.17.2.3.2,	Yes	
	 Injury and Illness Prevention Program (8 	p. 5.17-13		
	Cal. Code Regs., §3203);	Table 5.17-4, p. 5.17-20		
	 Fire Prevention Plan (8 Cal. Code Regs., § 	Section 5.17.2.3.2,	Yes	
	3221);	p. 5.17-13		
		Table 5.17-4, p. 5.17-20		
	 Emergency Action Plan (8 Cal. Code Regs., 	Sections 5.17.2.2, p. 5.17-	Yes	
	§ 3220);	1; 5.17.2.3.2, p. 5.17-13		
		Table 5.17-4, p. 5.17-20		
	Personal Protective Equipment Program (8	Section 5.17.2.3.2, p. 5.17-	Yes	
	Cal. Code Regs., §§3401-3411).	14		
	,	Table 5.17-4, p. 5.17-20		
Appendix B (i) (1) (A)	Tables that identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	Table 5.17-7, p. 5.17-22	Yes	
Appendix B (i) (1) (B)	Tables that identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local,	Table 5.17-9, p. 5.17-27	Yes	

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SITING REGULATIONS	Information	APPLICATION PAGE NUMBER AND SECTION NUMBER	COMPLETE YES OR NO	Information Required to Make Application Conform With Regulations
	regional, state and federal land use plans, and agencies that would have permit approval or enforcement authority, but for the exclusive authority of the Commission to certify sites and related facilities.			
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and provide the name of the official who will serve as a contact person for Commission staff.	Section 5.17.4, p. 5.17-27 Table 5.17-8. p. 5.17-27	Yes	
Appendix B (i) (3)	A schedule indicating when permits outside the authority of the Commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Section 5.17.5, p. 5.17-27 Table 5.17-9. p. 5.17-27	Yes	