Memorandum

Date: May 9, 2016
Telephone: (916) 654-4996

To: Robert B. Weisenmiller, Chair
Karen Douglas, Commissioner
David Hochschild, Commissioner
Andrew McAllister, Commissioner
Janea A. Scott, Commissioner

From: California Energy Commission
1516 Ninth Street
Sacramento, CA 95814-5512

Robert P. Oglesby
Executive Director

Subject: **MISSION ROCK ENERGY CENTER**
REVISED DATA ADEQUACY RECOMMENDATION (15-AFC-02)

On December 30, 2015, Mission Rock Energy Center, LLC, (Applicant) filed an Application for Certification (AFC) to construct and operate an electrical generating facility in Ventura County, California, approximately 2 miles west of Santa Paula, near State Highway 126. Mission Rock would be a natural gas-fired, nominal 255-megawatt electrical generating facility. Mission Rock would also provide 100 MWhr (25 MW for 4 hours) of battery storage and synchronous condenser clutch technology to provide ancillary and grid reliability services.

PROJECT DESCRIPTION

The five GE LM6000 CTGs would be equipped with selective catalytic reduction (SCR) air emissions control equipment and associated support equipment for nitrogen oxide (NOx) and carbon monoxide (CO) control. Each CTG would be capable of generating approximately 57 MW (gross) at base load. The project is expected to have an overall annual availability of 92 to 98 percent, including scheduled and forced outage occurrences.

PROJECT CONSTRUCTION AND OPERATION

As a peaking power plant, Mission Rock is expected to operate during periods of increased need on the grid. This includes: times of high electrical load, during periods when intermittent renewable source generation fluctuates; when base load plants are not operating or being brought on-line; or during emergency conditions. Mission Rock would provide a resource to balance the variability of renewable resources and satisfy peak energy and capacity needs during high-load events.

Staff's January 29, 2016, initial data adequacy review of the Mission Rock AFC determined that the AFC did not meet all the requirements listed in Title 20, section 1704, and Division 2, Chapter 5, Appendix B of the California Code of Regulations for the 12-month licensing process. Specifically, the AFC was deficient in 11 of 22 areas: air quality, biological resources, cultural resources, project overview, reliability, soils, traffic and transportation, transmission system design, visual resources, waste management and water resources.

Staff has reviewed the Data Adequacy (Supplement A) information submitted by the Applicant on April 29, 2016. Supplement A included the “Letter of Completeness” provided by the Ventura County Air Pollution Control District. The AFC now meets the above-listed requirements in all eleven of the previously deficient technical disciplines. Therefore, staff has determined that the AFC, with Supplement A now contains all the information required by the 12-month AFC process.

Attachment A is a summary table, and **Attachment B** contains the revised data adequacy worksheets for the eleven technical disciplines previously determined to be data inadequate.

At the Energy Commission’s Business Meeting on May 17, 2016, I will recommend that the Energy Commission accept the Mission Rock AFC as data adequate pursuant to California Code of Regulations, Title 20, Section 1709 (d). If the Energy Commission accepts staff’s recommendation, the Energy Commission may deem the application for certification with the supplemental information complete and appoint a Committee.

If you have any questions, please contact Mike Monasmith, staff’s Project Manager, at (916) 654-4894 or via email at mike.monasmith@energy.ca.gov.

Attachments **Attachment A**, Overview of Staff’s Revised Data Adequacy Determination
Attachment B, Staff’s Data Adequacy Worksheets

ATTACHMENT A

OVERVIEW OF ENERGY COMMISSION STAFF'S
Revised Data Adequacy Determination

Mission Rock Energy Center
15-AFC-02

TECHNICAL AREA	ATTACHMENT B PAGE NO.	ADEQUATE? 12-MONTH
Air Quality	1	Yes
Biological Resources	7	Yes
Cultural Resources	17	Yes
Project Overview	29	Yes
Reliability	33	Yes
Soils	36	Yes
Traffic and Transportation	38	Yes
Transmission System Design	42	Yes
Visual Resources	45	Yes
Waste Management	50	Yes
Water Resources	53	Yes

ATTACHMENT B

ENERGY COMMISSION STAFF'S
Revised Data Adequacy Worksheets

Mission Rock Energy Center
15-AFC-02

May 9, 2016

Adequacy Issue: Adequate X Inadequate ~~X~~

DATA ADEQUACY WORKSHEET

Revision No. ~~0~~ **1** Date ~~01-29-2016~~ **May 9, 2016**

Technical Area: **Air Quality** Project: Mission Rock Energy Center Technical Staff: Joseph Hughes

Project Manager: Mike Monasmith Docket: 15-AFC-02 Technical Senior: Gerry Bemis

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC 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.	Section 5.1, pp. 5.1-1 to 5.1-47. Appendix 5.1A-5.1H.	Yes	
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.	**Section 5.1, pp. 5.1-1 to 5.1-47. Appendix 5.1A-5.1H.**	~~NO~~ **YES**	~~The Ventura County Air Pollution Control District needs the permit application and an indemnification agreement in order to make a data adequacy determination. Once the district has made its determination, please provide the permit application completeness letter issued by the district.~~ **The Ventura County Air Pollution Control District deemed the permit application complete on April 14, 2016. The district provided staff with a copy of the completeness letter April 26, 2016 and the applicant docketed a copy of the completeness letter as part the Data Adequacy Supplement on April 29, 2016 (TN 211312).**
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.	Appendix 5.1A. Tables, 5.1A-4 and 5.1A-5. Appendix 5.1, Attachment 5.1A-1. Section 5.1.5.3, p. 5.1-18. Section 5.1.6.2, Table 5.1-23.	Yes	
Appendix B (g) (8) (C)	A description of the control technologies proposed to limit the emission of criteria pollutants.	Section 2.1.12, pp. 2.1-18 to 2.1-19. Section 5.1.4, p. 5.1-15.	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.	Not Applicable	Not Applicable	

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
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 5.1.3.4. Tables 5.1-6 through 5.1-11. Appendix 5.1A.	Yes	
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 5.1.3.2, pp. 5.1-6 through 5.1-11. Appendix 5.1A, table 5.1A-1.	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.	Appendix 5.1A, Table 5.1A-7. Section 5.1.3.2.	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 5.1.6.1, Table 5.1-22. Appendix 5.1B, Table 5.1B-2.	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 5.1.6, pp. 5.1-19 through 5.1-25. Dispersion Modeling Files, Support Files, AERMET.	Yes	

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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.	Not Applicable	Not Applicable	
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.	Appendix 5.1B Dispersion Modeling Files, Support Files, AERMET.	Yes	
Appendix B (g) (8) (I)	An evaluation of the project's direct and cumulative air quality impacts, consisting of the following:	See Below	See Below	
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;	Dispersion Modeling Files, Construction. Appendix 5.1E.	Yes	

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC 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 (NO_x, SO_2, CO, $PM_{10,}$ and $PM_{2.5}$) 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;	Dispersion Modeling Files. Section 5.1.6.3, pp. 5.1-31 to 5.1-33. Appendices 5.1B and 5.1C.	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 six mile radius which 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 5.1.6.1, p. 5.1-28. Appendix 5.1C.	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 $NO_{X,}$ SO_2, CO, PM_{10}, and $PM_{2.5}$.	Dispersion Modeling Files. Section 5.1.6.4, pp. 5.1-33 to 5.1-35.	Yes	
Appendix B (g) (8) (J)	If an emission offset strategy is proposed to mitigate the project's impacts under subsection (g)(1), provide the following information:	See Below	See Below	
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	Section 5.1.3.4, Table 5.1-12. Appendix 5.1H.	Yes	

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (8) (J) (ii)	Potential offset sources, including location, and quantity of emission reductions;	Appendix 5.1H.	Yes	
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.	Section 5.1.3.4, p. 5.1-12	Yes	
Appendix B (i) (1) (A)	Tables which 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 5.1.7, Table 5.1-30.	Yes	
Appendix B (i) (1) (B)	Tables which 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 5.1.7.1, pp. 5.1-38 through 5.1-44. Section 5.1.7.2, Table 5.1-31.	Yes	

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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 also provide the name of the official who will serve as a contact person for Commission staff.	Section 5.1.7.2, Table 5.1-31.	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 5.1.7.2, Table 5.1-31. Section 5.1.7.3.	Yes	

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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.	Page 5.2-1 to 5.2-21, Section 5.2.1; Page 5.2-13, Section 5.2.2; Page 5.2-6, Section 5.2.1.5; Page 5.2-21, Section 5.2.3; Page 5.2-21 to 5.2-25, Section 5.2.4	Yes	
Appendix B (g) (13) (A)	A regional overview and discussion of terrestrial and aquatic biological resources, with particular attention to sensitive biological resources within ten (10) miles of the project. Include a map at a scale of 1:100,000 (or other suitable scale) 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. Sensitive biological resources include the following:	Page 5.2-2 to 5.2-6, Section 5.2.1.1; Figure 5.2-1A; Figure 5.2-1B; Figure 5.2-2 (1 through 20); Figure 5.2-3; Figure 5.2-4; Figure 5.2-5; Figure 5.2-6 (1 through 24)	Yes	
Appendix B (g) (13) (A) (i)	species listed under state or federal Endangered Species Acts;	Appendix 5.2A	Yes	
Appendix B (g) (13) (A) (ii)	resources defined in sections 1702(q) and (v) of Title 20 of the California Code of Regulations;	Appendix 5.2A	Yes	
Appendix B (g) (13) (A) (iii)	species identified as state Fully Protected;	Appendix 5.2A	Yes	
Appendix B (g) (13) (A) (iv)	species covered by Migratory Bird Treaty Act;	Appendix 5.2A	Yes	

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
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 California Natural Diversity Database, or where applicable, in Local Coastal Programs or in relevant decisions of the California Coastal Commission; and	Appendix 5.2A; Page5.2-4, Section 5.2.1.3	Yes	
Appendix B (g) (13) (A) (vi)	fish and wildlife species that have commercial and/or recreational value.	Appendix 5.2A; Page 5.2-9, Section 5.2.1.10	Yes	
Appendix B (g) (13) (B)	Include a list of the species actually 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:	Appendix 5.2B	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 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 California Natural Diversity Database, and the associated areas where biological surveys were conducted. Label the biological resources and survey areas as well as the project facilities;	Figure 5.2-6 (1 through 24); Figure 5.2-3; Figure 5.2-4; Figure 5.2-5	Yes	
Appendix B (g) (13) (B) (ii)	A depiction of the extent of the thermal plume at the surface of the water if cooling water is proposed to be discharged to a water source. Provide the location for the intake and discharge structures on an aerial photograph(s) or detailed maps. Water sources include, but are not limited to, waterways, lakes, impoundments, oceans, bays, rivers, and estuaries; and	Not Applicable	Not Applicable	

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (13) (B) (iii)	An aerial photo or wetlands delineation maps at a scale of (1:2,400) showing any potential jurisdictional and non-jurisdictional wetlands 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 US Army Corps of Engineers Section 404 Permit application. 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.	Figure 5.2-2 (1 through 20)	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, 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:	Page 5.2-2, Section 5.2.1.1; Page 5.2-6 to 5.2-13, Section 5.2.1.5, Section 5.2.1.6, Section 5.2.1.7, Section 5.2.1.8	Yes	
Appendix B (g) (13) (C) (i)	A list of all the species actually observed;	Appendix 5.2B	Yes	
Appendix B (g) (13) (C) (ii)	A list of sensitive species and habitats with a potential to occur (as defined in (A) above); and	Appendix 5.2A	Yes	

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (13) (C) (iii)	If cooling water is taken directly from or discharged to a surface water feature source, include a description of the intake structure, screens, water volume, intake velocity hydraulic zone field of influence, and the thermal plume dispersion area as depicted in response to B(ii) above. Describe the thermal plume size and dispersion under high and low tides, and in response to local currents and seasonal changes. Provide a discussion of the aquatic habitats, biological resources, and critical life stages found in these affected waters. For repower projects that anticipate no change in cooling water flow, this information shall be provided in the form of the most recent federal Clean Water Act 316(a) and (b) studies of entrainment and impingement impacts that has been completed within the last five (5) years. For new projects or repower projects proposing to use once-through cooling and anticipating an increase in cooling water flow, provide a complete impingement and entrainment analysis per guidance in (D)(ii), below.	Not Applicable	Not Applicable	
Appendix B (g) (13) (D)	A description and results of all field studies and seasonal surveys used to provide biological baseline information about the project site and associated facilities. Include copies of the California Natural Diversity Database 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 surveys, and the name(s) and qualifications of the biologists conducting the surveys. Include:	Page 5.2-6 to 5.2-13, Sections 5.2.1.5 to 5.2.1.10; Appendix 5.2B **Data Adequacy Supplement Page 5-4 #8, Attachment DA 5.2-1**	~~No~~ **Yes**	~~Please provide field survey forms completed by the applicant's biologists, identifying the date(s) the surveys were completed and methods used to complete the surveys.~~

Adequacy Issue: Adequate X Inadequate ~~X~~

DATA ADEQUACY WORKSHEET

Revision No. ~~0~~ **1** Date ~~01-29-2016~~ **May 9, 2016**

Technical Area: **Biological Resources** Project: Mission Rock Energy Center Technical Staff: Andrea Martine

Project Manager: Mike Monasmith Docket: 15-AFC-02 Technical Senior: Eric Knight

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (13) (D) (i)	Current biological resources surveys conducted using appropriate field survey protocols 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;	Page 5.2-9, Section 5.2.1.9 **Data Adequacy Supplement Page 5-5 #9, Attachment DA 5.2-1**	~~No~~ **Yes**	~~AFC page 5.2-1 states "the methods and results of biological surveys for the proposed project are included in Section 5.2.2.4." However, this section does not exist.~~ ~~While AFC states that rare and special-status plant surveys were conducted in June 2014, within the flowering period, it does not describe the types of protocol surveys conducted.~~ ~~Please describe the field survey protocols used during the 2014 rare plant surveys.~~ ~~If special-status plant surveys were not conducted using appropriate survey protocols during the appropriate season(s), please conduct these surveys in areas to be disturbed by the project where suitable habitat exists for the special-status plants listed in Appendix 5.2A.~~ ~~The AFC states "During field surveys, the regional special-status wildlife species list was evaluated against observed conditions to determine which species could occur or have the potential to occur" (page 5.2-9, Section 5.2.1.10). However, there is no mention of any protocol surveys, dates of surveys, or survey methods for the special-status species listed in Appendix 5.2A.~~ ~~If special-status wildlife surveys were not conducted using appropriate survey protocols during the appropriate season(s), please conduct these surveys in areas to be disturbed by the project where suitable habitat exists for the special-status wildlife listed in Appendix 5.2A.~~ ~~Depending on the results of the surveys, update the list of Plant and Wildlife Species Observed during Field Surveys (Appendix 5.2B) if need be.~~

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (13) (D) (ii)	If cooling water is proposed to be taken directly from or discharged to a surface water feature source, seasonal aquatic resource studies and surveys shall be conducted. Aquatic resource survey data shall include, but is not limited to, fish trawls, ichthyoplankton and benthic sampling, and related temperature and water quality samples. For new projects or repower projects anticipating a change in cooling water flows, sampling protocols shall be provided to the Energy Commission staff for review and concurrence prior to the start of sampling. For repower projects not anticipating a change in cooling water flows, this information shall be provided in the form of the most recent federal Clean Water Act 316(b) impingement and entrainment impact study completed within five (5) years of the AFC filing date; and	Not Applicable	Not Applicable	

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (13) (D) (iii)	If the project or any related facilities could impact a jurisdictional or non-jurisdictional wetland, provide completed Army Corps of Engineers wetland delineation forms and/or determination of wetland status pursuant to Coastal Act requirements, name(s) and qualifications of biologist(s) completing the delineation, the results of the delineation and a table showing wetland acreage amounts to be impacted.	Page 5.2-17, Section 5.2.1.8; Page 5.11-9, Section 5.11.1.2, Fig 5.2-2 (page 1 of 20); Fig 5.2-2, page 10 of 20; (Fig 5.2-2; pages 11 of 20 and 12 of 20 **Data Adequacy Supplement Page 5-5 #10, Attachment DA 5.2-2**	~~No~~ **Yes**	~~The project has the potential to impact the wetlands southeast and adjacent to the project site (Fig 5.2-2, page 1 of 20), the natural gas pipeline route (Fig 5.2-2, page 10 of 20), and along the proposed Gen-Tie line (Fig 5.2-2; pages 11 of 20 and 12 of 20).~~ ~~The AFC says the project "will not cause loss or fill of any wetlands" (page 5.2-17). It also states the project will not "affect waters of the United States" or State waters (page 5.2-29). However there is no data to support this claim. The National Wetland Inventory data is not accurate enough and does not provide current conditions of the area to make a determination for direct and indirect impacts.~~ ~~Provide completed wetland delineation forms using the 1987 Army Corps of Engineers Wetlands Delineation Manual (United States Army Corps of Engineers, 1987), including delineation of waters jurisdictional to the State of California within 250 feet of the project area (including all linear facilities).~~
Appendix B (g) (13) (E)	Impacts discussion of the following:			
Appendix B (g) (13) (E) (i)	all impacts (direct, indirect, and cumulative) to biological resources from project site preparation, construction activities, plant operation, maintenance, and closure. Discussion shall also address sensitive species habitat impacts from cooling tower drift and air emissions;	Page 5.2-13 to 5.2-21, Sections 5.2.2 and 5.2.3	Yes	

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Appendix B (g) (13) (E) (ii)	facilities that propose to take water directly from, and/or discharge water to surface water features, daytime and nighttime impacts from the intake and discharge of water during operation, water velocity at the intake screen, the intake field of influence, impingement, entrainment, and thermal discharge. Provide a discussion of the extent of the thermal plume, effluent chemicals, oxygen saturation, intake pump operations, and the volume and rate of cooling water flow at the intake and discharge location; and	Not Applicable	Not Applicable	
Appendix B (g) (13) (E) (iii)	Methods to control biofouling and chemical concentrations, and temperatures that are currently being discharged or will be discharged to receiving waters.	Not Applicable	Not Applicable	
Appendix B (g) (13) (F)	A discussion of all feasible mitigation measures including, but not limited to the following:	Page 5.2-21, Section 5.2.4	Yes	
Appendix B (g) (13) (F) (i)	All measures proposed to avoid and/or reduce adverse impacts to biological resources; .	Page 5.2-21, Section 5.2.4	Yes	
Appendix B (g) (13) (F) (ii)	All off-site habitat mitigation and habitat improvement or compensation, and an identification of contacts for compensation habitat and management;	Page 5.2-21 to 5.2-25, Section 5.2.4	Yes	
Appendix B (g) (13) (F) (iii)	Design features to better disperse or eliminate a thermal discharge;	Not Applicable	Not Applicable	
Appendix B (g) (13) (F) (iv)	All measures proposed to avoid or minimize adverse impacts of cooling water intake. This shall include a Best Technology Available (BTA) discussion. If BTA is not being proposed, the rationale for not selecting BTA must be provided; and	Not Applicable	Not Applicable	

Adequacy Issue: Adequate X Inadequate ~~X~~

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Revision No. ~~0~~ **1** Date ~~01-29-2016~~ **May 9, 2016**

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Project Manager: Mike Monasmith Docket: 15-AFC-02 Technical Senior: Eric Knight

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Appendix B (g) (13) (F) (v)	Educational programs to enhance employee awareness during construction and operation to protect biological resources.	Page 5.2-22, Section 5.2.4	Yes	
Appendix B (g) (13) (G)	A discussion of compliance and monitoring programs to ensure the effectiveness of impact avoidance and mitigation measures incorporated into the project.	Page 5.2-22 to 5.2-25, Section 5.2.4	Yes	
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 California Department of Fish and Game, and the Regional Water Quality Control Board will be required for the proposed project.	Page 5.2-29, Section 5.2.6 **Data Adequacy Supplement Page 5-6 #11**	~~No~~ **Yes**	~~The AFC recommends consultation with CDFW and USFWS, particularly for the generator tie-line. There's a statement that reads "Further discussions will determine whether CDFW and USFWS will require formal consultation for this portion of the project," suggesting that some preliminary correspondence between the applicant and CDFW and/or USFWS has occurred.~~ ~~Please provide any preliminary correspondence between the project applicant and state and federal resource agencies regarding whether federal or state permits will be required for the proposed project.~~
Appendix B (i) (1) (A)	Tables which 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 5.2-4, Page 5.2-26, Section 5.2.5	Yes	

Adequacy Issue: Adequate X Inadequate ~~X~~

DATA ADEQUACY WORKSHEET

Revision No. ~~0~~ **1** Date ~~01-29-2016~~ **May 9, 2016**

Technical Area: **Biological Resources** Project: Mission Rock Energy Center Technical Staff: Andrea Martine

Project Manager: Mike Monasmith Docket: 15-AFC-02 Technical Senior: Eric Knight

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (i) (1) (B)	Tables which 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.	Page 5.2-29, Section 5.2.7, Table 5.2-5	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 also provide the name of the official who will serve as a contact person for Commission staff.	Page 5.2-29, Section 5.2.7, Table 5.2-5 **Data Adequacy Supplement Page 5-6 #12**	~~No~~ **Yes**	~~Provide the name, title, and email address of each agency personnel that will serve as the 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.	Page 5.2-29, Section 5.2.6 **Data Adequacy Supplement Page 5-7 #13**	~~No~~ **Yes**	~~The AFC provides no evidence that protocol surveys for special-status plants and wildlife species have been done to determine if impacts to federally listed species may occur. In addition, without completed jurisdictional wetland delineation forms, it is not possible to determine if Waters of the US may be impacted. Please consult with USFWS and USACE to determine if federal permits (e.g., Section 404) would be required.~~

Adequacy Issue: Adequate X Inadequate ~~X~~ DATA ADEQUACY WORKSHEET Revision No. ~~0~~ **1** Date ~~01-29-2016~~ **May 9, 2016**

Technical Area: **Cultural Resources** Project: Mission Rock Energy Center Technical Staff: B. Bagwell, D. Dyste, C. Hamilton

Project Manager: Mike Monasmith Docket: 15-AFC-02 Technical Senior: Thomas Gates, PhD

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC 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.	Existing site conditions: Vol I, Sec. 5.3, p. 5.3-1 to 5.3-2	Yes	
		Direct/Indirect/Cumulative Impacts of project: Vol I, Sec 5.3.3, p. 5.3-31 to 5.3-34	Yes	
		Measures to mitigate known impacts: Vol I, Sec. 5.3.4, p. 5.3-34 to 5.3-46	Yes	
		Effectiveness of the proposed measures: Vol I, Sec. 5.3.5, p. 5.3-34 to 43	Yes	
		Any monitoring plans proposed to verify the effectiveness of the mitigation: Vol I, Sec. 5.3.5, p. 5.3-41	Yes	

Adequacy Issue: Adequate X Inadequate ~~X~~ DATA ADEQUACY WORKSHEET Revision No. ~~0~~ **1** Date ~~01-29- 2016~~ **May 9, 2016**

Technical Area: **Cultural Resources** Project: Mission Rock Energy Center Technical Staff: B. Bagwell, D. Dyste, C. Hamilton

Project Manager: Mike Monasmith Docket: 15-AFC-02 Technical Senior: Thomas Gates, PhD

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
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.	Summary of the ethnology: Vol I, Sec. 5.3, pp. 5.3-3–5.3-7 Summary of the Prehistory: Vol I, Sec. 5.3, pp. 5.3-3–5.3-4 Summary of History: Vol I, Sec. 5.3, pp. 5.3-5–5.3-10	Yes Yes Yes	

Adequacy Issue: Adequate X Inadequate ~~X~~

DATA ADEQUACY WORKSHEET

Revision No. ~~0~~ **1** Date ~~01-29- 2016~~ **May 9, 2016**

Technical Area: **Cultural Resources** Project: Mission Rock Energy Center Technical Staff: B. Bagwell, D. Dyste, C. Hamilton

Project Manager: Mike Monasmith Docket: 15-AFC-02 Technical Senior: Thomas Gates, PhD

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (2) (B)	The results of a literature search to identify 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 listed pursuant to ordinance by a city or county, or recognized by any local historical or archaeological society or museum. Literature searches to identify the above 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 (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' 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 .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.	Literature searches: Vol I, Sec. 5.3, pp. 5.3-13–5.3-23 Cultural resources listed under a city/county ordinance or local museum/society: Vol I, Sec. 5.3, p.5.3-13 and Vol I, Sec. 5.3.2 p. 5.3-31 Completed by individuals meeting Secretary of Interior's Professional Standards for technical area: Vol I, Sec. 5.3, p. 5.3-1; Vol. II, App. 5.3D; App. 5.3B, p. 1 Copies of DPR forms for all cultural resources identified: Vol II., App. 5.3C USGS 7'5" Quad: Vol II, App. 5.3C; **Data Adequacy Supplement, confidential filing (5/2/16), Att. DA5.3-1** Copies of all technical reports within .25 mi of the	Yes Yes Yes Yes ~~No~~ **Yes** ~~No~~ **Yes**	~~Applicant needs to submit a revised 7.5-minute topographic map of the complete literature search results, delineating the boundaries of all previously recorded districts and locations of resources such as buildings and associated acreage, as identified by the CHRIS literature search, but also including locations of all resources, district boundaries, including the study area of the 1996 architectural study completed by San Buenaventura Associates. The applicant has presented most of this information piecemeal, but it should all be placed on one map to facilitate comparative analysis.~~ ~~All resources should be identified by the CHRIS Primary number, if available. If one is not available, applicant must use a temporary name and number designation.~~ ~~The applicant needs to provide copies of the following reports: VN127, VN494, VN1265, VN1776, VN1777, VN1801, VN2643,VN2774,~~

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
		area surveyed: Vol II, Sec. 5.3C; **Data Adequacy Supplement, confidential filing (5/2/16), Att. DA5.3-2**		~~VN2864, VN2872, VN2917~~
Appendix B (g) (2) (C)	The results of new 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 five (5) years old. Surveys to identify new 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' around the project site, substations and staging areas, and to no less than 50' 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 .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 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	New Survey: Vol I. Sec 5.3, p. 5.3-23 to 5.3-30 Names/Quals for surveyors: Vol II, App. 5.3D New arch survey: Vol I. Sec 5.3, p. 5.3-23 to 5.3-24 New historic arch survey: Vol I., Sec 5.3, p. 5.3-24 to 5.3-30 Technical report for new archaeological and architectural survey: Vol II, App. 5.3B	Yes Yes Yes Yes Yes	

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
	surveys, conforming to the Archaeological Resource Management Report format (CA Office of Historic Preservation Feb 1990), which is incorporated by reference, shall be separately provided and submitted (under confidential cover if archaeological site locations are included).			
Appendix B (g) (2) I cont.	Information included in the technical report shall also be provided in the Application for Certification, except that confidential information (archaeological sites or areas of religious significance) shall be submitted under a request for confidentiality pursuant to Title 20, California Code of Regulations, § 2501 et seq. At a minimum, the technical report shall include the following:	Technical report provided: Vol. II, App. 5.3B Information (except confidential) from technical report: Vol. I, Sec 5.3, p. 5.3-1 to 5.3-41	Yes Yes	
Appendix B (g) (2) I (i)	The summary from Appendix B (g)(2)(A) and the literature search results from Appendix B (g)(2)(B);	Summary of ethnology, prehistory and history: Vol. II, App. 5.3B, p. 7-16; Vol. I, Sec. 5.3.1, p. 5.3-2 – 5.3-10 Summary of literature search: Vol. II, App. 5.3B; Vol. I, Sec. 5.3.2,4 p.5.3-12 to 5.3-23	Yes Yes	

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (2) (C) (ii)	The survey procedures and methodology used to identify cultural resources and a discussion of the cultural resources identified by the survey;	Archaeological Methods: Vol I, Sec 5.3.2, pp 5.3-12–5.3-13; Sec. 5.3.2.4. pp. 5.3-23–5.3-24; Vol II, App. 5.3B, pp. 19-20; 32-33.	Yes	
		Historical Architecture Methods: Vol I, Sec. 5.3.2.4, pp. 5.3-24–5.3-25; Vol II, App. 5.3B, pp.; 33-34.	Yes	
		Survey Results: Vol I, Sec. 5.3, pp. 5.3-25–5.3-26; 5.3-30; 5.3-32–5.3-33; and Table 5.3-3, pp. 5.3-27–5.3-29; Vol II, App. 5.3B, pp.; 34-40.	Yes	

Adequacy Issue: Adequate X Inadequate ~~X~~

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Technical Area: **Cultural Resources** Project: Mission Rock Energy Center Technical Staff: B. Bagwell, D. Dyste, C. Hamilton

Project Manager: Mike Monasmith Docket: 15-AFC-02 Technical Senior: Thomas Gates, PhD

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (2) (C) (iii)	Copies of all new and updated DPR 523(A) forms. If a cultural resource may be impacted by the project, also include the appropriate DPR 523 detail form for each such resource;	Copies of new forms DPR 523(A): Vol. II, App. 5.3B; **Data Adequacy Supplement, confidential filing (5/2/16), Att. DA5.3-3** Copies of updated forms DPR 523(A): Vol. II, App. 5.3B Copies of DPR detail forms: Vol. II, App. 5.3B, 5.3C	~~No~~ **Yes** Yes Yes	~~The applicant must provide DPR 523 (A) forms for the following newly recorded resources listed in Vol. II, App. 5.3B, Table 4-3: Todd Barranca Bridge, the Ellsworth Barranca Bridge, the Edwards Ranch Drainage Railroad Bridge, and SR 126.~~

Adequacy Issue: Adequate X Inadequate ~~X~~ DATA ADEQUACY WORKSHEET Revision No. ~~0~~ **1** Date ~~01-29- 2016~~ **May 9, 2016**

Technical Area: **Cultural Resources** Project: Mission Rock Energy Center Technical Staff: B. Bagwell, D. Dyste, C. Hamilton

Project Manager: Mike Monasmith Docket: 15-AFC-02 Technical Senior: Thomas Gates, PhD

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (2) (C) (iv)	A map at a scale of 1:24,000 U.S. Geological Survey quadrangle depicting the locations of all previously known and newly identified cultural resources compiled through the research required by Appendix B (g)(2)(B) and Appendix B (g)(2)(C) (ii); and	U.S. Geological Survey quadrangle map depicting previously known and newly identified cultural resources: Vol II, App. 5.3E; Vol. II, App. 5.3B, Figure 4-1; **Data Adequacy Supplement, confidential filing (5/2/16), Att. DA5.3-1**	~~No~~ **Yes**	~~Applicant needs to:~~ ~~a) provide all locations of previously known and newly recorded cultural resources plotted on a 1:24,000 U.S. Geological Survey quadrangle map,~~ ~~b) clearly distinguish between previously known and newly identified resources using legible font and text labels,~~ ~~c) include a map legend that clearly identifies all plotted resources, including previously known and newly identified cultural resources, buildings, structures, historical districts, and contributing elements to the historical districts (i.e., include at minimum, the Southern Pacific Railroad Line; the NRHP-eligible Limoneira Ranch Historic District and any associated cultural resources; the Edwards Ranch/Orchard Farm Historic District and any associated cultural resources; the Santa Clara Valley Rural Historic District (SCVRHD) and any associated cultural resources including but not limited to contributing elements to the District, such as the 57-acres of the Pardee Ranch; 41-acres of the Hubert Edwards Residence; 104-acres of the Milton Teague Ranch; the Fred Outland Ranch, 21-acres of the Tom Parker Ranch; 150-acres of the Sharp-Thille Ranch, Ventura County Landmark #114; and 45 acres of the Steele Ranch), and,~~ ~~d) submit this information to the CEC under a request for confidentiality.~~

Adequacy Issue: Adequate X Inadequate ~~X~~

DATA ADEQUACY WORKSHEET

Revision No. ~~0~~ **1** Date ~~01-29- 2016~~ **May 9, 2016**

Technical Area: **Cultural Resources** Project: Mission Rock Energy Center Technical Staff: B. Bagwell, D. Dyste, C. Hamilton

Project Manager: Mike Monasmith Docket: 15-AFC-02 Technical Senior: Thomas Gates, PhD

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
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.	Names/qualifications for cultural resources specialist: Vol. II App. 5.3D, pp. 7-14; **Data Adequacy Supplement, non-confidential filing (5/2/16), Att. DA5.3-4** Names/qualifications for architectural historians: Vol. II, App. 5.3D, pp. 3-6; 15-16.	~~No~~ **Yes** Yes	~~Applicant needs to provide a resume in Appendix 5.3D for Dr. W. Geoffrey Spaulding, a geoarchaeologist who is listed as a contributing specialist to the report (see AFC Vol I: p. 5.3-1).~~

Adequacy Issue: Adequate X Inadequate ~~X~~ DATA ADEQUACY WORKSHEET Revision No. ~~0~~ **1** Date ~~01-29- 2016~~ **May 9, 2016**

Technical Area: **Cultural Resources** Project: Mission Rock Energy Center Technical Staff: B. Bagwell, D. Dyste, C. Hamilton

Project Manager: Mike Monasmith Docket: 15-AFC-02 Technical Senior: Thomas Gates, PhD

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (2) (D)	Provide a copy of your request to the Native American Heritage Commission (NAHC) for information on Native American sacred sites and lists of Native Americans interested in the project vicinity, and copies of any correspondence received from the NAHC. Notify the Native Americans on the NAHC list about the project, including a project description and map. Provide a copy of all correspondence sent to Native American individuals and groups listed by the NAHC and copies of all responses. Provide a written summary of any oral responses.	NAHC request: ~~Not present~~ **Data Adequacy Supplement, non-confidential filing (5/2/16), Att. DA5.3-5** NAHC response: ~~Not present~~ **Data Adequacy Supplement, non-confidential filing (5/2/16), Att. DA5.3-5** Letters sent to Native Americans on NAHC list: Vol. II, App. 5.3A, pp. 7-35 Copies of correspondences sent and received by Native Americans listed by NAHC: Vol. II, App. 5.3A, pp. 37-45 Written summary of oral responses from Native Americans: Vol. II, App. 5.3A, pp. 3-6	~~No~~ **Yes** ~~No~~ **Yes** Yes Yes Yes	~~Applicant needs to provide a copy of the letter sent to NAHC requesting information on Native American scared sites and lists of Native Americans interested in the project vicinity. This is separate from staff's consultation obligations under AB 52.~~ ~~Applicant needs to provide copies of any correspondence received from the NAHC. If no correspondence has been received, the applicant should state as such. This is separate from staff's consultation obligations under AB 52.~~
Appendix B (g) (2) (E)	Include in the discussion of proposed mitigation measures required by subdivision (g)(1):	Discussion of proposed mitigation measures: Vol I, Sec. 5.3.5; Vol II, App. 5.3B	Yes	
Appendix B (g) (2) (E) (i)	A discussion of measures proposed to mitigate project impacts to known cultural resources;	Mitigation measures for known impacts: Vol. I, Sec. 5.3.5, pp. 5.3-34; 5.3-41–5.3.-43; Vol. II, App. 5.3B, p. 51	Yes	

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (2) (E) (ii)	A set of contingency measures proposed to mitigate potential impacts to previously unknown cultural resources and any unanticipated impacts to known cultural resources; and	Contingency mitigation measures: Vol I, Sec. 5.3.5.2, pp. 5.3-41–5.3-43; Vol II, App. 5.3B, pp. 52–54	Yes	
Appendix B (g) (2) (E) (iii)	Educational programs to enhance employee awareness during construction and operation to protect cultural resources.	Educational programs to enhance employee awareness: Vol. I, Sec. 5.3.5.2, p. 5.3-41–5.3-42; Vol. II, App. 5.3B, p. 53	Yes	
Appendix B (i) (1) (A)	Tables which 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	Tables identifying applicable LORS: Vol. I, Sec. 5.3.6, Table 5.3-5, p. 5.3-43 Explicitly referenced pages: Vol. I, Sec. 5.3.6, Table 5.3-5, p. 5.3-43 Discussion of applicability of, and conformance with LORS: Vol. I, Sec. 5.3.6, Table 5.3-5, p. 5.3-43	Yes Yes Yes	

Adequacy Issue: Adequate X Inadequate ~~X~~ DATA ADEQUACY WORKSHEET Revision No. ~~0~~ **1** Date ~~01-29- 2016~~ **May 9, 2016**

Technical Area: **Cultural Resources** Project: Mission Rock Energy Center Technical Staff: B. Bagwell, D. Dyste, C. Hamilton

Project Manager: Mike Monasmith Docket: 15-AFC-02 Technical Senior: Thomas Gates, PhD

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (i) (1) (B)	Tables which 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.	Tables identifying agencies: Vol. I, Sec. 5.3.6, Table 5.3-5, p 5.3-43; and Sec. 5.3.7, Table 5.3-6, p. 5.3-46	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 also provide the name of the official who will serve as a contact person for Commission staff.	Agency and commission contact information: Vol. I, Sec. 5.3.7, Table 5.3-6, p. 5.3-46	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.	Schedule and steps of obtaining permits: Vol. I, Sec. 5.3.8, p. 5.3-46	Yes	

Adequacy Issue: Adequate X Inadequate ~~X~~ DATA ADEQUACY WORKSHEET Revision No. ~~0~~ 1 Date ~~01-29-2016~~ **May 9, 2016**

Technical Area: **Project Overview** Project: Mission Rock Energy Center Technical Staff: Mike Monasmith

Mike Monasmith Docket: 15-AFC-02 Technical Senior: Chris Davis

SITING REGULATIONS	INFORMATION	AFC SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC 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	Please see the individual technical areas for specific section.
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	Please see the individual technical areas for specific section.
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	Please see the individual technical areas for specific section.
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.		Yes	Please see the individual technical areas for specific section.
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 1.3, pg.1-2	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, pg. 1-2	Yes	
Appendix B (a) (1) (C)	A description of and maps depicting the region, the vicinity, and the site and its immediate surroundings.	Figures 1.2-1, Figure 1.2-2	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 1.1-1	Yes	

SITING REGULATIONS	INFORMATION	AFC SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
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 the proposed power plant and related facilities.	Appendix 5.6	Yes	
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.	Section 2.1.16, pg. 2-22	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.		N/A	
Appendix B (a) (3) (B)	A list of all owners and operators of the proposed electric transmission facilities.	Section 2.3.15, Section 3.0, Appendix 2A	Yes	
Appendix B (a) (3) (C)	A description of the legal relationship between the applicant and each of the persons or entities specified in subsections (a)(3)(A) and (B).	Section 2.3.15, Section 3.0, Appendix 2A	Yes	.
Appendix B (b) (1)	In a section entitled, "Generation Facility Description, Design, and Operation" provide the following information:			
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;	Provided by Applicant in separate AFC filing on January 5, 2016	Yes	
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);	Figure 2.1-2	Yes	

Adequacy Issue: Adequate X Inadequate ~~X~~ DATA ADEQUACY WORKSHEET Revision No. ~~0~~ **1** Date ~~01-29- 2016~~ **May 9, 2016**

Technical Area: **Project Overview** Project: Mission Rock Energy Center Technical Staff: Mike Monasmith

Mike Monasmith Docket: 15-AFC-02 Technical Senior: Chris Davis

SITING REGULATIONS	INFORMATION	AFC SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (b) (1) (C)	A detailed description of the design, construction 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	Sections 2.1.2 though Sections 2.1.14	Yes	
Appendix B (b) (1) (D)	A description of how the site and related facilities were selected and the consideration given to engineering constraints, site geology, environmental impacts, water, waste and fuel constraints, electric transmission constraints, and any other factors considered by the applicant.	**Sections 2.1.2 though Sections 2.1.14**	Yes	
Appendix B (b) (2)	In a section entitled, "Transmission Lines Description, Design, and Operation" provide the following information:			
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 1.2-2	Yes	
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.	**Data Adequacy Supplement Attachment DA1.0-1**	~~NO~~ **YES**	~~Color reproduction maps provided over a long series (20+ maps that together, when combined, constitute the entire length of Transmission Line), however, need one, full page (11x17 foldout ideal) that would provide clarity of T-Line route before and after construction.~~

Adequacy Issue: Adequate X Inadequate ~~X~~

DATA ADEQUACY WORKSHEET

Revision No. ~~0~~ 1 Date ~~01-29- 2016~~ **May 9, 2016**

Technical Area: **Project Overview** Project: Mission Rock Energy Center Technical Staff: Mike Monasmith

Mike Monasmith Docket: 15-AFC-02 Technical Senior: Chris Davis

SITING REGULATIONS	INFORMATION	AFC SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC 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.	Sections 2.1-6, Section 3.0	Yes	
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 3.0	Yes	
Appendix B (e) (1)	A discussion of how facility closure will be accomplished in the event of premature or unexpected cessation of operations.	Section 2.3	Yes	

Adequacy Issue: Adequate X Inadequate ~~X~~ DATA ADEQUACY WORKSHEET Revision No. 0 **1** Date ~~01-29-2016~~ **May 9, 2016**

Technical Area: **Reliability** Project: Mission Rock Energy Center Technical Staff: Shahab Khoshmashrab

Project Manager: Mike Monasmith Docket: 15-AFC-2 Technical Senior: Shahab Khoshmashrab

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC 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.	Sections 1.3, 2.1, 2.1.7, 2.2.1, 2.2.2	Yes	
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.	Sections 2.1.7, 2.2.2.3, 4.0	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 based on a consideration of:	–	Yes	
Appendix B (h) (3) (B) (i)	Expected overall availability factor, and annual and lifetime capacity factors;	Sections 2.2.2.1, 2.1.2	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 conveyance lines, and the waste disposal system;	Sections 1.3, 1.5, 2.1, 2.1.3, 2.1.7, 2.1.8, 2.1.9, 2.1.10	Yes	
Appendix B (h) (3) (B) (iii)	Geologic and flood hazards, meteorologic conditions and climatic extremes, and cooling water availability;	Sections 2.2.2.4, 2.3.9, 5.4, 5.15 Appendix 2C	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	Section 2.1.3, 2.2.2.2	Yes	

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (h) (3) (B) (v)	For technologies not previously installed and operated in California, the expected power plant maturation period.	Sections 1.0, 2.1.17, 2.2.2.1 **Data Adequacy Supplement p.2-1**	~~NO~~ **YES**	~~In addition to the natural gas-fired, simple-cycle power block, the project proposes a battery energy storage system for onsite storage of electricity that can deliver additional electricity to the electricity grid. The project also proposes a clutch system to provide voltage support by operating as a synchronous condenser.~~ ~~The integration of these energy storage and clutch/condenser systems into thermal power plants is new in California. Please explain how the integration of these systems into the project's design would ensure the project's expected availability factor of 92-98 percent is achievable and maintained during the life of the project.~~
Appendix B (i) (1) (A)	Tables which 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 which 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	

Adequacy Issue: Adequate X Inadequate ~~X~~

DATA ADEQUACY WORKSHEET

Revision No. 0 **1** Date ~~01-29-2016~~ **May 9, 2016**

Technical Area: **Reliability** Project: Mission Rock Energy Center Technical Staff: Shahab Khoshmashrab

Project Manager: Mike Monasmith Docket: 15-AFC-2 Technical Senior: Shahab Khoshmashrab

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC 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 also 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	

Adequacy Issue:	Adequate X	Inadequate ~~X~~	DATA ADEQUACY WORKSHEET	Revision No. ~~0~~ **1**	Date ~~01-29- 2016~~ **May 9, 2016**
Technical Area:	**Soils**	Project:	Mission Rock Energy Center	Technical Staff:	Marylou Taylor
Project Manager:	Mike Monasmith	Docket:	15-AFC-02	Technical Senior:	Paul Marshall

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC 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.	Section 5.11, p. 5.11-1 **Data Adequacy Supplemental, p. 5-26**	~~NO~~ **YES**	~~Required information is listed below.~~
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:			
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. 5.11-2 Figure 5.11-1	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;	Section 5.11.1.1, p. 5.11-9 Section 5.11.1.4, p. 5.11-9 Section 5.11.1.5, p. 5.11-10	Yes	
Appendix B (g) (15) (A) (iii)	The location of any proposed fill disposal or fill procurement (borrow) sites; and	**Data Adequacy Supplemental, p. 5-26**	~~NO~~ **YES**	~~Provide information regarding proposed or intended fill procurement (borrow) site.~~
Appendix B (g) (15) (A) (iv)	The location of any contaminated soils that could be disturbed by project construction.	Section 5.11.1.5, p. 5.11-10 Appendix 5.14A	Yes	
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:			
Appendix B (g) (15) (B) (i)	The quantification of accelerated soil loss due to wind and water erosion; and	Section 5.11.2.4, p. 5.11-11 Appendix 5.11A	Yes	

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (15) (B) (ii)	The effect of power plant emissions on surrounding soil-vegetation systems.	Section 5.11.2.7, p. 5.11-15	Yes	
Appendix B (i) (1) (A)	Tables which 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 5.11-5, p. 5-11-18	Yes	
Appendix B (i) (1) (B)	Tables which 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.	Table 5.11-5, p. 5-11-18	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 also provide the name of the official who will serve as a contact person for Commission staff.	Table 5.11-6, p. 5-11-19	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.	Table 5.11-6, p. 5-11-19	Yes	

Adequacy Issue: Adequate X Inadequate ~~X~~

DATA ADEQUACY WORKSHEET

Revision No. ~~0~~ **1** Date ~~01-29- 2016~~ **May 9, 2016**

Technical Area: **Traffic & Transportation** Project: Mission Rock Energy Center Technical Staff: Ashley Gutierrez, Scott Polaske, John Hope

Project Manager: Mike Monasmith Docket: 15-AFC-02 Technical Senior: Eric Knight

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC 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.	AFC pg. 5.12-1 through 8 Sec. 5.12.1.1 through 5.12.1.2 AFC pg. 5.12-12 through 5.12-18 Sec.5.12.2 through 5.12.4	Yes	
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 5.12-2	Yes	
Appendix B (g) (5) (B)	If the proposed project including any linear facility is to be located within 20,000 feet of an airport runway that is at least 3,200 feet in actual length, or 5,000 feet of a heliport (or planned or proposed airport runway or an airport runway under construction, that is the subject of a notice or proposal on file with the Federal Aviation Administration), discuss the project's compliance with the applicable sections of the current Federal Aviation Regulation Part 77 – Objects Affecting Navigable Airspace, specifically any potential to obstruct or impede air navigation generated by the project at operation; such as, a thermal plume, a visible water vapor plume, glare, electrical interference, or surface structure height. The discussion should include a map at a scale of 1:24,000 that displays the airport or airstrip runway configuration, the proposed power plant site and related facilities.	AFC pg. 5.12-17 Sec. 5.12.2.5 AFC pg. 5-13-13 Sec. 5.13.2.4 **Data Adequacy Supplement pg.5-27 Sec. 5.12**	~~NO~~ **YES**	~~Operation of five turbine generators as part of the proposed project would create thermal plumes. The thermal plumes have the potential to effect air traffic safety in the airspace above the exhaust stacks and/or effect air navigation in the project area (such as for pilots arriving to and departing from Santa Paula Airport). Please provide an analysis and discussion of the potential for the proposed project's thermal plumes to affect air traffic. In addition, please provide a 1:24,000 scale map that shows the closest airport runway configuration, the proposed project site, and related facilities (e.g., power lines).~~

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (5) (C)	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 information, where applicable:	AFC pg. 5.12-1 Sec. 5.12.1.1 AFC pg. 5.12-11 through 12 Sec. 5.12.1.4 through 5.12.1.8 Figure 5.12-1 and 5.12-2 AFC pg. 1-2 and 1-7 Sec. 1.3 Figure 1.2-2	Yes	
Appendix B (g) (5) (C) (i)	Road classification and design capacity;	AFC pg. 5.12-2 Sec. 5.12.1.2 Table 5.12-1	Yes	
Appendix B (g) (5) (C) (ii)	Current daily average and peak traffic counts;	AFC pg. 5.12-8 Sec. 5.12.1.2 Table 5.12-5 through 5.12-6	Yes	
Appendix B (g) (5) (C) (iii)	Current and projected levels of service before project development, during construction, and during project operation;	AFC pg. 5.12-8 Sec. 5.12.1.2 Table 5.12-5 through 5.12-6 AFC pg. 5.12-14 Sec. 5.12.2.1 Table 5.12-8 through 5.12-10	Yes	
Appendix B (g) (5) (C) (iv)	Weight and load limitations;	AFC pg. 5.12-8 Sec. 5.12.1.3	Yes	
Appendix B (g) (5) (C) (v)	Estimated percentage of current traffic flows for passenger vehicles and trucks; and	AFC pg. 5.12-14 through 15 Sec. 5.12.2.1 Table 5.12-8 through 5.12-10	Yes	
Appendix B (g) (5) (C) (vi)	An identification of any road features affecting public safety.	AFC pg. 5.12-16 Sec. 5.12.2.4	Yes	

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (5) (D)	An assessment of the construction and operation impacts of the proposed project on the transportation facilities identified in subsection (g)(5)(C). 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 subsection (g)(5)(C).	AFC pg. 5.12-12 through 15 Sec. 5.12.2.1 through 5.12.2.2 Table 5.12-7 through 5.12-10	Yes	
Appendix B (g) (5) (E)	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.	AFC pg. 5.12-15 through 5.12-16 Sec. 5.12.2.3	Yes	
Appendix B (i) (1) (A)	Tables which 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	AFC pg. 5.12-18 through 5.12-22 Sec. 5.12.5 Table 5.12-11	Yes	

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (i) (1) (B)	Tables which 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.	AFC pg. 5.12-22 through 23 Sec. 5.12.6 through 5.12.7 Table 5.12-12 and 5.12-13	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 also provide the name of the official who will serve as a contact person for Commission staff.	AFC pg. 5.12-22 Sec. 5.12.6 Table 5.12-12	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.	AFC pg. 5.12-23 Sec. 5.12.7 Table 5.12-13	Yes	

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
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 1.1-1.3, Page 1-1 to 1-2	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 Page 2-1 to 2-2	Yes	
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. This description shall include power load flow diagrams which demonstrate conformance or nonconformance with utility reliability and planning criteria at the time the facility is expected to be placed in operation and five years thereafter; and	Section 3 Page 3-1 to 3-5 Figure 3-.2-1 **Data Adequacy Supplement** **Section 4** **Figure DA3.0-1** **MR-GEN-DE-E1-0002** **MR-GEN-DE-E1-0002 SH2**	~~No~~ **Yes**	~~Provide the following one-line diagrams. Show all equipment ratings including generators, transformers, isolated phase bus duct, circuit breakers, disconnect switches, and etc. which required for the project.~~ ~~1. One-line diagrams for the power plant.~~ ~~2. One-line diagrams for the power plant switchyard.~~ ~~3. One-line diagram for the Santa Clara Substation before the interconnection of the Mission Rock Energy Center~~ ~~4. Provide one-line diagram for the Santa Clara Substation after the interconnection of the Mission Rock Project.~~
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 2 Page 2.1.6 Figure 1.2-2	Yes	

Adequacy Issue: Adequate X Inadequate ~~X~~

DATA ADEQUACY WORKSHEET

Revision No. ~~0~~ **1** Date ~~01-29- 2016~~ **May 9, 2016**

Technical Area: **Transmission System Design** Project: Mission Rock Energy Center Technical Staff: Laiping Ng

Project Manager: Mike Monasmith Docket: 15-AFC-02 Technical Senior: Mark Hesters

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
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. 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.	Section 3.3 Page 3-2 Page 3-5 **Data Adequacy Supplement** **Attachment DA3.0-1**	~~No~~ **Yes**	~~Provide A completed Phase I and/or Phase II Interconnection Study or signed Study Agreement with the California Independent System Operator and proof of payment for the Mission Rock Energy Center project.~~
Appendix B (i) (1) (A)	Tables which 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 3-8 to 3-10 **Data Adequacy Supplement** **Section 6**	~~No~~ **Yes**	~~Missing GO-129~~
Appendix B (i) (1) (B)	Tables which 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.	Table 3.5.7	Yes	

Adequacy Issue: Adequate X Inadequate ~~X~~

DATA ADEQUACY WORKSHEET

Revision No. ~~0~~ 1 Date ~~01-29- 2016~~ **May 9, 2016**

Technical Area: **Transmission System Design** Project: Mission Rock Energy Center Technical Staff: Laiping Ng

Project Manager: Mike Monasmith Docket: 15-AFC-02 Technical Senior: Mark Hesters

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC 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 also provide the name of the official who will serve as a contact person for Commission staff.	NA		
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 3.3 Page 3-2	Yes	

Adequacy Issue: Adequate X Inadequate ~~X~~

DATA ADEQUACY WORKSHEET

Revision No. ~~0~~ **1** Date ~~01-29- 2016~~ **May 9, 2016**

Technical Area: **Visual Resources** Project: Mission Rock Energy Center Technical Staff: Mark Hamblin

Project Manager: Mike Monasmith Docket: 15-AFC-02 Technical Senior: Eric Knight

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC 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.	Pages 5.13-1, 5.13-2 Section 5.13.1 Pages 5.13-15, 5.13-16 Section 5.13.3 Page 5.14-16 Section 5.13.4	Yes	
Appendix B (g) (6) (A)	Descriptions of the existing visual setting of the vicinity of the proposed project site and the proposed routes for any project-related linear facilities. Include:	Pages 5.13-1, 5.13-2 Section 5.13.1 Figures 5.13-1, 5.13-2	Yes	
Appendix B (g) (6) (A) (i)	Topographic maps at a scale of 1:24,000 that depict directions from which the project would be seen, the view areas most sensitive to the potential visual impacts of the project, and the locations where photographs were taken for (g)(6)(C); and	Page 5.13-3 Section 5.13.1 Figures 5.13-1, 5.13-2	Yes	
Appendix B (g) (6) (A) (ii)	Description of the existing visual properties of the topography, vegetation, and any modifications to the landscape as a result of human activities, including existing water vapor plumes, above-ground electrical transmission lines, and nighttime lighting levels in the project viewshed.	Pages 5.13-1 – 5.13-6 Section 5.13.1 Page 5.13-2 Section 5.13.1 Page 5.13-3 Section 5.13-2	Yes	

Adequacy Issue: Adequate X Inadequate ~~X~~

DATA ADEQUACY WORKSHEET

Revision No. ~~0~~ **1** Date ~~01-29- 2016~~ **May 9, 2016**

Technical Area: **Visual Resources** Project: Mission Rock Energy Center Technical Staff: Mark Hamblin

Project Manager: Mike Monasmith Docket: 15-AFC-02 Technical Senior: Eric Knight

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (6) (B)	An assessment of the visual quality of those areas that would be affected by the proposed project. For projects proposed to be located within the coastal zone, the assessment should also describe how the proposed project would be sited to protect views to and along the ocean and scenic coastal areas, would minimize the alteration of natural land forms, would be visually compatible with the character of surrounding areas.	Pages 5.13-1 – 5.13-6 Section 5.13.1	Yes	
Appendix B (g) (6) (C)	In consultation with Energy Commission staff, identify: i) any designated scenic roadways or scenic corridors and any visually sensitive areas that would be affected by the proposed project, including recreational and residential areas; and ii) the locations of the key observation points to represent the most critical viewing locations from which to conduct detailed analyses of the visual impacts of the proposed project. Indicate the approximate number of people using each of these sensitive areas and the estimated number of residences with views of the project. Also identify any major public roadways and trails of local importance that would be visually impacted by the project and indicate the types of travelers (e.g., local residents, recreationists, workers, commuters, etc.) and the approximate number of vehicles, bicyclists, and/or hikers per day.	Pages 5.13-1, 5.13-2 Section 5.13.1 Pages 5.13-1 – 5.13-6 Section 5.13.1 **Data Adequacy Supplement Pages 5-28 – 29 Section 5.13 Visual Resources #21.**	~~No~~ **Yes**	~~Page 5.13-1 states that the Nature Conservancy hosts occasional guided hikes through their Santa Clara River properties in the vicinity of the project site. There is no indication of the approximate number of hikers using this area. Additionally, at KOPs 2 and 4, there is no estimate of the number of residences with views of the project (including the transmission line), only that a "few homes" are located in these areas.~~ ~~Please provide the estimated number of residences with views of the proposed project and the approximate number of hikers annually using the Nature Conservancy's Santa Clara River properties.~~

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (6) (D)	A table providing the dimensions (height, length, and width, or diameter) and, proposed color(s), materials, finishes, patterns, and other proposed design characteristics of each major component visible from off the project site, including any project-related electrical transmission line and/or offsite aboveground pipelines and metering stations.	Pages 5.13-9, 5.13-10 Section 5.13.2	Yes	
Appendix B (g) (6) (E)	Provide the cooling tower and heat recovery steam generator (HRSG) exhaust design parameters that affect visible plume formation. For the cooling tower, data shall include heat rejection rate, exhaust temperature, exhaust mass flow rate, liquid to gas mass flow ratio, and, if the tower is plume-abated, moisture content (percent by weight) or plume-abated fogging curve(s). The parameters shall account for a range of ambient conditions (temperature and relative humidity) and proposed operating scenarios, such as duct firing and shutting down individual cells. For the heat recovery steam generator exhausts, data shall include moisture content (percent by weight), exhaust mass flow rate, and exhaust temperature. The parameters must correspond to full-load operating conditions at specified ambient conditions, and shall account for proposed operating scenarios, such as power augmentation (i.e., evaporative coolers, inlet foggers, or steam injection) and duct firing, or proposed HRSG visible plume abatement, such as the use of an economizer bypass. For simple-cycle projects, provide analogous data for the exhaust stack(s).	Appendix 5.1A, Attachment 5.1A-1, Turbine Performance Data (Page 24 of 41)	Yes	

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (6) (F)	Provide: i) full-page color photographic reproductions of the existing site, and ii) full-page color simulations of the proposed project at life-size scale when the picture is held 10 inches from the viewer's eyes, including any project-related electrical transmission lines, in the existing setting from each key observation point. If any landscaping is proposed to comply with zoning requirements or to mitigate visual impacts, include the landscaping in simulation(s) representing sensitive area views, depicting the landscaping five years after installation; and estimate the expected time until maturity is reached.	Figures 5.13-3 – 5.13-7 **Data Adequacy Supplement Pages 5-29 Section 5.13- Visual Resources #22**	~~No~~ **Yes**	~~Figures 5.13-3 – 5.13-7 provide color photographic reproductions of the existing site and simulations of the proposed project. However, the existing site photos and simulations for each KOP are not full page, but share a single 8 ½ by 11 sheet of paper. In addition, there is no indication that the images are presented at life-size scale.~~ ~~Please provide on separate sheets of paper full-page color photographic reproductions of the existing site, and full-page color simulations of the proposed project at life-size scale when the picture is held 10 inches from the viewer's eyes.~~
Appendix B (g) (6) (G)	An assessment of the visual impacts of the project, including light, glare, and any modeling of visible plumes. Include a description of the method and identify any computer model used to assess the impacts. Provide an estimate of the expected frequency and dimensions (height, length, and width) of the visible cooling tower and/or exhaust stack plumes. Provide the supporting assumptions, meteorological data, operating parameters, and calculations used.	Page 5.13-13 Section 5.13.2 Appendix 5.1A, Attachment 5.1A-1, Turbine Performance Data (Page 24 of 41)	Yes	
Appendix B (g) (6) (H)	If any landscaping is proposed to reduce the visual impacts of the project, provide a conceptual landscaping plan at a 1:40 scale (1"=40'). Include information on the type of plant species proposed, their size, quantity, and spacing at planting, expected heights at 5 years and maturity, and expected growth rates.	Page 5.13-19 Section 5.13.5	Yes	

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (i) (1) (A)	Tables which 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	Pages 5.13-16 – 5.13-19 Section 5.13.5	Yes	
Appendix B (i) (1) (B)	Tables which 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.	Pages 5.13-19, 5.13-20 Section 5.13.5	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 also provide the name of the official who will serve as a contact person for Commission staff.	Pages 5.13-19, 5.13-20 Section 5.13.6	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.	Pages 5.13-17 – 5.13-20 Section 5.13.5 Pages 5.13-15, 5.13-16 Section 5.13.3	Yes	

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (b) (1) (C)	A detailed description of the design, construction 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,	Yes	
Appendix B (e) (1)	A discussion of how facility closure will be accomplished in the event of premature or unexpected cessation of operations.	Page 5.14-10-11, Section 5.14.4.3; Pages 2-27 – 2-28 Section 2.3	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.	Appendix 5.14; Pages 5.14-8 – 5.14-10, Sections 5.14.3 and 5.14.4	Yes	
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 CEC Staff 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 AFC.	Appendix 5.14A	Yes	

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
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.	Table 5.14-1 Table 5.14-2 **Data Adequacy Supplement, Figure DA5.14-1a**	~~NO~~ **YES**	~~Figures 2.3-5a and 2.3-5b cited on pg. 5.14-4 under Nonhazardous Wastewater cannot be located. Figures 2.1-5a and 2.1-5b on pg. 2-17 also cannot be located. The AFC indicates these figures show the wastewater flow rates. Figures 2.1-4a and 2.1-4b show aggregate wastewater flow rates but do not show the flow rates for each of the waste water streams described in Section 5.14. Please revise the appropriate AFC sections and figures to show the separate and correct wastewater flow rates.~~
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 Title 23, California Code of Regulations, § 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.	Pages 5.14-5 – 5.14-8, Section 5.14.2.3, Table 5.14-3	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.	Table 5.14-1 Table 5.14-2	Yes	
Appendix B (h) (1) (B)	A discussion of any measures proposed to improve adverse site conditions.	Pages 5.14-9 – 5.14-10, Section 5.14.4	Yes	
Appendix B (h) (1) (D) (v)	The waste disposal system and on-site disposal sites;	Pages 5.14-9 – 5.14-10, Section 5.14.4	Yes	

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (i) (1) (A)	Tables which 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	Pages 5.14-11 -5.14-14, Section 5.14.5, Table 5.14-4	Yes	
Appendix B (i) (1) (B)	Tables which 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.	Table 5.14-4	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 also provide the name of the official who will serve as a contact person for Commission staff.	Page 5.14-14, Section 5.14.6, Table 5.14-5	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.	Page 5.14-14, Section 5.14.7	Yes	

Adequacy Issue: Adequate X Inadequate ~~X~~

DATA ADEQUACY WORKSHEET

Revision No. ~~0~~ **1** Date ~~01-29-2016~~ **May 9, 2016**

Technical Area: **Water Resources** Project: Mission Rock Energy Center Technical Staff: Marylou Taylor

Project Manager: Mike Monasmith Docket: 15-AFC-02 Technical Senior: Paul Marshall

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC 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.	§ 5.15, p. 5.15-1 **Data Adequacy Supplemental, pp. 5-35 through 5-39**	~~NO~~ **YES**	~~Required information is listed below.~~
Appendix B (g) (14) (A)	All the information required to apply for the following permits, if applicable, including:			
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);	**Data Adequacy Supplemental, p. 5-35**	~~NO~~ **YES**	~~Provide the following information:~~ ~~• A Report of Waste Discharge for blowdown wastewater entering into the Santa Clara River.~~ ~~• A Draft Storm Water Pollution Prevention Plan for construction activities.~~
Appendix B (g) (14) (A) (ii)	Construction and Industrial Waste Discharge and/or Industrial Pretreatment permits from wastewater treatment agencies;	Table 5.15-4, p. 5.15-11 ~~Appendix 2D~~ **Data Adequacy Supplemental, Attachment DA5.15-1**	Yes	
Appendix B (g) (14) (A) (iii)	Nationwide Permits and/or Section 404 Permits from the U.S. Army Corps of Engineers; and	Not applicable	N/A	
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.	Not applicable	N/A	

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
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:			
Appendix B (g) (14) (B) (i)	Ground water bodies and related geologic structures;	§ 5.15.1.2, p. 5.15-5	Yes	
Appendix B (g) (14) (B) (ii)	Surface water bodies;	§ 5.15.1.1, p. 5.15-1	Yes	
Appendix B (g) (14) (B) (iii)	Water inundation zones, such as the 100-year flood plain and tsunami run-up zones;	§ 5.15.1.3, p. 5.15-6	Yes	
Appendix B (g) (14) (B) (iv)	Flood control facilities (existing and proposed); and	Not applicable	N/A	
Appendix B (g) (14) (B) (v)	Groundwater wells within ½ mile if the project will include pumping.	Not applicable	N/A	
Appendix B (g) (14) (C)	A description of the water to be used and discharged by the project. This information shall include:			
Appendix B (g) (14) (C) (i)	Source(s) of the primary and back-up water supplies and the rationale for their selection;	§ 2.1.9, p. 2-11 § 2.1.9.3, p. 2-12 **Data Adequacy Supplemental, p. 5-35**	~~NO~~ **YES**	~~Describe backup water supply or explain why none is needed.~~
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 (e.g., laboratory analysis);	Table 5.15-3, p. 5.15-11 Table 5.15-4, p. 5.15-11	Yes	

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
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;	Table 2.1-1, p. 2-12 § 2.1.9, p. 2-11 § 2.1.9.3, p. 2-12 Figures 2.1-4a, p. 2-13 Figures 2.1-4b, p. 2-15 § 5.15.1.7, p. 5.15-12 **Data Adequacy Supplemental, Figures DA5.14-1a and DA5.14-1b**	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 treatment, and wastewater discharge. Include a water mass balance diagram;	~~Figures 2.1-4a, p. 2-13~~ ~~Figures 2.1-4b, p. 2-15~~ **Data Adequacy Supplemental, Figures DA5.14-1a and DA5.14-1b** § 2.1.9, p. 2-11 § 2.1.9.3, p. 2-12 § 2.1.10.1, p. 2-17 § 5.14.1.2, p. 5.14-3 Table 5.14-2, p. 5.14-5 § 5.15.1.4, p. 5.15-6 § 5.15.1.5, p. 5.15-11 Table 5.15-5, p. 5.15-15 Appendix 2A, p. 2A-20 **Data Adequacy Supplemental, p. 5-36** **Data Adequacy Supplemental, Attachment DA5.15-1**	~~NO~~ **YES**	~~Wastewater discharge information is unclear and conflicting.~~ • ~~Explain the disposal method of sanitary waste and what would happen to the existing on-site septic system. Include sanitary waste on water balance diagram.~~ • ~~Clarify which waste streams are covered in the SCWW will-serve letter.~~ • ~~Explain the disposal method of discharge from water demineralization.~~ • ~~Clarify whether or not inlet air cooler system would use evaporative water cooling towers. If so, explain the disposal method of blowdown discharge.~~

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
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. In the event that a will-serve letter or letter of intent can not be provided, identify the most likely water purveyor and discuss the necessary assurances from the water purveyor to serve the project;	Appendix 2C **Data Adequacy Supplemental, p. 5-37**	~~NO~~ **YES**	~~Provide information demonstrating Limoneira has adequate supplies for the life of the project. Include a discussion of whether there are any restrictions or seasonal variation in the availability of their supply. Provide information on permitting that will be required for Limoneira to serve the project appropriately treated recycled water.~~
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 (e.g., surface water, groundwater), and provide the status of all appropriate agencies' approvals for the proposed use, environmental impact analysis on the specific transfers and/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);	Not applicable	N/A	
Appendix B (g) (14) (C) (vii)	Provide water mass balance and heat balance diagrams for both average and maximum flows that include all process and/or ancillary water supplies and wastewater streams. Highlight any water conservation measures on the diagram and the amount that they reduce water demand; and	Figure 2.1-3 ~~Figure 2.1-4a~~ ~~Figure 2.1-4b~~ **Data Adequacy Supplemental, Figures DA5.14-1a and DA5.14-1b** **Supplemental,** **pp. 5-37 and 5-38**	~~NO~~ **YES**	~~Resolve the following discrepancies regarding wastewater in the water balance diagrams and appropriate sections of the AFC:~~ • ~~"The MREC will discharge reverse osmosis reject water to Green Compass" (§ 5.15.1.5, p. 5.15-6)~~ • ~~"Process wastewater, principally RO system reject and chiller system cooling tower blowdown, will be discharge through… Green Compass" (§ 2.1.10.1, p. 2-17)~~ • ~~"The secondary wastewater collection system will collect sanitary wastewater… and route it to an onsite septic tank for discharge through removal by a licensed~~

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
				~~waste hauler" (§ 2.1.10.1, p. 2-17)~~ • ~~"MREC will discharge industrial and sanitary wastewater to Green Compass" (Table 5.15-5, p. 5.15-15)~~ • ~~"Wastewater from facility sinks, toilets, and showers will be disposed of to the sanitary sewer." (§5.14.4.2, p. 5.14-10)~~ • ~~"Industrial wastewater consisting of reverse osmosis system reject and cooling tower blowdown from the chiller system will be discharged through Green Compass" (Executive Summary, ES-1)~~ • ~~"No wastewater will be generated from the water treatment process or IX resin regeneration, since regeneration of the cationic and anionic resin will occur off-site via contracted vendor. The non-oily waste stream will pass through a walnut shell-activated carbon vessel followed by a surge tank and 5 micron bag filters before being sent to the waste water tank and eventually recycled back to the raw water storage tank. Sanitary waste will be sent to an onsite septic system." (Appendix 2A, page 2A-20)~~

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (14) (C) (viii)	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 may impose on the project.	~~Appendix 2D~~ **Data Adequacy Supplemental, Attachment DA5.15-1**	~~NO~~ **YES**	~~Once the discrepancies are resolved regarding wastewater disposal methods, provide necessary information to address the proposed methods of disposal.~~
Appendix B (g) (14) (D)	Identify all project elements associated with stormwater drainage, including a description of the following:			
Appendix B (g) (14) (D) (i)	Monthly and/or 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;	Table 5.15-2, p. 5.15-5 Appendix 5.15A	Yes	
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 5.15A	Yes	

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
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 5.15A	Yes	
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 5.15A	Yes	
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:			
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 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;	Executive Summary, ES-2 § 5.15.1.4, p. 5.15-6	Yes	
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;	Not applicable	N/A	

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (14) (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;	Executive Summary, ES-1 § 5.15.4, p. 5.15-14 § 5.14.1.2, p. 5.14-3 § 5.14.4.1, p. 5.14-9 § 5.14.4.2, p. 5.14-10	Yes	
Appendix B (g) (14) (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 process is "environmentally undesirable," or "economically unsound;"	**Data Adequacy Supplemental, p. 5-39**	~~NO~~ **YES**	~~Provide required information to explain why the zero liquid discharge process is "environmentally undesirable," or "economically unsound."~~
Appendix B (g) (14) (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;"	Not applicable	N/A	
Appendix B (g) (14) (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	§ 5.15.1.3, p. 5.15-6 Appendix 5.15A **Data Adequacy Supplemental, p. 5-39**	~~NO~~ **YES**	~~Discuss the project's conformance with requirements for a Floodplain Development Permit issued by Ventura County (the permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities).~~
Appendix B (g) (14) (vii)	All assumptions, evidence, references, and calculations used in the analysis to assess these effects.	§ 5.15.7, p. 5.15-16	Yes	

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (i) (1) (A)	Tables which 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 5.15-5, p. 5.15-16	Yes	
Appendix B (i) (1) (B)	Tables which 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.	Table 5.15-5, p. 5.15-16	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 also provide the name of the official who will serve as a contact person for Commission staff.	Table 5.15-5, p. 5.15-16	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.	Table 5.15-5, p. 5.15-16	Yes	

STATE OF CALIFORNIA

ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION

In the Matter of:	**)**	**Docket.**	**15-AFC-02**
	)	**Order:**	**16-0517-3a**
Application for Certification for the	**)**		
Mission Rock Energy Center	**)**	**May 17, 2016**	
_____	**)**		

Order Accepting the Executive Director's Recommendation to Find the Mission Rock Energy Center Application for Certification (AFC) Data Adequate

On December 30, 2015, Mission Rock Energy Center, LLC, filed an Application for Certification (AFC) to construct and operate an electrical generating facility in Ventura County, California, approximately 2 miles west of Santa Paula, near State Highway 126.

The Mission Rock Energy Center (Mission Rock) would be a natural gas-fired, nominal 255-megawatt electrical generating facility. Mission Rock would also provide 100 MWhr of battery storage and synchronous condenser clutch technology to provide ancillary and grid reliability services.

Energy Commission Staff completed its initial data adequacy review of the AFC in accordance with the California Code of Regulations, title 20, section 1704, and Division 2, Chapter 5, Appendix B for the 12-month permitting process. On January 29, 2016, the Energy Commission adopted the staff's recommendation that the information contained in the AFC was deficient in eleven areas, namely: air quality, biological resources, cultural resources, project overview, reliability, soils, traffic & transportation, transmission system design, visual resources, waste management and water resources.

On April 29, 2016, the Applicant submitted supplemental information reviewed by staff, and the Executive Director presented a revised recommendation that the AFC now contains all the information required by California Code of Regulations, Title 20, Section 1704, including Appendix B, for the 12-month AFC process.

On this basis, the Energy Commission hereby accepts the Mission Rock AFC with the supplemental information as data adequate, and pursuant to California Code of Regulations, Title 20, Section 1709 (c), deems the AFC complete.

CERTIFICATION

The undersigned Secretariat to the Commission does hereby certify that the foregoing is a full, true, and correct copy of an Order duly and regularly adopted at a meeting of the California Energy Commission held on May 17, 2016.

AYE:

NAY:

ABSENT:

ABSTAIN:

_____
Cody Goldthrite
Acting Secretariat

STATE OF CALIFORNIA

ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION

In the Matter of:	**)**	**Docket.**	**15-AFC-02**
	)	**Order:**	**16-0517-3b**
Application for Certification for the	**)**		
Mission Rock Energy Center	**)**	**May 17, 2016**	
_____	**)**		

Order Appointing a Siting Committee for Mission Rock Energy Center

On December 30, 2015 Mission Rock Energy Center, LLC, filed an Application for Certification (AFC) to construct and operate an electrical generating facility in Ventura County, California, approximately 2 miles west of Santa Paula, near State Highway 126. The Mission Rock Energy Center (Mission Rock) would be a natural gas-fired, nominal 255-megawatt electrical generating facility. Mission Rock would also provide 100 MWhr of battery storage and synchronous condenser clutch technology to provide ancillary and grid reliability services. The Energy Commission deemed the AFC complete on May 17, 2016.

Pursuant to Public Resources Code section 25211 and California Code of Regulations, title 20, section 1204, the Energy Commission hereby establishes the Mission Rock Siting Committee to preside over this AFC proceeding and any other proceedings arising from the AFC.

The Mission Rock Siting Committee shall have the authority and duties necessary to conduct this proceeding as set forth in Energy Commission regulations, including the authority of a presiding member to manage the proceeding in accordance with California Code of Regulations, title 20, section 1203.

Unless otherwise ordered by the Energy Commission, this Committee will dissolve 35 days after final action in this AFC proceeding.

The Committee members are as follows:
Presiding:
Associate:

CERTIFICATION

The undersigned Secretariat to the Commission does hereby certify that the foregoing is a full, true, and correct copy of a Resolution duly and regularly adopted at a meeting of the California Energy Commission held on May 17, 2016.

AYE:
NAY:
ABSENT:
ABSTAIN:

_____
Cody Goldthrite
Secretariat