

Memorandum

To: Karen Douglas, Chairman
James D. Boyd, Vice Chair
Arthur H. Rosenfeld, Ph.D., Commissioner
Jeffrey Byron, Commissioner
Julie Levin, Commissioner

Date: March 4, 2009
Telephone: (916) 654-4996

DOCKET**08-AFC-12**DATE MAR 04 2009RECD. MAR 04 2009

From: California Energy Commission – Melissa Jones
1516 Ninth Street
Sacramento, CA 95814-5512
Executive Director

**Subject: SAN JOAQUIN SOLAR 1 & 2 HYBRID PROJECT, DATA ADEQUACY
RECOMMENDATION (08-AFC-12)**

On November 26, 2008, San Joaquin Solar, LLC (SJS), submitted an Application for Certification (AFC) to construct and operate an electrical generating plant near the City of Coalinga, in Fresno County, California. The San Joaquin Solar 1 & 2 Hybrid Project would be a solar/biomass hybrid, nominal 106-megawatt (MW) power generation facility.

On January 14, 2009, the Energy Commission determined that the San Joaquin Solar 1 & 2 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 process. Specifically, the AFC was deficient in twelve of the 23 technical areas reviewed: air quality, alternatives, biological resources, hazardous materials handling, noise, project overview, reliability, socioeconomics, soils, transmission system design, waste management, and water resources.

On February 4, SJS filed a Supplement to the AFC containing the additional information for review. SJS followed this up with additional submittals on February 12 and 13th. In addition, on March 3rd, a letter from the San Joaquin Valley Air Pollution Control District was received indicating the application to the district is now complete. Staff has completed their review of the supplemental information and believes that the AFC now meets the listed requirements in all twelve of the previously deficient technical disciplines, and believes the AFC is now complete. Attached is a summary table and the revised data adequacy worksheets for the technical disciplines previously determined to be data inadequate, and reflecting that the supplemental information submitted by SJS completes the AFC.

At the Energy Commission's March 11, 2009 Business Meeting, I will recommend Commission approval of the Executive Director's data adequacy recommendation and the appointment of a Siting Committee to oversee the San Joaquin Solar 1 & 2 Hybrid Project. If you have any questions, please call Joseph Douglas, staff's Project Manager, at (916) 653-4677.

Attachment

Attachment A
Overview of Energy Commission Staff's
Data Adequacy Determination
San Joaquin Solar 1 & 2 Hybrid Project
08-AFC-12

Technical Area	Attachment B Page No.	Adequate
AIR QUALITY.....	4	YES
ALTERNATIVES.....	11	YES
BIOLOGICAL RESOURCES.....	12	YES
HAZARDOUS MATERIALS HANDLING.....	24	YES
NOISE.....	27	YES
PROJECT OVERVIEW.....	31	YES
RELIABILITY.....	36	YES
SOCIOECONOMICS.....	39	YES
SOILS.....	44	YES
TRANSMISSION SYSTEM DESIGN.....	46	YES
WASTE MANAGEMENT.....	51	YES
WATER RESOURCES.....	54	YES

ATTACHMENT B

ENERGY COMMISSION STAFF'S List of Revised Data Adequacies Sheets

**San Joaquin Solar 1 & 2 Hybrid Project
08-AFC-12**

March 4, 2009

Adequate X Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 1 Date 3/4/2009

Technical Area: Air QualityProject: San Joaquin Solar 1 & 2Technical Staff: Brewster BirdsallProject Manager: Joseph DouglasDocket: 08-AFC-12Technical Senior: Keith Golden

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 3.3 and 5.2.1.2 Section 5.2.2.5 Section 5.2.3 Section 5.2.4	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.	<u>Letter dated March 3, 2009 from the San Joaquin Valley Air Pollution Control District</u>	No Yes	Please provide a letter of completeness from San Joaquin Valley Air Pollution Control District. Application forms have not been filed with SJVAPCD. SJVAPCD Rule 2201, Section 5.8.3 requires the District to notify the CEC of completeness within 20 days of receipt of the AFC.
Appendix B (g) (8) (B)	The heating value and chemical characteristics of the proposed fuels, the stack height and diameter, the exhaust velocity and temperature, the heat rate and the expected capacity factor of the proposed facility.	Section 3.4.3.3, p. 3-6 Table 3.4-2 Section 5.2.2.2 pp. 5.2-18 to 5.2-21 Appendix B-3	Yes	
Appendix B (g) (8) (C)	A description of the control technologies proposed to limit the emission of criteria pollutants.	Section 3.4.3.1, p. 3-5 Section 5.2.5 Table 5.2-25, p. 5.2-46 Tables 5.2-26a and 26b p. 5.2-47	Yes	
Appendix B (g) (8) (D)	A description of the cooling system, the estimated cooling tower drift rate, the rate of water flow through the cooling tower, and the maximum concentrations of total dissolved solids.	Section 3.4.7 Section 5.2.2.2 Section 5.2.5, p. 5.2-48 Appendix B-3	Yes	

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Appendix B (g) (8) (E)	The emission rates of criteria pollutants and greenhouse gases (CO ₂ , CH ₄ , N ₂ O, and SF ₆) from the stack, cooling towers, fuels and materials handling processes, delivery and storage systems, and from all on-site secondary emission sources.	Section 5.2.2.2 and Section 5.2.2.3 pp. 5.2-18 to 5.2-29 Tables 5.2-12 to 5.2-17 Appendix B-3	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 5.2.2.2, p. 5.2-20 Section 5.2.2.2.1 Table 5.2-13, p. 5.2-25 Appendix B-3	Yes	
Appendix B (g) (8) (F)(ii)	A description of the project's planned initial commissioning phase, which is the phase between the first firing of emissions sources and the commercial operations date, including the types and durations of equipment tests, criteria pollutant emissions, and monitoring techniques to be used during such tests.	Section 5.2.2.2.2 pp. 5.2-25 to 5.2-27 Tables 5.2-14 and 5.2-15 Appendix B-4	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 5.2.1.2 pp. 5.2-3 to 5.2-13 Tables 5.2-2 to 5.2-8	Yes	

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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 5.2.1 Section 5.2.2.4.3, p. 5.2-31 Appendix B-1 Modeling data on CD	Yes	
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	Yes	
Appendix B (g) (8) (H) (ii)	The data shall include quarterly wind tables and wind roses, ambient temperatures, relative humidity, stability and mixing heights, upper atmospheric air data, and an analysis of whether this data is representative of conditions at the project site.	Section 5.2.1 Section 5.2.2.4.1 Section 5.2.2.4.3, p. 5.2-31 Appendix B-1 Modeling data on CD	Yes	
Appendix B (g) (8) (I)	An evaluation of the project's direct and cumulative air quality impacts, consisting of the following:	See below		

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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 (PM _{2.5})] from construction-related equipment;	Section 5.2.2.5.1 pp. 5.2-34 to 5.2-35 Table 5.2-18 Appendix B-2	Yes	
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;	Section 5.2.2.5.2 pp. 5.2-36 to 5.2-39 Table 5.2-19 to 5.2-22 Section 5.2.2.5.3 Section 5.2.2.5.4 Appendix B-3	Yes	

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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 5.2.2.4 Section 5.2.3, p. 5.2-39 Appendix B-6	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} .	Section 5.2.2.5.2.3 p. 5.2-38, Table 5.2-21 Appendix B-4	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		
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 5.2.4.2 p. 5.2-40 to 45 Table 5.2-24, p. 5.2-43	Yes	
Appendix B (g) (8) (J) (ii)	Potential offset sources, including location, and quantity of emission reductions;	Section 5.2.4.2 <u>Supplemental Information</u> <u>Confidential Filing</u>	No Yes	List of potential offset sources including the location of the offset sources and quantity of reductions.

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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) (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 5.2.4 p. 5.2-40 to 45 <u>Confidential Supplement Filing 2/09/09</u>	No Yes	Please provide a description of mitigation proposed for particulate matter less than 2.5 microns (PM2.5) because it is a pollutant that currently exceeds the ambient air quality standards but is not subject to offset requirements under the new source review rule.
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 5.2.6, Table 5.2-31 p. 5.2-64 to 66	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 5.2.6, Table 5.2-31 p. 5.2-64 to 66 Section 5.2.7 Table 5.2-32, p. 5.2-66 Table 5.2-33, p. 5.2-67	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.	Section 5.2.8 Table 5.2-33, p. 5.2-67	Yes	

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 Technical Senior: Keith Golden

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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 5.2.8 Table 5.2-33, p. 5.2-67	Yes	

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Technical Area: **Alternatives**

Project: San Joaquin Solar 1 & 2

Technical Staff: Joseph Douglas

Project Manager: Joseph Douglas

Docket: 08-AFC-12

Technical Senior: Robert Worl

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) (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.	Pages 4.2-4.3, Sections 4.2	Yes	
Appendix B (f) (1)	A discussion of the range of reasonable alternatives to the project, or to the location of the project, including the no project alternative, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and an evaluation of the comparative merits of the alternatives. In accordance with Public Resources Code section 25540.6(b), a discussion of the applicant's site selection criteria, any alternative sites considered for the project, and the reasons why the applicant chose the proposed site.	Page 4.4, Section 4-3 Pages 4.4-4.5, Section 4-4 <u>Supplemental information</u> <u>Page Alt-3</u>	No <u>Yes</u>	Please include a discussion of alternatives that could reduce the use of water such as zero liquid discharge and dry cooling. Fig. 4.2.2 — The light blue shaded parcels are not identified in legend. Please add the needed information in the Fig 4.2.2 legend area. There are two proposed transmission routes to the first point of connection, but no preferred route is analyzed. Please identify the preferred transmission route and the alternative transmission route.
Appendix B (f) (2)	An evaluation of the comparative engineering, economic, and environmental merits of the alternatives discussed in subsection (f)(1).	Pages, 4.4-4.5 Section 4.4.1 through 4.4.8 Page 4.6, Section 4.5	Yes	

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Technical Area: **Biological Resources**
Project Manager: Joseph Douglas

Project: San Joaquin Solar 1 & 2
Docket: 08-AFC-12

Technical Staff:	H. Blair, L. Cordonnier
Technical Senior:	Rick York

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Adequacy Issue: Adequate ☒ Inadequate ☐

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Project Manager: **Joseph Douglas**

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Docket: 08-AFC-12

Technical Staff: H. Blair, L. Cordonnier
Technical Senior: Rick York

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Appendix B (g) (13) (A) (i)	species listed under state or federal Endangered Species Acts;	Federal and state Endangered Species: Appendix F-2 Section 5.6.1.2.1 pgs 5.6-4 to 5.6-7 Section 5.6.1.2.2 pgs 5.6-7 to 5.6-17	Yes	
Appendix B (g) (13) (A) (ii)	resources defined in sections 1702(q) and (v) of Title 20 of the California Code of Regulations;	Areas of critical concern and species of special concern: Appendix F-2 Section 5.6.1.2.1 pgs 5.6-4 to 5.6-7 Section 5.6.1.2.2 pgs 5.6-7 to 5.6-17 Section 5.6.1.2.4 pgs 5.6-17 to 5.6-18	Yes	
Appendix B (g) (13) (A) (iii)	species identified as state Fully Protected;	State Fully Protected species: Appendix F-2 Section 5.6.1.2.1 pgs 5.6-4 to 5.6-7 Section 5.6.1.2.2 pgs 5.6-7 to 5.6-17	Yes	
Appendix B (g) (13) (A) (iv)	species covered by Migratory Bird Treaty Act;	Migratory Bird Act species: Appendix F-2 Section 5.6.1.2.1 pgs 5.6-4 to 5.6-7 Section 5.6.1.2.2 pgs 5.6-7 to 5.6-17	Yes	

X

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Biological Resources

San Joaquin Solar 1 & 2

Technical Staff: H. Blair, L. Cordonnier

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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	Species and habitats identified in the California Natural Diversity Database: Appendix F-2 Section 5.6.1.2.1 pgs 5.6-4 to 5.6-7 Section 5.6.1.2.2 pgs 5.6-7 to 5.6-17 <u>Supplemental Information Page BIO - 2</u>	No <u>Yes</u>	Provide information for sensitive species and habitats on the project site in addition to species on the transmission line route.
Appendix B (g) (13) (A) (vi)	fish and wildlife species that have commercial and/or recreational value.	Fish and wildlife of commercial or recreational value: Not applicable	N/A	
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:	List of species observed: Appendix F-2, F-4, F-5 <u>Supplemental Information Page BIO - 3</u>	No <u>Yes</u>	Provide a list of species actually observed during field surveys on the project site and transmission line route.
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;	Map of proposed project site: Figure 3.2-3 Figure 5.6-2 Map of biological resources: Figure 5.6-3 Map of survey area: Figure 5.6-2 <u>Supplemental Information Page BIO - 4</u>	Yes Yes No <u>Yes</u>	Provide a map of the field survey area that labels where biological surveys were conducted.

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 Technical Senior: **Rick York**

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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	Depiction of the thermal plume: Not applicable Location of intake and discharge structures: Not Applicable	N/A N/A	
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 (USACE) 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.	Potential jurisdictional or non-jurisdictional wetlands map: <u>Supplemental Information Page BIO - 5</u> Coastal zone wetlands map: Not applicable	No <u>Yes</u> N/A	Provide an aerial photo or wetlands delineation map at a scale of 1:2,400 showing potential jurisdictional and non-jurisdictional wetlands.

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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:	<p>Discussion of biological resources at project site: Section 5.6.1.1 pgs 5.6-2 to 5.6-4 Section 5.6.1.2 pgs 5.6-4 to 5.6-17 <u>Supplemental Information Page BIO - 6</u></p> <p>Discussion of biological resources at related facilities: Section 5.6.1.1 pgs 5.6-2 to 5.6-4 Section 5.6.1.2 pgs 5.6-4 to 5.6-17 Appendix F-2 <u>Supplemental Information Page BIO - 7</u></p>	<p>No <u>Yes</u></p> <p>No <u>Yes</u></p>	<p>Provide a discussion of the biological resources at the proposed project site by conducting a survey of the project site and within 1 mile of the project site. Provide the results of the December 2008 small mammal trapping survey.</p> <p>Provide the results of the 2009 transmission line field surveys.</p>
Appendix B (g) (13) (C) (i)	A list of all the species actually observed;	<p>List of species observed: Appendix F-2 Appendix F-4 Appendix F-5 <u>Supplemental Information Page BIO - 8</u></p>	No <u>Yes</u>	Provide a list of species observed onsite and within 1 mile of the project site.

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Technical Staff: **H. Blair, L. Cordonnier**
Technical Senior: **Rick York**

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Appendix B (g) (13) (C) (ii)	A list of sensitive species and habitats with a potential to occur (as defined in (A) above); and	Sensitive species and habitats with potential to occur: Appendix F-2 Section 5.6.1.2.1 pgs 5.6-4 to 5.6-7 Section 5.6.1.2.2 pgs 5.6-7 to 5.6-8 Section 5.6.1.2.3 pgs 5.6-8 to 5.6-17 Section 5.6.1.2.4 pgs 5.6-17 to 5.6-18	Yes	
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.	Intake structure characteristics: Not applicable Thermal plume description: Not applicable Aquatic habitat and biological resources affected: Not applicable Impingement and entrainment analysis: Not applicable	N/A N/A N/A N/A	

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 Technical Senior: Rick York

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)	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:	Description of field studies: Section 5.6.1.1 pgs 5.6-2 to 5.6-4 Copies of CNDDDB records and field survey forms: <u>Supplemental Information</u> <u>Page BIO - 9</u> Qualifications of biologists: Appendix F-6	Yes No <u>Yes</u> Yes	Provide copies of the CNDDDB records and field survey forms for all special status species found.
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;	Current biological surveys: Section 5.6.1.1 pgs 5.6-2 to 5.6-4 <u>Supplemental Information</u> <u>Page BIO - 10</u>	No <u>Yes</u>	Conduct and provide results of current biological surveys onsite and within a 1 mile buffer of the site, the December 2008 small mammal trapping survey, and the 2009 transmission line survey.

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Date 3/4/2009

Biological Resources

San Joaquin Solar 1 & 2

H. Blair, L. Cordonnier

H. Blair, L. Cordonnier

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	<p>Aquatic resource studies and surveys: Not applicable</p> <p>Aquatic resource survey data or impingement and entrainment impact study: Not applicable</p>	<p>N/A</p> <p>N/A</p>	
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.	<p>Impacts to jurisdictional or non-jurisdictional wetlands: Section 5.6.1.3 pgs 5.6-18 to 5.6-19 <u>Supplemental Information</u> <u>Page BIO - 11</u></p>	<p>No <u>Yes</u></p>	<p>Provide the Army Corps of Engineers wetland delineation forms and/or determination of wetland status.</p>
Appendix B (g) (13) (E)	Impacts discussion of the following:			

Adequacy Issue: Adequate ☒ Inadequate

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Revision No. 1 Date 3/4/2009

Technical Area: **Biological Resources**
Project Manager: Joseph Douglas

Project: San Joaquin Solar 1 & 2
Docket: 08-AFC-12

Technical Staff:	H. Blair, L. Cordonnier
Technical Senior:	Rick York

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) (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;	Project site impacts: Section 5.6.2 pgs 5.6-19 to 5.6-21 <u>Supplemental Information Page BIO - 12</u> Air emission impacts on sensitive species: <u>Supplemental Information Page BIO - 13</u>	No <u>Yes</u> No <u>Yes</u>	Provide an impact assessment for the project site. Provide information on impacts of the project pertaining to project site preparation, construction, operations, and maintenance activities. Provide a discussion of air emission impacts to biological resources.
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	Intake impacts: Not applicable Thermal plume impacts: Not applicable	N/A N/A	
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.	Biofouling and chemical concentration controls: Not applicable Discharge temperatures: Not applicable	N/A N/A	
Appendix B (g) (13) (F)	A discussion of all feasible mitigation measures including, but not limited to the following:			
Appendix B (g) (13) (F) (i)	All measures proposed to avoid and/or reduce adverse impacts to biological resources;.	Avoidance and minimization: Section 5.6.4 pgs 5.6-22 to 5.6-24	Yes	

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Revision No. 1 Date 3/4/2009

Biological Resources

San Joaquin Solar 1 & 2

H. Blair, L. Cordonnier

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Adequacy Issue: Adequate ☒ Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 1 Date 3/4/2009

Technical Area: **Biological Resources**
Project Manager: **Joseph Douglas**

Project: **San Joaquin Solar 1 & 2**
Docket: **08-AFC-12**

Technical Staff: **H. Blair, L. Cordonnier**
Technical Senior: **Rick York**

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) (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 (USFWS), the National Marine Fisheries Service (NMFS), the U.S. Army Corps of Engineers (USACE), the California Department of Fish and Game (CDFG), and the Regional Water Quality Control Board (RWCB) will be required for the proposed project.	Contact with state and federal agencies regarding permits: <u>Supplemental Information</u> <u>Page BIO - 15</u>	No <u>Yes</u>	Submit copies of preliminary correspondence regarding the proposed project with the USFWS and CDFG, USACE, and RWQCB. Correspondence needs to include a discussion of whether federal or state permits from USFWS and/or CDFG 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 IDENTIFYING APPLICABLE BIOLOGICAL RESOURCES LAWS, ORDINANCES, REGULATIONS, AND STANDARDS: Section 5.6.5 pgs 5.6-24 to 5.6-26 Table 5.6-2 pgs 5.6-26 to 5.6-28	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.	TABLES IDENTIFYING AGENCIES WITH JURISDICTION: Table 5.6-2 pgs 5.6-26 to 5.6-28 Table 5.6-4 pg 5.6-29	YES	

Adequacy Issue: Adequate X Inadequate _____

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Revision No. 1 Date 3/4/2009

Technical Area: **Biological Resources**
 Project Manager: Joseph Douglas

Project: San Joaquin Solar 1 & 2
 Docket: 08-AFC-12

Technical Staff: H. Blair, L. Cordonnier
 Technical Senior: Rick York

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.	AGENCY CONTACT INFORMATION: TABLE 5.6-3 PG 5.6-28 <u>Supplemental Information</u> Page BIO - 16	NO <u>YES</u>	PROVIDE CONTACT INFORMATION FOR USAGE, RWQCB, AND FRESNO COUNTY.
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.	Permit schedule: Table 5.6-4 pg 5.6-29	Yes	

Adequacy Issue: Adequate X Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 1 Date 3/4/2009

Technical Area: **Hazardous Materials Handling**

Project: San Joaquin 1&2

Technical Staff: Rick Tyler

Project Manager: Joseph Douglas

Docket: 08-AFC-12

Technical Senior: Rick Tyler

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (e) (1)	A discussion of how facility closure will be accomplished in the event of premature or unexpected cessation of operations.	Section 5.15.4 Supplemental Information Page HAZ - 1	No <u>Yes</u>	No discussion of facility closure.
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 5.15	Yes	
Appendix B (g) (10) (A)	A list of all materials used or stored on-site which are hazardous or acutely hazardous, as defined in Title 22, California Code of Regulations, § 66261.20 et seq., and a discussion of the toxicity of each material.	Tables 5.15-2	Yes	
Appendix B (g) (10) (B)	A map at a scale of 1:24,000 depicting the location of schools, hospitals, day-care facilities, emergency response facilities and long-term health care facilities, within the area potentially affected by any release of hazardous materials.	Figure 5.16-1	Yes	
Appendix B (g) (10) (C)	A discussion of the storage and handling system for each hazardous material used or stored at the site.	Section 5.15	Yes	
Appendix B (g) (10) (D)	The protocol that will be used in modeling potential consequences of accidental releases that could result in off site impacts. Identify the model(s) to be used, a description of all input assumptions, including meteorological conditions. The results of the modeling analysis can be submitted after the AFC is complete.	Section 5.15.3	Yes	

Adequacy Issue: Adequate ☒ Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 1 Date 3/4/2009

Technical Area: **Hazardous Materials Handling**

Project: San Joaquin 1&2

Technical Staff: Rick Tyler

Project Manager: Joseph Douglas

Docket: 08-AFC-12

Technical Senior: Rick Tyler

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (10) (E)	A discussion of whether a risk management plan (Health and Safety Code § 25531 et seq.) will be required, and if so, the requirements that will likely be incorporated into the plan.	Section 5.15.2.2	Yes	
Appendix B (g) (10) (F)	A discussion of measures proposed to reduce the risk of any release of hazardous materials.	Section 5.15	Yes	
Appendix B (g) (10) (G)	A discussion of the fire and explosion risks associated with the project.	Section 5.15.2.2	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 5.15-5	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.	Table 5.15-7	Yes	

Adequacy Issue: Adequate ☒ Inadequate ☐

DATA ADEQUACY WORKSHEET

Revision No. 1 Date 3/4/2009

Technical Area: **Hazardous Materials Handling**

Project: San Joaquin 1&2

Technical Staff: Rick Tyler

Project Manager: Joseph Douglas

Docket: 08-AFC-12

Technical Senior: Rick Tyler

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.	Table 5.15-6	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.	Table 5.15-7	Yes	

Adequacy Issue: Adequate ☒ Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 1 Date 3/4/2009

Technical Area: Noise
Project Manager: Joseph Douglas

Project: San Joaquin Solar 1&2
Docket: 08-AFC-12

Technical Staff: Steve Baker
Technical Senior: Steve Baker

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.	§§ 1.1, 1.2, 1.2.1, 1.2.3, 1.3.3.2, 3.3, 3.4.1, 3.4.3.4, 3.4.4, 3.4.5.1, 3.6.1, 3.6.1.5, 3.7.1, 3.7.3; Ch. 5.12; Apps. K-1 through K-5	Yes	
Appendix B (g) (4) (A)	A land use map which identifies residences, hospitals, libraries, schools, places of worship, or other facilities where quiet is an important attribute of the environment within the area impacted by the proposed project. The area potentially impacted by the proposed project is that area where, during either construction or operation, there is a potential increase of 5 dB(A) or more, over existing background levels.	Fig. 5.12-1	Yes	

Adequacy Issue: Adequate X Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 1 Date 3/4/2009

Technical Area: Noise
Project Manager: Joseph Douglas

Project: San Joaquin Solar 1&2
Docket: 08-AFC-12

Technical Staff: Steve Baker
Technical Senior: Steve Baker

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (4) (B)	A description of the ambient noise levels at those sites identified under subsection (g)(4)(A) which the applicant believes provide a representative characterization of the ambient noise levels in the project vicinity, and a discussion of the general atmospheric conditions, including temperature, humidity, and the presence of wind and rain at the time of the measurements. The existing noise levels shall be determined by taking noise measurements for a minimum of 25 consecutive hours at a minimum of one site. Other sites may be monitored for a lesser duration at the applicant's discretion, preferably during the same 25-hour period. The results of the noise level measurements shall be reported as hourly averages in Leq (equivalent sound or noise level), Ldn (day-night sound or noise level) or CNEL (Community Noise Equivalent Level) in units of dB(A). The L10, L50, and L90 values (noise levels exceeded 10 percent, 50 percent, and 90 percent of the time, respectively) shall also be reported in units of dB(A).	§§ 5.12.3.3, 5.12.3.3.1, 5.12.3.3.2, 5.12.3.3.3; Tables 5.12-2, 5.12-3; App. K-3	Yes	
Appendix B (g) (4) (C)	A description of the major noise sources of the project, including the range of noise levels and the tonal and frequency characteristics of the noise emitted.	Table 5.12-5	Yes	
Appendix B (g) (4) (D)	An estimate of the project noise levels, during both construction and operation, at residences, hospitals, libraries, schools, places of worship or other facilities where quiet is an important attribute of the environment, within the area impacted by the proposed project.	§§ 5.12.4.2.1, 5.12.4.2.3; Table 5.12-6	Yes	

Adequacy Issue: Adequate X Inadequate

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Revision No. 1 Date 3/4/2009

Technical Area: Noise
Project Manager: Joseph Douglas

Project: San Joaquin Solar 1&2
Docket: 08-AFC-12

Technical Staff: Steve Baker
Technical Senior: Steve Baker

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (4) (E)	An estimate of the project noise levels within the project site boundary during both construction and operation and the impact to the workers at the site due to the estimated noise levels.	§§ 5.12.4.1.1, 5.12.4.2.2	Yes	
Appendix B (g) (4) (F)	The audible noise from existing switchyards and overhead transmission lines that would be affected by the project and estimates of the future audible noise levels that would result from existing and proposed switchyards and transmission lines. Noise levels shall be calculated at the property boundary for switchyards and at the edge of the rights-of-way for transmission lines.	§ 5.12.4.2.4	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 5.12-7, 5.12-8, 5.12-9	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 5.12-10 <u>Supplemental Information, p. Noise-1</u>	Not Found Yes	Please identify agencies, such as the appropriate office(s) of the Fresno County Government, that would have permit authority were it not for the Energy Commission's exclusive jurisdiction.

Adequacy Issue: Adequate X Inadequate _____

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Revision No. 1 Date 3/4/2009

Technical Area: Noise
 Project Manager: Joseph Douglas

Project: San Joaquin Solar 1&2
 Docket: 08-AFC-12

Technical Staff: Steve Baker
 Technical Senior: Steve Baker

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.	§ 5.12.7.4; Table 5.12-10 Supplemental Information, p. Noise-2	Not Found Yes	Please identify officials of the Fresno County Government who were contacted, and who will serve as a contact person for Energy 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.	§ 5.12.7.5; Table 5.12-11	Yes	

Adequacy Issue: Adequate X Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 1 Date 3/4/2009

Technical Area: **Project Overview**
Project Manager: Joseph Douglas

Project: San Joaquin Solar 1 & 2
Docket: 08-AFC-12

Technical Staff: Joseph Douglas
Technical Senior: Robert Worl

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND 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.	Please see the individual technical areas for a determination regarding the adequacy of this item.	N/A	
Cal. Code Regs., tit. 20, § 1704, (a) (3) (B)	Descriptions, including methodologies and findings, of all major studies or research efforts undertaken and relied upon to provide information for the document; and a description of ongoing research of significance to the project (including expected completion dates; and	Please see the individual technical areas for a determination regarding the adequacy of this item.	N/A	
Cal. Code Regs., tit. 20, § 1704, (a) (3) (C)	A list of all literature relied upon or referenced in the documents, along with brief discussions of the relevance of each such reference	Please see the individual technical areas for a determination regarding the adequacy of this item.	N/A	
Cal. Code Regs., tit. 20, § 1704, (a) (4)	Each principal subject area covered in a notice or application shall be set forth in a separate chapter or section, each of which shall identify the person or persons responsible for its preparation.	Section 7	Yes	
Appendix B (a) (1) (A)	A general description of the proposed site and related facilities, including the location of the site or transmission routes, the type, size and capacity of the generating or transmission facilities, fuel characteristics, fuel supply routes and facilities, water supply routes and facilities, pollution control systems, and other general characteristics.	Page 3-1, Section 3.2 Page 3-1, Section 3.3 Page 3-2 through 3-22, Section 3.4 <u>Supplemental Information</u> <u>Page PROJ - 1</u>	No <u>Yes</u>	Please identify the preferred transmission route.
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.	Page 3-1, Section 3.2 Page 3-1, Section 3.3	Yes	

Adequacy Issue: Adequate X Inadequate

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Revision No. 1 Date 3/4/2009

Technical Area: **Project Overview**

Project: San Joaquin Solar 1 & 2

Technical Staff: Joseph Douglas

Project Manager: Joseph Douglas

Docket: 08-AFC-12

Technical Senior: Robert Worl

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (a) (1) (C)	A description of and maps depicting the region, the vicinity, and the site and its immediate surroundings.	Page 3-1, Section 3.2 Page 3-2, Section 3.4.1	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.	Page 5.13-1, Section 5.13 Figure 1.2-2, 3.4.2 <u>Supplemental Information Figure 3.4-2a.</u>	No <u>Yes</u>	Please provide a full-page color photographic reproduction depicting the visual appearance of the site prior to construction.
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 powerplant and related facilities.	Page, Appendix A-1	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.	Page 3-24, Sections 3.6.1	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.	Page 1-3, Sections 1.4 Appendix A-5 Section 6	Yes	
Appendix B (a) (3) (B)	A list of all owners and operators of the proposed electric transmission facilities.	Page 3-8, Section 3.4.5 Page 3-8, Section 3.4.5.1 Section 6	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	Yes	

Adequacy Issue: Adequate ☒ Inadequate ☐

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Technical Area: **Project Overview**

Project: San Joaquin Solar 1 & 2

Technical Staff: Joseph Douglas

Project Manager: Joseph Douglas

Docket: 08-AFC-12

Technical Senior: Robert Worl

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)	In a section entitled, "Generation Facility Description, Design, and Operation" provide the following information:	(See Below)		
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;	Figure 5.9.3	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);	Appendix A-2 Appendix A-5	Yes	
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 3	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.	Page 3-1 through 3-2, Sections 3.1-3.3	Yes	
Appendix B (b) (2)	In a section entitled, "Transmission Lines Description, Design, and Operation" provide the following information:	(See Below)		

Adequacy Issue: Adequate ☒ Inadequate ☐

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Technical Area: **Project Overview**

Project: San Joaquin Solar 1 & 2

Technical Staff: Joseph Douglas

Project Manager: Joseph Douglas

Docket: 08-AFC-12

Technical Senior: Robert Worl

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) (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);	Page 3-34, Section 3.8.7 Figure 3.4-7 Figure 5.13-1	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.	Figure 5.13.18 through 5.13.21	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.	Pages 3-8 through 3-10, Section 3.4.5 Page 3-24, Section 3.5.7	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	Pages 3-8 through 3-10, Section 3.4.5 <u>Supplemental Information</u> <u>Page PROJ – 3.</u>	No <u>Yes</u>	Please describe the constraints and potential impacts of the transmission line route alternatives, and the selection process in determining the preferred transmission line route.

Adequacy Issue: Adequate X Inadequate _____

DATA ADEQUACY WORKSHEET

Revision No. 1 Date 3/4/2009

Technical Area: **Project Overview**

Project: San Joaquin Solar 1 & 2

Technical Staff: Joseph Douglas

Project Manager: Joseph Douglas

Docket: 08-AFC-12

Technical Senior: Robert Worl

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (e) (1)	A discussion of how facility closure will be accomplished in the event of premature or unexpected cessation of operations.	Pages 3-32 through 3-36, Section 3.8	Yes	

Adequacy Issue: Adequate X Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 1 Date 3/4/2009

Technical Area: **Reliability**
Project Manager: Joseph Douglas

Project: San Joaquin Solar 1&2
Docket: 08-AFC-12

Technical Staff: Erin Bright
Technical Senior: Steve Baker

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.	§§ 1.1, 1.2, 3.1, 3.4, 3.6, 3.7, 3.8, 5.3, 5.5; Appendix A-4	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.	§§ 3.4.3.2, 3.4.3.4, 3.7.3; Table 3.4-4; Appendix A-4	Yes	
Appendix B (h) (3) (B)	A discussion of the anticipated service life and degree of reliability expected to be achieved by the proposed facilities based on a consideration of:	—	—	
Appendix B (h) (3) (B) (i)	Expected overall availability factor, and annual and lifetime capacity factors;	§§ 3.4.3, 3.7.1 <u>Supplemental Information</u> <u>Page RELI – 1</u>	No <u>Yes</u>	Please provide projected availability factor for both solar and biomass components, and estimated capacity factor for solar component.
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;	§§ 3.4.2, 3.4.3, 3.4.6, 3.4.7, 3.4.8, 5.5.2.1	Yes	
Appendix B (h) (3) (B) (iii)	Geologic and flood hazards, meteorologic conditions and climatic extremes, and cooling water availability;	§§ 1.2.2, 3.4.6, 3.8.3, 5.3.1.1.4, 5.3.1.2, 5.5.1.10	Yes	

Adequacy Issue: Adequate X Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 1 Date 3/4/2009

Technical Area: **Reliability**
 Project Manager: **Joseph Douglas**

Project: **San Joaquin Solar 1&2**
 Docket: **08-AFC-12**

Technical Staff: **Erin Bright**
 Technical Senior: **Steve Baker**

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) (iv)	Special design features adopted by the applicant or resource supplier to ensure power plant reliability including equipment redundancy; and	§§ 3.1, 3.7.1, 3.8.2	Yes	
Appendix B (h) (3) (B) (v)	For technologies not previously installed and operated in California, the expected power plant maturation period.	§§ 3.4.2.1, 3.4.3.1	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	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	
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	

Adequacy Issue: Adequate X Inadequate _____

DATA ADEQUACY WORKSHEET

Revision No. 1 Date 3/4/2009

Technical Area: **Reliability**
 Project Manager: Joseph Douglas

Project: San Joaquin Solar 1&2
 Docket: 08-AFC-12

Technical Staff: Erin Bright
 Technical Senior: Steve Baker

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

DATA ADEQUACY WORKSHEET

Revision No. 1 Date 3/4/2009

Technical Area: **Socioeconomics**
Project Manager: **Joe Douglas**

Project: **San Joaquin Solar 1 and 2**
Docket: **08-AFC-12**

Technical Staff: **Amanda Stennick**
Technical Senior: **Paula David**

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 5.10	Yes	
Appendix B (g) (7) (A)	A description of the socioeconomic circumstances of the vicinity and region affected by construction and operation of the project. Include:	Sections 5.10.1 and 2	Yes	
Appendix B (g) (7) (A) (i)	The economic characteristics, including the economic base, fiscal resources, and a list of the applicable local agencies with taxing powers and their most recent and projected revenues;	Sections 5.10.1.1 and 5.10.2.2 Table 5.10-4	Yes	
Appendix B (g) (7) (A) (ii)	The social characteristics, including population and demographic and community trends;	Table 5.10-1 Figures 5.10-1 and -2	Yes	
Appendix B (g) (7) (A) (iii)	Existing unemployment rates;	Table 5.10-2	Yes	
Appendix B (g) (7) (A) (iv)	Availability of skilled workers by craft required for construction and operation of the project;	Sections 5.10.2.1 and .4 Tables 5.1-3 and -5	Yes	
Appendix B (g) (7) (A) (v)	Availability of temporary and permanent housing and current vacancy rate; and	Section 5.10.2.6	Yes	

Adequacy Issue: Adequate X Inadequate**DATA ADEQUACY WORKSHEET**Revision No. 1 Date 3/4/2009Technical Area: **Socioeconomics**Project: San Joaquin Solar 1 and 2Technical Staff: Amanda StennickProject Manager: Joe DouglasDocket: 08-AFC-12Technical Senior: Paula David

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (7) (A) (vi)	Capacities, existing and expected use levels, and planned expansion of utilities (gas, water and waste) and public services, including fire protection, law enforcement, emergency response, medical facilities, other assessment districts, and school districts. For projects outside metropolitan areas with a population of 500,000 or more, information for each school district shall include current enrollment and yearly expected enrollment by grade level groupings, excluding project-related changes for the duration of the project schedule.	Section 5.10.2.8 Table 5.10-6	Yes	
Appendix B (g) (7) (B)	A discussion of the socioeconomic impacts caused by the construction and operation of the project (note year of estimate, model, if used, and appropriate sources), including:	Section 5.10.2	Yes	
Appendix B (g) (7) (B) (i)	An estimate of the number of workers to be employed each month by craft during construction, and for operations, an estimate of the number of permanent operations workers during a year;	Table 5.10-5 Sections 5.10.2.4 and .5	Yes	
Appendix B (g) (7) (B) (ii)	An estimate of the percentage of non-local workers who will relocate to the project area to work on the project;	Section 5.10.2.4 Table 5.10-5	Yes	
Appendix B (g) (7) (B) (iii)	An estimate of the potential population increase caused directly and indirectly by the project;	Section 5.10.2.5.3	Yes	
Appendix B (g) (7) (B) (iv)	The potential impact of population increase on housing during the construction and operations phases;	Section 6.10.2.6	Yes	

Adequacy Issue: Adequate ☒ Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 1 Date 3/4/2009

Technical Area: **Socioeconomics**

Project: San Joaquin Solar 1 and 2

Technical Staff: Amanda Stennick

Project Manager: Joe Douglas

Docket: 08-AFC-12

Technical Senior: Paula David

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (7) (B) (v)	The potential impacts, including additional costs, on utilities (gas, water, and waste) and public services, including fire, law enforcement, emergency response, medical facilities, other assessment districts, and school districts. Include response times to hospitals and for police, and emergency services. For projects outside metropolitan areas with a population of 500,000 or more, information on schools shall include project-related enrollment changes by grade level groupings and associated facility and staffing impacts by school district during the construction and operating phases;	Sections 5.10.2.8 and 5.18.4.9	Yes	
Appendix B (g) (7) (B) (vi)	An estimate of applicable school impact fees;	Section 5.10.2.8.4	Yes	
Appendix B (g) (7) (B) (vii)	An estimate of the total construction payroll and separate estimates of the total operation payroll for permanent and short-term (contract) operations employees;	Sections 5.10.2.4 and .5	Yes	
Appendix B (g) (7) (B) (viii)	An estimate of the expenditures for locally purchased materials for the construction and operation phases of the project;	Sections 5.10.2.3	Yes	
Appendix B (g) (7) (B) (ix)	An estimate of the capital cost (plant and equipment) of the project;	Section 5.10.2.3	Yes	
Appendix B (g) (7) (B) (x)	An estimate of sales taxes generated during construction and separately during an operational year of the project;	Not Given <u>Supplemental Information</u>	No <u>Yes</u>	Please provide an estimate of sales taxes generated during construction and separately during an operational year of the project.

Adequacy Issue: Adequate ☒ Inadequate ☐

DATA ADEQUACY WORKSHEET

Revision No. 1 Date 3/4/2009

Technical Area: **Socioeconomics**
Project Manager: **Joe Douglas**

Project: **San Joaquin Solar 1 and 2**
Docket: **08-AFC-12**

Technical Staff: **Amanda Stennick**
Technical Senior: **Paula David**

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (7) (B) (xi)	An estimate of property taxes generated during an operational year of the project; and	Section 5.10.2.2	Yes	
Appendix B (g) (7) (B) (xii)	The expected direct, indirect, and induced income and employment effects due to construction, operation, and maintenance of the project.	Section 5.10.2.3	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	TABLE 5.10-7	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 5.10-8	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 5.10-8	YES	

Adequacy Issue: Adequate X Inadequate _____

DATA ADEQUACY WORKSHEET

Revision No. 1 Date 3/4/2009

Technical Area: **Socioeconomics**
 Project Manager: Joe Douglas

Project: San Joaquin Solar 1 and 2
 Docket: 08-AFC-12

Technical Staff: Amanda Stennick
 Technical Senior: Paula David

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
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 5.10-9	Yes	

Adequacy Issue: Adequate ☒ Inadequate**DATA ADEQUACY WORKSHEET**

Revision No. 1 Date 3/4/2009

Technical Area: **Soils**
Project Manager: **Joseph Douglas**Project: **San Joaquin Solar 1 & 2**
Docket: **08-AFC-12**Technical Staff: **Christopher Dennis**
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 5.4 Pages 5.4-10, 11, 12 & 13	Yes	
Appendix B (g) (15) (A)	A map at a scale of 1:24,000 and written description of soil types and all agricultural land uses that will be affected by the proposed project. The description shall include:	Figure 5.4-1 Section 5.9 Supplemental Information Page SOIL - 1	No Yes	Needs a map of the site and surrounding area at a scale of 1:24,000
Appendix B (g) (15) (A) (i)	The depth, texture, permeability, drainage, erosion hazard rating, and land capability class of the soil;	Table 5.4-2	Yes	
Appendix B (g) (15) (A) (ii)	An identification of other physical and chemical characteristics of the soil necessary to allow an evaluation of soil erodibility, permeability, re-vegetation potential, and cycling of pollutants in the soil-vegetation system;	Table 5.4-2	Yes	
Appendix B (g) (15) (A) (iii)	The location of any proposed fill disposal or fill procurement (borrow) sites; and	Supplemental Information Page SOIL - 2	No Yes	Needs a discussion of the location of any proposed fill disposal or fill procurement (borrow) sites
Appendix B (g) (15) (A) (iv)	The location of any contaminated soils that could be disturbed by project construction.	Section 5.4.1.2	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 5.4.2.1	Yes	

Adequacy Issue: Adequate ☒ Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 1 Date 3/4/2009

Technical Area: **Soils**
Project Manager: Joseph DouglasProject: San Joaquin Solar 1 & 2
Docket: 08-AFC-12Technical Staff: Christopher Dennis
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) (15) (B) (ii)	The effect of power plant emissions on surrounding soil-vegetation systems.	Section 5.4.2.3	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	Table 5.4-4	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 5.4-4	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.	Table 5.4-5	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.	Table 5.4-6 <u>Supplemental Information</u> <u>Page SOIL - 93</u>	No Yes	Needs 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.

Adequacy Issue: Adequate ☒ Inadequate

DATA ADEQUACY WORKSHEET

Revision 1 Date 3/4/2009
No.

Technical Area: **Transmission System Design**
Project Manager: **Joseph Douglas**

Project: **San Joaquin Solar 1 & 2 Hybrid Project**
Docket: **08-AFC-12**

Technical Staff: **Ajoy Guha, P.E.**
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 (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 1.2.3, Page 1-3. Section 3.4.5, Pages 3-8 to 3-9.	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 3.4.5, Pages 3-8 to 3-9.. Section 3.5.7, Page 3-24. Figure 3.4-7.	Yes	

Adequacy Issue: Adequate ☒ Inadequate

DATA ADEQUACY WORKSHEET

Revision 1 Date 3/4/2009
No.

Technical Area: **Transmission System Design**

Project: San Joaquin Solar 1 & 2 Hybrid Project

Technical Staff: Ajoy Guha, P.E.

Project Manager: Joseph Douglas

Docket: 08-AFC-12

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) (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.	<p>Section 3.5.7, Page 3-24. Section 3.8-7, Page 3-34.</p> <p><u>Response to CEC Data Adequacy Requests, February 4, 2009, Revised Figures 3.4-11, 3.4-12 & 3.4-6, Pages Trans-1 to Trans 5.</u></p> <p>Section 3.4.5, Pages 3-8 to 3-9. Figure 3.4.6.</p>	No <u>Yes</u>	<p>Submit Pole design diagrams (including dead-end structures) for the 230 kV generator overhead tie line showing configuration of insulators and conductors (with conductor sizes and type), and height of the pole/structures. Submit a complete electrical one-line diagram (or resubmit Figure 3.4-6 with missing elements or sizes/ratings) of the proposed San Joaquin Solar 1 & 2 Hybrid (SJSH 1 & 2) project 230 kV switchyard showing all equipment for all new generators' interconnection with the switchyard along with their respective sizes and/or ratings as follows:</p> <p>i) Any bus duct connectors or overhead conductors or cables, 13.8 kV switchgear, buses, breakers & disconnect switches on the low side of each Generator step-up transformer (GSU);</p> <p>ii) The GSU and short overhead conductors and/or cables from the GSU to the switchyard with the configurations for the switchyard buses, breakers, disconnect switches on the 230 kV side, along with the proposed tie line transmission outlet from the switchyard.</p> <p>Provide a one-line electrical diagram showing the pre-project PG&E Gates 230 kV substation with the existing the transmission outlets along with the configurations for buses, breakers, disconnect switches, and their respective sizes and/or ratings. Also provide a one-line electrical diagram showing the post-project Gates 230 kV substation with the proposed 230 kV generator tie line interconnection facilities for buses, breakers and disconnect switches and their respective sizes and/or ratings</p> <p>Provide a physical layout drawing of the post-project Gates substation showing all major equipment and transmission outlets.</p>

Adequacy Issue: Adequate ☒ Inadequate

DATA ADEQUACY WORKSHEET

Revision 1 Date 3/4/2009
No.

Technical Area: Transmission System Design
Project Manager: Joseph Douglas

Project: San Joaquin Solar 1 & 2 Hybrid Project
Docket: 08-AFC-12

Technical Staff: Ajoy Guha, P.E.
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) (D)	A description of how the route and additional transmission facilities were selected, and the consideration given to engineering constraints, environmental impacts, resource conveyance constraints, and electric transmission constraints.	Section 3.4.5.1, Page 3-8 to 3-9. Figure 3-4-7. <u>Response to CEC Data Adequacy Requests, February 4, 2009, Page Trans-6.</u>	No <u>Yes</u>	Select the preferred route of the proposed generator 230 kV overhead transmission tie line to the Gates substation and describe how the route is selected by comparing with any alternate routes and their environmental effects.

Adequacy Issue: Adequate ☒ Inadequate

DATA ADEQUACY WORKSHEET

Revision 1 Date 3/4/2009
No.

Technical Area: **Transmission System Design**
Project Manager: **Joseph Douglas**

Project: **San Joaquin Solar 1 & 2 Hybrid Project**
Docket: **08-AFC-12**

Technical Staff: **Ajoy Guha, P.E.**
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)	<p>A completed System Impact Study or signed System Impact Study Agreement with the California Independent System Operator (CA ISO) 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.</p> <p>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.</p>	<p>Section 3.5.7, Page 3-24.</p> <p>Appendix 5, Large Generator Interconnection study Agreement</p> <p><u>Response to CEC Data Adequacy Requests, February 4, 2009, Pages Trans-6 to Trans-7</u></p>	<p>No</p> <p><u>Yes</u></p>	<p>The following discrepancies were observed in the Large Generator Interconnection Study Agreement (LGISA) submitted materials:</p> <p>i) Whereas the LGISA dated October 24, 2008 was executed and signed between the California ISO and Martifier Renewables Solar Thermal LLC., all requirements for inclusion in the Transition Cluster Generator Queue position including payment of fees were fulfilled by the Bethel 7 & 8 Solar Hybrid project.</p> <p>ii) However, the AFC for the proposed San Joaquin Solar 1 & 2 Hybrid (SJSH 1 & 2) project to the Energy Commission was received from the applicant, San Joaquin Solar 1 LLC and San Joaquin Solar 2 LLC.</p> <p>Please explain whether under the above circumstances the signed LGISA is still valid for the current proposed project and ownership, and as far as the generator California ISO queue position is concerned.</p>

Adequacy Issue: Adequate ☒ Inadequate

DATA ADEQUACY WORKSHEET

Revision 1 Date 3/4/2009
No.

Technical Area: **Transmission System Design**
Project Manager: **Joseph Douglas**

Project: **San Joaquin Solar 1 & 2 Hybrid Project**
Docket: **08-AFC-12**

Technical Staff: **Ajoy Guha, P.E.**
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) (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 3.9, Page 3-36. Appendix A-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.	Section 3.9, Page 3-36.	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.	Section 3.9, Page 3-36.	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 3.5.7, Page 3-24.	Yes	

Adequacy Issue: Adequate X Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 1 Date 3/4/2009

Technical Area: Waste Management
Project Manager: Joseph Douglas

Project: San Joaquin Solar
Docket: 08-AFC-12

Technical Staff: Ellie Townsend-Hough
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 (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 1.0 & 20	Yes	
Appendix B (e) (1)	A discussion of how facility closure will be accomplished in the event of premature or unexpected cessation of operations.	Supplemental Information Page WASTE - 1	No Yes	The AFC provides no discussion of temporary or permanent closure. AFC, Section 5.14.2.3, refers to a facility closure plan that is not included in the document.
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.	Supplemental Information Page WASTE - 2	No Yes	The AFC provides no discussion of cumulative impacts. There is no discussion of available landfill capacity and comparison to the total quantities of nonhazardous and hazardous wastes that would be generated during construction and operation.
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.	Page 5.14-1, Section 5.14.1.1 Appendix M-1	Yes	

Adequacy Issue: Adequate ☒ Inadequate ☐**DATA ADEQUACY WORKSHEET**

Revision No. 1 Date 3/4/2009

Technical Area: **Waste Management**

Project: San Joaquin Solar

Technical Staff: Ellie Townsend-Hough

Project Manager: Joseph Douglas

Docket: 08-AFC-12

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) (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.	Pages 3-14 – 3-15, Table 3.4-6, Table 3.4-7 Page 5.14-6 Table 5.14-2, Page 5.14-8 Table 5.14-3	Yes	
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.	Page 5.14-3 Table 5.14-1	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.	Pages 3-14 – 3-15, Table 3.4-6, Table 3.4-7 Page 5.14-6 Table 5.14-2, Page 5.14-8 Table 5.14-3	Yes	
Appendix B (h) (1) (B)	A discussion of any measures proposed to improve adverse site conditions.	Page 5.14-11 Section 5.14.4.1	Yes	
Appendix B (h) (1) (D) (v)	The waste disposal system and on-site disposal sites;	Pages 5.14-7 Section 5.14.2.2	Yes	

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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 5.14.5 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.	Section 5.14.5 Table 5.14.4, Table 5.14-5, & Table 5.14-6	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.	Section 5.14.5.4 Table 5.14.4 & 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.	Section 5.14.5.5 Table 5.14-6	Yes	

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Docket: 08-AFC-12

Technical Staff: Christopher Dennis
Technical Senior: Paul Marshall

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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.	Section 5.5 <u>Supplemental Information</u> <u>Pages : WATER ,1-3</u>	No <u>Yes</u>	Needs discussion of direct or indirect impacts due to construction, operation and maintenance of project.
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);	Section 5.5.4.5	Yes	
Appendix B (g) (14) (A) (ii)	Construction and Industrial Waste Discharge and/or Industrial Pretreatment permits from wastewater treatment agencies;		NA	
Appendix B (g) (14) (A) (iii)	Nationwide Permits and/or Section 404 Permits from the U.S. Army Corps of Engineers; and	Section 5.5.4.5 P 5.5-24	Yes	
Appendix B (g) (14) (A) (iv)	Underground Injection Control Permit(s) from the U.S. Environmental Protection Agency, California Division of Oil and Gas, and RWQCB.		NA	

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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;	<u>Supplemental Information Page WATER -3</u>	<u>No</u> <u>Yes</u>	Needs figures depicting hydrogeologic conditions, groundwater bodies or related geologic structures. Needs aquifer testing information to support estimated well yield and drawdown estimates to evaluate potential for impact to other wells.
Appendix B (g) (14) (B) (ii)	Surface water bodies;	<u>Supplemental Information Page WATER -5</u>	<u>No</u> <u>Yes</u>	Needs discussion or figures describing nearby surface water bodies.
Appendix B (g) (14) (B) (iii)	Water inundation zones, such as the 100-year flood plain and tsunami run-up zones;	Figure 5.5.1.10	Yes	
Appendix B (g) (14) (B) (iv)	Flood control facilities (existing and proposed); and	Page 5.5-14	Yes	
Appendix B (g) (14) (B) (v)	Groundwater wells within ½ mile if the project will include pumping.	Figure 5.5-4 P5.5-11	Yes	
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;	Section 5.5.2.1 Pages 5.5-9, 10 & 11	Yes	

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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);	Tables 5.5-4 and 5.5-5 Pages 5.5-6 & 7 and 5.5-13, <u>Supplemental Information</u> Pages: <u>WATER, 6-8</u>	No <u>Yes</u>	Needs a description of recycled wastewater quality. Needs a description of post treatment water quality from both water sources. Needs a description of water quality proposed for discharge to the evaporation ponds.
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;	Section 5.5.2.2 Page 5.5-11, <u>Supplemental Information</u> Page <u>WATER -9</u>	No <u>Yes</u>	Needs a description of construction water use.
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;	Section 5.5.2.2 Page 5.5-11 Figure 5.5-3	Yes	

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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;	Section 5.5.2.1 Pages 5.5-9,10&11 Appendix E	Yes	

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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);		NA	
Appendix B (g) (14) (C) (vii)	Provide water mass balance and heat balance diagrams for both average and maximum flows that include all process 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 5.5-3 Page 5.5-13	Yes	

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Appendix B (g) (14) (C) (viii)	<p>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.</p> <p>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.</p>		NA	

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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;	Section 5.5.1.3 Pages 5.5-1 & 14	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;	Section 5.5.2.3 Pages 5.5-14 & 15, <u>Supplemental Information</u> Pages: WATER, 10-12	No Yes	Need description of design storm. Need storm water collection system design, storm water collection system description and storm water collection system diagrams.
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	<u>Supplemental Information</u> Page WATER -13	No Yes	Need to provide all assumptions and calculations used to calculate runoff and to estimate changes in flow rates between pre- and post construction
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.	<u>Supplemental Information</u> Page WATER -14	No Yes	Need to provide 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 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:			

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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;	AFC Sections 5.5.2, 5.5.3, & 5.5.4, <u>Supplemental Information</u> <u>Pages: WATER- 1,6-9,15</u>	<u>No</u> <u>Yes</u>	Need to provide an impacts analysis of the proposed project on water resources and a discussion of conformance with water-related LORS and policy including the effects of project demand on the water supply and other users of these sources, 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
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;	<u>Supplemental Information</u> <u>Pages: WATER- 4,16</u>	No	Need an estimation of aquifer drawdown based on a computer modeling study that shall be conducted by a professional geologist and discuss any effects on the migration of groundwater contaminants, and the likelihood of any changes in existing physical or chemical conditions of groundwater resources
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;	Section 5.5.2	Yes	

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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;"		NA	
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;"	Section 5.5.2	Yes	
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	Section 5.5.1.10 Page 5.5-9 Figure 5.5-2	Yes	
Appendix B (g) (14) (vii)	All assumptions, evidence, references, and calculations used in the analysis to assess these effects.	Section 5.5.1.10 Page 5.5-9 Figure 5.5-2	Yes	

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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 5.5.4 Table 5.5-8 <u>Supplemental Information</u> Pages: WATER, 17-21	<u>No</u> <u>Yes</u>	Need to provide a table or matrix that explicitly references pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed
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 5.5-8	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 5.5-24 Table 5.5-9	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 5.5-24 Table 5.5-10	Yes	