State Of California | The Resources Agency of California

Memorandum

Date: November 8, 2011
Telephone: (916) 654-4996

To: Robert B. Weisenmiller, Ph.D., Chairman
James D. Boyd, Vice Chair
Karen Douglas, J.D., Commissioner
Carla Peterman, Commissioner

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

Subject: **QUAIL BRUSH GENERATION PROJECT, STAFF'S REVISED DATA ADEQUACY RECOMMENDATION (11-AFC-3)**

On August 29, 2011, Quail Brush Genco, LLC, submitted an Application for Certification (AFC) to construct and operate the Quail Brush Generation Project (QBGP). The QBGP is proposed to be developed on a 21.6-acre parcel, located in the City of San Diego, California. The proposed site is located west of the City of Santee, south of the Sycamore Landfill and north of State Route 52.

The QBGP is a nominally rated 100-megawatt (MW) intermediate/peaking load, electrical generating facility that would employ a set of eleven (11) natural gas-fired, reciprocating, Wartsila engine generators. The project would also include: an onsite electrical switchyard, above ground urea storage tank, two water storage tanks, septic tank and leach field, and an underground natural gas pipeline.

At the October 5, 2011 Business Meeting, the Commission found the AFC to be data inadequate. On October 26, 2011, the applicant filed a Supplement to the AFC. Staff has completed its data adequacy review of the supplemental information together with the original AFC and has determined that it now meets all the requirements listed in Title 20, California Code of Regulations, section 1704, Appendix B (2007) for the 12-month process.

Attached is a summary table and data adequacy worksheets for each technical discipline that was previously found to be inadequate. The worksheets for each technical area identify the location of the supplemental information that was provided to fulfill the AFC data adequacy requirements. At the Energy Commission's business meeting on November 16, 2011, I will recommend that the Energy Commission accept the AFC together with the Supplemental AFC and appoint a Committee for the QBGP. If you have any questions, please call Eric Solorio, staff's Project Manager, at (916) 651-0966.

Attachments: Attachment A, Overview of Staff's Data Adequacy Determination
Attachment B, Staff's Data Adequacy Worksheets

Attachment A
Overview of Energy Commission Staff's
Data Adequacy Determination
Quail Brush Generation Project
11-AFC-3

Technical Area	Attachment B Page No.	Adequate?
AIR QUALITY	1	YES
ALTERNATIVES	7	YES
BIOLOGICAL RESOURCES	8	YES
CULTURAL RESOURCES	24	YES
PALEONTOLOGICAL RESOURCES	34	YES
PROJECT OVERVIEW	37	YES
TRAFFIC AND TRANSPORTATION	42	YES
TRANSMISSION SYSTEM DESIGN	46	YES

ATTACHMENT B

ENERGY COMMISSION STAFF'S
Data Adequacy Worksheets

Quail Brush Generation Project
11-AFC-3

November 8, 2011

DATA ADEQUACY WORKSHEET

Adequacy Issue:	Adequate X Inadequate ____			Revision No. 1~~0~~	Date ~~September 13, 2011~~ November 04,2011
Technical Area:	**Air Quality**	Project:	Quail Brush Generation Project	Technical Staff:	Joseph Hughes
Project Manager:	Eric Solorio	Docket:	11-AFC-3	Technical Senior:	Gerry Bemis

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (1)	...provide a discussion of the existing site conditions, the expected direct, indirect and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation.	Section 4.7, pp. 4.7-2 through 4.7-49; Appendices F.1, F.2, F.5, F.7, and F.8.	Yes ~~No~~	~~Please provide an evaluation of the project's cumulative air quality impacts.~~
Appendix B (g) (8) (A)	The information necessary for the air pollution control district where the project is located to complete a Determination of Compliance.	Section 4.7 (Air Quality) Section 4.8 (Public Health) Section 2.0 (Project Description) Appendices F.1 thru F.10 San Diego Air Pollution Control District Completeness Letter dated November 2, 2011.	Yes ~~No~~	~~Please provide the permit application completeness letter from the San Diego Air Pollution Control District.~~
Appendix B (g) (8) (B)	The heating value and chemical characteristics of the proposed fuels, the stack height and diameter, the exhaust velocity and temperature, the heat rate and the expected capacity factor of the proposed facility.	Section 2.0 Project Description; Section 4.7.2.2 pp. 4.7-2 through 4.7-6; Appendices F.1, F.2, F.3.	Yes	
Appendix B (g) (8) (C)	A description of the control technologies proposed to limit the emission of criteria pollutants.	Section 4.7.2.2, pp. 4.7-3, 4; Section 4.7.4, pp. 4.7-12, 13; Appendix F.6	Yes	
Appendix B (g) (8) (D)	A description of the cooling system, the estimated cooling tower drift rate, the rate of water flow through the cooling tower, and the maximum concentrations of total dissolved solids.	Section 2.1, p.2-2; Section 4.7.1, p. 4.7-1; Appendix F.1.	Yes	

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (8) (E)	The emission rates of criteria pollutants and greenhouse gases (CO2, CH4, N2O, and SF6) from the stack, cooling towers, fuels and materials handling processes, delivery and storage systems, and from all on-site secondary emission sources.	Section 4.7.3, pp. 4.7-7 through 4.7-12; Appendix F.1, and F.6.	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 4.7.3, pp. 4.7-7 through 4.7-11; Appendix F.1, F.4, and F.6.	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 4.7.5.9, pp. 4.7-35 through 4.7-37; Appendix F.1.	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 4.7.5.6, pp. 4.7-26 through 4.7-31; Appendix F.2.	Yes	

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Technical Area:	**Air Quality**	Project:	Quail Brush Generation Project	Technical Staff:	Joseph Hughes
Project Manager:	Eric Solorio	Docket:	11-AFC-3	Technical Senior:	Gerry Bemis

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (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 4.7.5.5, pp. 4.7-22 through 4.7-26; Appendices F.2, and F.3. Met files 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.	Data not collected at site. Data supplied by SDAPCD. Section 4.7.5.5, pp. 4.7-22 through 4.7-26; Appendices F.2, and F.3; Met files on CD.	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 4.7.5.5, pp. 4.7-22 through 4.7-26; Appendices F.2, and F.3; Met files on CD.	Yes	
Appendix B (g) (8) (I)	An evaluation of the project's direct and cumulative air quality impacts, consisting of the following:			

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (8) (I) (i)	A screening level air quality modeling analysis, or a more detailed modeling analysis if so desired by the applicant, of the direct criteria pollutant impacts of project construction activities on ambient air quality conditions, including fugitive dust (PM_{10}) emissions from grading, excavation and site disturbance, as well as the combustion emissions [nitrogen oxides (NO_x), sulfur dioxide (SO_2), carbon monoxide (CO), and particulate matter less than 10 microns in diameter (PM_{10}) and particulate matter less than 2.5 microns in diameter (PM2.5)] from construction-related equipment;	Section 4.7.5, pp. 4.7-14 through 4.7-48; Appendices F.2, F.3, F.5, F.8.	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 4.7.5, pp. 4.7-14 through 4.7-48; Appendices F.2, F.3, F.5, F.8.	Yes	
Appendix B (g) (8) (I) (iii)	A protocol for a cumulative air quality modeling impacts analysis of the project's typical operating mode in combination with other stationary emissions sources within a six mile radius which have received construction permits but are not yet operational, or are in the permitting process. The cumulative inert pollutant impact analysis should assess whether estimated emissions concentrations will cause or contribute to a violation of any ambient air quality standard; and	Appendices F.3 and F.8.	Yes	

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (8) (I) (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 4.7.5.9, pp. 4.7-35 through 4.7-37; Appendices F.2, F.3, F.5, F.8.	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:			
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 4.7.3.4, pp. 4.7-8 through 4.7-11; Appendix F.7.	Yes	
Appendix B (g) (8) (J) (ii)	Potential offset sources, including location, and quantity of emission reductions;	Appendix F.7.	Yes	
Appendix B (g) (8) (K)	A detailed description of the mitigation, if any, which an applicant may propose, for all projects impacts from criteria pollutants that currently exceed state or federal ambient air quality standards, but are not subject to offset requirements under the district's new source review rule.	Appendix F.7.	Yes	
Appendix B (i) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	Section 4.7.6, pp. 4.7-50 through 4.7-54.	Yes	

DATA ADEQUACY WORKSHEET

Adequacy Issue:	Adequate X Inadequate ____			Revision No. 1~~0~~	Date ~~September 13, 2011~~ November 04,2011
Technical Area:	**Air Quality**	Project:	Quail Brush Generation Project	Technical Staff:	Joseph Hughes
Project Manager:	Eric Solorio	Docket:	11-AFC-3	Technical Senior:	Gerry Bemis

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (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 4.7.7, pp. 4.7-53, 54.	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 4.7.8, pp. 4.7-53, 54.	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 4.7.8, pp. 4.7-53, 54; Appendix F.9.	Yes	

DATA ADEQUACY WORKSHEET

Adequacy Issue:	Adequate X Inadequate ___			Revision No. 1 ~~0~~	Date October 27, 2011 ~~September 12, 2011~~
Technical Area:	**Alternatives**	Project:	Quail Brush Generation Project	Technical Staff:	Eric Solorio
Project Manager:	Eric Solorio	Docket:	11-AFC-3	Technical Senior:	Chris Davis

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.	3.3.1, pp. 3-3:4	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.	3.2, 3.3, 3.4, 3.5 AFC Supplement, Alternatives, pp1-6	Yes ~~No~~	~~Please provide 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.~~
Appendix B (f) (2)	An evaluation of the comparative engineering, economic, and environmental merits of the alternatives discussed in subsection (f)(1).	3.3, 3.4, 3.5 AFC Supplement, Alternatives, pp1-6	Yes ~~No~~	~~Please provide the comparison of engineering, economic, and environmental merits of feasible alternatives to the project.~~

Adequacy Issue: Adequate X Inadequate

DATA ADEQUACY WORKSHEET

Revision No. ~~0~~1 Date October 28, 2011 ~~September 14, 2011~~

Technical Area: **Biological Resources** Project: Quail Brush Generation Project Technical Staff: Andrea Martine

Project Manager: Eric Solorio Docket: 11-AFC-3 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) (1)	...provide a discussion of the existing site conditions, the expected direct, indirect and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation.	**Existing site conditions:** Sections 4.12.2, 4.12.3. Appendices H.2, H.3, H.4 and H.5 Supplement to the AFC Biological Resources pages 1-4 Supplement to the AFC Attachment B Exhibit 1	Yes ~~No~~	~~Please provide a map of the vegetation communities of the 1-mile buffer around the project site and out to 1,000 feet of the outer edge for proposed linear facilities. Also provide a discussion of these areas.~~ -
		Direct, indirect, and cumulative impacts: Section 4.12.2 Appendix H.2 Section 5.1 Supplement to the AFC Biological Resources pages 4-7	Yes ~~No~~	~~Please conduct general surveys for special status species of the 1-mile buffer around project site and 100% survey of the linear facilities out to 1,000 feet from the outer edge to supplement 2011 surveys. Then provide discussions of direct, indirect, and cumulative impacts of any special status species found during surveys of the proposed linears.~~
		Mitigation measures: Sections 4.12.3, 4.12.4 Appendix H.2 Section 5.2 Supplement to the AFC Biological Resources pages 7 and 8	Yes ~~No~~	~~Provide suggested mitigation measures of any special status species found during surveys of the linears.~~
		Monitoring plans: Sections 4.12.4.1 and 4.12.4.2 Appendix H.2 Section 5.2.2	Yes	

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Revision No. ~~0~~1 Date October 28, 2011 ~~September 14, 2011~~

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Project Manager: Eric Solorio Docket: 11-AFC-3 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) (A)	A regional overview and discussion of terrestrial and aquatic biological resources, with particular attention to sensitive biological resources within ten (10) miles of the project. Include a map at a scale of 1:100,000 (or other suitable scale) showing sensitive biological resource location(s) in relation to the project site and related facilities and any boundaries of a local Habitat Conservation Plan or similar open space land use plan or designation. Sensitive biological resources include the following:	**Regional overview:** Section 4.12.2 **Regional vicinity maps:** Figures 4.12-1, 4.12-2a, 4.12-2b, 4.12-2c, 4.12-2d, Appendix H.2 Appendix F Maps A-1 to A-4 and B-1 to B-4. Supplement to the AFC Biological Resources pages 8 and 9 Supplement to the AFC Attachment B Exhibits 2a-1, 2b-1, 2c-1, 2d-1, 2a-2, 2b-2, 2c-2, and 2d-2.	Yes Yes ~~No~~	~~Please provide a map at a scale of 1:100,000 (or other suitable scale) which includes sensitive biological resources out to 10 miles of the project site and shows the project site, linears, laydown site(s), roads, proposed mitigation lands, and any Multiple Species Conservation Program and Multi-Habitat Planning Area boundaries.~~

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (13) (A) (i)	species listed under state or federal Endangered Species Acts;	**Federal and state Endangered Species:** Section 4.12.2.6 Table 4.12-5, 4.12-6 Appendix B, Appendix C Supplement to the AFC Biological Resources pages 9 and10 Supplement to the AFC Attachment B.2 CNDDB list and Attachment B.3 Table 1 and Table 2. Table 3 on page 10	Yes ~~No~~	~~Please conduct a 9 quad search of the CNDDB for the following quads Del Mar, El Cajon, Jamul Mountains, La Jolla, La Mesa, National City, Point Loma, San Vicente Reservoir and Poway. Take this list and amend existing Special-Status Plant and Wildlife Tables 4.12-5 and 4.12-6 in AFC with all species listed in CNDDB search. Within the tables under the column "Potential to Occur/Known Occurrence/Suitable Habitat", please explain for each species from the search its potential to occur.~~ ~~The 9 quad CNDDB search in the AFC provided a list of 75 species (including plant communities). Staff conducted the same 9 quad CNDDB search and found 179 species (including plant communities). Because of this discrepancy, and no explanation as to the reasoning behind excluding several species abbreviated list for field surveys, the lack of general surveys for the 1-mile buffer and 100% coverage for linear facilities out to 1,000 feet, and conducting surveys late in the year, it is not known if all *federal and state endangered species* have been accounted for.~~

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (13) (A) (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:** Section 4.12.2.6 Table 4.12-6 Appendix B Supplement to the AFC Biological Resources pages 9 and10 Supplement to the AFC Attachment B.2 CNDDB list and Attachment B.3 Table 1 and Table 2, Table 3 page 10	Yes ~~No~~	~~Please follow instructions from first paragraph in Appendix B (g) (13) (A) (i) above.~~ ~~As discussed above for (g) (13) (A) (i) it is not known if all areas of critical concern and species of special concern have been accounted for as required by section 1702(g) and (v) of Title 20 of the California Code of Regulations.~~
Appendix B (g) (13) (A) (iii)	species identified as state Fully Protected;	**State Fully Protected species:** Section 4.12.2.6 Table 4.12-6 Appendix B Supplement to the AFC Biological Resources pages 9 and 10 Supplement to the AFC Attachment B.2 CNDDB list and Attachment B.3 Table 1 and Table 2. Table 3 page 10	Yes ~~No~~	~~Please follow instructions from first paragraph in Appendix B (g) (13) (A) (i) above.~~ ~~As discussed above for (g) (13) (A) (i) it is not known if all areas of state Fully Protected species have been accounted for.~~

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Appendix B (g) (13) (A) (iv)	species covered by Migratory Bird Treaty Act;	**Migratory Bird Act species:** Sections 4.12.2.6, 4.12.2.7 Table 4.12-6 Appendix B Supplement to the AFC Biological Resources pages 9 and 10 Supplement to the AFC Attachment B.2 CNDDB list and Attachment B.3 Table 1 and Table 2. Table 3 page 10	Yes ~~No~~	~~Please follow instructions from first paragraph in Appendix B (g) (13) (A) (i) above.~~ ~~As discussed above for (g) (13) (A) (i) it is not known if all areas of Migratory Bird Act species have been accounted for.~~
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:** Section 4.12.2 Tables 4.12-5, 4.12-6	Yes	
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	

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Revision No. ~~0~~1 Date October 28, 2011 ~~September 14, 2011~~

Technical Area: **Biological Resources** Project: Quail Brush Generation Project Technical Staff: Andrea Martine

Project Manager: Eric Solorio Docket: 11-AFC-3 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) (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:** Sections 4.12.2.1, 4.12.2.2, 4.12.2.3 Figure 4.12-3 Map Appendix F in Appendix H.2, Maps A-1-A4 and B-1-B-4 Supplement to the AFC Biological Resources pages 10 Supplement to the AFC Biological Resources Attachment B.4, Species Compendium and Exhibits 2-5	Yes ~~No~~	~~Please provide complete list of species observed within 1-mile of the project site and 1,000 feet from the outer edge of proposed linear facility corridors once surveys are completed.~~

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (13) (B) (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 4.12-1 Supplement to the AFC Biological Resources pages 10 and 11 Supplement to the AFC Attachment B Exhibits 3 (9 maps)	Yes ~~No~~	~~Please provide a map at a scale of 1:6,000 or color aerial photographs at a scale of 1"=500' with a 30 percent overlap that shows the proposed project site and related facilities. This map should include the 1-mile buffer around the project site and 1,000 feet from the out edge of linear facilities.~~
		Map of biological resources: Figures 4.12-2, 4.12-2a, 4.12-2b, 4.12-2c, 4.12-2d, 4.12-3 Supplement to the AFC Biological Resources pages 11 and 12 Supplement to the AFC Attachment B Exhibit 4 (9 maps)	Yes ~~No~~	~~Please provide a map at a scale of 1:6,000 or color aerial photographs at a scale of 1"=500' with a 30 percent overlap that shows the proposed project site and related facilities including linears and includes **species from CNDDB search**. This map should include the 1-mile buffer around the project site and 1,000 feet from the out edge of linear facilities.~~
		Map of survey area: Figures 4.12-4, 4.12-5, 4.12-6 Supplement to the AFC Biological Resources page 12 Supplement to the AFC Attachment B Exhibit 5 (9 maps)	Yes ~~No~~	~~Please provide a map at a scale of 1:6,000 or color aerial photographs at a scale of 1"=500' with a 30 percent overlap that shows the proposed project site and related facilities including linears and includes **species from project related field surveys**. This map should include the 1-mile buffer around the project site and 1,000 feet from the out edge of linear facilities.~~

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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:** Section 4.12.2.8, Appendix H.5 Exhibit 6a in Appendix H.5 **Coastal zone wetlands map:** Not applicable	Yes N/A	
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:	**Discussion of biological resources at project site:** Section 4.12.2 **Discussion of biological resources at related facilities:** Section 4.12.2	Yes Yes	

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Appendix B (g) (13) (C) (i)	A list of all the species actually observed;	**List of species observed:** Sections 4.12.2.3, 4.12.2.4 Tables 4.12-2, 4.12-4 Supplement to the AFC Biological Resources pages 1-5, 10 and 12 Supplement to the AFC Attachment B.4, Exhibits 2-5	Yes ~~No~~	~~Please provide a complete list of all the species observed in the 1-mile buffer around the project site and out to 1,000 feet from the outer edge of linear facilities once surveys are completed.~~
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:** Section 4.12.2.6 Tables 4.12-5, 4.12-6 Supplement to the AFC Biological Resources pages 9 and 10,12 and13 Supplement to the AFC Attachment B, Exhibit 1, Attachment B.2 CNDDB list and Attachment B.3 Table 1 and Table 2. Table 3 on page 10	Yes ~~No~~	~~Please follow instructions from first paragraph in Appendix B (g) (13) (A) (i) above.~~ ~~Please provide a vegetation communities map for the 1-mile buffer around project site and out to 1,000 feet from the outer edge of proposed linear facilities. Include any sensitive vegetation communities on this map.~~ ~~As discussed above for Appendix B (g) (13) (A) (i) it is not known if all sensitive species and habitats with potential to occur have been accounted for.~~

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (13) (C) (iii)	If cooling water is taken directly from or discharged to a surface water feature source, include a description of the intake structure, screens, water volume, intake velocity hydraulic zone field of influence, and the thermal plume dispersion area as depicted in response to B(ii) above. Describe the thermal plume size and dispersion under high and low tides, and in response to local currents and seasonal changes. Provide a discussion of the aquatic habitats, biological resources, and critical life stages found in these affected waters. For repower projects that anticipate no change in cooling water flow, this information shall be provided in the form of the most recent federal Clean Water Act 316(a) and (b) studies of entrainment and impingement impacts that has been completed within the last five (5) years. For new projects or repower projects proposing to use once-through cooling and anticipating an increase in cooling water flow, provide a complete impingement and entrainment analysis per guidance in (D)(ii), below.	**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	

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:** Appendix H.2 Sections 2, 3 and 4 Supplement to the AFC Biological Resources pages 13-15 Supplement to the AFC Attachment B Exhibit 3 (9 maps), Table 4 and 5 on page 14	Yes ~~No~~	~~As discussed under Appendix B (g) (13) (A) (i) above, the results of all field studies and seasonal surveys used to provide biological baseline information about the project site and associated facilities are incomplete.~~ ~~Please provide a description and results of all field studies and seasonal surveys used to provide biological baseline information for the project site and associate facilities for the 1-mile buffer around project site (100% coverage not required) and complete coverage out to 1,000 feet from the outer edge of linear facilities.~~
		Copies of CNDDB records and field survey forms: Appendix D in Appendix H.2	Yes	
		Qualifications of biologists: Appendix G in Appendix H.2	Yes	

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (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 4.4.4.5 Appendix H.1 Sections 4.2, 4.4, 4.5 Appendices H.2, H.4 Supplement to the AFC Biological Resources pages 15-18	Yes ~~No~~	~~Please describe in detail the methods used for botanical and wildlife field surveys.~~ ~~As discussed under Appendix B (g) (13) (A) (i) above, the results of all field studies and seasonal surveys used to provide biological baseline information about the project site and associated facilities are incomplete.~~ ~~Please explain why *Bloomeria clevelandii* occurs on the list of plants found during field surveys but is not mapped with the other special status plants and is not discussed in the impacts and mitigation sections. If this species was found please provide a map of its location(s) as well as a discussion of the species, impacts and mitigation.~~
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	**Aquatic resource studies and surveys:** Not applicable **Aquatic resource survey data or impingement and entrainment impact study:** Not applicable	N/A N/A	

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (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.	**Impacts to jurisdictional or non-jurisdictional wetlands:** Not applicable	N/A	
Appendix B (g) (13) (E)	Impacts discussion of the following:			
Appendix B (g) (13) (E) (i)	all impacts (direct, indirect, and cumulative) to biological resources from project site preparation, construction activities, plant operation, maintenance, and closure. Discussion shall also address sensitive species habitat impacts from cooling tower drift and air emissions;	**Project site impacts:** Section 4.12.3 Supplement to the AFC Biological Resources pages 5-7 Supplement to the AFC Attachment B.6 Table 4.12-10 **Air emission impacts on sensitive species habitat:** Section 4.12.3.3 Appendix H.2 Section 5.1.2	Yes ~~No~~ Yes	~~As discussed under Appendix B (g) (13) (A) (i) above, the results of all field studies and seasonal surveys used to provide biological baseline information about the project site and associated facilities are incomplete.~~

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) (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:	Section 4.12.4		
Appendix B (g) (13) (F) (i)	All measures proposed to avoid and/or reduce adverse impacts to biological resources;.	**Avoidance and minimization:** Sections 4.12.3, 4.12.4 Appendix H.2 Section 5.2	Yes	
Appendix B (g) (13) (F) (ii)	All off-site habitat mitigation and habitat improvement or compensation, and an identification of contacts for compensation habitat and management;	**Habitat mitigation:** Section 4.12.4.6 Appendix H.2 Section 5.1.2 **Contacts for compensation habitat:** Section 4.12.6 Table 4.12-12	Yes Yes	
Appendix B (g) (13) (F) (iii)	Design features to better disperse or eliminate a thermal discharge;	**Design features to eliminate thermal discharge:** Not applicable	N/A	

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (13) (F) (iv)	All measures proposed to avoid or minimize adverse impacts of cooling water intake. This shall include a Best Technology Available (BTA) discussion. If BTA is not being proposed, the rationale for not selecting BTA must be provided; and	**Measures to minimize impacts of cooling water intake:** Not applicable	N/A	
Appendix B (g) (13) (F) (v)	Educational programs to enhance employee awareness during construction and operation to protect biological resources.	**Employee biological resource awareness training:** Section 4.12.4.7	Yes	
Appendix B (g) (13) (G)	A discussion of compliance and monitoring programs to ensure the effectiveness of impact avoidance and mitigation measures incorporated into the project.	**Monitoring compliance effectiveness:** Sections 4.12.4 and 5.2	Yes	
Appendix B (g) (13) (H)	Submit copies of any preliminary correspondence between the project applicant and state and federal resource agencies regarding whether federal or state permits from other agencies such as the U. S. Fish and Wildlife Service (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:** Appendix H.6	Yes	

Adequacy Issue: Adequate X Inadequate ___

DATA ADEQUACY WORKSHEET

Revision No. ~~0~~1 Date October 28, 2011 ~~September 14, 2011~~

Technical Area: **Biological Resources** Project: Quail Brush Generation Project Technical Staff: Andrea Martine

Project Manager: Eric Solorio Docket: 11-AFC-3 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) (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 4.12.5 Table 4.12-10 Supplement to the AFC Biological Resources page 18	Yes ~~No~~	~~**Please revise table to include pages referencing AFC discussion of LORS.**~~
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 4.12-10	Yes	
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and also provide the name of the official who will serve as a contact person for Commission staff.	**AGENCY CONTACT INFORMATION:** SECTION 4.12.6 TABLE 4.12-12	Yes	
Appendix B (i) (3)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	**Permit schedule:** Section 4.12.7 Table 4.12-13	Yes	

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Appendix B (g) (1)	Provide a discussion of the existing site conditions, the expected direct, indirect and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation.	Existing site conditions. Section 4.1.1.4, (pp. 4.1-6–4.1-18), vol. 1, AFC.	Yes	
		Expected project impacts. Section 4.1.2.2, (pp. 4.1-19–4.1-21), vol. 1, AFC.	Yes	
		Proposed mitigation measures. Section 4.1.3, (pp. 4.1-21 and 4.1-22), vol. 1, AFC.	Yes	
		Effectiveness of proposed mitigation measures. Pages 1–4, Cultural Resources Section, AFC Supplement.	Yes ~~No~~	~~Please include explicit discussions of how each proposed mitigation measure would effectively help to avoid, minimize, or mitigate particular significant effects that the proposed project would have on historical resources.~~
		Monitoring plans proposed to verify mitigation effectiveness.	n/a	
Appendix B (g) (2) (A)	A summary of the ethnology, prehistory, and history of the region with emphasis on the area within no more than a 5-mile radius of the project location.	Summary of the ethnology, prehistory, and history. Sections 4.1.1.1–4.1.1.3, (pp. 4.1-2–4.1-6), vol. 1, AFC. Pages 7–11, Cultural Resources Section, AFC Supplement.	Yes ~~No~~	~~The synthesis of the general prehistory of the San Diego region as a whole is sufficient as a broad introduction to the archaeology of the project area, but is insufficient to underpin the development of any research model for the pedestrian survey of the project area or as a useful context to facilitate the interpretation of the survey results. Using the San Diego region prehistory as a springboard and using the cultural resources technical reports and site forms that were gathered for the appendices of the AFC, please develop a discussion of the prehistoric archaeology of the project area vicinity. Explain what the archaeology looks like on the ground in the vicinity of the project area. Similarly, while the synthesis of the ethnography of the Kumeyaay, as a conceptual anthropological construct, provides a~~

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
				~~broad introduction to the Native American use of landscapes in the region, it does not relate how Kumeyaay bands did use or may have used the landscape in a 5-mile radius of the project area. Please provide an explicit discussion of whether such ethnographic information is available, and, if so, what that information has to say about local Native American land use.~~
Appendix B (g) (2) (B)	The results of a literature search to identify cultural resources within an area not less than a 1-mile radius around the project site and not less than one-quarter (0.25) mile on each side of the linear facilities. Identify any cultural resources listed pursuant to ordinance by a city or county, or recognized by any local historical or archaeological society or museum. Literature searches to identify the above cultural resources must be completed by, or under the direction of, individuals who meet the Secretary of the Interior's Professional Standards for the technical area addressed.	Literature search results per the regulations. Section 4.1.1.4, (pp. 4.1-6–4.1-15) Cultural resources listed under a city or county ordinance. Section 4.1.1.4 (pp. 4.1-7, 4.1-9 and 4.1-10) Cultural resources recognized by local heritage society or museum. Section 4.1.1.4 (pp. 4.1-6) Interior Secretary's PQS for archaeology. App. B, app. C, vol. 2, AFC. Interior Secretary's PQS for history or architectural history.	Yes Yes Yes Yes n/a	
	Copies of California Department of Parks and Recreation (DPR) 523 forms (Title 14 CCR §4853) shall be provided for all cultural resources (ethnographic, architectural, historical, and archaeological) identified in the literature search as being 45 years or older or of exceptional importance as defined in the	DPR 523 forms. App. C, app. C, vol. 2, AFC (p. 119-145/2349, Confidential CD)	Yes ~~No~~	~~Please provide copies of all California Department of Parks and Recreation (DPR) 523 forms for the cultural resources (ethnographic, architectural, historical, and archaeological) identified in the literature search as being 45 years or older or of exceptional importance as defined in the National Register Bulletin Guidelines, (36 CFR 60.4(g)).~~

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	National Register Bulletin Guidelines, (36CFR60.4(g)). A copy of the USGS 7.5' quadrangle map of the literature search area delineating the areas of all past surveys and noting the California Historical Resources Information System (CHRIS) identifying number shall be provided. Copies also shall be provided of all technical reports whose survey coverage is wholly or partly within .25 mile of the area surveyed for the project under Section (g)(2)(C), or which report on any archaeological excavations or architectural surveys within the literature search area.	Map of literature search area with areas of past surveys and CHRIS Nos. App. D, app. C, vol. 2, AFC (p. 151/2349, Confidential CD) CHRIS reports. App. D, app. C, vol. 2, AFC (p. 152-2337/2349, Confidential CD)	Yes Yes	
Appendix B (g) (2) (C)	The results of new surveys or surveys less than 5 years old shall be provided if survey records of the area potentially affected by the project are more than five (5) years old. Surveys to identify new cultural resources must be completed by (or under the direction of) individuals who meet the Secretary of the Interior's Professional Standards for the technical area addressed. New pedestrian archaeological surveys shall be conducted inclusive of the project site and project linear facility routes, extending to no less than 200' around the project site, substations and staging areas, and to no less than 50' to either side of the right-of-way of project linear facility routes. New historic architecture field surveys in rural areas shall be conducted inclusive of the project site and the project linear facility routes, extending no less than .5 mile out from the proposed plant site and from the routes of all above-ground linear facilities. New historic	Results of new surveys. Section 4.1.1.4, (pp. 4.1-16 and 4.1-17), vol. 1, AFC Interior Secretary's PQS for archaeology. App. B, app. C, vol. 2, AFC. Interior Secretary's PQS for history or architectural history. Archaeology survey coverage. Section 4.1.1.4, (pp. 4.1-16, 4.1-20), vol. 1, AFC. Pages 11 and 12, and attachment C.2 (November 8, 2011 revision), Cultural Resources Section, AFC Supplement, and cover letter for the November 8	Yes Yes n/a Yes ~~No~~	~~Page 4.1-16 notes that the portions of the survey area that have a slope ≥ 35 percent were not subject to survey. Where those portions are and what the size of those portions are, are unknown to staff. As no prior agreement was concluded with staff, the applicant has not been excused from the requirement to survey the project area per the regulations here. In addition, page 4.1-20 notes that the proposed project is still evolving and that "the eastern end of the North Loop overhead line portion of the gen tie route, has been preliminarily designed~~

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	architecture field surveys in urban and suburban areas shall be conducted inclusive of the project site, extending no less than one parcel's distance from all proposed plant site boundaries. New historic architecture field reconnaissance ("windshield survey") in urban and suburban areas shall be conducted along the routes of all linear facilities to identify, inventory, and characterize structures and districts that appear to be older than 45 years or that are exceptionally significant, whatever their age.	revision.		~~to extend outside of the surveyed area" and that "the SDG&E switchyard, has been preliminarily placed along the boundary of the surveyed area in Spring Canyon," where the CEC-required 200-foot survey buffer would now extend outside of the surveyed area. The new pedestrian survey for the proposed project is therefore incomplete. Please provide either a detailed map, at a scale of 1 in. = 500 ft. or greater, that depicts accurate boundaries of the portions of the survey area that were not surveyed and a compelling, explicit rationale for the choice of ≥ 35 percent as a threshold to not survey sloped terrain, or the results of a survey of those same portions of the survey area. In addition, please provide the results of a survey of those portions of the reconfigured survey area that, due to the reconfiguration of the proposed project, fall outside of the original survey area.~~ ~~Also, in an effort to streamline staff's subsequent consultation with the applicant, staff would like to alert the applicant now to a related issue that is sure to become an issue during discovery. Staff believes that the new pedestrian survey is inadequate for a further reason. Page 4.1-16, among others, also notes that the visibility of the ground surface was poor (< 10%). The design of the field methodology for the survey does not evidence that this poor visibility was taken into account. As a consequence of this, staff believes that the survey results cannot be used as useful or reliable evidence to identify the archaeological resources in the proposed project area. During discovery, staff intends to request that the applicant redo the survey using a new methodology that takes the poor ground visibility into account.~~

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	A technical report of the results of the new surveys, conforming to the Archaeological Resource Management Report format (CA Office of Historic Preservation Feb 1990), which is incorporated by reference, shall be separately provided and submitted (under confidential cover if archaeological site locations are included).	Built-environment survey coverage. Section 4.1.1.4, (pp. 4.1-14–4.1-16), vol. 1, AFC. Technical report of results of new archaeological surveys. App. C, vol. 2, AFC. Pages 12–17, and attachment C.2 (November 8, 2011 revision), Cultural Resources Section, AFC Supplement, and cover letter for the November 8 revision. Technical report of results of a built-environment survey.	Yes Yes ~~No~~ n/a	~~The present technical report does not adequately conform to the ARMR format. Please provide inserts for the technical report that develop, pursuant to section VII of ARMR, a research design for the archeological resource base in the project area, and that incorporate the direction of section X of ARMR into the report's conclusions. Such a research design would ostensibly interpolate archaeological resource distribution patterns from the archaeological synthesis that would typically be one result of background archival research to derive a model of the archaeological remains that one would anticipate finding in the project area itself. That model would then be used to validate or question, and interpret the results of any new pedestrian surveys.~~
Appendix B (g) (2) (C) cont.	Information included in the technical report shall also be provided in the Application for Certification, except that confidential information (archaeological sites or areas of religious significance) shall be submitted under a request	AFC must include non-confidential technical report data. Section 4.1, vol. 1, AFC.	Yes	

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	for confidentiality pursuant to Title 20, California Code of Regulations, § 2501 et seq. At a minimum, ***the technical report shall include*** the following:			
Appendix B (g) (2) (C) (i)	The summary from Appendix B (g)(2)(A) and the literature search results from Appendix B (g)(2)(B);	Summary of the ethnology, prehistory, and history. Section 2.2, (pp. 2-4–2-7), app. C, vol. 2, AFC. Pages 7–11, Cultural Resources Section, AFC Supplement. Literature search and results. Section 3.1, (pp. 3-1–3-7), app. C, vol. 2, AFC.	Yes ~~No~~ Yes	~~The ethnographic, prehistoric, and historic summaries in the cultural resources technical report appear to be identical to those in the cultural resources section of the AFC, and, as such, staff would refer the applicant to our comment above on the latter summaries (see Appendix B (g) (2) (A~~
Appendix B (g) (2) (C) (ii)	The survey procedures and methodology used to identify cultural resources and a discussion of the cultural resources identified by the survey;	Archaeological survey methodology. Section 3.3, (p. 3-14), app. C, vol. 2, AFC. Built-environment survey methodology. Discussion of archaeological resources. Chapter 4, app. C, vol. 2, AFC. Discussion of built-environment resources	Yes n/a Yes n/a	
Appendix B (g) (2) (C) (iii)	Copies of all new and updated DPR 523(A) forms. If a cultural resource may be impacted by the project, also include the appropriate DPR 523 detail form for each such resource;	Archaeology forms. App. C, App. C, vol. 2, AFC. Built-environment forms.	Yes n/a	
Appendix B (g) (2) (C) (iv)	A map at a scale of 1:24,000 U.S. Geological Survey quadrangle depicting the locations of all previously known and newly identified cultural	1:24,000 scale, USGS 7.5' topographic quadrangle map, one map, of all	Yes ~~No~~	~~While staff can find this information parsed out over a number of separate maps, staff could not locate the one map required in the regulations here. Please~~

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
	resources compiled through the research required by Appendix B (g)(2)(B) and Appendix B (g)(2)(C) (ii); and	previously recorded and newly found cultural resources. Figure 7-12, Confidential Submission of October 24, 2011 (Previously and Newly Recorded Cultural Resources).		~~provide the1:24,000 scale, USGS 7.5' topographic quadrangle map depicting cultural resources, as required by Appendix B (g) (2) (C) (iv~~
Appendix B (g) (2) (C) (v)	The names and qualifications of the cultural resources specialists who contributed to and were responsible for literature searches, surveys, and preparation of the technical report.	Personnel and qualifications to conduct archaeological research. Section 3.3, (p. 3-14), and app. B, app. C, vol. 2, AFC. Personnel and qualifications to conduct built-environment research.)	Yes n/a	
Appendix B (g) (2) (D)	Provide a copy of your request to the Native American Heritage Commission (NAHC) for information on Native American sacred sites and lists of Native Americans interested in the project vicinity, and copies of any correspondence received from the NAHC. Notify the Native Americans on the NAHC list about the project, including a project description and map. Provide a copy of all correspondence sent to Native American individuals and groups listed by the NAHC and copies of all responses. Provide a written summary of any oral responses.	NAHC request. App. A, app. C, vol. 2, AFC. NAHC response(s). App. A, app. C, vol. 2, AFC. Letters sent to Native Americans. App. A, app. C, vol. 2, AFC. Response(s) from Native Americans. App. A, app. C, vol. 2, AFC. Summary of oral responses from Native Americans. Section 4.1.1.4, (p. 4.1-15), vol. 1, and section 3.2, (pp. 3-7	Yes Yes Yes Yes Yes	

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		and 3-14), app. C, vol. 2, AFC.		
Appendix B (g) (2) (E)	Include in the discussion of proposed mitigation measures required by subdivision (g)(1):	Proposal of mitigation measures. Sections 4.1.2.2–4.1.2.4, (pp. 4.1-19–4.1-21), vol. 1, AFC.	n/a	
Appendix B (g) (2) (E) (i)	A discussion of measures proposed to mitigate project impacts to known cultural resources;	Discussion of proposed mitigation measures. Sections 4.1.2.2–4.1.2.4, (pp. 4.1-19–4.1-21), vol. 1, AFC. Pages 1–4, Cultural Resources Section, AFC Supplement.	Yes ~~No~~	~~The proposed mitigation measures are referenced rather than discussed. No arguments are set out that first identify particular significant effects that the proposed project may have on significant cultural resources and that then explain how particular mitigation measures would mitigate particular significant effects. In short, an analysis of the effectiveness of the proposed mitigation measures is not present. Please provide this analysis, and please note that, absent a pedestrian survey that staff and the applicant are able to agree is complete (see comments above, Appendix B (g) (2) (C)), and absent a formal presentation of evaluations of the historical significance of the cultural resources that are found as a result of the complete survey effort, meaningful, conclusory discussions of potential project effects and effects mitigation would be precluded. If the applicant wishes to attempt substantive discussion of potential mitigation measures prior to discovery, please ensure that there is an agreement with staff on the completeness of the new pedestrian survey and provide complete, explicit discussions of the historical significance of any cultural resources found as a result of said survey.~~
Appendix B (g) (2) (E) (ii)	A set of contingency measures proposed to mitigate potential impacts to previously unknown cultural resources and any unanticipated impacts to known cultural resources; and	Contingency mitigation measures. Sections 4.1.2.2–4.1.2.4, (pp. 4.1-19–4.1-21), vol. 1, AFC. CUL-3 and CUL-4, pages 2 and 3, Cultural Resources Section, AFC Supplement.	Yes ~~No~~	~~A set of contingency measures is present in the cultural resources AFC section. Staff has been unable to find any substantive analysis of the effectiveness of these measures. Please provide the analysis that resulted in the proposed contingency measures for this project.~~

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (2) (E) (iii)	Educational programs to enhance employee awareness during construction and operation to protect cultural resources.	Labor education. CUL-2, (p. 4.1-22), vol. 1, AFC. CUL-2, page 2, Cultural Resources Section, AFC Supplement.	Yes ~~No~~	~~A provision is made for worker education, but staff has been unable to find any substantive analysis of the effectiveness of this measure. Please provide the analysis that resulted in the proposed worker education program for this 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	Applicable LORS table. Table 4.1-5, (4.1-23–4.1-26), vol. 1, AFC. Discussion of LORS applicability and conformance. Sections 4.1.4.1–4.1.4.3, (4.1-26–4.1-30), vol. 1, AFC. Conformance page references. Table 4.1-5, (4.1-23–4.1-26), vol. 1, AFC.	Yes Yes 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.	Jurisdictional agencies table. Table 4.1-6 and section 4.1.6, (p. 4.1-30), vol. 1, AFC.	Yes	
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and also provide the name of the official who will serve as a contact person for Commission staff.	Agency contacts. Table 4.1-6, (p. 4.1-30), vol. 1, AFC.	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	Extra-agency Permits. Section 4.1.6, (p. 4.1-30), vol. 1, AFC.	n/a	

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
	to obtain such permits.			

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.	4.15.1, p. 4.15-1 4.15.2, p. 4.15-4 4.15.3, p. 4.15-7	Yes	
Appendix B (g) (16) (A)	Identification of the physiographic province and a brief summary of the geologic setting, formations, and stratigraphy of the project area. The size of the paleonotological study area may vary depending on the depositional history of the region.	4.15.1.1, p. 4.15-1	Yes	
Appendix B (g) (16) (B)	A discussion of the sensitivity of the project area described in subsection (g)(16)(A) and the presence and significance of any known paleontologic localities or other paleontologic resources within or adjacent to the project. Include a discussion of sensitivity for each geologic unit identified on the most recent geologic map at a scale of 1:24,000. Provide rationale as to why the sensitivity was assigned.	4.15.1.2, p. 4.15-2	Yes	
Appendix B (g) (16) (C)	A summary of all local museums, literature searches and field surveys used to provide information about paleontologic resources in the project area described in subsection (g)(16)(A). Identify the dates of the surveys, methods used in completing the surveys, and the names and qualifications of the individuals conducting the surveys.	4.15.1.3, p. 4.15-3 4.15.1.4, p. 4.15-4	Yes	

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (16) (D)	Information on the specific location of known paleontologic resources, survey reports, locality records, and maps at a scale of 1:24,000, showing occurrences of fossil finds, if known, within a one-mile radius of the project and related facilities shall be included in a separate appendix to the Application and submitted to the Commission under a request for confidentiality, pursuant to Title 20, California Code of Regulations, s 2501 et seq.	4.15.1.4, p. 4.15-4	Yes ~~No~~	~~The AFC stated that there are paleontological localities in canyons adjacent to the proposed project site. If these localities are within a one-mile radius if the project then please provide a 1:24,000 scale map and submit in a confidential filing together with available survey reports and locality records.~~
Appendix B (g) (16) (E)	A discussion of any educational programs proposed to enhance awareness of potential impacts to paleontological resources by employees, measures proposed for mitigation of impacts to known paleontologic resources, and a set of contingency measures for mitigation of potential impacts to currently unknown paleontologic resources.	4.15.3, p. 4.15-7	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	4.15.4, p. 4.15-8	Yes	

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (i) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	4.15.6, p. 4.15-11	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.	4.15-5, p. 4.15-11	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.	4.15.6, p. 4.15-11	Yes	

Adequacy Issue:	Adequate X	Inadequate	DATA ADEQUACY WORKSHEET	Revision No.	1 ~~0~~	Date	~~October 27, 2011~~ ~~September 13, 2011~~
Technical Area:	**Project Overview**		Project:	Quail Brush Generation Project		Technical Staff:	Eric Solorio
Project Manager:	Eric Solorio		Docket:	11-AFC-3		Technical Senior:	Chris Davis

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.	Sections 2.0. 3.0 and 4.0 Appendices A through K	Yes	
Cal. Code Regs., tit. 20, § 1704, (a) (3) (B)	Descriptions, including methodologies and findings, of all major studies or research efforts undertaken and relied upon to provide information for the document; and a description of ongoing research of significance to the project (including expected completion dates; and	Sections 2.0. 3.0 and 4.0 Appendices A through K	Yes	
Cal. Code Regs., tit. 20, § 1704, (a) (3) (C)	A list of all literature relied upon or referenced in the documents, along with brief discussions of the relevance of each such reference	Section 3.6, p. 3-23 Section 4.1, p. 4.1-30 Section 4.2, p. 4.2-23 Section 4.3, p. 4.3-27 Section 4.4, p. 4.4-22 Section 4.5, p. 4.5-28 Section 4.6, p. 4.6-25 Section 4.7, p. 4.7-54 Section 4.8, p. 4.8-17 Section 4.11, p. 4.11-18 Section 4.12, p. 4.12-63 Section 4.13, p. 4.13-26 Section 4.14, p. 4.14-14 Section 4.15, p. 4.15-11 Section 4.16, p. 4.16-11 Section 4.17, p. 4.17-9	Yes	
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 5.0, p. 5-1	Yes	

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) (A)	A general description of the proposed site and related facilities, including the location of the site or transmission routes, the type, size and capacity of the generating or transmission facilities, fuel characteristics, fuel supply routes and facilities, water supply routes and facilities, pollution control systems, and other general characteristics.	Section 2.1	Yes	
Appendix B (a) (1) (B)	Identification of the location of the proposed site and related facilities by section, township, range, county and assessor's parcel numbers.	Section 2.1, p.2-3 AFC Supplement, Project Overview, p1 and Attachment E, Project Overview, Figure 2.1-2	Yes ~~No~~	~~Please provide the location of the proposed linear infrastructure facilities (e.g. electrical transmission lines, natural gas line) by section, township, range, county and assessor's parcel numbers.~~
Appendix B (a) (1) (C)	A description of and maps depicting the region, the vicinity, and the site and its immediate surroundings.	Section 2.1, Figure 2.1-1, Figure 2.1-2, Figure 2.1-3	Yes	
Appendix B (a) (1) (D)	A full-page color photographic reproduction depicting the visual appearance of the site prior to construction, and a full-page color simulation or artist's rendering of the site and all project components at the site, after construction.	Figure 4.5-10	Yes	
Appendix B (a) (1) (E)	In an appendix to the application, a list of current assessor's parcel numbers and owners' names and addresses for all parcels within 500 feet of the proposed transmission line and other linear facilities, and within 1000 feet of the proposed powerplant and related facilities.	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.	Section 2.3.13, p. 2-19	Yes	

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (a) (3) (A)	A list of all owners and operators of the site(s), the power plant facilities, and, if applicable, thermal host, the geothermal leasehold, the geothermal resource conveyance lines, and the geothermal re-injection system, and a description of their legal interest in these facilities.	Section 2.1, p. 2-1	Yes	
Appendix B (a) (3) (B)	A list of all owners and operators of the proposed electric transmission facilities.	Sections 2.1 and 2.2, pp. 2-4 and 2-5	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 2.1, p. 2-1	Yes	
Appendix B (b) (1)	In a section entitled, "Generation Facility Description, Design, and Operation" provide the following information:	N/A	N/A	
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 2.1-2 AFC Supplement, Project Overview, pp1-2 and Attachment E, Project Overview, Figure 2.1-2	Yes ~~No~~	~~Please provide maps at a scale of 1:24,000 (1" = 2000'), 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.~~
Appendix B (b) (1) (B)	Scale plan and elevation drawings depicting the relative size and location of the power plant and all related facilities to establish the accuracy of the photo simulations required in Sections (a)(1)(D) and (g)(6)(F);	Figures 2.3-1 and 2.3-2	Yes	

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (b) (1) (C)	A detailed description of the design, construction and operation of the facilities, specifically including the power generation, cooling, water supply and treatment, waste handling and control, pollution control, fuel handling, and safety, emergency and auxiliary systems, and fuel types and fuel use scenarios; and	Section 2.3, pp. 2-6:23	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.	Section 2.1, pp. 2-3:4	Yes	
Appendix B (b) (2)	In a section entitled, "Transmission Lines Description, Design, and Operation" provide the following information:	N/A	N/A	
Appendix B (b) (2) (A)	Maps at a scale of 1:24,000 (or appropriate map scale agreed to by staff) of each proposed transmission line route, showing the settled areas, parks, recreational areas, scenic areas, and existing transmission lines within one mile of the proposed route(s);	Figure 2.1-3	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 4.5-10	Yes	

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (b) (2) (C)	A detailed description of the design, construction, and operation of any electric transmission facilities, such as power lines, substations, switchyards, or other transmission equipment, which will be constructed or modified to transmit electrical power from the proposed power plant to the load centers to be served by the facility. Such description shall include the width of rights-of-way and the physical and electrical characteristics of electrical transmission facilities such as towers, conductors, and insulators.	Section 2.5-4, Page 2-26 Section 2.5-6, Page 2-27 to 2-30 Figures 2.1-2 & 2.13 AFC Supplement, Transmission System Design, pp1-2	Yes No	~~A complete response to the information requirements in the Transmission System Design worksheet will satisfy this deficiency.~~
Appendix B (b) (2) (D)	A description of how the route and additional transmission facilities were selected, and the consideration given to engineering constraints, environmental impacts, resource conveyance constraints, and electric transmission constraints; and	Section 2.5.1 AFC Supplement, Project Overview, p2	Yes No	~~Please provide after the final route is determined.~~
Appendix B (e) (1)	A discussion of how facility closure will be accomplished in the event of premature or unexpected cessation of operations.	Section 2.6, pp. 2-41:42	Yes	

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (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.	PP. 4.4-1 through 4.4-22 Section 4.4	Yes	
Appendix B (g) (5) (A)	A regional transportation setting, on topographic maps (scale of 1:250,000), identifying the project location and major transportation facilities. Include a reference to the transportation element of any applicable local or regional plan.	Figure 4.4-1 PP. 4.4-6 through 4-9 Section 4.4.1.3 and 4.4.2.1	Yes	
Appendix B (g) (5) (B)	If the proposed project including any linear facility is to be located within 20,000 feet of an airport runway that is at least 3,200 feet in actual length, or 5,000 feet of a heliport (or planned or proposed airport runway or an airport runway under construction, that is the subject of a notice or proposal on file with the Federal Aviation Administration), discuss the project's compliance with the applicable sections of the current Federal Aviation Regulation Part 77 – Objects Affecting Navigable Airspace, specifically any potential to obstruct or impede air navigation generated by the project at operation; such as, a thermal plume, a visible water vapor plume, glare, electrical interference, or surface structure height. The discussion should include a map at a scale of 1:24,000 that displays the airport or airstrip runway configuration, the proposed power plant site and related facilities.	PP. 4.4-2 and 4-3 Section 4.4.1.1 Supplemental Filing – October 2011	~~No~~ Yes	~~According to the AFC (pg. 4.4-3), the project is located within 20,000 feet of Gillespie Field. The length of the runway is not provided. The air service discussion notes that project structures would be below the height threshold but the applicant will file the appropriate forms with the Federal Aviation Administration. Please discuss the project's compliance with the applicable sections of the current Federal Aviation Regulation Part 77 – Objects Affecting Navigable Airspace, specifically any potential to obstruct or impede air navigation generated by the project at operation; such as, a thermal plume, a visible water vapor plume, glare, electrical interference, or surface structure height.~~

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (5) (C)	An identification, on topographic maps at a scale of 1:24,000, and a description of existing and planned roads, rail lines, (including light rail), bike trails, airports, bus routes serving the project vicinity, pipelines, and canals in the project area affected by or serving the proposed facility. For each road identified, include the following information, where applicable:	Figure 4.4-2	Yes	
Appendix B (g) (5) (C) (i)	Road classification and design capacity;	PP. 4.4-1 and 4-2 Section 4.4.1.1 PP. 4.4-5 Section 44.4.1.2 Supplemental Filing-October 2011	~~No~~ Yes	~~Please provide design capacity for local roads.~~
Appendix B (g) (5) (C) (ii)	Current daily average and peak traffic counts;	Pg. 4.4-5 Table 4.4-2 Section 4.4.1.2	Yes	
Appendix B (g) (5) (C) (iii)	Current and projected levels of service before project development, during construction, and during project operation;	Pg. 4.4-7 Table 4.4-5 Section 4.4.1.2	Yes	
Appendix B (g) (5) (C) (iv)	Weight and load limitations;	Pg. 4.4-4 Section 4.4.1.1	Yes	
Appendix B (g) (5) (C) (v)	Estimated percentage of current traffic flows for passenger vehicles and trucks; and	Pg. 4.4-6 Table 4.4-3 Section 4.4.1.2	Yes	
Appendix B (g) (5) (C) (vi)	An identification of any road features affecting public safety.	Pg. 4.4-15 Section 4.4.2.2	Yes	

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (5) (D)	An assessment of the construction and operation impacts of the proposed project on the transportation facilities identified in subsection (g)(5)(C). Also include anticipated project-specific traffic, estimated changes to daily average and peak traffic counts, levels of service, and traffic/truck mix, and the impact of construction of any facilities identified in subsection (g)(5)(C).	PP. 4.4-9 through 4-17 Sections 4.4.2.2 and 4.4.2.3	Yes	
Appendix B (g) (5) (E)	A discussion of project-related hazardous materials to be transported to or from the project during construction and operation of the project, including the types, estimated quantities, estimated number of trips, anticipated routes, means of transportation, and any transportation hazards associated with such transport.	PP. 4.4-14 and 4-15 Sections 4.4.2.2 and 4.4.2.3	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	PP. 4.4-19 and 4-20 Table 4.4-11 Section 4.4.5	Yes	

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (i) (1) (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.	Pg. 4.4-21 Table 4.4-13 Section 4.4.7	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.	Pg. 4.4-21 Table 4.4-12 Section 4.4.6	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.	Pg. 4.4-21 Table 4.4-12 Section 4.4.6	Yes	

Adequacy Issue: Adequate X Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 1~~0~~ Date October 29, 2011 ~~September 08, 2011~~

Technical Area: **Transmission System Design** Project: Quail Brush Generation Project Technical Staff: Ajoy Guha, P.E.

Project Manager: Eric Solorio Docket: 11-AFC-3 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.	Sections 2.5.1 to 2.5.6, Pages 2-24 to 2-30. Figures 2.1-2 & 2.1-3	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.	Section2.5-4, Page 2-26 Section 2.5-6, Page 2-27 to 2-30 Figures 2.1-2 & 2.1-3. Data Adequacy Supplement to AFC, Attachment G Exhibit 1	Yes ~~No~~	~~Please provide a discussion and drawing of the physical layout showing distinctly (in a larger scale) the selected route (along any road or land) of the proposed 230 kV overhead and underground interconnection line including Right of Way (ROW) width(s) between the proposed Quail Brush Generation Project (QBP) 230 kV switchyard and the proposed SDG&E 230 kV switchyard. Describe whether the ROW would be through private and/or public lands.~~

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.	Section 2.5.4 & 2.5.6, Pages 2-26 to 2-30. Figure 2.5-1 Supplement Data Adequacy Supplement to AFC Attachment G Exhibits 2 & 3. Section 2.5.5, Page 2-27. Figure 2.5-2. Attachment G Exhibit 4 Sections 2.5.4 & 2.5.5, Pages 2-26 & 2-27 Attachment G Exhibits 4 ,5 & 6	Yes ~~No~~	~~Please resubmit Tangent Pole design diagram (Figure 2.5-1) for the 230 kV generator overhead tie line showing ground clearance from the lowest conductor, height of the pole above and below ground and the ground conductor, if any with its size. Also include design diagrams of dead-end pole or structures for the overhead tie line at each end showing configuration of insulators and conductors with their respective position measurements on the pole including their heights. Include the proposed underground 230 kV single core UG cable line termination on the dead-end pole with their configuration, size, type and ampere rating. Submit details of the proposed UG cable tie line.~~ ~~Submit a complete electrical one-line diagram (or resubmit Figure 2.5-2 with missing elements or sizes/ratings) of the proposed QBP 230 kV switchyard showing all equipment for all 11 generator units interconnection with the switchyard along with their respective sizes and/or ratings as follows: i) Any bus duct connectors or overhead conductors or cables, 13.8 kV switchgear, buses, breakers & disconnect switches on the low side of Generator step-up transformer (GSU). ii) The GSU and short overhead conductors and/or cables from the GSU to the switchyard with the configuration for the switchyard buses, breakers, disconnect switches on the 230 kV side, along with the proposed tie line transmission outlet from the switchyard.~~ ~~Provide a one-line electrical diagram showing the proposed SDG&E 230 kV switchyard with the transmission outlets along with the configuration for buses, breakers, disconnect switches, and their respective sizes and/or ratings. Also provide a physical layout drawing.~~

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.	Sections 3.3.1 & 3.4-18. Pages 3-3 and 3-12 to 3-14.	Yes	.
Appendix B (b) (2) (E)	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. If the interconnection and operation of the proposed project will likely impact an transmission system that is not controlled by the interconnecting utility (or California Independent System Operator), provide evidence of a System Impact Study or agreement and proof of payment (when applicable) with/to the impacted transmission owner or provide evidence that there are no system impacts requiring mitigation.	Section 2.5.7, Page 2-30 Appendix B.9 Data Adequacy Supplement to AFC, Attachment G Exhibit 7.	Yes ~~No~~	~~Please submit proof of payment with a study plan for the signed Large Generator Interconnection Study Process Agreement (LGISPA) with the California ISO, dated April 16, 2010.~~
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	Sections 2.9-1 &2.9-3, Pages 2-48 to 2-50. Tables 2.9-1 & Table 2.9-4.	Yes	

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (i) (1) (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 2.9.9, Page 2-52. Table 2.9-10.	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 2.9.10, Page 2-53. Table 2.9-2.	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.	Sections 2.5.3 & 2.5.7, Pages 2-26 and 2-30. Data Adequacy Supplement to AFC, Attachment G.	Yes ~~No~~	~~Indicate when the Phase II System Impact Study for the San Diego area Cluster 2 projects (including QBP) is expected to be completed by the California ISO.~~