State Of California

The Resources Agency of California

Memorandum

	•	25, 2008 654-4966
То:	Jackalyne Pfarmenstiel, Chairman James D. Boyd, Vice Chair Arthur H. Rosenfeld, Ph.D., Commissioner Jeffrey Byron, Commissioner	DOCKET 08-AFC-2
		DATE APR 2 5 2008
From:	California Energy Commission – Melissa Jones 1516 Ninth Street Executive Director Sacramento, CA 95814-5512	RECD. APR 2 8 2008

Subject: BEACON SOLAR ENERGY PROJECT, DATA ADEQUACY RECOMMENDATION (08-AFC-2)

On March 14, 2008, the California Energy Commission received an Application for Certification (AFC) from Beacon Solar, LLC (Beacon Solar), a subsidiary of Florida Power & Light Energy, LLC (FPL) for the Beacon Solar Energy Project. The proposed project is a concentrated solar electric generating facility proposed on an approximately 2,012-acre site in eastern Kern County, California. The project would use parabolic trough solar thermal technology to produce electrical power using a steam turbine generator fed from a solar steam generator. The solar steam generator receives heat transfer fluid from arrays of parabolic mirrors that collect energy from the sun. The project would have a nominal electrical output of 250 megawatts (MW).

Staff's April 11, 2008 initial data adequacy review of the Beacon Solar Energy Project AFC determined that it did not meet all the requirements listed in Title 20, section 1704, and Division 2, Chapter 5, Appendix B of the California Code of Regulations for the 12-month process. Specifically, the AFC was deficient in six of 23 areas: Air Quality, Biological Resources, Cultural Resources, Geologic Hazards, Land Use, and Socioeconomics. Beacon Solar provided AFC Supplement material on April 21, 2008. Staff has reviewed the supplemental information and believes the AFC now meets the above-listed requirements in all six of the previously deficient technical disciplines.

Attached is a summary table and revised data adequacy worksheets for the six technical disciplines previously determined to be data inadequate. At the Energy Commission's May 7, 2008 Business Meeting, I will recommend Commission approval of the Executive Director's data adequacy recommendation for Beacon Solar's AFC and appointment of a siting committee for the Beacon Solar Energy Project. If you have any questions, please contact Bill Pfanner, staff's Project Manager, at (916) 654-4206.

Attachment

Attachment A Overview of Energy Commission Staff's Data Adequacy Determination Beacon Solar Energy Project 08-AFC-2

Attachment B	Adequate
Page No.	?
	YES
	Page No.

ATTACHMENT B

ENERGY COMMISSION STAFF'S List of Data Inadequacies

Beacon Solar Energy Project 08-AFC-2

April 25, 2008

Adequacy Issue: Technical Area: Project Manager:	Adequate X Inadequate DA1 Air Quality Project: Bill Pfanner Docket:	DATA ADEQUACY WORKSHEET tect: Beacon Solar Energy Project tet: 08-AFC-2	SHEET	Revision No. <u>1</u> Date <u>April 25, 2008</u> Technical Staff: <u>Geoff Lesh</u> Technical Senior: <u>Keith Golden</u>
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 1.2 pp. 1-2 to 3 Section 5.2.2 pg. 2-13 Section 5.2.4 pp. 5.2-29 to 44 Section 5.2.5 pp. 5.2-44 to 48	Yes	· · ·
Appendix B (g) (8) (A)	The information necessary for the air pollution control district where the project is located to complete a Determination of Compliance.	Not provided Docketed Kern County <u>APCD receipt of application</u> completeness letter	Ne Yes	
Appendix B (g) (8) (B)	The heating value and chemical characteristics of the proposed fuels, the stack height and diameter, the exhaust velocity and temperature, the heat rate and the expected capacity factor of the proposed facility.	Table 2-2 pg. 2-14 Table 5.2-28 p. 5.241 Section 5.2.4.4 pp. 5.2-37 to 43	Yes	
Appendix B (g) (8) (C)	A description of the control technologies proposed to limit the emission of criteria pollutants.	Section 5.2.3 pp. 5.2-23 to 28	Yes	

Adequacy Issue: Technical Area: Project Manager:	Adequate X Inadequate DAT Air Quality Project: Bill Pfanner Docket:	DATA ADEQUACY WORKSHEET ect: Beacon Solar Energy Project ket: 08-AFC-2	SHEET	Revision No. 1 Date April 25, 2008 Technical Staff: Geoff Lesh Technical Senior: Keith Golden
Siting Regulations	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (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 5.2.3.3 pp. 5.2-27 Section 2.5.5.4 pp. 2-17 to 2-18 Appendix E.3	Yes	
Appendix B (g) (8) (E)	The emission rates of criteria pollutants and greenhouse gases (CO2, CH4, N2O, and SF6) from the stack, cooling towers, fuels and materials handling processes, delivery and storage systems, and from all on-site secondary emission sources.	Appendix E.2 Sections 5.1 , 5.2.3 Tables 5.2-15, 17 to 26	Yes	
Appendix B (g) (8) (F)(i)	A description of typical operational modes, and start-up and shutdown modes for the proposed project, including the estimated frequency of occurrence and duration of each mode, and estimated emission rate for each criteria pollutant during each mode.	Section 5.2 Tables 5.2-15, 17 to 27 pp. 5.2-25 to 38 Appendix E.2	Yes	
Appendix B (g) (8) (F)(ii)	A description of the project's planned initial commissioning phase, which is the phase between the first firing of emissions sources and the commercial operations date, including the types and durations of equipment tests, criteria pollutant emissions, and monitoring techniques to be used during such tests.	Section 5.2.4.2 p. 5.2-29	Yes	

Air Quality

Adequacy Issue: Technical Area: Project Manager:	Adequate X Inadequate DA1 Air Quality Project: Bill Pfanner Docket:	DATA ADEQUACY WORKSHEET ect: Beacon Solar Energy Project ket: 08-AFC-2	SHEET	Revision No. <u>1</u> Date <u>April 25, 2008</u> Technical Staff: <u>Geoff Lesh</u> Technical Senior: <u>Keith Golden</u>
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) (G)	The ambient concentrations of all criteria pollutants for the previous three years as measured at the three Air Resources Board certified monitoring stations located closest to the project site, and an analysis of whether this data is representative of conditions at the project site. The applicant may substitute an explanation as to why information from one, two, or all stations is either not available or unnecessary.	Section 5.2.2 pp 5.2-13 Tables 5.2-9 to 14 Figure 6.2-6 to 16 Table 2-3 Appendix E.3	Yes	
Appendix B (g) (8) (H)	One year of meteorological data collected from either the Federal Aviation Administration Class 1 station nearest to the project or from the project site, or meteorological data approved by the California Air Resources Board or the local air pollution control district.	Section 2.1.4 Appendix E.3 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.	Appendix E.4 On CD	Yes	

California Energy Commission – EFSD

Air Quality

Adequacy Issue:	X Inadequate	DATA ADEQUACY WORKSHEET	SHEET	-
Technical Area: Project Manager:	Air Quality Project: Bill Pfanner Docket:	Beacon Solar Energy Project 08-AFC-2		Technical Staff: Geoff Lesh Technical Senior: Keith Golden
SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (8) (H) (ii)	The data shall include quarterly wind tables and wind roses, ambient temperatures, relative humidity, stability and mixing heights, upper atmospheric air data, and an analysis of whether this data is representative of conditions at the project site.	Section 5.2.2.2 Appendix E.1 On CD	Yes	
Appendix B (g) (8) (l)	An evaluation of the project's direct and cumulative air quality impacts, consisting of the following:	See below		
Appendix B (g) (8) (1) (i)	A screening level air quality modeling analysis, or a more detailed modeling analysis if so desired by the applicant, of the direct criteria pollutant impacts of project construction activities on ambient air quality conditions, including fugitive dust (PM_{10}) emissions from grading, excavation and site disturbance, as well as the combustion emissions [nitrogen oxides (NO _x), sulfur dioxide (SO ₂), carbon monoxide (CO), and particulate matter less than 10 microns in diameter (PM_{10}) and particulate matter less than 2.5 microns in diameter ($PM2.5$)] from construction-related equipment;	Section 5.2 Appendix E.3 On CD	≺es	

Air Quality

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SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (8) (I) (ii)	A screening level air quality modeling analysis, or a more detailed modeling analysis if so desired by the applicant, of the direct criteria pollutant (NO _x , SO ₂ , CO, PM ₁₀ , and PM _{2.5}) impacts on ambient air quality conditions of the project during typical (normal) operation, and during shutdown and startup modes of operation. Identify and include in the modeling of each operating mode the estimated maximum emissions rates and the assumed meteorological conditions;	Section 5.2.4 Table 5.2-3 p. 5.2-42 Appendix E.3 On CD	Yes	
Appendix B (g) (8) (I) (iii)	A protocol for a cumulative air quality modeling impacts analysis of the project's typical operating mode in combination with other stationary emissions sources within a six mile radius which have received construction permits but are not yet operational, or are in the permitting process. The cumulative inert pollutant impact analysis should assess whether estimated emissions concentrations will cause or contribute to a violation of any ambient air quality standard; and	Section 2.4 Appendix E.3	Yes	
Appendix B (g) (8) (I) (iv)	An air dispersion modeling analysis of the impacts of the initial commissioning phase emissions on state and federal ambient air quality standards for NO_{X} , SO_{2} , CO , PM_{10} , and $PM_{2.5}$.	Appendix E.4 On CD	Yes	

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Air Quality

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Adequacy Issue: Technical Area:	Adequate X Inadequate DAT Air Quality Project:	DATA ADEQUACY WORKSHEET ect: Beacon Solar Energy Project	SHEET	Revision No. <u>1</u> Date <u>April 25, 2008</u> Technical Staff: Geoff Lesh
Project Manager:		08-AFC-2		ч ц
SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (8) (J)	If an emission offset strategy is proposed to mitigate the project's impacts under subsection (g)(1), provide the following information:	See below		
Appendix B (g) (8) (J) (i)	The quantity of offsets or emission reductions that are needed to satisfy air permitting requirements of local permitting agencies (such as the air district), state and federal oversight air agencies, and the California Energy Commission. Identify by criteria air pollutant, and if appropriate, greenhouse gas; and	Section 5.2.5.2 p. 5.2-48	Yes	
Appendix B (g) (8) (J) (ii)	Potential offset sources, including location, and quantity of emission reductions;	N/A	Yes	
Appendix B (g) (8) (K)	A detailed description of the mitigation, if any, which an applicant may propose, for all projects impacts from criteria pollutants that currently exceed state or federal ambient air quality standards, but are not subject to offset requirements under the district's new source review rule.	Section 5.2.5 pp. 5.2-44 to 48	Yes	

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Appendix B (i) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	Sections 5.2.1.1 to 5.2.1.3 pp. 5.2-1 to 12 Table 5.2-1	Yes	
Appendix B (i) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Section 5.2.1 pp. 5.2-1 to 13 Table 5.2-2 p. 5.2-12	Yes	
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and also provide the name of the official who will serve as a contact person for Commission staff.	Table 5.2-2 p. 5.2-12	Yes	

Adequacy Issue:	Adequate	×	X Inadequate	DAI	DATA ADEQUACY WORKSHEET	SHEET	Revision No. 1 Date April 25, 2008
Technical Area:	Air Quality			Project:	Beacon Solar Energy Project		Technical Staff: Geoff Lesh
Project Manager:	Bill Pfanner			Docket:			Technical Senior: Keith Golden
SITING Regulations		2	INFORMATION		AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (i) (3)	A schedule indicating when authority of the commission the steps the applicant has take to obtain such permits.	ndicati ne con applic such	A schedule indicating when permits outside the Table 5.2-3 authority of the commission will be obtained and p. 5.2-13 the steps the applicant has taken or plans to take to obtain such permits.	s outside the obtained and or plans to	Table 5.2-3 p. 5.2-13	Yes	

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Revision No. 1 Date April 25, 2008 Technical Staff: Laurel Cordonnier Technical Senior: Rick York	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS		
3HEET	ADEQUATE YES OR NO	Yes Yes	Yes
ATA ADEQUACY WORKSHEET Beacon Solar Energy Project 08-AFC-02	AFC PAGE NUMBER AND SECTION NUMBER	Existing site conditions: Section 5.3.2.2 pg 5.3-6 to 5.3-7 Figure 5.3-1 Appendix F.1 Attachment C Direct, indirect, and cumulative impacts: Section 5.3.3 pg 5.3-23 to 5.3-24 Section 5.3.3 pg 5.3-23 to 5.3-24 Section 5.3.3 pg 5.3-23 to 5.3-24 Section 5.3.3 pg 5.3-23 to 5.3-34 Section 5.3.3 pg 5.3-23 to 5.3-34 Section 5.3.3 pg 5.3-33 to 5.3-34 Section 5.3.3 pg 5.3-35 to 5.3-34 Section 5.3.4 pg 5.3-35 to 5.3-36 5.3-36 5.3-37 Section 5.3.4 pg 5.3-35 to 5.3-36 5.3-37 5.3-37 5.3-37 5.3-37 5.3-37 5.3-38 5.3-37 5.3-37 5.3-37 5.3-37 5.3-38 5.3-37	Monitoring plans: Section 5.3.4 pg 5.3-37 to 5.3-43 (BIO 9-11; DT 1-17; WBO 1-7)
Adequate X Inadequate DA1 Biological Resources Project: Bill Pfanner Docket:	INFORMATION	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.	
Adequacy Issue: Technical Area: Project Manager:	SITING REGULATIONS	Appendix B (g) (1)	

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Adequacy Issue: Technical Area: Project Manager:	AdequateXInadequateDAT.Biological ResourcesProject:Bill PfannerDocket:	ATA ADEQUACY WORKSHEET Beacon Solar Energy Project 08-AFC-02	HEET	Revision No. 1 Date April 25, 2008 Technical Staff: Laurel Cordonnier Technical Senior: Rick York
Siting Regulations	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (13) (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 5.3.2 pg 5.3-6 Section 5.3.2.1 pg 5.3-6 Regional vicinity maps: Figure 5.3-1	Yes Yes	
Appendix B (g) (13) (A) (i)	species listed under state or federal Endangered Species Acts;	Federal and state Endangered Species: Table 5.3-6 pg 5.3-18 to 5.3-19 Section 5.3.2.3 pg 5.3-8 Section 5.3.2.4 pg 5.3-11; 5.3-19 to 5.3-21	Yes	
Appendix B (g) (13) (A) (ii)	resources defined in sections 1702(q) and (v) of Title 20 of the California Code of Regulations;	Areas of critical concern and species of special concern: Table 5.3-5 pg 5.3-16 to 5.3-17 Table 5.3-6 pg 5.3-18 to 5.3-19 Section 5.3.2.3 pg 5.3-8 Section 5.3.2.4 pg 5.3-12 to 5.3-22	Yes	

Biological Resources

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SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (13) (A) (iii)	species identified as state Fully Protected;	State Fully Protected species: Table 5.3-6 pg 5.3-18 to 5.3-19 Section 5.3.2.3 pg 5.3-8; 5.3-20 to 5.3-21	Yes	
Appendix B (g) (13) (A) (iv)	species covered by Migratory Bird Treaty Act;	Migratory Bird Act species: Appendix F.1 Attachment G	Yes	
Appendix B (g) (13) (A) (v)	species and habitats identified by local, state, and federal agencies as needing protection, including but not limited to those identified by the 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 5.3.2.3 pg 5.3-7 to 5.3-8 Appendix F.1 Biology Technical Report Section 2.1.1 pg 11-12	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, discussed in Section 5.3.2.5 pg 5.3-22	N/A	

Biological Resources

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SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (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: Table 5.3-4 pg 5.3-12 Section 5.3.2.3 pg 5.3-22 Appendix F.1 Attachment F Appendix F.1 Attachment G	Yes	
Appendix B (g) (13) (B) (j)	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 5.3-1 Map of biological resources: Figure 5.3-2 Figure 5.3-4 Figure 5.3-6 Figure 5.3-6 Figure 5.3-8 Figure 5.3-8	≺ ≺ Kes	
		Figure 5.3-5 Figure 5.3-5	69	
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	

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	Biological Resources Project: E Bill Pfanner Docket: (Beacon Solar Energy Project 08-AFC-02	HEET	Revision No. 1 Date April 25, 2008 Technical Staff: Laurel Cordonnier Technical Senior: Rick York
	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE Yes Or No	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
An a s jurri del Enç del phc	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: Figure 5.3-5 Coastal zone wetlands map: Not applicable	Yes N/A	

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Biological Resources

Adequacy Issue:	ate	ATA ADEQUACY WORKSHEET	HEET	-
Technical Area: Project Manager:	Bill Pfanner Docket:	Beacon Solar Energy Project 08-AFC-02		Technical Staff: Laurel Cordonnier Technical Senior: Rick York
SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (13) (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 5.3.2.4 pg 5.3-8 to 5.3-12 Section 5.3.2.5 pg 5.3-12 to 5.3-17 Table 5.3-5 pg 5.3-16 to 5.3-17 Table 5.3-6 pg 5.3-18 to 5.3-19 <u>AFC Volume 3 – Data</u> <u>AFC Volume 3 – Data</u> <u>Adequacy Supplement</u> (Biological Resources): <u>New Figure 5.3-9</u> <u>Discussion of biological</u> <u>resources at related areas</u> <u>where surveys are being</u> <u>conducted in spring 2008</u>	Kes Kes	In areas yet to be surveyed discussed in Section 5.3.2.4 page 5.3 9, please provide a detailed discussion of when, where, and what the surveys in 2008 will entail.
Appendix B (g) (13) (C) (i)	A list of all the species actually observed;	List of species observed: Table 5.3-4 pg 5.3-13 Appendix F.1 Attachment F Appendix F.1 Attachment G	Yes	

Biological Resources

· · ⊢	Project: Docket:	DATA ADEQUACY WORKSHEET Beacon Solar Energy Project 08-AFC-02		Revision No. 1 Date April 25, 2008 Technical Staff: Laurel Cordonnier Technical Senior: Rick York
A list of s potential	A list of sensitive species and habitats with a potential to occur (as defined in (A) above); and	AFC FAGE NUMBER AND SECTION NUMBER Sensitive species and habitats with potential to	ADEQUAIE YES OR NO Yes	CONFORM WITH REGULATIONS
		occur: Table 5.3-4 pg 5.3-14 Table 5.3-5 pg 5.3-16 to 5.3-17 Table 5.3-6 pg 5.3-18 to 5.3-19		

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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 affected: Not applicable Impingement and entrainment analysis: Not applicable	NIA NIA NIA	

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Technical Area: Project Manager:	'=[.]	Beacon Solar Energy Project 08-AFC-02		
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	Description of field studies: Section 5.3.2.4 no 5.3-8 to	Yes	
	associated facilities. Include copies of the California Natural Diversity Database records and field survey forms completed by the	5.3-12 Appendix F.1 Biology Technical Report		
	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	Copies of CNDDB records and field survey forms:	Yes	
	surveys. Include:	Appendix F.2 Qualifications of biologists: Appendix F.1 Attachment B	Yes	
		pg B-1 to B-2		

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Adequacy Issue: Technical Area: Project Manager:	Adequate X Inadequate DAT. Biological Resources Project: Bill Pfanner Docket:	ATA ADEQUACY WORKSHEET Beacon Solar Energy Project 08-AFC-02		Revision No. 1 Date April 25, 2008 Technical Staff: Laurel Cordonnier Technical Senior: Rick York
SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (13) (D) (i)	Current biological resources surveys conducted using appropriate field survey protocols during the appropriate season(s). State and federal agencies with jurisdiction shall be consulted for field survey protocol guidance prior to surveys if a protocol exists;	Current biological surveys: Section 5.3.2.4 pg 5.3-8 to 5.3-12 Appendix F.1 Biology Technical Report Afequacy Supplement (Biological Resources): New Figure 5.3-9 Discussion of biological resources at related areas where surveys are being conducted in spring 2008	No Yes	Staff needs to know the status of the areas yet to be surveyed discussed in Section 5.3.2.4 page 5.3-9 and the 2008 botanical survey. Please provide a detailed discussion of when, where, and what the surveys in 2008 will include.

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Adequacy Issue: Technical Area: Project Manager:	Adequate X Inadequate DAT Biological Resources Project: Bill Pfanner Docket:	DATA ADEQUACY WORKSHEET Beacon Solar Energy Project 08-AFC-02	HEET	Revision No. 1 Date April 25, 2008 Technical Staff: Laurel Cordonnier Technical Senior: Rick York
SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (13) (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	
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: Appendix F.1 Biology Technical Report Section 5.1.1 pg 67-68 and Section 5.2.1 pg 69 Appendix F.1 Attachment H	≺es	
Appendix B (g) (13) (E)	Impacts discussion of the following:			

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Adequacy Issue: Technical Area: Project Manager:	Adequate X Inadequate DAT. Biological Resources Project: Bill Pfanner Docket:	DATA ADEQUACY WORKSHEET Beacon Solar Energy Project 08-AFC-02	HEET	Revision No. <u>1</u> Date <u>April 25, 2008</u> Technical Staff: <u>Laurel Cordonnier</u> Technical Senior: <u>Rick York</u>
SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (13) (E) (i)	all impacts (direct, indirect, and cumulative) to biological resources from project site preparation, construction activities, plant operation, maintenance, and closure. Discussion shall also address sensitive species habitat impacts from cooling tower drift and air emissions;	Project site impacts: Section 5.3.3 pg 5.3-23 to 5.3-24 Section 5.3.3.1 pg 5.3-24 to 5.3-31 Section 5.3.3.2 pg 5.3-31 to 5.3-34	Yes	
		Air emission impacts on sensitive species: Section 5.3.3.2 pg 5.3-31 to 5.3-32	Yes	
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	

Biological Resources

Adequacy Issue: Technical Area: Project Manager:	Adequate X Inadequate DAT Biological Resources Project: Bill Pfanner Docket:	DATA ADEQUACY WORKSHEET Beacon Solar Energy Project 08-AFC-02	HEET	Revision No. <u>1</u> Date April 25, 2008 Technical Staff: Laurel Cordonnier Technical Senior: Rick York
Siting Regulations	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (13) (F)	A discussion of all feasible mitigation measures including, but not limited to the following:			
Appendix B (g) (13) (F) (i)	All measures proposed to avoid and/or reduce adverse impacts to biological resources.	Avoidance and minimization: Section 5.3.4 pg 5.3-36 to 5.3-37 Section 5.3.4.1 pg 5.3-37 to 5.3-43 Section 5.3.4.2 pg 5.3-43	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 5.3.3.1 pg 5.3-25 to 5.3-26 Table 5.3-7 pg 5.3-25 Table 5.3-8 pg 5.3-26 Section 5.3.4.1 pg 5.3-37 to 5.3-43 Table 5.3-10 pg 5.3-38	Yes	
		Contacts for compensation habitat: <u>No communications on</u> <u>habitat compensations</u> <u>occurred so no contacts</u> <u>provided</u>	Ne Yes	Please provide a list of contacts for habitat compensation and management. Please provide any communications with other agencies or groups regarding habitat compensation and management.

Biological Resources

Adequacy Issue:	Adequate X Inadequate	DATA	DATA ADEQUACY WORKSHEET	HEET	Revision No. 1 Date April 25, 2008
Technical Area:	Biological Resources	Project:	Beacon Solar Energy Project		Technical Staff: Laurel Cordonnier
Project Manager:	Bill Pfanner		08-AFC-02		Technical Senior: Rick York
SITING REGULATIONS	INFORMATION	z	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (13) (F) (iii)	Design features to better disperse or eliminate a thermal discharge;	erse or eliminate a	Design features to eliminate thermal discharge: Not applicable	N/A	
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	id or minimize ater intake. This gy Available (BTA) g proposed, the A must be provided;	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.	ance employee n and operation to	Employee biological resource awareness training: Section 5.3.4 pg 5.3-36 (BIO-2) Section 5.3.4.1 pg 5.3-40 (DT-7) and pg 5.3-42 (WBO-5)	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.	id monitoring veness of impact sures incorporated	Monitoring compliance effectiveness: Section 5.3.4 pg 5.3-37 (BlO-9, BlO-10, and BlO- 11) Section 5.3.4.1 pg 5.3-38 to 5.3-43 (DT-1 through DT- 17 and WBO-1 to WBO-7) Section 5.3.4.2 page 5.3-43	Yes	

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Adequacy Issue:	Adequate X Inadequate DATI	DATA ADEQUACY WORKSHEET	HEET	Revision No. 1 Date April 25, 2008
Technical Area:	Biological Resources Project:	Beacon Solar Energy Project		Technical Staff: Laurel Cordonnier
Project Manager:	Bill Pfanner Docket:	08-AFC-02		Technical Senior: Rick York
SITING	INFORMATION	AFC PAGE NUMBER AND	ADEQUATE	INFORMATION REQUIRED TO MAKE AFC
REGULATIONS		SECTION NUMBER	YES OR NO	CONFORM WITH REGULATIONS
Appendix B (g) (13) (H)	Submit copies of any preliminary correspondence between the project applicant and state and federal resource agencies regarding whether federal or state permits from other agencies such as the U. S. Fish and Wildlife Service (USFWS), the National Marine Fisheries Service (NMFS), the U.S. Army Corps of Engineers (USACE), the California Department of Fish and Game (CDFG), and the Regional Water Quality Control Board (RWQCB) will be required for the proposed project.	Contact with state and federal agencies regarding permits: Table 5.3-2 pg 5.3-5 Appendix F.2	Yes	
Appendix B (i) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	Table identifyingapplicable biologicalresources laws,ordinances, regulations,and standards:Table 5.3-1 pg 5.3-1 to 5.3-2	¥es	

Biological Resources

Adequacy Issue: Technical Area: Project Manager:	AdequateXInadequateDAT.Biological ResourcesProject:Bill PfannerDocket:	DATA ADEQUACY WORKSHEET Beacon Solar Energy Project 08-AFC-02	HEET	Revision No. 1 Date April 25, 2008 Technical Staff: Laurel Cordonnier Technical Senior: Rick York
SITING Regulations	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (i) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Tables identifying agencies with jurisdiction: Table 5.3-2 pg 5.3-5	Yes	
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and also provide the name of the official who will serve as a contact person for Commission staff.	Agency contact information: Table 5.3-2 pg 5.3-5	Yes	
Appendix B (i) (3)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Permit schedule: Section 5.3.1.5 pg 5.3-5 to 5.3-6 Table 5.3-3 pg 5.3-6	Yes	

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Adequacy Issue:		DALA ADEROAOL WORNSHEL		Kevision No. 1 Date April 25, 2008
Technical Area: Project Manager:	Cultural Resources Project: Bill Pfanner Docket:	Beacon Solar Energy Project		Technical Staff: Dorothy Torres 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	Discussion of the existing site conditions AFC Vol 1, p. 5.4-6 & Confidential tech report, pp. 11-14	Yes	The annineant arrayidad a discussion of
	effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation.	Expected direct, indirect and cumulative impacts AFC Vol 1, pp. 5.4-16 and 5.4-24	Ne Yes	direct and cumulative impacts. Please also provide a discussion of indirect impacts.
		AFC Volume 3- Data Adequacy Supplemental Filing (Cultural Resources).	202	
		Measures proposed to mitigate impacts, effectiveness of measures, and proposed monitoring of measures AFC Vol 1, pp. 5.4-24 to p. 5.4-25	8	

Cultural Resources

gy Project Technical Staff: Dorothy Torres Technical Senior: Rick York	ER AND ADEQUATE INFORMATION REQUIRED TO MAKE AFC BER YES OR NO CONFORM WITH REGULATIONS	logy, Yes ory 6 & 1 Report,	e radius Yes 1-0 to	e radius e radius d not ig linears 10 to 11 to 26 Iisted by Ne Please address whether Kern County has a listed by Ves Ne Please address whether Kern County to maintain a list of significant historical resources. If so, please identify the cultural resources listed pursuant to ordinance within a 1 mile radius around the project site and not less than one-quarter mile on each side of the linear facilities.
ect: Beacon Solar Energy Project <et: 08-afc-2<="" th=""><td>AFC PAGE NUMBER AND SECTION NUMBER</td><td>Summary of ethnology, prehistory and history AFC Vol 1, p. 5.4-6 & Confidential Tech Report, pp. 15 to 19</td><td>Emphasis on 5-mile radius of project location AFC Vol 1, pp. 5.4-0 to 5.4-10</td><td>Results of literature search, not less than 1-mile radius around project, and not less than 0.25 along linears AFC Vol 1, pp. 5.4-10 to 5.4-12 & Confidential Tech Report pp. 21 to 26 Cultural resources listed by local ordinance AFC Volume 3- Data <u>Adequacy Supplemental</u> <u>Filing (Cultural Resources).</u></td></et:>	AFC PAGE NUMBER AND SECTION NUMBER	Summary of ethnology, prehistory and history AFC Vol 1, p. 5.4-6 & Confidential Tech Report, pp. 15 to 19	Emphasis on 5-mile radius of project location AFC Vol 1, pp. 5.4-0 to 5.4-10	Results of literature search, not less than 1-mile radius around project, and not less than 0.25 along linears AFC Vol 1, pp. 5.4-10 to 5.4-12 & Confidential Tech Report pp. 21 to 26 Cultural resources listed by local ordinance AFC Volume 3- Data <u>Adequacy Supplemental</u> <u>Filing (Cultural Resources).</u>
Cultural Resources Project: Bill Pfanner Docket:	INFORMATION	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.		The results of a literature search to identify cultural resources within an area not less than a 1-mile radius around the project site and not less that than one-quarter (0.25) mile on each side of the linear facilities. Identify any cultural resources listed pursuant to ordinance by a city or county, or recognized by any local historical or archaeological society or museum. Literature searches to identify the above cultural resources must be completed by, or under the direction of, individuals who meet the Secretary of the Interior's Professional Standards for the technical area addressed.
Technical Area: Project Manager:	SITING REGULATIONS	Appendix B (g) (2) (A)		Appendix B (g) (2) (B)

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Adequacy Issue: Technical Area: Project Manager:	AdequateXInadequateDA1Cultural ResourcesProject:Bill PfannerDocket:	DATA ADEQUACY WORKSHEET ect: Beacon Solar Energy Project ket: 08-AFC-2	SHEET	Revision No. 1 Date April 25, 2008 Technical Staff: Dorothy Torres Technical Senior: Rick York
Sitting Regulations	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
	Copies of California Department of Parks and Recreation (DPR) 523 forms (Title 14 CCR §4853) shall be provided for all cultural resources (ethnographic, architectural, historical, and archaeological) identified in the literature search as being 45 years or older or of exceptional importance as defined in the National Register Bulletin Guidelines, (36CFR60.4(g)). A copy of the USGS 7.5' quadrangle map of the literature search area delineating the areas of all past surveys and noting the California Historical Resources Information System (CHRIS) identifying number	Individuals meeting Secretary of Interior Standards AFC Vol2, Section G Confidential Tech Report, Section 1 <u>AFC Volume 3- Data</u> <u>Adequacy Supplemental</u> <u>Filing (Cultural Resources).</u>	He Ke	Mathew Tennyson, who is referenced as conducting the architectural survey does not appear to meet Secretary of the Interior's Professional Standards for architectural history. Jennifer Hirsch's resume is included in Vol 2, Appendix G, and she does appear to meet Secretary of the Interior Standards for architectural history, but her role in providing information is not clear. Please discuss Ms. Hirsch's role in gathering cultural resources information for the project.
	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	Copies of USGS 7.5' quad map of lit search area including all past surveys <u>Supplemental Confidential</u> map 4-18-08	No Yes	The applicant provided Table 5.4-3 that listed previous cultural resources surveys. Please add the CHRIS identifying number and delineate the area of all past surveys on a USGS 7.5 minute quadrangle map.
		Copies of technical reports Confidential Tech Report , Section 2 <u>AFC Volume 3- Data</u> <u>Adequacy Supplemental</u> <u>Filing (Cultural Resources)</u> .	Yes Yes	Please provide copies of technical reports whose survey coverage is wholly or partly within the .25 mile area surveyed or that report on excavations or architectural surveys within the literature search area.

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Adequacy Issue:	Adequate X Inadequate	DATA ADEQUACY WORKSHEET	SHEET	Revision No. 1 Date April 25, 2008
Technical Area:	Cultural Resources Project:	ect: Beacon Solar Energy Project		Technical Staff: Dorothy Torres
Project Manager:	Bill Pfanner Docket:			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) (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	n 5 Results of new surveys the AFC Vol 1, pp. 5.4-12 to e 5.4-14 & Confidential Tech Report, Part 2, pp. der 29 to 57	Yes	
	Secretary of the Interior's Professional Standards for the technical area addressed.	ds Individuals who meet Secretary of the Interior's	Ne Yes	It does not appear that Matthew Tennyson moets Secretary of the Interior Standards
	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			for provisions of archaeological surveys. It does appear that Jennifer Hirsch meets the requirements. Please clarify Ms. Hirsch's role in gathering information for the project.
	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 AFC Volume 3- Data w Adequacy Supplemental Filing (Cultural Resources).	Yes	
	the project linear facility routes, extending no less than .5 mile out from the proposed plant site and from the routes of all above-ground linear facilities. New historic architecture field surveys in urban and suburban areas shall be conducted inclusive of the project site, extending no less than one parcel's distance from all proposed plant site			
	boundaries. New historic architecture field reconnaissance ("windshield survey") in urban al 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		<u>Yes</u>	Please identify the name of the person who meets Secretary of the Interior Standards in architectural history who either conducted or provided eversight for the historic architecture field surveys
	exceptionally significant, whatever their age.	AFC Vol 1, p. 5.4 -13 Supplemental Filing 4-14- 08		
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Adequacy Issue: Technical Area: Project Manager:	AdequateXInadequateDA1Cultural ResourcesProject:Bill PfannerDocket:	DATA ADEQUACY WORKSHEET ect: Beacon Solar Energy Project ket: 08-AFC-2	SHEET	Revision No. 1 Date April 25, 2008 Technical Staff: Dorothy Torres 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
	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).	A technical report of survey results Confidential Tech Report	Yes	
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 for confidentiality pursuant to Title 20, California Code of Regulations, § 2501 et seq. At a minimum, the technical report shall include the following:	Technical report Info also provided in AFC AFC Vol 1, pp. 5.4-1 to 5.4-27 Information that may identify archaeological sites or areas of religious significance Confidential Tech Report	Yes Yes	
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 from Appendix B (g)(2)(A) AFC Vol 1, pp. 5.4-6 to 5.4-10 Confidential Tech Report pp. 15 to 19 Literature results from Appendix B(g)(2)(B) Confidential Tech Report, Attachment 2	Yes	

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Revision No. 1 Date April 25, 2008 Technical Staff: Dorothy Torres Technical Senior: Rick York	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS				Please clarify Jennifer Hirsch's role regarding cultural resources activities for the project. Responding to item B(g)(2)(B) regarding Ms. Hirsch's role will suffice for this item.
SHEET	ADEQUATE YES OR NO	Yes	Yes	Yes	He Se
DATA ADEQUACY WORKSHEET ect: Beacon Solar Energy Project ket: 08-AFC-2	AFC PAGE NUMBER AND SECTION NUMBER	Survey procedures and methodology and cultural resources identified AFC Vol 1, pp. 5.4-12 to 5.4-14 & 5.4-17 to 5.4-23 5.4-14 & 5.4-17 to 5.4-23 Confidential Tech Report, pp. 29 to 66	Copies of new and updated DPR 523 forms Confidential Tech Report, Sections 5 & 6 AFC Vol 2, Section G, Appendix 2	A map at a scale of 1:24,000 U.S. Geo Survey Quad depicting cultural resources locations Confidential Technical Report, Section 4	Names and Qualifications Confidential Technical Report, Section 1 & AFC Vol, 2, Appendix G <u>AFC Volume 3- Data</u> <u>Adequacy Supplemental</u> Filing (Cultural Resources).
Adequate X Inadequate DA1 Cultural Resources Project: Bill Pfanner Docket:	INFORMATION	The survey procedures and methodology used to identify cultural resources and a discussion of the cultural resources identified by the survey;	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;	A map at a scale of 1:24,000 U.S. Geological Survey quadrangle depicting the locations of all previously known and newly identified cultural resources compiled through the research required by Appendix B (g)(2)(B) and Appendix B (g)(2)(C) (ii); and	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.
Adequacy Issue: Technical Area: Project Manager:	SITING REGULATIONS	Appendix B (g) (2) (C) (ii)	Appendix B (g) (2) (C) (iii)	Appendix B (g) (2) (C) (iv)	Appendix B (g) (2) (C) (v)

Cultural Resources

Revision No. 1 Date April 25, 2008 Technical Staff: Dorothy Torres Technical Senior: Rick York	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS	· ·			
SHEET	ADEQUATE YES OR NO	Yes Yes	Yes	Yes	Yes
DATA ADEQUACY WORKSHEET ect: Beacon Solar Energy Project ket: 08-AFC-2	AFC PAGE NUMBER AND SECTION NUMBER	NAHC contacts AFC Vol 2, Attachment 3 Native American contacts and correspondence AFC Vol 2, Attachment 3	Proposed mitigation measures AFC Vol 1, pp. 5.4-24 to 5.4-25	Measures proposed to mitigate impacts AFC Vol 1, pp. 5.4-24 to 5.4-25	Contingency measures to mitigate impacts to previously unknown cultural resources AFC Vol 1, pp. 5.4-24 to 5.4-25
Adequate X Inadequate DA1 Cultural Resources Project: Bill Pfanner Docket:	INFORMATION	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.	Include in the discussion of proposed mitigation measures required by subdivision (g)(1):	A discussion of measures proposed to mitigate project impacts to known cultural resources;	A set of contingency measures proposed to mitigate potential impacts to previously unknown cultural resources and any unanticipated impacts to known cultural resources; and
Adequacy Issue: Technical Area: Project Manager:	SITING REGULATIONS	Appendix B (g) (2) (D)	Appendix B (g) (2) (E)	Appendix B (g) (2) (E) (i)	Appendix B (g) (2) (E) (ii)

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Cultural Resources

Adequacy Issue: Technical Area: Project Manager:	Adequate X Inadequate DA Cultural Resources Project: Bill Pfanner Docket:	DATA ADEQUACY WORKSHEET ect: Beacon Solar Energy Project ket: 08-AFC-2		Revision No. 1 Date April 25, 2008 Technical Staff: Dorothy Torres 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) (2) (E) (iii)	Educational programs to enhance employee awareness during construction and operation to protect cultural resources.	Educational programs to enhance employee awareness AFC Vol 1, p. 5.4-24	Yes	
Appendix B (i) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	Tables identifying laws, regulations, ordinances, standards etc. AFC Vol 1, pp. 5.4-1 to 5.4-2	Yes	
Appendix B (i) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Tables which identify each agency with jurisdiction AFC Vol 1, p. 5.4-5 Agency with jurisdiction to issue applicable permits AFC Vol 1, p. 5.4-5	Yes Yes	

Cultural Resources

Adequacy Issue: Technical Area:	Adequate X Inadequate DA Cultural Resources Project:	DATA ADEQUACY WORKSHEET ect: Beacon Solar Energy Project	SHEET	Revision No. 1 Date April 25, 2008 Technical Staff: Dorothy Torres
Project Manager:				Technical Senior: Rick York
SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and also provide the name of the official who will serve as a contact person for Commission	Agency names and contact information AFC Vol 1, p. 5.4-5	Yes	
Appendix B (i) (3)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Schedule indicating when bermits outside authority of commission will be obtained AFC Vol 1, p. 5.4-5	Yes	

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Adequacy Issue: Technical Area: Project Manager:	AdequateXInadequateDA'Geological HazardsProject:Bill PfannerDocket:	DATA ADEQUACY WORKSHEET ect: Beacon Solar Energy Project ket: 08-AFC-2	SHEET	Revision No. 1 Date April 25, 2008 Technical Staff: Steve Baker, P.E. Technical Senior: Dal Hunter, Ph.D., P.E.
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 1.2, Section 5.5.3.1, Section 5.5.3.2, Section 5.5.3.3	Yes	
Appendix B (g) (17) (A)	A summary of the geology, seismicity, and geologic resources of the project site and related facilities, including linear facilities.	Section 5.5.2.1, Section 5.5.2.2, Section 5.5.2.4 <u>AFC Volume 3- Data</u> <u>Adequacy Supplement</u> (Geologic Hazards)	Ab Sa	Summary of geology and seismicity along related linear facilities
Appendix B (g) (17) (B)	A map at a scale of 1:24,000 and description of all recognized stratigraphic units, geologic structures, and geomorphic features within two (2) miles of the project site and along proposed facilities. Include an analysis of the likelihood of ground rupture, seismic shaking, mass wasting and slope stability, liquefaction, subsidence, tsunami runup, and expansion or collapse of soil structures at the plant site. Describe known geologic hazards along or crossing linear facilities.	Figure 5.5-1, Figure 5.5-2, Figure 5.5-3, Section 5.5.2.3, Appendix H, Attachment B. <u>AFC Volume 3- Data</u> <u>Adequacy Supplement</u> (Geologic Hazards)	es Ab	Summary of geology and seismicity along related linear facilities

Geological Hazards

Adequacy Issue: Technical Area: Project Manager:	Adequate X Inadequate DA Geological Hazards Project: Bill Pfanner Docket:	DATA ADEQUACY WORKSHEET ect: Beacon Solar Energy Project cet: 08-AFC-2	SHEET	Revision No. 1 Date April 25, 2008 Technical Staff: Steve Baker, P.E. Technical Senior: Dal Hunter, Ph.D., P.E.
SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (17) (C)	A map and description of geologic resources of recreational, commercial, or scientific value which may be affected by the project. Include a discussion of the techniques used to identify and evaluate these resources.	Section 5.5.2.4	Yes	
Appendix B (i) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	Table 5.5-1, Section 5.5.1.1, Section 5.5.1.2, Section 5.5.1.3, Section 5.5.1.3, Table 5.5-3	≺es	
Appendix B (i) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Section 5.5.1.4, Table 5.5-2	Yes	

Geological Hazards

Adequacy Issue:	equate		SHEET	-
Technical Area: Project Manager:	Geological Hazards Project: Bill Pfanner Docket:	Beacon Solar Energy Project 08-AFC-2		Technical Staff: Steve Baker, P.E. Technical Senior: Dal Hunter, Ph.D., P.E.
Siting Regulations	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and also provide the name of the official who will serve as a contact person for Commission staff.	Table 5.5-2	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.	Section 5.5.1.5, Table 5.5-3	Yes	

Geological Hazards

Adequacy Issue: Technical Area: Project Manager:	Adequate X Inadequate DAT Land Use Project: Bill Pfanner Docket:	DATA ADEQUACY WORKSHEET ect: Beacon Solar Energy Project eet: 08-AFC-2	HEET	Revision No. <u>1</u> Date <u>April 25, 2008</u> Technical Staff: <u>James Adams</u> Technical Senior: <u>Paula David</u>
SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (1)	provide a discussion of the existing site conditions, the expected direct, indirect and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation.	 §1.0 (pp.1-1 thru 1-11) Figs. 1-1, 1-2 Site Conditions: \$2.4.1 (pp. 2-3, 2-4); §5.7.2; also §5.X.2 throughout the AFC. Impacts: §5.7.3; also §§5.X.3 throughout the AFC. Mitigation & Monitoring: §5.7.4; also §5.X.4 throughout the AFC. 	Yes	
Appendix B (g) (3) (A)	A discussion of existing land uses and current zoning at the site, land uses and land use patterns within one mile of the proposed site and within one-quarter mile of any project-related linear facilities.	§§5.7.1.3, 5.7.2 Table 5.7-2, 5.7-3	Yes	
Appendix B (g) (3) (A) (i)	An identification of residential, commercial, industrial, recreational, scenic, agricultural, natural resource protection, natural resource extraction, educational, religious, cultural, and historic areas, and any other area of unique land uses;	<pre>§§5.7.1.2 (military airspace, p.5.7-2), 5.7.1.3, 5.3.2.3, 5.4.2.5, 5.9.2.4 Tables 5.7-2 Figs. 5.7-1, 5.7-2, 5.7-4, 5.7- 6 Appendices F, G, H</pre>	Yes	

IEET Revision No. 1 Date April 25, 2008 Technical Staff: James Adams Technical Staff: Paula David	ADEQUATE INFORMATION REQUIRED TO MAKE AFC YES OR NO CONFORM WITH REGULATIONS	Yes	No The AFC indicates that the areas surrounding the project site have little potential for foreseeable future development. No list or discussion of discretionary reviews by jurisdictional public agencies was provided. Please provide a list and/or discussion of all discretionary reviews initiated or completed within 18 months for projects, including General Plan/Zoning amendments, with the potential to impact or be impacted by the project.	Yes
DATA ADEQUACY WORKSHEET ect: Beacon Solar Energy Project ket: 08-AFC-2	AFC PAGE NUMBER AND SECTION NUMBER	§5.7.1.7	Nene AFC Volume 3- Data Adequacy Supplement (Land Use)	Figs. 1-2, 5.7-1, 5.7-2, 5.7-4, 5.7-5, 5.7-6
Adequate X Inadequate DAT. Land Use Project: Bill Pfanner Docket:	INFORMATION	A discussion of any trends in recent zoning changes and potential future land use development;	Identification of all discretionary reviews by public agencies initiated or completed within 18 months prior to filing the application for those changes or developments identified in subsection (g)(3)(A)(ii);	Legible maps of the areas identified in subsection (g)(3)(A) potentially affected by the project, on which existing land uses, jurisdictional boundaries, general plan designations, specific plan designations, and zoning have been clearly delineated.
Adequacy Issue: Technical Area: Project Manager:	Siting Regulations	Appendix B (g) (3) (A) (ii)	Appendix B (g) (3) (A) (iii)	Appendix B (g) (3) (A) iv)

Land Use

Adequacy Issue: Technical Area: Project Manager:	Adequate X Inadequate DAT Land Use Project: Bill Pfanner Docket:	DATA ADEQUACY WORKSHEET ect: Beacon Solar Energy Project ket: 08-AFC-2		Revision No. 1 Date April 25, 2008 Technical Staff: James Adams Technical Senior: Paula David
	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE Yes Or No	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
A di facil plar loca ider mea	A discussion of the compatibility of the proposed facilities with present and expected land uses, and conformity with any long-range land use plans adopted by any federal, state, regional, or local planning agency. The discussion shall identify the need, if any, for variances or any measures that would be necessary to make the proposal conform with permitted land uses.	§5.7.1 Table 5.7-3	Yes	
A d pro pro pro anc App App App App App	A discussion of the legal status of the parcel(s) on which the project is proposed. If the proposed site consists of more than one legal parcel, describe the method and timetable for merging or otherwise combining those parcels so that the proposed project, excluding linears and temporary laydown or staging area, will be located on a single legal parcel. The merger need not occur prior to a decision on the start of construction.	Table 2-1 Response to CEC Staff Data Adequacy Comments April 2008 AFC Volume 3 - Data Adequacy Supplement (Land Use)	A S	The cover letter for the AFC submission indicates that Beacon Solar intends to "develop, construct, own, and operate the proposed new facility on land owned by the company". There is no discussion within the AFC regarding current land ownership, legal status of the parcels, or method and timetable for merging or combining the multiple parcels. Please provide a discussion of the current land ownership, legal status, intent regarding transfer of title, and method/timetable for merging or combining the multiple parcels (excluding linears and any temporary use areas).
- H all de	A map at a scale of 1:24,000 and written description of agricultural land uses found within all areas affected by the proposed project. The description shall include:	§§5.7.2, 5.12.2.1 Fig. 5.7-4 Table 5.7-2	Yes	

Adequacy Issue: Technical Area: Project Manager:	Adequate X Inadequate DAT Land Use Project: Project: Bill Pfanner Docket:	DATA ADEQUACY WORKSHEET ect: Beacon Solar Energy Project ket: 08-AFC-2	HEET	Revision No. 1 Date April 25, 2008 Technical Staff: James Adams Technical Senior: Paula David
SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (3) (D) (i)	Crop types, irrigation systems, and any special cultivation practices;	N/A	N/A	
Appendix B (g) (3) (D) (ii)	Whether farmland affected by the project is prime, of statewide importance, or unique as defined by the California Department of Conservation; and	§5.7.2	Yes	
Appendix B (g) (3) (D) (iii)	Direct, indirect, and cumulative effects on agricultural land uses. If the proposed site or related facilities are subject to an Agricultural Land Conservation contract, provide a written copy and a discussion of the status of the expiration or canceling of such contract.	§§5.7.2, 5.12.2.1	Yes	
Appendix B (i) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, and permits applicable to the proposed project, and a discussion of the applicability of and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	Tables 5.7-1, 5.7-5	Yes	

Land Use

Adequacy Issue:	Adequate X Inadequate DAT	DATA ADEQUACY WORKSHEET	HEET	Revision No. 1 Date April 25, 2008
Technical Area: Project Manager:	Land Use Project: Bill Pfanner Docket:	Beacon Solar Energy Project 08-AFC-2		
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.	§5.7.1.5 Table 5.7-5	Yes	
Appendix B (i) (3)	The name, title, phone number, and address, if known, of an official within each agency who will serve as a contact person for the agency.	Table 5.7-4	Yes	
Appendix B (i) (3)	A schedule indicating when permits outside the authority of the Energy Commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	§5.7-5	Yes	

Land Use

Adequacy Issue: Technical Area: Project Manager:	Adequate X Inadequate DAT Socioeconomics Project: Bill Pfanner Docket:	DATA ADEQUACY WORKSHEET ject: Beacon Solar Energy Project cket: 08-AFC-2	HEET	Revision No. 1 Date April 25, 2008 Technical Staff: Marie McLean Technical Senior: Dale Edwards
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.	P. 5.11.3 through 11—27 P 5.11-1 through P.11-27 Tables 5.11-1 through Table 11-13 Section 5.11	Yes	
Appendix B (g) (7) (A)	A description of the socioeconomic circumstances of the vicinity and region affected by construction and operation of the project. Include:		Yes	
Appendix B (g) (7) (A) (i)	The economic characteristics, including the economic base, fiscal resources, and a list of the applicable local agencies with taxing powers and their most recent and projected revenues;	P. 5.11-6; § 5.11.2.5 P. 5.11-8; § 5.11.2.5 P. 5-11-12; § 5.11.2.8 P 5.11-26; § 5.11.3.2 P. 5.11-28 § 5.11.3.3 Table 5-11.8 P. 5.11-4, 11-5 AFC Volume 3- Data Adequacy Supplement (Socioeconomics)	No Yes	Please provide information about projected revenues.
Appendix B (g) (7) (A) (ii)	The social characteristics, including population and demographic and community trends;	P. 5.11-35.11-5; § 5.11.2.3 Table 5.11-2;Table 5.11-3	Yes	

Socioeconomics

Adequacy Issue: Technical Area: Project Manager:	Adequate X Inadequate DA Socioeconomics Project: Bill Pfanner Docket:	DATA ADEQUACY WORKSHEET ject: Beacon Solar Energy Project cket: 08-AFC-2	BHEET	Revision No. 1 Date April 25, 2008 Technical Staff: Marie McLean Technical Senior: Dale Edwards
SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (7) (A) (iii)	Existing unemployment rates;	P. 5.11-8; § 5.11.2.5	Yes	
Appendix B (g) (7) (A) (iv)	Availability of skilled workers by craft required for construction and operation of the project;	P. 5.11-14; § 5.11.3.2; P 5-11-26; § 5.11.3.3 Table 5.11-10; Table 5.11- 11; Table 5.11-12; Table 5.11-13	Yes	
Appendix B (g) (7) (A) (v)	Availability of temporary and permanent housing and current vacancy rate; and	P. 5.11-23-24; § 5.11-3.2	Yes	
Appendix B (g) (7) (A) (vi)	Capacities, existing and expected use levels, and planned expansion of utilities (gas, water and waste) and public services, including fire protection, law enforcement, emergency response, medical facilities, other assessment districts, and school districts. For projects outside metropolitan areas with a population of 500,000 or more, information for each school district shall include current enrollment and yearly expected enrollment by grade level groupings, excluding project-related changes for the duration of the project schedule.	P. 5.11-9—12; § 5.11.2.6 Table 5.11-6, P. 5.11-11 Table 5.11-7, P. 5-11-12	Yes	
Appendix B (g) (7) (B)	A discussion of the socioeconomic impacts caused by the construction and operation of the project (note year of estimate, model, if used, and appropriate sources), including:	P. 5.11-24; § 5.11.3.2;	Yes	

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Socioeconomics

Adequacy Issue: Technical Area:	A Inadequate Pro	DATA ADEQUACY WORKSHEET	HEET	- '
Project Manager:	Bill Pfanner Docket:	08-AFC-2		Technical Senior: Dale Edwards
Siting Regulations	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (7) (B) (i)	An estimate of the number of workers to be employed each month by craft during construction, and for operations, an estimate of the number of permanent operations workers during a year;	P. 5.11-15 and 5.11-16; Table 5.11-9	Yes	
Appendix B (g) (7) (B) (ii)	An estimate of the percentage of non-local workers who will relocate to the project area to work on the project;	P. 5.11-23-24; § 5.11-3.2	Yes	
Appendix B (g) (7) (B) (iii)	An estimate of the potential population increase caused directly and indirectly by the project;	P. 5.11-24; § 5.11.3.2	Yes	
Appendix B (g) (7) (B) (iv)	The potential impact of population increase on housing during the construction and operations phases;	P. 5.11-24; § 5.11.3.2	Yes	
Appendix B (g) (7) (B) (v)	The potential impacts, including additional costs, on utilities (gas, water, and waste) and public services, including fire, law enforcement, emergency response, medical facilities, other assessment districts, and school districts. Include response times to hospitals and for police, and emergency services. For projects outside metropolitan areas with a population of 500,000 or more, information on schools shall include project-related enrollment changes by grade level groupings and associated facility and staffing impacts by school district during the construction and operating phases;	P. 5.11.25-27; § 5.11.3.2	Yes	

Socioeconomics

Adequacy Issue: Technical Area: Project Manager:	AdequateXInadequateDA'SocioeconomicsProject:Bill PfannerDocket:	DATA ADEQUACY WORKSHEET ject: Beacon Solar Energy Project cket: 08-AFC-2	HEET	Revision No. <u>1</u> Date <u>April 25, 2008</u> Technical Staff: <u>Marie McLean</u> Technical Senior: <u>Dale Edwards</u>
SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (7) (B) (vi)	An estimate of applicable school impact fees;	P. 5.11-27; § 5.11.3.3	Yes	
Appendix B (g) (7) (B) (vii)	An estimate of the total construction payroll and separate estimates of the total operation payroll for permanent and short-term (contract) operations employees;	P. 5.11-24; § 5.11.3.3 AFC Volume 3- Data Adequacy Supplement (Socioeconomics)	Yes	Please provide separate estimates of the total operation payroll for permanent and short-term (contract) employees.
Appendix B (g) (7) (B) (xi)	An estimate of property taxes generated during an operational year of the project; and	P. 5.11-28; § 5.11.3.3	Yes	
Appendix B (g) (7) (B) (xii)	The expected direct, indirect, and induced income and employment effects due to construction, operation, and maintenance of the project.	P. 5.11-25; § 5.11.3.2;	Yes	
Appendix B (g) (7) (B) (viii)	An estimate of the expenditures for locally purchased materials for the construction and operation phases of the project;	P. 5.11-24—25; § 5.11.3.2; P. 5.11-27; § 5.11.3.3	Yes	
Appendix B (g) (7) (B) (ix)	An estimate of the capital cost (plant and equipment) of the project;	NA <u>AFC Volume 3- Data</u> <u>Adequacy Supplement</u> (Socioeconomics)	Ne Yes	Please provide an estimate of the capital cost of plant and equipment.
Appendix B (g) (7) (B) (x)	An estimate of sales taxes generated during construction and separately during an operational year of the project;	P. 5.11-26; § 5.1.3.2. P. 5.11-28; §5.11.3.3	Yes	

Socioeconomics

Adequacy Issue: Technical Area: Project Manager:	Adequate X Inadequate DA Socioeconomics Project: Bill Pfanner Docket:	DATA ADEQUACY WORKSHEET ject: Beacon Solar Energy Project cket: 08-AFC-2	HEET	Revision No. 1 Date April 25, 2008 Technical Staff: Marie McLean Technical Senior: Dale Edwards
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	P. 5.11.1; Table 5.11-1	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.	P. 5.11-2; § 5.11.1.4 AFC Volume 3- Data Adequacy Supplement (Socioeconomics)	No Yes	Please provide tables in which each agency (such as public works departments and assessors) with jurisdiction to enforce identified laws, regulations, and standards is identified.
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.	P. 5.11-2; § 5.11.1.4 <u>AFC Volume 3- Data</u> <u>Adequacy Supplement</u> (Socioeconomics)	No Yes	Please provide in table (above) name and title of contact along with telephone number.

Socioeconomics

Adequacy Issue:	Adequate X Inadequate	DATA	DATA ADEQUACY WORKSHEET	HEET	Revision No. 1	Revision No. 1 Date April 25, 2008
Technical Area:	Socioeconomics	Project:	Beacon Solar Energy Project		Technical Staff:	Marie McLean
Project Manager:	Bill Pfanner	Docket:	08-AFC-2		Technical Senior:	Dale Edwards
SITING	INFORMATION		AFC PAGE NUMBER AND	ADEQUATE	INFORMATION REQ	INFORMATION REQUIRED TO MAKE AFC
REGULATIONS			SECTION NUMBER	YES OR NO	CONFORM WIT	CONFORM WITH REGULATIONS
Appendix B (i) (3)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.		AN			

Socioeconomics