State of California | The Resources Agency of California

Memorandum

Date : November 6, 2006
Telephone: (916) 654-4996

To: Jackalyne Pfannenstiel, Chairman
James D. Boyd, Vice Chair
Arthur H. Rosenfeld, Ph.D., Commissioner
John L. Geesman, Commissioner
Jeffery Byron, Commissioner

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

B. B. Blevins
Executive Director

DOCKET
06-AFC-5
DATE NOV 6 2006
RECD. NOV 6 2006

Subject: **PANOCHE ENERGY CENTER PROJECT**
REVISED DATA ADEQUACY RECOMMENDATION (06-AFC-5)

Staff's September 1, 2006 initial data adequacy review of the Panoche Energy Center (PEC) Application for Certification (AFC) determined that the AFC did not meet all the information requirements of the California Code of Regulations, Title 20, Section 1704, including Appendix B, for the 12-month AFC process. Specifically, the AFC was deficient in 10 of 23 areas reviewed: air quality, biological resources, geological hazards, land use, paleontological resources, project overview, reliability, socioeconomics, transmission system engineering, and water resources. The applicant submitted a draft AFC Supplement on October 30, 2006. Staff has determined that with the additional information submitted, the AFC now meets the information requirements listed above in all 23 technical areas. Given staff's determination, the applicant will be providing a final AFC Supplement on November 7, 2006.

Attached is a summary table and revised data adequacy worksheets for the ten technical disciplines previously determined to be data inadequate, reflecting that the supplemental information submitted by PEC achieves AFC data adequacy.

On August 2, 2006, Energy Investors Fund, LLC, submitted an Application for Certification (AFC) to construct and operate a simple-cycle power plant, the Panoche Energy Center (PEC), in an unincorporated area of western Fresno County. The PEC would be a nominal 400 megawatt (MW) simple-cycle power plant consisting of four General Electric LMS100 natural gas-fired combustion turbine generators (CTG) and associated equipment. The PEC is designed as a peaking facility to meet electric generation load during periods of high demand, which generally occur during daytime hours, and more frequently during the summer portions of the year. The project is expected to have an annual capacity factor of approximately 57 percent. The generators would connect to the adjacent Pacific Gas & Electric Panoche Substation.

We have received written comments from the San Joaquin Air Valley Pollution Control District which indicated that the Air Permit Application as of October 18, 2006, is complete. The US Environmental Protection Agency also indicated the PEC Application for a Deep-injection Well Permit was deemed complete on October 20, 2006.

At the Energy Commission's business meeting on November 8, 2006, staff will recommend that the Energy Commission accept the AFC.

If you have any questions, please call James W. Reede, Jr., staff's Project Manager, at (916) 653-1245.

Attachments

ATTACHMENT A
OVERVIEW OF ENERGY COMMISSION STAFF'S
DATA ADEQUACY DETERMINATION
PANOCHE ENERGY CENTER
06-AFC-5

TECHNICAL AREA	ATTACHMENT B PAGE NO.	ADEQUATE? 12-MONTH
Air Quality	4	Yes
Biological Resources	8	Yes
Geological Hazards	12	Yes
Land Use	14	Yes
Paleontological Resources	18	Yes
Project Overview	20	Yes
Reliability	23	Yes
Socioeconomics	25	Yes
Transmission System Eng.	31	Yes
Water Resources	35	Yes

ATTACHMENT B

ENERGY COMMISSION STAFF'S
List of Data Adequacies

Panoche Energy Center
06-AFC-5

November 6, 2006

Adequacy Issue: Adequate **X** Inadequate ___

DATA ADEQUACY WORKSHEET

Revision No. 1 Date November 6, 2006

Technical Area: **Air Quality** Project: Panoche Energy Center Technical Staff: William Walters

Project Manager: James Reede Docket: 06-AFC-5 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) (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.	§1.2 (p. 1-2 to 1-4) §5.2.2 (p. 5.2-11 to 5.2-34) §5.2.3 (p. 5.2-34,35) §5.2.4 (p. 5.2-35 to -38)	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.	SJVAPCD application completeness letter dated 10/18/06.	Yes ~~No~~	~~The permit application has not been deemed complete by the SJVAPCD. The permit completeness review allows 30 days from the date of receipt (8/10/06), or by 9/9/06, but informally the District has stated that they will try to complete the review within two weeks, or by 8/24/06.~~
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.	§1.2.2 (p. 1-2) §3.4.4.2 (p. 3-9) §5.16.3 (p. 5.16-6) Appendix I, Attachment C Air Quality DVD Natural Gas Information Supplement provided 10/30/06.	Yes	
Appendix B (g) (8) (C)	A description of the control technologies proposed to limit the emission of criteria pollutants.	§3.4.10 (p. 3-23,24) §5.2.5.10 (p. 5.2-46,47) Appendix I, Attachment E	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.	§3.4.7.3.1 (p. 3-15,16) Appendix I, Attachment C	Yes	
Appendix B (g) (8) (E)	The emission rates of criteria pollutants from the stack, cooling towers, fuels and materials handling processes, delivery and storage systems, and from all secondary emission sources.	§5.2.2 (p. 5.2-11 to -20) Appendix I, Attachment B & C	Yes	

Adequacy Issue: Adequate **X** Inadequate ____

DATA ADEQUACY WORKSHEET

Revision No. 1 Date November 6, 2006

Technical Area: **Air Quality** Project: Panoche Energy Center Technical Staff: William Walters

Project Manager: James Reede Docket: 06-AFC-5 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) (F)	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.	§5.2.2.2 (p. 5.2-14 to -18) Appendix I, Attachment C	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.	§5.2.1.2 (p. 5.2-4 to -11) Table 5.2-2 to 5.2-8	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.	Air Quality DVD	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.)	N/A	N/A	
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.	§5.2.2.3.3 (p. 5.2-22,23) Appendix I, Attachment A Air Quality DVD	Yes	
Appendix B (g) (8) (I)	An evaluation of the project's direct and cumulative air quality impacts, consisting of the following:	---	---	---

Adequacy Issue: Adequate **X** Inadequate ____

DATA ADEQUACY WORKSHEET

Revision No. 1 Date November 6, 2006

Technical Area: **Air Quality** Project: Panoche Energy Center Technical Staff: William Walters

Project Manager: James Reede Docket: 06-AFC-5 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) (I) (i)	A screening level air quality modeling analysis, or a more detailed modeling analysis if so desired by the applicant, of the direct inert 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})] from construction-related equipment;	§5.2.2.4 (p. 5.2-29 to -32) Air Quality DVD	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 inert criteria pollutant (NO_x, SO_2, CO and PM_{10}) 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; and	§5.2.2.4 (p. 5.2-30 to -34) Air Quality DVD	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.	§5.2.3 (p. 5.2-34,35) Appendix I, Attachment D, Section 4.3.3	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 needed;	§5.2.4 (p. 5.2-35 to -38)	Yes	

Adequacy Issue: Adequate **X** Inadequate ____

DATA ADEQUACY WORKSHEET

Revision No. 1 Date November 6, 2006

Technical Area: **Air Quality** Project: Panoche Energy Center Technical Staff: William Walters

Project Manager: James Reede Docket: 06-AFC-5 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) (J) (ii)	Potential offset sources, including location, and quantity of emission reductions; and	October 30, 2006 Supplement, Data Adequacy Response pages AQ-4 to AQ-7, Locations available from SJVAPCD website ERC list.	Yes ~~No~~	~~Please provide a list of offset holders with whom you have entered, or potentially will enter, into negotiations. You may submit this information to the Energy Commission with a request for confidential status.~~
Appendix B (g) (8) (J) (iii)	Method of emission reduction.	October 30, 2006 Supplement, Data Adequacy Response pages AQ-6, -7.	Yes ~~No~~	~~Please identify the mechanism for reduction for each potential offset identified in response to Appendix B(g)(8)(J)(ii) above.~~
Appendix B (g) (8) (K)	A topographic map containing contour and elevation data, at a scale of 1:24,000, showing the area within 6 miles of the power plant site.	Figure 5.2-1 Figure 5.13-4	Yes	
Appendix B (h) (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 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;	Table 5.2-27(p. 5.2-51,52)	Yes	
Appendix B (h) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Table 5.2-27(p. 5.2-51,52) Table 5.2-28 (p. 5.2-53)	Yes	
Appendix B (h) (2)	A discussion of the conformity of the project with the requirements listed in subsection (h)(1)(A).	§5.2.5 (p. 5.2-38 to -52)	Yes	
Appendix B (h) (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 5.2-28 (p. 5.2-53)	Yes	

Adequacy Issue: Adequate **X** Inadequate ____

DATA ADEQUACY WORKSHEET

Revision No. 1 Date November 6, 2006

Technical Area: **Air Quality** Project: Panoche Energy Center Technical Staff: William Walters

Project Manager: James Reede Docket: 06-AFC-5 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 (h) (4)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	§5.2.7 Permit application submitted to District on 8/10/06	Yes	

Adequacy Issue: Adequate **X** Inadequate ___

DATA ADEQUACY WORKSHEET

Revision No. 1 Date November 6, 2006

Technical Area: **Biological Resources** Project: Panoche Energy Center Technical Staff: Joanna Grebel

Project Manager: James Reede Docket: 06-AFC-5 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: Sec. 5.6.1, pgs. 5.6-1 to 5.6-4 Direct, indirect, cumulative impacts: Sec. 5.6.2.1.1, Sec. 5.6.2.1.2, Sec. 5.6.2.3, Sec 5.18. October 30, 2006 Supplement page AQ-7 Mitigation measures and monitoring: Sec. 5.6.3, Sec. 5.6.4	Yes Yes ~~No~~ Yes	~~Applicant needs to include a discussion of cumulative impacts and protected species habitat loss from local power plant development.~~
Appendix B (g) (13) (A)	A regional overview and discussion of biological resources, with particular attention to sensitive biological resources near the project, and a map at a scale of 1:100,000 (or some other suitable scale) showing their location in relation to the project.	Sensitive species discussion: Table 5.6-1, Sec. 5.6.1.5, pgs. 5.6-5 to 5.6-9 Maps: Figs. 5.6-1 and 5.6-2	Yes Yes	
Appendix B (g) (13) (B)	A discussion and detailed maps at a scale of 1:6,000, of the biological resources at the site of the proposed project and related facilities, and in areas adjacent to them, out to a mile from the site and 1000 feet from the outer edge of linear facility corridors. Include a list of the species actually observed and those with a potential to occur. The discussion and maps shall address the distribution of community types, denning or nesting sites, population concentrations, migration corridors, breeding habitats, and the presence of sensitive biological resources.	Maps: Figs. 5.6-1 and 5.6-2 Species lists: Sec. 5.6.1, Table 5.6-2 Sensitive species lists: Table 5.6-1	Yes Yes Yes	

Adequacy Issue: Adequate **X** Inadequate ____

DATA ADEQUACY WORKSHEET

Revision No. 1 Date November 6, 2006

Technical Area: **Biological Resources** Project: Panoche Energy Center Technical Staff: Joanna Grebel

Project Manager: James Reede Docket: 06-AFC-5 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 description of all studies and surveys used to provide biological information about the project site, including seasonal surveys and copies of the California Department of Fish and Game's Natural Diversity Data Base Survey Forms, "California Native Species Field Survey Forms", and "California Natural Community Field Survey Forms", completed by the applicant. Include the dates and duration of the studies, methods used to complete the studies, and the names and qualifications of individuals conducting the studies.	Survey descriptions and results: Sec. 5.6.1.1, pgs. 5.6-2 to 5.6-3 CNDDB field survey forms: Appendix N	Yes Yes	
Appendix B (g) (13) (D)	A discussion of all permanent and temporary impacts to biological resources from site preparation, construction activities, and plant operation. Discussion of impacts must consider impacts from cooling tower drift, and from the use and discharge of water during construction and operation. For facilities which use once-through cooling or take or discharge water directly from or to natural sources, discuss impacts resulting from entrainment, impingement, thermal discharge, effluent chemicals, type of pump (if applicable), temperature, volume and rate of flow at intake and discharge location, and plume configuration in receiving water.	Discussion of permanent and temporary impacts: Sec. 5.6.2.1.1, Sec. 5.6.2.1.2	Yes	
Appendix B (g) (13) (E)	A discussion of the following:			
Appendix B (g) (13) (E) (i)	All measures proposed to avoid and/or reduce any adverse impacts;	Mitigation measures: Sec. 5.6.3, Sec. 5.6.4	Yes	
Appendix B (g) (13) (E) (ii)	All measures proposed to mitigate any adverse impacts, including any proposals for off-site mitigation; and	Mitigation measures: Sec. 5.6.3, Sec. 5.6.4	Yes	

Adequacy Issue: Adequate **X** Inadequate ___

DATA ADEQUACY WORKSHEET

Revision No. 1 Date November 6, 2006

Technical Area: **Biological Resources** Project: Panoche Energy Center Technical Staff: Joanna Grebel

Project Manager: James Reede Docket: 06-AFC-5 Technical Senior: Rick York

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (13) (E) (iii)	Any educational programs proposed to enhance employee awareness in order to protect biological resources.	Worker Environmental Awareness Program: Sec. 5.6.3	Yes	
Appendix B (g) (13) (F)	A discussion of compliance and monitoring programs proposed to ensure the effectiveness of mitigation measures incorporated into the project.	Mitigation measures: Sec. 5.6.3, Sec. 5.6.4	Yes	
Appendix B (g) (13) (G)	A discussion of native fish and wildlife species of commercial and/or recreational value that could be impacted by the project.	Commercial and/or recreational species:	NA	
Appendix B (g) (13) (H)	For purposes of this section, sensitive biological resources are one of the following:			
Appendix B (g) (13) (H) (i)	Species listed under state or federal Endangered Species Acts;	State or federally listed species: Sec. 5.6.1.6, Table 5.6-1	Yes	
Appendix B (g) (13) (H) (ii)	Resources defined in sections 1702 (q) and (v) of Title 20 of the California Code of Regulations; and	State or federally listed species: Sec. 5.6.1.6, Table 5.6-1	Yes	
Appendix B (g) (13) (H) (iii)	Species or habitats identified by legislative acts as requiring protection.	State or federally listed species: Sec. 5.6.1.6, Table 5.6-1	Yes	
Appendix B (h) (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 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;	LORS compliance: Sec. 5.6.5, pgs. 5.6-14 to 5.6-18, Table 5.6-3	Yes	

Adequacy Issue: Adequate **X** Inadequate ____

DATA ADEQUACY WORKSHEET

Revision No. 1 Date November 6, 2006

Technical Area: **Biological Resources** Project: Panoche Energy Center Technical Staff: Joanna Grebel

Project Manager: James Reede Docket: 06-AFC-5 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 (h) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits 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.	Agency jurisdiction: Sec. 5.6.5, pgs. 5.6-14 to 5.6-18, Table 5.6-3	Yes	
Appendix B (h) (2)	A discussion of the conformity of the project with the requirements listed in subsection (h)(1)(A).	____	____	
Appendix B (h) (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.	Agency contacts: Sec. 5.6.5.4 October 30, 2006 Supplement page AQ-8	Yes ~~No~~	~~Informal consultations with the California Department of Fish and Game and U.S. Fish and Wildlife Service may be needed regarding potential effects of the proposed project on state and federally protected species. Include information on who was contacted at each agency and their contact information.~~
Appendix B (h) (4)	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: Sec. 5.6.5.5	Yes	

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (1)	...provide a discussion of the existing site conditions, the expected direct, indirect and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation.	Section 5.3.1, Page 5.3-1 and 5.3-2; 5.3.2, Pages 5.3-18 through 5.3-20; and Appendix L.	Yes	
Appendix B (g) (17) (A)	A summary of the geology, seismicity, and geologic resources of the project site and related facilities;	Section 5.3.1.1.1 through 5.3.1.1.7, Pages 5.3-2 through 5.3-12; Table 5.3-2, Pages 5.3-14 and 5.3-15; Section 5.3.2, Page 5.3-18; and Appendix L.	Yes	
Appendix B (g) (17) (B)	A map at a scale of 1:24,000 and description of all recognized stratigraphic units, geologic structures, and geomorphic features within 2 miles of the project site. Include an analysis of the likelihood of ground rupture, seismic shaking, mass wasting and slope stability, liquefaction, subsidence, and expansion or collapse of soil structures.	Figure 5.3-2A and 5.3-2B; Section 5.3.1.1.2 through 5.3.1.1.4, Pages 5.3-2 through 5.3-7; Section 5.3.1.1.8 through 5.3.1.1.12, Pages 5.3-12 through 5.3-17; and Appendix L.	Yes	
Appendix B (g) (17) (C)	A map and description of geologic resources of recreational, commercial, or scientific value which may be affected by the project. Include a discussion of the techniques used to identify and evaluate these resources.	Section 5.3.2, Page 5.3-18.	Yes	
Appendix B (h) (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 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;	Section 5.3.3, Pages 5.3-18 through 5.3-20; and Table 5.3-3, Page 5.3-19.	Yes	

Adequacy Issue: Adequate **X** Inadequate ____

DATA ADEQUACY WORKSHEET

Revision No. 1 Date November 6, 2006

Technical Area: **Geological Hazards** Project: Panoche Energy Center Technical Staff: Dr. Patrick Pilling

Project Manager: Dr. James Reede Docket: 06-AFC-5 Technical Senior: Steve Baker

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (h) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits 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 5.3.3.4, Page 5.3-20; Table 5.3-4, Page 5.3-20; and Section 5.3.3.5; Page 5.3-20.	Yes	
Appendix B (h) (2)	A discussion of the conformity of the project with the requirements listed in subsection (h)(1)(A).	October 30, 2006 Supplement Response to Data Adequacy, page AQ-6.	Yes ~~No~~	~~A discussion of the conformity of the project with the requirements listed in subsection (h)(1)(A) has not been provided.~~
Appendix B (h) (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 5.3-4, Page 5.3-20.	Yes	

Adequacy Issue: Adequate **X** Inadequate ____

DATA ADEQUACY WORKSHEET

Revision No. 1 Date November 6, 2006

Technical Area: **Land Use** Project: Panoche Energy Center Technical Staff: Amanda Stennick

Project Manager: James Reede Docket: 06-AFC-5 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.	Section 5.0	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. Include:	Sections 5.9.1.3 and 5.9.1.3.1 Table 5.9-1 Figures 5.9-2, -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;	Sections 5.9.1.3.1 and 5.9.1.3.2 Table 5.9-1 Figures 5.9-2, -3	Yes	
Appendix B (g) (3) (A) (ii)	A discussion of any trends in recent zoning changes and potential future land use development;	Section 5.9.1.5 Table 5.9-2	Yes	
Appendix B (g) (3) (A) (iii)	Identification of all discretionary reviews by public agencies initiated or completed within 18 months prior to filing the application for those changes or developments identified in subsection (g)(3)(A)(ii); and	Section 5.9.1.5 Table 5.9-2	Yes	
Appendix B (g) (3) (A) iv)	Legible maps of the areas identified in subsection (g)(3)(A) potentially affected by the project, on which existing land uses, jurisdictional boundaries, general plan designations, specific plan designations, and zoning have been clearly delineated.	Figures 5.9-1 through -3	Yes	

Adequacy Issue: Adequate **X** Inadequate ___

DATA ADEQUACY WORKSHEET

Revision No. 1 Date November 6, 2006

Technical Area: **Land Use** Project: Panoche Energy Center Technical Staff: Amanda Stennick

Project Manager: James Reede Docket: 06-AFC-5 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) (3) (B)	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	Sections 5.9.1.3, 5.9.1.3.1, 5.9.1.3.2, 5.9.4.2, 5.9.4.3, 5.9.4.5. Table 5.9-3 October 30, 2006 Supplement pages AQ-10 to AQ-14	~~No~~ Yes	~~Government Code 51238.1 discusses the principles of compatibility of uses on Williamson Act Contract lands. In the Application for Certification, the applicant references Government Code 51238 (a) 1, which discusses compatible uses on agricultural *preserves*, not contracts. As such, the applicant does not discuss the need to cancel the existing contract, which would be required if a power plant was to be constructed on contracted lands under the Williamson Act. Please discuss the steps you will take to submit to Fresno County a Williamson Act cancellation on the project-related acreage; or, please demonstrate that the proposed project is consistent with Government Code 51238.3(c), or is consistent with Government Code 51238.3(c) (2).~~ ~~Conveyances of real property by deed, lease, or deed of trust are considered a division of land and are subject to the Subdivision Map Act and applicable Fresno County land division ordinances. For the project to conform to the Subdivision Map Act and applicable Fresno County land division ordinances, the applicant will need to prepare a tentative and final map, obtain approval of the map from Fresno County, and record the map(s) in the County Recorder's Office. Please discuss the steps you will take to prepare a tentative map of the portion of the parcel you seek to lease, including Fresno County's timeline for approval.~~
Appendix B (g) (15) (B)	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:	Figure 5.9-1	Yes	
Appendix B (g) (15) (B) (i)	Crop types, irrigation systems, and any special cultivation practices; and	Section 1.2.1 Supplement Page AQ-23	~~No~~ Yes	~~Please state the irrigation systems and any special cultivation practices on the site.~~

Adequacy Issue: Adequate **X** Inadequate ____

DATA ADEQUACY WORKSHEET

Revision No. 1 Date November 6, 2006

Technical Area: **Land Use** Project: Panoche Energy Center Technical Staff: Amanda Stennick

Project Manager: James Reede Docket: 06-AFC-5 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) (15) (B) (ii)	Whether farmland affected by the project is prime, of statewide importance, or unique as defined by the Natural Resource Conservation Service of the California Department of Conservation.	Section 5.4.1.2	Yes	
Appendix B (g) (15) (C)	An assessment of the effects of the proposed project on soil resources and agricultural land uses. This decision shall include:			
Appendix B (g) (15) (C) (ii)	Direct and indirect effects on agricultural land uses; and	~~Not given~~ Supplement Page AQ-24 & AQ-25	~~No~~ Yes	~~Please provide a discussion of the impacts of removing the project-related acreage out of agriculture production.~~
Appendix B (h) (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 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;	Sections 5.9.4.4 and .5 October 30, 2006 Supplement pages AQ-10 to AQ-14	~~No~~ Yes	~~Please see comments for Appendix B (g) (3) (B).~~
Appendix B (h) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Table 5.9-5 October 30, 2006 Supplement pages AQ-10 to AQ-14	~~No~~ Yes	~~Please see comments for Appendix B (g) (3) (B).~~
Appendix B (h) (2)	A discussion of the conformity of the project with the requirements listed in subsection (h)(1)(A).	Section 5.9.4.3 October 30, 2006 Supplement pages AQ-10 to AQ-14	~~No~~ Yes	~~Please see comments for Appendix B (g) (3) (B).~~
Appendix B (h) (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 5.9-4	Yes	

Adequacy Issue:	Adequate **X**	Inadequate ___	**DATA ADEQUACY WORKSHEET**		Revision No. 1	Date	November 6, 2006
Technical Area:	**Land Use**		Project:	Panoche Energy Center	Technical Staff:		Amanda Stennick
Project Manager:	James Reede		Docket:	06-AFC-5	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 (h) (4)	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.	~~Not given.~~ October 30, 2006 Supplement pages AQ-10 to AQ-14	~~No~~ Yes	~~Please see comments for Appendix B (g) (3) (B).~~

Adequacy Issue: Adequate **X** Inadequate ____

DATA ADEQUACY WORKSHEET

Revision No. 1 Date November 6, 2006

Technical Area: **Paleontological Resources** Project: Panoche Energy Center Technical Staff: Dr. Patrick Pilling

Project Manager: Dr. James Reede Docket: 06-AFC-5 Technical Senior: Steve Baker

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (1)	...provide a discussion of the existing site conditions, the expected direct, indirect and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation.	Section 5.8.2, Pages 5.8-2 through 5.8-3; Section 5.8.2.5.2, Pages 5.8-11 through 5.8-13; Section 5.8.2.5.3, Page 5.8-13; Section 5.8.3, Pages 5.8-13 through 5.8-14; Section 5.8.4, Page 5.8-14; and Section 5.8.5, Pages 5.8-14 through 5.8-15.	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 area may vary depending on the depositional history of the area.	Section 5.8.2, Pages 5.8-2 through 5.8-4; and Section 5.8.2.5.1, Pages 5.8-8 through 5.8-11.	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.	Section 5.8.2.5.2, Pages 5.8-11 through 5.8-13; and Appendix K.	Yes	
Appendix B (g) (16) (C)	A summary of all 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.	Section 5.8.1, Pages 5.8-1 through 5.8-2; and Section 5.8.2.3, Page 5.8-4.	Yes	
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, 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, § 2501 et seq.	Appendix K.	Yes	

Adequacy Issue: Adequate **X** Inadequate ____

DATA ADEQUACY WORKSHEET

Revision No. 1 Date November 6, 2006

Technical Area: **Paleontological Resources** Project: Panoche Energy Center Technical Staff: Dr. Patrick Pilling

Project Manager: Dr. James Reede Docket: 06-AFC-5 Technical Senior: Steve Baker

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (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.	Section 5.8.5, Pages 5.8-14 through 5.8-15.	Yes	
Appendix B (h) (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 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;	Section 5.8.7, Pages 5.8-15 through 5.8-17; and Table 5.8-1.	Yes	
Appendix B (h) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	N/A		
Appendix B (h) (2)	A discussion of the conformity of the project with the requirements listed in subsection (h)(1)(A).	October 30, 2006 Supplement Response to Data Adequacy, page AQ-14.	Yes ~~No~~	~~A discussion of the conformity of the project with the requirements listed in subsection (h)(1)(A) has not been provided.~~
Appendix B (h) (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.	N/A		
Appendix B (h) (4)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	N/A		

Adequacy Issue: Adequate **X** Inadequate ___

DATA ADEQUACY WORKSHEET

Revision No. 1 Date November 6, 2006

Technical Area: **Project Overview** Project: Panoche Energy Center Technical Staff: James W. Reede, Jr.

Project Manager: James W. Reede, Jr. Docket: 06-AFC-5 Technical Senior: Eileen Allen

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.	Various Sections	Yes ~~No~~	~~Socioeconomics, Appendix B (g)(1)~~
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	Various Sections	Yes ~~No~~	~~Transmission Systems Engineering Appendix B(b)(2)(C), Appendix B(h)(1), (h)(2), (h)(3), and (h)(4).~~ ~~Water Resources, Appendix B (g)(14)(A)(i), (g)(14)(B)(i), g)(14)(C), g)(14)(C)(iii), g)(14)(E)(i), g)(14)(h)(4).~~
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	Various Sections		
Cal. Code Regs., tit. 20, § 1704, (a) (4)	Each principal subject area covered in a notice or application shall be set forth in a separate chapter or section, each of which shall identify the person or persons responsible for its preparation.	Section 7.0, Page 7-1		
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, water supply, pollution control systems, and other general characteristics.	Section 3.0, Pages 3-1 through 3-44	Yes	
Appendix B (a) (1) (B)	Identification of the location of the proposed site and related facilities by section, township, range, county and assessors parcel numbers.	Section 3.2, Page 3-2	Yes	
Appendix B (a) (1) (C)	A description of and maps depicting the region, the vicinity, and the site and its immediate surroundings.	Section 3.0, Pages 3-1 to 3-4 & Figure 3.2-1	Yes	
Appendix B (a) (1) (D)	A full-page color photographic reproduction depicting the visual appearance of the site prior to construction, and a full-page color simulation or artist's rendering of the site and all project components at the site, after construction.	Section 1.0, Figure 1.3-1 October 30, 2006 Supplement page AQ-15.	Yes ~~No~~	~~Please provide a full-page color photographic reproduction depicting the visual appearance of the site prior to construction.~~

Adequacy Issue: Adequate **X** Inadequate ____

DATA ADEQUACY WORKSHEET

Revision No. 1 Date November 6, 2006

Technical Area: **Project Overview** Project: Panoche Energy Center Technical Staff: James W. Reede, Jr.

Project Manager: James W. Reede, Jr. Docket: 06-AFC-5 Technical Senior: Eileen Allen

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) (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 Q	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 1.3, Page 1-4	Yes	
Appendix B (a) (3) (A)	A list of all owners and operators of the site(s), the power plant facilities, and, if applicable, thermal host, the geothermal leasehold, the geothermal resource conveyance lines, and the geothermal re-injection system, and a description of their legal interest in these facilities.	Section 1.4, Page 1-4 October 30, 2006 Supplement page AQ-18.	Yes ~~No~~	~~Please list the property owner of the land on which the project is proposed to be sited.~~
Appendix B (a) (3) (B)	A list of all owners and operators of the proposed electric transmission facilities.	Section 3.6, Page 3-34	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 1.2.1, Page 1-2, and Section 2.0, Pages 2-1 & 2-2	Yes	
Appendix B (b) (1) (A)	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;	Figure 3.2-1	Yes	
Appendix B (b) (1) (B)	Scale plan and elevation drawings depicting the relative size and location of the power plant and all related facilities;	Figures 3.4-1, 2 & 3	Yes	
Appendix B (b) (1) (C)	A detailed description of the design, construction and operation of the facilities, specifically including the power generation, cooling, water supply and treatment, waste handling and control, pollution control, fuel handling, and safety, emergency and auxiliary systems, and fuel types and fuel use scenarios; and	Section 3.0, Pages 3-1 through 3-58	Yes	

Adequacy Issue: Adequate **X** Inadequate ____

DATA ADEQUACY WORKSHEET

Revision No. 1 Date November 6, 2006

Technical Area: **Project Overview** Project: Panoche Energy Center Technical Staff: James W. Reede, Jr.

Project Manager: James W. Reede, Jr. Docket: 06-AFC-5 Technical Senior: Eileen Allen

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (b) (2) (A)	Maps at a scale of 1:24,000 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 3.2-1	Yes	
Appendix B (b) (2) (B)	A full-page color photographic reproduction depicting a representative above ground section of the transmission line route prior to construction and a full-page color photographic simulation of that section of the transmission line route after construction.	Section 1.0, Figure 1.3-1 October 30, 2006 Supplement page AQ-44.	~~No~~ Yes	~~Please provide a full-page color photographic reproduction depicting a representative above ground section of the transmission line route prior to construction. Compliance with Appendix B(a)(1)(D) will satisfy both requirements~~
Appendix B (c)	In a section entitled, "Demand Conformance" provide a discussion explaining how the proposed project conforms with the requirements of Public Resources Code § 25524 or Public Resources Code § 25540.6(a)(5). If the provisions of Public Resources Code § 25523.5 are applicable, explain how the project conforms with the requirements of this section. Additional data adequacy requirements may be contained in the Electricity Report applicable pursuant to Title 20, California Code of Regulations, § 1720.5.	Not Applicable		
Appendix B (d) (1)	A copy of any study or analysis required by the terms of the Commission's Final Decision on the NOI, and a brief summary of the results of the study or analysis.	Not Applicable		
Appendix B (d) (2)	Updates of any significant information which has changed since the Commission's Final Decision on the NOI.	Not Applicable		
Appendix B (e) (1)	A discussion of how facility closure will be accomplished in the event of premature or unexpected cessation of operations.	Section 3.10, Pages 3-48 & 3-49	Yes	

Adequacy Issue: Adequate **X** Inadequate ____

DATA ADEQUACY WORKSHEET

Revision No. 1 Date November 6, 2006

Technical Area: **Reliability** Project: Panoche Energy Center Technical Staff: Steve Baker

Project Manager: James Reede Docket: 06-AFC-5 Technical Senior: Steve Baker

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (1)	...provide a discussion of the existing site conditions, the expected direct, indirect and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation.	§§ 1.1, 1.2.1, 1.2.2, 1.2.3, 1.2.4, 2.0, 2.1, 2.2, 2.3, 3.1, 3.2, 3.3, 3.3.1, 3.3.2.2, 3.3.2.3, 3.3.3.1, 3.4.1, 3.4.4.1, 3.4.4.2, 3.4.5.4, 3.4.5.5, 3.4.5.6, 3.4.6, 3.4.7, 3.4.12.5, 3.4.12.6, 3.5.5, 3.5.9, 3.5.10, 3.7.1, 3.9.2.1, 3.9.2.1.2, 3.9.2.5.1, 3.9.4, 3.11.4, 3.11.5, 3.11.7.1, 3.11.7.2, 3.11.8, 3.11.8.1, 3.11.8.2, 4.3, 4.4; Table 3.4-1	Yes	
Appendix B (i) (3) (A)	A discussion of the sources and availability of the fuel or fuels to be used over the estimated service life of the facilities.	§§ 1.2.3, 3.2, 3.4.6, 3.7.1, 3.11, 7.1	Yes	
Appendix B (i) (3) (B)	A discussion of the anticipated service life and degree of reliability expected to be achieved by the proposed facilities based on a consideration of:			
Appendix B (i) (3) (B) (i)	Expected annual and lifetime capacity factors;	§§ 1.2.2, 3.4.1, 3.4.4.2, 3.9.2.1, 3.11.4	Yes	
Appendix B (i) (3) (B) (ii)	The demonstrated or anticipated feasibility of the technologies, systems, components, and measures proposed to be employed in the facilities, including the power generation system, the heat dissipation system, the water supply system, the reinjection system, the atmospheric emission control system, resource conveyance lines, and the waste disposal system;	§§ 1.1, 1.2.2, 1.2.4, 3.1, 3.4.1, 3.4.4.1, 3.4.7, 3.5.5, 3.5.10, 3.7.1, 3.9.4, 3.11.7.1, 3.11.7.2	Yes	
Appendix B (i) (3) (B) (iii)	Geologic and flood hazards, meteorologic conditions and climatic extremes, and cooling water availability;	§§ 1.2.4, 3.1, 3.3, 3.3.1, 3.3.2.2, 3.3.2.3, 3.3.3.1, 3.4.7, 3.5.9, 3.11.7.2	Yes	

Adequacy Issue: Adequate **X** Inadequate ____

DATA ADEQUACY WORKSHEET

Revision No. 1 Date November 6, 2006

Technical Area: **Reliability** Project: Panoche Energy Center Technical Staff: Steve Baker

Project Manager: James Reede Docket: 06-AFC-5 Technical Senior: Steve Baker

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (i) (3) (B) (iv)	Special design features adopted by the applicant or resource supplier to ensure power plant reliability; and	§§ 3.4.5.4, 3.4.5.5, 3.4.5.6, 3.4.12.5, 3.4.12.6, 3.5.5, 3.5.9, 3.9.2.1, 3.9.2.1.1, 3.9.2.5.1, 3.11.5.1, 3.11.5.3, 3.11.5.4, 3.11.5.5, 3.11.5.6, 3.11.8; Table 3.4-1	Yes	
Appendix B (i) (3) (B) (v)	The expected power plant maturation period.	October 30, 2006 Supplement page AQ-43 ~~Not Found~~	Yes ~~No~~	~~Describe the maturation period expected for the new GE LMS100 gas turbine generator~~
Appendix B (h) (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 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;	N/A	N/A	
Appendix B (h) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	N/A	N/A	
Appendix B (h) (2)	A discussion of the conformity of the project with the requirements listed in subsection (h)(1)(A).	N/A	N/A	
Appendix B (h) (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 5.9-4	Yes	
Appendix B (h) (4)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	N/A	N/A	

Adequacy Issue: Adequate x Inadequate ___

DATA ADEQUACY WORKSHEET

Revision No. 2 Date November 6, 2006

Technical Area: **Socioeconomics** Project: Panoche Energy Center (PEC) Technical Staff: Joseph Diamond Ph. D.

Project Manager: James W. Reede, Jr., Ed.D. Docket: 06-AFC-5 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.	Section 5.10.2 Study Area, pages 5.10-1&2. Section 5.10.2.2 Employment During Construction, Pages 5.10-3&4. Section 5.10.2.3 Employment During Operation, page 5.10-4. Section 5.10.3.3 Population During Construction Phase, pages 5.106&7. Section 5.10.3.4 Project Impacts to Population During Operation, page 5.10-7. Section 5.10.7 Cumulative Impacts, page 5.10-13. Section 5.18.2 Cumulative Impacts Analysis, pages 5.18-3&4. Section 5.18.4 Mitigation Measures, page 5.18-4. Section 5.10.8.5 Applicable Permits, Permits Schedule, and Fee, pages 5.10-15&16. October 30, 2006 Supplement pages AQ-32 to 33.	~~No~~ Yes	~~Please provide an economic impact analysis using an economic model (e.g., IMPLAN or another) in order to show construction and operational secondary (indirect and induced) income and employment impacts~~.
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:			

Adequacy Issue: Adequate x Inadequate ___

DATA ADEQUACY WORKSHEET

Revision No. 2 Date November 6, 2006

Technical Area: **Socioeconomics** Project: Panoche Energy Center (PEC) Technical Staff: Joseph Diamond Ph. D.

Project Manager: James W. Reede, Jr., Ed.D. Docket: 06-AFC-5 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) (i)	The economic characteristics, including the economic base, fiscal resources, and a list of the applicable local agencies with taxing powers and their most recent and projected revenues;	Section 5.10.2.1 Economic Base and Employment, pages 5.10-2&3. Section 5.10.6 Fiscal Resources, pages 5.10-12&13.	Yes	
Appendix B (g) (7) (A) (ii)	The social characteristics, including population and demographic and community trends;	Section 5.10.3.1 Fresno County Population, page 5.10-4. Section 5.10.3.2 Project Vicinity, pages 5.10-4&6. Section 5.10.4.2 Environmental Justice Screening Analysis, pages 5.10-8&9.	Yes	
Appendix B (g) (7) (A) (iii)	Existing and projected unemployment rates;	Section 5.10.2.1 Economic Base and Employment, pages 5.10-2&3.	Yes	
Appendix B (g) (7) (A) (iv)	Availability of skilled workers by craft required for construction and operation of the project;	Section 5.10.2.2 Employment During Construction, pages 5.10-3&4. Section 5.10.2.3 Employment During Operation, page 5.10-4.	Yes	
Appendix B (g) (7) (A) (v)	Availability of temporary and permanent housing; and	Section 5.10.3.5 Housing, page 5.10-7.	Yes	

Adequacy Issue: Adequate x Inadequate ___

DATA ADEQUACY WORKSHEET

Revision No. 2 Date November 6, 2006

Technical Area: **Socioeconomics** Project: Panoche Energy Center (PEC) Technical Staff: Joseph Diamond Ph. D.

Project Manager: James W. Reede, Jr., Ed.D. Docket: 06-AFC-5 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) (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 construction schedule.	Section 5.10.5 Public Services and Utilities, pages 5.10-9 through 5.10-12.	Yes	
Appendix B (g) (7) (B)	A discussion of the socioeconomic impacts caused by the construction and operation of the project, including:			
Appendix B (g) (7) (B) (i)	The number of workers to be employed each month by craft during construction and operation;	Section 5.10.2.2 Employment During Construction, Table 5.10-3 Labor Personnel Requirements By Month, page 5.10-5. Section 5.10.2.3 Employment During Operation, Table 5.10-4, PEC Estimated Staff During Operations, page 5.10-6.	Yes	

Adequacy Issue: Adequate x Inadequate ___

DATA ADEQUACY WORKSHEET

Revision No. 2 Date November 6, 2006

Technical Area: **Socioeconomics** Project: Panoche Energy Center (PEC) Technical Staff: Joseph Diamond Ph. D.

Project Manager: James W. Reede, Jr., Ed.D. Docket: 06-AFC-5 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) (ii)	An estimate of the number and percentage of workers who will commute daily, commute weekly, or relocate in order to work on the project;	Section 5.10.2.2 Employment During Construction, pages 5.10-3&4. Section 5.10.2.3 Employment During Operation, page 5.10-4. Section 5.10.3.3 Population During Construction Phase, pages 5.10-6&7. Section 5.10.3.4 Project Impacts to Population During Operations, page 5.10-7.	Yes	
Appendix B (g) (7) (B) (iii)	An estimate of the potential population increase caused directly and indirectly by the project;	Section 5.10.3.3 Population During Construction Phase, pages 5.10-6&7. Section 5.10.3.4 Project Impacts to Population During Operations, page 5.10-7.	Yes	
Appendix B (g) (7) (B) (iv)	The potential impact of population increase on housing during the construction and operations phases;	Section 5.10.3-5 Housing, page 5.10-7.	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. 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 operation phases;	Section 5.10.5 Public Service and Utilities, pages 5.10-9 through 5.10-12.	Yes	
Appendix B (g) (7) (B) (vi)	An estimate of applicable school impact fees;	Section 5.10.8.5 Applicable Permits, Permit Schedule, and Fees, page 5.10-15.	Yes	

Adequacy Issue: Adequate x Inadequate ___

DATA ADEQUACY WORKSHEET

Revision No. 2 Date November 6, 2006

Technical Area: **Socioeconomics** Project: Panoche Energy Center (PEC) Technical Staff: Joseph Diamond Ph. D.

Project Manager: James W. Reede, Jr., Ed.D. Docket: 06-AFC-5 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) (vii)	An estimate of the total construction payroll and an estimate of the total operation payroll;	Section 5.10.2.2 Employment During Construction, pages 5.10-3&4. Section 5.10.2.3 Employment During Operation, page 5.10-4.	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; and	Section 5.10.6.1 Project Construction, page 5.10-13. October 30, 2006 Supplement page AQ-33.	~~No~~ Yes	~~Please provide an estimate of expenditures for locally purchased materials for the operation phase of the project.~~
Appendix B (g) (7) (B) (ix)	An estimate of the capital cost of the project of the potential impacts on tax revenues from construction and operation of the project.	Section 5.10.6.1 Project Construction, page 5.10-13. Section 5.10.6.2 Project Operation, page 5.10-13.	Yes	
Appendix B (h) (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 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;	Table 5.10-18 LORS Applicable To Socioeconomics, page 5.10-14.	Yes	
Appendix B (h) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits 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.	Same as above.	Yes	

Adequacy Issue: Adequate x Inadequate ___

DATA ADEQUACY WORKSHEET

Revision No. 2 Date November 6, 2006

Technical Area: **Socioeconomics** Project: Panoche Energy Center (PEC) Technical Staff: Joseph Diamond Ph. D.

Project Manager: James W. Reede, Jr., Ed.D. Docket: 06-AFC-5 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 (h) (2)	A discussion of the conformity of the project with the requirements listed in subsection (h)(1)(A).	Section 5.10.8.5 Applicable Permits, Permit Schedule, and Fees, pages 5.10-15&16. Table 5.10-10 Applicable Socioeconomic Permits and Fees, page 5.10-16. Table 5.18-2 LORS Applicable To Cumulative Impacts, page 5.18-5 Section 5.18.4 Mitigation Measures, page 5.18-4.	Yes	
Appendix B (h) (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 5.10-9 Involved Agencies And Contacts, pages 5.10-14&16.	Yes	
Appendix (h) (4)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Section 5.10.8.5 Permit, Permit Schedule, and Fees, pages 5.10-15&16.	N/A	

Adequacy Issue: Adequate **X** Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 1 Date November 6, 2006

Technical Area: **Transmission System Eng.** Project: Panoche Energy Center (PEC) Technical Staff: Laiping Ng

Project Manager: James Reede Docket: 06-AFC-5 Technical Senior: Mark Hesters

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (i) (2) (A)	A discussion of the need for the additional electric transmission lines, substations, or other equipment, the basis for selecting principal points of junction with the existing electric transmission system, and the capacity and voltage levels of the proposed lines, along with the basis for selection of the capacity and voltage levels.	Section 2.0 Page 2-1 to 2-2 Section 3.6-3.6.4 Page 3-34 to 3-37 Section 3.11.3.1 Page 3-52	Yes	
Appendix B (i) (2) (B)	A discussion of the extent to which the proposed electric transmission facilities have been designed, planned, and routed to meet the transmission requirements created by additional generating facilities planned by the applicant or any other entity.	Section 3.4.5 Page 3-9 to 3-10 Section 3.6 - 3.6.4 Page 3-34 to 3-37	Yes	

Adequacy Issue: Adequate **X** Inadequate ___

DATA ADEQUACY WORKSHEET

Revision No. 1 Date November 6, 2006

Technical Area: **Transmission System Eng.** Project: Panoche Energy Center (PEC) Technical Staff: Laiping Ng

Project Manager: James Reede Docket: 06-AFC-5 Technical Senior: Mark Hesters

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (b) (2) (C)	A detailed description of the design, construction, and operation of any electric transmission facilities, such as power lines, substations, switchyards, or other transmission equipment, which will be constructed or modified to transmit electrical power from the proposed power plant to the load centers to be served by the facility. Such description shall include the width of rights of way and the physical and electrical characteristics of electrical transmission facilities such as towers, conductors, and insulators. This description shall include power load flow diagrams which demonstrate conformance or nonconformance with utility reliability and planning criteria at the time the facility is expected to be placed in operation and five years thereafter; and	Section 3.4.5 - 3.4.5.2 Page 3-9 to 3-10 Section 3.6 - 3.6.4 Page 3-34 to 3-37 Figure 3.4-7 Figure 3.6-1 to 3.6-2 System Impact Study And Facilities Study Report October 30, 2006 Supplement pages AQ-52 to AQ-61	~~No~~ Yes	~~Provide detail drawings for the take off structures which required in interconnecting the 230 kV transmission lines from the proposed power plant to the existing Panoche Substation.~~ ~~Resubmit Single Line Diagrams (Figure 3.6-1) for the Panoche Substation with all equipment ratings including breakers, disconnect switches, buses, and etc.~~ ~~Verify the conductor type and size for the generation-tie line: 795 ACSS, 795 ACSR, 975 ACSS or others.~~ ~~Please provide the re-evaluation of the System Impact Study. The Study should analyze the system impact with and without the project during peak and off-peak system conditions, which will demonstrate conformance or non-conformance with the utility reliability and planning criteria with the following provisions:~~ ~~a. Identify major assumptions in the base cases including imports to the system, major generation and load changes in the system and queue generation.~~ ~~b. Analyze system for N-0, important N-1 and critical N-2 contingency conditions and provide a list of criteria violations in a table showing the loadings before and after adding the new generation.~~ ~~c. Short circuit studies (Optional- Data requests will follow).~~ ~~d. Analyze system for Transient Stability and Post-transient voltage conditions under critical N-1 and N-2 contingencies, and provide related plots, switching data and a list for voltage violations in the studies (Optional-Data requests will follow).~~ ~~e. Provide a list of contingencies evaluated for each study.~~ ~~f. List mitigation measures considered (required) and those selected (optional- Data Requests will follow) for all criteria violations.~~ ~~g. Provide electronic copies of *.sav and *.drw PSLF files (optional-Data Requests will follow).~~ h. ~~Provide power flow diagrams (**MW, % loading & P. U. voltage**) for base cases with and without the project. Power flow diagrams must also be provided for all N-0, N-1 and N-2 studies where overloads or voltage violations appear.~~

Adequacy Issue: Adequate X Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 1 Date November 6, 2006

Technical Area: **Transmission System Eng.** Project: Panoche Energy Center (PEC) Technical Staff: Laiping Ng

Project Manager: James Reede Docket: 06-AFC-5 Technical Senior: Mark Hesters

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (b) (2) (D)	A description of how the route and additional transmission facilities were selected, and the consideration given to engineering constraints, environmental impacts, resource conveyance constraints, and electric transmission constraints.	Section 3.6 – 3.6.4 Page 3-34 to 3-37 Section 3.11.3.1 Page 3-52	Yes	
Appendix B (g) (18) (A)	The locations and a description of the existing switchyards and overhead and underground transmission lines that would be affected by the proposed project.	Appendix F October 30, 2006 Supplement pages AQ-52 to AQ-61	 Yes ~~No~~	~~Please provide the required information.~~
Appendix B (h) (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 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;	Appendix F October 30, 2006 Supplement pages AQ-52 to AQ-61 Transmission LORS for the PEC – Submitted on November 3, 2006	~~No~~ Yes	~~Please provide the required information~~
Appendix B (h) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits 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.	October 30, 2006 Supplement pages AQ-52 to AQ-61	~~No~~ Yes	~~Provide a schedule for the CAISO Preliminary Approval Letter for interconnection of the proposed project to the CAISO control grid.~~

Adequacy Issue: Adequate ___ X Inadequate ___

DATA ADEQUACY WORKSHEET

Revision No. 1 Date November 6, 2006

Technical Area: **Transmission System Eng.** Project: Panoche Energy Center (PEC) Technical Staff: Laiping Ng

Project Manager: James Reede Docket: 06-AFC-5 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 discussion of the conformity of the project with the requirements listed in subsection (h) (1) (A).	October 30, 2006 Supplement pages AQ-52 to AQ-61 Transmission LORS for the PEC – Submitted on November 3, 2006	~~No~~ Yes	~~Please provide the appropriate discussion.~~
Appendix B (h) (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.	October 30, 2006 Supplement pages AQ-52 to AQ-61	~~No~~ Yes	~~Please provide the contact person information for the CAISO.~~
Appendix B (h) (4)	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.	October 30, 2006 Supplement page AQ-52	~~No~~ Yes	~~Provide a schedule for the CAISO Preliminary Approval Letter for interconnection of the proposed project to the CAISO control grid.~~

Adequacy Issue: Adequate **X** Inadequate ____

DATA ADEQUACY WORKSHEET

Revision No. 1 Date November 6, 2006

Technical Area: **Water Resources** Project: Panoche Technical Staff: Michael Stephens

Project Manager: James Reede Docket: AFC-06-02 Technical Senior: Paul Richins

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.	3-2; 3.3	Yes	
Appendix B (g) (14) (A)	All information required by the Regional Water Quality Control Board in the region where the project will be located to apply for:	5.5-28; 5.5.8	Yes	
Appendix B (g) (14) (A) (i)	Waste Discharge Requirements; and	5.5-27; 5.5.8.2.1 October 30, 2006 Supplement	~~No~~ Yes	~~Information required to meet regional board discharge requirements is insufficient. The applicant states that a draft permit application will be submitted sometime in the future. A Class 1 wastewater injection permit can take over a year to be granted, from the submittal of the application. Because a permit application has not been submitted; it is not possible to conduct analyses on the feasibility of deep well injection. Please provide a permit application; with a letter from the approving agency stating that the permit application is complete.~~
Appendix B (g) (14) (A) (ii)	A National Pollutant Discharge Elimination System Permit.	5.5-28; 5.5-8	Yes	
Appendix B (g) (14) (B)	A description of the hydrologic setting of the project. The information shall describe, in writing and on maps at a scale of 1:24,000, the chemical and physical characteristics of the following water bodies that may be affected by the proposed project:	5.5-3; 5.5.1.6	Yes	

Adequacy Issue: Adequate **X** Inadequate ___

DATA ADEQUACY WORKSHEET

Revision No. 1 Date November 6, 2006

Technical Area: **Water Resources** Project: Panoche Technical Staff: Michael Stephens

Project Manager: James Reede Docket: AFC-06-02 Technical Senior: Paul Richins

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (14) (B) (i)	Ground water bodies and related geologic structures;	5.5-3; 5.5.1.6 October 30, 2006 Supplement	~~No~~ Yes	~~No site specific water chemistry data was presented in the AFC. Please obtain site specific groundwater data for this project. This will require obtaining groundwater sample(s) at the site and conducting laboratory analyses of these samples. Samples should be collected from the water bearing zone that is proposed for project water supply well field development and the data presented to CEC.~~ ~~No site specific groundwater data is presented that shows the ability of the project to supply the quantities of water that are required for the proposed project.~~ ~~Site specific aquifer and well field design testing should be conducted to ensure aquifer characteristics that were inferred from historical well sampling, construction, and drilling that occurred at distances from the proposed project; are also present at the proposed project site. Please provide at a minimum two (2) geologic and hydrologic cross sections at 90 degree angles across the site, forming a fence diagram. Please include all surface and groundwater features. Please include existing well, groundwater, and other data, as well as the proposed groundwater production wells.~~ ~~The data presented on site specific geology and hydrogeology to support construction of a deep injection well is extremely limited; consisting of data obtained from an oil and gas field 2 miles away. In addition, permitting of a Class I Injection well requires an extensive application process, with no guarantee that the permit will be granted, given that the Project site is located in a fairly unstable geologic area. Please provide at a minimum two (2) geological cross-sections that cross the Project Site at 90 degrees; forming a "fence" diagram; representing the target waste injection zone as well as water bearing zones above and below.~~

Adequacy Issue: Adequate **X** Inadequate ___

DATA ADEQUACY WORKSHEET

Revision No. 1 Date November 6, 2006

Technical Area: **Water Resources** Project: Panoche Technical Staff: Michael Stephens

Project Manager: James Reede Docket: AFC-06-02 Technical Senior: Paul Richins

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (14) (B) (ii)	Surface water bodies; and	3-3; 3.3.3.1	Yes	
Appendix B (g) (14) (B) (iii)	Water inundation zones, such as the 100-year flood plain and tsunami run-up zones.	5.5.3.2.4	Yes	
Appendix B (g) (14) (C)	A description of the water to be used and discharged by the project. This information shall include:	3-13; 3.4.7 5.5-13; 5.5.3.1.1 5.5-18; 5.5.3.2.2 October 30, 2006 Supplement	~~No~~ Yes	~~SEE BELOW~~
Appendix B (g) (14) (C) (i)	Source of the water and the rationale for its selection, and if fresh water is to be used for power plant cooling purposes, a discussion of all other potential sources and an explanation why these sources were not feasible;	3-13; 3.4.7 5.5-13; 5.5.3.1.1 5.5-8; 5.5.2.1	Yes	
Appendix B (g) (14) (C) (ii)	The physical and chemical characteristics of the source and discharge water;	5.5-14; 5.5.3.1.2 5.5-18; 5.5.3.2 October 30, 2006 Supplement	~~No~~ Yes	~~No site specific water chemistry data was presented in the AFC. Please obtain site specific groundwater data for this project. This will require obtaining groundwater sample(s) at the site and conducting laboratory analyses of these samples. Samples should be collected from the water bearing zone that is proposed for the project water supply.~~
Appendix B (g) (14) (C) (iii)	Average and maximum daily and annual water demand and waste water discharge for both the construction and operation phases of the project; and	3-14; 3.4.7.1 5.5-8, 5.5.2 5.5.3.2.4	Yes	
Appendix B (g) (14) (C) (iv)	A description of all facilities to be used in water conveyance, treatment, and discharge. Include a water mass balance diagram.	5.5-14; 5.5.3.1.4 5.5-17; 5.5.3.2.1	Yes	
Appendix B (g) (14) (D)	A description of pre-, and post-construction runoff and drainage patterns, including:	5.5-1; 5.5.1.1 5.5-20; 5.5.3.2.4	Yes	
Appendix B (g) (14) (D) (i)	Precipitation and storm runoff patterns; and	3-3; 3.3.3.1 5.5-1; 5.5.1.1	Yes	
Appendix B (g) (14) (D) (ii)	Drainage facilities and design criteria.	5.5-20; 5.5.3.2.4	Yes	

Adequacy Issue: Adequate **X** Inadequate ___

DATA ADEQUACY WORKSHEET

Revision No. 1 Date November 6, 2006

Technical Area: **Water Resources** Project: Panoche Technical Staff: Michael Stephens

Project Manager: James Reede Docket: AFC-06-02 Technical Senior: Paul Richins

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (14) (E)	An assessment of the effects of the proposed project on water resources. This discussion shall include:	5.5-21; 5.5.4 October 30, 2006 Supplement	~~No~~ Yes	~~SEE BELOW~~
Appendix B (g) (14) (E) (i)	The effects of project demand on the water supply and other users of this source;	5.5-21; 5.5.4.4 October 30, 2006 Supplement	~~No~~ Yes	~~Please provide aquifer testing data and computer modeling that shows the relationship between the proposed water supply production well field, nearby wells, surface water bodies, and aquifer zones above and below the proposed water production target zone.~~
Appendix B (g) (14) (E) (ii)	The effects of construction activities and plant operation on water quality; and	5.5-21; 5.5.4.3	Yes	
Appendix B (g) (14) (iii)	The effects of the project on the 100-year flood plain or other water inundation zones.	5.5.3.2.4	Yes	
Appendix B (h) (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 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;	5.5-14; 5.5.8.2.2	Yes	
Appendix B (h) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits 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.	5.5-14; 5.5.8.2.2	Yes	
Appendix B (h) (2)	A discussion of the conformity of the project with the requirements listed in subsection (h)(1)(A).	5.5-14; 5.5.8.2.2	Yes	
Appendix B (h) (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.	5.5-33; 5.5.8.5	Yes	

Adequacy Issue: Adequate **X** Inadequate ___

DATA ADEQUACY WORKSHEET

Revision No. 1 Date November 6, 2006

Technical Area: **Water Resources** Project: Panoche Technical Staff: Michael Stephens

Project Manager: James Reede Docket: AFC-06-02 Technical Senior: Paul Richins

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (h) (4)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	5.5-28; 5.5.8.2.2 October 30, 2006 Supplement	~~No~~ Yes	~~The permit schedule is much too vague to comply with the requirement. Please provide a schedule for permits with real calendar dates based on the most current project schedule information.~~