

Memorandum

Date: September 5, 2008
Telephone: (916) 654-4996

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

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

Subject: **GWF TRACY COMBINED CYCLE POWER PLANT PROJECT, REVISED DATA ADEQUACY RECOMMENDATION (08-AFC-7)**

Staff's August 14, 2008 initial data adequacy review of the GWF Tracy Combined Cycle Power Plant (GWF Tracy) Application for Certification (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 7 of 23 areas: Air Quality, Biological Resources, Cultural Resources, Paleontological Resources, Traffic and Transportation, Transmission System Design (Engineering), and Water Resources. On September 3, 2008, GWF Energy, LLC, provided a draft AFC Supplement to staff for review. Staff has reviewed the supplemental information and believes the AFC now meets the above-listed requirements in all seven of the previously deficient technical disciplines. The applicant formally filed one hundred and twenty-five copies of the AFC Supplement on September 5, 2008. Attached is a summary table and revised data adequacy worksheets for the seven technical disciplines previously determined to be data inadequate, reflecting staff's determination that the supplemental information submitted by GWF Energy, LLC, satisfies the data deficiencies specified by the California Energy Commission at the August 27, 2008 Business Meeting.

On June 30, 2008, GWF Energy, LLC, submitted an AFC to the Energy Commission to modify the existing Tracy Peaker Plant (TPP) (01-AFC-16), a nominal 169-megawatt (MW) simple-cycle power plant, by converting the facility into a combined-cycle power plant with a new nominal generating capacity of 314 MW. The Energy Commission licensed the existing facility on July 17, 2002; it began commercial operation on June 1, 2003. The proposed project would occupy a 16.38-acre, fenced site within the existing GWF-owned 40-acre parcel in an unincorporated portion of San Joaquin County immediately southwest of Tracy, California, and approximately 20 miles southwest of Stockton, California.

At the Energy Commission Business Meeting on September 10, 2008, I will recommend that the Energy Commission accept the GWF Tracy Combined Cycle Power Plant AFC with the supplemental information as complete, and request that a Committee be appointed. If you have any questions, please call Christopher Meyer, staff's Project Manager, at (916) 653-1639.

Attachments

DOCKET	
08-AFC-7	
DATE	SEP 05 2008
RECD.	SEP 05 2008

Attachment A
Overview of Energy Commission Staff's
Revised Data Adequacy Determination
GWF Tracy Combined Cycle Power Plant Project
08-AFC-7

Technical Area	Attachment B Page No.	Adequate ?
AIR QUALITY.....	5	<u>YES</u> NO
BIOLOGICAL RESOURCES	11	<u>YES</u> NO
CULTURAL RESOURCES	20	<u>YES</u> NO
PALEONTOLOGICAL RESOURCES	26	<u>YES</u> NO
TRAFFIC AND TRANSPORTATION	29	<u>YES</u> NO
TRANSMISSION SYSTEM DESIGN.....	33	<u>YES</u> NO
WATER RESOURCES.....	37	<u>YES</u> NO

ATTACHMENT B

**ENERGY COMMISSION STAFF'S
Data Adequacy Determination
Revised to Reflect AFC Supplement**

**GWF Tracy Combined Cycle Power Plant Project
08-AFC-7**

September 5, 2008

Adequacy Issue: Adequate Inadequate
 Technical Area: Air Quality
 Project Manager: Christopher Meyer

DATA ADEQUACY WORKSHEET
 Project: GWF Tracy Combined Cycle Power Plant
 Docket: 08-AFC-7

Revision No. 1 Date September 5, 2008
 Technical Staff: Brewster Birdsall
 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.	Sections 2.2.1 and 2.2.2 Section 5.1.1, p. 5.1-1 Section 5.1.4.3 pp. 5.1-22 to 25 Section 5.1.6, p. 5.1-40	Yes	
Appendix B (g) (8) (A)	The information necessary for the air pollution control district where the project is located to complete a Determination of Compliance.	<u>Notice of Receipt of Complete Applications from San Joaquin Valley Air Pollution Control District dated August 22, 2008.</u>	<u>Yes No</u>	Letter of completeness from San Joaquin Valley Air Pollution Control District. District application forms were dated June 26, 2008. SJVAPCD Rule 2201, Section 5.8.3 requires the District to notify the CEC of completeness within 20 days of receipt of the AFC.
Appendix B (g) (8) (B)	The heating value and chemical characteristics of the proposed fuels, the stack height and diameter, the exhaust velocity and temperature, the heat rate and the expected capacity factor of the proposed facility.	Section 2.2.2 Table 5.1-8 pp. 5.1-12 and 13 Appendix 5.1C Table 5.1C-3	Yes	
Appendix B (g) (8) (C)	A description of the control technologies proposed to limit the emission of criteria pollutants.	Section 2.2.10 pp. 2-11 to 12 Section 5.1.6.2.3 pp. 5.1-42 to 44	Yes	
Appendix B (g) (8) (D)	A description of the cooling system, the estimated cooling tower drift rate, the rate of water flow through the cooling tower, and the maximum concentrations of total dissolved solids.	Section 2.2.7 pp. 2-8 to 2-10 p. 5.1-13	Yes	

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 1 Date September 5, 2008

Technical Area: Air Quality

Project: GWF Tracy Combined Cycle Power Plant

Technical Staff: Brewster Birdsall

Project Manager: Christopher Meyer

Docket: 08-AFC-7

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) (E)	The emission rates of criteria pollutants and greenhouse gases (CO ₂ , CH ₄ , N ₂ O, and SF ₆) from the stack, cooling towers, fuels and materials handling processes, delivery and storage systems, and from all on-site secondary emission sources.	Table 5.1-10 pp. 5.1-13 and 14 Table 5.1-11, p. 5.1-14 Table 5.1-13, p. 5.1-19 Table 5.1-14, p. 5.1-21	Yes	
Appendix B (g) (8) (F)(i)	A description of typical operational modes, and start-up and shutdown modes for the proposed project, including the estimated frequency of occurrence and duration of each mode, and estimated emission rate for each criteria pollutant during each mode.	Section 5.1.4.1.3 pp. 5.1-10 to 11 Table 5.1-6 Table 5.1-10, p. 5.1-14 Appendix 5.1B Tables 5.1B-2 to 9	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 5.1.4.1.2 pp. 5.1-9 to 10 Table 5.1-5 Appendix 5.1B Table 5.1B-1	Yes	
Appendix B (g) (8) (G)	The ambient concentrations of all criteria pollutants for the previous three years as measured at the three Air Resources Board certified monitoring stations located closest to the project site, and an analysis of whether this data is representative of conditions at the project site. The applicant may substitute an explanation as to why information from one, two, or all stations is either not available or unnecessary.	Section 5.1.3 Tables 5.1-3, p. 5.1-5	Yes	

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 1 Date September 5, 2008

Technical Area: Air Quality

Project: GWF Tracy Combined Cycle Power Plant

Technical Staff: Brewster Birdsall

Project Manager: Christopher Meyer

Docket: 08-AFC-7

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)	One year of meteorological data collected from either the Federal Aviation Administration Class 1 station nearest to the project or from the project site, or meteorological data approved by the California Air Resources Board or the local air pollution control district.	Section 5.1.4.3.1, p. 5.1-16 Appendix 5.1C On CD <u>AFC Supplement A with copy of Feb 2008 Dispersion Modeling Protocol</u>	<u>Yes</u> No	Air Dispersion Modeling Protocol that demonstrates that one year of data from Modesto has been approved by the local air district, given that four years are available on air district website.
Appendix B (g) (8) (H) (i)	If the data is collected from the project site, the applicant shall demonstrate compliance with the requirements of the U.S. Environmental Protection Agency document entitled "On-Site Meteorological Program Guidance for Regulatory Modeling Applications" (EPA - 450/4-87-013 (August 1995)), which is incorporated by reference in its entirety.	Not applicable	Yes	
Appendix B (g) (8) (H) (ii)	The data shall include quarterly wind tables and wind roses, ambient temperatures, relative humidity, stability and mixing heights, upper atmospheric air data, and an analysis of whether this data is representative of conditions at the project site.	Appendix 5.1C Tables 5.1C-10a to 10d Figures 5.1C-1a to 1e On CD	Yes	
Appendix B (g) (8) (I)	An evaluation of the project's direct and cumulative air quality impacts, consisting of the following:	See below		

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 1 Date September 5, 2008

Technical Area: Air Quality

Project: GWF Tracy Combined Cycle Power Plant

Technical Staff: Brewster Birdsall

Project Manager: Christopher Meyer

Docket: 08-AFC-7

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 criteria pollutant impacts of project construction activities on ambient air quality conditions, including fugitive dust (PM10) emissions from grading, excavation and site disturbance, as well as the combustion emissions [nitrogen oxides (NOx), sulfur dioxide (SO ₂), carbon monoxide (CO), and particulate matter less than 10 microns in diameter (PM10) and particulate matter less than 2.5 microns in diameter (PM2.5)] from construction-related equipment;	Section 5.1.4.3.2 Section 5.1.4.3.3 Table 5.1-15, p. 5.1-22 Appendix 5.1C Tables 5.1C-7 to 9 Figures 5.1C-4 and 5 On CD	Yes	
Appendix B (g) (8) (I) (ii)	A screening level air quality modeling analysis, or a more detailed modeling analysis if so desired by the applicant, of the direct criteria pollutant (NOx, SO ₂ , CO, PM10, and PM2.5) 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 5.1.4.3.2 Section 5.1.4.3.3 Table 5.1-17, p. 5.1-23 Appendix 5.1C Tables 5.1C-3 to 6 Figures 5.1C-2 and 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 5.1.7 <u>AFC Supplement A with copy of Feb 2008 Dispersion Modeling Protocol</u>	<u>Yes</u> No	Air Dispersion Modeling Protocol that the applicant proposes to use for cumulative modeling

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 1 Date September 5, 2008

Technical Area: Air Quality

Project: GWF Tracy Combined Cycle Power Plant

Technical Staff: Brewster Birdsall

Project Manager: Christopher Meyer

Docket: 08-AFC-7

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) (iv)	An air dispersion modeling analysis of the impacts of the initial commissioning phase emissions on state and federal ambient air quality standards for NO _x , SO ₂ , CO, PM ₁₀ , and PM _{2.5} .	Section 5.1.4.3.2 Section 5.1.4.3.3 Table 5.1-16, p. 5.1-23 Appendix 5.1C Tables 5.1C-1 and 2 On CD	Yes	
Appendix B (g) (8) (J)	If an emission offset strategy is proposed to mitigate the project's impacts under subsection (g)(1), provide the following information:	See below		
Appendix B (g) (8) (J) (i)	The quantity of offsets or emission reductions that are needed to satisfy air permitting requirements of local permitting agencies (such as the air district), state and federal oversight air agencies, and the California Energy Commission. Identify by criteria air pollutant, and if appropriate, greenhouse gas; and	Section 5.1.6.2.1 Table 5.1-23	Yes	
Appendix B (g) (8) (J) (ii)	Potential offset sources, including location, and quantity of emission reductions;	Section 5.1.6.2.1 pp. 5.1-41 and 42 Table 5.1-23	Yes	
Appendix B (g) (8) (K)	A detailed description of the mitigation, if any, which an applicant may propose, for all projects impacts from criteria pollutants that currently exceed state or federal ambient air quality standards, but are not subject to offset requirements under the district's new source review rule.	Section 5.1.6.1 Section 5.1.6.2 pp. 5.1-41 and 42 Table 5.1-23	Yes	

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 1 Date September 5, 2008

Technical Area: Air Quality

Project: GWF Tracy Combined Cycle Power Plant

Technical Staff: Brewster Birdsall

Project Manager: Christopher Meyer

Docket: 08-AFC-7

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 (i) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	Section 5.1.5 Table 5.1-19 Table 5.1-20 Table 5.1-21	Yes	
Appendix B (i) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Section 5.1.5 Table 5.1-19 Table 5.1-20 Table 5.1-21	Yes	
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and also provide the name of the official who will serve as a contact person for Commission staff.	Section 5.1.8 Table 5.1-25	Yes	
Appendix B (i) (3)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Section 5.1.9 p. 5.1-45	Yes	

Adequacy Issue: Adequate Inadequate
 Technical Area: Biological Resources
 Project Manager: Christopher Meyer

DATA ADEQUACY WORKSHEET

Revision No. 1 Date September 5, 2008
 Technical Staff: Misa Ward
 Technical Senior: Rick York

Project: GWF Tracy Combined Cycle Power Plant
 Docket: 08-AFC-7

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (1)	...provide a discussion of the existing site conditions, the expected direct, indirect and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation.	Existing site conditions: Vol. 1, pg. 5.2-7 to 5.2-14, Section 5.2.3.1 Direct, indirect, and cumulative impacts: Vol. 1, pgs. 5.-22 to 5.2-30, Section 5.2.4 Mitigation measures: Vol. 1, pgs. 5.2-30 to 5.2-31, Section 5.2.6 Monitoring plans: Vol. 1, pgs. 5.2-28 & 5.2-30 to 5.2-31, Section 5.2.6	Yes Yes Yes Yes	
Appendix B (g) (13) (A)	A regional overview and discussion of terrestrial and aquatic biological resources, with particular attention to sensitive biological resources within ten (10) miles of the project. Include a map at a scale of 1:100,000 (or other suitable scale) showing sensitive biological resource location(s) in relation to the project site and related facilities and any boundaries of a local Habitat Conservation Plan or similar open space land use plan or designation. Sensitive biological resources include the following:	Regional overview: Vol. 1, pgs. 5.2-7 to 5.2-8, Section 5.2.3.1 Regional vicinity map: Vol. 1, Figs. 5.2-1 to 5.2-6	Yes Yes	
Appendix B (g) (13) (A) (i)	species listed under state or federal Endangered Species Acts;	Vol. 1, pgs. 5.2-14 to 5.2-22, Section 5.2.3.4, Tables 5.2-4; Vol. 2, Appendix 5.2B	Yes	
Appendix B (g) (13) (A) (ii)	resources defined in sections 1702(q) and (v) of Title 20 of the California Code of Regulations;	Vol. 1, pgs. 5.2-14 to 5.2-22, Section 5.2.3.4, Tables 5.2-4; Vol. 2, Appendix 5.2B	Yes	
Appendix B (g) (13) (A) (iii)	species identified as state Fully Protected;	Vol. 1, pgs. 5.2-3 & 5.2-4, Table 5.2-1	Yes	

Adequacy Issue: Adequate Inadequate
 Technical Area: Biological Resources
 Project Manager: Christopher Meyer

DATA ADEQUACY WORKSHEET

Revision No. 1 Date September 5, 2008
 Project: GWF Tracy Combined Cycle Power Plant Technical Staff: Misa Ward
 Docket: 08-AFC-7 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) (iv)	species covered by Migratory Bird Treaty Act;	Vol. 1, pg. 5.2-29, Section 5.2.4.3.4	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	Vol. 1, pgs. 5.2-14 to 5.2-22, Section 5.2.3.4, Tables 5.2-4; Vol. 2, Appendix 5.2B	Yes	
Appendix B (g) (13) (A) (vi)	fish and wildlife species that have commercial and/or recreational value.	<u>AFC Supplement A</u>	<u>Yes No</u>	Please include a discussion of any such species in the project vicinity, potential impacts, and mitigation.
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:	Actually observed: Vol. 1, pgs. 5.2-8 to 5.2-13, Tables 5.2-2 & 5.2-3 Potential to occur: Vol. 1, pgs. 5.2-14 to 5.2-22, Section 5.2.3.4, Tables 5.2-4, Figs. 5.2-1 to 5.2-6; Vol. 2, Appendix 5.2B	Yes Yes	
Appendix B (g) (13) (B) (i)	Detailed maps at a scale of 1:6,000 or color aerial photographs taken at a recommended scale of 1 inch equals 500 feet (1:6,000) with a 30 percent overlap that show the proposed project site and related facilities, biological resources including, but not limited to, those found during project-related field surveys and in records from the California Natural Diversity Database, and the associated areas where biological surveys were conducted. Label the biological resources and survey areas as well as the project facilities;	Vol. 1, Figs. 5.2-1, 5.2-2, 5.2-5 & 5.2-6	Yes	

Adequacy Issue: Adequate Inadequate
 Technical Area: Biological Resources
 Project Manager: Christopher Meyer

DATA ADEQUACY WORKSHEET

Revision No. 1 Date September 5, 2008
 Project: GWF Tracy Combined Cycle Power Plant Technical Staff: Misa Ward
 Docket: 08-AFC-7 Technical Senior: Rick York

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (13) (B) (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		N/A	
Appendix B (g) (13) (B) (iii)	An aerial photo or wetlands delineation maps at a scale of (1:2,400) showing any potential jurisdictional and non-jurisdictional wetlands delineated out to 250 feet from the edge of disturbance if wetlands occur within 250 feet of the project site and/or related facilities that would be included with the US Army Corps of Engineers 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.		N/A	
Appendix B (g) (13) (C)	A discussion of the biological resources at the proposed project site and related facilities. Related facilities include, but are not limited to, laydown and parking areas, gas and water supply pipelines, transmission lines, and roads. The discussion shall address the distribution of vegetation community types, denning or nesting sites, population concentrations, migration corridors, breeding habitats, and other appropriate biological resources including the following:	--	--	
Appendix B (g) (13) (C) (i)	A list of all the species actually observed;	Vol. 1, pgs. 5.2-8 to 5.2-13, Table 5.2-2 & Table 5.2-3	Yes	

Adequacy Issue: Adequate Inadequate
 Technical Area: Biological Resources
 Project Manager: Christopher Meyer

DATA ADEQUACY WORKSHEET

Revision No. 1 Date September 5, 2008
 Project: GWF Tracy Combined Cycle Power Plant Technical Staff: Misa Ward
 Docket: 08-AFC-7 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) (ii)	A list of sensitive species and habitats with a potential to occur (as defined in (A) above); and	Vol. 1, pgs. 5.2-14 to 5.2-22, Section 5.2.3.4, Tables 5.2-4, Figs. 5.2-1 to 5.2-6; Vol. 2, Appendix 5.2B	Yes	
Appendix B (g) (13) (C) (iii)	If cooling water is taken directly from or discharged to a surface water feature source, include a description of the intake structure, screens, water volume, intake velocity hydraulic zone field of influence, and the thermal plume dispersion area as depicted in response to B(ii) above. Describe the thermal plume size and dispersion under high and low tides, and in response to local currents and seasonal changes. Provide a discussion of the aquatic habitats, biological resources, and critical life stages found in these affected waters. For repower projects that anticipate no change in cooling water flow, this information shall be provided in the form of the most recent federal Clean Water Act 316(a) and (b) studies of entrainment and impingement impacts that has been completed within the last five (5) years. For new projects or repower projects proposing to use once-through cooling and anticipating an increase in cooling water flow, provide a complete impingement and entrainment analysis per guidance in (D)(ii), below.		N/A	

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 1 Date September 5, 2008

Technical Area: **Biological Resources**

Project: GWF Tracy Combined Cycle Power Plant

Technical Staff: Misa Ward

Project Manager: Christopher Meyer

Docket: 08-AFC-7

Technical Senior: Rick York

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (13) (D)	A description and results of all field studies and seasonal surveys used to provide biological baseline information about the project site and associated facilities. Include copies of the California Natural Diversity Database records and field survey forms completed by the applicant's biologist(s). Identify the date(s) the surveys were completed, methods used to complete the surveys, and the name(s) and qualifications of the biologists conducting the surveys. Include:	Survey methods & results: Vol. 1, pgs. 5.2-9 & 5.2-12, Section 5.2.3.2 CNDDDB records: Vol. 2, Appendix 5.2B Resumes: Vol. 2, Appendix 5.2A	Yes Yes Yes	
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;	Protocol surveys: Vol. 1, pg. 5.2-15, Section 5.2.3.4.1 <u>AFC Supplement A</u> Appropriate season: Vol. 1, pg. 5.2-8 & 5.2-15 <u>AFC Supplement A</u>	<u>Yes No</u> <u>Yes No</u>	Please contact the California Department of Fish and Game (CDFG) to determine whether a protocol-level burrowing owl survey is necessary for this project and submit a report of conversation. Please ask CDFG to state which additional seasons, if any, are required for the above protocol-level survey, and submit a report of conversation.

Adequacy Issue: Adequate Inadequate
 Technical Area: Biological Resources
 Project Manager: Christopher Meyer

DATA ADEQUACY WORKSHEET

Revision No. 1 Date September 5, 2008
 Project: GWF Tracy Combined Cycle Power Plant Technical Staff: Misa Ward
 Docket: 08-AFC-7 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		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.		N/A	
Appendix B (g) (13) (E)	Impacts discussion of the following:	--	--	

Adequacy Issue: Adequate Inadequate
 Technical Area: Biological Resources
 Project Manager: Christopher Meyer

DATA ADEQUACY WORKSHEET

Revision No. 1 Date September 5, 2008
 Project: GWF Tracy Combined Cycle Power Plant Technical Staff: Misa Ward
 Docket: 08-AFC-7 Technical Senior: Rick York

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (13) (E) (i)	all impacts (direct, indirect, and cumulative) to biological resources from project site preparation, construction activities, plant operation, maintenance, and closure. Discussion shall also address sensitive species habitat impacts from cooling tower drift and air emissions;	Impacts: Vol.1, pgs. 5.2-22 to 5.2-30, Sections 5.2.4 & 5.2.5 Air emissions impacts: Vol. 1, pg. 5.2-26	Yes 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		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.		N/A	
Appendix B (g) (13) (F)	A discussion of all feasible mitigation measures including, but not limited to the following:	--	--	
Appendix B (g) (13) (F) (i)	All measures proposed to avoid and/or reduce adverse impacts to biological resources;	Vol. 1, pgs. 5.2-30 & 5.2-31, Section 5.2.6	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;	Vol. 1, pg. 5.1-30, Section 5.2.4.6, pg. 5.2-31, Section 5.2.7	Yes	

Adequacy Issue: Adequate Inadequate
 Technical Area: Biological Resources
 Project Manager: Christopher Meyer

DATA ADEQUACY WORKSHEET

Revision No. 1 Date September 5, 2008
 Project: GWF Tracy Combined Cycle Power Plant Technical Staff: Misa Ward
 Docket: 08-AFC-7 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) (iii)	Design features to better disperse or eliminate a thermal discharge;		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		N/A	
Appendix B (g) (13) (F) (v)	Educational programs to enhance employee awareness during construction and operation to protect biological resources.	Vol. 1, pg. 5.2-30, Section 5.2.6	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.	Vol. 1, pg. 5.2-30, Section 5.2.6	Yes	
Appendix B (g) (13) (H)	Submit copies of any preliminary correspondence between the project applicant and state and federal resource agencies regarding whether federal or state permits from other agencies such as the U. S. Fish and Wildlife Service (USFWS), the National Marine Fisheries Service, the U.S. Army Corps of Engineers, the California Department of Fish and Game (CDFG), and the Regional Water Quality Control Board will be required for the proposed project.	<u>AFC Supplement A</u>	<u>Yes No</u>	Please contact the agencies in Table 5.2-6 and discuss potential biological resource concerns, impacts, mitigation, whether separate local, state, or federal permits will be required, and submit records of conversations.

Adequacy Issue: Adequate Inadequate
 Technical Area: Biological Resources
 Project Manager: Christopher Meyer

DATA ADEQUACY WORKSHEET

Revision No. 1 Date September 5, 2008
 Project: GWF Tracy Combined Cycle Power Plant Technical Staff: Misa Ward
 Docket: 08-AFC-7 Technical Senior: Rick York

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (i) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	Vol. 1, pgs. 5.2-3 to 5.2-5, 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.	Vol. 1, pg. 5.2-31, Table 5.2-6	Yes	
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and also provide the name of the official who will serve as a contact person for Commission staff.	Vol. 1, pg. 5.2-31, Table 5.2-6 <u>AFC Supplement A</u>	<u>Yes No</u>	The contact information appears to be out of date; please update the table with the current, staff-level biologists in the project region for the U.S. Fish and Wildlife Service and CDFG (and county if needed).
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.	Vol. 1, pg. 5.2-31	Yes	

Adequacy Issue: Adequate Inadequate
 Technical Area: Cultural Resources
 Project Manager: Christopher Meyer

DATA ADEQUACY WORKSHEET

Revision No. 1 Date September 5, 2008
 Project: GWF Tracy Combined Cycle Power Plant Technical Staff: Beverly E. Bastian
 Docket: 08-AFC-7 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: Vol. 1, p. 2-3 impacts due to project: Vol. 1, p. 5.3-1 mitigation measures for known impacts: effectiveness of the proposed measures any monitoring plans proposed to verify the effectiveness of the mitigation	Yes Yes N/A N/A N/A	
Appendix B (g) (2) (A)	A summary of the ethnology, prehistory, and history of the region with emphasis on the area within no more than a 5-mile radius of the project location.	summary of the ethnology, prehistory, and history: Vol. II, App. 1A, CD of Tracy Peaker Project AFC, 2001	Yes	

Adequacy Issue: Adequate Inadequate
 Technical Area: Cultural Resources
 Project Manager: Christopher Meyer

DATA ADEQUACY WORKSHEET

Revision No. 1 Date September 5, 2008
 Technical Staff: Beverly E. Bastian
 Technical Senior: Rick York

Project: GWF Tracy Combined Cycle Power Plant
 Docket: 08-AFC-7

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (2) (B)	<p>The results of a literature search to identify cultural resources within an area not less than a 1-mile radius around the project site and not less than one-quarter (0.25) mile on each side of the linear facilities. Identify any cultural resources listed pursuant to ordinance by a city or county, or recognized by any local historical or archaeological society or museum. Literature searches to identify the above cultural resources must be completed by, or under the direction of, individuals who meet the Secretary of the Interior's Professional Standards for the technical area addressed.</p> <p>Copies of California Department of Parks and Recreation (DPR) 523 forms (Title 14 CCR §4853) shall be provided for all cultural resources (ethnographic, architectural, historical, and archaeological) identified in the literature search as being 45 years or older or of exceptional importance as defined in the National Register Bulletin Guidelines, (36CFR60.4(g)). A copy of the USGS 7.5' quadrangle map of the literature search area delineating the areas of all past surveys and noting the California Historical Resources Information System (CHRIS) identifying number shall be provided. Copies also shall be provided of all technical reports whose survey coverage is wholly or partly within .25 mile of the area surveyed for the project under Section (g)(2)(C), or which report on any archaeological excavations or architectural surveys within the literature search area.</p>	<p>literature searches: Vol. I, pp. 5.3-6-5.3-9</p> <p>cultural resources listed under a city or county ordinance: <u>AFC Supplement A</u></p> <p>cultural resources recognized by local societies: <u>AFC Supplement A</u></p> <p>names/quals for lit searchers/directors: Vol. II, App. 5.3D</p> <p>DPR 523s for known resources: Vol. II, App. 5.3C</p> <p>map of lit search area with past surveys and CHRIS #s: Vol. II, App. 5.3E, fig.</p> <p>CHRIS reports: Vol. II, App. 5.3C (partial submission) <u>AFC Supplement A</u></p>	<p>Yes</p> <p><u>Yes No</u></p> <p><u>Yes No</u></p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p><u>Yes No</u></p>	<p>Please contact San Joaquin County to identify cultural resources listed per local ordinance that are located within a one-mile radius of the proposed plant site, and incorporate and provide the results in the technical report and the AFC.</p> <p>Please contact local historical and archaeological societies to identify recognized local cultural resources that are located within a one-mile radius of the proposed plant site, and incorporate and provide the results in the technical report and the AFC.</p> <p>Please provide a copy, under confidential cover, of one CHRIS technical report, # 3559, whose survey coverage is within 0.25 mile of the project site, and copies of 11 additional technical reports whose survey coverage is within 0.25 miles of the three transmission line segments that would be reconducted, including reports #'s 716, 734 (1977), 810, 4182, 4216, 4501, 5622, 5625, 6263, 6577, and 6579 (listed in Table 5.3-4).</p>

Adequacy Issue: Adequate Inadequate
 Technical Area: Cultural Resources
 Project Manager: Christopher Meyer

DATA ADEQUACY WORKSHEET

Revision No. 1 Date September 5, 2008
 Project: GWF Tracy Combined Cycle Power Plant Technical Staff: Beverly E. Bastian
 Docket: 08-AFC-7 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)	<p>The results of new surveys or surveys less than 5 years old shall be provided if survey records of the area potentially affected by the project are more than five (5) years old. Surveys to identify new cultural resources must be completed by (or under the direction of) individuals who meet the Secretary of the Interior's Professional Standards for the technical area addressed.</p> <p>New pedestrian archaeological surveys shall be conducted inclusive of the project site and project linear facility routes, extending to no less than 200' around the project site, substations and staging areas, and to no less than 50' to either side of the right-of-way of project linear facility routes. New historic architecture field surveys in rural areas shall be conducted inclusive of the project site and the project linear facility routes, extending no less than .5 mile out from the proposed plant site and from the routes of all above-ground linear facilities. New historic architecture field surveys in urban and suburban areas shall be conducted inclusive of the project site, extending no less than one parcel's distance from all proposed plant site boundaries. New historic architecture field reconnaissance ("windshield survey") in urban and suburban areas shall be conducted along the routes of all linear facilities to identify, inventory, and characterize structures and districts that appear to be older than 45 years or that are exceptionally significant, whatever their age.</p> <p>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).</p>	<p>names/quals for archaeological surveyors or directors: Vol. II, App. 5.3D</p> <p>names/quals for historical architecture surveyors or directors:</p> <p>survey coverage, archaeology: Vol. I, pp. 5.3-9-5.3-10</p> <p>survey coverage, architecture:</p> <p>tech report for new archaeological survey: <u>AFC Supplement A</u></p> <p>tech report for new historical architecture survey:</p>	<p>Yes</p> <p>N/A</p> <p>Yes</p> <p>N/A</p> <p><u>Yes No</u></p> <p>N/A</p>	<p>Please provide a confidential technical report of the new cultural resources survey of the three transmission line segments that would have to be reconducted to accommodate this project's output.</p>

Adequacy Issue: Adequate Inadequate
 Technical Area: Cultural Resources
 Project Manager: Christopher Meyer

DATA ADEQUACY WORKSHEET

Revision No. 1 Date September 5, 2008
 Project: GWF Tracy Combined Cycle Power Plant Technical Staff: Beverly E. Bastian
 Docket: 08-AFC-7 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) 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:	AFC includes tech report data, unless confidential: Vol. 1, sec. 5.3	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: <u>AFC Supplement A</u> lit-search results: <u>AFC Supplement A</u>	<u>Yes</u> No <u>Yes</u> No	Please provide the summary and literature search results in the technical report of the new cultural resources survey. Please update the literature search results to include information obtained from local agencies and local historical and archaeological organizations.
Appendix B (g) (2) (C) (ii)	The survey procedures and methodology used to identify cultural resources and a discussion of the cultural resources identified by the survey;	archaeological methodology: <u>AFC Supplement A</u> historical architecture methodology:	<u>Yes</u> No N/A	Please provide a description of the survey procedures and methods in the technical report of the new cultural resources survey.
Appendix B (g) (2) (C) (iii)	Copies of all new and updated DPR 523(A) forms. If a cultural resource may be impacted by the project, also include the appropriate DPR 523 detail form for each such resource;	archaeology forms: architecture forms:	N/A N/A	
Appendix B (g) (2) (C) (iv)	A map at a scale of 1:24,000 U.S. Geological Survey quadrangle depicting the locations of all previously known and newly identified cultural resources compiled through the research required by Appendix B (g)(2)(B) and Appendix B (g)(2)(C) (ii); and	archaeology and architecture map: <u>AFC Supplement A</u>	<u>Yes</u> No	Please provide a copy of the USGS 7.5' quadrangle map(s) of the literature search area, under confidential cover, depicting the locations of all known cultural resources identified in the two literature searches and all new cultural resources identified in the new survey of the three transmission line segments. The map should additionally demarcate the new area surveyed, per Archaeological Resource Management Report format requirements.

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 1 Date September 5, 2008

Technical Area: Cultural Resources

Project: GWF Tracy Combined Cycle Power Plant

Technical Staff: Beverly E. Bastian

Project Manager: Christopher Meyer

Docket: 08-AFC-7

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) (v)	The names and qualifications of the cultural resources specialists who contributed to and were responsible for literature searches, surveys, and preparation of the technical report.	names/quals for archaeologists: Vol. II, App. 5.3D names/quals for architectural historians:	Yes N/A	
Appendix B (g) (2) (D)	Provide a copy of your request to the Native American Heritage Commission (NAHC) for information on Native American sacred sites and lists of Native Americans interested in the project vicinity, and copies of any correspondence received from the NAHC. Notify the Native Americans on the NAHC list about the project, including a project description and map. Provide a copy of all correspondence sent to Native American individuals and groups listed by the NAHC and copies of all responses. Provide a written summary of any oral responses.	NAHC request: Vol. II, App. 5.3A NAHC response: Vol. II, App. 5.3A letters sent to Native Americans: Vol. II, App. 5.3A Native American consultation: Vol. II, App. 5.3A summary of oral responses from Native Americans: Vol. II, App. 5.3A	Yes Yes Yes Yes Yes	
Appendix B (g) (2) (E)	Include in the discussion of proposed mitigation measures required by subdivision (g)(1):	-	-	-
Appendix B (g) (2) (E) (i)	A discussion of measures proposed to mitigate project impacts to known cultural resources;	mitigation measures for known impacts:	N/A	
Appendix B (g) (2) (E) (ii)	A set of contingency measures proposed to mitigate potential impacts to previously unknown cultural resources and any unanticipated impacts to known cultural resources; and	contingency mitigation measures: Vol. I, pp. 5.3-12-5.3-14	Yes	
Appendix B (g) (2) (E) (iii)	Educational programs to enhance employee awareness during construction and operation to protect cultural resources.	worker education: Vol. I, p. 5.3-12	Yes	

Adequacy Issue: Adequate Inadequate
 Technical Area: Cultural Resources
 Project Manager: Christopher Meyer

DATA ADEQUACY WORKSHEET

Revision No. 1 Date September 5, 2008
 Project: GWF Tracy Combined Cycle Power Plant Technical Staff: Beverly E. Bastian
 Docket: 08-AFC-7 Technical Senior: Rick York

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (i) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	tables identifying applicable LORS: Vol. 1, Table 5.3-1 explicitly referenced pages: Vol. 1, Table 5.3-1 discussion of applicability of LORS: Vol. 1, Table 5.3-1	Yes Yes Yes	
Appendix B (i) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	tables identifying agencies: Vol. 1, Table 5.3.7	Yes	
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and also provide the name of the official who will serve as a contact person for Commission staff.	official within each agency who will serve as a contact person for the agency: Vol. 1, Table 5.3.7	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 outside permits will be obtained: Vol. 1, p. 5.3-14	Yes	

Adequacy Issue: Adequate Inadequate
 Technical Area: Paleontological Resources
 Project Manager: Christopher Meyer

DATA ADEQUACY WORKSHEET

Revision No. 1 Date September 5, 2008
 Project: GWF Combined Cycle Power Plant Project Technical Staff: Pat Pilling, Ph.D., P.E.
 Docket: 08-AFC-7 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 2.2.1 Section 5.8.3 Section 5.8.4 Section 5.8.5 Section 5.8.6 Appendix G	Yes	
Appendix B (g) (16) (A)	Identification of the physiographic province and a brief summary of the geologic setting, formations, and stratigraphy of the project area. The size of the paleontological study area may vary depending on the depositional history of the region.	Section 5.4.3 Section 5.8.3.1 Section 5.8.3.3.1	Yes	
Appendix B (g) (16) (B)	A discussion of the sensitivity of the project area described in subsection (g)(16)(A) and the presence and significance of any known paleontologic localities or other paleontologic resources within or adjacent to the project. Include a discussion of sensitivity for each geologic unit identified on the most recent geologic map at a scale of 1:24,000. Provide rationale as to why the sensitivity was assigned.	Section 5.8.3.3.1 Section 5.8.3.3.3 Section 5.8.4.2 Appendix G	Yes	
Appendix B (g) (16) (C)	A summary of all local museums, literature searches and field surveys used to provide information about paleontologic resources in the project area described in subsection (g)(16)(A). Identify the dates of the surveys, methods used in completing the surveys, and the names and qualifications of the individuals conducting the surveys.	Section 5.8.1 Section 5.8.3.2 Section 5.8.3.3.2 Appendix G	Yes	

Adequacy Issue: Adequate Inadequate
 Technical Area: Paleontological Resources
 Project Manager: Christopher Meyer

DATA ADEQUACY WORKSHEET

Revision No. 1 Date September 5, 2008
 Project: GWF Combined Cycle Power Plant Project Technical Staff: Pat Pilling, Ph.D., P.E.
 Docket: 08-AFC-7 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) (D)	Information on the specific location of known paleontologic resources, survey reports, locality records, and maps at a scale of 1:24,000, showing occurrences of fossil finds, if known, within a one-mile radius of the project and related facilities shall be included in a separate appendix to the Application and submitted to the Commission under a request for confidentiality, pursuant to Title 20, California Code of Regulations, s 2501 et seq.	Section 5.8.3.3.2 Appendix G <u>AFC Supplement A, confidential filing</u>	<u>Yes</u> No	Please provide a map depicting known paleontological sites within a 1-mile radius of the project site must be submitted for review.
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 5.8.6	Yes	
Appendix B (i) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	Section 5.8.2 Table 5.8-1	Yes	

Adequacy Issue: Adequate Inadequate
 Technical Area: Paleontological Resources
 Project Manager: Christopher Meyer

DATA ADEQUACY WORKSHEET

Revision No. 1 Date September 5, 2008
 Project: GWF Combined Cycle Power Plant Project Technical Staff: Pat Pilling, Ph.D., P.E.
 Docket: 08-AFC-7 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) (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 5.8.2 Table 5.8-1 Appendix G	Yes	
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and also provide the name of the official who will serve as a contact person for Commission staff.	Section 5.8.7 Table 5.8-3	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 5.8.8	Yes	

Adequacy Issue: Adequate Inadequate
 Technical Area: Traffic and Transportation
 Project Manager: Christopher Meyer

DATA ADEQUACY WORKSHEET

Revision No. 1 Date September 5, 2008
 Project: GWF Tracy Combined Cycle Power Plant Technical Staff: James Adams
 Docket: 08-AFC-7 Technical Senior: Paula David

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (1)	...provide a discussion of the existing site conditions, the expected direct, indirect and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation.	PP. 5.12-1 through 12-26 Tables 5.12-1 through 12-11 Figures 5.12-1 through 12-6 Section 5.12	Yes	
Appendix B (g) (5) (A)	A regional transportation setting, on topographic maps (scale of 1:250,000), identifying the project location and major transportation facilities. Include a reference to the transportation element of any applicable local or regional plan.	Figure 5.12-1 Table 5.12-1 Pg. 5.12-6 Section 5.12.2.3	Yes	
Appendix B (g) (5) (B)	If the proposed project including any linear facility is to be located within 20,000 feet of an airport runway that is at least 3,200 feet in actual length, or 5,000 feet of a heliport (or planned or proposed airport runway or an airport runway under construction, that is the subject of a notice or proposal on file with the Federal Aviation Administration), discuss the project's compliance with the applicable sections of the current Federal Aviation Regulation Part 77 – Objects Affecting Navigable Airspace, specifically any potential to obstruct or impede air navigation generated by the project at operation; such as, a thermal plume, a visible water vapor plume, glare, electrical interference, or surface structure height. The discussion should include a map at a scale of 1:24,000 that displays the airport or airstrip runway configuration, the proposed power plant site and related facilities.	Pg. 5.12-15 Section 5.12.3.9 <u>AFC Supplement A</u>	<u>Yes No</u>	Please discuss the project's compliance with the applicable sections of the current Federal Aviation Regulation Part 77 – Objects Affecting Navigable Airspace, specifically any potential to obstruct or impede air navigation generated by the project at operation; such as, a thermal plume, a visible water vapor plume, glare, electrical interference, or surface structure height. The discussion should include a map at a scale of 1:24,000 that displays the airport or airstrip runway configuration, the proposed power plant site and related facilities.

Adequacy Issue: Adequate Inadequate
 Technical Area: Traffic and Transportation
 Project Manager: Christopher Meyer

DATA ADEQUACY WORKSHEET

Revision No. 1 Date September 5, 2008
 Project: GWF Tracy Combined Cycle Power Plant Technical Staff: James Adams
 Docket: 08-AFC-7 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) (5) (C)	An identification, on topographic maps at a scale of 1:24,000, and a description of existing and planned roads, rail lines, (including light rail), bike trails, airports, bus routes serving the project vicinity, pipelines, and canals in the project area affected by or serving the proposed facility. For each road identified, include the following information, where applicable:	Figure 5.12-2 PP. 5.12-7 & 8 Section 5.12.3.1 <u>AFC Supplement A</u>	<u>Yes</u> No	Please show the bus routes that serve the local area on Figure 5.12-2 and discuss what roads are serviced by the "Tracer" paratransit bus. Please discuss the roads identified as access routes.
Appendix B (g) (5) (C) (i)	Road classification and design capacity;	Pg. 5.12-7 & 8 Section 5.12.3.1 <u>AFC Supplement A</u>	<u>Yes</u> No	See comment above.
Appendix B (g) (5) (C) (ii)	Current daily average and peak traffic counts;	PP. 5.12-10 & 11 Table 5.12-3 & 4 <u>AFC Supplement A</u>	<u>Yes</u> No	Please provide current daily average and peak traffic counts for West Schulte Road and access routes.
Appendix B (g) (5) (C) (iii)	Current and projected levels of service before project development, during construction, and during project operation;	PP. 5.12-1 & 12 Tables 5.12-4 & 6 Section 5.12.3.3.1 PP. 5.12-19 & 20 Tables 5.12-8 & 9 Section 5.12.4.3 Pg. 5.12-23 Section 5.12.6.2 <u>AFC Supplement A</u>	<u>Yes</u> No	Please provide current and projected levels of service before project development, during construction, and during project operation for the access routes.
Appendix B (g) (5) (C) (iv)	Weight and load limitations;	PP. 5.12-12 & 13 Section 5.12.3.4 <u>AFC Supplement A</u>	<u>Yes</u> No	Please provide weight and load limitations for the access routes.
Appendix B (g) (5) (C) (v)	Estimated percentage of current traffic flows for passenger vehicles and trucks; and	PP. 5.12-7 & 8 Section 5.12.3.1 <u>AFC Supplement A</u>	<u>Yes</u> No	Please provide estimated percentage of current traffic flows for passenger vehicles and trucks using West Schulte and the access routes.
Appendix B (g) (5) (C) (vi)	An identification of any road features affecting public safety.	Pg. 5.12-22 Section 5.12.4.6	Yes	

Adequacy Issue: Adequate Inadequate
 Technical Area: Traffic and Transportation
 Project Manager: Christopher Meyer

DATA ADEQUACY WORKSHEET

Revision No. 1 Date September 5, 2008
 Project: GWF Tracy Combined Cycle Power Plant Technical Staff: James Adams
 Docket: 08-AFC-7 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) (5) (D)	An assessment of the construction and operation impacts of the proposed project on the transportation facilities identified in subsection (g)(5)(C). Also include anticipated project-specific traffic, estimated changes to daily average and peak traffic counts, levels of service, and traffic/truck mix, and the impact of construction of any facilities identified in subsection (g)(5)(C).	PP. 5.12-22 & 23 Section 5.12.6.1 Table 5.12-9 Section 5.12.4.3	Yes	
Appendix B (g) (5) (E)	A discussion of project-related hazardous materials to be transported to or from the project during construction and operation of the project, including the types, estimated quantities, estimated number of trips, anticipated routes, means of transportation, and any transportation hazards associated with such transport.	PP. 5.12-21 & 22 Section 5.12.4.5 <u>AFC Supplement A</u>	<u>Yes</u> No	Please provide a discussion of project related hazardous materials to be transported to or from the project during operation of the project, including the types, estimated quantities, estimated number of trips, anticipated routes, means of transportation, and any transportation hazards associated with such transport.
Appendix B (i) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	PP. 5.12-1 through 3 Table 5.12-1 Section 5.12.2	Yes	

Adequacy Issue: Adequate Inadequate
 Technical Area: Traffic and Transportation
 Project Manager: Christopher Meyer

DATA ADEQUACY WORKSHEET

Revision No. 1 Date September 5, 2008
 Project: GWF Tracy Combined Cycle Power Plant Technical Staff: James Adams
 Docket: 08-AFC-7 Technical Senior: Paula David

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (i) (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.	PP. 5.12-23 &24 Table 5.12-10 Section 5.12.7	Yes	
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and also provide the name of the official who will serve as a contact person for Commission staff.	PP. 5.12-23 &24 Table 5.12-10 Section 5.12.7	Yes	
Appendix B (i) (3)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Pg. 5.12-24 Section 5.12.8	Yes	

Adequacy Issue: Adequate Inadequate
 Technical Area: Transmission System Design
 Project Manager: Christopher Meyer

DATA ADEQUACY WORKSHEET

Revision No. 1 Date September 5, 2008
 Project: GWF Tracy Combined Cycle Power Plant Technical Staff: Ajoy Guha, P.E.
 Docket: 08-AFC-7 Technical Senior: Mark Hesters

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (h) (2) (A)	A discussion of the need for the additional electric transmission lines, substations, or other equipment, the basis for selecting principal points of junction with the existing electric transmission system, and the capacity and voltage levels of the proposed lines, along with the basis for selection of the capacity and voltage levels.	Section 1.1, Pages 1-1 to 1-3. Section 2.2.5, Page 2-6.	Yes	
Appendix B (h) (2) (B)	A discussion of the extent to which the proposed electric transmission facilities have been designed, planned, and routed to meet the transmission requirements created by additional generating facilities planned by the applicant or any other entity.	Section 2.2.5, Page 2-6. Section 3.1, Page 3-1. Figure 2.1-1.	Yes	

Adequacy Issue: Adequate Inadequate
 Technical Area: Transmission System Design
 Project Manager: Christopher Meyer

DATA ADEQUACY WORKSHEET

Revision No. 1 Date September 5, 2008
 Technical Staff: Ajoy Guha, P.E.
 Technical Senior: Mark Hesters

Project: GWF Tracy Combined Cycle Power Plant
 Docket: 08-AFC-7

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (b) (2) (C)	A detailed description of the design, construction, and operation of any electric transmission facilities, such as power lines, substations, switchyards, or other transmission equipment, which will be constructed or modified to transmit electrical power from the proposed power plant to the load centers to be served by the facility. Such description shall include the width of rights of way and the physical and electrical characteristics of electrical transmission facilities such as towers, conductors, and insulators.	Section 2.2.5, Page 2-6. Section 3.1, Page 3-1. Section 3.2, Pages 3-1 to 3-3. Figures 2.1-4. Figure 3.1-1. Supplement A AFC, September, 2008. <u>Figures 2.1-4, TSE-1b & TSE-1c.</u>	No <u>Yes</u>	Resubmit Figure 2.1-4 for a complete electrical one-line diagram of the proposed GWF Tracy Combined Cycle Power Plant (GWF Tracy) project showing all equipment and outlet lines including the generator step-up transformer (GSU), 115-KV SF6 breaker and disconnect switches on the high side, the 115-KV short overhead line from the GSU high side breaker to the existing GWF Tracy 115 kV switchyard with their respective sizes and/or types for the equipment, overhead conductor and ratings, Provide one-line electrical diagrams showing the pre and post project existing GWF Tracy 115 kV switchyard with the existing generator units, the new 115-KV transmission line outlet to the proposed GWF Tracy project and the existing 115-KV interconnection tie line with changes if any, to the PG&E 115-kV Schulte switching station with the configurations for buses, breakers, disconnect switches, and the lines and their respective sizes and/or ratings. Also provide a one-line electrical diagram showing the pre and post project existing PG&E 115-kV Schulte switching station showing the existing 115-kV generator overhead tie line with changes if any, with the configurations for 115-kV buses, breakers and disconnect switches and their respective ratings including all transmission outlet lines with the changes.

Adequacy Issue: Adequate Inadequate
 Technical Area: Transmission System Design
 Project Manager: Christopher Meyer

DATA ADEQUACY WORKSHEET

Revision No. 1 Date September 5, 2008
 Project: GWF Tracy Combined Cycle Power Plant Technical Staff: Ajoy Guha, P.E.
 Docket: 08-AFC-7 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 3.1, Page 3-1.. Figure 3.1-1. Figure 2.1-1	Yes	
Appendix B (b) (2) (E)	<p>A completed System Impact Study or signed System Impact Study Agreement with the California Independent System Operator and proof of payment. When not connecting to the California Independent System Operator controlled grid, provide the executed System Impact Study agreement and proof of payment to the interconnecting utility.</p> <p>If the interconnection and operation of the proposed project will likely impact an transmission system that is not controlled by the interconnecting utility (or California Independent System Operator), provide evidence of a System Impact Study or agreement and proof of payment (when applicable) with/to the impacted transmission owner or provide evidence that there are no system impacts requiring mitigation.</p>	Section 3.4, Page 3-15. Appendix 3A, System impact study.	Yes	
Appendix B (i) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	Section 2.5.1, Page 2-22 to 2-25. Table 2.5-1.	Yes	

Adequacy Issue: Adequate Inadequate
 Technical Area: Transmission System Design
 Project Manager: Christopher Meyer

DATA ADEQUACY WORKSHEET

Revision No. 1 Date September 5, 2008
 Project: GWF Tracy Combined Cycle Power Plant Technical Staff: Ajoy Guha, P.E.
 Docket: 08-AFC-7 Technical Senior: Mark Hesters

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (i) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Section 2.5.1, Page 2-22 to 2-35. Table 2.5-1.	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.	Sections 2.7 & 2.8-9, Page 2-40	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 2.5.1, Page 2-22 to 2-25.	Yes	

Adequacy Issue: Adequate Inadequate
 Technical Area: Water Resources
 Project Manager: Christopher Meyer

DATA ADEQUACY WORKSHEET

Revision No. 1 Date September 5, 2008
 Project: GWF Tracy Combined Cycle Power Plant Technical Staff: Richard Latteri
 Docket: 08-AFC-7 Technical Senior: Paul Marshall

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (14)	...provide a discussion of the existing site conditions, the expected direct, indirect and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation.	---	---	
Appendix B (g) (14) (A)	All the information required to apply for the following permits, if applicable, including:	---	---	
Appendix B (g) (14) (A) (i)	Waste Discharge Requirements; National Pollutant Discharge Elimination System Permit; and/or a Section 401 Certification or Waiver from the appropriate Regional Water Quality Control Board (RWQCB);	Section 5.15.2.2.2 Section 5.15.4.4 Section 5.15.5	Yes	
Appendix B (g) (14) (A) (ii)	Construction and Industrial Waste Discharge and/or Industrial Pretreatment permits from wastewater treatment agencies;	N/A	---	
Appendix B (g) (14) (A) (iii)	Nationwide Permits and/or Section 404 Permits from the U.S. Army Corps of Engineers; and	N/A	---	
Appendix B (g) (14) (A) (iv)	Underground Injection Control Permit(s) from the U.S. Environmental Protection Agency, California Division of Oil and Gas, and RWQCB.	N/A	---	
Appendix B (g) (14) (B)	A detailed description of the hydrologic setting of the project. The information shall include a narrative discussion and on maps at a scale of 1:24,000 (or appropriate scale approved by staff), describing the chemical and physical characteristics of the following nearby water bodies that may be affected by the proposed project:	---	---	

Adequacy Issue: Adequate Inadequate
 Technical Area: Water Resources
 Project Manager: Christopher Meyer

DATA ADEQUACY WORKSHEET

Revision No. 1 Date September 5, 2008
 Project: GWF Tracy Combined Cycle Power Plant Technical Staff: Richard Latteri
 Docket: 08-AFC-7 Technical Senior: Paul Marshall

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (14) (B) (i)	Ground water bodies and related geologic structures;	Section 5.15.3.1.2 Figure 5.15-2	Yes	
Appendix B (g) (14) (B) (ii)	Surface water bodies;	Section 5.15.3.1.1 Figure 5.15-1	Yes	
Appendix B (g) (14) (B) (iii)	Water inundation zones, such as the 100-year flood plain and tsunami run-up zones;	Section 5.15.3.2	Yes	
Appendix B (g) (14) (B) (iv)	Flood control facilities (existing and proposed); and	N/A	—	
Appendix B (g) (14) (B) (v)	Groundwater wells within ½ mile if the project will include pumping.	N/A	—	
Appendix B (g) (14) (C)	A description of the water to be used and discharged by the project. This information shall include:	—	—	
Appendix B (g) (14) (C) (i)	Source(s) of the primary and back-up water supplies and the rationale for their selection;	Section 5.15.3.4.1 Section 5.15.4.3 <u>AFC Supplement A</u>	<u>Yes No</u>	Please provide a description of the back-up water supply and a discussion of the infrastructure/pipeline required for delivery.
Appendix B (g) (14) (C) (ii)	The expected physical and chemical characteristics of the source and discharge water(s) including identification of both organic and inorganic constituents before and after any project-related treatment. For source waters with seasonal variation, provide seasonal ranges of the expected physical and chemical characteristics. Provide copies of background material used to create this description (e.g., laboratory analysis);	Section 2.2.7.3	Yes	
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;	Sections 5.15.3.4.1 & .2 Table 5.15-4 <u>AFC Supplement A</u>	<u>Yes No</u>	Please provide the average and maximum daily and annual construction water demand for the project.

Adequacy Issue: Adequate Inadequate
 Technical Area: Water Resources
 Project Manager: Christopher Meyer

DATA ADEQUACY WORKSHEET

Revision No. 1 Date September 5, 2008
 Project: GWF Tracy Combined Cycle Power Plant Technical Staff: Richard Latteri
 Docket: 08-AFC-7 Technical Senior: Paul Marshall

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (14) (C) (iv)	A detailed description of all facilities to be used in water conveyance (from primary source to the power plant site), water treatment, and wastewater discharge. Include a water mass balance diagram;	Section 5..15.3.4 Figures 2.1-5a & -5b	Yes	
Appendix B (g) (14) (C) (v)	For all water supplies intended for industrial uses to be provided from public or private water purveyors, a letter of intent or will-serve letter indicating that the purveyor is willing to serve the project, has adequate supplies available for the life of the project, and any conditions or restrictions under which water will be provided. In the event that a will-serve letter or letter of intent can not be provided, identify the most likely water purveyor and discuss the necessary assurances from the water purveyor to serve the project;	Section 5.15.3.4.1 <u>AFC Supplement A</u>	<u>Yes</u> No	Please provide a letter of intent, will-serve letter, or copy of an existing contract from Byron-Bethany Irrigation District indicating that BBID is willing to serve the project, has adequate supplies available for the life of the project, and any conditions or restrictions under which water will be provided.
Appendix B (g) (14) (C) (vi)	For all water supplied which necessitates transfers and/or exchanges at any point, identify all parties and contracts/agreements involved, the primary source for the transfer and/or exchange water (e.g., surface water, groundwater), and provide the status of all appropriate agencies' approvals for the proposed use, environmental impact analysis on the specific transfers and/or exchanges required to obtain the proposed supplies, a copy of any agency regulations that govern the use of the water, and an explanation of how the project complies with the agency regulation(s);	N/A	—	

Adequacy Issue: Adequate Inadequate
 Technical Area: Water Resources
 Project Manager: Christopher Meyer

DATA ADEQUACY WORKSHEET

Revision No. 1 Date September 5, 2008
 Project: GWF Tracy Combined Cycle Power Plant Technical Staff: Richard Latteri
 Docket: 08-AFC-7 Technical Senior: Paul Marshall

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (14) (C) (vii)	Provide water mass balance and heat balance diagrams for both average and maximum flows that include all process and/or ancillary water supplies and wastewater streams. Highlight any water conservation measures on the diagram and the amount that they reduce water demand; and	Figures 2.1-3A – 3F Figures 2.1-5A & 5B	Yes	
Appendix B (g) (14) (C) (viii)	<p>For all projects which have a discharge, provide a copy of the will-serve letter, permit or contract with the public or private entity that will be accepting the wastewater and contact storm water from the project. The letter, permit or contract, if possible, shall identify the discharge volumes and the chemical or physical characteristics under which the wastewater and contact storm water will be accepted.</p> <p>In the event that a will-serve letter, permit, or contract cannot be provided, identify the most likely wastewater/storm water entity and discuss why the applicant was unable to secure the necessary assurances to serve the project's wastewater/storm water needs. Also, discuss the term of the wastewater service to the project, whether the wastewater entity has adequate permit capacity for the volume of wastewater from the project and has adequate permit levels for the chemical/physical characteristics of the project's wastewater and storm water for the life of the project, and any issues or conditions/restrictions the wastewater entity may impose on the project.</p>	Section 5.15.3.4.2 <u>AFC Supplement A</u>	<u>Yes No</u>	<p>Please provide a copy of the will-serve letter, permit or contract with the public or private entity that will be accepting the wastewater and contact storm water from the project. The letter, permit or contract, if possible, shall identify the discharge volumes and the chemical or physical characteristics under which the wastewater and contact storm water will be accepted.</p> <p>In the event that a will-serve letter, permit, or contract cannot be provided, please identify the most likely wastewater/storm water entity and discuss why the applicant was unable to secure the necessary assurances to serve the project's wastewater/storm water needs.</p>
Appendix B (g) (14) (D)	Identify all project elements associated with stormwater drainage, including a description of the following:	—	—	

Adequacy Issue: Adequate Inadequate
 Technical Area: Water Resources
 Project Manager: Christopher Meyer

DATA ADEQUACY WORKSHEET

Revision No. 1 Date September 5, 2008

Project: GWF Tracy Combined Cycle Power Plant Technical Staff: Richard Latteri
 Docket: 08-AFC-7 Technical Senior: Paul Marshall

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (14) (D) (i)	Monthly and/or seasonal precipitation and stormwater runoff and drainage patterns for the proposed site and surrounding area that may be affected by the project's construction and operation;	Section 5.15.3.3 Figures 5.15-3a -- 3d Table 5.15-2	Yes	
Appendix B (g) (14) (D) (ii)	Drainage facilities and the design criteria used for the plant site and ancillary facilities, including but not limited to capacity of designed system, design storm, and estimated runoff;	Section 5.15.3.3.2 Appendix 5.11A	Yes	
Appendix B (g) (14) (D) (iii)	All assumptions and calculations used to calculate runoff and to estimate changes in flow rates between pre- and post construction; and	Appendix 5.11A	Yes	
Appendix B (g) (14) (D) (iv)	A copy of applicable regional and local requirements regulating the drainage systems, and a discussion of how the project's drainage design complies with these requirements.	Section 5.15.2.3 <u>AFC Supplement A</u>	<u>Yes</u> No	Please provide a copy of Chapter 9-1400 of the San Joaquin County Ordinance for the preparation and submittal of a drainage, erosion and sedimentation control plan.
Appendix B (g) (14) (E)	An impacts analysis of the proposed project on water resources and a discussion of conformance with water-related LORS and policy. This discussion shall include:	---	---	
Appendix B (g) (14) (E) (i)	The effects of project demand on the water supply and other users of this source, including, but not limited to, water availability for other uses during construction or after the power plant begins operation, consistency of the water use with applicable RWQCB basin plans or other applicable resource management plans, and any changes in the physical or chemical conditions of existing water supplies as a result of water use by the power plant;	Section 5.15.4.3	Yes	

Adequacy Issue: Adequate Inadequate
 Technical Area: Water Resources
 Project Manager: Christopher Meyer

DATA ADEQUACY WORKSHEET

Revision No. 1 Date September 5, 2008
 Project: GWF Tracy Combined Cycle Power Plant Technical Staff: Richard Latteri
 Docket: 08-AFC-7 Technical Senior: Paul Marshall

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (14) (E) (ii)	If the project will pump groundwater, an estimation of aquifer drawdown based on a computer modeling study shall be conducted by a professional geologist and include the estimated drawdown on neighboring wells within 0.5 mile of the proposed well(s), any effects on the migration of groundwater contaminants, and the likelihood of any changes in existing physical or chemical conditions of groundwater resources shall be provided;	N/A	—	
Appendix B (g) (14) (iii)	The effects of construction activities and plant operation on water quality and to what extent these effects could be mitigated by best management practices;	Section 5.15.5	Yes	
Appendix B (g) (14) (iv)	If not using a zero liquid discharge project design for cooling and process waters, include the effects of the proposed wastewater disposal method on receiving waters, the feasibility of using pre-treatment techniques to reduce impacts, and beneficial uses of the receiving waters. Include an explanation why the zero liquid discharge process is “environmentally undesirable,” or “economically unsound;”	Section 5.15.4.5	Yes	
Appendix B (g) (14) (v)	If using fresh water, include a discussion of the cumulative impacts, alternative water supply sources and alternative cooling technologies considered as part of the project design. Include an explanation of why alternative water supplies and alternative cooling are “environmentally undesirable,” or “economically unsound;”	Section 5.15.4.3 <u>AFC Supplement A</u>	<u>Yes</u> No	Please provide a discussion of the cumulative impacts of the project's use of raw water from the Delta Mendota on downstream users and the availability of an alternative water supply that is not considered fresh inland water. Include an explanation of why alternative water supplies are “environmentally undesirable,” or “economically unsound;”

Adequacy Issue: Adequate Inadequate
 Technical Area: Water Resources
 Project Manager: Christopher Meyer

DATA ADEQUACY WORKSHEET

Revision No. 1 Date September 5, 2008
 Project: GWF Tracy Combined Cycle Power Plant Technical Staff: Richard Latteri
 Docket: 08-AFC-7 Technical Senior: Paul Marshall

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (14) (vi)	The effects of the project on the 100-year flood plain, flooding potential of adjacent lands or water bodies, or other water inundation zones; and	Section 5.15.3.3 Appendix 5.11A	Yes	
Appendix B (g) (14) (vii)	All assumptions, evidence, references, and calculations used in the analysis to assess these effects.	Section 5.15.3.3 Appendix 5.11A	Yes	
Appendix B (i) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	Section 5.15.2 Table 5.15-1	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 5.15.2 Table 5.15-1	Yes	
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and also provide the name of the official who will serve as a contact person for Commission staff.	Table 5.15-4 <u>AFC Supplement A</u>	<u>Yes No</u>	Please provide the name and phone number (if known) of the official who will serve as a contact person for storm water discharge permitting and an official from San Joaquin County who is familiar with the County's drainage, erosion, and sedimentation control plan requirements.

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 1 Date September 5, 2008

Technical Area: **Water Resources**

Project: GWF Tracy Combined Cycle Power Plant

Technical Staff: Richard Latteri

Project Manager: Christopher Meyer

Docket: 08-AFC-7

Technical Senior: Paul Marshall

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (i) (3)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Table 5.15-5	Yes	