

Memorandum

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

Date: September 16, 2009
Telephone: (916) 654-4996

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


Melissa Jones
Executive Director

DOCKET**09-AFC-4**

DATE 9/16/2009

RECD. 9/16/2009

Subject: **CONTRA COSTA GENERATING STATION PROJECT, DATA ADEQUACY
RECOMMENDATION (09-AFC-4)**

On June 30, 2009, Contra Costa Generating Station, LLC filed an Application for Certification (AFC) to construct and operate the Contra Costa Generating Station (CCGS), proposed as a merchant natural gas-fired, combined-cycle electrical generating facility rated at a nominal generating capacity of 624 megawatts (MW). The project is located in Oakley, eastern Contra Costa County. If approved, site construction activities would commence in the first quarter of 2011, and take approximately 33 months. It is currently anticipated that the project would be on line and in commercial service by the fourth quarter of 2013.

On August 12, 2009, the Energy Commission determined that the CCGS AFC did not meet all the requirements listed in Title 20, section 1704, and Division 2, Chapter 5, Appendix B of the California Code of Regulations for the 12-month process. Specifically, the AFC was deficient in five of the 23 technical areas reviewed: air quality, cultural resources, project overview, transmission system design, and waste management.

On August 20, CCGS filed a Supplement to the AFC containing the additional information for review. CCGS followed this up with additional submittals on August 31 and September 8. In addition, on September 9, a letter from the Bay Area Air Quality Management District was received indicating the application to the district is now complete.

The Energy Commission staff has completed their review of the supplemental information and believes that the AFC now meets 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. Attached is a summary table and revised data adequacy worksheets for the technical disciplines previously determined to be data inadequate, and reflecting that the supplemental information submitted by CCGS completes the AFC.

At the Energy Commission's business meeting on September 23, 2009, I will recommend Commission approval of the Executive Director's data adequacy

recommendation and the appointment of a Siting Committee to oversee the CCGS. If you have any questions, please call Joseph Douglas, staff's Project Manager, at (916) 653-4677.

Attachment

Attachment A
Overview of Energy Commission Staff's
Data Adequacy Determination
Contra Costa Generating Station Project
09-AFC-4

Technical Area	Attachment B Page No.	Adequate
AIR QUALITY.....	5	YES
CULTURAL RESOURCES.....	12	YES
PROJECT OVERVIEW.....	19	YES
TRANSMISSION SYSTEM DESIGN.....	24	YES
WASTE MANAGEMENT.....	27	YES

ATTACHMENT B

ENERGY COMMISSION STAFF'S List of Revised Data Adequacy Sheets

**Contra Costa Generating Station Project
09-AFC-4**

September 16, 2009

Adequacy Issue: Adequate ☒ Inadequate ☐ **DATA ADEQUACY WORKSHEET** Revision No. 1 Date 9/16/2009

Technical Area: **Air Quality** Project: Contra Costa Generation Station Technical Staff: Joseph Hughes
Brewster Birdsell

Project Manager: Joseph Douglas Docket: 09-AFC-4 Technical Senior: Matt Layton

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 5.1.1, pages 5.1-1 through 5.1-44; Appendix 5.1	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.	Section 5.1.6, page 5.1-33; Appendix 5.1I <u>Completeness letter dated 9/9/2009</u>	No <u>Yes</u>	Please provide a completeness letter from the Bay Area Air Quality Management District (BAAQMD). BAAQMD Rule 2-3-402 allows 20 days for determining completeness from the application submittal in early July.
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 5.1.5.7, page 5.1-26, table 5.1-18; Section 5.1.1, page 5.1-1; Appendix 5.1A, 5.1A-10	Yes	
Appendix B (g) (8) (C)	A description of the control technologies proposed to limit the emission of criteria pollutants.	Section 5.1.4, page 5.1-14; Section 5.1.4.2, page 5.1-15 through 5.1-16	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.	Appendix 5.2A-6	Yes	

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Appendix B (g) (8) (E)	The emission rates of criteria pollutants and greenhouse gases (CO ₂ , CH ₄ , N ₂ O, and SF ₆) from the stack, cooling towers, fuels and materials handling processes, delivery and storage systems, and from all on-site secondary emission sources.	Appendix 5.1A-7; Appendix 5.1A-8; Appendix 5.1A-11	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.	Appendix 5.1A-5; Section 5.1.3.2, page 5.1-7; Section 5.1.5.3, pages 5.1-8 through 5.1-10; Section 5.1.5.8, pages 5.1-28 through 5.1-30	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 5.1.5.8, page 5.1-30, table 5.1-21	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 5.1.5.6, pages 5.1-23 through 5.1-24, table 5.1-16; Appendix 5.1C	Yes	

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Appendix B (g) (8) (H)	One year of meteorological data collected from either the Federal Aviation Administration Class 1 station nearest to the project or from the project site, or meteorological data approved by the California Air Resources Board or the local air pollution control district.	Section 5.1.5.1, pages 5.1-16 through 5.1-17; Section 5.1.5.5, pages 5.1-19 through 5.1-20; Appendix 5.1C	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	
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 5.1B-4-8; Appendix 5.1B-1; Section 5.1.2.3, pages 5.1-4 through 5.1-5	Yes	
Appendix B (g) (8) (I)	An evaluation of the project's direct and cumulative air quality impacts, consisting of the following:			

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Appendix B (g) (8) (I) (i)	A screening level air quality modeling analysis, or a more detailed modeling analysis if so desired by the applicant, of the direct criteria pollutant impacts of project construction activities on ambient air quality conditions, including fugitive dust (PM ₁₀) emissions from grading, excavation and site disturbance, as well as the combustion emissions [nitrogen oxides (NO _x), sulfur dioxide (SO ₂), carbon monoxide (CO), and particulate matter less than 10 microns in diameter (PM ₁₀) and particulate matter less than 2.5 microns in diameter (PM _{2.5})] from construction-related equipment;	Appendix 5.1E, table 5.2E-1	Yes	
Appendix B (g) (8) (I) (ii)	A screening level air quality modeling analysis, or a more detailed modeling analysis if so desired by the applicant, of the direct criteria pollutant (NO _x , SO ₂ , CO, PM ₁₀ , and PM _{2.5}) impacts on ambient air quality conditions of the project during typical (normal) operation, and during shutdown and startup modes of operation. Identify and include in the modeling of each operating mode the estimated maximum emissions rates and the assumed meteorological conditions;	Section 5.1.3.3, pages 5.1-8 through 5.1-11 Appendix 5.1A	Yes	

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Appendix B (g) (8) (I) (iii)	A protocol for a cumulative air quality modeling impacts analysis of the project's typical operating mode in combination with other stationary emissions sources within a six mile radius which have received construction permits but are not yet operational, or are in the permitting process. The cumulative inert pollutant impact analysis should assess whether estimated emissions concentrations will cause or contribute to a violation of any ambient air quality standard; and	Appendix 5.1C, page 19 of 21	Yes	
Appendix B (g) (8) (I) (iv)	An air dispersion modeling analysis of the impacts of the initial commissioning phase emissions on state and federal ambient air quality standards for NO _x , SO ₂ , CO, PM ₁₀ , and PM _{2.5} .	Section 5.1.5.8, pages 5.1-8 through 5.1-30; Appendix 5.1A-5	Yes	
Appendix B (g) (8) (J)	If an emission offset strategy is proposed to mitigate the project's impacts under subsection (g)(1), provide the following information:			
Appendix B (g) (8) (J) (i)	The quantity of offsets or emission reductions that are needed to satisfy air permitting requirements of local permitting agencies (such as the air district), state and federal oversight air agencies, and the California Energy Commission. Identify by criteria air pollutant, and if appropriate, greenhouse gas; and	Appendix 5.1G, table 5.1G-1; Supplemental 5.1-5, table DA 5.1-1; Supplemental 5.1-7	Yes	
Appendix B (g) (8) (J) (ii)	Potential offset sources, including location, and quantity of emission reductions;	Appendix 5.1G, table 5.1G-1; Supplemental 5.1-6 (and confidential filing)	Yes	

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Joseph Hughes
Brewster Birdsall

Project Manager:

Joseph Douglas

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Appendix B (g) (8) (K)	A detailed description of the mitigation, if any, which an applicant may propose, for all projects impacts from criteria pollutants that currently exceed state or federal ambient air quality standards, but are not subject to offset requirements under the district's new source review rule.	Appendix 5.1G; Supplemental 5.1-7	Yes	
Appendix B (i) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	Section 5.1.6, pages 5.1-33 through 5.1-42	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 5.1.6, pages 5.1-33 through 5.1-42, table 5.1-25; Section 5.1.7, pages 5.1-42, table 5.1-26	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 5.1.7, page 5.1-42, table 5.1-26	Yes	

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Project Manager: Joseph Douglas Docket: 09-AFC-4 Technical Senior: Matt Layton

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Appendix B (i) (3)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Section 5.1.8, page 5.1-42; Supplemental 5.1-8, table DA 5.1-2	Yes	

Adequacy Issue: Adequate ☒ Inadequate ☐ **DATA ADEQUACY WORKSHEET** Revision No. 1 Date 9/16/2009

Technical Area: **Cultural Resources** Technical Staff: Beverly Bastian

Project Manager: Joseph Douglas Docket: 09-AFC-4 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, Sec. 5.5.0, p. 5.6-1 impacts due to project: Vol. 1, Sec. 5.3, pp. 5.3-20--5.3-21 measures to mitigate known impacts: Vol. 1, Sec. 5.3, pp. 5.3-21--5.3-24 effectiveness of the proposed measures any monitoring plans proposed to verify the effectiveness of the mitigation	Yes Yes Yes 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. 1, Sec. 5.3, pp. 5.3-2--5.3-6	Yes	

DATA ADEQUACY WORKSHEET

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Appendix B (g) (2) (B)	The results of a literature search to identify cultural resources within an area not less than a 1-mile radius around the project site and not less than one-quarter (0.25) mile on each side of the linear facilities. Identify any cultural resources listed pursuant to ordinance by a city or county, or recognized by any local historical or archaeological society or museum. Literature searches to identify the above cultural resources must be completed by, or under the direction of, individuals who meet the Secretary of the Interior's Professional Standards for the technical area addressed. 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.	Literature searches: Vol. 1, Sec. 5.3, pp. 5.3-7-5.3-9 Cultural resources listed under a city or county ordinance: <u>Data Adequacy Supplement 1 (8/20/09), pp. 17-18</u> Cultural resources recognized by local societies: Vol. 1, Sec. 5.3, p. 5.3-20 Names/quals for lit searchers/directors: Vol. 2, App. 5.3D DPR523s for known resources: Map of lit search area with past surveys and CHRIS #s: Vol. 2, App. 5.3C, Study Maps 1 & 2 CHRIS reports: Data Adequacy Supplement 1 confidential submission of 5 reports (8/20/09); additional supplement, non-confidential submission of 1 report (9/8/09).	Yes No <u>Yes</u> Yes Yes Yes Yes No-Yes	Please make inquiries about cultural resources listed under a city or county ordinance and provide any resulting information to the Commission. Four required reports for cultural resources surveys within 0.25 mile of the proposed plant site or transmission line (s) and two reports on excavation (e) and NRHP evaluation were not included in Vol. 2, App. 5.3C. Please provide copies of CHRIS reports S-009054(e), S-023665(e), S-023674(e), S-033824(e), S-034412(e), and S-034866(e).

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Appendix B (g) (2) (C)	The results of new surveys or surveys less than 5 years old shall be provided if survey records of the area potentially affected by the project are more than five (5) years old. Surveys to identify new cultural resources must be completed by (or under the direction of) individuals who meet the Secretary of the Interior's Professional Standards for the technical area addressed. New pedestrian archaeological surveys shall be conducted inclusive of the project site and project linear facility routes, extending to no less than 200' around the project site, substations and staging areas, and to no less than 50' to either side of the right-of-way of project linear facility routes. New historic architecture field surveys in rural areas shall be conducted inclusive of the project site and the project linear facility routes, extending no less than .5 mile out from the proposed plant site and from the routes of all above-ground linear facilities. New historic 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. 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).	Names/quals for archaeological surveyors or directors: Vol. 2, App. 5.3D Names/quals for historical architecture surveyors or directors: Vol. 2, App. 5.3D Survey coverage, archaeology: Vol. 1, Figure 5.3-1 Survey coverage, architecture: Vol. 1, Figure 5.3-2 Technical report for new archaeological survey: Vol. 2, App. 5.3B Technical report for new architectural survey: Vol. 2, App. 5.3B	Yes Yes Yes Yes Yes Yes	

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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:	Vol. 1, Sec. 5.3, pp. 5.3-1–5.3-30	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: Vol. 2, App. 5.3B, pp. 1–8 Literature search results: Vol. 2, App. 5.3B, pp. 8–11	Yes Yes	
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: Vol. 2, App. 5.3B, pp. 12–13 Historical architecture methodology: Vol. 2, App. 5.3B, pp. 14–15	Yes Yes	
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;	Archaeological forms: Vol. 2, App. 5.3B, App. A Architecture forms: Vol. 2, App. 5.3B, App. A	Yes Yes	
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>Data Adequacy Supplement 1 (8/20/09), Fig. DA 5.3-1</u>	No <u>Yes</u>	Please compile and submit under confidential cover a map at a scale of 1:24,000 showing the locations of all previously known and newly identified cultural resources located within the literature search area, with the resources labeled. (Study maps 1 & 2 in Vol. 2, App. 5-3C show known resources but not resources newly identified by the applicant's surveys.)

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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. 2, App. 5.3D	Yes	
		Names/quals for architectural historians: Vol. 2, App. 5.3D	Yes	
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. 2, App. 5.3A NAHC response: Vol. 2, App. 5.3A Letters sent to Native Americans: Letters received from Native Americans: Vol. 1, Sec. 5.3, p. 5.3-15 Summary of oral responses from Native Americans: Vol. 1, Sec. 5.3, p. 5.3-19	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: Vol. 1, Sec. 5.3, pp. 5.3-20–5.3-21	Yes	

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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. 1, Sec. 5.3, pp. 5.3-22–5.3-24	Yes	
Appendix B (g) (2) (E) (iii)	Educational programs to enhance employee awareness during construction and operation to protect cultural resources.	Worker education programs: Vol. 1, Sec. 5.3, p. 5.3-22	Yes	
Appendix B (i) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	Tables identifying applicable LORS: Vol. 1, Sec. 5.3, Table 5.3-3, p. 5.3-24 Explicitly referenced pages: <u>Data Adequacy Supplement 1 (8/20/09), pp. 18–20</u>	No <u>Yes</u> Yes	Applicant needs to add to Table 5.3-3 the AFC page numbers where conformance with each law, during both construction and operation, is discussed.
Appendix B (i) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Discussion of applicability of LORS: Vol. 1, Sec. 5.3, pp. 5.3-25–5.3-28 Tables identifying agencies: Vol. 1, Sec. 5.3, Table 5.3-4, p. 5.3-29	Yes	

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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, Sec. 5.3, Table 5.3-4, p. 5.3-29	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, Sec. 5.3, p. 5.3-29	Yes	

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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.		N/A	Please see the individual technical areas for a determination regarding the adequacy of this item.
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		N/A	Please see the individual technical areas for a determination regarding the adequacy of this item.
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		N/A	Please see the individual technical areas for a determination regarding the adequacy of this item.
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.	Sections 2, 3, 4, 5 and 1C	Yes	
Appendix B (a) (1) (A)	A general description of the proposed site and related facilities, including the location of the site or transmission routes, the type, size and capacity of the generating or transmission facilities, fuel characteristics, fuel supply routes and facilities, water supply routes and facilities, pollution control systems, and other general characteristics.	Page 2-1 – 2-32 Section 2.1 Page 2-33 – 2-45 Sections 2.3, 2.4 and 2.5 Page 3-1 – 3-16 Section 3.1, 3.2 3.3 and 3.4 Page 4-1 – 4-5 Section 4.1, 4.2 and 4.3	Yes	
Appendix B (a) (1) (B)	Identification of the location of the proposed site and related facilities by section, township, range, county and assessor's parcel numbers.	Page 1-2, Section 1.2 Page 2-1, Section 2.1	Yes	

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (a) (1) (C)	A description of and maps depicting the region, the vicinity, and the site and its immediate surroundings.	Page 1-1, Section 1.1 and 1.2 Page 2-1 – 2-2, Section 2.1 Page 5.13-1 – 5.13-19 Section 5.13.1	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.	Figure 1.1-3, Figure 5.13-2, Figure 5.13-3, Figure 5.13-4, Figure 5.13-5, Figure 5.13-6, Figure 5.13-7, Figure 5.13-8	Yes	
Appendix B (a) (1) (E)	In an appendix to the application, a list of current assessor's parcel numbers and owners' names and addresses for all parcels within 500 feet of the proposed transmission line and other linear facilities, and within 1000 feet of the proposed powerplant and related facilities.	Appendix 1B	Yes	
Appendix B (a) (2)	Project Schedule: Proposed dates of initiation and completion of construction, initial start-up, and full-scale operation of the proposed facilities.	Page 2-32 – 2-35, Sections 2.2 and 2.3	Yes	
Appendix B (a) (3) (A)	A list of all owners and operators of the site(s), the power plant facilities, and, if applicable, thermal host, the geothermal leasehold, the geothermal resource conveyance lines, and the geothermal re-injection system, and a description of their legal interest in these facilities.	Page 1-2, Sections 1.3	Yes	
Appendix B (a) (3) (B)	A list of all owners and operators of the proposed electric transmission facilities.	Page 3-1, Section 3.2	Yes	

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (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).	Page 1-2, Sections 1.3	Yes	
Appendix B (b) (1)	In a section entitled, "Generation Facility Description, Design, and Operation" provide the following information:	(See Below)		
Appendix B (b) (1) (A)	Maps at a scale of 1:24,000 (1" = 2000'), (or appropriate map scale agreed to by staff) along with an identification of the dedicated leaseholds by section, township, range, county, and county assessor's parcel number, showing the proposed final locations and layout of the power plant and all related facilities;	Page 2-1 Section 2.1.1 Figure 2.1-1, Figure 2.1-2, Figure 1.1-2	Yes	
Appendix B (b) (1) (B)	Scale plan and elevation drawings depicting the relative size and location of the power plant and all related facilities to establish the accuracy of the photo simulations required in Sections (a)(1)(D) and (g)(6)(F);	Page 5.13-29 Section 5.13.2.3 Figure 2.1-3A and Figure 2.1-3B	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	Page 2-1 – 2-37 Section 2.1, 2.2, 2.3 and 2.4 Appendix 2	Yes	

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (b) (1) (D)	A description of how the site and related facilities were selected and the consideration given to engineering constraints, site geology, environmental impacts, water, waste and fuel constraints, electric transmission constraints, and any other factors considered by the applicant.	Page 1-1 through 1-2, Section 1.1 Page 6-1 – 6-22 Section 6	Yes	
Appendix B (b) (2)	In a section entitled, "Transmission Lines Description, Design, and Operation" provide the following information:	(See Below)	Yes	
Appendix B (b) (2) (A)	Maps at a scale of 1:24,000 (or appropriate map scale agreed to by staff) of each proposed transmission line route, showing the settled areas, parks, recreational areas, scenic areas, and existing transmission lines within one mile of the proposed route(s);	Page 3-1, Section 3.2 Figure 3.2-1 Page 5.6-1 – 5.6-29 Section 5 Figure 5.6-1, Figure 5.6-2, Figure 5.6-3 and Figure 5.6-4 <u>Supplemental filing</u> <u>Figure 10.0-1</u>	No-Yes	Please provide the transmission line route, showing the settled areas, parks, recreational areas, scenic areas, and existing transmission lines within one mile of the proposed route The maps do not identify all transmission routes and are only a ¼ mile around the transmission line corridor.
Appendix B (b) (2) (B)	A full-page color photographic reproduction depicting a representative above ground section of the transmission line route prior to construction and a full-page color photographic simulation of that section of the transmission line route after construction.	Figure 5.13.1, Figure 5.13-3, Figure 5.13-7 and 5.13-8	Yes	

DATA ADEQUACY WORKSHEET

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.	Pages 3-1 through 3-20, Section 3	Yes	
Appendix B (b) (2) (D)	A description of how the route and additional transmission facilities were selected, and the consideration given to engineering constraints, environmental impacts, resource conveyance constraints, and electric transmission constraints; and	Pages 3-1 through 3-20, Section 3	Yes	
Appendix B (e) (1)	A discussion of how facility closure will be accomplished in the event of premature or unexpected cessation of operations.	Pages 2-44 - 2-45, Section 2.7	Yes	

DATA ADEQUACY WORKSHEET

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 Page 1-1 to 1-2	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 2.0 Page 2-1 Section 3.2 Page 3-1 to 3-2	Yes	
Appendix B (b) (2) (C)	A detailed description of the design, construction, and operation of any electric transmission facilities, such as power lines, substations, switchyards, or other transmission equipment, which will be constructed or modified to transmit electrical power from the proposed power plant to the load centers to be served by the facility. Such description shall include the width of rights of way and the physical and electrical characteristics of electrical transmission facilities such as towers, conductors, and insulators.	Section 3.2 Page 3-1 to 3-2 Figure 2.1-5 Figure 3.2-2 <u>Supplemental filing</u> <u>Page 7</u>	No Yes	1. Provide a detailed one-line diagram for the existing Contra Costa Substation before the interconnection of the project. 2. Provide a detailed one-line diagram for the addition of the project. - Show bay arrangement of the necessary equipment which are required to interconnect the project. - Provide ratings of the breakers, disconnect switches, relays, buses, and etc. Resubmit Figure 2.1-5. Show all auxiliary load equipments and their ratings

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 2.1.5 Page 2-15 to 2-16	Yes	
Appendix B (b) (2) (E)	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. If the interconnection and operation of the proposed project will likely impact an transmission system that is not controlled by the interconnecting utility (or California Independent System Operator), provide evidence of a System Impact Study or agreement and proof of payment (when applicable) with/to the impacted transmission owner or provide evidence that there are no system impacts requiring mitigation.	Section 3.3 Page 3-2 Appendix 3A	Yes	

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (i) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	Section 3.5 Page 3-16 to 3-19	Yes	
Appendix B (i) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Section 3.5.7 Page 3-20	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.	NA		
Appendix B (i) (3)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Section 3.3 Page 3-2 <u>Supplemental filing</u>	No Yes	Provide schedules for the CAISO Phase I and Phase II interconnection studies of the proposed project to the CAISO control grid.

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (b) (1) (C)	A detailed description of the design, construction and operation of the facilities, specifically including the power generation, cooling, water supply and treatment, waste handling and control, pollution control, fuel handling, and safety, emergency and auxiliary systems, and fuel types and fuel use scenarios; and	Section 2.0	Yes	
Appendix B (e) (1)	A discussion of how facility closure will be accomplished in the event of premature or unexpected cessation of operations.	Page 2-43 – 2-44 Section 2.7, Page 5.14-13 Section 5.14.4.3	Yes	
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.	Page 5.14-1- 5.14-2 Section 5.14.1.1.1 - 5.14.1.1.2, Page 5.14-2 Section 5.14.1.1.2 Section 5.14.3, Section 5.14.4	Yes	

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (12) (A)	A Phase I Environmental Site Assessment (ESA) for the proposed power plant site using methods prescribed by the American Society for Testing and Materials (ASTM) document entitled "Standard Practice for Environmental Site Assessments: Phase 1 Environmental Site Assessment Process" (Designation: E 1527-93, May 1993), which is incorporated by reference in its entirety; or an equivalent method agreed upon by the applicant and the CEC Staff that provides similar documentation of the potential level and extent of site contamination. The Phase I ESA shall have been completed no earlier than one year prior to the filing of the AFC.	Attachment DA 5.14-1 Phase 1 ESA	Yes <u>No</u>	Regulations state "The Phase I ESA shall have been completed no earlier than one year prior to the filing of the AFC." The Phase I and II Environmental Site Assessments are five years old. There is no verification that no facilities, construction or agricultural has been located on the proposed project site in the last five years. Page 5.14-1 notes that the California Department of Toxic Substance Control released the Western Development Area and Eastern Development Area from further regulatory oversight on May 1, 2006. Documentation for the oversight release is not included. There is also no Phase I for the 2.4 mile-long transmission line.
Appendix B (g) (12) (B)	A description of each waste stream estimated to be generated during project construction and operation, including origin, hazardous or nonhazardous classification pursuant to Title 22, California Code of Regulations, § 66261.20 et seq., chemical composition, estimated annual weight or volume generated, and estimated frequency of generation.	Table 5.14-1 Table 5.14-2	Yes	
Appendix B (g) (12) (C)	A description of all waste disposal sites which may feasibly be used for disposal of project wastes. For each site, include the name, location, classification under Title 23, California Code of Regulations, § 2530 et seq., the daily or annual permitted capacity, daily or annual amounts of waste currently being accepted, the estimated closure date and remaining capacity, and a description of any enforcement action taken by local or state agencies due to waste disposal activities at the site.	Table 5.14-3 Section 5.14.2.3.1 Section 5.14.2.3.2	Yes	

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (12) (D)	A description of management methods for each waste stream, including methods used to minimize waste generation, length of on- and off-site waste storage, re-use and recycling opportunities, waste treatment methods used, and use of contractors for treatment.	Table 5.14-1 Table 5.14-2	Yes	
Appendix B (h) (1) (B)	A discussion of any measures proposed to improve adverse site conditions.	Section 5.14.1.1.2	Yes	
Appendix B (h) (1) (D) (v)	The waste disposal system and on-site disposal sites;	Section 5.14.2.3.3, Section 5.14.4.1.1	Yes	
Appendix B (i) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	Table 5.14-4	Yes	
Appendix B (i) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Table 5.14-4 Table 5.14-5	Yes	

DATA ADEQUACY WORKSHEET

Revision No. 1 Date 9/16/2009

Adequacy Issue: Adequate **X** Inadequate

Technical Area: **Waste Management** Project: Contra Costa Generating Station Technical Staff: Ellie Townsend-Hough
Project Manager: Joseph Douglas Docket: 09-AFC-4 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) (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 5.14-5	Yes	
Appendix B (i) (3)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Table 5.14.7	Yes	