

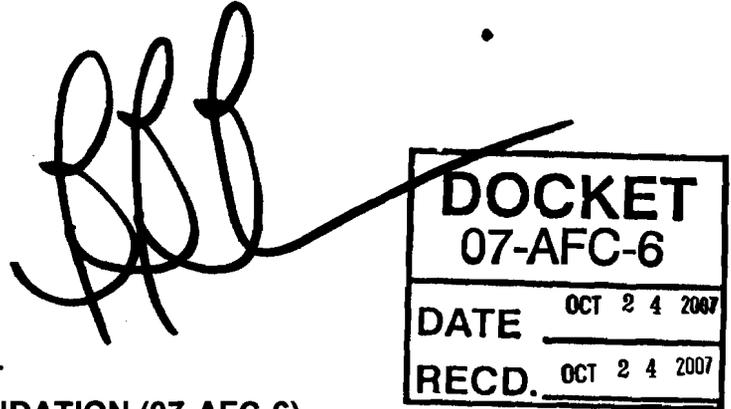
Memorandum

Date : October 24, 2007
 Telephone: (916) 653-1245

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

From: California Energy Commission **B. B. Blevins**
 1516 Ninth Street **Executive Director**
 Sacramento, CA 95814-5512

Subject: **CARLSBAD ENERGY CENTER PROJECT**
REVISED DATA ADEQUACY RECOMMENDATION (07-AFC-6)



Staff's October 10, 2007, initial data adequacy review of the Carlsbad Energy Center Application for Certification (AFC) submitted on September 14, 2007, 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 9 of 23 areas: air quality, biological resources, cultural resources, land use, socioeconomic, traffic and transportation, transmission system design, visual resources, and water resources.

Staff has reviewed the supplemental information submitted on October 24, 2007, and believes the AFC now meets the above-listed requirements in all nine of the previously deficient technical disciplines. Staff has determined that the AFC with Supplement "A," now contains all the information required by California Code of Regulations, Title 20, Section 1704, including Appendix B, for the 12-month AFC process.

Attachment A is a summary table and Attachment B contains revised data adequacy worksheets for the nine technical disciplines previously determined to be data inadequate, reflecting that the supplemental information submitted by Carlsbad Energy Center, LLC, achieves data adequacy.

We have received written comments from other agencies. The San Diego Air Pollution Control District has indicated that the Air Permit Application submitted September 17, 2007, is complete. The California Coastal Commission has indicated by letter that they will not be participating in the Energy Commission's review of the Carlsbad Energy Center Project AFC.

The proposed Carlsbad Energy Center Project is a 558 megawatt gas-fired, combined cycle power plant proposed for a site on the same property as the existing Encina Power Station in Carlsbad, San Diego County. The Carlsbad facility will be using air cooled technology for turbine cooling which will avoid the need for connection to the Encina facility's sea water once-through cooling structures. Both the Carlsbad project and the Encina Power Station are owned by NRG Energy, Inc.

At the Energy Commission's business meeting on October 31, 2007, staff will recommend that the Energy Commission accept the AFC as data adequate. Pursuant to California Code of Regulations, Title 20, Section 1709 (c), if the Energy Commission accepts staff's recommendation, the Energy Commission may deem the application for certification, with the supplemental information, as complete, and appoint a Committee.

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

Attachments

**ATTACHMENT A
OVERVIEW OF ENERGY COMMISSION STAFF'S
REVISED DATA ADEQUACY DETERMINATION
CARLSBAD ENERGY CENTER
07-AFC-6**

TECHNICAL AREA	ATTACHMENT B PAGE No.	ADEQUATE? 12-MONTH
Air Quality	1	Yes
Biological Resources	8	Yes
Cultural Resources	16	Yes
Land Use	22	Yes
Socioeconomics	26	Yes
Traffic and Transportation	32	Yes
Transmission System Design	36	Yes
Visual Resources	40	Yes
Water Resources	45	Yes

ATTACHMENT B

**ENERGY COMMISSION STAFF'S
Revised Data Adequacy Worksheets**

**Carlsbad Energy Center
07-AFC-6**

October 24, 2007

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 1 Date October 24, 2007

Technical Area: Air Quality

Project: Carlsbad Energy Center

Technical Staff: Joe Loyer/Will Walters

Project Manager: James W. Reede, Jr., Ed.D

Docket: 07-AFC-6

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.	Sec 5.1.1 page 5.1-1 et al Sec 5.1.6.2.2 page 5.1-34 Sec 5.1.6.3 page 5.1-37 Sec 5.1.6.3.3 page 5.1-45 Sec 5.1.6.3.1 page 5.1-46 Sec 5.1.6.5 page 5.1-51 Sec 5.1.8 pages 5.1-57 to 59 Sec 5.1.6.2.3 page 5.1-35 App 5.1B Tables 12,13 App 5.1D App 5.1E	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>Letter of Completeness issued by the San Diego APCD on October 17, 2007.</u>	Yes No	Please provide a letter of data completeness from the SDAPCD when it is available or a related communication such as an e-mail.
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.	Sec 2.3.3 page 2-33 Table 5.1-18 page 5.1-30 App 5.1D Sec 5.1.6.1.2 page 5.1-30 Sec 2.3.2.1 page 2-28, <u>Supplement A</u>	Yes No	Please clarify the expected capacity factor for the proposed project. In section 5.1.6.1.2, the capacity factor is reported as 4,100 hours per year per turbine (approximately 47 percent), while in section 2.3.2.1, the capacity factor is reported as between 25 and 100 percent.
Appendix B (g) (8) (C)	A description of the control technologies proposed to limit the emission of criteria pollutants.	Sec 5.1.7.3.1 and 5.1.7.3.2 page 5.1-37 to 50	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.	Sec 2.2.8 page 2-11	Yes	
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.	Sec 5.1.8.2 page 5.1-59 to 61 Sec 5.1.6.2 page 5.1-31 et al App 5.1D <u>Supplement A</u>	Yes No	Please report all expected emissions of SF₆ from the project switching and transformer equipment mentioned on page 1-3. Please provide an estimate and discussion of the potential PM₁₀ emissions from the evaporative cooler.

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 1 Date October 24, 2007

Technical Area: Air Quality

Project: Carlsbad Energy Center

Technical Staff: Joe Loyer/Will Walters

Project Manager: James W. Reede, Jr., Ed.D

Docket: 07-AFC-6

Technical Senior: Keith Golden

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (8) (F)(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.	Sec 5.1.6.1.2 page 5.1-37 et al	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.	Sec 5.1.6.3.2 page 5.1-44 Sec 5.1.6.3.4 pages 5.1-46 and 47 App 5.1B	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.	Sec 5.1.3 page 5.1-4 et al	Yes	
Appendix B (g) (8) (H)	One year of meteorological data collected from either the Federal Aviation Administration Class 1 station nearest to the project or from the project site, or meteorological data approved by the California Air Resources Board or the local air pollution control district.	Sec 5.1.1.2 page 5.1-2 App 5.1A	Yes	

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 1 Date October 24, 2007

Technical Area: Air Quality

Project: Carlsbad Energy Center

Technical Staff: Joe Loyer/Will Walters

Project Manager: James W. Reede, Jr., Ed.D

Docket: 07-AFC-6

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) (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.	NA	NA	
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.	App 5.1A Electronic modeling files	Yes	
Appendix B (g) (8) (I)	An evaluation of the project's direct and cumulative air quality impacts, consisting of the following:	NA	NA	
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;	Sec 5.1.6.5 page 5.1-51 App 5.1E	Yes	

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 1 Date October 24, 2007

Technical Area: Air Quality

Project: Carlsbad Energy Center

Technical Staff: Joe Loyer/Will Walters

Project Manager: James W. Reede, Jr., Ed.D

Docket: 07-AFC-6

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) (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;	Sec 5.1.6.3.1 page 5.1-40 to 42 App 5.1D	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	Sec 5.1.8 page 5.1-57 to 59	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} .	Sec 5.1.6.3.4 pages 5.1-46 to 47 Table 5.1-28 page 5.1-47 <u>Supplement A</u>	<u>Yes</u> <u>No</u>	Please provide emission impact estimates of SO₂, PM₁₀ and PM_{2.5} emissions from the proposed project's initial commissioning.
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:	NA	NA	

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 1 Date October 24, 2007

Technical Area: Air Quality

Project: Carlsbad Energy Center

Technical Staff: Joe Loyer/Will Walters

Project Manager: James W. Reede, Jr., Ed.D

Docket: 07-AFC-6

Technical Senior: Keith Golden

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (8) (J) (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	Sec 5.1.6.2.3 page 5.1-34 Sec 5.1.7.3.3 page 5.1-54	Yes	
Appendix B (g) (8) (J) (ii)	Potential offset sources, including location, and quantity of emission reductions;	Sec 5.1.6.2.3 page 5.1-35 App 5.1B Tables 12 & 13	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.	Sec 5.1.6.2.3 page 5.1-35 App 5.1B Tables 12 & 13	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 5.1-15 pages 5.1-24 to 27	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 5.1-9 page 5.1-12	Yes	

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 1 Date October 24, 2007

Technical Area: Air Quality

Project: Carlsbad Energy Center

Technical Staff: Joe Loyer/Will Walters

Project Manager: James W. Reede, Jr., Ed.D

Docket: 07-AFC-6

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) (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 5.1-9 page 5.1-12	Yes	
Appendix B (i) (3)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Table 5.1-15 pages 5.1-24 to 27	Yes	

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 1 Date October 24, 2007

Technical Area: Biological Resources

Project: Carlsbad Energy Center

Technical Staff: Heather Blair

Project Manager: James W. Reede, Jr., Ed.D

Docket: 07-AFC-6

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: Section 5.2.3 (pgs. 5.2-5 – 5.2-10) Direct, indirect, and cumulative impacts: Section 5.2.4 (pgs. 5.2-11 – 5.2-21) Mitigation measures: Section 5.2.5 (pgs. 5.2-21, 22); Section 5.2.6 (pgs. 5.2-22 – 5.2-28) Monitoring plans: Section 5.2.6 (pgs. 5.2-22 – 5.2-28)	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: Section 5.2.3.1 (pgs. 5.2-5 – 5.2-6) Regional map: Figure 5.2-4	Yes Yes	
Appendix B (g) (13) (A) (i)	species listed under state or federal Endangered Species Acts;	Table 5.2-5; Section 5.2.3.4 (pgs. 5.2-9, 10); Section 5.2.4.3 (pgs. 5.2-16 – 5.2-19); Appendix 5.2a	Yes	
Appendix B (g) (13) (A) (ii)	resources defined in sections 1702(q) and (v) of Title 20 of the California Code of Regulations;	Table 5.2-5; Sections 5.2.3.3 and 5.2.3.4 (pgs. 5.2-7 – 5.2-10)	Yes	
Appendix B (g) (13) (A) (iii)	species identified as state Fully Protected;	Table 5.2-5; Section 5.2.2.2 (pg. 5.2-2); Appendix 5.2a	Yes	

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 1 Date October 24, 2007

Technical Area: Biological Resources

Project: Carlsbad Energy Center

Technical Staff: Heather Blair

Project Manager: James W. Reede, Jr., Ed.D

Docket: 07-AFC-6

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;	Table 5.2-5; Section 5.2.4.3.5 (pg. 5.2-19); Appendix 5.2a	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	Sensitive species: Section 5.2, pgs. 5.2-16-19	Yes	
Appendix B (g) (13) (A) (vi)	fish and wildlife species that have commercial and/or recreational value.	Species of commercials value: Section 5.2.3.1 (pg. 5.2-6); Section 5.2.4.3.2	Yes	
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:	Species actually observed: Table 5.2-3 (pgs. 5.2-35, 36); Table 5.2-4 (pgs. 5.2-37 – 5.2-39) Species that have the potential to occur: Section 5.2.3.3 (pgs. 5.2-7 – 5.2-9); Section 5.2.3.4 (pgs. 5.2-9, 10); Appendix 5.2a	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;	Sensitive species maps: Figures 2.1-1, 5.2-2, 5.2-3, 5.2-4	Yes	

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 1 Date October 24, 2007

Technical Area: Biological Resources

Project: Carlsbad Energy Center

Technical Staff: Heather Blair

Project Manager: James W. Reede, Jr., Ed.D

Docket: 07-AFC-6

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	Section 5.2.4.3.2 (pg. 5.2-17)	Not applicable to project	
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.	Wetlands: Section 5.2.4.4 (pg. 5.2-19, 20), Figure 5.2.5	Yes	
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;	Table 5.2-3 (pgs. 5.2-35, 36); Table 5.2-4 (pgs. 5.2-37 – 5.2-39)	Yes	
Appendix B (g) (13) (C) (ii)	A list of sensitive species and habitats with a potential to occur (as defined in (A) above); and	Section 5.2.3.3 (pgs. 5.2-7 – 5.2-9); Section 5.2.3.4 (pgs. 5.2-9, 10); Appendix 5.2a	Yes	

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 1 Date October 24, 2007

Technical Area: Biological Resources

Project: Carlsbad Energy Center

Technical Staff: Heather Blair

Project Manager: James W. Reede, Jr., Ed.D

Docket: 07-AFC-6

Technical Senior: Rick York

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (13) (D) (i)	Current biological resources surveys conducted using appropriate field survey protocols during the appropriate season(s). State and federal agencies with jurisdiction shall be consulted for field survey protocol guidance prior to surveys if a protocol exists;	Survey protocols: Section 5.2.3.2 (pg. 5.2-7) Agency consultation: Section 5.2.7 (pg. 5.2-28)	Yes Yes	
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	Section 5.2.4.3.2 (pg. 5.2-17)	Not applicable to project	
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.	Section 5.2.4.4 (pg. 5.2-19, 20)	Yes	
Appendix B (g) (13) (E)	Impacts discussion of the following:	--	--	

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 1 Date October 24, 2007

Technical Area: Biological Resources

Project: Carlsbad Energy Center

Technical Staff: Heather Blair

Project Manager: James W. Reede, Jr., Ed.D

Docket: 07-AFC-6

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;	Section 5.2.4.3.2 (pg. 5.2-17)	Not applicable to project	
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	Section 5.2.4.3.2 (pg. 5.2-17)	Not applicable to project	
Appendix B (g) (13) (F) (v)	Educational programs to enhance employee awareness during construction and operation to protect biological resources.	Section 5.2.5.1 (pg. 5.2-21); Section 5.2.6 (pgs. 5.2-22 – 5.2-28)	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.	Section 5.2.6 (pgs. 5.2-22 – 5.2-28)	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, the National Marine Fisheries Service, the U.S. Army Corps of Engineers, the California Department of Fish and Game, and the Regional Water Quality Control Board will be required for the proposed project.	Agency consultation: Section 5.2.7 (pg. 5.2-28) <u>Supplement A</u>	No <u>Yes</u>	Consultation with state and federal agencies, including but not limited to the California Department of Fish and Game, California Coastal Commission, and U.S. Fish and Wildlife Service, may be needed regarding potential effects of the proposed CECP on special status species. A record of conversation, including the agency official's name and contact information, needs to be provided.
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 5.2-1 (pg. 5.2-31)	Yes	

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 1 Date October 24, 2007

Technical Area: Biological Resources

Project: Carlsbad Energy Center

Technical Staff: Heather Blair

Project Manager: James W. Reede, Jr., Ed.D

Docket: 07-AFC-6

Technical Senior: Rick York

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (i) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Table 5.2-1	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.	Agency consultation: Section 5.2.7 (pg. 5.2-28) <u>Supplement A</u>	No <u>Yes</u>	Consultation with state and federal agencies, including but not limited to the California Department of Fish and Game, California Coastal Commission, and U.S. Fish and Wildlife Service, may be needed regarding potential effects of the proposed CEGP on special status species. A record of conversation, including the agency official's name and contact information, needs to be provided.
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 5.2.8 (pg. 5.2-28)	Yes	

Adequacy Issue: Adequate Inadequate
 Technical Area: Cultural Resources
 Project Manager: James W. Reede, Jr., Ed.D

DATA ADEQUACY WORKSHEET

Revision No. 1 Date October 24, 2007
 Technical Staff: Dorothy Torres
 Technical Senior: Rick York

Project: Carlsbad Energy Center
 Docket: 07-AFC-6

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (1)	...provide a discussion of the existing site conditions, the expected direct, indirect and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation.	<p>Discussion of the existing site conditions AFC Vol 1, p. 1-2</p> <p>Expected direct, indirect and cumulative impacts AFC Vol 1, p. 5.3-18 &19</p> <p>Measures proposed to mitigate impacts, effectiveness of measures, and proposed monitoring of measures AFC Vol 1, p. 5.3-21</p>	<p>Yes</p> <p>Yes</p> <p>Yes</p>	
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.	<p>Summary of ethnology, prehistory and history AFC Vol 1, p. 5.3-5 to 53-9</p> <p>Emphasis on 5-mile radius of project location AFC Vol 2, Appendix 5.3B</p>	<p>Yes</p> <p>Yes</p>	

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 1 Date October 24, 2007

Technical Area: Cultural Resources

Project: Carlsbad Energy Center

Technical Staff: Dorothy Torres

Project Manager: James W. Reede, Jr., Ed.D

Docket: 07-AFC-6

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) (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>Results of literature search, not less than 1-mile radius around project, and not less than 0.25 along linears AFC Vol 1, p.5.3-13</p> <p>Cultural resources listed by local ordinance. AFC Vol 2, Appendix 5.3A</p> <p>Individuals meeting Secretary of Interior Standards AFC Vol 2, Appendix 5.3D & Confidential Filing Part 1</p> <p>Copies of USGS 7.5' quad map of lit search area including all past surveys Confidential Filing Part 1</p> <p>Copies of technical reports Confidential Filings Part 1 & 2</p>	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>	

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 1 Date October 24, 2007

Technical Area: Cultural Resources

Project: Carlsbad Energy Center

Technical Staff: Dorothy Torres

Project Manager: James W. Reede, Jr., Ed.D

Docket: 07-AFC-6

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
<p>Appendix B (g) (2) (C)</p>	<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>Results of new surveys Confidential Filing, Part 2 Appendix 5.3 F, AFC Vol 1, p. 5.13 to 5.14, and AFC Vol 2, Appendix 5.3B</p> <p>Individuals who meet Secretary of the Interior's Professional Standards AFC Vol 2, Appendix 5.3D</p> <p>New archaeological surveys extending 200' at project and 50' at linear facilities Confidential Filing, Part 2, Appendix 5.3F, AFC Vol 1, p. 5.13 to 5.14</p> <p>New architecture field surveys no less than one parcel distant AFC Vol 2, Appendix 5.3B</p> <p>A technical report of survey results. Confidential Filing Part 2, Appendix 5.3F</p>	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>	

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 1 Date October 24, 2007

Technical Area: Cultural Resources

Project: Carlsbad Energy Center

Technical Staff: Dorothy Torres

Project Manager: James W. Reede, Jr., Ed.D

Docket: 07-AFC-6

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:	Info provided in AFC AFC Vol 1, p. 5.3-13 to 5.3-17 Information that may identify archaeological sites or areas of religious significance AFC Confidential Filing Parts 1 & 2	Yes Yes	
Appendix B (g) (2) (C) (i)	The summary from Appendix B (g)(2)(A) and the literature search results from Appendix B (g)(2)(B);	Summary from Appendix B (g)(2)(A). <u>A summary of ethnology, prehistory, and history was added to the Confidential Technical Report, in Supplement A</u> Literature results from Appendix B(g)(2)(B) Confidential Filing, Part 2, Appendix 5.3F	No <u>Yes</u> Yes	The technical report shall include (summary from Appendix (B) (g) (2) (A)), of the ethnology, prehistory, and history of the region emphasizing no more than a 5-mile radius of the project location as required by Appendix B (g) (2) (C).
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;	Survey procedures and methodology and cultural resources identified Confidential Filing Part 2 Appendix 5.3F and AFC Vol 2, Appendix 5.3B	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;	Copies of new and updated DPR 523 forms AFC Vol 2, Appendix 5.3B	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	A map at a scale of 1:24,000 U.S. Geo Survey Quad depicting cultural resources locations <u>was added to the Confidential Technical Report in Supplement A.</u>	No <u>Yes</u>	Please add map from Appendix 5.3E to technical report provided as Confidential Filing, Appendix 5.3F as required by Appendix B (g) (2) (C).

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 1 Date October 24, 2007

Technical Area: Cultural Resources

Project: Carlsbad Energy Center

Technical Staff: Dorothy Torres

Project Manager: James W. Reede, Jr., Ed.D

Docket: 07-AFC-6

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 and Qualifications AFC Vol 2, Appendix 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 contacts AFC Vol2, Appendix 5.3A Native American contacts and correspondence AFC Vol 2, Appendix 5.3A	Yes Yes	
Appendix B (g) (2) (E)	Include in the discussion of proposed mitigation measures required by subdivision (g)(1):	Proposed mitigation measures AFC Vol 1, p. 5.3-19 to 5.3-22	Yes	
Appendix B (g) (2) (E) (i)	A discussion of measures proposed to mitigate project impacts to known cultural resources;	Measures proposed to mitigate impacts AFC Vol 1, p. 5.3-17 to 5.3-18	Yes	
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 measures to mitigate impacts to previously unknown cultural resources AFC Vol 1, p. 5.3-19	Yes	
Appendix B (g) (2) (E) (iii)	Educational programs to enhance employee awareness during construction and operation to protect cultural resources.	Educational programs to enhance employee awareness AFC Vol 1, p. 5.3-19	Yes	

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 1 Date October 24, 2007

Technical Area: Cultural Resources

Project: Carlsbad Energy Center

Technical Staff: Dorothy Torres

Project Manager: James W. Reede, Jr., Ed.D

Docket: 07-AFC-6

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 laws, regulations, ordinances, standards etc. AFC Vol 1, p. 5.3-3 Permits applicable to proposed project AFC Vol 1, p. 5.3-23	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 which identify each agency with jurisdiction AFC Vol 1, p. 5.3-22	Yes	
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and also provide the name of the official who will serve as a contact person for Commission staff.	Agency names and contact information AFC Vol 1, p. 5.3-22	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 indication when permits outside authority of commission will be obtained AFC Vol 1, p. 5.3-22	Yes	

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 1 Date October 24, 2007

Technical Area: Land Use

Project: Carlsbad Energy Center

Technical Staff: Amanda Stennick

Project Manager: James W. Reede, Jr., Ed.D

Docket: 07-AFC-6

Technical Senior: Eric Knight

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 5.6	Yes	
Appendix B (g) (3) (A)	A discussion of existing land uses and current zoning at the site, land uses and land use patterns within one mile of the proposed site and within one-quarter mile of any project-related linear facilities. Include:	Sections 5.6.2 and 5.6.3.3 Figures 5.6-1 and -2 Tables 5.6-3 and -4	Yes	
Appendix B (g) (3) (A) (i)	An identification of residential, commercial, industrial, recreational, scenic, agricultural, natural resource protection, natural resource extraction, educational, religious, cultural, and historic areas, and any other area of unique land uses;	Section 5.6.4.2.3 Figure 5.6-3	Yes	
Appendix B (g) (3) (A) (ii)	A discussion of any recent or proposed zone changes and/or general plan amendments noticed by an elected or appointed board, commission, or similar entity at the state or local level;	Section 5.6.5	Yes	
Appendix B (g) (3) (A) (iii)	Identification of all discretionary reviews by public agencies initiated or completed within 18 months prior to filing the application for those changes or developments identified in subsection (g)(3)(A)(ii); and	Section 5.6.6 Table 5.6-7	Yes	

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 1 Date October 24, 2007

Technical Area: Land Use

Project: Carlsbad Energy Center

Technical Staff: Amanda Stennick

Project Manager: James W. Reede, Jr., Ed.D

Docket: 07-AFC-6

Technical Senior: Eric Knight

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (3) (A) (iv)	Legible maps of the areas identified in subsection (g)(3)(A) potentially affected by the project, on which existing land uses, jurisdictional boundaries, general plan designations, specific plan designations, and zoning have been clearly delineated.	Figures 5.6-1 and -2	Yes	
Appendix B (g) (3) (B)	A discussion of the compatibility of the proposed project with present and expected land uses, and conformity with any long-range land use plans adopted by any federal, state, regional, or local planning agencies. The discussion shall identify the need, if any, for land use decisions by another public agency or as part of the commission's decision that would be necessary to make the project conform to adopted federal, state, regional, or local coastal plans, land use plans, or zoning ordinances. Examples of land use decisions include: general plan amendments, zoning changes, lot line adjustments, parcel mergers, subdivision maps, Agricultural Land Conservation Act contracts cancellation, and Airport Land Use Plan consistency determinations.	Section 5.6.3.3.1 Tables 5.6-5 and -6	Yes	

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 1 Date October 24, 2007

Technical Area: Land Use

Project: Carlsbad Energy Center

Technical Staff: Amanda Stennick

Project Manager: James W. Reede, Jr., Ed.D

Docket: 07-AFC-6

Technical Senior: Eric Knight

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (3) (C)	A discussion of the legal status of the parcel(s) on which the project is proposed. If the proposed site consists of more than one legal parcel, describe the method and timetable for merging or otherwise combining those parcels so that the proposed project, excluding linears and temporary laydown or staging area, will be located on a single legal parcel. The merger need not occur prior to a decision on the Application but must be completed prior to the start of construction.	Sections 1.5 and 5.6.4.2.1 <u>Supplement A</u>	<u>No-Yes</u>	For staff to determine whether Assessor Parcel Number 210-01-41 (the parcel identified in the Application for Certification as the 30-acre parcel where the Carlsbad Energy Center Project is proposed to be constructed) is a legal parcel as defined in the California Subdivision Map Act, please provide one of the following bulleted items: <ul style="list-style-type: none"> • a Certificate of Compliance from the City of Carlsbad; • a Final Parcel Map as recorded by the City of Carlsbad; • a Tentative Parcel Map with a recorded legal description from the City of Carlsbad; or • a current grant deed AND a grant deed that was recorded closest to but preceding the date of March 4, 1972.
Appendix B (g) (3) (D)	A map at a scale of 1:24,000 and written description of agricultural land uses found within all areas affected by the proposed project. The description shall include:	Section 5.6.7.3 Figure 5.6-3	Yes	
Appendix B (g) (3) (D) (i)	Crop types, irrigation systems, and any special cultivation practices;	Section 5.6.7.3	Yes	
Appendix B (g) (3) (D) (ii)	Whether farmland affected by the project is prime, of statewide importance, or unique as defined by the California Department of Conservation; and	Section 5.6.7.3	Yes	
Appendix B (g) (3) (D) (iii)	Direct, indirect, and cumulative effects on agricultural land uses. If the proposed site or related facilities are subject to an Agricultural Land Conservation contract, provide a written copy and a discussion of the status of the expiration or canceling of such contract.	Section 5.6.7.3	Yes	

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 1 Date October 24, 2007

Technical Area: Land Use

Project: Carlsbad Energy Center

Technical Staff: Amanda Stennick

Project Manager: James W. Reede, Jr., Ed.D

Docket: 07-AFC-6

Technical Senior: Eric Knight

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 5.6-5 and -6	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 5.6-8 and -9	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.	Tables 5.6-8 and -9	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 5.6-9	Yes	

Adequacy Issue: Adequate Inadequate
 Technical Area: Socioeconomics
 Project Manager: James W. Reede, Jr., Ed.D

DATA ADEQUACY WORKSHEET

Revision No. 1 Date October 24, 2007
 Technical Staff: Joseph Diamond Ph. D.
 Technical Senior: Eric Knight

Project: Carlsbad Energy Center
 Docket: 07-AFC-6

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (1)	...provide a discussion of the existing site conditions, the expected direct, indirect and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation.	Section 5.10.3 Affected Environment, pages 5.10-3&4. Section 5.10.4 Environmental Analysis, pages 5.10-10 to 19. Section 5.10.5 Cumulative Effects, pages 5.10.23&24. Section 5.10.7 Mitigation Measures, page 5.10-24. Section 5.10.6 Environmental Justice, page 5.10-24. Appendix 5.10A Environmental Justice, pages 5.10A-1 to 4.	Yes	
Appendix B (g) (7) (A)	A description of the socioeconomic circumstances of the vicinity and region affected by construction and operation of the project. Include:			
Appendix B (g) (7) (A) (i)	The economic characteristics, including the economic base, fiscal resources, and a list of the applicable local agencies with taxing powers and their most recent and projected revenues;	Section 5.10.3.3 Economy and Employment, pages 5.10-5&6. Section 5.10.3.4 Fiscal Resources, pages 5.10-6&7.	Yes	
Appendix B (g) (7) (A) (ii)	The social characteristics, including population and demographic and community trends;	Section 5.10.3.1 Population, pages 5.10-3&4.	Yes	
Appendix B (g) (7) (A) (iii)	Existing unemployment rates;	Section 5.10.3.3 Economy and Employment, page 5.10-6.	Yes	

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 1 Date October 24, 2007

Technical Area: Socioeconomics

Project: Carlsbad Energy Center

Technical Staff: Joseph Diamond Ph. D.

Project Manager: James W. Reede, Jr., Ed.D

Docket: 07-AFC-6

Technical Senior: Eric Knight

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (7) (A) (iv)	Availability of skilled workers by craft required for construction and operation of the project;	Section 5.10.4.3.1 Construction Workforce, page 5.10-11. Table 5.10-12 Labor Union Contact page 5.10-16. Table 5.10-13 Available Labor by Skill in San Diego-Carlsbad-San Marcos Metropolitan Statistical Area (MSA), 2004-2014, page 5.10-16.	Yes	
Appendix B (g) (7) (A) (v)	Availability of temporary and permanent housing and current vacancy rate; and	Section 5.10.3.2 Housing, pages 5.10-4&5. Section 5.10.4.3.3, Housing Impacts, page 5.10-17 and Supplement A.	No <u>Yes</u>	Please provide the current vacancy rates for temporary housing (and date) i.e., the 448 hotel/motels with 53,598 rooms in San Diego County and 16 recreational vehicle (RV) parks within 13 miles of the City of Carlsbad discussed in the AFC.
Appendix B (g) (7) (A) (vi)	Capacities, existing and expected use levels, and planned expansion of utilities (gas, water and waste) and public services, including fire protection, law enforcement, emergency response, medical facilities, other assessment districts, and school districts. For projects outside metropolitan areas with a population of 500,000 or more, information for each school district shall include current enrollment and yearly expected enrollment by grade level groupings, excluding project-related changes for the duration of the project schedule.	Section 5.10.3.5 Education, pages 5.10-7&8. Section 5.10.3.6 Public Services and Facilities, pages 5.10-8&9. Section 5.10.3.7 Utilities, pages 5.10-9&10.	Yes	
Appendix B (g) (7) (B)	A discussion of the socioeconomic impacts caused by the construction and operation of the project (note year of estimate, model, if used, and appropriate sources), including:			

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 1 Date October 24, 2007

Technical Area: Socioeconomics

Project: Carlsbad Energy Center

Technical Staff: Joseph Diamond Ph. D.

Project Manager: James W. Reede, Jr., Ed.D

Docket: 07-AFC-6

Technical Senior: Eric Knight

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (7) (B) (i)	An estimate of the number of workers to be employed each month by craft during construction, and for operations, an estimate of the number of permanent operations workers during a year;	Section 5.10.4.3 Construction Impacts, page 5.10-11. Table 5.10-10 Construction Personnel By Craft-Single Phased Construction, pages 5.10-12 to 15. Section 5.10.4.4.1 Operation Workforce, page 5.10-21.	Yes	
Appendix B (g) (7) (B) (ii)	An estimate of the percentage of non-local workers who will relocate to the project area to work on the project;	Section 5.10.4.3.2 Population Impacts, page 5.10-16.	Yes	
Appendix B (g) (7) (B) (iii)	An estimate of the potential population increase caused directly and indirectly by the project;	Section 5.10.4.3.2 Population Impacts, page 5.10-16. Section 5.10.4.4.1 Operational Workforce, page 5.10-21.	Yes	
Appendix B (g) (7) (B) (iv)	The potential impact of population increase on housing during the construction and operations phases;	Section 5.10.4.3.3 Housing Impacts, page 5.10-17. Section 5.10.4.4.3 Housing Impacts, page 5.10-21.	Yes	

Adequacy Issue: Adequate Inadequate
 Technical Area: Socioeconomics
 Project Manager: James W. Reede, Jr., Ed.D

DATA ADEQUACY WORKSHEET

Revision No. 1 Date October 24, 2007
 Technical Staff: Joseph Diamond Ph. D.
 Technical Senior: Eric Knight

Project: Carlsbad Energy Center
 Docket: 07-AFC-6

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (7) (B) (v)	The potential impacts, including additional costs, on utilities (gas, water, and waste) and public services, including fire, law enforcement, emergency response, medical facilities, other assessment districts, and school districts. Include response times to hospitals and for police, and emergency services. For projects outside metropolitan areas with a population of 500,000 or more, information on schools shall include project-related enrollment changes by grade level groupings and associated facility and staffing impacts by school district during the construction and operating phases;	Section 5.10.4.3.6 Impacts on Education, page 5.10-20. Section 5.10.4.3.7 Impacts on Public Services and Facilities, page 5.10-20. Section 5.10.4.3.8 Impacts on Utilities, page 5.10-20. Section 5.10.4.4.6 Impacts on Education, pages 5.10-22&23. Section 5.10.4.4.7 Impacts on Public Services and Facilities, page 5.10-23. Section 5.10.4.4.8 Impact on Utilities, page 5.10-23.	Yes	
Appendix B (g) (7) (B) (vi)	An estimate of applicable school impact fees;	Section 5.10.4.4.6 Impacts on Education, page 5.10-23. Section 5.10.7 Mitigation Measures, page 5.10-24.	Yes	
Appendix B (g) (7) (B) (vii)	An estimate of the total construction payroll and separate estimates of the total operation payroll for permanent and short-term (contract) operations employees;	Section 5.10.4.3.4 Impacts to the Local Economy and Employment Single Phase Construction, page 5.10-17 and Phased Construction, page 5.10-18. Section 5.10.4.4.4 Impacts on the Local Economy and Employment, page 5.10-22.	Yes	
Appendix B (g) (7) (B) (viii)	An estimate of the expenditures for locally purchased materials for the construction and operation phases of the project;	Section 5.10.4.3.4 Impacts to the Local Economy and Employment, page 5.10-17. Section 5.10.4.4.4 Impacts on the Local Economy and Employment, page 5.10-21.	Yes	
Appendix B (g) (7) (B) (ix)	An estimate of the capital cost (plant and equipment) of the project;	Section 5.10.4.3.5 Fiscal Impacts, page 5.10-19.	Yes	

Adequacy Issue: Adequate Inadequate
 Technical Area: Socioeconomics
 Project Manager: James W. Reede, Jr., Ed.D

DATA ADEQUACY WORKSHEET

Revision No. 1 Date October 24, 2007
 Technical Staff: Joseph Diamond Ph. D.
 Technical Senior: Eric Knight

Project: Carlsbad Energy Center
 Docket: 07-AFC-6

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (7) (B) (x)	An estimate of sales taxes generated during construction and separately during an operational year of the project;	Section 5.10.4.3.5 Fiscal Impacts, Single Phase Construction and Phased Construction, pages 5.10-19&20. Section 5.10.4.4.5 Fiscal Impacts, page 5.10-22.	Yes	
Appendix B (g) (7) (B) (xi)	An estimate of property taxes generated during an operational year of the project; and	Section 5.10.4.4.5, Fiscal Impacts, page 5.10-22.	Yes	
Appendix B (g) (7) (B) (xii)	The expected direct, indirect, and induced income and employment effects due to construction, operation, and maintenance of the project.	Section 5.10.4.3.4, Impacts to the Local Economy and Employment, pages 5.10-17 to 19. Section 5.10.4.4.4 Impacts on the Local Economy and Employment, pages 5.10-21&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	Table 5.10.1 Laws, Ordinances, Regulations and Standards Applicable to Socioeconomics, page 5.10-1.	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.	Table 5.10-17 Agencies and Agency Contacts for Socioeconomics, page 5.10-25.	Yes	

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 1 Date October 24, 2007

Technical Area: Socioeconomics

Project: Carlsbad Energy Center

Technical Staff: Joseph Diamond Ph. D.

Project Manager: James W. Reede, Jr., Ed.D

Docket: 07-AFC-6

Technical Senior: Eric Knight

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.	Same as above.	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 5.10.7 Mitigation Measures, page 5.10-24.	Not Applicable	

Adequacy Issue: Adequate Inadequate
 Technical Area: Traffic and Transportation
 Project Manager: James W. Reede, Jr., Ed.D

DATA ADEQUACY WORKSHEET

Revision No. 1 Date October 24, 2007
 Technical Staff: David Flores
 Technical Senior: Eric Knight

Project: Carlsbad Energy Center
 Docket: 07-AFC-6

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.	AFC pg. 2-3 & 4 Sec. 2.2 AFC pg. 5.12-11 Sec. 5.12.3.4 AFC pg. 5.12-21 through 23 Sec. 5.12.7	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 5.12-2 & 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.	AFC pg. 5.12-13 Sec. 5.12.3.8 Figure 5.12-6 Sec.5.13.3.2.3 and Sec. 5.13.3.2.4 and Supplement A	<u>Yes</u> <u>No</u>	There is no discussion as to whether the project operation would impede/obstruct air navigation (eg., thermal plume, visible plume, glare, electrical interference etc.) as required under this siting regulation.

Adequacy Issue: Adequate Inadequate
 Technical Area: Traffic and Transportation
 Project Manager: James W. Reede, Jr., Ed.D

DATA ADEQUACY WORKSHEET

Revision No. 1 Date October 24, 2007
 Technical Staff: David Flores
 Technical Senior: Eric Knight

Project: Carlsbad Energy Center
 Docket: 07-AFC-6

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 5.12.3 Figure 5.12.5 AFC pg. 5.12-11 through 13 Sec. 5.12.3.4	Yes	
Appendix B (g) (5) (C) (i)	Road classification and design capacity;	AFC pg. 5.12-7 through 9 Table 5.12-3 & 4 Sec. 5.12.3.1	Yes	
Appendix B (g) (5) (C) (ii)	Current daily average and peak traffic counts;	AFC pg. 5.12-9, Sec. 5.12.3.2.1 Table 5.12-4	Yes	
Appendix B (g) (5) (C) (iii)	Current and projected levels of service before project development, during construction, and during project operation;	AFC pg. 5.12-16 & 17 Sec. 5.2.4.2.3 Table 5.12-9 7 &10	Yes	
Appendix B (g) (5) (C) (iv)	Weight and load limitations;	AFC pg. 5.12-11 Sec. 5.12.3.3	Yes	
Appendix B (g) (5) (C) (v)	Estimated percentage of current traffic flows for passenger vehicles and trucks; and	AFC pg. 5.12-8 through 11 Sec. 5.12.3.2.1 Table 5.12-4 through 6 Figure 5.12-4	Yes	
Appendix B (g) (5) (C) (vi)	An identification of any road features affecting public safety.	AFC pg. 5.12-19 Sec. 5.12.4.4	Yes	
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).	AFC pg. 5.12-15 through 17, Sec.5.12.4.2 AFC pg. 5.12-21 Sec. 5.12.6.2 Figure 5.12-8 & 9	Yes	

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 1 Date October 24, 2007

Technical Area: Traffic and Transportation

Project: Carlsbad Energy Center

Technical Staff: David Flores

Project Manager: James W. Reede, Jr., Ed.D

Docket: 07-AFC-6

Technical Senior: Eric Knight

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) (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.	AFC pg. 5.12-18 Sec. 5.12.4.3	Yes	
Appendix B (i) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	AFC pg. 5.12-1 through 6 Sec. 5.12.2 through 5.12.2.3	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.	AFC pg. 5.12-24 Table 5.12-11	Yes	
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and also provide the name of the official who will serve as a contact person for Commission staff.	AFC pg. 5.12-24 Sec. 5.12.8 Table 5.12-11	Yes	

Adequacy Issue: Adequate Inadequate
 Technical Area: Traffic and Transportation
 Project Manager: James W. Reede, Jr., Ed.D

DATA ADEQUACY WORKSHEET

Revision No. 1 Date October 24, 2007
 Technical Staff: David Flores
 Technical Senior: Eric Knight

Project: Carlsbad Energy Center
 Docket: 07-AFC-6

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.	AFC pg. 5.12-24 & 25 Sec. 5.12.9 Table 5.12-12	Yes	

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision 1 Date October 24, 2007
No.

Technical Area: Transmission System Design

Project: Carlsbad Energy Center

Technical Staff: Ajoy Guha, P.E.

Project Manager: James W. Reede, Jr., Ed.D

Docket: 07-AFC-6

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 2.1, Page 2-1. Section 2.2.5.1, 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 3.1, Page 3-1. Section 3.2 Pages 3-1 to 3-2. Figure 3.1-2.	Yes	

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision 1 Date October 24, 2007
No.

Technical Area: Transmission System Design

Project: Carlsbad Energy Center

Technical Staff: Ajoy Guha, P.E.

Project Manager: James W. Reede, Jr., Ed.D

Docket: 07-AFC-6

Technical Senior: Mark Hesters

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (b) (2) (C)	A detailed description of the design, construction, and operation of any electric transmission facilities, such as power lines, substations, switchyards, or other transmission equipment, which will be constructed or modified to transmit electrical power from the proposed power plant to the load centers to be served by the facility. Such description shall include the width of rights of way and the physical and electrical characteristics of electrical transmission facilities such as towers, conductors, and insulators.	<p>Section 3.1, Page 3-1. Sections 3.2, Pages 3-1 to 3-2. Figure 3.1-1. Figure 3.1-2 Revised Section 3.1, Page 3-1. Revised Section 3.2, Pages 3-2 to 3-3. <u>Figures TSE1a-1 to TSE1a-4.</u> <u>Supplement A</u></p> <p><u>Figures TSE1b-1 to TSE1b-7</u> <u>Supplement A</u></p> <p><u>Figures TSE1c-1 to TSE1c-11</u> <u>Supplement A</u></p>	<p>No <u>Yes</u></p>	<p>Provide a complete electrical one-line diagram (or resubmit Figure 3.1-1) of the proposed Carlsbad Energy Center Project (CECP) 138 kV & 230 kV switchyards or the post-project Encina switchyards showing all equipment for all new generators' interconnection with the switchyard including any bus duct connectors or cables, 13.8 kV switchgear & breakers on the low side, generator step-up transformers, short overhead line and/or cables from the transformers to the switchyards with their configurations, buses, breakers, disconnect switches on the 138 kV & 230 kV sides and their respective ratings, along with the existing/proposed transmission outlets from the switchyards.</p> <p>Also provide a one-line diagram showing the existing Encina generator units and pre-project existing 138 kV & 230 kV Encina Switchyards with their configurations, buses, breakers with the existing transmission outlets.</p> <p>Provide a physical layout drawing of the CECP switchyards or the post-project Encina Switchyards showing all major equipment and transmission outlets.</p>
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 3.2 Pages 3-1 to 3-2. Figure 3.1-2.	Yes	

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision 1 Date October 24, 2007
No.

Technical Area: Transmission System Design

Project: Carlsbad Energy Center

Technical Staff: Ajoy Guha, P.E.

Project Manager: James W. Reede, Jr., Ed.D

Docket: 07-AFC-6

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) (E)	<p>A completed System Impact Study or signed System Impact Study Agreement with the California Independent System Operator (CA ISO) and proof of payment. When not connecting to the California Independent System Operator controlled grid, provide the executed System Impact Study agreement and proof of payment to the interconnecting utility.</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>	<p>Section 3.2-3, Pages 3-3 to 3-4.</p> <p>Appendix 3A</p>	Yes	
Appendix B (i) (1) (A)	<p>Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and</p>	<p>Section 3.4, Pages 3-10 & 3-11.</p>	Yes	

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision 1 Date October 24, 2007
No.

Technical Area: Transmission System Design

Project: Carlsbad Energy Center

Technical Staff: Ajoy Guha, P.E.

Project Manager: James W. Reede, Jr., Ed.D

Docket: 07-AFC-6

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 3.4.7, Pages 3-13 to 3-14.	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 3.4.7, Pages 3-13 to 3-14.	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 3.4.7, Pages 3-13 to 3-14. TSE Data Adequacy Response, Page 2 of Supplement A	No <u>Yes</u>	Provide the expected date(s) when the preliminary and final interconnection approvals from the California ISO would be obtained, or, when the final Large Generator Interconnection Agreement would be executed with the California ISO.

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 1 Date October 24, 2007

Technical Area: Visual Resources

Project: Carlsbad Energy Center

Technical Staff: Mark R. Hamblin

Project Manager: James W. Reede, Jr., Ed.D

Docket: 07-AFC-6

Technical Senior: Eric Knight

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.	Pages 1-12 through 13, sect. 1.7.11 Page 5.13-3 through 4, sect. 5.13.2.2 through 5.13.2.3 Page 5.13-10 through 18, sect. 5.13.3.2.1 through 5.13.5.	Yes	
Appendix B (g) (6) (A)	Descriptions of the existing visual setting of the vicinity of the proposed project site and the proposed routes for any project-related linear facilities. Include:	Page 5.13-1 through 4, sect. 5.13.2.1 through 4.	Yes	
Appendix B (g) (6) (A) (i)	Topographic maps at a scale of 1:24,000 that depict directions from which the project would be seen, the view areas most sensitive to the potential visual impacts of the project, and the locations where photographs were taken for (g)(6)(C); and	Figure 5.13-3	Yes	
Appendix B (g) (6) (A) (ii)	Description of the existing visual properties of the topography, vegetation, and any modifications to the landscape as a result of human activities, including existing water vapor plumes, above-ground electrical transmission lines, and nighttime lighting levels in the project viewshed.	Page 5.13-3 through 8, sect. 5.13.2.2 through 5.13.2.5 Page 5.13-11 through 12, sect. 5.13.3.2.3 through 5.13.3.2.4	Yes	

Adequacy Issue: Adequate Inadequate
 Technical Area: Visual Resources
 Project Manager: James W. Reede, Jr., Ed.D

DATA ADEQUACY WORKSHEET

Revision No. 1 Date October 24, 2007
 Technical Staff: Mark R. Hamblin
 Technical Senior: Eric Knight

Project: Carlsbad Energy Center
 Docket: 07-AFC-6

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (6) (B)	An assessment of the visual quality of those areas that would be affected by the proposed project. For projects proposed to be located within the coastal zone, the assessment should also describe how the proposed project would be sited to protect views to and along the ocean and scenic coastal areas, would minimize the alteration of natural land forms, would be visually compatible with the character of surrounding areas.	Page 5.13-12 through 17, sect.5.13.3.3.1 through 5.13.3.3.4	Yes	
Appendix B (g) (6) (C)	In consultation with Energy Commission staff, identify: i) any designated scenic roadways or scenic corridors and any visually sensitive areas that would be affected by the proposed project, including recreational and residential areas; and ii) the locations of the key observation points to represent the most critical viewing locations from which to conduct detailed analyses of the visual impacts of the proposed project. Indicate the approximate number of people using each of these sensitive areas and the estimated number of residences with views of the project. Also identify any major public roadways and trails of local importance that would be visually impacted by the project and indicate the types of travelers (e.g., local residents, recreationists, workers, commuters, etc.) and the approximate number of vehicles, bicyclists, and/or hikers per day.	Page 5.13-12 through 15, sect. 5.13.3.3.1 through 5.13.3.3.2 Page 5.13-21 through 23, sect. 5.13.7.1 through 5.13.7.5	Yes	
Appendix B (g) (6) (D)	A table providing the dimensions (height, length, and width, or diameter) and, proposed color(s), materials, finishes, patterns, and other proposed design characteristics of each major component visible from off the project site, including any project-related electrical transmission line and/or offsite aboveground pipelines and metering stations.	Table 5.13-2	Yes	

Adequacy Issue: Adequate Inadequate
 Technical Area: Visual Resources
 Project Manager: James W. Reede, Jr., Ed.D

DATA ADEQUACY WORKSHEET

Revision No. 1 Date October 24, 2007
 Technical Staff: Mark R. Hamblin
 Technical Senior: Eric Knight

Project: Carlsbad Energy Center
 Docket: 07-AFC-6

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (6) (E)	Provide the cooling tower and heat recovery steam generator (HRSG) exhaust design parameters that affect visible plume formation. For the cooling tower, data shall include heat rejection rate, exhaust temperature, exhaust mass flow rate, liquid to gas mass flow ratio, and, if the tower is plume-abated, moisture content (percent by weight) or plume-abated fogging curve(s). The parameters shall account for a range of ambient conditions (temperature and relative humidity) and proposed operating scenarios, such as duct firing and shutting down individual cells. For the heat recovery steam generator exhausts, data shall include moisture content (percent by weight), exhaust mass flow rate, and exhaust temperature. The parameters must correspond to full-load operating conditions at specified ambient conditions, and shall account for proposed operating scenarios, such as power augmentation (i.e., evaporative coolers, inlet foggers, or steam injection) and duct firing, or proposed HRSG visible plume abatement, such as the use of an economizer bypass. For simple-cycle projects, provide analogous data for the exhaust stack(s).	Appendix 5.1B, Table 5.1B-6 Page 5.13-12, sect. 5.13.3.2.4	Yes	

Adequacy Issue: Adequate Inadequate
 Technical Area: Visual Resources
 Project Manager: James W. Reede, Jr., Ed.D

DATA ADEQUACY WORKSHEET

Revision No. 1 Date October 24, 2007
 Technical Staff: Mark R. Hamblin
 Technical Senior: Eric Knight

Project: Carlsbad Energy Center
 Docket: 07-AFC-6

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (6) (F)	Provide: i) full-page color photographic reproductions of the existing site, and ii) full-page color simulations of the proposed project at life-size scale when the picture is held 10 inches from the viewer's eyes, including any project-related electrical transmission lines, in the existing setting from each key observation point. If any landscaping is proposed to comply with zoning requirements or to mitigate visual impacts, include the landscaping in simulation(s) representing sensitive area views, depicting the landscaping five years after installation; and estimate the expected time until maturity is reached.	Figures 15.13-6 through 12 of Supplement A	No <u>Yes</u>	On AFC page 5.13-10 it states "The simulation images presented in this AFC include 50 mm lens photos printed at a size which is about 9 inches in width. These images should be viewed at a distance of approximately 12.5 inches to gain an optimal impression of the project's scale in relationship to the surrounding landscape." The images are not presented at life-size scale. The purpose behind the use of a life-size (approximately tabloid-size) photo is that if an individual extended it to a normal reading range and lined it up with the horizon at the KOP location, the photo simulation if accurate will lineup/match the actual physical setting providing a true to life view of the proposed power plant. Please provide individual life-size photos of Figure 5.13-6, Figure 5.13-7, Figure 5.13-8, Figure 5.13-9, Figure 5.13-10, Figure 5.13-11 and Figure 5.13-12.
Appendix B (g) (6) (G)	An assessment of the visual impacts of the project, including light, glare, and any modeling of visible plumes. Include a description of the method and identify any computer model used to assess the impacts. Provide an estimate of the expected frequency and dimensions (height, length, and width) of the visible cooling tower and/or exhaust stack plumes. Provide the supporting assumptions, meteorological data, operating parameters, and calculations used.	Page 5.13-11-12, sect. 5.13.3.2.3 Page 5.13-12, sect. 5.13.3.2.4 Page 5.13-15, sect. 5.13.3.3.2	Yes	
Appendix B (g) (6) (H)	If any landscaping is proposed to reduce the visual impacts of the project, provide a conceptual landscaping plan at a 1:40 scale (1"=40'). Include information on the type of plant species proposed, their size, quantity, and spacing at planting, expected heights at 5 years and maturity, and expected growth rates.	Page 5.13-11 (no landscaping as per a CEQA mitigation)	Yes	

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 1 Date October 24, 2007

Technical Area: Visual Resources

Project: Carlsbad Energy Center

Technical Staff: Mark R. Hamblin

Project Manager: James W. Reede, Jr., Ed.D

Docket: 07-AFC-6

Technical Senior: Eric Knight

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	Page 5.13-21 through 30, sect. 5.13.7.1 through 5.13.7.11, Table 5.13-4 Table 5.13-5 Table 5.13-6 Table 5.13-7 Table 5.13-8 Table 5.13-9 Table 5.13-10	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 5.13-3	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 5.13-3	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.	NA	NA	

Adequacy Issue: Adequate Inadequate
 Technical Area: Water Resources
 Project Manager: James W. Reede, Jr., Ed.D

DATA ADEQUACY WORKSHEET

Revision No. 1 Date October 24, 2007
 Technical Staff: Richard Latteri
 Technical Senior: Paul Richins

Project: Carlsbad Energy Center
 Docket: 07-AFC-6

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 Section 5.15.3.4.2 and Supplement A	No-Yes	Please provide a copy of the current Section 401 Certification from the San Diego Regional Water Quality Control Board for the discharge of stormwater into Aqua Hedionda Lagoon; a discussion of the requirements for a new Section 401 Certification; and all information required to apply for a new Section 401 Certification.
Appendix B (g) (14) (A) (ii)	Construction and Industrial Waste Discharge and/or Industrial Pretreatment permits from wastewater treatment agencies;	Sections 5.15.3.6	Yes	
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

DATA ADEQUACY WORKSHEET

Revision No. 1 Date October 24, 2007

Technical Area: Water Resources

Project: Carlsbad Energy Center

Technical Staff: Richard Latteri

Project Manager: James W. Reede, Jr., Ed.D

Docket: 07-AFC-6

Technical Senior: Paul Richins

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (14) (B) (i)	Ground water bodies and related geologic structures;	Section 5.15.3.2.1 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 5.15.3.2.2 Section 5.15.3.3 Figure 5.15-3	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 5.15.3.5.1 & 2 and <u>Supplement A</u>	No <u>Yes</u>	Please provide the rationale for using potable water from the City of Carlsbad for construction activities.
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 5.15.4.4 Table 5.15-5 Appendix 5.15E Table 5.15F-1	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;	Section 5.15.3.5.2	Yes	

Adequacy Issue: Adequate Inadequate
 Technical Area: Water Resources
 Project Manager: James W. Reede, Jr., Ed.D

DATA ADEQUACY WORKSHEET

Revision No. 1 Date October 24, 2007
 Technical Staff: Richard Latteri
 Technical Senior: Paul Richins

Project: Carlsbad Energy Center
 Docket: 07-AFC-6

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 2.2.7 Figures 2.2-6a & 6b	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 5.15.3.5 Appendix 5.15A and <u>Supplement A</u>	No <u>Yes</u>	<p>Please provide a will-serve letter from the City of Carlsbad indicating that the City is willing to serve the CECP; has adequate supplies of tertiary treated recycled water for the life of the project; and any conditions or restrictions under which water will be provided.</p> <p>In the event that a will-serve letter cannot be provided, please provide a discussion of the necessary assurances from the City to serve the CECP with up to 945 gpm of tertiary treated recycled water for a period of 30—35 years.</p>
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

DATA ADEQUACY WORKSHEET

Revision No. 1 Date October 24, 2007

Technical Area: Water Resources

Project: Carlsbad Energy Center

Technical Staff: Richard Latteri

Project Manager: James W. Reede, Jr., Ed.D

Docket: 07-AFC-6

Technical Senior: Paul Richins

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (14) (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	Section 2.2.7 Figures 2.2-5, 6a & 6b	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>	Appendix 5.15A and Supplement A	No-Yes	<p>Please provide a will-serve letter from the City of Carlsbad for the discharge of sanitary and industrial wastewater into the City's sanitary sewer system that identifies the discharge volumes and the chemical or physical characteristics under which the wastewater and contact stormwater will be accepted.</p> <p>In the event a will-serve letter from the City cannot be provided, please provide a discussion of the wastewater service required for the CECP; whether the City has adequate permit capacity for the quantity and quality of wastewater from the CECP for the life of the project; and any conditions or restrictions the City may impose on the CECP.</p>
Appendix B (g) (14) (D)	Identify all project elements associated with stormwater drainage, including a description of the following:	—	—	

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 1 Date October 24, 2007

Technical Area: Water Resources

Project: Carlsbad Energy Center

Technical Staff: Richard Latteri

Project Manager: James W. Reede, Jr., Ed.D

Docket: 07-AFC-6

Technical Senior: Paul Richins

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (14) (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 5.15.3.4 Appendix 5.15C	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;	Appendix 5.15C and <u>Supplement A</u>	No <u>Yes</u>	Please provide the City of Carlsbad's drainage and design criteria per the requirements of San Diego County's Municipal Storm Water NPDES Permit No. CAS0108758.
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	Section 5.15.4.1 Appendix 5.15B	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.	Sections 5.15.2 & .3 and <u>Supplement A</u>	No <u>Yes</u>	Please provide a copy of Section 15.12 of the City of Carlsbad Municipal Code; a copy of the City's Standard Urban Storm Water Mitigation Plan; and a discussion of how the GECP's drainage and sediment control design complies with those requirements.
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;	<u>Supplement A</u>	No <u>Yes</u>	Please provide a discussion of the effects of GECP recycled and potable water demand on the City of Carlsbad supplies; its affect on other users of those water sources; and the consistency of potable water use for construction with the SDRWQCB basin plan or other applicable resource management plans.

Adequacy Issue: Adequate Inadequate
 Technical Area: Water Resources
 Project Manager: James W. Reede, Jr., Ed.D

DATA ADEQUACY WORKSHEET

Revision No. 1 Date October 24, 2007
 Technical Staff: Richard Latteri
 Technical Senior: Paul Richins

Project: Carlsbad Energy Center
 Docket: 07-AFC-6

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;	Appendices 5.15C & B	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;”	Appendix 5.15E	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;”	N/A	—	

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 1 Date October 24, 2007

Technical Area: Water Resources

Project: Carlsbad Energy Center

Technical Staff: Richard Latteri

Project Manager: James W. Reede, Jr., Ed.D

Docket: 07-AFC-6

Technical Senior: Paul Richins

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (14) (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 5.15.3.2.2 Section 5.15.3.3 Figure 5.15-3	Yes	
Appendix B (g) (14) (vii)	All assumptions, evidence, references, and calculations used in the analysis to assess these effects.	Section 5.15.3.2.2 Section 5.15.3.3 Figure 5.15-3	Yes	
Appendix B (i) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	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.	Tables 5.15-1 & 5.15-7	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.	Table 5.15-7	Yes	

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 1 Date October 24, 2007

Technical Area: Water Resources

Project: Carlsbad Energy Center

Technical Staff: Richard Latteri

Project Manager: James W. Reede, Jr., Ed.D

Docket: 07-AFC-6

Technical Senior: Paul Richins

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (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 5.15-7	Yes	

