

M e m o r a n d u m**Date:** November 21, 2000**Telephone:** ATSS (916) 654-4176**File:** DataAdqREC1MemoNov21

To : William J. Keese, Chairman
Michal C. Moore, Commissioner
Robert A. Laurie, Commissioner
Robert Pernell, Commissioner
Art Rosenfeld, Commissioner

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

Subject: DATA ADEQUACY RECOMMENDATION FOR THE MORRO BAY POWER PLANT PROJECT - (00-AFC-12)

The staff has completed its data adequacy review of the Morro Bay Power Plant Application for Certification (AFC) (00-AFC-12) submitted on October 23, 2000. I have determined that the AFC does not contain all the information required by Cal. Code of Regs., tit. 20, § 1704, Appendix B. Attachment A contains an overview of the adequacy of each technical discipline. Attachment B contains staff's detailed data adequacy worksheets which describe staff's findings for each information requirement.

The technical areas that the staff found data inadequate are air quality, land use, traffic and transportation, visual resources, cultural resources, socioeconomics, water resources and transmission system engineering. The provision of additional data in these areas should not be time consuming with the possible exception of air quality, cultural resources, visual resources and transmission system engineering. The latter discusses the need for an updated Preliminary Facilities Study (System Impact/Facilities Study) to be completed by Pacific Gas and Electric Company (PG&E).

The San Luis Obispo Air Pollution Control District (District) has provided a letter dated November 17, 2000, contained in Attachment C, which states that it has determined that the AFC is not complete according to District standards. Because the Energy Commission's regulations require that the AFC contain the information necessary for the District to complete its Determination of Compliance, fulfillment of District requirements in Attachment A (of the District's letter) are required for this project to be deemed data adequate by the Energy Commission. Information required by the District in Attachments B and C of their letter will be obtained during the discovery phase of the AFC process which begins once a project is deemed data adequate.

Additional comments, which are contained in Attachment D, were received from the following individuals and agencies:

City of Morro Bay
Morro Bay National Estuary Program
California Coastal Commission
Peter Wagner
Henriette Groot
Betty Winholtz
Yarrow Nelson

The City of Morro Bay (City) presented extensive comments on the following technical areas: alternatives, biological resources, cultural resources, geological resources, hazardous materials handling, land use, noise, socioeconomics, soils, traffic and transportation, visual resources, waste management, water resources, and worker safety. Some of the City's visual resources and land use comments were included in the staff's data adequacy assessment. It has been determined that the majority of the issues raised in the City's comments should be addressed during the discovery phase of the AFC process.

Many of the remaining comments, including those of the other responding agencies, California Coastal Commission and the Morro Bay National Estuary Program, were focused on the technical areas of alternatives, biological resources and water resources. In many cases the comments are directed at the need for the clarification, justification, or quantification of points made in the AFC, which are issues staff believes are more appropriate for the discovery stage of the AFC process. However, staff agrees that the issues raised in all of these comments are important, and intends to request the information identified during the discovery phase. All commenting parties are encouraged to participate in discovery phase workshops to ensure that all project issues are addressed as comprehensively as possible.

At the Energy Commission's business meeting on December 6, 2000, I will be recommending that the Energy Commission not accept the AFC until all the additional information specified in Attachment B is supplied. Pursuant to Cal. Code of Regs., tit. 20, § 1709 (c), if the Energy Commission accepts my recommendation, the Energy Commission shall indicate, in writing, those parts of the AFC which fail to meet the information requirements and the manner in which it can be made complete.

If you have any questions, please call Kae C. Lewis, staff's Project Manager, at (916) 654-4176.

STEVE LARSON
Executive Director

Attachments

cc: Christopher Ellison, Counsel to Applicant
Andrew Trump, Duke Energy North America
Gary Willey, San Luis Obispo Air Pollution Control District
Greg Fuz, City of Morro Bay
Michael Bowen, California Coastal Commission
Michael Multari, Morro Bay National Estuary Program
Yarrow Nelson
Peter Wagner
Henriette Groot

ATTACHMENT A

**OVERVIEW OF ENERGY COMMISSION STAFF'S
DATA ADEQUACY DETERMINATION**

**Morro Bay Power Project
00-AFC-12**

TECHNICAL AREA	ATTACHMENT B PAGE No.	ADEQUATE?	INADEQUATE?
PROJECT OVERVIEW.....	1	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ALTERNATIVES	4	<input checked="" type="checkbox"/>	<input type="checkbox"/>
AIR QUALITY	5	<input type="checkbox"/>	<input checked="" type="checkbox"/>
PUBLIC HEALTH.....	9	<input checked="" type="checkbox"/>	<input type="checkbox"/>
WORKER SAFETY	11	<input checked="" type="checkbox"/>	<input type="checkbox"/>
T-LINE SAFETY AND NUISANCE	13	<input checked="" type="checkbox"/>	<input type="checkbox"/>
HAZARDOUS MATERIALS HANDLING.....	15	<input checked="" type="checkbox"/>	<input type="checkbox"/>
WASTE MANAGEMENT	17	<input checked="" type="checkbox"/>	<input type="checkbox"/>
LAND USE	20	<input type="checkbox"/>	<input checked="" type="checkbox"/>
TRAFFIC AND TRANSPORTATION.....	23	<input type="checkbox"/>	<input checked="" type="checkbox"/>
NOISE	26	<input checked="" type="checkbox"/>	<input type="checkbox"/>
VISUAL RESOURCES	29	<input type="checkbox"/>	<input checked="" type="checkbox"/>
CULTURAL RESOURCES.....	33	<input type="checkbox"/>	<input checked="" type="checkbox"/>
SOCIOECONOMICS	36	<input type="checkbox"/>	<input checked="" type="checkbox"/>
BIOLOGICAL RESOURCES.....	39	<input checked="" type="checkbox"/>	<input type="checkbox"/>
SOIL RESOURCES.....	43	<input checked="" type="checkbox"/>	<input type="checkbox"/>
WATER RESOURCES	45	<input type="checkbox"/>	<input checked="" type="checkbox"/>
PALEONTOLOGICAL RESOURCES.....	48	<input checked="" type="checkbox"/>	<input type="checkbox"/>
GEOLOGICAL RESOURCES	50	<input checked="" type="checkbox"/>	<input type="checkbox"/>
FACILITY DESIGN.....	52	<input checked="" type="checkbox"/>	<input type="checkbox"/>
RELIABILITY.....	55	<input checked="" type="checkbox"/>	<input type="checkbox"/>
EFFICIENCY	57	<input checked="" type="checkbox"/>	<input type="checkbox"/>
TRANSMISSION SYSTEM ENG.....	59	<input type="checkbox"/>	<input checked="" type="checkbox"/>

ATTACHMENT B

**ENERGY COMMISSION STAFF'S
List of Data Inadequacies**

**Morro Bay Power Plant Project
00-AFC-12**

November 21, 2000

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 0 Date _____

Technical Area: Project Overview

Project: Morro Bay Power Project

Technical Staff: Kae Lewis

Project Manager: Kae Lewis

Docket: _____

Technical Senior: Roger Johnson

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Cal. Code Regs., tit. 20, § 1704, (a) (3) (A)	Descriptions of all significant assumptions, methodologies, and computational methods used in arriving at conclusions in the document.	Data evaluated in technical sections.	NA	
Cal. Code Regs., tit. 20, § 1704, (a) (3) (B)	Descriptions, including methodologies and findings, of all major studies or research efforts undertaken and relied upon to provide information for the document; and a description of ongoing research of significance to the project (including expected completion dates; and	Data evaluated in technical sections.	NA	
Cal. Code Regs., tit. 20, § 1704, (a) (3) (C)	A list of all literature relied upon or referenced in the documents, along with brief discussions of the relevance of each such reference	Data evaluated in technical sections.	NA	
Cal. Code Regs., tit. 20, § 1704, (a) (4)	Each principal subject area covered in a notice or application shall be set forth in a separate chapter or section, each of which shall identify the person or persons responsible for its preparation.	Page 9-1 (V.IB)	Yes	
Appendix B (a) (1) (A)	A general description of the proposed site and related facilities, including the location of the site or transmission routes, the type, size and capacity of the generating or transmission facilities, fuel characteristics, fuel supply, water supply, pollution control systems, and other general characteristics.	Page 2-29 to 2-79; Figure 2-5 (V.IA)	Yes	
Appendix B (a) (1) (B)	Identification of the location of the proposed site and related facilities by section, township, range, county and assessors parcel numbers.	Page 2-40 (V.IA)	Yes	
Appendix B (a) (1) (C)	A description of and maps depicting the region, the vicinity, and the site and its immediate surroundings.	Pages 2-41; 2-51 to 2-52; Figures 1-1 to 1-3; 2-2 to 2-4; 2-8 (V.IA)	Yes	
Appendix B (a) (1) (D)	A full-page color photographic reproduction depicting the visual appearance of the site prior to construction, and a full-page color simulation or artist's rendering of the site and all project components at the site, after construction.	Figures 1-5 to 1-6; 2-13 to 2-16 (V.IA)		

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 0 Date _____

Technical Area: Project Overview

Project: Morro Bay Power Project

Technical Staff: Kae Lewis

Project Manager: Kae Lewis

Docket: _____

Technical Senior: Roger Johnson

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (a) (1) (E)	In an appendix to the application, a list of current assessor's parcel numbers and owners' names and addresses for all parcels within 500 feet of the proposed transmission line and other linear facilities, and within 1000 feet of the proposed powerplant and related facilities.	Appendix I.I (V.II)	Yes	
Appendix B (a) (2)	Project Schedule: Proposed dates of initiation and completion of construction, initial start-up, and full-scale operation of the proposed facilities.	Pages 1-17 to 1-21; 2-62 to 2-63; Figures 2-10 to 2-11; 1-7 (V.IA)	Yes	
Appendix B (a) (3) (A)	A list of all owners and operators of the site(s), the power plant facilities, and, if applicable, thermal host, the geothermal leasehold, the geothermal resource conveyance lines, and the geothermal re-injection system, and a description of their legal interest in these facilities.	Pages 2-4 to 2.9 (V.IA)	Yes	
Appendix B (a) (3) (B)	A list of all owners and operators of the proposed electric transmission facilities.	Pages 1-4; 2-64 (V.IA)	Yes	
Appendix B (a) (3) (C)	A description of the legal relationship between the applicant and each of the persons or entities specified in subsections (a)(3)(A) and (B).	Page 1-4 (V.IA)	Yes	
Appendix B (b) (1) (A)	Maps at a scale of 1:24,000 (1" = 2000'), along with an identification of the dedicated leaseholds by section, township, range, county, and county assessor's parcel number, showing the proposed final locations and layout of the power plant and all related facilities;	Page 2-40; Figure 2-4 (V.IA)	Yes	
Appendix B (b) (1) (B)	Scale plan and elevation drawings depicting the relative size and location of the power plant and all related facilities;	Figure 2-7; 2-12 (V.IA)	Yes	
Appendix B (b) (1) (C)	A detailed description of the design, construction and operation of the facilities, specifically including the power generation, cooling, water supply and treatment, waste handling and control, pollution control, fuel handling, and safety, emergency and auxiliary systems, and fuel types and fuel use scenarios; and	Pages 2-29 to 2-79 (V.IA); Pages 8-1 to 8-42 (V.IB)	Yes	

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 0 Date _____

Technical Area: Project Overview

Project: Morro Bay Power Project

Technical Staff: Kae Lewis

Project Manager: Kae Lewis

Docket: _____

Technical Senior: Roger Johnson

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (b) (2) (A)	Maps at a scale of 1:24,000 of each proposed transmission line route, showing the settled areas, parks, recreational areas, scenic areas, and existing transmission lines within one mile of the proposed route(s).	Output from new 1200MW plant will use existing PG&E switchyard (no major new trans infrastructure).	NA	
Appendix B (b) (2) (B)	A full-page color photographic reproduction depicting a representative above ground section of the transmission line route prior to construction and a full-page color photographic simulation of that section of the transmission line route after construction.	See above.	NA	
Appendix B (c)	In a section entitled, "Demand Conformance" provide a discussion explaining how the proposed project conforms with the requirements of Public Resources Code § 25524 or Public Resources Code § 25540.6(a)(5). If the provisions of Public Resources Code § 25523.5 are applicable, explain how the project conforms with the requirements of this section. Additional data adequacy requirements may be contained in the Electricity Report applicable pursuant to Title 20, California Code of Regulations, § 1720.5.		NA	
Appendix B (d) (1)	A copy of any study or analysis required by the terms of the Commission's Final Decision on the NOI, and a brief summary of the results of the study or analysis.	Page 5-1 (V.IA) Under CPRC S.25540.6(a) modernization of existing facilities is exempt from NOI requirement.	NA	
Appendix B (d) (2)	Updates of any significant information which has changed since the Commission's Final Decision on the NOI.	See above.	NA	
Appendix B (e) (1)	A discussion of how facility closure will be accomplished in the event of premature or unexpected cessation of operations.	Pages 4-3 to 4-4 (V.IA)	Yes	

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 0 Date _____

Technical Area: Alternatives

Project: Morro Bay (MBPP)

Technical Staff: Kae Lewis

Project Manager: _____

Docket: _____

Technical Senior: Roger Johnson

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (b) (1) (D)	A description of how the site and related facilities were selected and the consideration given to engineering constraints, site geology, environmental impacts, water, waste and fuel constraints, electric transmission constraints, and any other factors considered by the applicant.	Pages 2-81 to 2-82; 5-2 to 5-7 (V.IA)	Yes	
Appendix B (f) (1)	A discussion of the range of reasonable alternatives to the project, or to the location of the project, including the no project alternative, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and an evaluation of the comparative merits of the alternatives. In accordance with Public Resources Code section 25540.6(b), a discussion of the applicant's site selection criteria, any alternative sites considered for the project, and the reasons why the applicant chose the proposed site.	Pages 5-8 to 5-47 (V.IA)	Yes	
Appendix B (f) (2)	An evaluation of the comparative engineering, economic, and environmental merits of the alternatives discussed in subsection (f)(1).	Pages 5-8 to 5-47; Table 5-1 (V.IA)	Yes	

Adequacy Issue: Adequate _____ Inadequate X

DATA ADEQUACY WORKSHEET

Revision No. _____ Date November 3, 2000

Technical Area: **Air Quality**

Project: Morro Bay Power Plant

Technical Staff: Magdy Badr

Project Manager: Kae Lewis

Docket: 00-AFC-12

Technical Senior: Robert Haussler

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 6.2-1 to 6.2-78 Appendixes 6.2-1 to 6.2-8	Yes	
Appendix B (g) (8) (A)	The information necessary for the air pollution control district where the project is located to complete a Determination of Compliance.	Section 6.2 Appendix 6.2	No	The San Luis Obispo Air pollution Control District staff has reviewed the Application and determined that it is not complete according to their standards. See attached District's letter in which the needed information are specified.
Appendix B (g) (8) (B)	The heating value and chemical characteristics of the proposed fuels, the stack height and diameter, the exhaust velocity and temperature, the heat rate and the expected capacity factor of the proposed facility.	Table 6.2-24 Table 6.2-34 Table 6.2-2.4 Pages 6.2-43 and 44	Yes	
Appendix B (g) (8) (C)	A description of the control technologies proposed to limit the emission of criteria pollutants.	Page 6.2-6 Appdix 6.2-6	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.	No Cooling tower are needed. Plant utilizes sea water.	Yes	
Appendix B (g) (8) (E)	The emission rates of criteria pollutants from the stack, cooling towers, fuels and materials handling processes, delivery and storage systems, and from all secondary emission sources.	Appendix 6.2-1	Yes	
Appendix B (g) (8) (F)	A description of typical operational modes, and start-up and shutdown modes for the proposed project, including the estimated frequency of occurrence and duration of each mode, and estimated emission rate for each criteria pollutant during each mode.	Table 6.2-2.3 Table 6.2-1.3 Page 6.2-43	Yes	

Adequacy Issue: Adequate _____ Inadequate X

DATA ADEQUACY WORKSHEET

Revision No. _____ Date November 3, 2000

Technical Area: Air Quality

Project: Morro Bay Power Plant

Technical Staff: Magdy Badr

Project Manager: Kae Lewis

Docket: 00-AFC-12

Technical Senior: Robert Haussler

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (8) (G)	The ambient concentrations of all criteria pollutants for the previous three years as measured at the three Air Resources Board certified monitoring stations located closest to the project site, and an analysis of whether this data is representative of conditions at the project site. The applicant may substitute an explanation as to why information from one, two, or all stations is either not available or unnecessary.	Table 6.2-37 Page 6.2-59	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.	Appendix 6.2-2.1 Electronic filing on "CD"	Yes	
Appendix B (g) (8) (H) (i)	If the data is collected from the project site, the applicant shall demonstrate compliance with the requirements of the U.S. Environmental Protection Agency document entitled "On-Site Meteorological Program Guidance for Regulatory Modeling Applications" (EPA - 450/4-87-013 (August 1995), which is incorporated by reference in its entirety.)	Electronic filing on "CD"	No	The meteorological data (On-Site Data) was collected by PG&E. The Applicant must include documentation showing compliance with EPA guidance or a letter from ARB or from the air district indicating that the meteorological data is acceptable
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.	Figures 6.2-1 to 6.2-4 Pages 6.2-87 to 8.2-112 Electronic filing on "CD"	Yes	
Appendix B (g) (8) (I)	An evaluation of the project's direct and cumulative air quality impacts, consisting of the following:			

Adequacy Issue: Adequate _____ Inadequate X

DATA ADEQUACY WORKSHEET

Revision No. _____ Date November 3, 2000

Technical Area: Air Quality

Project: Morro Bay Power Plant

Technical Staff: Magdy Badr

Project Manager: Kae Lewis

Docket: 00-AFC-12

Technical Senior: Robert Haussler

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (8) (I) (i)	A screening level air quality modeling analysis, or a more detailed modeling analysis if so desired by the applicant, of the direct inert pollutant impacts of project construction activities on ambient air quality conditions, including fugitive dust (PM ₁₀) emissions from grading, excavation and site disturbance, as well as the combustion emissions [nitrogen oxides (NO _x), sulfur dioxide (SO ₂), carbon monoxide (CO), and particulate matter less than 10 microns in diameter (PM ₁₀)] from construction-related equipment;	Appendix 6.2-5	Yes	
Appendix B (g) (8) (I) (ii)	A screening level air quality modeling analysis, or a more detailed modeling analysis if so desired by the applicant, of the direct inert criteria pollutant (NO _x , SO ₂ , CO and PM ₁₀) impacts on ambient air quality conditions of the project during typical (normal) operation, and during shutdown and startup modes of operation. Identify and include in the modeling of each operating mode the estimated maximum emissions rates and the assumed meteorological conditions; and	Pages 6.2-47 to 6.2-67 Tables 6.2-5 and 6.2-6	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.	Appendix 6.2-8	Yes	
Appendix B (g) (8) (J)	If an emission offset strategy is proposed to mitigate the project's impacts under subsection (g)(1), provide the following information:			
Appendix B (g) (8) (J) (i)	The quantity of offsets needed;	Pages 6.2-5 to 6.2-7	Yes	

Adequacy Issue: Adequate _____ Inadequate X

DATA ADEQUACY WORKSHEET

Revision No. _____ Date November 3, 2000

Technical Area: **Air Quality**

Project: Morro Bay Power Plant

Technical Staff: Magdy Badr

Project Manager: Kae Lewis

Docket: 00-AFC-12

Technical Senior: Robert Haussler

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (8) (J) (ii)	Potential offset sources, including location, and quantity of emission reductions; and	Pages 6.2-5 to 6.2-7 Table 6.2-53	Yes	
Appendix B (g) (8) (J) (iii)	Method of emission reduction.	Pages 6.2-5 to 6.2-7	Yes	
Appendix B (g) (8) (K)	A topographic map containing contour and elevation data, at a scale of 1:24,000, showing the area within 6 miles of the power plant site.		Yes	
Appendix B (h) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, and permits applicable to the proposed project, and a discussion of the applicability of each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed;	Tables 6.2-21 Pages 6.2-72 to 6.2-79	Yes	
Appendix B (h) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Table 6.2-16	Yes	
Appendix B (h) (2)	A discussion of the conformity of the project with the requirements listed in subsection (h)(1)(A).	Table 6.2-21 Pages 6.2-72 to 79	Yes	
Appendix B (h) (3)	The name, title, phone number, and address, if known, of an official within each agency who will serve as a contact person for the agency.	Table 6.2-16	Yes	
Appendix B (h) (4)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Table 7.1 Section 7, page 7-107	Yes	

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 0 Date November 7, 2000

Technical Area: Public Health
 Project Manager: Kae Lewis

Project: Morro Bay Power Plant
 Docket: 00-AFC-12

Technical Staff: Obed Odoemelam
 Technical Senior: Bob Haussler

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 6.2, pages 6.2-2 through 6.2-4, 6.2-15 through 6.2-22. (Section 6.16 is "Public Health")	Yes	
Appendix B (g) (9) (A)	A list of all toxic substances emitted by the project under normal operating conditions, which may cause an adverse public health impact as a result of acute, chronic, or sub-chronic exposure and to which members of the public may be exposed. This list should include, at a minimum, any pollutants emitted by the project that are listed pursuant to Health and Safety Code § 25249.8.	Section 6.2, page 6.2-46; Section 6.16, pages 6.16-13 through 6.16-15	Yes	
Appendix B (g) (9) (B)	A protocol describing the analysis which the applicant will conduct to determine the extent of potential public exposure to substances identified in subsection (g)(9)(A) resulting from normal facility operation. The analysis itself can be submitted after the AFC is complete.	Section 6.2, pages 6.2-67 through 6.2-68. Appendix 6.2-3.	Yes	
Appendix B (g) (9) (C)	A map at a scale of 1:24,000, showing all terrain areas exceeding the elevation of the stack within a 10 mile radius of the facility.	Section 6.1, page 6.1-5; Section 6.16, page 6.16-3	Yes	
Appendix B (g) (9) (D)	A map at a scale of 1:24,000, showing the distribution of population and sensitive receptors within the area exposed to the substances identified in subsection (g)(9)(A).	Section 6.16, page 6.16-3	Yes	

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 0 Date November 7, 2000

Technical Area: Public Health
 Project Manager: Kae Lewis

Project: Morro Bay Power Plant
 Docket: 00-AFC-12

Technical Staff: Obed Odoemelam
 Technical Senior: Bob Haussler

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (h) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, and permits applicable to the proposed project, and a discussion of the applicability of each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed;	Section 7.5-16; table 7-1 page 7-65 through 7-68	Yes	
Appendix B (h) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Same as above.	Yes	
Appendix B (h) (2)	A discussion of the conformity of the project with the requirements listed in subsection (h)(1)(A).	Section 6.2, page 6.2-45	Yes	
Appendix B (h) (3)	The name, title, phone number, and address, if known, of an official within each agency who will serve as a contact person for the agency.	Table 7.2 page 7-101	Yes	
Appendix B (h) (4)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Section 7 Figure 7-1 page 7-107	Yes	

Adequacy Issue: Adequate Inadequate
 Technical Area: Worker Safety
 Project Manager: Kae Lewis

DATA ADEQUACY WORKSHEET

Revision No. 1 Date 11/8/00
 Technical Staff: Rick Tyler
 Technical Senior: Rick Tyler

Project: Morro Bay Power Project
 Docket: 00-AFC-12

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 6.17	Yes	
Appendix B (g) (11) (A)	A description of the safety training programs which will be required for construction and operation personnel.	Section 6.17.1.2	Yes	
Appendix B (g) (11) (B)	A complete description of the fuel handling system and the fire suppression system.	Sec. 6.17.1.3	Yes	
Appendix B (g) (11) (C)	Provide draft outlines of the Construction Health and Safety Program and the Operation Health and Safety Program, as follows: Construction Health and Safety Program: * Injury and Illness Prevention Plan (8 Cal. Code Regs., § 1509); * Fire Protection and Prevention Plan (8 Cal. Code Regs., § 1920); * Personal Protective Equipment Program (8 Cal. Code Regs., §§ 1514-1522) Operation Health and Safety Program: * Injury and Illness Prevention Program (8 Cal. Code Regs., § 3203); * Fire Prevention Plan (8 Cal. Code Regs., § 3221); * Emergency Action Plan (8 Cal. Code Regs., § 3220); * Personal Protective Equipment Program (8 Cal. Code Regs., §§ 3401-3411).	Table 6.17-4 Table 6.17-4 Table 6.17-4 Table 6.17-4 Section 6.17.2.1.10 and Table 6.17-4 Table 6.17-3 Table 6.17-4	Yes Yes Yes Yes Yes Yes	

Adequacy Issue: Adequate Inadequate
 Technical Area: Worker Safety
 Project Manager: Kae Lewis

DATA ADEQUACY WORKSHEET

Revision No. 1 Date 11/8/00
 Technical Staff: Rick Tyler
 Technical Senior: Rick Tyler

Project: Morro Bay Power Project
 Docket: 00-AFC-12

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (h) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, and permits applicable to the proposed project, and a discussion of the applicability of each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed;	Table 6.17-5	Yes	
Appendix B (h) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Table 6.17-5	Yes	
Appendix B (h) (2)	A discussion of the conformity of the project with the requirements listed in subsection (h)(1)(A).	Table 6.17-5	Yes	
Appendix B (h) (3)	The name, title, phone number, and address, if known, of an official within each agency who will serve as a contact person for the agency.	Table 7-2	Yes	
Appendix B (h) (4)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Figure 7-1	Yes	

Adequacy Issue: Adequate Inadequate
 Technical Area: T-Line Safety and Nuisance
 Project Manager: Kae Lewis

DATA ADEQUACY WORKSHEET

Revision No. 0 Date Nov 6, 2000
 Technical Staff: Obed Odoemelam
 Technical Senior: Bob Haussler

Project: Morrow Bay Power Plant
 Docket: 00-AFC-12

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (18) (A)	The locations and a description of the existing switchyards and overhead and underground transmission lines that would be affected by the proposed project.	Section 2.0, page 2-64. Section 6.18, pages 6.18-1 through 6.18-5.	Yes	
Appendix B (g) (18) (B)	An estimate of the existing electric and magnetic fields from the facilities listed in (A) above and the future electric and magnetic fields that would be created by the proposed project, calculated at the property boundary of the site and at the edge of the rights of way for any transmission line. Also provide an estimate of the radio and television interference that could result from the project.	Section 6.18, pages 6.18-9 through 6.18-11. Appendix 6.18-1	Yes	
Appendix B (g) (18) (C)	Specific measures proposed to mitigate identified impacts, including a description of measures proposed to eliminate or reduce radio and television interference, and all measures taken to reduce electric and magnetic field levels.	Section 2.0, page 2-64. Section 6.18, pages 6.12-15.	Yes	
Appendix B (h) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, and permits applicable to the proposed project, and a discussion of the applicability of each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed;	Section 7.0, pages 7-10 through 7-12; table 7-1 page 7-69	Yes	
Appendix B (h) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Section 7.0, pages 7-10 through 7-12; table 7-1 page 7-69	Yes	

Adequacy Issue: Adequate Inadequate
 Technical Area: T-Line Safety and Nuisance
 Project Manager: Kae Lewis

DATA ADEQUACY WORKSHEET

Revision No. 0 Date Nov 6, 2000
 Technical Staff: Obed Odoemelam
 Technical Senior: Bob Haussler

Project: Morrow Bay Power Plant
 Docket: 00-AFC-12

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (h) (2)	A discussion of the conformity of the project with the requirements listed in subsection (h)(1)(A).	Section 7.0, pages 7-10 through 7-12.	Yes	
Appendix B (h) (3)	The name, title, phone number, and address, if known, of an official within each agency who will serve as a contact person for the agency.	Table 7-2 page 7-102	Yes	
Appendix B (h) (4)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	NA		

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 0 Date 11/8/00

Technical Area: Hazardous Materials Handling

Project: Morro Bay

Technical Staff: R. Tyler

Project Manager: k. Lewis

Docket: 00-AFC-12

Technical Senior: R. Tyler

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 6.15	Yes	
Appendix B (g) (10) (A)	A list of all materials used or stored on-site which are hazardous or acutely hazardous, as defined in Title 22, California Code of Regulations, § 66261.20 et seq., and a discussion of the toxicity of each material.	Table 6.15-5	Yes	
Appendix B (g) (10) (B)	A map at a scale of 1:24,000 depicting the location of schools, hospitals, day-care facilities, emergency response facilities and long-term health care facilities, within the area potentially affected by any release of hazardous materials.	Figure 6.15-2	Yes	
Appendix B (g) (10) (C)	A discussion of the storage and handling system for each hazardous material used or stored at the site.	Section 6.15.2.2 and Table 6.15-5	Yes	
Appendix B (g) (10) (D)	The protocol that will be used in modeling potential consequences of accidental releases that could result in off site impacts. Identify the model(s) to be used, a description of all input assumptions, including meteorological conditions. The results of the modeling analysis can be submitted after the AFC is complete.	Section 6.15.2.2.3 and 6.15.2.2.7	Yes	
Appendix B (g) (10) (E)	A discussion of whether a risk management plan (Health and Safety Code § 25531 et seq.) will be required, and if so, the requirements that will likely be incorporated into the plan.	Section 6.15.2.2.2	Yes	
Appendix B (g) (10) (F)	A discussion of measures proposed to reduce the risk of any release of hazardous materials.	Section 6.15.2.2	Yes	

Adequacy Issue: Adequate Inadequate
 Technical Area: Hazardous Materials Handling
 Project Manager: k. Lewis

DATA ADEQUACY WORKSHEET

Revision No. 0 Date 11/8/00
 Technical Staff: R. Tyler
 Technical Senior: R. Tyler

Project: Morro Bay
 Docket: 00-AFC-12

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (10) (G)	A discussion of the fire and explosion risks associated with the project.	Section 8.12.4	Yes	
Appendix B (h) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, and permits applicable to the proposed project, and a discussion of the applicability of each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed;	Table 6.15-9	Yes	
Appendix B (h) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Table 6.15-9 and table 7-1	Yes	
Appendix B (h) (2)	A discussion of the conformity of the project with the requirements listed in subsection (h)(1)(A).	Section 6.15.5	Yes	
Appendix B (h) (3)	The name, title, phone number, and address, if known, of an official within each agency who will serve as a contact person for the agency.	Table 7-2	Yes	
Appendix B (h) (4)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Figure 7-1	Yes	

Adequacy Issue: Adequate Inadequate
 Technical Area: Waste Management
 Project Manager: Kae Lewis

DATA ADEQUACY WORKSHEET

Revision No. 0 Date October 27, 2000
 Technical Staff: Mike Ringer
 Technical Senior: Bob Haussler

Project: Morrow Bay Power Plant Project
 Docket: 00-AFC-12

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (b) (1) (C)	A detailed description of the design, construction and operation of the facilities, specifically including the power generation, cooling, water supply and treatment, waste handling and control, pollution control, fuel handling, and safety, emergency and auxiliary systems, and fuel types and fuel use scenarios; and	sec. 6.14.2.1.2 Table 6.14-5	YES	
Appendix B (e) (2)	A discussion of how facility closure will be accomplished in the event of premature or unexpected cessation of operations.	sec. 4.2.1	YES	
Appendix B (g) (1)	...provide a discussion of the existing site conditions, the expected direct, indirect and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation.	sec. 6.14.1.1 sec. 6.14.1.2 sec. 6.14.2 sec. 6.14.2.3 sec. 6.14.2.4	YES	
Appendix B (g) (12) (A)	A Phase I Environmental Site Assessment for the proposed power plant site using methods prescribed by the American Society for Testing and Materials (ASTM) document entitled "Standard Practice for Environmental Site Assessments: Phase 1 Environmental Site Assessment Process" (Designation: E 1527-93, May 1993), which is incorporated by reference in its entirety; or an equivalent method agreed upon by the applicant and the CEC Staff that provides similar documentation of the potential level and extent of site contamination.	sec. 6.14.1.1	YES	
Appendix B (g) (12) (B)	A description of each waste stream estimated to be generated during project construction and operation, including origin, hazardous or nonhazardous classification pursuant to Title 22, California Code of Regulations, § 66261.20 et seq., chemical composition, estimated annual weight or volume generated, and estimated frequency of generation.	sec. 6.14.2.1.1 sec. 6.14.2.1.2 sec. 6.14.2.1.3 Table 6.14-5	YES	

Adequacy Issue: Adequate Inadequate
 Technical Area: Waste Management
 Project Manager: Kae Lewis

DATA ADEQUACY WORKSHEET

Revision No. 0 Date October 27, 2000
 Technical Staff: Mike Ringer
 Technical Senior: Bob Haussler

Project: Morrow Bay Power Plant Project
 Docket: 00-AFC-12

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (12) (C)	A description of all waste disposal sites which may feasibly be used for disposal of project wastes. For each site, include the name, location, classification under Title 23, California Code of Regulations, § 2530 et seq., the daily or annual permitted capacity, daily or annual amounts of waste currently being accepted, the estimated closure date and remaining capacity, and a description of any enforcement action taken by local or state agencies due to waste disposal activities at the site.	sec. 6.14.1.3.2 Table 6.14-4	YES	
Appendix B (g) (12) (D)	A description of management methods for each waste stream, including methods used to minimize waste generation, length of on- and off-site waste storage, re-use and recycling opportunities, waste treatment methods used, and use of contractors for treatment.	sec. 2.3 sec. 6.14.1.2 Table 6.14-3 Table 6.14-5 p.6. 14-15-16	YES	
Appendix B (h) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, and permits applicable to the proposed project, and a discussion of the applicability of each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed;	Table 6.14-7	YES	
Appendix B (h) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Table 7-1 Table 7-2	YES	
Appendix B (h) (2)	A discussion of the conformity of the project with the requirements listed in subsection (h)(1)(A).	Table 6.14-7	YES	

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 0 Date October 27, 2000

Technical Area: **Waste Management**

Project: Morrow Bay Power Plant Project

Technical Staff: Mike Ringer

Project Manager: Kae Lewis

Docket: 00-AFC-12

Technical Senior: Bob Haussler

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (h) (3)	The name, title, phone number, and address, if known, of an official within each agency who will serve as a contact person for the agency.	Table 7-2	YES	
Appendix B (h) (4)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	N/A	YES	

Adequacy Issue: Adequate _____ Inadequate X

DATA ADEQUACY WORKSHEET

Revision No. 1 Date November 6, 2000

Technical Area: **Land Use**

Project: Moro Bay Modernization & Replacement Project

Technical Staff: Mark Hamblin

Project Manager: Kae Lewis

Docket: _____

Technical Senior: Dale Edwards

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (1)	...provide a discussion of the existing site conditions, the expected direct, indirect and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation.	Page 6.9-1; Section 6-9; Page 6.9-10; Section 6.9.2; Page 6.1-1 – 6.1.13; Section 6-1; Page 6.9-66 – 6.9-69; Section 6.9.4.3.	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:	Page 6.9-10 - 6.9-23; Section 6.9.2.1 – 6.9.2.2	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;	Page 6.9-11-6.9-23 Section 6.9.2.2	Yes	
Appendix B (g) (3) (A) (ii)	A discussion of any trends in recent zoning changes and potential future land use development;	Page 6.9-61; Section 6.9.4.2 Page 6.9-66; Section 6.9.4.3	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	Page 6.9-30; Section 6.9.3.3.2 Page 6.1-4 – 6.1-9; Section 6.1.4	Yes	
Appendix B (g) (3) (A) (iv)	Legible maps of the areas identified in subsection (g)(3)(A) potentially affected by the project, on which existing land uses, jurisdictional boundaries, general plan designations, specific plan designations, and zoning have been clearly delineated.	Page 6.9-3-6.9-7; Section 6.9 Page 6.9-15-20; Section 6.9.2.2 Page 6.9-33; Section 6.9.3.3.4	No	Demonstrate that the proposed project is consistent with the Coastal Commission Power Plant Siting Study Map. Provide a map that displays the relationship of the <u>proposed</u> project site configuration to the 25- and 100-foot buffer zones (AFC (Figure 6.9-7) provided this for the existing plant configuration).

Adequacy Issue: Adequate _____ Inadequate X

DATA ADEQUACY WORKSHEET

Revision No. 1 Date November 6, 2000

Technical Area: **Land Use**

Project: Moro Bay Modernization & Replacement Project

Technical Staff: Mark Hamblin

Project Manager: Kae Lewis

Docket: _____

Technical Senior: Dale Edwards

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (3) (B)	A discussion of the compatibility of the proposed facilities with present and expected land uses, and conformity with any long-range land use plans adopted by any federal, state, regional, or local planning agency. The discussion shall identify the need, if any, for variances or any measures that would be necessary to make the proposal conform with permitted land uses	Page 6.9-26-31; Section 6.9.3.3.4 Page 6.9-37-61; Section 6.9.4	Yes	
Appendix B (g) (15) (B)	A map at a scale of 1:24,000 and written description of agricultural land uses found within all areas affected by the proposed project. The description shall include:	Page 6.4-7; Section 6.4.1.2	Yes	
Appendix B (g) (15) (B) (i)	Crop types, irrigation systems, and any special cultivation practices; and	Page 6.9-11; Section 6.9.2.2	Yes	
Appendix B (g) (15) (B) (ii)	Whether farmland affected by the project is prime, of statewide importance, or unique as defined by the Natural Resource Conservation Service of the California Department of Conservation.	Page 6.4-6-9; Section 6.4.1.2	Yes	
Appendix B (g) (15) (C)	An assessment of the effects of the proposed project on soil resources and agricultural land uses. This decision shall include:	Page 6.4-9-15; Section 6.4.2.1	Yes	
Appendix B (g) (15) (C) (ii)	Direct and indirect effects on agricultural land uses; and	Page 6.4-9-15; Section 6.4.2.1	Yes	
Appendix B (h) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, and permits applicable to the proposed project, and a discussion of the applicability of each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed;	Page 6.9-70-108; Table 6.9-3	Yes	

Adequacy Issue: Adequate _____ Inadequate X

DATA ADEQUACY WORKSHEET

Revision No. 1 Date November 6, 2000

Technical Area: **Land Use**

Project: Moro Bay Modernization & Replacement Project

Technical Staff: Mark Hamblin

Project Manager: Kae Lewis

Docket: _____

Technical Senior: Dale Edwards

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (h) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Page 7-96; Table 7-2	Yes	
Appendix B (h) (2)	A discussion of the conformity of the project with the requirements listed in subsection (h)(1)(A).	Page 6.9-70-108; Table 6.9-3	Yes	
Appendix B (h) (3)	The name, title, phone number, and address, if known, of an official within each agency who will serve as a contact person for the agency.	Page 7-96; Table 7-2	Yes	
Appendix B (h) (4)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Page 7-107; Figure 7-1	Yes	

Adequacy Issue: Adequate _____ Inadequate X

DATA ADEQUACY WORKSHEET

Revision No. 0 Date 10/26/00

Technical Area: Traffic and Transportation

Project: Morro Bay

Technical Staff: James Fore

Project Manager: Kae Lewis

Docket: 00-AFC-12

Technical Senior: Dale Edwards

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (1)	...provide a discussion of the existing site conditions, the expected direct, indirect and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation.	Section 6.11.2 Pages 6.11-28 through 6.11-66 Section 6.11.2.2, Pages 6.11-66 through 6.11-67 Section 6.11.3, Page 6.11.76	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.	AFC Figure 6.11-2, Page 6.11-7	Yes	
Appendix B (g) (5) (B)	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:	AFC Figure 6.11-3, Page 6.11-9	Yes	
Appendix B (g) (5) (B) (i)	Road classification and design capacity;		No	Road classifications (Freeway, arterial, collector, major, secondary, etc.) and the design capacity for the roadways.
Appendix B (g) (5) (B) (ii)	Current daily average and peak traffic counts;	AFC Section 6.11.2.1.2.3, Section 6.11.2.1.3 and Section 6.11.2.1.4 Pages 6.11-47 through 6.11-84	Yes	
Appendix B (g) (5) (B) (iii)	Current and projected levels of service before project development, during construction, and during project operation;	AFC Table 6.11-2 Page 6.11-20 through 6.11-23 Table 6.11-6 Pages 6.11-54 through 6.11-56	Yes	
Appendix B (g) (5) (B) (iv)	Weight and load limitations;	AFC Section 6.11.1.3.4, Page 6.1-12	Yes	
Appendix B (g) (5) (B) (v)	Estimated percentage of current traffic flows for passenger vehicles and trucks; and		No	Estimated percentage of current traffic flows for passenger vehicles and trucks
Appendix B (g) (5) (B) (vi)	An identification of any road features affecting public safety.		No	Identify any road features affecting public safety such as unmarked railroad crossings, sharp curves, blind intersections, etc.

Adequacy Issue: Adequate _____ Inadequate X

DATA ADEQUACY WORKSHEET

Revision No. 0 Date 10/26/00

Technical Area: Traffic and Transportation

Project: Morro Bay

Technical Staff: James Fore

Project Manager: Kae Lewis

Docket: 00-AFC-12

Technical Senior: Dale Edwards

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (5) (C)	A description of any new, planned, or programmed transportation facilities in the project vicinity, including those necessary for construction and operation of the proposed project. Specify the location of such facilities on topographic maps at a scale of 1:24,000.	AFC Section 6.1.4, Pages 6.1-4 through 6.1-12	Yes	
Appendix B (g) (5) (D)	An assessment of the construction and operation impacts of the proposed project on the transportation facilities identified. 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 Section 6.11.2.3, Pages 6.11-67 through 6.11-76	Yes	
Appendix B (g) (5) (E)	A discussion of project-related hazardous materials to be transported to or from the project during construction and operation of the project, including the types, estimated quantities, estimated number of trips, anticipated routes, means of transportation, and any transportation hazards associated with such transport.	AFC Section 6.11.2.1.2.3 Pages 6.11-59 through 6.11-60 and Section 6.15	Yes	
Appendix B (h) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, and permits applicable to the proposed project, and a discussion of the applicability of each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed;	AFC, Section 7.0, Table 7-1, Pages 7-84 through 7-87	Yes	
Appendix B (h) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	AFC, Section 7.0, Table 7-1, Pages 7-84 through 7-87	Yes	
Appendix B (h) (2)	A discussion of the conformity of the project with the requirements listed in subsection (h)(1)(A).	AFC, Section 7.4.11, Pages 7-49 through 7-51, Table 7-2, Page 7-97.	Yes	
Appendix B (h) (3)	The name, title, phone number, and address, if known, of an official within each agency who will serve as a contact person for the agency.	AFC, Section 6.11.5, Page 6.11-71	Yes	

Adequacy Issue: Adequate _____ Inadequate X

DATA ADEQUACY WORKSHEET

Revision No. 0 Date 10/26/00

Technical Area: Traffic and Transportation

Project: Morro Bay

Technical Staff: James Fore

Project Manager: Kae Lewis

Docket: 00-AFC-12

Technical Senior: Dale Edwards

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (h) (4)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	AFC, Section 7.4.11, Table 7-2, Page 7-97	No	Schedule needs to indicate 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.

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 1 Date November 15, 2000

Technical Area: Noise

Project: Morro Bay Power Plant Project

Technical Staff: Steve Baker

Project Manager: Kae Lewis

Docket: 00-AFC-12

Technical Senior: Steve Baker

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (1)	...provide a discussion of the existing site conditions, the expected direct, indirect and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation.	§§ 1.2, 2.0, 2.1.1.3, 2.1.1.7, 2.1.2, 2.2.1, 2.2.3.15, 6.1.4; Table 6.1-1; Chapter 6.12; §§ 7.4.12, 8.7.1; Appendix 6.12-1	Yes	
Appendix B (g) (4) (A)	A land use map which identifies residences, hospitals, libraries, schools, places of worship, or other facilities where quiet is an important attribute of the environment within the area impacted by the proposed project. The area impacted by the proposed project is that area where there is a potential increase of 5 dB(A) or more, during either construction or operation, over existing background levels.	Figures 6.12-2, 6.12-15, 6.12-16	Yes	
Appendix B (g) (4) (B)	A description of the ambient noise levels at those sites identified under subsection (g)(4)(A) which the applicant believes provide a representative characterization of the ambient noise levels in the project vicinity, and a discussion of the general atmospheric conditions, including temperature, humidity, and the presence of wind and rain at the time of the measurements. The existing noise levels shall be determined by taking noise measurements for a minimum of 25 consecutive hours at a minimum of one site. Other sites may be monitored for duration at the applicant's discretion during the same 25-hour period. The results of the noise level measurements shall be reported in L _{eq} (equivalent sound or noise level), L _{dn} (day-night sound or noise level) or CNEL (Community Noise Equivalent Level) in units of dB(A). The L ₁₀ , L ₅₀ , and L ₉₀ values (noise levels exceeded 10 percent, 50 percent, and 90 percent of the time, respectively) shall also be reported.	§ 6.12.1.3; Figures 6.12-2 through -14; Tables 6.12-3, 6.12-4, 6.12-5; Appendix 6.12-1	Yes	
Appendix B (g) (4) (C)	A description of the major noise sources of the project, including the range of noise levels and the tonal and frequency characteristics of the noise emitted.	§§ 6.12.1.2, 6.12.2.2; Tables 6.12-2, 6.12-14; Figures 6.12-7 through 6.12-16	Yes	

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 1 Date November 15, 2000

Technical Area: Noise

Project: Morro Bay Power Plant Project

Technical Staff: Steve Baker

Project Manager: Kae Lewis

Docket: 00-AFC-12

Technical Senior: Steve Baker

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (4) (D)	An estimate of the project noise levels, during both construction and operation, at residences, hospitals, libraries, schools, places of worship or other facilities where quiet is an important attribute of the environment, within the area impacted by the proposed project.	§§ 6.12.2.1, 6.12.2.2, 6.12.2.3; Appendix 6.12-1	Yes	
Appendix B (g) (4) (E)	An estimate of the project noise levels within the project site boundary during both construction and operation and the impact to the workers at the site due to the estimated noise levels.	§§ 6.12.2.1, 6.12.2.2	Yes	
Appendix B (g) (4) (F)	The audible noise from existing switchyards and overhead transmission lines that would be affected by the project and estimates of the future audible noise levels that would result from existing and proposed switchyards and transmission lines. Noise levels shall be calculated at the property boundary for switchyards and at the edge of the rights-of-way for transmission lines.	§ 6.12.2.2, pp. 6.12-54 to 6.12-55	Yes	
Appendix B (h) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, and permits applicable to the proposed project, and a discussion of the applicability of each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed;	Table 7-1	Yes	
Appendix B (h) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Table 7-2	Yes	
Appendix B (h) (2)	A discussion of the conformity of the project with the requirements listed in subsection (h)(1)(A).	§ 6.12.2.2; Tables 6.12-12, 6.12-13	Yes	

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 1 Date November 15, 2000

Technical Area: Noise

Project: Morro Bay Power Plant Project

Technical Staff: Steve Baker

Project Manager: Kae Lewis

Docket: 00-AFC-12

Technical Senior: Steve Baker

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (h) (3)	The name, title, phone number, and address, if known, of an official within each agency who will serve as a contact person for the agency.	Table 7-2	Yes	
Appendix B (h) (4)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Figure 7-1	Yes	

Adequacy Issue: Adequate _____ Inadequate X

DATA ADEQUACY WORKSHEET

Revision No. 1 Date Nov. 17, 2000

Technical Area: Visual Resources

Project: Morro Bay

Technical Staff: Gary Walker

Project Manager: Kae Lewis

Docket: 00-AFC-12

Technical Senior: Dale Edwards

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (1)	...provide a discussion of the existing site conditions, the expected direct, indirect and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation.	Pp.6.13-1 through 6.13-208.	No	The cumulative impacts discussion (p.6.13-162) concerns land use impacts, not visual impacts. Please revise the discussion to address the potential for cumulative visual impacts in the project viewshed.
Appendix B (g) (6) (A)	Descriptions of the existing visual setting of the vicinity of the project, the region that can be seen from the vicinity of the project, and the proposed project site. Include:	Pp.6.13-9 through 6.13-45.	Yes	
Appendix B (g) (6) (A) (i)	Topographic maps at a scale of 1:24,000 of the areas from which the project may be seen, identification of the view areas most sensitive to the potential visual impacts of the project, and the locations where photographs were taken for (g)(6)(E);	Figures 6.13-5 and 6.13-12.	Yes	
Appendix B (g) (6) (A) (ii)	Elevations of any existing structures on the site; and	Figures 2-7, 2-12, 2-15, 2-19, 6.13-5, and 6.13-7. Pp.2-19 and 6.13-42.	Yes	
Appendix B (g) (6) (A) (iii)	The visual properties of the topography, vegetation, and any modifications to the landscape as a result of human activities.	Pp.6.13-9 through 6.13-45.	Yes	
Appendix B (g) (6) (B)	An assessment of the visual quality of those areas that will be impacted by the proposed project.	Pp.6.13-40 and 6.13-41, Section 6.13.1.9.	Yes	

Adequacy Issue: Adequate _____ Inadequate X

DATA ADEQUACY WORKSHEET

Revision No. 1 Date Nov. 17, 2000

Technical Area: Visual Resources

Project: Morro Bay

Technical Staff: Gary Walker

Project Manager: Kae Lewis

Docket: 00-AFC-12

Technical Senior: Dale Edwards

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (6) (C)	After discussions with staff and community residents who live in close proximity to the proposed project, identify the scenic corridors and any visually sensitive areas potentially affected by the proposed project, including recreational and residential areas. Indicate the approximate number of people using each of these sensitive areas and the estimated number of residences with views of the project. For purposes of this section, a scenic corridor is that area of land with scenic natural beauty, adjacent to and visible from a linear feature, such as a road, or river.	Pp.6.13-80 through 6.13-156.	Yes	
Appendix B (g) (6) (D)	A description of the dimensions, color, and material of each major visible component of the project.	Figure 6.13-8; pp.6.13-54, 6.13-57, and 6.13-61.	No	<p>The AFC (pp.6.12-61 and 6.13-57) states that a 20-foot sound wall is part of the proposed project.</p> <p>Please specify the length of the sound wall.</p> <p>Please specify the material for the sound wall.</p> <p>Please provide a map to scale that shows the proposed location of the sound wall in relation to the other proposed power plant features and in relation to Morro Creek and the Fisherman's Storage Facilities.</p>
Appendix B (g) (6) (E)	Full-page color photographic reproductions of the existing site, and full-page color simulations of the proposed project in the existing setting from each location representative of the view areas most sensitive to the potential visual impacts of the project.	Pp.6.13-81 through 6.13-157.	No	<p>The photographic reproductions and simulations are oversized (approximately 14 inches wide). Nevertheless, the panoramic view angle of the photographic reproductions and simulations is such that, as the images note, the proper viewing distance is 8 inches. Staff will request larger copies that can be viewed from a normal reading distance.</p> <p>Please provide simulations of the proposed project during each major phase of construction, from at least two Key Observation Points with the clearest views of construction features.</p>

Adequacy Issue: Adequate _____ Inadequate X

DATA ADEQUACY WORKSHEET

Revision No. 1 Date Nov. 17, 2000

Technical Area: Visual Resources

Project: Morro Bay

Technical Staff: Gary Walker

Project Manager: Kae Lewis

Docket: 00-AFC-12

Technical Senior: Dale Edwards

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (6) (F)	An assessment of the visual impacts of the project, including light and glare, and visible plumes.	Pp.6.13-70 through 6.13-162. P.2-19.	No	<p>The AFC (p.6.13-58) briefly describes proposed project lighting but does not assess the project's lighting impacts. Please provide such an assessment. Include impacts due to construction lighting.</p> <p>Please provide an assessment of the project's visual impacts due to glare.</p> <p>Please provide an assessment of the visual impacts of the project during construction.</p> <p>Please provide a description and a depiction of the proposed design treatment for the water intake building.</p> <p>The AFC (pp.6.13-58 and 6.13-61) estimates the frequency of visible water vapor plumes due to the project and states that they would be smaller than the plumes from the existing power plant. However, it does not estimate their size and does not assess their visual impacts.</p> <p>Please provide an estimate of the dimensions of the project's visible water vapor plumes.</p> <p>Please provide an assessment of the visual impacts of the project's visible vapor plumes.</p>
Appendix B (h) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, and permits applicable to the proposed project, and a discussion of the applicability of each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed;	Tables 6.13-6 and 6.13-7, pp.6.13-163 through 6.13-176.	Yes	

Adequacy Issue: Adequate _____ Inadequate X

DATA ADEQUACY WORKSHEET

Revision No. 1 Date Nov. 17, 2000

Technical Area: Visual Resources

Project: Morro Bay

Technical Staff: Gary Walker

Project Manager: Kae Lewis

Docket: 00-AFC-12

Technical Senior: Dale Edwards

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (h) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Tables 6.13-6 and 6.13-7, pp.6.13-163 through 6.13-176.	Yes	
Appendix B (h) (2)	A discussion of the conformity of the project with the requirements listed in subsection (h)(1)(A).	Tables 6.13-6 and 6.13-7, pp.6.13-163 through 6.13-176.	Yes	
Appendix B (h) (3)	The name, title, phone number, and address, if known, of an official within each agency who will serve as a contact person for the agency.	Table 7-1, pp. 7-98	Yes	
Appendix B (h) (4)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Not Applicable		

Adequacy Issue: Adequate _____ Inadequate X

DATA ADEQUACY WORKSHEET

Revision No. 1 Date 11/03/00

Technical Area: Cultural Resources

Project: Morro Bay Power Plant Project

Technical Staff: Dorothy Torres

Project Manager: Kae Lewis

Docket: 00-AFC-12

Technical Senior: Dale Edwards

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (1)	...provide a discussion of the existing site conditions, the expected direct, indirect and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation.	AFC Vol 1A, p.6.7-1 &6.7-2 Con Appendix 6.7-2 p. 8 AFC Vol 1A, p.6.7-12 AFC Vol 1A, p. 6.7-13 & 14	Yes	
Appendix B (g) (2) (A)	A brief summary of the ethnology, prehistory, and history of the region in which the project site and related facilities are located and maps at a scale of 1:24,000, indicating areas of ethnographic occupation. The region may vary depending on the extent of the territory occupied or used by prehistoric cultures indigenous to the area in which the project is located.	AFC Vol 1A p. 6.7-7 Con Appendix 6.7-2 p. 2&3 AFC Vol 1A , Fig. 6.7-2	Yes	
Appendix B (g) (2) (B)	A description of all literature searches and field surveys used to provide information about known cultural resources in the project vicinity. If survey records of the area potentially physically affected by the project are not available, and the area has the potential for containing significant cultural resources, the applicant shall submit a new or revised survey for any portion of the area lacking comprehensive survey data. A discussion of the dates of the surveys, methods used in completing the surveys, and the identification and qualification of the individuals conducting the surveys shall be included.	AFC Vol 1A p. 6.7-3 & 4 Con Appendix 6.7-2 & 6.7-3 Con App 6.7-2 & 6.7-3	No	Please conduct and provide a description and the results of an historic literature and records search. Please provide the results of a survey conducted to identify historic resources that may be impacted either directly or indirectly by the project. The survey should describe buildings, structures and features in the vicinity of the project. The discussion should include, but not be limited to the existing Morro Power Plant, the PG&E substation, Morro Rock and Morro Bay Old Town.

Adequacy Issue: Adequate _____ Inadequate X

DATA ADEQUACY WORKSHEET

Revision No. 1 Date 11/03/00

Technical Area: Cultural Resources

Project: Morro Bay Power Plant Project

Technical Staff: Dorothy Torres

Project Manager: Kae Lewis

Docket: 00-AFC-12

Technical Senior: Dale Edwards

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (2) (C)	A discussion of the sensitivity of the project area described in subsection (g)(2)(A) and the presence and significance of any known archeological sites and other cultural resources that may be affected by the project. Information on the specific location of archeological resources shall be included in a separate appendix to the application and submitted to the Commission under a request for confidentiality pursuant to Title 20, California Code of Regulations, § 2501 et seq.	Con App. 6.7-3 p. 4-17 AFC Vol 1A, p. 6.7-9 to 11 Con App. 6.7-2 & 6.7-3	No	Please submit any site records obtained or generated as a result of the historic literature/records search or survey.
Appendix B (g) (2) (D)	A summary of contacts and communications with, and responses from, Native American representatives who may have an interest in heritage lands and/or resources potentially affected by the proposed project.	AFC Vol 1V, Appendix 6.7-4	Yes	
Appendix B (g) (2) (E)	In the discussion on mitigation and monitoring prepared pursuant to subsection (g)(1), a discussion of any educational programs proposed to enhance awareness of potential impacts to archeological resources by employees and contractors, measures proposed for mitigation of impacts to known cultural resources, and a set of contingency measures for mitigation of potential impacts to previously unknown cultural resources.	AFC Vol 1A, p. 6.7-13 to 6.7-14	Yes	
Appendix B (h) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, and permits applicable to the proposed project, and a discussion of the applicability of each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed;	AFC Vol 1A 6.7-16 AFC Vol 1B, p 7-43 to 46 AFC Vol 1B, Table 7-1, p. 7-81 to 83	Yes	

Adequacy Issue: Adequate _____ Inadequate X

DATA ADEQUACY WORKSHEET

Revision No. 1 Date 11/03/00

Technical Area: Cultural Resources

Project: Morro Bay Power Plant Project

Technical Staff: Dorothy Torres

Project Manager: Kae Lewis

Docket: 00-AFC-12

Technical Senior: Dale Edwards

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (h) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	AFC Vol 1B, Table 7-1 p. 7.81 to 83	Yes	
Appendix B (h) (2)	A discussion of the conformity of the project with the requirements listed in subsection (h)(1)(A).	AFC Vol 1B, p. 7-43 to 45	Yes	
Appendix B (h) (3)	The name, title, phone number, and address, if known, of an official within each agency who will serve as a contact person for the agency.	AFC Vol 1B, Table 7-2 p. 7-96	Yes	
Appendix B (h) (4)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	AFC Vol 1A, p. 6.7-15	Yes	

Adequacy Issue: Adequate _____ Inadequate X

DATA ADEQUACY WORKSHEET

Revision No. 0 Date October 26, 2000

Technical Area: Socioeconomics

Project: Morro Bay Power Plant Project

Technical Staff: Amanda Stennick

Project Manager: Kae Lewis

Docket: 00-AFC-12

Technical Senior: Dale Edwards

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (1)	...provide a discussion of the existing site conditions, the expected direct, indirect and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation.	Section 6.10	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:	See below		
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;	Sections 6.10-1, 6.10.1.2.2 Table 6.10-3 Figure 6.10-1	No	Please provide a list of the applicable local agencies with taxing powers and their most recent and projected revenues.
Appendix B (g) (7) (A) (ii)	The social characteristics, including population and demographic and community trends;	Tables 6.10-1, -2, -11	Yes	
Appendix B (g) (7) (A) (iii)	Existing and projected unemployment rates;	Tables 6.10-4, -13	Yes	
Appendix B (g) (7) (A) (iv)	Availability of skilled workers by craft required for construction and operation of the project;	Table 6.10-17	Yes	
Appendix B (g) (7) (A) (v)	Availability of temporary and permanent housing; and	Tables 6.10-6, -7 Section 6.10.1.2.3	Yes	
Appendix B (g) (7) (A) (vi)	Capacities, existing and expected use levels, and planned expansion of utilities (gas, water and waste) and public services, including fire protection, law enforcement, emergency response, medical facilities, other assessment districts, and school districts. For projects outside metropolitan areas with a population of 500,000 or more, information for each school district shall include current enrollment and yearly expected enrollment by grade level groupings, excluding project-related changes, for the duration of the project construction schedule.	Sections 6.10.1.2.4 through 6.10.1.2.6 Tables 6.10-8, -9	Yes	

Adequacy Issue: Adequate _____ Inadequate X

DATA ADEQUACY WORKSHEET

Revision No. 0 Date October 26, 2000

Technical Area: Socioeconomics

Project: Morro Bay Power Plant Project

Technical Staff: Amanda Stennick

Project Manager: Kae Lewis

Docket: 00-AFC-12

Technical Senior: Dale Edwards

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (7) (B)	A discussion of the socioeconomic impacts caused by the construction and operation of the project, including:	See below		
Appendix B (g) (7) (B) (i)	The number of workers to be employed each month by craft during construction and operation;	Figure 6.10-4 Sections 6.10.2.1 through 6.10.2.2	Yes	
Appendix B (g) (7) (B) (ii)	An estimate of the number and percentage of workers who will commute daily, commute weekly, or relocate in order to work on the project;	Sections 6.10.2, 6.10.2.1.2	Yes	
Appendix B (g) (7) (B) (iii)	An estimate of the potential population increase caused directly and indirectly by the project;	Section 6.10.2.1.2	Yes	
Appendix B (g) (7) (B) (iv)	The potential impact of population increase on housing during the construction and operations phases;	Section 6.10.2.1.4	Yes	
Appendix B (g) (7) (B) (v)	The potential impacts, including additional costs, on utilities (gas, water and waste) and public services, including fire, law enforcement, emergency response, medical facilities, other assessment districts, and school districts. For projects outside metropolitan areas with a population of 500,000 or more, information on schools shall include project-related enrollment changes by grade level groupings and associated facility and staffing impacts by school district during the construction and operation phases;	Sections 6.10.2.1.4 through 6.10.2.2.5	Yes	
Appendix B (g) (7) (B) (vi)	An estimate of applicable school impact fees;	Section 6.10.2.2.5	Yes	
Appendix B (g) (7) (B) (vii)	An estimate of the total construction payroll and an estimate of the total operation payroll;	Section 6.10.2	Yes	
Appendix B (g) (7) (B) (viii)	An estimate of the expenditures for locally purchased materials for the construction and operation phases of the project; and	Section 6.10.2	Yes	
Appendix B (g) (7) (B) (ix)	An estimate of the capital cost of the project of the potential impacts on tax revenues from construction and operation of the project.	Sections 6.10.2.1.8, 6.10.2.2.8 Table 6.10-18, -19, -20	Yes	

Adequacy Issue: Adequate _____ Inadequate X

DATA ADEQUACY WORKSHEET

Revision No. 0 Date October 26, 2000

Technical Area: Socioeconomics

Project: Morro Bay Power Plant Project

Technical Staff: Amanda Stennick

Project Manager: Kae Lewis

Docket: 00-AFC-12

Technical Senior: Dale Edwards

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (h) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, and permits applicable to the proposed project, and a discussion of the applicability of each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed;	Section 7.4.10 Table 7-2	Yes	
Appendix B (h) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Section 7.4.10 Table 7-2	Yes	
Appendix B (h) (2)	A discussion of the conformity of the project with the requirements listed in subsection (h)(1)(A).	Section 6.10.2.2.5 Pages 6.10-41-42	Yes	
Appendix B (h) (3)	The name, title, phone number, and address, if known, of an official within each agency who will serve as a contact person for the agency.	Table 6.10-25	Yes	
Appendix (h) (4)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	None identified for Socioeconomics	Yes	

Adequacy Issue: Adequate Inadequate
 Technical Area: Biological Resources
 Project Manager: Kae Lewis

DATA ADEQUACY WORKSHEET

Revision No. _____ Date 11-15-00
 Technical Staff: Dick Anderson
 Technical Senior: Dr. James Brownell

Project: Morro Bay Power Plant
 Docket: 00-AFC-12

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 6.6 A Section 6.6 B Marine Impact: Section 6.6A.2.1 Terrestrial Impact Section 6.6B.2	Yes	
Appendix B (g) (13) (A)	A regional overview and discussion of biological resources, with particular attention to sensitive biological resources near the project, and a map at a scale of 1:100,000 (or some other suitable scale) showing their location in relation to the project.	Section 6.6 A Section 6.6 B Table of all Special Status Species: 6.6B-2 page 6.6B-50 through 56	Yes	
Appendix B (g) (13) (B)	A discussion and detailed maps at a scale of 1:6,000, of the biological resources at the site of the proposed project and related facilities, and in areas adjacent to them, out to a mile from the site and 1000 feet from the outer edge of linear facility corridors. Include a list of the species actually observed and those with a potential to occur. The discussion and maps shall address the distribution of community types, denning or nesting sites, population concentrations, migration corridors, breeding habitats, and the presence of sensitive biological resources.	Section 6.6 A Section 6.6 B Individual habitat maps:6.6A-6 through 10 pages 6.6A-23 through 47	Yes	

Adequacy Issue: Adequate Inadequate
 Technical Area: Biological Resources
 Project Manager: Kae Lewis

DATA ADEQUACY WORKSHEET

Revision No. _____ Date 11-15-00
 Technical Staff: Dick Anderson
 Technical Senior: Dr. James Brownell

Project: Morro Bay Power Plant
 Docket: 00-AFC-12

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (13) (C)	A description of all studies and surveys used to provide biological information about the project site, including seasonal surveys and copies of the California Department of Fish and Game's Natural Diversity Data Base Survey Forms, "California Native Species Field Survey Forms", and "California Natural Community Field Survey Forms", completed by the applicant. Include the dates and duration of the studies, methods used to complete the studies, and the names and qualifications of individuals conducting the studies.	Table 6.6 A-1 Section 6.6 A Section 6.6 B	Yes	
Appendix B (g) (13) (D)	A discussion of all permanent and temporary impacts to biological resources from site preparation, construction activities, and plant operation. Discussion of impacts must consider impacts from cooling tower drift, and from the use and discharge of water during construction and operation. For facilities which use once-through cooling or take or discharge water directly from or to natural sources, discuss impacts resulting from entrainment, impingement, thermal discharge, effluent chemicals, type of pump (if applicable), temperature, volume and rate of flow at intake and discharge location, and plume configuration in receiving water.	Section 6.6 A.2.1 (marine) Section 6.6 B.2 (terrestrial)	Yes	
Appendix B (g) (13) (E)	A discussion of the following:		N/A	
Appendix B (g) (13) (E) (i)	All measures proposed to avoid and/or reduce any adverse impacts;	Section 6.6 A.3 Section 6.6 B.2	Yes	
Appendix B (g) (13) (E) (ii)	All measures proposed to mitigate any adverse impacts, including any proposals for off-site mitigation; and	Section 6.6 A.3 Section 6.6 B.2	Yes	
Appendix B (g) (13) (E) (iii)	Any educational programs proposed to enhance employee awareness in order to protect biological resources.	Section 6.6 B page 6.6B-97	Yes	

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision No. _____ Date 11-15-00

Technical Area: Biological Resources

Project: Morro Bay Power Plant

Technical Staff: Dick Anderson

Project Manager: Kae Lewis

Docket: 00-AFC-12

Technical Senior: Dr. James Brownell

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (13) (F)	A discussion of compliance and monitoring programs proposed to ensure the effectiveness of mitigation measures incorporated into the project.	Section 6.6 B	Yes	
Appendix B (g) (13) (G)	A discussion of native fish and wildlife species of commercial and/or recreational value that could be impacted by the project.	Section 6.6 A Section 6.6 B	Yes	
Appendix B (g) (13) (H)	For purposes of this section, sensitive biological resources are one of the following:			
Appendix B (g) (13) (H) (i)	Species listed under state or federal Endangered Species Acts;	Section 6.6 A Section 6.6 B	Yes	
Appendix B (g) (13) (H) (ii)	Resources defined in sections 1702 (q) and (v) of Title 20 of the California Code of Regulations; and	Section 6.6 A Section 6.6 B	Yes	
Appendix B (g) (13) (H) (iii)	Species or habitats identified by legislative acts as requiring protection.	Section 6.6 A Section 6.6 B	Yes	
Appendix B (h) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, and permits applicable to the proposed project, and a discussion of the applicability of each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed;	Section 6.6 B Section 7.4.6 pages 7-27 through 43	Yes	
Appendix B (h) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Table 7-2 page 7-94 through 95	Yes	

Adequacy Issue: Adequate Inadequate
 Technical Area: Biological Resources
 Project Manager: Kae Lewis

DATA ADEQUACY WORKSHEET

Revision No. _____ Date 11-15-00
 Technical Staff: Dick Anderson
 Technical Senior: Dr. James Brownell

Project: Morro Bay Power Plant
 Docket: 00-AFC-12

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (h) (2)	A discussion of the conformity of the project with the requirements listed in subsection (h)(1)(A).	Section 6.6 B	Yes	
Appendix B (h) (3)	The name, title, phone number, and address, if known, of an official within each agency who will serve as a contact person for the agency.	Table 7-2 page 7-94 through 95	Yes	
Appendix B (h) (4)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Figure 7-1	Yes	

Adequacy Issue: Adequate Inadequate
 Technical Area: Soil Resources
 Project Manager: Kae Lewis

DATA ADEQUACY WORKSHEET

Revision No. _____ Date 11/09/00
 Technical Staff: Joe O'Hagan
 Technical Senior: Jim Brownell

Project: Morro Bay Powr Project
 Docket: 00-AFC-12

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 2-62 to 2-64; 2-79 to 2-81; 6.4-1 to 6.4-16; Figures 2-22 and 2-23	Yes	
Appendix B (g) (15) (A)	A map at a scale of 1:24,000 and written description of soil types and all agricultural land uses that will be affected by the proposed project. The description shall include:	Figure 6.4-1	Yes	
Appendix B (g) (15) (A) (i)	The depth, texture, permeability, drainage, erosion hazard rating, and land capability class of the soil; and	Table 6.4-1	Yes	
Appendix B (g) (15) (A) (ii)	An identification of other physical and chemical characteristics of the soil necessary to allow an evaluation of soil erodibility, permeability, re-vegetation potential, and cycling of pollutants in the soil-vegetation system.	Pages 6.4-1 to 6.4-6; Table 6.4-1	Yes	
Appendix B (g) (15) (C)	An assessment of the effects of the proposed project on soil resources and agricultural land uses. This discussion shall include:			
Appendix B (g) (15) (C) (i)	The quantification of accelerated soil loss due to wind and water erosion;	Table 6.4-1	Yes	
Appendix B (g) (15) (C) (iii)	The effect of power plant emissions on surrounding soil-vegetation systems.	Pages 6.2-38 to 6.2-72	Yes	

Adequacy Issue: Adequate Inadequate
 Technical Area: Soil Resources
 Project Manager: Kae Lewis

DATA ADEQUACY WORKSHEET

Revision No. _____ Date 11/09/00
 Technical Staff: Joe O'Hagan
 Technical Senior: Jim Brownell

Project: Morro Bay Powr Project
 Docket: 00-AFC-12

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (h) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, and permits applicable to the proposed project, and a discussion of the applicability of each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed;	Tables 7-1 and 7-2	Yes	
Appendix B (h) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Tables 7-1 and 7-2	Yes	
Appendix B (h) (2)	A discussion of the conformity of the project with the requirements listed in subsection (h)(1)(A).	Table 7-1; Page 6.4-16	Yes	
Appendix B (h) (3)	The name, title, phone number, and address, if known, of an official within each agency who will serve as a contact person for the agency.	Table 7-2	Yes	
Appendix B (h) (4)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Figure 7-1	Yes	

Adequacy Issue: Adequate _____ Inadequate X
 Technical Area: Water Resources
 Project Manager: Kae Lewis

DATA ADEQUACY WORKSHEET

Revision No. _____ Date 11/09/00
 Technical Staff: Joe O'Hagan
 Technical Senior: Jim Brownell

Project: Morro Bay Power Plant Project
 Docket: 00-AFC-12

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 2-24 to 2-27; 2-41 to 2-52; 2-55 to 2-59; 6.5-1 to 6.5-95	Yes	
Appendix B (g) (14) (A)	All information required by the Regional Water Quality Control Board in the region where the project will be located to apply for:			
Appendix B (g) (14) (A) (i)	Waste Discharge Requirements; and			
Appendix B (g) (14) (A) (ii)	a National Pollutant Discharge Elimination System Permit.	Pages 2-24 to 2-27; 2-41 to 2-52; 2-55 to 2-59; 6.5-1 to 6.5-95; Appendix 6.5-1	No	Water quality data for the source and discharge flows.
Appendix B (g) (14) (B)	A description of the hydrologic setting of the project. The information shall describe, in writing and on maps at a scale of 1:24,000, the chemical and physical characteristics of the following water bodies that may be affected by the proposed project:	Pages 6.5-20 to 6.5-53; Figures 6.5-4 to 6.5-13; Appendix 6.5-3	Yes	
Appendix B (g) (14) (B) (i)	Ground water bodies and related geologic structures;	Pages 6.5-38 to 6.5-50; 6.14-1 to 6.14-4	Yes	
Appendix B (g) (14) (B) (ii)	Surface water bodies; and	Pages 6.5-20 to 6.5-37; Appendix 6.5-3	Yes	
Appendix B (g) (14) (B) (iii)	Water inundation zones, such as the 100-year flood plain and tsunami run-up zones.	See Geologic Resources		
Appendix B (g) (14) (C)	A description of the water to be used and discharged by the project. This information shall include:			

Adequacy Issue: Adequate _____ Inadequate X

DATA ADEQUACY WORKSHEET

Revision No. _____ Date 11/09/00

Technical Area: Water Resources

Project: Morro Bay Power Plant Project

Technical Staff: Joe O'Hagan

Project Manager: Kae Lewis

Docket: 00-AFC-12

Technical Senior: Jim Brownell

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) (i)	Source of the water and the rationale for its selection, and if fresh water is to be used for power plant cooling purposes, a discussion of all other potential sources and an explanation why these sources were not feasible;	Pages 2-24 to 2-27; 2-55 to 2-56; 6.5-1 to 6.5-19	Yes	
Appendix B (g) (14) (C) (ii)	The physical and chemical characteristics of the source and discharge water;	Pages 6.5-20 to 6.5-37	No	Water quality data for the source and discharge flows.
Appendix B (g) (14) (C) (iii)	Average and maximum daily and annual water demand and waste water discharge for both the construction and operation phases of the project; and	Figure 6.5-18; pages 2-57 to 2.58	Yes	
Appendix B (g) (14) (C) (iv)	A description of all facilities to be used in water conveyance, treatment, and discharge. Include a water mass balance diagram.	Pages 2-24 to 2-27; 2-55 to 2-56; 6.5-1 to 6.5-19	Yes	
Appendix B (g) (14) (D)	A description of pre-, and post-construction runoff and drainage patterns, including:	See Geologic Resources		
Appendix B (g) (14) (D) (i)	Precipitation and storm runoff patterns; and	See Geologic Resources		
Appendix B (g) (14) (D) (ii)	Drainage facilities and design criteria.	See Geologic Resources		
Appendix B (g) (14) (E)	An assessment of the effects of the proposed project on water resources. 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;	Pages 2-24 to 2-27; 2-55 to 2-56; 6.5-1 to 6.5-19	Yes	
Appendix B (g) (14) (E) (ii)	The effects of construction activities and plant operation on water quality; and	Pages 2-24 and 2-27	Yes	
Appendix B (g) (14) (iii)	The effects of the project on the 100-year flood plain or other water inundation zones.	See Geologic Resources		

Adequacy Issue: Adequate _____ Inadequate X

DATA ADEQUACY WORKSHEET

Revision No. _____ Date 11/09/00

Technical Area: Water Resources

Project: Morro Bay Power Plant Project

Technical Staff: Joe O'Hagan

Project Manager: Kae Lewis

Docket: 00-AFC-12

Technical Senior: Jim Brownell

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (h) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, and permits applicable to the proposed project, and a discussion of the applicability of each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed;	Pages 6.5-89 to 6.5-93; Table 7-1	Yes	
Appendix B (h) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Tables 7-1 and 7-2	Yes	
Appendix B (h) (2)	A discussion of the conformity of the project with the requirements listed in subsection (h)(1)(A).	Table 7-1; Pages 6.5-89 to 6.5-93;	Yes	
Appendix B (h) (3)	The name, title, phone number, and address, if known, of an official within each agency who will serve as a contact person for the agency.	Table 7-2	Yes	
Appendix B (h) (4)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Figure 7-1	Yes	

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 0 Date 10/31/00

Technical Area: Paleontological Resources

Project: Morro Bay Power Project

Technical Staff: Robert Anderson

Project Manager: Kae Lewis

Docket: 00-AFC-12

Technical Senior: Steve Baker

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (1)	...provide a discussion of the existing site conditions, the expected direct, indirect and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation.	Section 6.8.1, and Sections 6.8.2 through 6.8.4	Yes	
Appendix B (g) (16) (A)	Identification of the physiographic province and a brief summary of the geologic setting, formations, and stratigraphy of the project area. The area may vary depending on the depositional history of the area.	Section 6.8.1.2	Yes	
Appendix B (g) (16) (B)	A discussion of the sensitivity of the project area described in subsection (g)(16)(A) and the presence and significance of any known paleontologic localities or other paleontologic resources within or adjacent to the project.	Sections 6.8.1.3 and 6.8.1.5	Yes	
Appendix B (g) (16) (C)	A summary of all literature searches and field surveys used to provide information about paleontologic resources in the project area described in subsection (g)(16)(A). Identify the dates of the surveys, methods used in completing the surveys, and the names and qualifications of the individuals conducting the surveys.	Sections 6.8.1.4 and 6.8.1.5	Yes	
Appendix B (g) (16) (D)	Information on the specific location of known paleontologic resources, survey reports, locality records, and maps at a scale of 1:24,000, shall be included in a separate appendix to the Application and submitted to the Commission under a request for confidentiality, pursuant to Title 20, California Code of Regulations, § 2501 et seq.	Section 6.8.1.5	Yes	

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 0 Date 10/31/00

Technical Area: Paleontological Resources

Project: Morro Bay Power Project

Technical Staff: Robert Anderson

Project Manager: Kae Lewis

Docket: 00-AFC-12

Technical Senior: Steve Baker

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (16) (E)	A discussion of any educational programs proposed to enhance awareness of potential impacts to paleontological resources by employees, measures proposed for mitigation of impacts to known paleontologic resources, and a set of contingency measures for mitigation of potential impacts to currently unknown paleontologic resources.	Not Applicable	Not Applicable	
Appendix B (h) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, and permits applicable to the proposed project, and a discussion of the applicability of each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed;	Section 7.4.8 Table 7-1	Yes	
Appendix B (h) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Table 7-1	Yes	
Appendix B (h) (2)	A discussion of the conformity of the project with the requirements listed in subsection (h)(1)(A).	Section 6.8.5 and Section 7.4.8	Yes	
Appendix B (h) (3)	The name, title, phone number, and address, if known, of an official within each agency who will serve as a contact person for the agency.	Not Applicable	Not Applicable	
Appendix B (h) (4)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Not Applicable	Not Applicable	

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 0 Date 10/31/00

Technical Area: Geological Resources

Project: Morro Bay Power Plant Project

Technical Staff: Robert Anderson

Project Manager: Kae Lewis

Docket: 00-AFC-12

Technical Senior: Steve Baker

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (1)	...provide a discussion of the existing site conditions, the expected direct, indirect and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation.	Sections 6.3.1.3, and 6.3.2.1 through 6.3.4	Yes	
Appendix B (g) (17) (A)	A summary of the geology, seismicity, and geologic resources of the project site and related facilities;	Section 6.3.1.3 and 6.3.1.4.1	Yes	
Appendix B (g) (17) (B)	A map at a scale of 1:24,000 and description of all recognized stratigraphic units, geologic structures, and geomorphic features within 2 miles of the project site. Include an analysis of the likelihood of ground rupture, seismic shaking, mass wasting and slope stability, liquefaction, subsidence, and expansion or collapse of soil structures.	Figure 6.3-3 and Sections 6.3.1.4.2 through 6.3.1.5.7	Yes	
Appendix B (g) (17) (C)	A map and description of geologic resources of recreational, commercial, or scientific value which may be affected by the project. Include a discussion of the techniques used to identify and evaluate these resources.	Figure 6.3-3 and Section 6.3.1	Yes	
Appendix B (h) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, and permits applicable to the proposed project, and a discussion of the applicability of each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed;	Table 6.3-25 and Section 7.2-1	Yes	

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 0 Date 10/31/00

Technical Area: **Geological Resources**

Project: Morro Bay Power Plant Project

Technical Staff: Robert Anderson

Project Manager: Kae Lewis

Docket: 00-AFC-12

Technical Senior: Steve Baker

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (h) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Table 6.3-3	Yes	
Appendix B (h) (2)	A discussion of the conformity of the project with the requirements listed in subsection (h)(1)(A).	Sections 6.3.1.5.4, 6.3.1.5.5, and 6.3.2.1	Yes	
Appendix B (h) (3)	The name, title, phone number, and address, if known, of an official within each agency who will serve as a contact person for the agency.	Not Applicable	Not Applicable	

Adequacy Issue: Adequate Inadequate
 Technical Area: Facility Design
 Project Manager: Kae Lewis

DATA ADEQUACY WORKSHEET

Revision No. 0 Date 10/31/00
 Technical Staff: Robert Anderson/Kisabuli
 Technical Senior: Steve Baker

Project: Morro Bay Power Project
 Docket: 00-AFC-0012

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) (iii)	Water inundation zones, such as the 100-year flood plain and tsunami run-up zones.	Section 6.5.1.8 and Figure 6.5-14, Section 6.5.2.2.5	Yes	
Appendix B (g) (14) (D) (i)	Precipitation and storm runoff patterns; and	Appendix "C" Section 3.3.2 and Figures 2-22, 2-23, and 6.5-14		
Appendix B (g) (14) (D) (ii)	Drainage facilities and design criteria.	Section 6.5.1.8, Section 6.5.2.2.6, Appendix "C" Sections 3.3.2 through 3.3.2.5	Yes	
Appendix B (g) (14) (E) (ii)	The effects of construction activities and plant operation on water quality; and			
Appendix B (g) (14) (iii)	The effects of the project on the 100-year flood plain or other water inundation zones.	Section 6.5.1.8; Figures 2-22, 2-23, 6.5-14, and 6.5-15, Section 6.5.2.2.5	Yes	
Appendix B (h) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, and permits applicable to the proposed project, and a discussion of the applicability of each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed;	Tables 6.3-4, 7-1, 7-2, 7-3, 7-4 and 7-5	Yes	
Appendix B (h) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Table 7-2	Yes	
Appendix B (h) (2)	A discussion of the conformity of the project with the requirements listed in subsection (h)(1)(A).	Table 7-2	Yes	

Adequacy Issue: Adequate Inadequate
 Technical Area: Facility Design
 Project Manager: Kae Lewis

DATA ADEQUACY WORKSHEET

Revision No. 0 Date 10/31/00
 Project: Morro Bay Power Project Technical Staff: Robert Anderson/Kisabuli
 Docket: 00-AFC-0012 Technical Senior: Steve Baker

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (h) (3)	The name, title, telephones number, and address, if known, of an official within each agency who will serve as a contact person for the agency.	Table 7-2	Yes	
Appendix B (h) (4)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Figure 7-1	Yes	
Appendix B (i) (1) (A)	A description of the site conditions and investigations or studies conducted to determine the site conditions used as the basis for developing design criteria. The descriptions shall include, but not be limited to, seismic and other geologic hazards, adverse conditions that could affect the project's foundation, adverse meteorological and climatic conditions, and flooding hazards, if applicable.	Section 2.2.2, 6.3.1, Figure 6.3-4 and Appendix B-1	Yes	
Appendix B (i) (1) (B)	A discussion of any measures proposed to improve adverse site conditions.	Section 6.3.3	Yes	
Appendix B (i) (1) (C)	A description of the proposed foundation types, design criteria (including derivation), analytical techniques, assumptions, loading conditions, and loading combinations to be used in the design of facility structures and major mechanical and electrical equipment.	Appendices 8-3, 8-4 and table D-1	Yes	
Appendix B (i) (1) (D)	For each of the following facilities and/or systems, provide a description including drawings, dimensions, surface-area requirements, typical operating data, and performance and design criteria for protection from impacts due to adverse site conditions:	See below	See below	
Appendix B (i) (1) (D) (i)	The power generation system;	Section 2.2.3.1	Yes	
Appendix B (i) (1) (D) (ii)	The heat dissipation system;	Section 2.2.3.2	Yes	
Appendix B (i) (1) (D) (iii)	The cooling water supply system, and, where applicable, pre-plant treatment procedures;	6.5.1	Yes	
Appendix B (i) (1) (D) (iv)	The atmospheric emission control system;	Section 6.2	Yes	

Adequacy Issue: Adequate Inadequate

DATA ADEQUACY WORKSHEET

Revision No. 0 Date 10/31/00

Technical Area: Facility Design

Project: Morro Bay Power Project

Technical Staff: Robert Anderson/Kisabuli

Project Manager: Kae Lewis

Docket: 00-AFC-0012

Technical Senior: Steve Baker

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (i) (1) (D) (v)	The waste disposal system and on-site disposal sites;	6.14.1.3	Yes	
Appendix B (i) (1) (D) (vii)	The geothermal resource conveyance and re-injection lines (if applicable);	N/A	N/A	
Appendix B (i) (1) (D) (viii)	Switchyards/transformer systems; and	Section 2.2.3.4	Yes	
Appendix B (i) (1) (D) (ix)	Other significant facilities, structures, or system components proposed by the applicant.	Section 2.2.3, 2.2.4 , 2.3 and 2.4	Yes	

Adequacy Issue: Adequate Inadequate
 Technical Area: Reliability
 Project Manager: Kae Lewis

DATA ADEQUACY WORKSHEET

Revision No. 0 Date November 1, 2000
 Technical Staff: Steve Baker
 Technical Senior: Steve Baker

Project: Morro Bay Power Plant Project
 Docket: 00-AFC-12

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (1)	...provide a discussion of the existing site conditions, the expected direct, indirect and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation.	§§ 1.2, 2.0, 2.1.1.2, 2.1.1.5, 2.1.1.8, 2.1.1.9, 2.1.1.10, 2.1.2, 2.2.2, 2.2.3.3, 2.2.3.5, 2.2.3.6, 2.2.3.7, 2.2.3.11, 2.2.3.12, 2.2.3.16, 5.8, 8.1, 8.2, 8.2.2, 8.2.3, 8.3.1, 8.3.1.1, 8.3.1.2, 8.3.1.4, 8.5.1.1, 8.5.1.2, 8.5.2.1, 8.5.2.2	Yes	
Appendix B (i) (3) (A)	A discussion of the sources and availability of the fuel or fuels to be used over the estimated service life of the facilities.	§§ 1.2, 2.0, 2.1.1.5, 2.1.2, 2.2.3.12, 8.5.1.1, 8.5.1.2	Yes	
Appendix B (i) (3) (B)	A discussion of the anticipated service life and degree of reliability expected to be achieved by the proposed facilities based on a consideration of:	—	—	
Appendix B (i) (3) (B) (i)	Expected annual and lifetime capacity factors;	§§ 1.2, 2.0, 2.1.2, 2.2.3.5, 8.3.1, 8.5.2.2.1	Yes	
Appendix B (i) (3) (B) (ii)	The demonstrated or anticipated feasibility of the technologies, systems, components, and measures proposed to be employed in the facilities, including the power generation system, the heat dissipation system, the water supply system, the reinjection system, the atmospheric emission control system, resource conveyance lines, and the waste disposal system;	§§ 2.1.2, 8.3.1, 8.5.2.2.1, 8.5.2.2.3	Yes	
Appendix B (i) (3) (B) (iii)	Geologic and flood hazards, meteorologic conditions and climatic extremes, and cooling water availability;	§§ 1.2, 2.0, 2.1.1.8, 2.1.1.9, 2.2.2, 2.2.3.6, 2.2.3.7, 2.2.3.11, 2.2.3.16, 8.2, 8.2.2, 8.2.3, 8.3.1.1, 8.3.1.2, 8.5.2.2.4	Yes	
Appendix B (i) (3) (B) (iv)	Special design features adopted by the applicant or resource supplier to ensure power plant reliability; and	§§ 8.5.2.1, 8.5.2.2.2; Table 8-3; §§ 8.5.2.2.3, 8.5.2.2.5, 8.5.2.2.6	Yes	

Adequacy Issue: Adequate Inadequate
 Technical Area: Reliability
 Project Manager: Kae Lewis

DATA ADEQUACY WORKSHEET

Revision No. 0 Date November 1, 2000
 Technical Staff: Steve Baker
 Technical Senior: Steve Baker

Project: Morro Bay Power Plant Project
 Docket: 00-AFC-12

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (i) (3) (B) (v)	The expected power plant maturation period.	§ 8.5.2.1	Yes	
Appendix B (h) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, and permits applicable to the proposed project, and a discussion of the applicability of each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed;	Table 7-1	Yes	
Appendix B (h) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Table 7-2	Yes	
Appendix B (h) (2)	A discussion of the conformity of the project with the requirements listed in subsection (h)(1)(A).	N/A	N/A	
Appendix B (h) (3)	The name, title, phone number, and address, if known, of an official within each agency who will serve as a contact person for the agency.	Table 7-2	Yes	
Appendix B (h) (4)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Figure 7-1	Yes	

Adequacy Issue: Adequate Inadequate
 Technical Area: Efficiency
 Project Manager: Kae Lewis

DATA ADEQUACY WORKSHEET

Revision No. 0 Date November 1, 2000
 Technical Staff: Steve Baker
 Technical Senior: Steve Baker

Project: Morro Bay Power Project
 Docket: 00-AFC-12

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (1)	...provide a discussion of the existing site conditions, the expected direct, indirect and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation.	§§ 1.1, 1.2, 2.0, 2.1.1.2, 2.1.1.5, 2.1.1.10, 2.1.2, 2.2.2, 2.2.3.3, 2.2.3.5, 2.2.3.12; Tables 5-1, 5-3; §§ 5.8, 5.9.2, 8.1, 8.2, 8.3.1, 8.5.1.1, 8.5.1.2, 8.5.2.2.1, 8.6.1; Appendix 8-1	Yes	
Appendix B (i) (4) (A)	Heat and mass balance diagrams for design conditions for each mode of operation.	Appendix 8-1	Yes	
Appendix B (i) (4) (B)	Annual fuel consumption in BTUs for each mode of operation.	§ 8.6.1	Yes	
Appendix B (i) (4) (C)	Annual net electrical energy produced in MWh for each mode of operation.	§ 8.6.1	Yes	
Appendix B (i) (4) (D)	Number of hours the plant will be operated in each mode of operation in each year.	§§ 2.0, 2.1.1.2, 2.1.2, 2.2.3.5, 8.5.2.1, 8.5.2.2.1	Yes	
Appendix B (i) (4) (E)	If the project will be a cogeneration facility, calculations showing compliance with applicable efficiency and operating standards.	N/A	N/A	
Appendix B (i) (4) (F)	A discussion of alternative generating technologies available for the project, including the projected efficiency of each, and an explanation why the chosen equipment was selected over these alternatives.	§§ 5.8, 5.9	Yes	

Adequacy Issue: Adequate Inadequate
 Technical Area: Efficiency
 Project Manager: Kae Lewis

DATA ADEQUACY WORKSHEET

Revision No. 0 Date November 1, 2000
 Technical Staff: Steve Baker
 Technical Senior: Steve Baker

Project: Morro Bay Power Project
 Docket: 00-AFC-12

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (h) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, and permits applicable to the proposed project, and a discussion of the applicability of each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed;	Table 7-1	Yes	
Appendix B (h) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Table 7-2	Yes	
Appendix B (h) (2)	A discussion of the conformity of the project with the requirements listed in subsection (h)(1)(A).	N/A	N/A	
Appendix B (h) (3)	The name, title, phone number, and address, if known, of an official within each agency who will serve as a contact person for the agency.	Table 7-2	Yes	
Appendix B (h) (4)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Figure 7-1	Yes	

Adequacy Issue: Adequate _____ Inadequate X
 Technical Area: Transmission System Eng.
 Project Manager: Kae Lewis

DATA ADEQUACY WORKSHEET

Revision No. _____ Date Nov. 8, 2000
 Technical Staff: Laiping Ng
 Technical Senior: Al McCuen

Project: Morro Bay Power Plant Project
 Docket: 00-AFC-12

Siting Regulations	Information	Afc Page Number And Section Number	Adequate Yes Or No	Information Required To Make Afc Conform With Regulations
Appendix B (i) (2) (A)	A discussion of the need for the additional electric transmission lines, substations, or other equipment, the basis for selecting principal points of junction with the existing electric transmission system, and the capacity and voltage levels of the proposed lines, along with the basis for selection of the capacity and voltage levels.	Section 2 Page 2-1 Section 2.2.4 Page 2-64 Section 8.4 Page 8-25	No	Provide the conductor size of the unit connection to the PG&E switchyard.
Appendix B (i) (2) (B)	A discussion of the extent to which the proposed electric transmission facilities have been designed, planned, and routed to meet the transmission requirements created by additional generating facilities planned by the applicant or any other entity.		NA	
Appendix B (b) (2) (C)	A detailed description of the design, construction, and operation of any electric transmission facilities, such as power lines, substations, switchyards, or other transmission equipment, which will be constructed or modified to transmit electrical power from the proposed power plant to the load centers to be served by the facility. Such description shall include the width of rights of way and the physical and electrical characteristics of electrical transmission facilities such as towers, conductors, and insulators. This description shall include power load flow diagrams which demonstrate conformance or nonconformance with utility reliability and planning criteria at the time the facility is expected to be placed in operation and five years thereafter; and	Section 2.2.4 Page 2-64 Section 2.2.3 Page 2-52 to 2-54 Section 8.4 Page 8-25 Appendix 6.18-2 Appendix 8.9	No	The Preliminary Facilities Study (System Impact/Facility Study) was done for 2001. Please provide a this Study for 2003. The Study should include: 1) Normal system operation, 2) Important N-1 contingencies, 3) Critical N-2 contingencies. Please provide the power flow study and load flow diagrams that demonstrate conformance or non conformance with utility reliability and planning criteria for the first year of operation. Please identify the proposed mitigation methods for criteria violations.
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 8.4 Page 8-25	Yes	

Adequacy Issue: Adequate _____ Inadequate X
 Technical Area: Transmission System Eng.
 Project Manager: Kae Lewis

DATA ADEQUACY WORKSHEET

Revision No. _____ Date Nov. 8, 2000
 Technical Staff: Laiping Ng
 Technical Senior: Al McCuen

Project: Morro Bay Power Plant Project
 Docket: 00-AFC-12

Siting Regulations	Information	Afc Page Number And Section Number	Adequate Yes Or No	Information Required To Make Afc Conform With Regulations
Appendix B (h) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, and permits applicable to the proposed project, and a discussion of the applicability of each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed;		NA	
Appendix B (h) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.		NA	
Appendix B (h) (2)	A discussion of the conformity of the project with the requirements listed in subsection (h)(1)(A).		NA	
Appendix B (h) (3)	The name, title, phone number, and address, if known, of an official within each agency who will serve as a contact person for the agency.		NA	
Appendix B (h) (4)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.		NA	

ATTACHMENT C

Comments of the San Luis Obispo Air
Pollution Control District



**AIR POLLUTION
CONTROL DISTRICT**
COUNTY OF SAN LUIS OBISPO

November 17, 2000

Kae Lewis
California Energy Commission
1516 Ninth Street
Sacramento, California 95814-5512

Re: Data Adequacy Review for the Morro Bay Power Plant Application for
Certification (00-AFC-12), District Application Number 3038.

Dear Ms. Lewis:

District staff has reviewed Duke Energy's Morro Bay Power Plant Application for
Certification (00-AFC-12) and has determined the application is not complete
according to District standards.

**We divided our comments, which are attached, into three segments: Attachment
A - Permit Data Adequacy Issues, Attachment B - CEQA Issues, and Attachment C
- Other Issues. Attachment A contains the items needed for application
completeness or data adequacy. According to our understanding of the CEC
process, the issues in Attachments B and C can be resolved after data adequacy.**

For our tracking purposes, we have assigned the project application number 3038;
however, we will continue to use your number 00-AFC-12 in all correspondence.

If you have any questions, feel free to contact me at (805) 781-5912.

Sincerely,

GARY E. WILLEY

Air Pollution Control Engineer

Attachments

cc: Bob Cochran, Duke Energy

Gary Rubenstein, Sierra Research

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Attachment A
November 16, 2000 Letter to CEC
00-AFC-12
Permit Data Adequacy Issues

1. **Provide a Certification of Statewide Compliance. District Rule 204, Requirements, Section E. requires Duke to certify that all emission units located in California which would be classified as a major stationary source, as defined in Rule 105, and which are owned or operated by the applicant, or by any entity controlling, controlled by or under common control with such applicant, are in compliance or on a schedule for compliance with all applicable emission limitations and standards.**
2. *A Revised Protocol for Evaluating Ambient Air Quality Impacts of the Proposed Expansion Project at Morro Bay, CA* was included as an attachment to a June 2, 2000 letter from Gary Rubenstein of Sierra Research to Mr. Robert W. Carr of the San Luis Obispo County APCD. The protocol states that, *“The application will include concentration isopleths to illustrate the spatial distribution of the maximum modeled impacts from the gas turbines.”* Provide these isopleths for annual concentration impact results. For short-term averaging periods, provide graphical presentations that plot the maximum impact locations on topographic basemaps of the surrounding area. This data provided to the APCD from Sierra Research after the AFC application was received.
3. Provide a larger and better defined map of the receptor grid (Figure 6.2-16: layout, Page 6.2-111)
4. Provide information to identify how the ammonia used in selective catalytic reduction will be obtained. If it is to be generated onsite, what equipment, processes and pollutant emissions may result? If all of the ammonia, or any portion of it that is ultimately needed for normal operations, is intended to be brought in from offsite by tanker truck, how much ammonia will be needed on a monthly basis? How many truck trips will be required, and what will be the pollutant emissions from those delivery truck trips? What safety measures will be taken to minimize the potential for accidents or a spill of this hazardous material? The emission from predictable truck trips must be added into the impacts resulting from the project, and mitigated or offset as necessary.
5. Provide a profile check for offsets as required by Rule 204, Requirements, Section B.4 using the baseline period that will be proposed for the emission reduction credits.
6. Provide all input and output data files associated with the health risk assessment modeling analysis for the project. Include both dispersion modeling files and risk model. (Note: This data provided to the APCD from Sierra Research after the AFC application was received.)

7. Page 6.2-42, Tables 6.2-25 and 26: Provide the calculations used to estimate the natural gas combustion emission factors in units of pounds per million BTUs. The emission factor for PM10 is different between the two tables.
8. Table 6.2-1.8 on page 32 of Attachment 6.2-1.1: Provide missing data for hexane and propylene. AFC text references this table, but it is missing hexane and propylene. (Note: this data provided to the APCD from Sierra Research after the AFC application was received.)
9. Section 6.2.6.4, Page 6.2-67: Provide a copy of the South Coast AQMD's multi-pathway exposure adjustment values. The values used for the multi-pathway exposure adjustments were not listed. They need to be listed so that we can check to make sure that they are valid and acceptable to OEHHA.
10. Section 6.2.6.4, Page 6.2-68: Provide an analysis of adverse health impacts to off site worksites. The analysis did not include adverse health impacts to off site worksites.
11. Provide a copy of the relevant pages from the 1991 AB2588 report used to establish noncriteria pollutant emission rates for the existing boilers and other power plant sources.
12. Page 6.2-55: In describing turbine operations during initial commissioning, is it assumed that the existing boilers would be shut down, or is there a potential for them to be operating during turbine commissioning? If so, emissions and impacts from this scenario need to be included in the analysis.
13. Section 6.2.6.4, Page 6.2-69, Paragraph 1: Include the emissions from all sources in the Rule 219, Toxics New Source Review, health impact analysis. This should include any retained or added diesel fire pump engines, diesel emergency generators, and gasoline dispensing and storage operations.
14. PROVIDE A PROCESS FLOW DIAGRAM FOR COMBUSTION GASES.
15. THE AFC STATES IN SEVERAL PLACES THAT THE OZONE LIMITING METHOD (OLM) WAS USED TO ESTABLISH NO₂ IMPACTS. PLEASE DESCRIBE IN DETAIL HOW THE OLM WAS APPLIED. IN PARTICULAR, DISTINGUISH WHETHER OR NOT HOUR-BY-HOUR OZONE AND NO₂ MONITORING DATA FOR EACH OF THE 8,760 HOURS IN A GIVEN YEAR WERE MATCHED TO THE 8,760 HOURS OF DISPERSION MODELING RESULTS FOR THE SAME YEAR, OR WHETHER SINGLE OZONE AND NO₂ BACKGROUND VALUES WERE SELECTED AS REPRESENTATIVE FOR THE ENTIRE YEAR. PROVIDE THE OZONE AND NO₂ BACKGROUND VALUES USED IN THE ANALYSES.

Attachment B
November 16, 2000 Letter to CEC
00-AFC-12
CEQA Review Issues

1. Provide missing data for 24-month average emissions. The two-year tables listed in Appendix 6.2-1.1 on pages 10, 12, 14, 16, and 18 state 24-month average emissions but only include 20 months of data. The 25 months average emission data on the same pages include only 8 months of data.
2. The emission comparison between the new turbines and existing boilers lists emissions from the boilers prior to the additional boiler controls required in 2003 by District Rule 429. Please provide the estimated boiler emissions in 2003 after the additional controls and include that emission scenario with the comparison data presented in Table 6.2-4.
3. Page 6.2-46, Table 6.2-33: There has been no analysis of the potential for secondary particulate formation due to the increase in ammonia emissions (and SO₂ emissions) that would occur from the project. Ammonia can readily combine with NO_x emissions to produce particulate ammonium nitrate (NH₄NO₃). The applicant needs to analyze the potential for the MMPP project to produce secondary particulate formation in the project region.
4. Provide a complete emission analysis for the demolition phase of the project. This analysis was excluded in Appendix 6.2-5, Section 6.2-5.2 Demolition. Our experience with large demolition projects leads us to conclude that the emissions from the demolition phase could well be significant, and certainly contribute to overall construction phase impacts. In addition, demolition activities have the potential to generate various nuisance problems. We therefore believe the air quality impacts from demolition activities should be assessed and added to the construction phase impacts in Table 6.2-5.3. In addition, suitable mitigation measures for demolition impacts need to be addressed.
5. Page 6.2-51: The application shows that the existing boiler stacks were modeled at 383 feet rather than their actual height of 450 feet due to GEP limitations. It is staff's understanding that GEP considerations apply only to the stack height of a *proposed* facility. Existing sources should always be modeled using actual physical parameters and operating conditions. Please perform modeling of the existing boilers using the actual 450-foot stack height; modeling scenarios should include emission rates at both current levels and after the controls required in 2003.
6. Page 6.2-60, Table 6.2-39: Are the modeled impacts for one- and eight-hour CO reversed? This also occurs in Table 6.2-44 (p.65).

7. Page 6.2-66, Table 6.2-45: Please identify the regulatory guidance cited that specifies use of the highest second-high 24-hr average PM₁₀ concentration for comparison to PSD Class II increment threshold.
8. Page 6.2-70: Did the visibility screening models include the effect of ammonia emissions from the turbine SCR system?
9. Page 6.2-72: The calculation of construction equipment emissions is based on the assumption that all diesel-powered equipment will comply with the EPA 1996 off-road diesel standards (Appendix Attachment 6.2-5.1). It is questionable that all diesel equipment used for construction will actually be manufactured subsequent to 1996. Unless the applicant desires to be held by a permit condition that requires the use of post-1996 construction equipment, construction emissions for diesel-powered equipment should be based on their applicable emission factors presented in the *EPA Non-Road Engine and Vehicle Emission Study Report* of 1991, as referenced in footnote (1) of the Appendix Attachment.

The construction modeling should be redone to reflect the revised emission factors. Given the predicted NO₂ impacts from construction shown in Table 6.2-5.4 (Appendix 6.2-5), it is likely that the revised emission factors will show a predicted violation of the state NO₂ standard. If this occurs, then appropriate mitigation (construction phasing, activity management, use of emission controls, etc.) should be identified and modeled to demonstrate the ability to eliminate the standard violation.

- a. The discussion of construction impacts states that modeled PM₁₀ violations are unlikely due to the conservative nature of the modeling. Please provide a more detailed justification of this conclusion given that the modeled PM₁₀ concentration, without the inclusion of background, is more than twice the state 24-hour standard.
 - b. The discussion also states that “...*construction sites that use good dust suppression techniques and low-emitting vehicles typically do not cause violations of air quality standards.*” Please provide additional support for this statement.
10. Appendix 6.2-8, Page 1: It is stated that, “As is the case of ozone precursors, emissions of PM₁₀ precursors are expected to have approximately equivalent ambient impacts in forming PM₁₀, per ton of emissions on a regional basis.” Please provide documentation to justify this assumption.
 11. In an August 21, 2000 letter from Gary Rubenstein of Sierra Research to Dennis Jang of the Bay Area Air Quality Management District it was indicated that, “We are scheduling another triplicate test to verify that the first two runs accurately characterize acrolein emissions from the gas turbine at part load.” Have these tests been completed? If so, please provide the results.
 12. Appendix 6.2-5, Section 6.2-5.3: The discussion of available mitigation measures to control exhaust from heavy-duty diesel construction equipment does

not mention the use of soot filters or oxidizing catalysts. Both controls are typical requirements imposed by the CEC on several recent power plant applications. Please provide a description of these controls and how they might be used on the construction equipment employed on your project.

13. Page 6.2-64, Table 6.2-42: What information does this table present? Are these the highest 24-hour PM10 samples measured at each of the sites in the years noted? The table title is misleading, if that is the case.
14. Page 6.2-71, final sentence: Do Federal Class I visibility protection requirements limit the cumulative use of the acceptable 5% increment of deterioration noted? If so, what assessment of use of that increment needs to occur for this impact analysis?
15. Page 6.2-83 through 86: What is the source of these maps, which present very general information about wind flow statewide for each of four quarters? How do the identified "predominant" wind directions relate to associated wind velocities, pollutant dispersion and potential air quality impacts from plant emissions at key receptor sites? Such aspects of impact analysis are typically complex and are resolved through computer modeling. In the case of wind flow at Morro Bay, is it meaningful to present "predominant" wind direction, when other wind roses in the same document show that winds can come from highly variable directions over time?
16. Page 6.2-109, Figure 6.2-14: What is the meaning of "expected violations of the California PM10 standard"? Is this the product of actual violations measured each year times 6, considering the one day in six normal PM10 sampling schedule? Is this conclusion discussed anywhere in the text?

Attachment C
November 16, 2000 Letter to CEC
00-AFC-12
Other Issues

1. Page 6.2-53: It is stated that modeling of the turbines alone is a worst-case estimate because it does not reflect the benefits of eliminating the existing emissions from the boilers. The justification for this statement is unclear. Is the intent to indicate that background concentrations would be lower than those used in the modeling if the boiler impacts were subtracted from background levels?
2. Page 6.2-55: In describing emissions during turbine commissioning, the statement is made that "...since there is no external CO control for the turbines, CO emissions during commissioning are not expected to be any higher than CO emissions evaluated during startup operations." Please explain this statement in relation to the oxidation catalyst proposed for CO control.
3. Page 6.2-49: It is stated that APCD staff selected the 1994-1996 meteorological data set collected at the PG&E met station as the appropriate met data to use in the modeling analyses. This is misstated; that specific dataset was selected by Duke and proposed for use in the modeling analysis described in Duke's modeling protocol. APCD staff approved the modeling protocol, with requested modifications.
4. Section 6.2.1.7, Page 6.2-10, Table 6.2-7: Staff could not recreate these values or determine how some of these values were estimated (distances to the nearest receptors and who they were, were not clearly defined). The tables should include all of the chemicals of concern with District-approved emission factors.
5. Page 6.2-3, paragraph 2: San Luis Obispo County is in attainment for the federal ozone standard. It does not attain the state ozone standard.
6. Page 6.2-4, Table 6.2-1, and Page 6.2-59, Table 6.2-37: These tables cite pollutant levels in ug/m³, while on pg. 6.2-14, in table 6.2-8, and in other tables, pollutant standards are properly presented in the more commonly understood form of ppm.

However, modeled project impacts are conventionally determined in ug/m³, establishing the need for baseline pollutant levels to be in that form also. Both methods of identifying concentrations (ppm and ug/m³) should be used in all tables which present information about ambient air quality levels or incremental impacts. Without using ppm values for ambient levels, it is difficult for the public to relate a project impact to an appropriate standard.

7. Page 6.2-21, paragraph 2: The application incorrectly states that PM 2.5 has been sampled only at Arroyo Grande. This probably references data obtained from a short period of dichotomous sampling on the Nipomo Mesa, but that monitoring did not meet accepted PM_{2.5} sample requirements. PM_{2.5} sampling, meeting all state and federal sampling standards, began in January, 1999 at Atascadero and San Luis Obispo, and has continued on a regular schedule of one day in six since then.

8. Page 6.2-23, Table 6.2-16: The table lists the wrong address for the SLO County APCD.
9. Page 6.2-29, paragraph 2, bullet 2: The title “air Pollution control Officer” should be properly capitalized.
10. Page 6.2-58, paragraph 3: The ARB does not monitor for PM10 at Morro Bay. This is a San Luis Obispo county APCD station.
11. Page. 6.2-63, paragraph 1: The stated hypothesis that: because onshore winds typically reach Morro Rock first before coming onshore, they should have lower PM10 levels than in the City of Morro Bay, may not be correct. TSP sampling performed on the roof of the Morro Bay High School bus barn in 1978-1980 commonly showed higher particulate levels there than in the City of Morro Bay. This was presumably due to marine aerosol and condensed salt from ocean surf. This same process probably occurs for PM10 also, meaning that baseline PM10 levels on the upwind side of Morro Rock could be higher.

ATTACHMENT D

Comments of Other Agencies and Individuals

From: "McKelligott" <raymck@slonet.org>
To: <docket@energy.state.ca.us>
Date: 11/16/00 8:12AM

TO: Docket Unit, CEC
Attn: Kae Lewis

FROM: Betty Winholtz, Morro Bay resident

DATE: November 16, 2000

RE: Docket #00-AFC-12
Category: Noise

GENERAL COMMENTS

- 1.. No receptor sites 900 feet north of the proposed plant site were used. One half of the city's population lives north of the plant.
- 2.. No topographical data or effects are given. The city is built on a series of hills with Morro Rock and the Sandspit to the west.
- 3.. No specific data on meteorological effects are given only generalized description.
- 4.. No noise-related data or effects on flora and fauna are given. The site is bordered on the north and west by sensitive habitat zoning.
- 5.. No data for 7 of the 14 receptor sites is shown. Noticeably omitted is the Radcliff neighborhood.
- 6.. No full-load data is presented for any receptor site.
- 7.. No detail on the proposed sound wall given. No data on the effect of the proposed wall to the east, west, or south given.
- 8.. No data on cumulative effects of equipment for the following phases given: tank demolition, site preparation, pile installation, foundation placement, building construction, exterior finish and clean up, commissioning and initial start-up, normal operations, and stack demolition.
- 9.. No data on cumulative effects of the above phases in conjunction with the operation of the current plant and/or Highway 1 traffic.
- 10.. No mitigation factors mentioned, i.e. restricted hours, temporary noise barriers along truck routes.

SPECIFIC COMMENTS

Text

- 1.. Tables 6.12-8, 5.12-9, and 6.12-11 omit data for 7 of 14 receptor sites.
- 2.. Table 6.12-10 omits data for 8 of 14 receptor sites.
- 3.. Table 6.12-12 lists inconsistent percentage loads, none at full load. Column 7 uses the symbol (+) but actually averages rather than adds.
- 4.. Table 6.12-13 in Column 6 uses the symbol (+) but actually averages rather than adds.

Appendix

- 1.. Section 1.1. The data collected in January 1999 may be irrelevant since new equipment has been added to the plant as late as June of 2000.
- 2.. Section 3.2. Sites may not be representative since receptor sites were put at noise intersections specifically at Morro Bay High School rather than the school building, Morro Elementary School rather than the school building, and Morro Rock Parking Lot rather than elevated up the side of the Rock.
- 3.. Section 3.3. The data collected in January 1999 may not be representative because our wind does not typically come from the east, blowing sound away from the city.
- 4.. Section 3.3. Table 5 does not indicate whether data was weighted for altitude or whether it was measured fast or slow.
- 5.. NTA 6.12-3. Attenuation for distance is noted, but no comment on adjusting for contour.
- 6.. NTA 6.12-3. Table NTA 3-1 through 3-6. Averages do not reflect quantity.
- 7.. NTA 6.12-4. Does not name the PC-based noise prediction program for verification.
- 8.. NTA 6.12-4. Case 3. Are there better walls than 32 rating? Is there more comparative data from Hildago, Texas?
- 9.. NTA 6.12-4. Case 4. Levels are barely below standards leaving little room for error. Are we getting the best of technology?
- 10.. NTA 6.12-5. No data on controlled vent steam release.
- 11.. NTA 6.12-6. Weather data may no longer be representative. No scenarios given.

Coastal Commission Staff Specific Comments on Data Adequacy for the Proposed Morro Bay Power Plant

ALTERNATIVES

COASTAL DEPENDENCY AND ALTERNATIVE COOLING TECHNOLOGIES

On page 5-5 the AFC reads "...The MBPP was and is considered coastal dependent because it requires access to seawater for cooling purposes. As a result , MBPP qualifies as a coastal dependent facility as defined by CCA."

Commission staff finds this conclusion premature. The AFC's determination of coastal dependency appears to be based on the AFC's rejection of alternative cooling technologies, such as cooling towers, air-cooled condensers, or cooling ponds. The AFC rejects these alternatives with little substantive information to support its finding. More specific information on alternative technologies, such as cost-benefit analyses, a more specific visual resources analysis, and so forth are necessary in order to determine the proposed project's coastal dependency.

NO PROJECT ALTERNATIVE

Commission staff finds the "No Project Alternative" inadequate. This two-page section (5-8 to 5-10) substitutes unsupported generalities and projections about the California energy market for quantitative analysis to support the AFC's general conclusion that the No Project Analysis is preferable to the proposed project. A more quantitative assessment is needed to support the AFC's findings.

BIOLOGICAL RESOURCES

MARINE BIOLOGICAL RESOURCES

Commission staff finds many of the AFC's conclusions relating to the plant's historic and projected effects on marine biological resources either unsubstantiated or premature. In particular, the AFC lacks both historic, pre-project, baseline data with which to evaluate the plant's historic effects, and the AFC lacks final and current thermal, impingement, and entrainment studies.

The aforementioned studies are essential components of the environmental analysis of the proposed project's effects on marine biological resources. The CEC uses these studies for the AFC review, the Regional Water Quality Control Board uses them for its National Pollutant Discharge Elimination System (NPDES) permitting process, and the Coastal Commission uses them to develop recommendations to the CEC pursuant to §30413 (d)(4) of the Coastal Act. Lacking these three critical studies, Commission staff urges the CEC to postpone a finding of data adequacy at least until study completion.

TERRESTRIAL BIOLOGICAL RESOURCES

With respect to terrestrial resources, the AFC makes a number of unsupported conclusions that require further information and explanation:

WETLANDS DELINEATION

The AFC finds that "...Some small examples of human-influenced growth of marsh vegetation occur on the MBPP property in depressions with highly permeable sandy soils where there are leaks from fire control pipe valves. These however, would not qualify as Corps, CCC, CDFG, or City wetlands due to the lack of hydric soil conditions and lack of wetland hydrology." (AFC, 6.6B-47). The AFC includes no formal wetland delineation to support this claim. Thus, Commission staff is unable to determine whether or not the AFC's conclusions are correct.

BRIDGE CONSTRUCTION

The AFC includes insufficient information to determine what, if any, ecological or geomorphological effects the proposed bridge might have on Morro Creek, and how this may affect any existing habitat there. Limitations include the lack of an identified bridge site, the absence of any permit information, the absence of any geomorphological evaluations, and the resulting lack of information about how this project aspect may affect Morro Creek and the species found there, such as steelhead trout.

WILLOW CAMP CREEK BORING OPERATION

The AFC does not contain sufficient information with which to determine potential risks to riparian and terrestrial environments that may result from this proposed work. Drilling in or below riparian environments has proven to be an imperfect science at best, fraught with risk of "frac-outs" and other effects. Drilling plans, geological assessments, and spill control and prevention plans would provide a minimum of information to adequately assess this proposed project.

Traffic and Transportation (coastal access and recreation)

The AFC should include a more quantitative analysis of the effects increased traffic and transportation may have on coastal access and recreation. For example, the AFC should quantify weekend travel rates, specific project locations (such as the Morro Creek Bridge), and all access roads and their designs.

SOIL AND WATER QUALITY

The AFC contains insufficient information to determine what effects the proposed project may have on soil and water quality.

GRADING PLAN

The AFC should identify how and where grading and proposed work will effect contaminated soil and water resources. In particular, Commission staff would need a more detailed grading plan and the erosion control measures the applicant intends to take in order to protect surrounding water bodies.

VISUAL RESOURCES

While the AFC proposes a dramatic improvement in the visual resources of the Morro Bay Project area, many of these assertions are unquantified. We suggest that the applicant submit more thorough evidence to support its claims.

DELIVERED VIA EMAIL AND REGULAR MAIL

November 20, 2000

Kae Lewis, Project Manager
California Energy Commission
1516 Ninth Street
Sacramento, CA 95814

RE: Duke Energy Morro Bay Project (00-AFC-12)

Dear Ms. Lewis:

Enclosed for your consideration is the Coastal Commission staff's assessment of the adequacy of the Application For Certification (AFC) for the proposed Morro Bay Project. We appreciate your willingness to incorporate our findings into the California Energy Commission (CEC) staff recommendation on data adequacy to the CEC.

The purpose of this letter is to clearly enunciate our opinion that the Application For Certification (AFC), while helpful, does not contain adequate data with which to conduct a thorough analysis of the proposed project and its potential effects on coastal resources as required by Coastal Act §30413. Due to AFC shortcomings in the areas of coastal access and recreation, visual resources, biological resources, marine resources, and soil and water quality, all of which are outlined in Attachment "A", we recommend that the CEC make a finding that the AFC is not data adequate, until such time as the missing information is supplied by the applicant.

Although the AFC does not yet meet the level of data adequacy, the AFC and other portions of this proceeding's evidentiary body represent an excellent beginning to the certification process. We look forward to working closely with the applicant, the CEC, and others to evaluate the proposed project's conformity with the Coastal Act. Please call me at (415) 904-5249 if you have any questions about this letter or our comments contained in Attachment A.

Sincerely,

Michael Bowen
Coastal Program Analyst

Encl. Attachment A – Data Adequacy Evaluation

From: <Henrigroot@aol.com>
To: <DOCKET@energy.state.ca.us>
Date: 11/16/00 10:28AM
Subject: Docket # 00- AFC - 12 Alternatives

DOCKET # 00- AFC -12

COMMENTS ON ALTERNATIVES

On page 5-21 reference is made to the fact that the City of Morro Bay requested discussion of the use of reclaimed water. The only data provided in response is the information that 1400 GPM could be available from the nearby Wastewater Treatment Plant and that this amount is not sufficient. The possibility of using this reclaimed water as at least part of the cooling water is not considered or discussed.

The reason for this is made clear by the legal discussion on p. 6.5-84. Duke Energy is in a much better position to claim that they are not building a new plant if they are allowed to re-use the old intake and discharge system. The principle here is that if you want to build a new home you leave one wall standing so that the permitting process is easier.

Respectfully submitted,

Henriette Groot, PhD
(Retired psychologist, PhD 1960 UCLA, Director of Training for Psychology Service at Long Beach VA Center, Associate Clinical Professor UCLA; expertise in Program Evaluation and Quality Assurance, extensive list of publications and scientific papers.)

CC: <klewis@energy.state.ca.us>

From: <Henrigroot@aol.com>
To: <DOCKET@energy.state.ca.us>
Date: 11/16/00 10:29AM
Subject: Docket # 00-AFC-12 Water Resources

DOCKET # 00 - AFC - 12

COMMENTS ON WATER RESOURCES

On water diversion / tidal prism: 6.5.2.2

On the subject of the impact of the MBPP on the Morro Bay Estuary we find on page 6.5-60: "The following factors have played much larger roles in the observed historical changes in physical processes than has operation of the MBPP....." Where are the data to support this statement? Section 6.5.1.4.2, cited in this context, says nothing to support this statement.

And again, same page, "The plant operations do not affect the tidal prism at all." No supportive data referred to. Next comes the statement on p.6.5-63: "any small effects that the existing plant could have will be reduced accordingly with the Project." Which is it? No impact? A small impact? How can we know at all without appropriate studies? For all the interesting discussion, largely hypothetical, in Appendix 6.5-3 on Physical and Hydrodynamic Characteristics of the bay no one apparently has ever bothered to attempt to correlate conditions in the Estuary with down-time at the plant, i.e. times when there is no water diversion to the plant.

On the thermal plume: 6.5.2.2.3

PG &E plume mapping dates from 1972. Despite statements to the contrary, these mappings were not done under all conditions of tide and current. Also, the image of Plume #2 (Fig 6.5-23) is cropped in such a manner that we do not see the full Westerly and SWesterly extent of that particular plume. Figure 6.5-9 on p 6.5-34 of the "typical" current is misleading. Any local dragger (fisherman) can tell you that the current often flows South causing the plume to bend Southward and even into the harbor (see also studies of the plume from the Wastewater Treatment Plant for this). Where the discharge plume goes at any given time depends on the combination of tide, current, wind, swell.

On p 6.5-70 we find the statement that currently "a much more complete characterization" of the plume is underway. We are referred to Appendix 6.5-1 however we do not find the data there, except for an unreadable graph for January 2000 and preliminary data for July 99. There is a long list of temperature recorder locations and their date of installation. Why are the data they provided not given? Anyway, none of this information is of any use unless the correlation is shown with

state of the tide, current North or South, and level of operation of the plant. Furthermore it seems ludicrous that Duke chooses the low-tech method of temperature measurement by boat and even discusses photography from the top of Morro Rock, a protected Ecological Preserve sacred to local Native Americans which no one is allowed to climb. Infrared satellite imagery (see Fig 6.5 -22, 23 and 24 of the PG&E study) are the obvious method of choice to give an estimate of the extent of the thermal plume under any combination of conditions. Also see the Remote Sensing image obtained from the Landsat Mapper which clearly shows the thermal plume curving South around the Rock extending past the harbor mouth. (This attachment will be sent with the hard copy to be mailed separately) I provided Duke with this very picture half a year or longer ago, undoubtedly there are other sources of satellite imagery such as GIS.

It seems incredible, even negligent to me that no current or long-term data of this kind is offered in the AFC. Doesn't the California Thermal Plan require thermal monitoring? In view of the damage found from the thermal discharge at Diablo Power Plant this information is critical!

P6.5-34 States that the "existing NPDES allows for a 30 degree temperature differential". However, that is the maximum, the AFC fails to mention what is the actual current delta t. Information on the actual present NPDES permit is missing, Appendix 6.5-5 only gives the application for an extension of an existing permit. Perusal of the existing permit (at least its predecessor WDR Order No. 95-28) discloses that there is a requirement (p.7) that the discharge not "significantly decrease the natural light to benthic communities and other marine life." I have inquired about turbidity studies and to my knowledge none have been done.

Respectfully submitted

Henriette Groot, PhD
(Retired psychologist, PhD 1960 UCLA, Director of Training for Psychology Service at Long Beach VA Center, Associate Clinical Professor UCLA; expertise in Program Evaluation and Quality Assurance, extensive list of publications and scientific papers.)

CC: <klewis@energy.state.ca.us>

From: peter wagner <cpwags@earthlink.net>
To: <KLewis@energy.state.ca.us>
Date: 11/15/00 5:31PM
Subject: Docket #00-AFC-12

Dear Ms. Lewis:

I am writing with regard to the data-adequacy phase of the Application for Certification by Duke Energy for the proposed Morro Bay Power Plant expansion. My background includes 33 years teaching and research in electrical engineering, seven years as Director of the University of Maryland Center for Environmental and Estuarine Studies (now called the Center for Environmental Science), and one year working for the Maryland Power Plant Siting Program in the Maryland Department of Natural Resources as an engineer responsible for setting up an environmental monitoring program.

I have carefully examined the sections to which my comments are addressed. These are Section 4, Facility Closure; Section 5, Alternatives Analysis; Section 6.2, Air Quality; and Section 6.13, Visual Resource Analysis.

Section 4, Facility Closure

Section 4.2: Duke (p.4-2) lists four possibilities for the site after permanent cessation of operations. No backup calculations or estimates are given for these options, e.g., estimates of the property value or the types of "new, state of the art electric generation technology" that might replace the new plant at the end of its life.

Section 4.2.2: Duke gives an anticipated lifetime for the new units of "at least 30 years" with the possibility of a longer working life (p.4-3). No data are included to support this estimate, e.g., no lifetime figures for comparable units, no documentation of any engineering estimates of lifetime. Duke is unwilling to make any projections of "Future conditions that could affect ... closure/decommissioning"(p.4-3) or "to speculate on the long-term use of the existing power plant site..."(p.4-5). It is hard to believe that such projections could not have been made and included in the AFC.

Section 5, Alternatives Analysis

Section 5.2: Duke (p.5-6) lists five criteria for a "reasonable selection of an offsite alternative..." and says "offsite alternatives are not discussed..."(p.5-7). Not one example of a possible alternative site that meets the criteria within reason is given. Surely somewhere in California there are such sites, and at least some of them should be identified in the AFC for comparison.

Section 5.4: The entire discussion of the no-project alternative is given just two pages! There is no quantitative comparison whatsoever for operation of the proposed plant vis a vis the existing plant. The only numerical datum in this section is the additional generation of 198 MW (p.5-9). Some comparative numbers can be ferreted out of other sections, but a summary of such information, including air quality (after the soon-to-be-required retrofit), noise, cooling water use, and other environmental effects, belongs here.

In addition, this section is silent on the operating schedule most likely to obtain in future years under the no-project scenario. Would the old plant be used primarily for peaking or intermediate use as opposed to base loading for the proposed plant? What is the expected lifetime of the old plant, and what is the basis for a lifetime estimate? What are the lifetime figures for comparable generating units which have been in operation for many decades? No relevant information or estimates are included.

Section 5.8, Alternative Cooling Technologies:

Section 5.8.7: With the exception of a single reference to another section (p.5-32), this section is entirely qualitative and unsupported by any data to support the assertions.

Section 5.8.9: Relocation of the intake point in a way that would result in no water withdrawal from Morro Bay is an extremely important topic. It may constitute the single most significant set of environmental consequences for the entire project. Unfortunately Duke gives only two pages to this topic and, again, includes no quantitative information to back its assertions. For example, it asserts higher impingement rates for an offshore intake "Based on experience from other offshore intakes...". What experience? Where are the relevant literature citations?

Section 6.2 and Appendix, Air Quality

Section 6.2.1.3: Table 6.2-3 (p. 6.2-5) is completely misleading because it gives emission rates for the existing plant averaged over the most recent two years. First, no justification is given for choosing these particular years. The operating schedule for the past two years is not representative of the operating history of units 1 through 4, nor does Duke give any justification that these years are representative of future operation, presumably as a peaking plant-- though Duke doesn't specify. Second, the San Luis Obispo County Air Pollution Control District (SLOCAPCD) requires a baseline average over a 36 month continuous period, not 24 months. Although Duke justifies its table as "fulfilling CEQA and federal programs"(p.6.2-5), there is no corresponding table based on the three-year SLOCAPCD criterion.

Section 6.2.6.2 and Appendix 6.2

The SLOCAPCD Rule 213 requires that, for baseline emission determinations, the most recent three consecutive years or a more representative three-year period out of the last five be averaged to obtain a baseline for emission credits. Duke did not provide emission data for five years but only for an interval that barely encompasses its desired averaging period of August 1997 through July 2000.

The designation of a representative three-year period can have a very large effect on emission credits, but is impossible to make because Duke omitted the first two years out of the most recent five. Further, Duke has included no justification to back up its proposed choice of averaging period. How representative are the most recent 36 months, not of the recent past which has been unusual, but of the operating schedule most likely to be adopted in the long term if the old plant stays in place? A quantitative estimate based on projected energy demand is needed.

Section 6.13, Visual Resource Analysis

The intake building is a dominant, conspicuous eyesore on the Embarcadero, a prominent tourist area. In several places (e.g. pp.2-9 and 2-19) Duke mentions its intention to make cosmetic improvements in the facade, yet nowhere are any specifics given. Section 6.13 contains no elevations or sketches indicating what the building would look like; the only illustrations that do show the intake building (6.13-1 on p. 6.13-59 and KOP 9, p.6.13-113) appear to leave it unchanged. The possibility of lowering the height of the intake building by replacing the enclosed crane with a portable crane, which Duke proposes elsewhere to reduce the height of the main structure (p.2-15), is not analyzed or even mentioned. The intake building should be given the same level of aesthetic and engineering treatment as the other structures.

I hope these observations are helpful and constructive. I would be pleased to discuss them at greater length. Thank you for your consideration.

Sincerely,

Peter E. Wagner
2650 Maple Ave.
Morro Bay, CA 93442
(805)771-8642

CC: <DOCKET@energy.state.ca.us>

**ATTACHMENT A
OVERVIEW OF
City of Morro Bay**

**DATA ADEQUACY DETERMINATION
MORRO BAY POWER PLANT PROJECT 00-AFC-12**

Technical Area	Attachment B	ADEQUATE?
	PAGE NO.	
ALTERNATIVES.....	7	NO
BIOLOGICAL RESOURCES	8	NO
CULTURAL RESOURCES	11	NO
GEOLOGICAL HAZARDS.....	13	NO
HAZARDOUS MATERIALS HANDLING	15	NO
LAND USE.....	16	NO
NOISE.....	19	NO
SOCIOECONOMICS.....	21	NO
SOILS	25	NO
TRAFFIC AND TRANSPORTATION	26	NO
VISUAL RESOURCES.....	30	NO
WASTE MANAGEMENT.....	32	NO
WATER RESOURCES.....	33	NO
WORKER SAFETY.....	36	

ATTACHMENT B

**City of Morro Bay
List of Data Inadequacies**

**Morro Bay Power Plant Project
00-AFC-12**

November 22, 2000

Adequacy Issue: Adequate _____ Inadequate x
 Technical Area: **Alternatives**

DATA ADEQUACY WORKSHEET

Date 11/13/00

Project: Morro Bay Power Plant

Docket: 00-AFC-12

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (f) (2)	An evaluation of the comparative engineering, economic, and environmental merits of the alternatives discussed in subsection (f)(1).		NO	The AFC should provide a quantitative basis for comparison of the proposed project with each feasible alternative, particularly the no project alternative. The complete assumptions underlying the no project alternative should be thoroughly described and explained including the estimated useful life of the existing plant, the number of generating units that would be operational, the peak and average generating levels assumed when comparing with project impacts, an explanation of any necessary modifications to the existing plant, facility and/or operating program that are assumed to be necessary for the existing plant to continue to operate. The technical basis for the above information should be cited and provided in the AFC.

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.		NO	Provide a separate resource protection/mitigation monitoring plan developed from the mitigation measures. Key mitigating design features are listed in the AFC on Page 6.6B-92, including several plans as well as specific mitigation and monitoring activities to reduce impacts.
Appendix B (g) (13) (A)	A regional overview and discussion of biological resources, with particular attention to sensitive biological resources near the project, and a map at a scale of 1:100,000 (or some other suitable scale) showing their location in relation to the project.		NO	Include specific discussion on the peregrine falcons or other sensitive species at Morro Rock in the sections on sensitive species potentially impacted by the project from noise or air quality (page 6.6B-100 and Appendix 6.2-5).
Appendix B (g) (13) (B)	A discussion and detailed maps at a scale of 1:6,000, of the biological resources at the site of the proposed project and related facilities, and in areas adjacent to them, out to a mile from the site and 1000 feet from the outer edge of linear facility corridors. Include a list of the species actually observed and those with a potential to occur. The discussion and maps shall address the distribution of community types, denning or nesting sites, population concentrations, migration corridors, breeding habitats, and the presence of sensitive biological resources.		NO	Clarify the impacts to the Monarch butterfly and its habitat. The AFC identifies Monarch butterflies on the project site but it does not clarify if the trees used by the Monarchs within the impacted area are or are not considered to be Environmentally Sensitive Habitats. The discussion on this species in the AFC (Page 6.6B-70) states that removal, thinning, or disturbance of trees used by the butterflies would have an adverse impact on this species. However, Monarch butterflies are not included in the impacts section and it is not clear if project activities would include tree thinning, removal, or other disturbance to trees used by Monarchs.

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (13) (C)	A description of all studies and surveys used to provide biological information about the project site, including seasonal surveys and copies of the California Department of Fish and Game's Natural Diversity Data Base Survey Forms, "California Native Species Field Survey Forms", and "California Natural Community Field Survey Forms", completed by the applicant. Include the dates and duration of the studies, methods used to complete the studies, and the names and qualifications of individuals conducting the studies.		NO	Provide a List of Preparers that identifies those who contributed to the report or conducted surveys and a brief description of their qualifications in a table format (i.e., Name, Resource Area, Education and/or Years of Experience with resource). Several people are identified in the text as having conducted surveys or otherwise having contributed to the preparation of the AFC and/or supporting documents. Resumes included for the authors of the Biological Resources Section and the AFC are not sufficient.
Appendix B (g) (13) (D)	A discussion of all permanent and temporary impacts to biological resources from site preparation, construction activities, and plant operation. Discussion of impacts must consider impacts from cooling tower drift, and from the use and discharge of water during construction and operation. For facilities which use once-through cooling or take or discharge water directly from or to natural sources, discuss impacts resulting from entrainment, impingement, thermal discharge, effluent chemicals, type of pump (if applicable), temperature, volume and rate of flow at intake and discharge location, and plume configuration in receiving water.		NO	Clarify the impacts to the Monarch butterfly and its habitat. The AFC identifies Monarch butterflies on the project site but it does not clarify if the trees used by the Monarchs within the impacted area are or are not considered to be Environmentally Sensitive Habitats. The discussion on this species in the AFC (Page 6.6B-70) states that removal, thinning, or disturbance of trees used by the butterflies would have an adverse impact on this species. However, Monarch butterflies are not included in the impacts section and it is not clear if project activities would include tree thinning, removal, or other disturbance to trees used by Monarchs.
Appendix B (g) (13) (E)	A discussion of the following:			

Adequacy Issue: Adequate Inadequate **X** **DATA ADEQUACY WORKSHEET**

Date 11/13/00

Technical Area: Biological Resources

Project: Morro Bay Power Plant Project

Docket: 00-AFC-12

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (13) (E) (i)	All measures proposed to avoid and/or reduce any adverse impacts;		NO	Provide a cross-section diagram illustrating the flow line of Morro Creek, top of bank, edge of vegetation, proposed setback/buffer area, and edge of proposed ground disturbance, and a similar cross-section showing any changes to dune areas adjoining the project site are necessary to demonstrate impacts (or lack thereof). Indicate what, if any, biological field studies have been carried out to determine the adequacy of any proposed setback/buffer areas adjacent to environmentally sensitive habitat.
Appendix B (g) (13) (E) (ii)	All measures proposed to mitigate any adverse impacts, including any proposals for off-site mitigation; and		NO	Identify the specific locations of any areas proposed to be placed in protective conservation easements for protection of sensitive biological resources.
Appendix B (g) (13) (F)	A discussion of compliance and monitoring programs proposed to ensure the effectiveness of mitigation measures incorporated into the project.		NO	Provide a separate resource protection/mitigation monitoring plan developed from the mitigation measures. Key mitigating design features are listed in the AFC on Page 6.6B-92, including several plans as well as specific mitigation and monitoring activities to reduce impacts.

Adequacy Issue: Adequate _____ Inadequate X

DATA ADEQUACY WORKSHEET

Date 11/13/00

Technical Area: Cultural Resources

Project: Morro Bay Power Plant Project

Docket: 00-AFC-12

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.		Pending	The City was not able to receive and review the confidential filings pertaining to cultural resources prior to the deadline for initial data adequacy comments. Upon review of these materials, the City will provide further comments regarding the adequacy of the impact analysis and any proposed mitigation.
Appendix B (g) (2) (B)	A description of all literature searches and field surveys used to provide information about known cultural resources in the project vicinity. If survey records of the area potentially physically affected by the project are not available, and the area has the potential for containing significant cultural resources, the applicant shall submit a new or revised survey for any portion of the area lacking comprehensive survey data. A discussion of the dates of the surveys, methods used in completing the surveys, and the identification and qualification of the individuals conducting the surveys shall be included.		NO	Conduct the geotechnical boring program with a statistically reliable sample of piling locations (pg. 6.7-7). The limited sample does not support the conclusion that “the three probable subsurface cultural deposits in the project area are limited in their extent and are not considered to represent significant cultural resources.” (pg. 6.7-10, para. 1). Preliminary review of technical reports prepared by Parker and Parsons (2000) indicates the presence of intact buried cultural remains. Their depth, well preserved context, and location adjacent to the ancestral Morro Bay estuary make the cultural deposits potentially unique resources to address research questions about early prehistoric adaptations in the project area.
Appendix B (g) (2) (C)	A discussion of the sensitivity of the project area described in subsection (g)(2)(A) and the presence and significance of any known archeological sites and other cultural resources that may be affected by the project. Information on the specific location of archeological resources shall be included in a separate appendix to the application and submitted to the Commission under a request for confidentiality pursuant to Title 20, California Code of Regulations, § 2501 et seq.		Pending	The City was not able to receive and review the confidential filings pertaining to cultural resources prior to the deadline for initial data adequacy comments. Upon review of these materials, the City will provide further comments regarding the adequacy of the impact analysis and any proposed mitigation. The confidential filing should include further details regarding the size, location and treatment of the proposed conservation easement noted in the MOA with the Chumash .

Adequacy Issue: Adequate _____ Inadequate X

DATA ADEQUACY WORKSHEET

Date 11/13/00

Technical Area: Cultural Resources

Project: Morro Bay Power Plant Project

Docket: 00-AFC-12

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (2) (E)	In the discussion on mitigation and monitoring prepared pursuant to subsection (g)(1), a discussion of any educational programs proposed to enhance awareness of potential impacts to archeological resources by employees and contractors, measures proposed for mitigation of impacts to known cultural resources, and a set of contingency measures for mitigation of potential impacts to previously unknown cultural resources.		No	<p>Address these areas in the MOA (Appendix 6.7-5):</p> <ul style="list-style-type: none"> -Long-term protection of archaeological sites within the Duke property outside of the proposed plant upgrade footprint; and -An appropriate location for potential reburial of human remains and related burial artifacts outside of known archaeological boundaries, in the event such materials are recovered during archaeological testing and/or construction excavation activities. Reburial of artifacts explained in section 3.6.2 of the MOA "will be interred on site whenever possible," but could impact other existing cultural resources. <p>Address the past impacts of PG&E development onsite that contribute to cumulative impacts on cultural resources (pg. 6.7-12).¹</p> <p>Address the project's potential to impact buried cultural resources and contribute to cumulative impacts.¹</p>

¹Mitigations to address the project's contribution to cumulative impacts:

- a.Prepare onsite archaeological site stabilization plan addressing eroding surfaces, and use of protective fill and shallow rooted vegetation;
- b.Prepare an offsite archaeological site stabilization plan for portions of sites within Caltrans improvement activity along State Highway 41;
- c.Prepare an agenda defining issues, and hold pre-construction meetings with construction personnel and subcontractors, a County-qualified archaeologist, and a local Native American representative to discuss the sensitivity of the resources, the importance of their preservation, and penalties for illicit artifact collection on-site;
- d.Prepare long-term employee archaeological resource sensitivity training to preclude illicit artifact collection; and
- e.Work with Native American representatives through the MOA to develop a program for addressing/mitigating any incremental contributions to cumulative impacts within the Morro Bay area. Consider funding/establishing a permanent facility on-site or in the Morro Bay area to house all artifacts found during all phases of the project or coordinate with existing local repositories of artifacts through the San Luis Obispo County Archaeological Society.

Adequacy Issue: Adequate _____ Inadequate X

DATA ADEQUACY WORKSHEET

Date 11/13/00

Technical **Geological Hazards**

Pro Morro Bay Power Plant Project

Docket: 00-AFC-12

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: 6.3-1 – 6.3-12 Hazards: 6.3-12-6.3-22 Impacts: 6.3-22 – 6.3-23 Page 6.3-24 Project Design Features Pg. 6.3-24 Mitigation (none)	NO	Clarify whether cut and fill will be balanced on-site. It is unclear whether materials proposed to be excavated will be suitable for use as engineered fill, from the standpoint of geotechnical engineering and subsurface contamination. The extent of subsurface contamination beneath the existing tank farm is currently unknown. Soil remediation may require excavation and off-site disposal of an unknown quantity of soil. It is unclear whether excavation of contaminated soil would be completed in conjunction with grading for the proposed facility. It is not possible to determine whether cut and fill can be balanced on-site. If soils are to be exported off-site, additional air quality and noise impacts would occur due to vehicle traffic. Address impacts to drainage and sedimentation resulting from construction and in the vicinity of the existing tank farm. Include calculations of projected increases in runoff, specification of equipment storage/servicing areas, denotation of creek setback areas, and establishment of revegetation plans. It is important that recommended Performance Standards be incorporated into the project design to preclude erosion-induced sedimentation and pollution of adjoining receiving waters.
Appendix B (g) (17) (A)	A summary of the geology, seismicity, and geologic resources of the project site and related facilities;	Pg. 6.3-3 – 6.3-23	NO	Explain whether the power plant is considered a “critical structure” in terms of seismic requirements

Adequacy Issue: Adequate _____ Inadequate X

DATA ADEQUACY WORKSHEET

Date 11/13/00

Technical **Geological Hazards**

Pro Morro Bay Power Plant Project

Docket: 00-AFC-12

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (17) (B)	A map at a scale of 1:24,000 and description of all recognized stratigraphic units, geologic structures, and geomorphic features within 2 miles of the project site. Include an analysis of the likelihood of ground rupture, seismic shaking, mass wasting and slope stability, liquefaction, subsidence, and expansion or collapse of soil structures.	Analysis: Section 6.3.1.5, Pp. 6.03-20 – 6.3-22 Figures 6.3-2, 6.3-3, 6.3-6	NO	Clarify impacts of tsunamis in the seismic hazard analysis Analyze and address long-term erosion rates with respect to the expected life of the facility. Provide recommendations regarding minimum setbacks and site elevations to prevent long term adverse effects of shoreline erosion on site facilities.

Adequacy Issue: Adequate _____ Inadequate X

DATA ADEQUACY WORKSHEET

Date 11/16/00

Technical Area: Hazardous Materials Handling

Project: Morro Bay Power Plant Project

00-AFC-12

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 6.15		<p>Provide sufficient information regarding e hazardous materials. For example, page 6.15-3 references aqueous ammonia as the only hazardous material associated with the project that could require an offsite consequence analysis in a worst-case scenario. Hydrazine, morpholine, sulfuric acid, and natural gas (to name a few) are all materials that could present an offsite risk. A complete Hazardous Materials Inventory Statement should be included.</p> <p>Aqueous Ammonia offsite impacts:</p> <ul style="list-style-type: none"> • Address the use of built in mitigation to keep the vapors from going anywhere offsite, including roads, etc. • Substantiate the modeling assumptions as they appear to be incorrect. The LOC should be modeled as 1/10 IDLH per acceptable Guidelines. • Substantiate the use of balls in the dike as a method to reduce the hazard footprint. • Reflect the corrected worst case footprint and provide for notification/ protective actions for all persons potentially exposed including tourists, surfers, motorists, etc., in the Sensitive Receptor table, Table 6.16-1 (page 6-16.2) .
Appendix B (g) (10) (A)	A list of all materials used or stored on-site which are hazardous or acutely hazardous, as defined in Title 22, California Code of Regulations, § 66261.20 et seq., and a discussion of the toxicity of each material.	Table 6.15		Correct Table 6.15-5. " Morpholine" CAS 110-91-8 is a corrosive and a F1-C liquid. Table lists it as toxic. Is a Health 3/ fire 3. Also, sulfuric acid not included on table. 93% sulfuric is commonly used at power plants.they propose to store 5741 gallons gasoline in aboveground tank, probably for motor fuel.

The Spill Control Plan will need updating to reflect the proposed projects. Must be to MBFD approval (Appendix 6.15-2).

Adequacy Issue: Adequate _____ Inadequate X

DATA ADEQUACY WORKSHEET

Date 11/13/00

Technical Area: Land Use

Project: Morro Bay Power Plant Project

Docket:

00-AFC-12

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) (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;	P. 6.9-9 – 6.9-13, p.6.9-61	NO	Establish adequate boundaries of Environmentally Sensitive Habitat Areas. Figure 6.9-7 purports to describe Environmentally Sensitive Habitat Areas and 25- and 100-foot buffers surrounding them. LUP Policy 11.22 requires the boundaries of Environmentally Sensitive Habitat Areas to be established based on field studies paid for by the applicant and performed by the City or its consultants. It is not clear if this study was completed nor how the buffers and Environmentally Sensitive Habitat Areas were determined.
Appendix B (g) (3) (A) (ii)	A discussion of any trends in recent zoning changes and potential future land use development;	Zoning: Section 6.9.4.2 & p.6.9-61 Future Land Use Dev: 9.6-2 & 6.9-9 (includes Den Dulk acquisition)	NO	Discuss potential impacts of the Den Dulk property acquisition and the use of the site. Include impacts of Project with and without the Den Dulk acquisition. Specify how the acquisition will comply with the Waterfront Master Plan, how the Den Dulk property will be used for future access (by Duke and the public), how the property will provide a buffer between the new plant and future public access to coastal areas.
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 6.9-1, 6.9-2, 6.9-3, 6.9-4, 6.9-5, 6.9-6, 6.9-7, 6.9-8	NO	Provide a map that displays the relationship of the <u>proposed</u> project's site configuration to the 25- and 100-foot buffer zones (Figure 6.9-7 describes the <u>existing</u> plant configuration in relation to 25-foot and 100-foot sensitive habitat area buffer zones). Demonstrate that the proposed project is consistent with Coastal Commission Power Plant Siting Study Map. Figure 16 in the LUP shows a map of Morro Bay from the State Coastal Commission Power Plant Siting Study. LUP, p. 109. The northern tip of the project site is in a designated area, which means that it is not suitable for power plant development. Though it would appear that the proposed project would not protrude into this area except perhaps for the extreme northeast corner (near the tank farm berm), it would be helpful to see an overlay of the proposed site configuration onto Figure 16.

Adequacy Issue: Adequate _____ Inadequate X

DATA ADEQUACY WORKSHEET

Date 11/13/00

Technical Area: Land Use

Project: Morro Bay Power Plant Project

Docket: _____

00-AFC-12

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (3) (B)	A discussion of the compatibility of the proposed facilities with present and expected land uses, and conformity with any long-range land use plans adopted by any federal, state, regional, or local planning agency. The discussion shall identify the need, if any, for variances or any measures that would be necessary to make the proposal conform with permitted land uses		NO	<ol style="list-style-type: none"> 1. Demonstrate compliance with the Waterfront Master Plan¹ 2. Provide a diagram with the details of the new high pressure gas pipeline intertie . While the rationale for underground boring is to avoid environmental impacts to the Willow Camp Creek streambed and adjacent riparian vegetation, it would still be helpful to know where the proposed underground boring will take place and where the intertie will be located. 3. Provide specific information about the sites under consideration for the construction laydown facility. The general discussion on p. 6.9-9 is not sufficient to assess the impacts on the City, even though the laydown yard would not be located within the City. It is premature for Duke to assert that it will comply with all land use requirements that apply to the construction laydown areas because the location is not yet known and because the laydown areas may cause impacts outside the immediate impact area. 4. Provide a diagram or map showing the construction access route and associated features (entrance point, contractors' parking lot, exit point) and their relationship to Morro Creek and other Environmentally Sensitive Habitat Areas, including Dune Scrub, as depicted on Figure 6.9-7. 5. Include a long-term site plan for the Duke property that will address non-industrial use of the portion of the site currently occupied by the existing facility.

Adequacy Issue: Adequate _____ Inadequate X

DATA ADEQUACY WORKSHEET

Date 11/13/00

Technical Area: Land Use

Project: Morro Bay Power Plant Project

Docket: 00-AFC-12

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (h) (4)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	None	No	Required permits outside the CEC's jurisdiction may include, but are not limited to, a U.S. Coast Guard Rivers and Harbors Act permit for Morro Creek bridge, an Army Corps of Engineers Section 404 permit, a CA Dept. of Fish and Game Streambed Alteration Agreement., Coastal Development Permit for any development within the direct permit jurisdiction of the Coastal Commission. In addition, the project proposes to construct improvements on lands either owned by the City (bridge and construction access road) or by private third parties (construction road on Den Dulk parcel). Appropriate approvals from the property owners will be necessary. Pursuant to the MOU between Duke and the City of Morro Bay, the City will enter into negotiations with Duke regarding necessary approvals for use of City property for those improvements on City property as well as for continuing use of the cooling water outfall. ²

Notes to Land Use:

¹**Compliance with Waterfront Master Plan not demonstrated.** Certain aspects of the Project, including but not limited to the intake structure and the area identified in the Waterfront Master Plan as Planning Area #2, are subject to the City's Waterfront Master Plan. The AFC's discussion of compliance with the Waterfront Master Plan is inconsistent at best. The AFC implies that because the Waterfront Master Plan makes changes to the City's Local Coastal Plan, the Waterfront Master Plan must be reviewed and approved by the Coastal Commission before it takes effect. City officials acknowledge that the Waterfront Master Plan has not been submitted to the Coastal Commission. See AFC, p. 6.9-30. However, the Waterfront Master Plan may still be valid even if it has not been approved by the Coastal Commission. Under Conway v. City of Imperial Beach, 52 Cal.App.4th 78 (1997), a local land use regulation that amends existing regulations but which does not change permitted uses on a given parcel of land may not require Coastal Commission approval. The Waterfront Master Plan falls into this category because it does not change permitted uses on the project site. At the same time that Duke implies the Project is not subject to the Waterfront Master Plan, the AFC points out that the Project complies or will comply with certain elements of the Waterfront Master Plan. See, for example, the discussion of the realignment of the Embarcadero in front of the existing plant, AFC p. 6.9-2. At a minimum, Waterfront Master Plan Design Guidelines apply to the redesign of the facade of the cooling water intake structure. See AFC, p. 6.9-9. The AFC provides no discussion of design compliance. Incidentally, Duke is obligated to design the exterior facade of the intake building in accordance with the Waterfront Master Plan Design Guidelines under the terms of the non-binding MOU between the City and Duke.

²**Bridge location and design not shown.** The proposed bridge that will cross Morro Creek is discussed in many different places, but there are still many unanswered questions about it. For example, the AFC states that neither an Army Corps of Engineers Section 404 permit nor a Department of Fish and Game Streambed Alteration Agreement will be required for construction of the bridge, but the basis of this conclusion is not explained. (Pp. 6.9-60 & 61) It could be implied that because the bridge will span the Creek, it will not require these permits. It would be helpful to see a diagram or schematic sketch of the bridge that shows (a) its location relative to Morro Creek and other Environmentally Sensitive Habitat Areas; and (b) its configuration, particularly the placement of the bridge footings. It is difficult to assess the impacts of the bridge if it is impossible to determine the bridge's location. The AFC states that an administrative review and possible permit authorization from the U.S. Coast Guard will be required. (Pg. 6.9-61) At a minimum, the AFC should include a schedule for this process.

Adequacy Issue: Adequate _____ Inadequate X

DATA ADEQUACY WORKSHEET

Date Sept. 22, 1999

Technical Area: Noise

Project: Morro Bay Power Plant Project

Docket: 00-AFC-12

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.		NO	Provide details regarding post-construction monitoring including any proposed surveys, location of noise measurement sites, duration of measurements, provisions for varying atmospheric conditions, and provisions for varying plant operating scenarios
Appendix B (g) (4) (B)	A description of the ambient noise levels at those sites identified under subsection (g)(4)(A) which the applicant believes provide a representative characterization of the ambient noise levels in the project vicinity, and a discussion of the general atmospheric conditions, including temperature, humidity, and the presence of wind and rain at the time of the measurements. The existing noise levels shall be determined by taking noise measurements for a minimum of 25 consecutive hours at a minimum of one site. Other sites may be monitored for duration at the applicant's discretion during the same 25-hour period. The results of the noise level measurements shall be reported in L _{eq} (equivalent sound or noise level), L _{dn} (day-night sound or noise level) or CNEL (Community Noise Equivalent Level) in units of dB(A). The L ₁₀ , L ₅₀ , and L ₉₀ values (noise levels exceeded 10 percent, 50 percent, and 90 percent of the time, respectively) shall also be reported.			<p>Explain how the noise analysis takes variations in atmospheric conditions into consideration. The following information would address this issue:</p> <ul style="list-style-type: none"> a. Measurements of noise in representative residential neighborhoods during a typical prevailing-wind conditions (from NW quadrant, with most-common prevailing wind speed) at all downwind measurement locations previously monitored, plus at least two additional sensitive receptor locations (or more as needed to evaluate topographic variability) to the east/east-southeast (i.e., downwind) of the site, at distances between one and one-and-a-half miles from the plant; b. Measurements at the same locations of the plant during calm conditions (i.e., no wind or lowest possible wind speed) to provide a reference for comparing "wind" and "no wind" conditions; c. Measurements of the reverse wind condition (i.e., winter months, winds from east/northeast), based on the wind/no-wind differences derived from the measurements under westerly conditions. Describe anticipated increase in impacts on sensitive receptors to the west/southwest of the site, including recreational locations on the beach and viewing/recreational locations near Morro Rock; d. Details of the typical frequency and time of occurrence of temperature inversion conditions and use it as the basis for measuring temperature-inversion effects (during no-wind conditions).

Adequacy Issue: Adequate _____ Inadequate X

DATA ADEQUACY WORKSHEET

Date Sept. 22, 1999

Technical Area: Noise

Project: Morro Bay Power Plant Project

Docket: 00-AFC-12

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (4) (C)	A description of the major noise sources of the project, including the range of noise levels and the tonal and frequency characteristics of the noise emitted.			Discuss "tonal" noise generating characteristics of new equipment. Compare these to the tonal characteristics of the existing plant and discuss the relationship between tonal sound and annoyance to humans.
Appendix B (g) (4) (D)	An estimate of the project noise levels, during both construction and operation, at residences, hospitals, libraries, schools, places of worship or other facilities where quiet is an important attribute of the environment, within the area impacted by the proposed project.			Address the effects of the proposed night construction shift on night time noise levels and consistency with the City Noise Element. Consult with the San Luis Coastal School District regarding any potential concerns regarding noise effects of the project on nearby school facilities.
Appendix B (g) (4) (E)	An estimate of the project noise levels within the project site boundary during both construction and operation and the impact to the workers at the site due to the estimated noise levels.			Address the effects of the proposed night construction shift on night time noise levels and consistency with the City Noise Element.

Adequacy Issue: Adequate _____ Inadequate X

DATA ADEQUACY WORKSHEET

Date 11/13/00

Technical Area: Socioeconomics

Project: Morro Bay Power Plant Project

Docket: 00-AFC-12

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (7) (A) (iii)	Existing and projected unemployment rates;		NO	Provide projections of unemployment rates.
Appendix B (g) (7) (A) (iv)	Availability of skilled workers by craft required for construction and operation of the project;	Page 6.10-35 Section 6.10.2.1.3 Table 6.10-17	NO	Provide data from a verifiable source. Duke should project availability instead of deferring to an assumption that workers will increase with population growth. Provide discussion/analysis on supply of, demand and need for workers in SLO and SB counties, include consideration of other significant projects (Cuesta Grade, Avila Beach rebuild, etc) and effects of local unemployment rate on worker supply. Providing raw supply numbers without analysis is not sufficient.
Appendix B (g) (7) (A) (v)	Availability of temporary and permanent housing; and	Page 6.10-12-16,	NO	<ol style="list-style-type: none"> 1. Provide the occupancy rate for RV/ campgrounds in the Project area by month for a consideration of availability of transient housing during the tourist seasons. 2. Provide the number of RV spaces and occupancy rate for those parks that are in the MBPP vicinity. 3. Provide occupancy rate by month for hotel and motel rooms in Project area. 4. Update the housing characteristics to 1999 for an accurate analysis of the dynamic local housing market. 5. Provide the number of vacant houses that are seasonal/vacation and are available transient housing.
Appendix B (g) (7) (B) (i)	The number of workers to be employed each month by craft during construction and operation;	Section 6.10.2 Page 6.10-33	NO	Provide the number of workers to be employed each month by craft during construction in a table in Section 6.10.2. Current AFC provides number of workers expected for each month only by construction activity.

Adequacy Issue: Adequate _____ Inadequate X

DATA ADEQUACY WORKSHEET

Date 11/13/00

Technical Area: Socioeconomics

Project: Morro Bay Power Plant Project

Docket: 00-AFC-12

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (7) (B) (ii)	An estimate of the number and percentage of workers who will commute daily, commute weekly, or relocate in order to work on the project;	Section 6.10.2.2.2 Page 6.10-32: "...most workers are expected to commute daily during Project construction. A limited number (projected at less than 5 percent of the constructor work force) may commute weekly, returning home for weekends and holidays. Due to the relatively short-term needs for construction workers from the various crafts, these workers are not expected to relocate in response to the project."	NO	<ol style="list-style-type: none"> 1. Provide estimates of the workers who will commute daily and weekly in the form of numbers and percentages and discussion of how those estimates are calculated. 2. Provide an estimate of the number of workers who will temporarily relocate during the construction phase. Page 6.10-31 includes discussion of the peak and average number of workers expected during the high activity period of the construction schedule (months 1-23). The peak will be 831 during month 13 and an average of 323 during the high activity period. The assumption is that "most" workers will commute from SLO and SB counties; however, that assumption is not supported. On pg. 6.10-32, the AFC claims that less than 5 percent of the workers will commute weekly and claims that workers are not expected to relocate for the Project. This claim is contradicted on pg. 6.11-32 when the AFC states that 17% of the workers will commute locally, including local residents and temporarily relocated workers.
Appendix B (g) (7) (B) (iii)	An estimate of the potential population increase caused directly and indirectly by the project;	Section 6.10.2.1.2	NO	<ol style="list-style-type: none"> 1. Provide the number of employees expected to relocate from other Duke locations during the construction phase. It is not sufficient to state "these numbers are anticipated to be small." 2. Provide analysis of population growth induced by project.

Adequacy Issue: Adequate _____ Inadequate X

DATA ADEQUACY WORKSHEET

Date 11/13/00

Technical Area: Socioeconomics

Project: Morro Bay Power Plant Project

Docket: 00-AFC-12

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) (iv)	The potential impact of population increase on housing during the construction and operations phases;	Section 6.10.2.1.4	NO	<ol style="list-style-type: none"> 1. Section 6.10.2.1 does include sufficient data to support the assumption that the construction work force will be locally provided. Discuss the impact of a population increase on transient housing (motels, RV parks, campgrounds) with consideration of the monthly occupancy rates of those facilities to ensure that impacts to tourism are included. 2. Estimate the number of workers who will temporarily live in boats moored in the harbor (liveaboards).
Appendix B (g) (7) (B) (vii)	An estimate of the total construction payroll and an estimate of the total operation payroll;	Section 6.10.2, Pg. 6.10-31-construction payroll Section 6.10.2.2.8, Pg. 6.10-46-operation payroll	NO	Provide a spreadsheet or appendix to show how the sales tax and payroll benefits were calculated. More data are required to substantiate the reason that 77 operations workers will be earning in aggregate \$8.6 million, or an average of \$112,000 each.

Adequacy Issue: Adequate _____ Inadequate X

DATA ADEQUACY WORKSHEET

Date 11/13/00

Technical Area: Socioeconomics

Project: Morro Bay Power Plant Project

Docket: 00-AFC-12

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. For projects outside metropolitan areas with a population of 500,000 or more, information on schools shall include project-related enrollment changes by grade level groupings and associated facility and staffing impacts by school district during the construction and operation phases;	Section 6.10.2.1.5 through 6.10.2.8 and 6.10.2.2.5 (pp. 6.10-36 – 6.10-38) through 6.10.2.2.8 (pp. 6.10-41 – 6.10-46)		<ol style="list-style-type: none"> 1. Include quantitative estimates of school enrollment impacts of the project. 2. Provide an analysis of the Project and increased population on the city's park and recreation facilities and harbor. 3. Estimate the impacts on harbor-related facilities (bathrooms, boat ramps, increased harbor patrol, pumpout facilities) from workers who occupy "liveboards." 4. Include a socioeconomic monitoring program for the project with the following elements: <ul style="list-style-type: none"> • Periodic reporting by Duke regarding personnel, payrolls, and spending. These reports should tabulate the local or non-local composition of hiring and spending. This will provide a basis for the City to assess how much of a local socioeconomic impact the project is having. • Periodic estimation or tabulation of local population, school enrollments, transient occupancy tax collections, home prices, and related factors potentially affected by the project. • Periodic assessment of impacts, considering both project activities and changes in local socioeconomic conditions as discussed here. • Provisions for mitigating impacts to the extent feasible. Such mitigation could include monetary compensation (such as to affected public agencies or private individuals), adoption of alternative procedures to avoid creation of undesired project effects, and provision of services or facilities in kind to offset adverse impacts.

Adequacy Issue: Adequate _____ Inadequate X
 Technical Area: Soils

DATA ADEQUACY WORKSHEET

Date 11/13/00
 Docket: 00-AFC-12

Project: Morro Bay Power Plant Project

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.		NO	<p>Performance Standards to minimize impacts to water quality of Morro Estuary and Morro Creek from soil erosion and runoff should be provided such as:</p> <ul style="list-style-type: none"> a. ANALYZE ANY INCREASED RUN-OFF VOLUMES OR DEGRADATION OF RUN-OFF WATER QUALITY ON ANY RECEIVING SURFACE WATERS (MORRO CREEK AND BAY); b. INDICATE PROPOSED SURFACE MATERIAL FOR ALL AREAS WHERE ANY GROUND DISTURBANCE IS PROPOSED (INCLUDING TEMPORARY CONSTRUCTION ACCESS ROADS, LAY-DOWN AREAS, EQUIPMENT STAGING AREAS, BERMS, STOCKPILES, ETC) AND INDICATE THEIR LOCATION ON PROJECT GRADING PLANS; c. DESIGNATE AND CONSTRUCT CONTAINMENT AREAS FOR WASHING OF CONCRETE, PAINT, OR EQUIPMENT DURING CONSTRUCTION ONLY WHERE WASH RUN-OFF CAN BE CONTAINED FOR SUBSEQUENT REMOVAL FROM THE SITE. AVOID WASHING AREAS NEAR SENSITIVE BIOLOGICAL RESOURCES. d. DESIGN A GRADING PLAN TO MINIMIZE EROSION AND TO INCLUDE THE FOLLOWING: <ul style="list-style-type: none"> 1) PROHIBIT GRADING WITHIN AN AGREED UPON SETBACK FROM THE TOP OF BANK OF MORRO CREEK. 2) TREAT/REVEGETATE GRADED AREAS WITHIN AN AGREED UPON TIME AFTER COMPLETION OF GRADING ACTIVITIES. USE GEOTEXTILE BINDING FABRICS IF NECESSARY TO HOLD SLOPE SOILS UNTIL VEGETATION IS ESTABLISHED.

Adequacy Issue: Adequate _____ Inadequate X

DATA ADEQUACY WORKSHEET

Date 11/13/00

Technical Area: Traffic and Transportation

Project: Morro Bay Power Plant Project

Docket: 00-AFC- 13

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.		NO	<ol style="list-style-type: none"> 1. Clearly identify in a separate section measures that are proposed to mitigate project impacts that are included in project description as design features. 2. Identify appropriate mitigation/compensation to offset the adverse effect of multi-year construction, demolition and related traffic, including the effects to pavement on public streets. 3. Specify the methodology for assessing impacts to city streets from heavy equipment during Project construction. 4. Explain why use of barges for transportation of construction materials and heavy equipment to reduce impacts on city streets & residential neighborhoods is not proposed. 5. Clarify impacts from concrete and aggregate use and transport./scheduling, e.g. how would deliveries of these materials be feasibly avoided during AM peak hours? 6. Provide an updated cumulative project list for the traffic analysis---in particular for projects located on any of the proposed construction routes, e.g. Atascadero Road RV Park, Shell Station Project, Chevron Station Project, etc. 7. Provide a geometric analysis of all intersections that would be impacted by peak project traffic, truck traffic and heavy/oversize load traffic to demonstrate that existing configuration of lanes, crossings, signals, signage, stacking areas, turn pockets, medians, etc. can safely and adequately accommodate project peak traffic. 8. Assess the impacts of large increases in peak hour traffic compared to existing peak hour conditions. Project demand for concrete.

Adequacy Issue: Adequate _____ Inadequate X

DATA ADEQUACY WORKSHEET

Date 11/13/00

Technical Area: Traffic and Transportation

Project: Morro Bay Power Plant Project

Docket: 00-AFC- 13

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) (B)	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:	Existing & Future Bikeways: figure 6.11-4 & 15	NO	<ol style="list-style-type: none"> 1. Include Main St. Class I bike path as pedestrian facility/joint use facility (Section 6.11.1.3.2) 2. Include maps with bus routes, existing and planned roads/road improvements, pipelines, and navigation waterway/harbor.
Appendix B (g) (5) (B) (i)	Road classification and design capacity;	Classification is minimally addressed in text on pp. 6.11-13 & 14.	NO	<ol style="list-style-type: none"> 1. Provide design capacity for roads in project area, at a minimum for employees route, construction delivery routes, hazard material routes, heavy/oversized equipment routes, and back gate entry/driveway. 2. Provide a table with classification of all roads affected by Project.
Appendix B (g) (5) (B) (ii)	Current daily average and peak traffic counts;	Table 6.11-4 - peaks	NO	<ol style="list-style-type: none"> 1. Use current traffic data from 1999/2000 2. Peak hour trip don't appear consistent with construction workforce size indicated 3. Provide table of daily average traffic counts. 4. Clarify graphics – font is too small. 5. Hwy 41/Main Street Existing and Future LOS not consistent with City/Caltrans analysis indicating LOS D currently for this intersection during AM Peak Hour.
Appendix B (g) (5) (B) (iii)	Current and projected levels of service before project development, during construction, and during project operation;		NO	Use current traffic data from 1999/2000. Use the HCM methodology for assessment of levels of service. Use updated cumulative project lists as noted above.
Appendix B (g) (5) (B) (iv)	Weight and load limitations;		NO	Provide weight and load limitations in AFC. It is not adequate to postpone this information for the Transportation Management Plan. Information is necessary now to determine impacts of proposed Project.
Appendix B (g) (5) (B) (v)	Estimated percentage of current traffic flows for passenger vehicles and trucks; and		NO	Provide estimates of traffic flows for passenger vehicles and trucks – existing, during construction and during operation.

Adequacy Issue: Adequate _____ Inadequate X

DATA ADEQUACY WORKSHEET

Date 11/13/00

Technical Area: Traffic and Transportation

Project: Morro Bay Power Plant Project

Docket: 00-AFC- 13

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)	A description of any new, planned, or programmed transportation facilities in the project vicinity, including those necessary for construction and operation of the proposed project. Specify the location of such facilities on topographic maps at a scale of 1:24,000.		NO	<ol style="list-style-type: none"> 1. Include Morro Bay High School Bike Path (Atascadero Rd north to Cloisters) - Spring 01 construction. 2. Identify timing of roadway and intersection improvements (Section 6.11.3, p.6.11-76) 3. Include improvements (roundabout) to Hwy 41/Main intersection. 4. Coordinate roadway infrastructure improvements with other City/County/ CalTrans improvement projects.
Appendix B (g) (5) (D)	An assessment of the construction and operation impacts of the proposed project on the transportation facilities identified. 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).		NO	<ol style="list-style-type: none"> 1. Impact of construction-related traffic on intersections during peak hour---The City has recommended that the most current version of the Highway Capacity Manual (HCM) be used in the analysis of signalized and unsignalized intersection operation. Presently, the most current version of the HCM is 1997. No deviation from the methodologies used in that publication is permitted. The unsignalized intersection analysis appears to not conform to these requirements. The traffic analysis continues to discuss a "worst movement" when the operation of the intersection is analyzed--- this is confusing and not consistent with HCM methodology. 2. Analyze weekend traffic impacts (Section 6.11-34, ¶2) 3. Evaluate proposed 25% carpool. Consult with Regional Rideshare for current carpool data in county, city and region. 4. Assess stacking lengths of employee vehicles in back gate driveway and impacts on Main Street. 5. Include passenger traffic and truck mix analysis. 6. Provide Transportation Management Plan in AFC.

Adequacy Issue: Adequate _____ Inadequate X

DATA ADEQUACY WORKSHEET

Date 11/13/00

Technical Area: Traffic and Transportation

Project: Morro Bay Power Plant Project

Docket: 00-AFC- 13

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.	Pg. 6.11-59, ¶2	NO	Develop an Ammonia Transport Circulation Plan that outlines travel routes and protocols for ammonia transport.
Appendix B (h) (4)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.		NO	Support areas are envisioned but there are no specifics as to their location. (Pages 6.11-46,-62 and -65)The proposal is outside of developed urban areas with easy access to Highway 1. The county allows temporary construction yards only after obtaining a land use permit with appropriate environmental review. Apparently no location has been chosen nor permits obtained. These yards may not likely to be available, if they are not approved in time for the project. The permitting process and a time frame for issuance must be addressed. Confirm site control for all off-site lands included as part of the project, particularly areas on City and other privately owned lands proposed for construction access, bridge construction and off-site construction laydown.

Adequacy Issue: Adequate _____ Inadequate X

DATA ADEQUACY WORKSHEET

Date 11/13/00

Technical Area: Visual Resources

Project: Morro Bay Power Plant Project

Docket: 00-AFC-12

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) (C)	After discussions with staff and community residents who live in close proximity to the proposed project, identify the scenic corridors and any visually sensitive areas potentially affected by the proposed project, including recreational and residential areas. Indicate the approximate number of people using each of these sensitive areas and the estimated number of residences with views of the project. For purposes of this section, a scenic corridor is that area of land with scenic natural beauty, adjacent to and visible from a linear feature, such as a road, or river.		NO	Provide evidence of compliance with Cal Trans concerns regarding the maintenance of high levels of visual quality along the Cal Trans <i>scenic highway</i> .
Appendix B (g) (6) (D)	A description of the dimensions, color, and material of each major visible component of the project.		NO	Address the issue of the facility's visual character and adequately review architectural options. The AFC does not include an evaluation of potential architectural treatments that could be applied to the power plant to improve visual quality. Describe the proposed treatment of the intake building.
Appendix B (g) (6) (E)	Full-page color photographic reproductions of the existing site, and full-page color simulations of the proposed project in the existing setting from each location representative of the view areas most sensitive to the potential visual impacts of the project.		NO	Provide adequate information (e.g.; exact photographic positions, camera angles) for the City to replicate the KOP's, or for the City to recreate the simulations of the proposed power plant. Illustrate visual transitions during construction. The simulations in the revised AFC illustrate existing conditions and future conditions. They do not illustrate <i>interim conditions</i> . Section 6.13.2.3 lists nine considerations, but none of those describe the visual impacts of the power plant during construction.

Adequacy Issue: Adequate _____ Inadequate X

DATA ADEQUACY WORKSHEET

Date 11/13/00

Technical Area: Visual Resources

Project: Morro Bay Power Plant Project

Docket: 00-AFC-12

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)	An assessment of the visual impacts of the project, including light and glare, and visible plumes.		NO	<p>Clarify the value of the results from Measurement of Visual Change (section 6.13.2.11) , and how this information will be applied to the plant modifications process.</p> <p>Substantiate the claim that a percentage reduction of some object in view will correspond to an equal percentage increase in visual quality with empirical evidence.</p> <p>Address light and glare impacts from proposed night construction activities.</p>

Adequacy Issue: Adequate _____ Inadequate X

DATA ADEQUACY WORKSHEET

Date 11/13/00

Technical Area: Waste Management

Project: Morro Bay Power Plant Project

Docket: 00-AFC-12

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (e) (2)	A discussion of how facility closure will be accomplished in the event of premature or unexpected cessation of operations.	Not included in Waste Mangement section 6.14	NO	The AFC does not include provisions for decommissioning the power plant and restoring the site in the event of a permanent cessation of operations. The AFC should provide an estimate of the expected useful life of the plant, projected closure date and decommissioning/site restoration plan and/or appropriate facility closure performance standards.
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.	6.14.1 Existing conditions 6.14.2 Impacts	NO	Provide a more detailed description of the monitoring and compliance program that will be implemented to ensure that the project's waste minimization and recycling objectives will be achieved.
Appendix B (g) (12) (D)	A description of management methods for each waste stream, including methods used to minimize waste generation, length of on- and off-site waste storage, re-use and recycling opportunities, waste treatment methods used, and use of contractors for treatment.	Pp. 6.14-10, 12, 13 Section 6.14.14 pp. 6.14-15& 16	NO	Analyze the reuse of blow down water from the new plant that will not be reused as makeup water for the new landscaping. (Pg. 6.14-12 states that 80,000 gpd will be discharged through the cooling water discharge line.) Explain how stormwater runoff could be treated and retained for future use onsite as gray water rather than simply being directed through an oil and water separator and discharged. Include impact of retention versus discharge on flood control.
Appendix B (h) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, and permits applicable to the proposed project, and a discussion of the applicability of each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed;	Table 6.14-7, 6.14-27	NO	Include the APCD permit requirements and procedures for removal of insulation from the piping and other tank components that contains asbestos. Reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed.

Adequacy Issue: Adequate _____ Inadequate X
 Technical Area: Water Resources

DATA ADEQUACY WORKSHEET

Date 11/13/00
 Docket: 00-AFC-12

Project: Morro Bay Power Plant Project

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) (iii)	Water inundation zones, such as the 100-year flood plain and tsunami run-up zones.		NO	Section 6.5.1.8 - Water Inundation Zones discusses the relation of the 100-year flood plain to the project site. The first paragraph of this section quotes the FEMA Flood Insurance Study which states that "There is no history of serious flood problems from the streams that flow through Morro Bay." The author should be advised that the storms of 1995 and 1998 do not support that statement, and that the information contained in the 1985 FIRM is out of date. Furthermore, as the application states, the FIRM does not take into account the existing berm and dike system surrounding the tank farm. Until a new flood analysis is completed as has been required by the City, the published base flood elevation in the FIRM should not be relied upon and conclusions relative to the potential for site flooding should not be drawn.
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 of the water and the rationale for its selection, and if fresh water is to be used for power plant cooling purposes, a discussion of all other potential sources and an explanation why these sources were not feasible;		NO	Explain the legal basis for the formation of a mutual water company by PGE and Duke within the City limits. Explain why the project site will not be served by City water service.
Appendix B (g) (14) (C) (ii)	The physical and chemical characteristics of the source and discharge water;		NO	Explain why on-site water is not considered potable.

Adequacy Issue: Adequate _____ Inadequate X

DATA ADEQUACY WORKSHEET

Date 11/13/00

Technical Area: **Water Resources**

Project: Morro Bay Power Plant Project

Docket: 00-AFC-12

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) (ii)	Drainage facilities and design criteria.		NO	<ol style="list-style-type: none"> 1. Section 6.5.2.2.6, Paragraph 2 states that "The existing berm elevations are sufficient to prevent flood waters from inundating the site during a base flood event." This statement is not supported and cannot be supported until a current flood analysis is completed. Paragraph 3 of this section again implies the base flood elevation may be raised up to 1' as a result of project development, see comments above. It will also be necessary to review the impacts if any of the proposed Morro Creek Bridge construction. 2. The City requires site drainage facilities to be designed to a 25-year storm. The reference to 10-year storm in Section 8.2.1 should be modified. This section also includes the conceptual grading, drainage and erosion control plans previously referenced, see earlier comments regarding these.
Appendix B (g) (14) (E)	An assessment of the effects of the proposed project on water resources. This discussion shall include:		NO	Assess the project's consistency with Chapter 13 of the MBMC concerning water conservation.
Appendix B (g) (14) (E) (i)	The effects of project demand on the water supply and other users of this source;		NO	Provide specific estimates supported by calculations for all project water use, particularly water useage during construction and for landscape irrigation.
Appendix B (g) (14) (E) (ii)	The effects of construction activities and plant operation on water quality; and		NO	Address any potential effects from increase groundwater extraction on City water resources adjacent to Morro Creek and address any potential for increased pumping to draw existing MtBE contamination in the area toward City wells.

Adequacy Issue: Adequate _____ Inadequate X

DATA ADEQUACY WORKSHEET

Date 11/13/00

Technical Area: **Water Resources**

Project: Morro Bay Power Plant Project

Docket: 00-AFC-12

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) (iii)	The effects of the project on the 100-year flood plain or other water inundation zones.		NO	<p>Section 6.5.1.8 - Water Inundation Zones discusses the relation of the 100-year flood plain to the project site. The first paragraph of this section quotes the FEMA Flood Insurance Study which states that "There is no history of serious flood problems from the streams that flow through Morro Bay." The author should be advised that the storms of 1995 and 1998 do not support that statement, and that the information contained in the 1985 FIRM is out of date. Furthermore, as the application states, the FIRM does not take into account the existing berm and dike system surrounding the tank farm. Until a new flood analysis is completed as has been required by the City, the published base flood elevation in the FIRM should not be relied upon and conclusions relative to the potential for site flooding should not be drawn.</p> <p>Section 6.5.2.4 should include reference to the preparation of a current flood analysis and application to the City and FEMA for construction and/or map revisions as necessary.</p> <p>Section 6.5.2.2.5, Paragraph 2 implies that the project would be allowed to increase the base flood water surface elevation up to 1'. However, City and FEMA requirements limited the <u>cumulative</u> increase in water surface elevation to be 1'. An individual project cannot typically cause a 1' increase unless it can be shown that the cumulative effect of other projects and properties will not exceed the 1' increase.</p>

Adequacy Issue: Adequate Inadequate **X**

DATA ADEQUACY WORKSHEET

Date 11/16/00

Technical Area: **Worker Safety**

Project: Morro Bay Power Plant Project

Docket: 00-AFC-12

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.		NO	Provide information about the capabilities of the existing fire suppression system. Data regarding water flow, hydrant spacing, and the amount of stored water needs to be provided as the additional fire systems were referenced to "extend from existing systems."
Appendix B (g) (11) (A)	A description of the safety training programs which will be required for construction and operation personnel.	pg. 6.17-5, Sec. 6.17.1.1 Table 6.17-1	NO	Table 6.17-1 should include training on fall protection, handling or Urethane, fire prevention training.
Appendix B (h) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, and permits applicable to the proposed project, and a discussion of the applicability of each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed;	Table 7-1 Section 7.3.2.1.3.	NO	Update table to include the 1997 Uniform Fire code with 1998 California amendments, including all of the appendices, as the adopted fire code. Change "may" at top of page 7-6 to "shall". Fire code language on Pg. 7-5,6 is incorrect and incomplete Correct table to include MBFD in the review of site plan, facility layout and design etc. Correct language regarding fire code requirements/compliance (pg. 7-91). Add NFPA 850 (the umbrella standard for power plants) and NFPA 77 (static electricity). This table should not be construed as limiting MBFD use of NFPA standards.

Recommended Plans to be submitted to, and approved by, the Morro Bay Fire Department prior to construction beginning for the particular phase of the project (tank removal, demolition or construction of new facility):

1. Written financial agreement with timeframes and COLA's for funding of Fire Department personnel, equipment, and CDF dispatching system.
2. Fire Protection Plan for all phases of the project. Plan to include on site activities and offsite lay down area.
3. Construction Fire/ Hazardous Materials Safety Plan for all phases. Plan to include Confined Space rescue, Technical rescue, etc.
4. Operational Fire Safety plan (for operational phase)
5. Emergency Response Plan for all Phases of the project including operations. Plan to include response to the worst-case offsite consequence.
6. Submittal of Traffic Management plans to Fire Department, with daily updates of road closures or restrictions.

7. Revised hazard modeling of Aqueous Ammonia to 1/10 IDLH with no credit for balls.
8. Written agreement as to what Codes and Standards will be followed.
9. Plans, calculations, flow tests, etc regarding the existing Fire Water system and the proposed extension.
10. Submit the OSHA required Illness and Injury Prevention plan, to the Fire Department for review.
11. Provide details regarding intended use of the existing drainage system and the existing oily water separator for Fire Code compliance.
12. Provide plan showing two points of approved Fire apparatus access (remote from each other) to all tanks being removed.
13. Submit a Hazardous Materials Inventory Statement (HMIS) including all information required by the Fire Code, and consistent with classifications utilized by the Fire Code.
14. Provide written agreement that the use of any water tender in lieu of a hydrant during tank removal, is to be under direct Fire Department control.
15. Submittal of all detailed plans, specifications and calculations to Fire Department for review and approval prior to new construction.

Page 9.17-28: Any new connections to existing system subject to FD review/ testing/ approval, based upon capacity and condition. Use of a water tender in lieu of a fixed water source is subject to approval, and control of, MBFD. Tenders with tires tend to not be there when needed. Only one 16' wide access road is proposed. There should be two routes of emergency access to each area, and they must be meet MBFD approval as to width, surface.

The storage and dispensing of flammable and combustible liquids subject to MBFD approval notwithstanding the referenced Fire Code Section 7904, due to large quantities and extensive activity. There is no Section 7908 in the current UFC. Tank cleaning and welding to also comply with State Fire Code. Procedure for removal of Urethane is subject to MBFD approval.

All engineering, design and installation must be subject to compliance with Fire and Building Code and their applicable related standards, as well as FD and Building Department review and approval, notwithstanding what this section, and these appendices state. They include language that is not satisfactory as to Code compliance and compliant design. For one example :Appendix 8-8 (H)" Storage, use and handling of chemicals".

The Emergency Plan should be updated to include all hazardous materials that will be present. (Pg. 9.17-14 and Table 6.17-3)

Page 6.17-18 regarding emergency response indicates that employees are trained responders. If this is so, the brigade must be OSHA and NFPA compliant . If this is so, the brigade must be OSHA and NFPA compliant

November 16, 2000

Kae Lewis, Project Manager
California Energy Commission
1516 Ninth Street
Sacramento, CA 95814

RE: Duke Energy Morro Bay Project (00-AFC-12)

Dear Kae:

Please find enclosed the City of Morro Bay's review of the data adequacy of the Duke application. We have attempted to use the Energy Commission's format for evaluation of data adequacy to facilitate your review of our concerns. As we have discussed, the City is committed to working with Duke and the Energy Commission to constructively resolve any areas of data inadequacy as expeditiously as possible so that discovery and analysis of the project's effects can commence. We would be happy to meet with you and your staff to discuss any questions that you have about our comments. The comments were prepared with the assistance of our review team including:

Rick Algert, Harbor Director Bill Boucher, Capital Project Manager Lauren Brown, Biologist Dr. Gary Clay, Landscape Architecture Professor Greig Cummings, Planning Manager Bill Dohn, Acoustic Consultant Greg Fuz, Public Services Director Clyde Ganes, Building Official Jim Hunt, Fire/Hazardous Materials Consultant Jeff Jones, Fire Chief Bruce Keogh, Wastewater Treatment Manager Larry Kraemer, Civil Engineer Jim Koser, Finance Director	Andrea Leuker, Recreation and Parks Director Joe Loven, Police Chief Dr. Robert Niehaus, Economist Steve Orosz, Traffic Engineer Dave Phillips, Maintenance Supervisor Tyson Powell, Special Counsel Perry Russell, Geologist Rob Schultz, City Attorney Tammy Seale, Contract Planner David Stone, Archaeologist Steve Sylvester, City Engineer
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The City of Morro Bay's *Preapplication Recommendations* and the *Memorandum of Understanding* with Duke Energy have also been provided to you separately. These documents are the result of many months of review and consideration of this project before this AFC was submitted to your office. We believe that the current AFC demonstrates in many ways the benefits of the early coordination between the City and Duke Energy and we look forward to continuing a similar level of cooperation and involvement throughout the Commission's review process.

Sincerely,

Greg Fuz
Director of Public Services
City of Morro Bay

November 17, 2000

CALIFORNIA ENERGY COMMISSION
Attn: Docket Unit
1516 Ninth Street, MS-4
Sacramento CA 95814-5512

RE: Docket # 00-AFC-12
Duke Energy Permit for Morro Bay Power Plant Expansion
Data Adequacy Concerns

I respectfully submit the following summary of air quality data concerns:

1. It appears that the plant expansion will significantly increase PM₁₀ emissions and ground-level PM₁₀ concentrations. Also PM₁₀ is a criteria pollutant for which the Morro Bay area has been in non-attainment for state ambient air quality standards, and the plant expansion is likely to increase the occurrences of non-attainment. Therefore, please

- A. Estimate the potential number of state non-attainment days resulting from the project, and
- B. Consider electrostatic precipitators in the BACT analysis.

2. The increased emissions from the power plant expansion are being offset by ERCs from discontinuing oil burning at the Morro Bay Power Plant. From the report it is impossible to see how this calculation was made because data for the time period for which oil was burned at the plant are not included. Therefore, please:

A. INCLUDE COMPLETE EMISSION DATA FOR THE PAST FIVE YEARS IN ATTACHMENT 6.2-1.1, AND

- B. Justify the use of an averaging period other than the most recent three years for calculation of emission credits.

3. The emission inventory for San Luis Obispo County (Attachment 3) is for the year 1996. Since emissions data for the Morro Bay Power Plant are provided only for 1997-2000, it is difficult to compare existing power plant emissions to emissions of other sources. Fulfillment of 2A above would help address this inadequacy.

4. Table 6.2-38 shows model predictions for maximum ground-level air pollutants at Morro Rock. The predicted maximum CO concentrations are much higher than that predicted in models excluding Morro Rock, but all other predicted

pollutant concentrations are the same. This seems unlikely. Please correct the data in this table or explain why the other pollutant concentrations are not also higher at this location.

5. Estimate potential impacts of air pollutants on Peregrine Falcons nesting on Morro Rock.
6. Include predicted maximum ground-level pollutant concentrations at Black Hill.
7. Table 6.2-6 compares modeled project impacts to background pollutant concentrations. However, the "background concentrations" include emissions from the existing power plant. It would be helpful to know what fraction of total ground-level pollutants would be contributed by the new power plant. Therefore, please include background concentrations for periods of time for which the power plant was not operating.

Thank you for your consideration of these data inadequacies.

Sincerely,

Yarrow Nelson
Asst. Professor
Environmental Engineering
3030 Beachcomber Dr.
Morro Bay, CA 93442

MORRO BAY NATIONAL ESTUARY PROGRAM

601 Embarcadero #11 Morro Bay, CA 93442 805-772-3834

November 15, 2000

(original by e-mail)

Kae Lewis
California Energy Commission

RE: 00-AFC-12, Morro Bay Power Plant "Data Adequacy" Review

Dear Ms. Lewis,

Thank you for the opportunity to comment on the "data adequacy" of the Morro Bay Power Plant modernization AFC submitted by Duke Energy (Docket # 00-AFC-12). In order to get these comments to you as soon as possible, I am sending them by e-mail; a hard copy will follow.

The Morro Bay National Estuary Program is funded in part through the US EPA pursuant to the federal Clean Water Act. Morro Bay is one of only 28 national estuaries. The Bay Foundation, a 501.c.3 non-profit corporation, is our bursar. The MBNEP has completed a Comprehensive Conservation and Management Plan (CCMP) for Morro Bay that has been approved by the Governor and endorsed by the US EPA Region IX. The CCMP contains over 60 specific "action plans" aimed at improving water quality in Morro Bay and enhancing the environmental values of the estuary. The CCMP is based on a multi-year effort based on extensive research and involving numerous federal, State, and local agencies, non-profit corporations, businesses, property-owners and the public, generally. The MBNEP is not a regulatory agency. Rather, the MBNEP implements the CCMP by facilitating the cooperative efforts of the numerous agencies and organizations involved with conservation of the estuary and its watershed.

With our limited staff, we have not been able to review the entire AFC packet comprehensively. However, please consider the following questions in your review for data adequacy.

1. Duke has commissioned studies of entrainment as well as other potential impacts. At least some of these studies are not yet completed. For example, a one year entrainment study is not finished and the analysis of impacts relies, in part, on only a few weeks of that study's data. What are the possible consequences of proceeding with the certification review without the study's being completed? Will the review of the potential impacts and mitigations (if necessary) be compromised by not having the completed study until after the one-year timeframe for review of the AFC has commenced?

2. Throughout the document, Duke uses the existing plant as the baseline for assessing potential impacts. As you are aware, the existing MBPP is several decades old and uses technology from the 1950's and 1960's. The "modernization" is, in fact, the complete replacement of the present plant.

While we agree that when comparing, for example, one day of operations at full capacity of the existing plant versus one day of operations at full capacity of the new plant, many of the environmental effects are reduced. However, isn't it reasonable to assume that with the new plant's modern technology and improved efficiency that the modernized plant will be operated more frequently and a higher level than the older plant if it were not replaced? Furthermore, isn't reasonable to assume that with this major investment, the new plant extends the effective life of the site for power production? If so, then wouldn't at least one baseline comparison for fairly assessing impacts be the increased level of operation and the increased longevity of the facility?

In addition, it is clear that some environmental impacts have been occurring from the existing plant for many years. Shouldn't at least one point of comparison be, then, no plant at the site? Should this be one of the alternatives evaluated in order to gauge the true environmental effects of the power plant?

3. At least in the Marine Biology section, the cumulative impacts subsection refers to other potential developments in the area. Shouldn't this subsection also evaluate the cumulative impacts over time? It is possible that relatively small effects incurred over a short period of time may reach significant proportions after several decades of operations.

4. Until recently, there appeared to be the real prospect that the existing plant would not be demolished in a timely way, but would either be kept idle in place or removed only over a prolonged period. In light of that experience, does it make sense to include a discussion of the future remediation of the new plant at the end of its productive life?

Thank you for the opportunity to raise these questions. Please call or e-mail me if you need additional information or clarification.

Sincerely,

Michael Multari
Program Director

C: Brad Hagemann, Michael Thomas (RWQCB)
Robert Cochran, Duke Energy
Grug Fuze, City of Morro Bay
Chris Clark, Bay Foundation

From: "Yarrow M. Nelson" <ynelson@calpoly.edu>
To: <klewis@energy.state.ca.us>
Date: 11/20/00 12:26PM
Subject: AFC Data Adequacy Review: Duke MBPP Expansion

Kae Lewis
Siting Officer
California Energy Commission

Dear Kae,
I have attached a pdf file of my comments on data adequacy for the AFC of the proposed Duke MBPP Expansion. I will send a hard copy letter today also (with 12 copies).
Thank you for your consideration of these concerns.
Yarrow

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