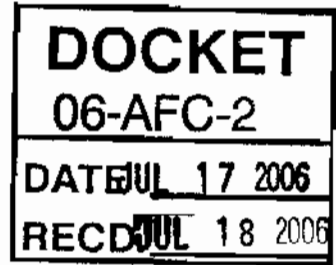


# Memorandum

Date : July 17, 2006  
Telephone: (916) 654-4996

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



A handwritten signature in black ink, appearing to read "B. B. Blevins". The signature is fluid and cursive, written over the typed name and title.

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

**Subject: SECOND HIGHGROVE POWER PLANT PROJECT DATA ADEQUACY RECOMMENDATION (06-AFC-2) AND REQUEST TO APPOINT A COMMITTEE**

The staff has completed its data adequacy review of the Highgrove Power Plant Project Application for Certification (AFC) submitted on May 25, 2006. Initially, on June 23, 2006, staff had determined that the AFC did not contain all the information required by California Code of Regulations, Title 20, Section 1704, including Appendix B, for the 12-month AFC process. At the July 5, 2006, Business Meeting that recommendation was accepted by the Energy Commission. Twenty-three technical disciplines were reviewed and information was needed in two areas; air quality and transmission system engineering. Subsequently, on June 28, 2006, and on July 14, 2006, the applicant provided Supplements A and B to the AFC containing materials that satisfied staff's need for information in these two areas.

Attachment A contains a revised overview indicating that these technical disciplines are now adequate. Attachment B contains the revised detailed data adequacy worksheets for Air Quality and Transmission System Engineering, describing staff's revised findings for each area, and citing the supplemental information provided to meet the requirements for the 12-month AFC process.

The South Coast Air Quality Management District received the Air Permit Application on June 23, 2006, and on July 14, 2006, provided staff with a letter stating that the Air Permit Application is complete.

At the Energy Commission's business meeting on July 19, 2006, staff will recommend that the Energy Commission now accept the AFC, with Supplemental material, as complete and meeting all the information requirements as specified in Attachment B of this revision, along with the 21 areas specified as complete in the June 28, 2006, Executive Director's recommendation.

If you have any questions, please call Robert Worl, staff's Project Manager, at (916) 651-8853.

Attachments

**ATTACHMENT A  
OVERVIEW OF ENERGY COMMISSION STAFF'S  
DATA ADEQUACY DETERMINATION  
HIGHGROVE POWER PLANT PROJECT  
06-AFC-2**

<b>TECHNICAL AREA</b>	<b>ATTACHMENT B PAGE NO</b>	<b>ADEQUATE? 12-MONTH</b>
<b>AIR QUALITY</b>	<b>1</b>	<b>YES</b>
<b>TRANSMISSION SYSTEM ENG</b>	<b>6</b>	<b>YES</b>

**ATTACHMENT B**

**ENERGY COMMISSION STAFF'S  
Revised Data Adequacy Sheets for Air Quality and  
Transmission System Engineering**

**Highgrove Power Plant Project  
06-AFC-2**

**July 17, 2006**

**DATA ADEQUACY WORKSHEET**

Adequacy Issue: Adequate  Inadequate       Revision No. 01      Date July 14, 2006  
 Technical Area: **Air Quality**      Project: Highgrove      Technical Staff: Joe Loyer  
 Project Manager: Robert Worl      Docket: 06-AFC-02      Technical Senior: Keith Golden

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (1)	...provide a discussion of the existing site conditions, the expected direct, indirect and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation.	Section 1, 2, 5, 6, 7 & 8.1 App 8.1A through 8.1F App 8.6B, 8.12B	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.	1. AFC Supplement A; 2. Application to Air District; 3. Confidential filing- Emissions Reduction Credits negotiation package; all filed June 28, 2006; and 4. Supplement B, a Letter from Air District accepting the application as complete, filed July 14, 2006.	No <u>Yes</u>	Please provide the information for a complete application to the South Coast Air Quality Management District.
Appendix B (g) (8) (B)	The heating value and chemical characteristics of the proposed fuels, the stack height and diameter, the exhaust velocity and temperature, the heat rate and the expected capacity factor of the proposed facility.	Sec 10.4 page 10-3 App 8.1B Table 8.1B-8 App 8.1C Table 8.1C-1	Yes	
Appendix B (g) (8) (C)	A description of the control technologies proposed to limit the emission of criteria pollutants.	Sec 8.1 page 8.1-1 App 8.1D	Yes	
Appendix B (g) (8) (D)	A description of the cooling system, the estimated cooling tower drift rate, the rate of water flow through the cooling tower, and the maximum concentrations of total dissolved solids.	Sec 8.1 page 8.1-29 App 8.1B Table 8.1B-7	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.	Sec 8.1 Page 8.1-29 All of App 8.1B	Yes	

Adequacy Issue:  
 Technical Area:  
 Project Manager:

Adequate **X** Inadequate  
**Air Quality**  
 Robert Worl

**DATA ADEQUACY WORKSHEET**  
 Project: Highgrove  
 Docket: 06-AFC-02

Revision No. 01 Date July 14, 2006  
 Technical Staff: Joe Loyer  
 Technical Senior: Keith Golden

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (8) (F)	A description of typical operational modes, and start-up and shutdown modes for the proposed project, including the estimated frequency of occurrence and duration of each mode, and estimated emission rate for each criteria pollutant during each mode.	App 8.1B Table 8.1B-5	Yes	
Appendix B (g) (8) (G)	The ambient concentrations of all criteria pollutants for the previous three years as measured at the three Air Resources Board certified monitoring stations located closest to the project site, and an analysis of whether this data is representative of conditions at the project site. The applicant may substitute an explanation as to why information from one, two, or all stations is either not available or unnecessary.	Sec 8.1.4 Page 8.1-5 through 8.1-10	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.	Figures 8.1-1a through -1e CD provided	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)	NA	NA	
Appendix B (g) (8) (H) (ii)	The data shall include quarterly wind tables and wind roses, ambient temperatures, relative humidity, stability and mixing heights, upper atmospheric air data, and an analysis of whether this data is representative of conditions at the project site.	Figures 8.1-1a through -1e CD provided	Yes	
Appendix B (g) (8) (I)	An evaluation of the project's direct and cumulative air quality impacts, consisting of the following:			

**DATA ADEQUACY WORKSHEET**

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (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 <sub>10</sub> ) emissions from grading, excavation and site disturbance, as well as the combustion emissions [nitrogen oxides (NO <sub>x</sub> ), sulfur dioxide (SO <sub>2</sub> ), carbon monoxide (CO), and particulate matter less than 10 microns in diameter (PM <sub>10</sub> )] from construction-related equipment;	Sec 8.1.6.2.3 page 8.1-38 through 8.1-42 App 8.1A CD provided	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 <sub>x</sub> , SO <sub>2</sub> , CO and PM <sub>10</sub> ) 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	Sec 8.1.6.2.1 page 8.1-31 through 8.1-42 App 8.1C CD Provided	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.	Section 8.1.8 page 8.1-52	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;	Table 8.1-32 page 8.1-49 App 8.1F	Yes	

**DATA ADEQUACY WORKSHEET**

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (8) (J) (ii)	Potential offset sources, including location, and quantity of emission reductions; and	App 8.1F and the AFC Supplement A, the Application to the Air District, and Confidential Emissions Reduction Credit negotiation package, filed June 28, 2006	No <u>Yes</u>	Provide a list of ERC holders (including the locations of these potential ERCs) that you have contacted to enter negotiations necessary for the VOC, CO, PM10 and SO2 ERCs and for the NOx RTCs. You may submit this information to the Commission with a request for confidential status.
Appendix B (g) (8) (J) (iii)	Method of emission reduction.	Section 8.1.9 page 8.1-53 App 8.1D	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.	USGS Quad Maps	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 8.1-11 page 8.1-13 through 8.1-15	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 8.1-11 page 8.1-13 through 8.1-15	Yes	
Appendix B (h) (2)	A discussion of the conformity of the project with the requirements listed in subsection (h)(1)(A).	Section 8.1.7 page 8.1-46 through 8.1-52	Yes	
Appendix B (h) (3)	The name, title, phone number, and address, if known, of an official within each agency who will serve as a contact person for the agency.	Table 8.1-10 page 8.1-11	Yes	

**DATA ADEQUACY WORKSHEET**

Revision No. 01 Date July 14, 2006  
 Technical Staff: Joe Loyer  
 Technical Senior: Keith Golden

Adequacy Issue: Adequate  Inadequate  
 Technical Area: **Air Quality**  
 Project: Highgrove  
 Project Manager: Robert Worl  
 Docket: 06-AFC-02

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.	Table 8.1-11 page 8.1-13 through 8.1-15	Yes	



Adequacy Issue:  
 Technical Area:  
 Project Manager:

Adequate **X** Inadequate  
**Transmission System Eng.**  
 Robert Worl

**DATA ADEQUACY WORKSHEET**  
 Sun Valley Energy project  
 05-AFC-3

Revision No. 01 Date July 14, 2006  
 Technical Staff: Sudath Arachchige  
 Technical Senior: Mark Hesters

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (i) (2) (A)	A discussion of the need for the additional electric transmission lines, substations, or other equipment, the basis for selecting principal points of junction with the existing electric transmission system, and the capacity and voltage levels of the proposed lines, along with the basis for selection of the capacity and voltage levels.	Section 2.1.5 Pages 2-10 Section 2.1.14 Section 5.0, 5.1, 5.2 System Impact Study Appendix 5A Figure 5.1-2 (Single Line Diagram), Figure 5.1-3 (Monopole Tower) Section 2.0, 2.1.5 Section 5.1	Yes	
Appendix B (i) (2) (B)	A discussion of the extent to which the proposed electric transmission facilities have been designed, planned, and routed to meet the transmission requirements created by additional generating facilities planned by the applicant or any other entity.		Yes	
Appendix B (b) (2) (C)	A detailed description of the design, construction, and operation of any electric transmission facilities, such as power lines, substations, switchyards, or other transmission equipment, which will be constructed or modified to transmit electrical power from the proposed power plant to the load centers to be served by the facility. Such description shall include the width of rights of way and the physical and electrical characteristics of electrical transmission facilities such as towers, conductors, and insulators. 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 2.0 Pages 2-1 to 2 Section 2.1.5 Pages 2-10 Interconnection System Impact Study, Appendix 5A. <u>June 28, 2006, AFC Supplement A Power Flow Diagrams and Revised Figure 5.1-2 (Single Line Diagram), Figure 5.1-3 (Monopole Tower design)</u> Appendix 10D3.1, 10D3.2; Appendix 5A, Tables 3-1, and 3-2.	No-  <u>Yes</u>	Provide power flow diagrams (MVA, % loading & P-U voltage) for all N-1 and N-2 contingencies where overloads or voltage violations appear.

Adequacy Issue:  
 Technical Area:  
 Project Manager:

Adequate **X** Inadequate  
**Transmission System Eng.**  
 Robert Worl

**DATA ADEQUACY WORKSHEET**

Revision No. 01 Date July 14, 2006  
 Technical Staff: Sudath Arachchige  
 Technical Senior: Mark Hesters

Project: Sun Valley Energy project  
 Docket: 05-AFC-3

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (b) (2) (D)	A description of how the route and additional transmission facilities were selected, and the consideration given to engineering constraints, environmental impacts, resource conveyance constraints, and electric transmission constraints.	Section 2.1.5 Pages 2-10 Section 5.1, 5.2 Figure 5.1-2 (Single Line Diagram), Figure 5.1-3 (Monopole Tower design)	Yes	
Appendix B (h) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, and permits applicable to the proposed project, and a discussion of the applicability of each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed.	Section 5.4, Table 5.4-1 Pages 5-14 Appendix 10D2	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 5.4.7, Table 5.4-7 Pages 5-16 to 5-17 Section 8.16.5, Table 8.16-10	Yes	
Appendix B (h) (2)	A discussion of the conformity of the project with the requirements listed in subsection (h) (1) (A).	Section 10D2, Appendix 10D	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.	Section 10.5, Table 10.4-2 Section 8.16.4 Table 8.16-9	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	

**CALIFORNIA ENERGY COMMISSION**

1516 NINTH STREET  
 SACRAMENTO, CA 95814-5512  
 www.energy.ca.gov



**BEFORE THE ENERGY RESOURCES CONSERVATION AND  
 DEVELOPMENT COMMISSION OF THE STATE OF CALIFORNIA**

In the Matter of:	)	Docket No.06-AFC-2
	)	Order No:
Application for Certification	)	Commission Appointment
for the Highgrove Power Plant Project	)	of Committee
By AES Highgrove, LLC	)	

**I. INTRODUCTION**

On May 25, 2006, the AES Highgrove, LLC, filed an Application for Certification for the Highgrove Power Plant Project. The proposed 300-megawatt natural gas-fired plant will be located in the city of Grand Terrace, San Bernardino County.

**II. SUMMARY OF HEARING**

At a regularly scheduled business meeting on July 19, 2006, the Commission appointed a Committee to preside over the Highgrove Power Plant Project Application for Certification proceedings pursuant to Public Resources Code section 25211 and Title 20, California Code of Regulations, section 1204.

**III. ORDER**

The Commission hereby appoints a Committee to preside over the AES Highgrove, LLC, Application for Certification proceedings consisting of Jackalyne Pfannenstiel, Chairman, as Presiding Member and Jeffrey Byron, Commissioner, as Associate Member.

Dated July 19, 2006

STATE ENERGY RESOURCES  
 CONSERVATION AND  
 DEVELOPMENT COMMISSION

\_\_\_\_\_  
 JACKALYNE PFANNENSTIEL  
 Chairman