CALIFORNIA ENERGY COMMISSION
1516 NINTH STREET
SACRAMENTO, CA 95814-5512

May 23, 2002

Mr. Taylor O. Miller, Esq.
Palomar Energy LLC
980 Ninth Street
Sacramento, CA 95814

Dear Mr. Miller:

PALOMAR ENERGY PROJECT (01-AFC-24) DATA REQUESTS

Pursuant to Title 20, California Code of Regulations, section 1716, the California Energy Commission (Energy Commission) staff requests that Palomar Energy LLC supply the information specified in the enclosed data requests.

The subject areas addressed in the enclosed data requests for transmission system engineering. The information requested is necessary to understand the project, assess whether the project will result in significant environmental effects, and to assess project alternatives and mitigation measures.

Written responses to the enclosed data requests are due to the Energy Commission by June 24, 2002, or at a later date agreed upon by the Energy Commission staff and the applicant.

If you are unable to provide the information requested in the data requests, or object to providing it, you must contact the committee assigned to the project and the project manager, within 10 days of receiving these requests, stating your reason for delay or objection.

If you have any questions regarding the enclosed data requests, please call me at (916) 651-8835.

Sincerely,

Bob Eller
Siting Project Manager

Enclosure
cc: Agency Distribution List

Palomar Energy Project
Data Requests
(01-AFC-24)

Technical Area: **Transmission System Engineering**
Authors: Henry Zaininger / Laiping Ng

BACKGROUND

Page 12 of the Detailed Facilities Study (DFS), dated March 2001 which we believe should have been referenced as March 2002, and transmitted April 17, 2002, shows an overload of the Sycamore – Scripps 69 kV line to 105 percent normal rating when the Palomar Plant is dispatched at full MW output under base case conditions with no contingencies. The DFS further states that the 69 kV line upgrade is optional and that there will be significant dispatch constraints imposed on the Palomar Plant to mitigate this overload if the 69 kV line is not upgraded. Staff needs more specific information regarding proposed mitigation measures in order to analyze the potential transmission system engineering impacts of the Palomar Energy Project.

DATA REQUEST

118. Please provide an operating plan that clearly specifies how the Sycamore – Scripps 69 kV line overload will be mitigated if it is not upgraded.

119. If operational limitations are not feasible, describe the potential environmental impacts of any system upgrades.

BACKGROUND

Appendix A2 of the DFS presents congestion management thermal loading results. Several lines overload for various contingencies with Palomar installed. However there is no explanation of mitigation measures to eliminate these overloads.

DATA REQUEST

137. Please provide an explanation that clearly specifies how the line overloads will be mitigated and verify that the congestion management procedures used as mitigation are feasible.

BACKGROUND

Appendix B of the DFS presents voltage deviation results. However there is no explanation or interpretation of these results in the report.

DATA REQUEST

138. Please provide an interpretation of the voltage deviation results contained in Appendix B of the DFS that clearly describes whether these voltage deviations meet ISO or other appropriate post transient voltage deviation criteria.

Palomar Energy Project
Data Requests
(01-AFC-24)

BACKGROUND

Detailed results of a sensitivity analysis without the Valley – Rainbow 500 kV line are presented in Appendix C. Page 14 of the Detailed Facilities Study provides a brief description of the sensitivity analysis results. In the sensitivity case with lower imports the Sycamore – Scripps 69 kV line overload during base case conditions without contingencies is eliminated. However the contingency analysis results in Appendix C show that this line plus several other facilities overload during various contingencies. Staff needs more specific information regarding the relative impacts of the results on mitigation measures with (results in Appendices A and B) and without (results in Appendix C) the Valley – Rainbow 500 kV line in order to prepare the Staff assessment for the Palomar Plant.

DATA REQUEST

139. Please provide a more detailed comparison of the relative impacts on line overloads, voltage deviations, and mitigation measures with and without the Valley – rainbow 500 kV line contained in Appendices A, B and C of the DFS.

BACKGROUND

On page 13 of the Detailed Facilities Study dated March 2001, under section titled: "Winter Sensitivity Analysis," it indicates that no additional upgrades are identified as a result of the project output at 545 MW. However, the assumptions used for this sensitivity case were not included in the report.

DATA REQUEST

140. Identify major assumptions in winter off peak cases contained in the DFS including imports to the system, major generation and load changes in the system and queue generation.

141. Analyze the transmission system for N-0. In a table, show the loadings before and after adding the new generation.

142. Provide power flow diagrams **(MW, percent loading & P. U. voltage)** for base cases with and without the project. Power flow diagrams must also be provided for all N-0, N-1 and N-2 studies where overloads or voltage violations appear.

143. Provide electronic copies of *.sav and *.drw PSLF files used to perform this analysis.

BACKGROUND

ISO personnel have reported to staff that the current projections for the 2004 San Diego area load are lower than the assumptions used in the Detailed Facilities Study dated March 2001, and that updated base cases have been developed and are currently being reviewed by the ISO.

DATA REQUEST

144. Please provide a study that analyzes the Palomar Energy Project with a lower load and import without the Valley-Rainbow line as specified in the current ISO assumptions for 2004 San Diego. This study should analyze normal loading conditions and contingencies (N-0, N-1, and critical N-2) without the Rainbow Valley Interconnect for both peak and off peak cases and identify the selected mitigation measures, including a discussion of the feasibility of the selected measures.

BACKGROUND

Section 2.6 of the Application for Certification states that the Palomar switchyard will be connected to the SDG&E transmission system via a loop-in of the existing 230 kV Escondido – Sycamore line which runs along the western boundary of the project site, and that the project does not require the construction of any new transmission lines. However, there is no discussion or drawing showing the interconnection between the existing 230 kV Escondido – Sycamore line and the Palomar Substation 230 kV switchyard within the project site. This information was previously requested in Data Request 68 but was not provided in the previous responses.

DATA REQUEST

145. Please provide a plan-view drawing and explanation of the interconnection layout between the existing Escondido – Sycamore 230 kV line and the Palomar 230 kV switchyard including the following information:

a) Structure type, location and configuration for any structures located between the existing 230 kV line and the Palomar 230 kV switchyard;

b) Conductor size and rating for the new loop-in facilities as well as for the existing 230 kV line; and

c) Location of the existing 230 kV line and the Palomar 230 kV switchyard within the plant site.

BACKGROUND

Page 24 of the Detailed Facilities Study, dated March 2001, refers the reader to Tables 1 and 3 when reviewing the results of the post transient/VAR margin simulations. It appears this is a typo and the reader should be referring to Tables 16 and 18 instead.

DATA REQUEST

146. Please clarify which tables should be referred to when reviewing the post transient/VAR margin results contained on page 24 of the DFS.