

Memorandum

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Telephone: ATSS ()
(916) 653-0159
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To: Commissioner Robert A. Laurie
Commissioner David A. Rohy

From: California Energy Commission - Marc Pryor
1516 Ninth Street Project Manager
Sacramento, CA 95814-5512

Subject: **Supplemental and Revised Testimony to the La Paloma Generating Project (98-AFC-2) Final Staff Assessment**

On April 7, 1999, the California Energy Commission (Energy Commission) staff filed its Final Staff Assessment (FSA) for the La Paloma Generating Project, a 1,048 megawatt natural gas-fired power plant to be located in western Kern County, California. As noted in the FSA, the air quality, biological resources, water resources, paleontological resources and cultural resources technical areas were incomplete due to a lack of timely information.

Attached is the supplemental testimony for the paleontological resources technical area. In addition, revisions to the project description and the socioeconomics sections are attached. The former is a clarification and the latter is the result of the receipt of additional information which did not allow sufficient time for staff to review and incorporate the material into the FSA.

SUMMARY OF THE SUPPLEMENTAL DOCUMENTS

Supplemental Testimony

On March 31, 1999, the applicant submitted a supplement that contained the results of the paleontological survey conducted for three changes in the project. These changes are: 1) the addition of an alternative electrical transmission line Route 1B that deviates around a parcel of land owned by the California Department of Fish and Game; 2) a short route adjustment to the water supply pipeline; and 3) the addition of a 700,000 gallon water storage tank ("reservoir").

Revised Testimony

After the FSA was filed, new information related to socioeconomics led to the need for staff to revise its testimony. Staff respectfully submits a revised Socioeconomics analysis.

Project description footnote 2 in the FSA mentions electrical transmission line Route 1B. This route, as noted above, is an alternative routing and does not

Commissioner Robert A. Laurie

April 14, 1999

Page 2

remove from consideration Route 1 that crosses the CDFG property. Route 1B has been, and will be, considered at the same level of analysis as Route 1. This will allow the applicant the flexibility of not delaying the project if access for Route 1 cannot be obtained.

These revisions are in ~~strikeout~~/underline form to enable the reader to readily see the revisions made in the analysis.

FUTURE FILINGS

At this time, staff anticipates filing additional testimony in the areas of air quality, biological resources and water resources.

Air Quality

The staff is currently reviewing the Preliminary Determination of Compliance (PDOC) issued on April 1, 1999, by the San Joaquin Valley Unified Air Pollution Control District (District) for the proposed La Paloma project and docketed with the Energy Commission on April 2, 1999. The end of the comment period is May 1, 1999. Issues which may be identified in comments on the PDOC by the U.S. Environmental Protection Agency (EPA), the California Air Resources Board (CARB), Energy Commission staff, California Unions for Reliable Energy or other parties may include: 1) the adequacy of the current offset proposal; 2) the appropriateness of the District's proposed interpollutant trading ratio of NO_x for PM₁₀; or 3) the adequacy of the District's proposed BACT determinations for NO_x and CO emissions.

Regarding the third point, BACT for NO_x and CO emissions, the District is proposing a 3-hour averaging time for NO_x at 2.5 ppm, and 10 ppm average over 3-hours for CO. In the past, EPA has said that a 1-hour averaging time is appropriate for NO_x, and a 4 ppm average over 24-hours is appropriate for CO. Until all issues are identified and resolved, staff cannot complete its supplementary air quality testimony on the project.

Biological Resources

The U. S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Game (CDFG) have not provided their respective biological opinions on the La Paloma project. The federal Biological Opinion may be provided for the La Paloma project in mid-May. Regarding the state opinion, the CDFG Biological Opinion and Incidental Take Permit will not be provided until CDFG receives a copy of the USFWS opinion. Once CDFG receives a copy of the federal opinion, CDFG will develop the state opinion and associated take permit. Staff believes that the state opinion may be provided in late May.

The state Fully Protected species issue is still unresolved. The blunt-nosed leopard lizard, a state listed Endangered Species as well as a Fully Protected species, is known to occur in the project region, so mitigation will need to be implemented. However, the Fully Protected Species statute does not appear to permit any take of the blunt-nosed leopard lizard.

According to the Fish and Game Code, CDFG is not allowed to grant a take of a Fully Protected species unless the impacts occur while doing research. On the other hand, the California Endangered Species Act does have a means to grant a take of a state-listed species under the terms of an Incidental Take Permit. CDFG is trying to resolve this problem; however, an interim solution is currently not available, and a permanent solution will require legislation. CDFG has recently (April 7, 1999) indicated that an interim solution may available soon.

Cultural Resources

In addition to the paleontological resources survey supplement filed March 31, 1999, the applicant provided a cultural resources survey. Staff has not completed its review and analysis of this supplemental material. Also, recent changes to the California Environmental Quality Act has necessitated a revision of the cultural resources testimony in the FSA. Staff hopes to complete and submit its supplemental testimony prior to the scheduled hearing date of April 22, 1999.

Water Resources

Staff's water resources analysis remains incomplete at this time. Items to be addressed are the same that were stated in the Executive Summary of the FSA: 1) an analysis of the project's conformity with the State Water Regional Control Board (SWRCB) Policy 75-58; 2) the Class I injection well permit from the Environmental Protection Agency (anticipated in August, 1999); 3) agreements between the California Department of Water Resources, West Kern Water District and the Kern County Water Agency have not been completed regarding the proposed turnout on the California Aqueduct; and 4) an agreement between these agencies regarding West Kern Water District's ability to place groundwater into the aqueduct to meet any shortfalls in State Water Project deliveries has also not been completed.

Staff is finishing the collection of information necessary to complete its analysis and expects to file a supplement prior to the scheduled hearing date of April 26, 1999.

Attachment

cc: Proof of Service

PALEONTOLOGICAL RESOURCES

Supplemental Testimony of Robert Anderson

INTRODUCTION

On March 31, 1999, La Paloma Generating Company, LLC (La Paloma) filed results of its *Paleontological Resources Technical Report for the La Paloma Generating Project Supplement #2 to Appendix M* of the Application for Certification. The survey was performed along the newly proposed alternative electrical transmission line route (Route 1B), the water supply pipeline reroute (Route 2), and the water storage reservoir.

Route 1B was added to avoid a parcel of land owned by the California Department of Fish and Game that is a natural preserve. Approximately 0.6 miles of route was added to the originally proposed 13.6 mile route. A portion of this 0.6 miles had already been surveyed.

Staff did not have adequate time to analyze the survey prior to publication of the Final Staff Assessment (FSA). This supplemental testimony completes staff's assessment of the Paleontological Resources technical area.

SURVEY RESULTS

The survey did not reveal any fossils. However, some chert and siliceous mudstone material not native to the site was collected for analysis for microfossils. The microfossil analysis was not completed as of March 31, 1999.

CONCLUSION

The results of the survey do not change staff's proposed paleontological conditions of certification for the project contained in the FSA.

SOCIOECONOMICS

Revised Testimony of Dale Edwards

INTRODUCTION

A California Energy Commission (Energy Commission) staff socioeconomic impact analysis generally evaluates the project induced changes on community services and/or infrastructure and related community issues such as environmental justice and facility closure. Cumulative impacts are also included. This analysis discusses the potential impacts of the proposed La Paloma project on local communities, community resources, and public services, pursuant to Title 14, California Code of Regulations, Section 15131.

LAWS, ORDINANCES, REGULATIONS AND STANDARDS (LORS)

The following LORS are applicable to the La Paloma Generating Company, LLC (La Paloma) project:

FEDERAL

Executive Order 12898, "Federal Actions to address Environmental Justice (EJ) in Minority Populations and Low-Income Populations." This order focuses federal attention on the environment and human health conditions of minority communities and calls on agencies to achieve environmental justice as part of this mission. The order requires the US Environmental Protection Agency (EPA) and all other federal agencies (as well as state agencies receiving federal funds) to develop strategies to address this problem. Agencies are required to identify and address any disproportionately high and/or adverse human health or environmental effects of their programs, policies, and activities on minority and/or low-income populations. The Energy Commission receives federal funds and is thus subject to this Executive Order.

STATE

CALIFORNIA GOVERNMENT CODE, SECTIONS 53080, 65959 ET SEQ.

The code includes provisions for levies against development projects near school districts. The administering agency for the above authority for this project is Kern County.

CALIFORNIA GOVERNMENT CODE, SECTION 65996

As amended by SB 50 (Ch. 407, Sec. 23), states that public agencies may not impose fees, charges or other financial requirements to offset the cost for school facilities.

LOCAL

KERN COUNTY GENERAL PLAN

Public facilities component pertinent to socioeconomics.

POLICY No. 8

In evaluating a development application, Kern County will consider impacts on the local school districts.

IMPLEMENTATION E

Requires the determination of the local cost of facility and infrastructure improvements and expansions that are necessitated by new development of any type and requires the preparation of a schedule of charges to be levied on the developer at the time of approval of the Final Map.

SETTING

The La Paloma project is located in the rural oil fields of western Kern County. For a full description of the socioeconomic setting, please refer to the project description and location (3.0) in the La Paloma AFC, Vol. I., July 1998 (La Paloma 1998). The study area (affected area), defined by La Paloma in the socioeconomics section of the AFC, includes: western Kern County, Bakersfield, Buttonwillow, Maricopa, McFarland, McKittrick, Taft, Shafter, Wasco, and the unincorporated areas of Fellows, Ford City, and Derby Acres. These communities represent all of the communities, within a two-hour, one-way commute distance of the power plant site in which construction and operations workers may live.

IMPACTS

Staff reviewed the La Paloma AFC, Vol. I, July 1998, socioeconomic section (La Paloma 1998) regarding potential impacts to community services and infrastructure (i.e., employment, housing, schools, utilities, emergency and other services), and environmental justice. Based on its independent review, and the fact that data provided in the socioeconomic section of the AFC was provided by and is referenced to governmental agencies and trade associations, staff finds the AFC's socioeconomic analysis and conclusions to be acceptable.

EMPLOYMENT

The analytical tools (gravity and input-output models) used in the AFC by La Paloma to estimate impacts from the La Paloma project on the affected area are widely used and are acceptable to staff. Gravity models relate to incoming population (non-local population) and answer the question of where people will likely live. The gravity model assumes that the attractiveness of a community (whether for shopping or as a place to live) increases with the size of the community (at least for smaller communities) and decreases with the distance that

must be traveled to get to the community (Siegler 1979). The results of the gravity model, as presented by La Paloma in the AFC, are that 66 percent of the non-local construction workers (approximately 69 workers at peak construction) are expected to live in Bakersfield. This is a result that staff would expect because more amenities are available in Bakersfield when compared to the communities closer to the project site. The model further indicates that approximately 22 percent or 23 workers will likely live in Taft or Maricopa, 11 percent or about 12 workers will likely live in Shafter or Wasco; and about one worker will live in Buttonwillow.

The Impact Analysis For Planning (IMPLAN) model is a common regional economic tool used by The University of California at Berkeley. La Paloma has used this tool to assess other generating projects in the area and it is a common regional economic tool. In general, most multipliers are estimated by showing the total change divided by the initial change. Employment multipliers refer to the total additional employment stimulated by the new activity. IMPLAN, a type of input-output model is a disaggregated type of model which divides the (regional) economy into sectors and provides a multiplier for each sector (Lewis et al. 1979). It was appropriate for La Paloma to use a gravity model to distribute the incoming non-local population, and then an input-output model (IMPLAN) to estimate the overall employment resulting from the project. The employment multipliers used by La Paloma (3.23 for construction and 2.88 for operations) are within an acceptable range of 2 often cited by many economists. The 2.88 multiplier for operations is based on a large electrical facility, the Midway Sunset power plant, in Kern County (Smith 1999).

The peak of construction, when the highest number of workers will be needed, is expected to occur in the 15th through 20th months of construction. The greatest number of construction workers, estimated to be 747 workers, will be needed in the 18th month of construction. Approximately 642 of these workers are expected to come from the communities in the affected area (within a two-hour commute radius), and approximately 105 are expected to relocate from communities outside of the two-hour commute radius.

The number of construction workers needed outside of the peak construction period will range from fewer than 100 in the first four months of construction to approximately 519 workers in the 21st month of construction. The average number of non-local workers needed for power plant construction will be 55; 66 for power plant and transmission line construction. During operation of the project, about 35 workers will be needed to maintain and operate the project. Approximately 15 of these operations workers may be non-local.

HOUSING

As of January 1997, approximately 79,572 housing units existed in Bakersfield, 3,311 in Shafter, 4402 in Wasco, 2,418 in Taft, 1,583 in McFarland, and 453 in Maricopa. There are approximately 91,739 total housing units within a two-hour commute, represented by these communities. The vacancy rate for this housing averages approximately five percent. Therefore, approximately 4,587 single-

family, multi-family and mobil homes are generally available. In addition, there are approximately 5,760 total motel/hotel rooms in those same communities, with the availability being about 30 percent on average or 1728 rooms. The combination of housing and motel/hotel rooms likely available to non-local construction and operations workers for this project is more than sufficient for worker needs.

SCHOOLS

Based on 55 average non-local construction workers, 50 school-aged children, not 42¹ as it appears in the La Paloma AFC, and 14 school-aged children for plant operation will be added to the affected area schools. Based on the results of La Paloma's use of a gravity model, most project-related school children are expected to enter Bakersfield schools at the K-8 grade level. According to Table 5.10-6 in the AFC, schools in the Bakersfield City School District and Kern High School District are generally at- or over-capacity. Schools in western Kern County, closer to the project site, appear to be well below capacity in most cases. The addition of project-related children to schools that are at- or over-capacity may increase costs in terms of supplies, equipment and/or teachers. However, according to Senate Bill 50, signed by Governor Wilson on August 27, 1998, which amended section 17620 of the Education code, school funding is restricted to property taxes and statutory facility fees collected at the time the building permit is acquired (\$0.31 per square foot of covered or enclosed space). Public agencies may not impose fees, charges or other financial requirements to offset the cost for "school facilities." School facilities are defined as "any school-related consideration relating to a school district's ability to accommodate enrollment."

The life of the La Paloma power plant is estimated by La Paloma in the AFC to be 35 years. Property taxes on the plant have been estimated to be \$50,988,000 in the first 10 years with approximately 61 percent (Barnett 1998) earmarked for education (at 1.2 percent of the estimated \$500 million capital cost) according to the La Paloma AFC. The net present value of the estimated property taxes cited above at 5.29 percent, the 30-year long-term treasury yield (as of 11/17/98) is \$38,822,985. The total employment, estimated by La Paloma, using an IMPLAN model, is the equivalent of 1,457 jobs (includes 1,006 secondary jobs), based on an average of 451 project-related construction jobs and a multiplier of 3.23. For project operations, an average of 35 jobs with an IMPLAN multiplier of 2.88 results in an equivalent of 101 total jobs (includes 66 secondary jobs).

It should be noted that in the La Paloma AFC, the Kern County Superintendent of Schools is quoted as saying, "the project will not have a significant environmental effect in the area of school facilities" (La Paloma 1998). The person who provided that quote, Mr. Steven Hartsell, is the Director of School District Facility Services, under the Superintendent of Schools. Per Mr. Hartsell, recent legislation precludes local and state agencies from imposing fees or other required payments on development projects for the purpose of mitigating possible enrollment impacts to schools (Hartsell 1999).

¹ Miscalculation in AFC at 5.10.2.5

UTILITIES, EMERGENCY AND OTHER SERVICES

The West Kern Water District can meet the project's water supply needs within their existing capacity, PG&E will provide electricity during project construction, and Kern River Gas Transmission Company is the natural gas provider. The project is not expected to place significant demands on the Kern County Fire Department or the Westside District Hospital, during construction or operation.

FINANCIAL

La Paloma estimates (La Paloma 1998, p. 5.10-19) that the construction payroll will be \$146 million (1998 dollars) for 22-24 months, and the operation payroll will be \$6 million (1998) dollars for 35 years, the bulk of which will be spent in the affected area communities. La Paloma estimates that \$42 to \$43 million worth of materials and equipment will be purchased locally during construction and that about \$6.1 to \$7.0 million will be spent locally for operating supplies annually for over 35 years. This spending will generate sales tax revenues for the local jurisdiction (about one percent for the county, and about 6.25 percent for the State, for a total of 7.25 percent).

ENVIRONMENTAL JUSTICE

The EJ screening analysis contained in the AFC (p. 5.10-4) is consistent with the federal EJ guidelines, and the analysis is acceptable to staff. According to the federal EJ guidelines, a minority or low income population exists if the minority or low income population percentage of the affected area is fifty percent of the affected area's general population or greater.

The EJ analysis in the AFC indicates that the affected area's minority population is less than 50 percent. According to the data presented in Table 5.10-2 in the AFC, 31 percent of the affected area population are non-white, based on 1990 US Census Data. More recent minority population data for the total affected area was not available. However, using estimated 1998 minority and total population data for Bakersfield (La Paloma 1998, p. 5.10-2), the growth area of Kern County, staff concludes that the affected area would still fall below the 50 percent threshold, at an estimated 34 percent, to find EJ an issue. In addition, the highest low-income population percentages are for McFarland and Wasco at 27 percent. Therefore, further EJ analysis is not necessary.

CUMULATIVE IMPACTS

Cumulative impacts might occur when more than one project has an overlapping construction schedule that creates a demand for workers that cannot be met by local labor, resulting in an influx of non-local workers and their dependents. At the time of filing of the La Paloma AFC, no other power plant projects were identified in the vicinity of the LPGP. The La Paloma AFC included a discussion of cumulative impacts and concluded that there ~~are~~were none.

Since the La Paloma filing, several other power plant projects in western Kern County have either filed AFCs, or are expected to soon. Sunrise Cogeneration and Power Project filed an AFC on December 21, 1998, for a 300MW cogeneration project which will be located near the community of Fellows. Elk Hills Power, LLC filed an AFC on February 24, 1999, for a 500MW combined cycle power plant to be located at Elk Hills. AFCs are expected to be filed for the ~~Pastoria and~~ Midway-Sunset and Pastoria projects in ~~April and May~~ May and November 1999, respectively.

SOCIOECONOMICS TABLE 1 shows the estimated number of workers by month for the projected and estimated construction schedules for each of the power plant projects identified above. There are approximately nine months that the five projects will have overlapping construction schedules. During this period, the total number of workers needed for all five projects ranges from approximately ~~1,400 to over 2000~~²: 1,274 to 1,718³. As of February 1999, the number of unemployed workers in the Kern County labor force was 38,800 out of a total civilian labor force of 277,800 (State of California – Employment Development Department, preliminary data, 1999).

Staff agrees that the LPGP will primarily draw on the local labor force for construction and operation. No significant influx of permanent employee or secondary employment households is expected due to the LPGP because Kern County has a large available labor pool. With the addition of each subsequent project into the construction phase, the ability of the available local labor force to meet project construction needs decreases. The cumulative need for workers in particular crafts or specialties will exceed the availability of workers in those crafts in the local area at different times based on the numbers of specialists available and the total number of specialists needed. Each of the currently filed projects has identified their expectations for local vs. non-local workers based on the available work force by craft and their expectation of worker availability based on other project needs.

La Paloma, likely the first of the five projects to start construction, estimates that 86 and 14 percent of their average worker needs will be supplied by local and non-local workers, respectively. For peak construction, the percentages remain relatively unchanged. Sunrise's estimates are basically the same as La Paloma's. The Elk Hills AFC estimates 80 percent local and 20 percent non-local construction workers for average and peak periods. These expectations for local verses non-local workers are consistent with the availability of general construction laborers and the availability of workers in specific crafts in Kern County. There is sufficient housing available in Bakersfield and other communities closer to the project sites to meet all non-local worker needs.

² ~~The number of workers for the Sunrise project's related facilities, such as the gas supply line and electric transmission line, were not available for this analysis.~~

³ The number of workers for the Sunrise project's related facilities, such as the gas supply line and electric transmission line, were not available for this analysis.

SOCIOECONOMICS Table 1
Cumulative Construction Workers (Estimated)

	La Paloma	Sunrise*	Elk Hills	Midway-Sunset**	Pastoria**	Total
Year 2000						
Jan	53					53
Feb	76					76
Mar	148	64	111			323
Apr	222	75	128			425
May	304	96	142			542
Jun	403	142	195			740
Jul	467	157	241			865
Aug	555	197	306		72	1,130
Sep	597	233	333	111	140	1,414
Oct	637	241	352	128	210	1,568
Nov	665	255	347	142	289	1,698
Dec	714	237	329	195	382	1,857
Year 2000						
Jan	53					53
Feb	76					76
Mar	148	64	111			323
Apr	222	75	128			425
May	304	96	142			542
Jun	403	142	195			740
Jul	467	157	241			865
Aug	555	197	306			1058
Sep	597	233	333	111		1274
Oct	637	241	352	128		1358
Nov	665	255	347	142		1409
Dec	714	237	329	195	72	1547
Year 2001						
Jan	729	213	317	241	444	1,944
Feb	699	193	310	306	527	2,035
Mar	625	124	231	333	567	1,880
Apr	521	104	158	352	605	1,740
May	399	78	124	347	631	1,579
Jun	195			329	678	1,202
Jul	141			317	692	1,150
Aug				310	664	974
Sep				231	593	824
Oct				158	495	653
Nov				124	379	503
Dec					185	185

Year 2001						
Jan	729	213	317	241	140	1640
Feb	699	193	310	306	210	1718
Mar	625	124	231	333	289	1602
Apr	521	104	158	352	382	1517
May	399	78	124	347	444	1392
Jun	195			329	527	1051
Jul	141			317	567	1025
Aug				310	605	915
Sep				231	631	862
Oct				158	678	836
Nov				124	692	816
Dec					664	664
Year 2002						
Jan					134	134
Feb						0
Mar						0
Year 2002						
Jan					593	593
Feb					495	495
Mar					379	379
Apr					185	185
May					134	134
Jun						

* Does not include electric transmission line, gas line and water line workers.

** AFCs not yet filed. The number of workers are estimated, based on generating capacity of the project, compared to the three projects that have filed AFCs.

Based on an average of approximately 1,746,495 workers during the nine months of overlapping construction for all five projects, and using a multiplier of 3.23, approximately 5,639,830 secondary jobs are expected to result during that period. Staff does not expect a significant number of these jobs to be filled by non-local workers because these jobs are expected to be temporary, coincident with the construction schedule, and salaries associated with indirect and induced jobs generally do not attract new workers to an area. Over a period of approximately 21 months, secondary jobs, related to the construction of two or more of these projects at the same time, are expected to range from 1,030 to 5,639,1043 to 5,549.

Using a 2.88 multiplier, secondary jobs expected from the operation of the projects range from 127 for two projects to 380 for all five projects (based on 44 employees for two projects and 132 employees, projected plus estimated, for all five projects). These secondary jobs are expected to be filled from the local work force.

Based on an estimated average of 258 non-local workers for all five projects during construction, and assuming the average family size to be 2.91 persons (State of California, Department of Finance 1998), approximately 195 children are expected to be added to Kern County Schools. These children will not enter and leave the schools at the same time, but will enter and leave schools over a period ranging from four to 19 months. During operation of the five projects, approximately 48

children are expected to be added to western Kern County schools as a result of non-local workers relocating their families. The increase in school enrollments due to the five projects during construction will likely cause an impact on those schools in the Bakersfield area that are currently at- or over-capacity. The increase in school enrollments due to the five projects during operation is not expected to cause an impact because these students will likely attend schools in the vicinity of the projects, and these schools are typically under-capacity.

The Kern County Fire Department will provide emergency medical response for the proposed power plants. The Fire Department believes that they have adequate resources to provide emergency medical response for the five power plants that have been identified in this cumulative analysis.

The Kern County Fire Department's fire fighting resources are sufficient to cover all five of the proposed power plant projects. However, the Fire Department has identified a need for one new ladder truck to maintain its current level of service and to effectively respond to the types of emergency incidents that occur at facilities such as the proposed power plant facilities. Specifically, the Fire Department sees an increase in the number of emergency responses that will require High Angle and Confined Space Specialist Technicians and equipment. The Fire Department requires one new, properly equipped, ladder truck that will be assigned to Station 21 at Taft, and nine new personnel to cover three work shifts per day. Currently, the County has three ladder trucks, two in service and one as a backup. All three trucks are located in the metropolitan Bakersfield area. The closest ladder truck is about 40 miles away from the four power plants proposed for western Kern County. This distance makes dispatching to the area where the power plants are planned unacceptable due to the excessive response time.

The Kern County Fire Department estimates the cost of a new, properly equipped, ladder truck to be \$700,000. This cost should be paid by all the projects benefiting from its use. Initially, based on a proration by generation in megawatts, each of the three currently filed power plant projects should make a payment to the Kern County Fire Department as follows: La Paloma, \$396,900 (56.7 percent); Sunrise, \$114,100 (16.3 percent); and Elk Hills, \$189,000 (27 percent).

These amounts will be offset as other new projects, subject to this cost sharing, are developed in the area.

~~For the purchase of a replacement ladder truck, approximately 15 years after the purchase~~In addition to the cost of the new ladder truck, the ~~three projects should make annual payments for 15 years to the Kern County Fire Department as follows: La Paloma, \$39,690; Sunrise, \$11,410; and Elk Hills, \$18,900. These amounts will change as other new projects, subject to this cost sharing, are developed in the area.~~

County requires first year funding for the cost of nine new personnel needed~~For the cost of the nine new personnel~~ to cover three shifts per ~~day, the three projects~~

~~should make a one-time payment~~ day. One-time payments to the Kern County Fire Fund should be made by each of the three currently proposed power plant projects as follows: La Paloma, \$425,250; Sunrise, \$122,250; and Elk Hills, \$202,500.

As new power plant projects in western Kern County are certified by the Energy Commission, they will be required to reimburse the project owners of the La Paloma, Sunrise and Elk Hills projects, based on their share of the above costs as determined by their portion of the total megawatts added to the area. The Kern County Fire Department acknowledges that other new projects, outside the jurisdiction of the Energy Commission, and not necessarily power plants, that benefit from the new ladder truck may also be subject to cost sharing for the above equipment and personnel.

The Kern County Sheriff will provide police service for the five new projects, and existing resources are expected to be adequate to meet law enforcement needs during construction and operation of the five projects. Westside District Hospital serves the area for the five new projects, and their facility is expected to adequately meet medical service needs during construction and operation of the five new projects.

According to the Kern County Fire Department (Chaffin 1999), the Fire Department estimates that ~~their~~the Fire Fund share of the property taxes paid by the four projects expected in the Taft area will be approximately ~~\$960,000~~\$1,371,500 per year. This amount is based on the estimated property tax payments described in the AFCs for the La Paloma, Sunrise and Elk Hills projects. Taxes for the Midway-Sunset project were estimated based on the Elk Hills project (both are 500 megawatt projects).

These projected tax payments to the County will not occur until approximately 18 months after start of construction for each project. However, the need for the new ladder truck begins with the start of construction for each of the power plants. In addition, if assessment of property taxes moves from the County to the state, as described below, Kern County can expect to receive approximately \$809,000 annually in tax revenues from the four projects.

The State Board of Equalization, in a November 13, 1998 issue paper, ~~states~~stated that assessment of power generating facilities of 50 megawatts or more should be conducted by the state, using unitary valuation and allocation of revenues on a countywide basis. Board of Equalization staff recommends that implementation of state assessed facilities should be carried out in two phases. Phase 1, which was adopted by the Board on ~~12/7/98~~December 7, 1998 and commenced on ~~1/1/99~~January 1, 1999, assesses those companies that have purchased electric generation facilities previously owned by regulated public utilities. Phase 2, which would include all companies producing 50 megawatts or more, is proposed to be adopted on ~~1/1/2000~~. ~~Thus, when~~January 1, 2000. Thus, if Phase 2 is implemented, the La Paloma ~~project will most~~project, and all subsequent projects certified by the Energy Commission, will likely be assessed on the unitary tax roll, with revenues from property taxes allocated

by formula on a countywide basis with each jurisdiction in the county (cities, school districts, and special districts) receiving a portion of the revenues. A primary difference between state assessment and county assessment is that under county assessment the valuation provisions of Article XIII A (Proposition 13) apply, including establishing a base year value, a limit of two percent on annual increases, and valuation on the lower of fair market value or adjusted base year value. These provisions do not apply to state assessed property, which is valued annually at fair market value. Therefore, Kern County should expect substantial changes in the allocation of property tax revenues generated by the project and a diminishment of revenues to the County.

The Kern County Assessor's Office has analyzed the projected tax revenues from existing and four proposed power plant projects in Kern County, under the current general levy and under the unitary tax. They found that under the current general levy, the County would expect to receive \$2.953 million toward the Fire Fund, and under the unitary tax, if approved, the County would expect to receive \$1.751 million. This represents a potential 41 percent reduction in tax revenues to the County (Kern County Assessor's Office 1999).

FACILITY CLOSURE

PLANNED CLOSURE

La Paloma's AFC provides for the inclusion of socioeconomic LORS which will be incorporated into the facility closure plan when it becomes necessary at the end of the project's economic life. The socioeconomic impacts of facility closure will be evaluated at that time.

UNEXPECTED TEMPORARY CLOSURE

Any unexpected, temporary closure would not likely cause any significant environmental impacts on the affected area, because the likely result of a temporary closure would be reactivation of the power plant by the same or a new owner within a relative short period of time. Personnel changes may occur if there is an ownership change, but socioeconomic impacts would not change significantly because the number of operating personnel would remain relatively the same.

UNEXPECTED PERMANENT CLOSURE

Any unexpected, permanent closure of the La Paloma project would not likely cause any significant environmental impacts on the affected area, because facility closure impacts would be similar to construction impacts, and staff has found no socioeconomic, significant impacts due to the construction of the project.

MITIGATION

La Paloma contends that impacts to schools will be mitigated by the property taxes paid in connection with operation of the proposed project. Staff has determined that, even though a significant cumulative impact has been identified for Kern

County schools during the construction period for four power plant projects in western Kern County, including La Paloma, with the changes to the Education Code resulting from the passage of SB 50 in 1998, school funding is now restricted to a combination of property tax revenues and a statutory development fee based on a project's covered or enclosed space.

CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

The estimated gross benefits from the project include increases in the affected area's property and sales taxes, employment, and sales of services, manufactured goods and equipment.

Staff agrees with La Paloma's conclusions in the AFC that the project will not cause a significant adverse impact on the affected area's housing, schools, police, fire, emergency services, hospitals, utilities and employment.

A potential cumulative significant impact on the Kern County Fire Department has been identified. This impact results from the construction and operation of the La Paloma and three other power plant projects in western Kern County (Sunrise, Elk Hills and ~~Midway-Sunset~~Midway-Sunset). The introduction of the four new power plants in this area reduces the fire department's emergency rescue capabilities below acceptable levels. The owners of the La Paloma project should be required to pay the Kern County Fire Department a share of the cost to bring the fire department's emergency rescue capabilities up to acceptable levels. The Sunrise and Elk Hills projects will also be required to pay a share of the fire department costs. The ~~Midway-Sunset~~Midway-Sunset project, and any other project in the vicinity certified by the Energy Commission after certification of the La Paloma project, will be required to reimburse the owners of the La Paloma, Sunrise and Elk Hills projects, based on their share of the costs. Should the Sunrise or Elk Hills project not be certified as expected, the dollar amount specified in proposed condition of certification **SOCIO-2** will have to be revised via a staff proposed amendment.

The project, as proposed, is consistent with all applicable socioeconomic LORS. The proposed conditions of certification ensure compliance with LORS, and mitigation of the identified cumulative impact on the Kern County Fire Department.

RECOMMENDATIONS

For the area of socioeconomics, staff recommends that, with the adoption of the following conditions of certification, the La Paloma project be approved.

PROPOSED CONDITIONS OF CERTIFICATION

SOCIO-1 The project owner shall pay the statutory development fee as required at the time of filing for the “in-lieu” building permit with the Kern County Department of Engineering and Survey Services and Building Inspection.

Verification: The project owner shall provide proof of payment of the statutory development fee in the next Monthly Compliance Report following the payment.

SOCIO-2 The project owner shall:

- 1) meet with representatives of the Kern County Fire Department, Sunrise Cogeneration and Power Project, and Elk Hills Power Project, within 30 days following the last date of certification for any of these projects, to reach an agreement on funding for the following:
 - ~~b) purchase of a new 105-foot Pierce Quint Aerial ladder truck equipped for high angle and confined space rescues;~~
 - a) ~~a set-aside fund for the purchase of a new replacement ladder truck approximately 15 years from the date of purchase of the truck in a) above;~~rescues; and
 - b) nine new positions for personnel to cover three shifts per day for the new truck.

If property taxes are collected by the State of California under the unitary tax, the parties shall also reach agreement on funding for:

- c) a replacement ladder truck.

Or, if ~~the parties above have not reached~~ an agreement has not been reached within 90 days of the last date of certification for ~~these~~the above projects:

- 1) The project owner shall make a payment in the amount of \$396,900 to the Kern County Fire Department toward the purchase of a new ladder truck, properly equipped per Kern County Fire Department specifications. This payment shall be made within 120 days of the last date of certification for any of the three projects indicated in this condition.

~~The project owner shall make annual payments for a period of 15 years to the Kern County Fire Department in the amount of \$39,690 for the purchase of a~~

~~replacement ladder truck. This payment shall be made within 120 days of the last date of certification for any of the three projects indicated in this condition.~~

The project owner shall make a one-time payment to the Kern County Fire Department in the amount of \$425,250 for the cost of nine new personnel for one year to cover three shifts per day for the new ladder truck. This payment shall be made within 120 days of the last date of certification for any of the three projects indicated in this condition.

If property taxes are collected by the State of California under the unitary tax, the project owner shall make annual payments in the amount of \$39,690 for a period of 15 years for the purchase of a replacement ladder truck. These payments shall begin within 120 of the last date of certification for any of the three projects indicated in this condition.

Should the Sunrise and/or Elk Hills projects not be certified by the Energy Commission, the amounts specified in option 2) above will be revised by the Energy Commission to distribute the fire department costs to La Paloma and those projects in the vicinity that have been certified after the La Paloma project.

~~Verification:~~ **Verification:** The project owner shall provide the CPM with a copy of an agreement with the Kern County Fire Department and the Sunrise and Elk Hills project owners, as described under option 1) above, within 90 days of the last date of Energy Commission certification for the three projects. If no agreement is reached, the project owner shall provide the CPM with proof of payments to the Kern County Fire Department, in the amounts specified under option 2) above, within ~~90~~120 days of the last date of Energy Commission certification for the three ~~projects. The project~~ projects. ~~owner shall provide proof of annual payments for the replacement ladder truck in the Annual Compliance Report.~~

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EXECUTIVE SUMMARY

INTRODUCTION

This Final Staff Assessment (FSA) contains the California Energy Commission (Energy Commission) staff's evaluation of the La Paloma Generating Company, LLC's (La Paloma) Application for Certification (AFC) (98-AFC-2) for the La Paloma Generating Project (LPGP). The LPGP electric generating plant and related facilities, such as the electric transmission line, natural gas pipeline and water lines are under the Energy Commission's jurisdiction and cannot be constructed or operated without the Energy Commission's certification. Staff is an independent party in the proceedings. This FSA is a staff document and it examines engineering and environmental aspects of the LPGP, based on the information available at that time of document creation. The FSA contains analyses similar to those contained in Environmental Impact Reports required by the California Environmental Quality Act (CEQA). It is not a Committee document nor is the FSA a final or proposed decision on the proposal. The FSA presents staff's conclusions and proposed conditions that staff recommends apply to the design, construction, operation, and closure of the proposed facility, if certified.

BACKGROUND

On August 12, 1998, La Paloma filed an AFC with the Energy Commission to construct and operate the LPGP. On August 26, 1998, the Energy Commission deemed the AFC data adequate, at which time staff began its analysis of the proposal. The analyses contained in this FSA are based upon information from: 1) the AFC; 2) subsequent amendments; 3) responses to data requests; 4) supplementary information from local and state agencies and interested individuals; 5) existing documents and publications; and 6) independent field studies and research.

PROJECT DESCRIPTION

The LPGP will be located near McKittrick, Kern County, California, approximately 40 miles west of Bakersfield, California. The project site is about 23 acres in size and is situated near the intersection of Reserve Road and Skyline Road. The site is the location of a former oil production field. The project will be owned and operated by La Paloma, a subsidiary of U.S. Generating Company, LLC (USGen), which, in turn, is an unregulated subsidiary of Pacific Gas and Electric Corporation (PG&E)¹. Electrical energy produced from the proposed merchant power plant will be sold in California's newly created electricity market pursuant to sales agreements with municipalities or other customers. Construction of the facility is

¹ U.S. Generating Company, LLC is not the same as PG&E, the utility. The California Public Utilities Commission does not regulate U.S. Generating Company, LLC.

expected to begin late in 1999 and commercial operation is expected to begin late 2001. The project costs are estimated to be \$500 million. The project is expected to create an average of 451 construction jobs and 35 permanent operational jobs.

The project as proposed by La Paloma is a 1,048 megawatt, natural gas-fired, combined cycle facility. Electricity generated by the LPGP would be transmitted over a 14.2-mile long, 230kV double-circuit transmission line to PG&E's Midway Substation at Buttonwillow². Cooling (i.e., raw) water would be conveyed from the California Aqueduct by an 8-mile long pipeline. Waste water would be disposed into on-site deep injection wells. Fuel for the natural gas-fired turbines would be piped 370-feet from a large interstate pipeline jointly owned by the Kern River Gas Transmission Company and the Mojave Pipeline Company. A complete description of the Proposal is contained the **PROJECT DESCRIPTION** section of this FSA.

STAFF'S ASSESSMENT

Each technical area section of the FSA contains a discussion of impacts, mitigations measures and conditions of certification. The FSA includes staff's assessments of:

- the project's conformity with integrated assessment of need;
- the environmental setting of the proposal;
- impacts on public health and safety, and measures proposed to mitigate these impacts;
- environmental impacts, and measures proposed to mitigate these impacts;
- the engineering design of the proposed facility, and engineering measures proposed to ensure the project can be constructed and operated safely and reliably;
- project alternatives;
- compliance of the project with all applicable laws, ordinances, regulations and standards (LORS) during construction and operation; and
- proposed conditions of certification, where these can be identified at this time.

² On March 16, 1999, La Paloma docketed with the California Energy Commission its Supplement 2 to the AFC. One of the two project changes presented in the supplement was a 0.6-mile deviation of the transmission line route (Route 1) to avoid a parcel of land owned by California Department of Fish and Game. This deviation has been designated by La Paloma as Alternative Route 1B and has been analyzed at the same level of detail as the proposed Route 1 to provide flexibility if Route 1 access cannot be obtained.

COMPLETE ANALYSES

Staff believes its analysis of the power plant is substantially complete for the following 17 technical areas:

*Need Conformance	Socioeconomics
Public Health	*Waste Management
Hazardous Materials Handling	Facility Design and Geology
Worker Safety & Fire Protection	*Reliability
Transmission Line Safety & Nuisance	Efficiency
Land Use	Transmissin System Engineering
Traffic and Transportation	Alternatives
Noise	*Closure and Compliance
Visual Resources	

* Does not feature revisions from the PSA.

Staff notes that La Paloma, agencies, other parties, and the public have not had an opportunity to review and comment on sections that have been revised since the Preliminary Staff Assessment (PSA). Therefore, there is a potential that La Paloma, other parties, agencies, and the public may have comments or suggestions regarding the findings, conclusions and recommendations they have not had the opportunity to consider. To the extent that staff believes it appropriate to address those comments, this FSA should not be considered complete in those areas.

INCOMPLETE ANALYSES

Five technical areas are incomplete. The areas and the reasons for being incomplete are air quality, water resources, biological resources, cultural resources, and paleontologic resources.

AIR QUALITY

The San Joaquin Valley Unified Air Pollution Control District (District) has yet to issue a preliminary Determination of Compliance (DOC), and there are important air quality technical and policy issues remaining, including:

1. La Paloma's need to secure the balance of their SO₂ and PM₁₀ offset credits. La Paloma intends to use excess NO_x credits they have secured for their PM₁₀ liability at an offset ratio of 1.1 to 1. The District has not made a finding yet as to whether this ratio is acceptable, but they will make a finding when they issue the preliminary DOC. The U.S. Environmental Protection Agency (EPA) may comment on this subject, in their comments on the preliminary DOC;
2. The District is expected to determine that Best Available Control Technology (BACT) for NO_x is 2.5 parts-per-million (ppm) averaged over 3-hrs. However,

the EPA, in the High Desert Power Plant (97-AFC-1) and Sutter Power Plant (97-AFC-2) siting cases considered that the averaging time should use a 1-hour duration.

3. La Paloma proposed a BACT level for CO of 10 ppm. EPA considers 4 ppm as the appropriate level of BACT.
4. In addition, staff is continuing to work on their cumulative impacts modeling analysis of the LPGP, Sunrise Cogeneration and Power, and Elk Hills Power Projects.

Resolution of these issues must proceed after the District's issuance of the preliminary DOC.

WATER RESOURCES

Staff has not completed an analysis of the project's conformity with the State Water Regional Control Board (SWRCB) Policy 75-58. This policy gives priority over the use of fresh water for power plant cooling to other lower quality water sources. The Class I injection well permit from the Environmental Protection Agency is anticipated in August, 1999³. In addition, agreements between the California Department of Water Resources, West Kern Water District and the Kern County Water Agency have not been completed regarding the proposed turnout on the California Aqueduct. Furthermore, an agreement between these agencies regarding West Kern Water District's ability to place groundwater into the aqueduct to meet any shortfalls in State Water Project deliveries has also not been completed.

BIOLOGICAL RESOURCES

The biological resources analysis contained in this FSA is as complete as possible, pending federal and state agency Biological Opinions (BO). The U.S. Fish and Wildlife Service's (USFWS) BO, initiated by the Bureau of Land Management as a Section 7 consultation, is expected to be issued after the Final Staff Assessment (FSA). However, staff understands that unforeseen issues may arise that could delay the USFWS BO.

California Department of Fish and Game (CDFG) will issue a separate BO and an Incidental Take permit. In addition, CDFG will provide their opinion after receiving the federal opinion. It is unknown, at this time, when the CDFG and USFWS documents will be provided.

³ La Paloma's need to file a Class I permit with US EPA, instead of a Class V with the Regional Water Quality Control Board, was determined after the filing of the PSA on February 5, 1999.

CULTURAL AND PALEONTOLOGIC RESOURCES

Due to the transmission line route deviation mentioned above, additional cultural and paleontologic surveys where necessary. The results of these surveys are expected to be docketed with the Energy Commission on or about March 31, 1999.

STAFF RECOMMENDATION

Staff has identified five technical areas that are incomplete in their analyses: air quality, water resources, biological resources, cultural and paleontologic resources. Although our analysis is potentially complete in 17 areas, resolution of the remaining issues in the other five areas will be crucial to the Energy Commission's Decision on this project.

The District's Preliminary DOC was expected to be issued on March 26, 1999, but did not occur. Staff will require at least three weeks to prepare testimony that analyzes the Preliminary DOC. Until the biological and water resources issues are settled, staff cannot be certain what changes may be required to its testimony. Similarly, staff cannot determine whether the transmission line routing change will require amended testimony for cultural and paleontologic resources until La Paloma files the survey results. This analysis will take time to conduct as well, and the time required is dependent upon the results of the survey.

At this time, staff is unable to recommend that the project be certified.