Supplement to Staff Assessment

GWF TRACY PEAKER PROJECT

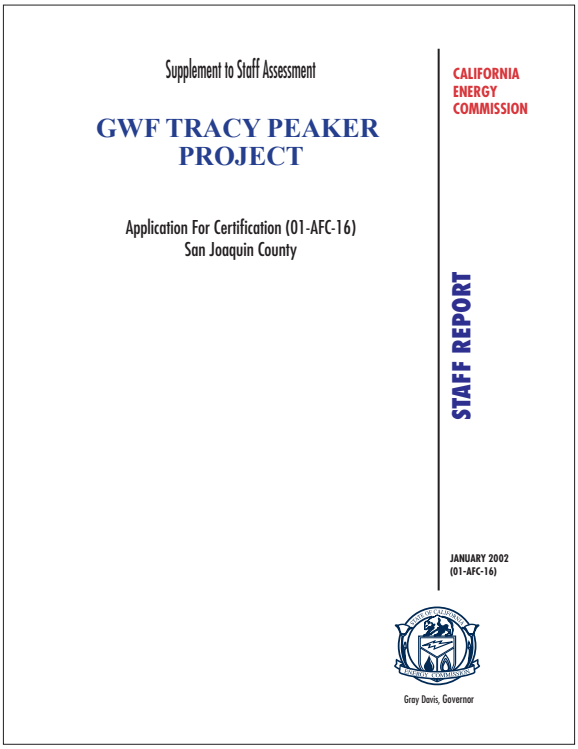
Application For Certification (01-AFC-16)
San Joaquin County

CALIFORNIA ENERGY COMMISSION

STAFF REPORT

JANUARY 2002
(01-AFC-16)

Gray Davis, Governor



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NOTE TO READER

This report is a supplement to the Staff Assessment (SA) filed on December 28, 2001. Please discard the supplement filed on January 18, 2002 and replace with the enclosed document. This supplement includes errata, changes to staff's analysis made necessary by the applicant's late filing of their Wet Weather Contingency Plan-related project changes, responses to written comments received from agencies and members of the public prior to January 16, 2002, and information received at the SA Workshop held on January 9, 2002. Written comments received after this date are included to the extent of staff's ability given the time allowed.

The supplement includes changes to the following sections:

- Response to Public and Agency Comments,
- Air Quality,
- Biological Resources,
- Hazardous Materials,
- Land Use,
- Noise and Vibration,
- Public Health,
- Socioeconomics,
- Soil and Water Resources
- Visual Resources,
- Transmission Line Safety and Nuisance
- Waste, and
- Worker Safety.

EXECUTIVE SUMMARY

This Executive Summary replaces the Executive Summary from the Staff Assessment filed December 28, 2001 and the supplement filed January 18, 2002.

INTRODUCTION

This supplement to the Staff Assessment (SA) contains the Energy Commission staff's independent analysis and recommendation on the Tracy Peaker Project (TPP). The TPP and related facilities such as the electric transmission lines, natural gas line, water supply lines and wastewater lines are under the Energy Commission's jurisdiction (Pub. Resources Code § 25500). When issuing a license, the Energy Commission acts as lead state agency (Pub. Resource Code § 25519(c)) under the California Environmental Quality Act (Pub. Resource Code §§ 21000 et seq.), and its process is functionally equivalent to the preparation of an environmental impact report (Cal. Code Regs., tit. 14 § 15251(k)).

It is the responsibility of the Energy Commission staff to complete an independent assessment of the project's potential effects on the environment, the public's health and safety, and whether the project conforms with all applicable laws, ordinances, regulations and standards (LORS). The staff also recommends measures to mitigate potential significant adverse environmental effects and conditions for construction, operation and eventual closure of the project, if approved by the Energy Commission. The analyses contained in this document were prepared in accordance with Public Resources Code section 25500 et seq.; the California Code of Regulations, Title 20, section 12001 et seq.; and the California Environmental Quality Act (Pub. Resources Code § 21000 et seq.) and its guidelines (Cal. Code Regs., tit. 14 § 15000 et seq.).

This SA is not the decision document for these proceedings nor does it contain findings of the Energy Commission related to environmental impacts or the project's compliance with local/state/federal legal requirements. The final decision will be made by the Commissioners of the California Energy Commission only after the completion of evidentiary hearings. The Commissioners will consider the recommendations of all interested parties, including those of the Energy Commission staff; the applicant; intervenors; concerned citizens; and local, state, and federal agencies, before making a final decision on the application to construct and operate the TPP.

PROJECT LOCATION AND DESCRIPTION

On August 16, 2001, GWF Energy LLC filed an AFC with the California Energy Commission seeking approval to construct and operate the TPP. As proposed, the TPP would be a 169-megawatt (MW) natural gas-fired, simple-cycle electric generating facility, owned and operated by GWF Energy LLC.

The applicant proposes to build the TPP on a 10.3-acre fenced site within a 40-acre parcel of land in unincorporated San Joaquin County, immediately southwest of the City of Tracy and approximately 20 miles southwest of Stockton. The property is bounded

by the Delta-Mendota Canal to the southwest, agricultural property to the south and east, and the Union Pacific Railroad to the north. Refer to **PROJECT DESCRIPTION Figures 1 and 2** for the local setting map and the site layout, respectively

The proposal is for a natural-gas-fired, simple-cycle generating facility with two 115-kilovolt (kV) switchyards and an on-site electric transmission interconnection that ultimately connects to the Tesla substation. The TPP would use two General Electric combustion turbine generators (CTGs), each with a base load nominal output of 84.4 MW at annual average conditions.

Associated equipment would include emission control systems necessary to meet emission limits. The CTGs would be equipped with a dry low NOx combustor system to control the NOx concentration exiting each CTG. The exhaust gas temperature would be reduced with ambient air to allow for additional post-combustion NOx control with a selective catalytic reduction (SCR) system. In addition, GWF would provide offsets for all proposed criteria pollutant emissions from the TPP, including CO.

The TPP, if built, would connect to the Tesla-Kasson 115-kV transmission line within the fenced site. Natural gas would be delivered to the TPP via a new interconnect with PG&E's natural gas pipeline that crosses beneath the proposed site.

The applicant plans to supply the plant's cooling and process water requirements with untreated water from the Delta-Mendota Canal, supplied under an existing contract with the Plain View Water District. The simple cycle design of the TPP does not include a cooling tower, thus the TPP would have minimal demand for cooling and process water. Drinking water for the facility would be provided by a local bottled water vendor.

A wastewater recovery system would be used to reduce the volume of wastewater produced by the plant. The small quantity of wastewater remaining would be sent to a 10,000 gallon storage tank for off-site recycle or disposal.

The applicant plans to begin construction immediately following certification, for a period of approximately eight months. The project was originally scheduled to be operational in a simple-cycle mode beginning the summer of 2002. This schedule is now unlikely, but the applicant has not provided a revised schedule. Electricity generated from this facility will be sold to the California Department of Water Resources (DWR) under a 10-year contract, operating in simple-cycle mode for the duration of the contract. The contract with DWR provides for the purchase of up to 4,000 hours per year of plant generating capacity, but GWF wishes to retain the flexibility to operate the plant for sale of electricity beyond the contracted hours, up to a maximum of 8,000 hours per year.

A more complete description of the project is contained in the **PROJECT DESCRIPTION** section of the original SA.

PUBLIC AND AGENCY COORDINATION

When the Commission receives an AFC, copies were sent to all relevant federal, state, and local agencies, and a notice of receipt was mailed to all property owners within

1,000 feet of the proposed plant site and within 500 feet of the proposed linears. As soon as the Commission accepted the Application, the Energy Commission's Public Adviser's Office sent a copy of the AFC with 25 copies of a one-page project summary to the Tracy Branch Library. The librarian also put up a poster about the project on the library's public information bulletin board.

During the month of October, the Public Adviser's Office published an article in the Byron School District newsletter describing the Tracy Peaker Project. Also, the Energy Commission's Media Office issued a press release to notify news agencies about the project. During the month of November, 11,000 one-page newspaper inserts announcing the Informational Hearing and Site Visit were distributed through the Tracy Press News. These 11,000 inserts were place in papers being delivered to zip codes closest to the proposed plant site[1].

Energy Commission staff conducted a publicly noticed workshop November 20, 2001 for the public to learn about the project, the Energy Commission's process, and to air their questions and concerns about the proposed power plant. The Committee conducted its Informational Hearing and Site Visit one week later. When the Staff Assessment was issued on December 28, 2001, the Media Office again issued a press release, and notices were sent out to the General Public, Property Owner, and Agency mailing lists. Staff held a second workshop January 9, 2002, during which staff addressed comments from the applicant and the public on the SA. All workshops and hearings were noticed at least 10 days in advance and the notices were mailed, as required by regulation, to the General Public, Property Owner, and Agency mailing lists. The Commission's web server also sent the notices to all subscribers on the Tracy Peaker Project electronic notice list. In addition, the Informational Hearing was noticed in the Tracy Press.

Staff also contacted relevant local, state and federal agencies, such as the San Joaquin County, California Independent System Operator, San Joaquin Valley Air Pollution Control District, U.S. Fish and Wildlife Service, California Department of Fish and Game, the City of Tracy, and the San Joaquin Council of Governments.

Written comments received from members of the public, and letters from agencies that require some form of response, have been included in this supplement to the SA.

STAFF'S ASSESSMENT

Each technical area section of the SA contains a discussion of impacts, and where appropriate, mitigation measures and conditions of certification. The SA includes staff's assessments of:

- the environmental setting of the proposal;
- impacts on public health and safety, and measures proposed to mitigate these impacts;

[1] The notices were placed in papers being delivered to the following zip codes: 95376, 95378, 95304, 95377, 95336, 95330, and 95206.

- 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 closure;
- project alternatives;
- compliance of the project with all applicable laws, ordinances, regulations and standards (LORS) during construction and operation; and
- proposed conditions of certification.

OVERVIEW OF STAFF'S CONCLUSIONS

The Applicant filed a supplement to the AFC on December 11, 2001, containing changes to the project made necessary by the need for a Wet Weather Construction Contingency Plan. Per the supplement, the Applicant identified the need for an additional 13.2 acres for construction laydown and a new temporary access road. Given the short time available, not all staff was able to incorporate the applicant's recent project changes into their analysis for the SA. Further, the supplement raised new questions, requiring a second set of data requests. This supplement includes staff's analysis of the project changes.

Staff's analysis indicates that the project's environmental impacts can be mitigated to levels of less than significant. Staff's analysis also indicates that the project can be made to conform with all LORS.

Since the Staff Assessment Workshop on January 9, 2001, staff made changes to the Conditions of Certification in the Noise, Biological Resources, and Soil and Water Resources sections.

Below is a summary of the potential environmental impacts and LORS compliance for each technical area. Following the summary table is an update on technical areas for which staff's analysis has significantly changed since the SA.

Technical Discipline	Environmental / System Impact	LORS Conformance
Air Quality	Impacts mitigated	yes
Biological Resources	Impacts mitigated	yes
Cultural Resources	Impacts mitigated	yes
Power Plant Efficiency	No impact	N/A
Power Plant Reliability	No impact	N/A
Facility Design	N/A	yes
Geology	Impacts mitigated	yes
Hazardous Materials	Impacts mitigated	yes
Land Use	Impacts mitigated	yes
Noise	Impacts mitigated	yes
Public Health	Impacts mitigated	yes
Socioeconomics	Impacts mitigated	yes
Traffic and Transportation	Impacts mitigated	yes
Transmission Line Safety	Impacts mitigated	yes
Transmission System Engineering	Impacts mitigated	yes
Visual Resources	Impacts mitigated	yes
Waste Management	Impacts mitigated	yes
Water and Soils	Impacts mitigated	yes
Worker Safety	Impacts mitigated	yes

Biological Resources

The project changes described in the Applicant's AFC supplement raised concerns from staff about the potential for sensitive wetland species to occur on or near the project site. This would have particularly affected staff's analysis of the potential for construction-related impacts. In response to staff's subsequent data requests, however, the applicant provided sufficient evidence that the nearby wetland does not provide suitable habitat for these species. Therefore, staff's conclusions regarding construction-related impacts did not change.

Additionally, staff's revised analysis addresses comments received by the US Fish and Wildlife Service regarding the potential for the project to adversely affect kit fox. Staff recognizes that the TPP would cause permanent, temporary, and possible cumulative impacts to kit fox habitat. These impacts, however, would be mitigated to less than significant levels by the applicant providing funds for the purchase of mitigation lands at a 1:1 (impact:mitigation) ratio as required under the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan, and through the implementation of the Biological Resources Mitigation Implementation and Monitoring Plan. In addition, the applicant has agreed to the following design changes to respond to specific concerns for kit fox: to place the project as far as feasible from the Delta Mendota Canal, maximizing the width of the kit fox migration corridor; to eliminate from their landscaping plan any landscaping trees near the canal; and to place 0.9 acres of open space on their property into a conservation easement. With these design changes, impacts to migrating kit fox would be reduced to a level of less than significant.

Land Use

The City of Tracy filed comments on the SA regarding the City's overlapping sphere of influence that includes the project site. These comments are addressed in the staff assessment but do not change staff's conclusions.

Due to the proximity of the project to the City of Tracy, and in response to the City's comments, staff reviewed the Tracy General Plan/Urban Management Plan. The City of Tracy has adopted two Specific Plans for development within the TPP vicinity. The Tracy Hills Specific Plan area is located within the City of Tracy's incorporated area, with the northern boundary of the Plan approximately 0.6 mile from the TPP site. The South Schulte Specific Plan area includes the site, but the land has not been annexed to the City. Thus, while the TPP project site is within the City of Tracy's Sphere of Influence, the land is currently in San Joaquin County's jurisdiction because the land has not yet been annexed. Staff's analysis of consistency with LORS, therefore, relied on County rather than City LORS. Staff's conclusions that the project conforms with all applicable LORS has not changed.

Noise

Based upon comments received by the applicant and the public, staff revisited its analysis of potential noise impacts. Staff previously identified the potential for significant noise impacts if plant operation noise levels exceeded 39dBA at the nearest sensitive receptor and proposed a condition requiring the applicant to mitigate cumulative noise levels (i.e. ambient plus project noise levels) to 39dBA. The applicant provided comments indicating that it could mitigate the plant itself to 42dBA, but staff does not have sufficient evidence at this time to indicate that a lower noise limit is not feasible. Therefore, staff has changed the condition only slightly. Instead of requiring that the cumulative noise levels be held to 39 dBA – an unreasonable expectation because it requires the applicant to reduce noise output from the project if ambient noise levels increase – the condition now proposed by staff specifies that noise levels from the project, measured at the nearest sensitive receiver, should be limited to 39 dBA. While staff has not seen a specific proposal from the applicant, staff believes it is likely that further design changes could be made to reduce plant noise levels an additional three dBA to achieve the 39 dBA level proposed for Condition of Certification NOISE-5.

Visual Resources

The project as proposed has the potential to cause significant adverse visual impacts to views from several areas, but staff's proposed conditions of certification will reduce these impacts to a level of less than significant. Staff's analysis of the original landscaping plan presented from GWF found that the proposed landscaping would not be effective in screening the power plant from view in the area of KOP 1. The applicant since revised its conceptual landscaping plan to achieve effective screening.

Because the revised landscaping plan addresses staff's concerns about views from KOP 1, staff now finds the project to conform to General Plan policies that relate to visual aspects of the project.

Environmental Justice

EPA guidelines on environmental justice state that if 50 percent of the population affected by a project has minority or low-income status, it must be determined if these populations are exposed to disproportionately high and adverse human health or environmental impacts.

In the **Socioeconomics** section of the SA, staff presents the results of their "environmental justice screening analysis." The purpose of the environmental justice screening analysis is to determine whether of not there is a low-income and/or minority population within the potential affected area of the proposed site.

Socioeconomics Figure 1 from the SA identifies census blocks within six miles of the proposed project that had minority populations greater than 50 percent. Census 2000 data indicate that the minority population within the six-mile radius of the project site is 45 percent. The percent of population considered low-income or living below the poverty level ranges from 11 percent in San Joaquin County to 7 percent within a six-mile radius of the EAEC. This percentage is well below the threshold of greater than 50 percent that staff uses to determine if there is a significant low-income population.

There are, however, small "pockets" within the six-mile radius that have greater than 50 percent minority persons. When a minority and/or low-income population is identified, staff in the technical areas of air quality, public health, hazardous materials, noise, water, waste, traffic and transportation, visual resources, land use, socioeconomics and transmission line safety and nuisance must consider possible impacts on the minority/low-income population as part of their analysis. This "environmental justice" (EJ) analysis consists of identification of significant impacts (if any), identification of mitigation, and determination of whether there is a disproportionate impact if an unmitigated significant impact has been identified.

Because staff has not identified significant unmitigable impacts for the subjects listed above, staff believes that there are no environmental justice issues with this project.

CONCLUSION AND RECOMMENDATIONS

In summary, staff concludes that, with mitigation, the project would be in conformance with all Laws, Ordinances, Regulations and Standards (LORS) and would avoid significant environmental and system impacts. Staff recommends that, if the project is approved, the proposed conditions of certification included in the various technical areas be adopted to ensure that all potential impacts for both construction and operation are mitigated to the extent possible.

TRACY PEAKER PROJECT (01-AFC-16)
SUPPLEMENT TO STAFF ASSESSMENT

RESPONSE TO PUBLIC AND AGENCY COMMENTS

Below is an index of comments received from interested citizens and local governmental agencies for which a response is appropriate. A few of the questions are answered directly below but most are addressed in the applicable technical section/chapter cross-referenced below. Responses appearing in separate chapters are included under the heading "Response to Public and Agency Comments." Following the index is a copy of each interested citizen and public agency comment.

AGENCY COMMENTS

SAN JOAQUIN COUNTY DEPARTMENT OF PUBLIC WORKS

On October 31, 2001, staff received a letter from San Joaquin County with information about the County's requirements for the applicant to complete a Construction and Demolition Debris Waste Diversion Plan, a Solid Waste Operations Plan, and a response to "Requirements for Collection and Recycling" from the County's Ordinance Code, Chapter 9-1160. These comments are discussed in **WASTE MANAGEMENT**.

DEPARTMENT OF TOXIC SUBSTANCES CONTROL

On September 20, 2001, staff received a letter from the Department of Toxic Substances Control (DTSC) with some suggested conditions of certification. These comments are discussed in WASTE MANAGEMENT.

U.S. FISH AND WILDLIFE SERVICE

On January 8, 2002, staff received comments from the US Fish and Wildlife Service expressing concerns regarding the applicant's landscaping plan. These comments are addressed in the BIOLOGICAL RESOURCES Section.

CITY OF TRACY

On January 16, 2002, staff received a faxed version of a letter from the City of Tracy with comments on the Staff Assessment regarding land use. These comments will be addressed in the LAND USE section.

PUBLIC COMMENTS (NON-INTERVNORS)

WRITTEN COMMENTS

AKT Development

(see attached)

Tom Neuerburg

TN-1 *I am a firefighter EMS personnel - I am concerned regarding proper staffing equipment etc. to care for a large # of children, adults, etc. getting ill from any chemicals, fumes emitted. There is a large population in Tracy and not a lot of emergency personnel and equipment to handle a disaster of this magnitude.*

Children are more susceptible than adults! (See PUBLIC HEALTH and HAZARDOUS MATERIALS)

Jamie Neuerburg

JN-1 *My children attend a school designated in the EIR as being within 3 miles of the plant. I am concerned about my children's health and breathing polluted air (which is already noncompliant with state and Federal standards). How are you going to inform us of a leak, my children's school, everyone within the vicinity of any health hazards from problems at plant. How do you mitigate health issues for asthmatics and others with breathing problems. I know these chemicals/fumes cause cancer and I don't want my children exposed to such risks. There is a large number of those with Cancers who have been exposed to these chemicals in one way or another. Our children are more important than any need for a power plant. I would hope you would try and avoid an unnecessary plant. We moved away from these plants to a family community!* (See PUBLIC HEALTH, AIR QUALITY, and HAZARDOUS MATERIALS)

Blane Hill

BH-1 *Public Health* (See PUBLIC HEALTH)
BH-2 *Pollution* (See AIR QUALITY)
BH-3 *Noise* (See NOISE)

Lance K. Chun

LC-1 *TTP is classified as a "peaker" plant. The applicant is using the 4 month certification process to speed up their power plant construction. I think the applicant needs to be held responsible for the "peaker" plant classification. There are 8760 hours in a 365-day calendar year. At 4000 hours the peaker would be operating for 45.66% of the year. That's pretty close to half the year. At 8000 hours the peaker would be operating at 91.32% of the time. That would definitely not be a "peaker" plant for any rational being. Hence, I strongly believe that if the applicant wants to construct a "peaker" plant and use the quickest certification process of 4 months only, then it should be strictly held to be a "peaker" plant. Even 4000 hours seems to border on the outrageous side for a "peaker" plant. I would strongly urge the Staff to study this definition of "peaker" and put some strict guidelines on this definition. The applicant should definitely NOT be certified to operate the plant for more than 4000 hours a year. I suggest it should be certified for at most 2000 hours a year -- as it is being certified as a "peaker" plant. I realize that the applicant will not be deciding how often the plant runs and that the ISO will request they start or stop operations on any given day, but that in itself doesn't necessarily prevent this TPP from operating at 8000 hours. Hence, it must be stipulated as a certifiable requirement that this "peaker" plant NOT be able to operate for more than 2000 or 4000 hours. If the applicant wants to be certified for operations of 8000 hours, they should use another certification process which will require an approval period longer than 4 months.*

Response: You are correct in your observation that a plant that operates as many as 8,000 hours a year should not properly be referred to as a "peaker" plant, and it is unfortunate that the title of this project contains the word "peaker"

because the term is misleading. However, the legislation that allowed for the four-month approval process did not specify that a plant must be a peaker, only that it be a simple-cycle plant. Although a simple-cycle plant would normally operate as a peaker, this is not always the case. The applicant applied for approval from the Energy Commission under the four-month process and was initially granted "data adequacy" under the four-month provisions. The commission later had to move this project to the 12-month process, but the project is still being processed on an expedited schedule – a commission decision that cannot properly be addressed by staff.

The Energy Commission does not make a distinction between peakers and baseload facilities. Staff's analysis of a proposal for this, as for any other project, is an analysis of the worst case – in this case 8,000 hours of operation.

LC-2 *I don't understand why this project is being allowed to use it's technology (twin gas turbine engines) to operate as a peaker, which is capable of starting in 10 minutes, when the applicant has admitted that the ISO, in most instances, will notify them a day ahead to start operations. In fact, the applicant has conceded that the TPP will NOT be staffed 365 days a year. It will be staffed when operation is required. The applicant states that someone from another GWF plant will come to the TPP to operate this plant. So I do not understand the logic of designating this plant a peaker plant and allowing them to use this much less efficient generation technology when they will most likely not be employing this 10 minute quick start feature that is the sole benefit of this type of a plant. It just does NOT make logical sense to me.*

Response: Staff recognizes that the technology proposed by the applicant is not the most efficient technology for the purpose. However, there are no laws, ordinances, regulations, or standards, nor are there requirements under the California Environmental Quality act, that require the use of the most efficient technology available. When evaluating the efficiency of a project, staff can only look at the potential effects on the natural gas system and in this case has found no impacts.

LC-3 *With regards to the property value and how it will be affected by the TPP, it was suggested by an analysis done by the applicant that data suggests that property values has and will continue to rise in and around the Tracy area. They suggest that property values will not decline as a result of the TPP. That is very misleading. Of course property values will rise in this area. The Bay Area, being in such short supply of any kind of housing--be they affordable or not--compels some of that population to move to the closest city in SJ County--which is Tracy. Thus, of course property values in this area will continue to rise, due to the shear demand. But of course the TPP will negatively effect the potential prices of the property increase. If my home (1.5 - 2 miles NE of the TPP) were to sell for $400,000 if there wasn't a TPP, it would definitely sell for a lower price when the potential buyer finds out that a power plant is so close by. Everything else being equal, I definitely would not have purchased my home in Tracy in the March of 2000, had I known a power plant was going to be only 1.5 miles away from it.*

And if I did, I definitely would NOT have paid as much for it. The TPP will definitely effect the property values in the surrounding area. It may not be obvious due to the fact that housing is in such short supply in CA and the price of housing continues to increase, but the TPP absolutely will reduce the potential rise in property values--as compared to the same property if TPP did not existed. (See SOCIOECONOMICS)

LC-4 *With regards to air pollution. Ozone and PM(10) will increase in the areas surrouding TPP. While I fully understand the concept of pollution credits, and it may be helpful for the entire air region in the aggregate, it will certainly be worse for our immediate area. It may be justifiable to other people outside of Tracy to build this plant here, but it certainly is NOT justifiable to people living immediately around the TPP. No matter how minute the scientific evidence suggests the pollution to be, it nevertheless will be there. And we all can appreciate the difference between the theoretical where everything is 100% perfect and what happens in the real world where things can fail, safety procedures are neglected, and safety inspections are notified in advance. As Will of Staff stated himself during the workshop that he personally issued several citations for violations--during one of his previous jobs--to an industrial plant right next to the proposed TPP. Thus, given the real world with its imperfections, these power plants should not be built so close to residential zones.* (See AIR QUALITY)

Paula R. Giannini – Buenavista

PG-1 *As a citizen of this city and county I am deeply concerned about "Big Business" attitude toward human life and growing things. It seems as if air Pollution can be explained away by buying credits or mitigation. Air Pollution is "Severe" here in the San Joaquin County/Valley. This means the air is not healthy to breathe.*

Energy is required to be a productive society and is necessary. However, it is not necessary to place these energy producing facilities so close to human life. It is appalling and unacceptable to me that an incredible amount of attention can be paid to the well being of a kit fox, salamander and toads and not a mention of the health impacts on human beings. (See AIR QUALITY and PUBLIC HEALTH)

PG-2 *Air in the San Joaquin Valley has been defined as "Severe", placing an air pollutting business in an already polluted county an area appears irresponsible. On 1-7-02 Channel 13 News (10pm) report San Joaquin coutny/valley as the worst pollution in the nation, specifically worse that Los Angeles, Calif.* (See AIR QUALITY)

PG-3 *The emission of powerful toxins into our air is a concern, especially when a company decides to build its business incredibly close to residential areas. It appears to be an irresponsible act. The plant itself is not an aesthetically appealing structure.* (See PUBLIC HEALTH and VISUAL RESOURCES)

John C. Lee, M.A., C.D.T.

JL-1 *Thank you for your letter of December 30, 2001, in which you informed me of the TRACY PEAKER PROJECT. I regret to inform you that I have to protest about this project for the reasons as follows:*

1. *My property is located at 26788 S. Hansen Road, Tracy, which is less than 1,000 feet from the proposed project.*
2. *My property is intended to be used for the Dental Technology School, and the building project will commence sometime this year depending upon the school budget problem.*
3. *We are well aware of the California energy problem, but we are of opinion that the Technical Education in this state is as important as the other.*
4. *For the effective operation of our school, the problem of pollution and noise produced by the Tracy Peaker Project will be an intolerable handicap, and has to be reconsidered.*
5. *The students safety factors also has to be considered.*

(See LAND USE, AIR QUALITY, and NOISE)

Laura Swickard

SW-1 *I am terribly concerned that the proposed projects will heighten an already loud level of noise thus lowering property values and quality of life for the community. An ugly noise wall is not a good solution. Do you have any others?* (See NOISE)

SW-2 *I am deeply concerned and worried about the air quality in Tracy. I think the project will further impact this problem. Couple this with growing concerns about water quality and supply. Is this project worth it?* (See AIR QUALITY)

SW-3 *I am greatly concerned that tax money will not in all probability not go to the most impacted communities because of the county insistence of collecting and dispersing the monies. I want assurances that the money will benefit communities that suffer under this proposed plan.* (SEE SOCIOECONOMICS)

Don Washburn

DW-1 *Diesel exhaust contains carcinogens. How do you intend on removing them from our air?* (See AIR QUALITY)

DW-2 *Noise Pollution: How much more noise pollution will the proposed plants produce? Will the levels be detrimental to our health? Who makes this determination and how do they decide?* (See NOISE)

DW-3 *Other than the obvious pollution, how will the aesthetics of the area be effected and who makes this judgment? How will this lower/impact property value?* (See VISUAL RESOURCES)

Melinda Bettencourt

MB-1 *How will this effect the air quality of Tracy and how would this affect those persons who are already afflicted with respiratory problems? Will there be any long term effects?* (See AIR QUALITY and PUBLIC HEALTH)

MB-2 *City Growth: How will this effect the rapid growth of Tracy? Will property value decline? How will this effect local and incoming business owners?* (See SOCIOECONOMICS)

MB-3 *Agriculture: How will this effect the local farm life? How will the groundwater be affected? Will crop health be in jeopardy?* (See SOCIOECONOMICS, LAND USE, and SOIL & WATER RESOUCES)

Annaben Kazemi

AK-1 *Air Pollution: I am wondering how this project will effect the already poor quality of air in Tracy. How will our ozone be affected? What, if any, are the plans to help fix the air quality?* (See AIR QUALITY)

AK-2 *What are the alternatives to the peaker plants and have those alternatives been fully explored? Are the alternatives more environmentally friendly? What can be done to minimize the impact of the plants on the environment?*

Response: Peaker plants are loosely defined as those plants that can quickly and reliably start up and begin delivering electricity to the transmission grid in a very short time. These types of plants are very useful in providing the flexibility to electricity service providers in meeting expected and unexpected peaks in the demand for electricity. For example, during hot summer days, air conditioning use can often increase considerably through the afternoon, causing a sudden increase in the demand for electricity throughout a given region. More traditional base-load power plants often are not able to increase their output fast enough to meet this sudden increase in demand. It is at these times that system dispatchers call for extra peaking power, and peaking plant owners start up their plants and bring them on-line to meet that demand.

At present, there is no known reliable alternative generation that could meet all the requirements of a utility scale gas-fired peaker plant; i.e., that have the ability to quickly start up and generate power to the grid. There is some promise of developing technology being able to supply this service in the future, such as the use of fuel cell generating plants; but this technology is not yet developed to the point of being able to replace the gas-fired peaking plants that are in use today.

To minimize the environmental impacts of peaking plants, the San Joaquin Valley Air Pollution Control District requires plant owners to use Best Available Control Technology (BACT) to minimize the air emissions from these plants. Plant owners are also required to completely offset the air emissions from their power plants by obtaining air emissions offset credits. In addition, virtually all peaking power plants in California are fueled by natural gas, which is considered far less polluting than other fuels used by some peaking plants in other states, such as fuel oil, diesel fuel, petroleum distillate, kerosene or aviation jet fuel. Please see the Air Quality section of this Staff Assessment for a more complete explanation of the mandated mitigation measures that the Energy Commission will require to minimize the air quality impacts of the Tracy Peaker Power Plant.

AK-3 *Noise Pollution: Are there measures to lessen the noise levels of the plants? How is the issue of noise pollution being addressed? If one plant increases*

noise levels, how will the proposed 5-7 plants impact noise pollution? (See NOISE)

Cammy Stricker

CS-1 Air Pollution: How much will the quality of our air be affected and how will this impact people with respiratory illness? *(See AIR QUALITY)*

CS-2 *Alternative Sources: Have alternative sources been explored freely? Are any other power alternatives being considered?*

Response: The Energy Commission examined both different technologies and different locations as possible alternatives to building the Tracy Peaker Power Plant. Please see the Alternatives section of this Staff Assessment for a more complete analysis of the possible alternatives to the project. It is important to note that the Energy Commission does not have the authority to mandate the use of technologies or of site locations other than that proposed by the Applicant. If the Alternatives analysis revealed that other sites or the use of other technologies could feasibly avoid, eliminate or reduce to an insignificant level the impacts related to the proposed project that otherwise could not be avoided, eliminated or reduced to insignificance, the Commission only has the authority to deny the project (i.e., to choose the "No-Project" alternative to the proposed project). Commission Staff concluded in the Alternatives section that there is no known feasible alternative to the proposed project that would avoid, eliminate or reduce to an insignificant level any impacts that otherwise could not be avoided, eliminated or reduced to an insignificant level using the technology or location proposed by the Applicant in the Tracy Peaker Project proceeding.

CS-3 *Benefits: What are the major drawbacks to these plants and how do they justify the benefits?*

Response: The main drawback of gas-fired peaker power plants is that they are not as fuel-efficient and emit more polluting air emissions than some other types of power plants, such as natural gas-fired combined-cycle power plants. However, new gas-fired peaker plants in California are by comparison considerably cleaner than many power plants in use today, many of which were built in the 1950s. Peaker power plant owners are also required to use Best Available Control Technology and to fully offset their emissions before starting operations of their plants. As explained in the response to Comment AK-2, peaker plants currently fulfill a very important role in the provision of electricity service in California, and there are no known less-polluting plants that could feasibly fulfill this role in the near-future. Combined-cycle power plants, for example, cannot increase power output rapidly enough to meet the peak demand for electricity during any given afternoon. Also, any power plant that has fully offset its emissions would by definition not have any air quality impact, and therefore would not be any more or less polluting than any other type of power plant that also has fully offset its air emissions.

David Howey

DH-1 *Power Plant: Air pollution, air quality, health issue, property value, value of business interest.*

Response: The Energy Commission fully examined all potential impacts to the environmental and to human health that could occur from the construction of the proposed power plant (please see the Air Quality, Public Health, Hazardous Materials and Geology sections of this Staff Assessment for analysis of potential air quality, public health and safety concerns related to the Tracy Peaking Plant. Please see the response to comment DW-3 in the Socioeconomics Section of this Staff Assessment for a full discussion of potential effects on property values caused by the construction and operation of the TPP.

Laura Simon

LS-1 *I have serious concerns about the long-term effect on our air quality in Tracy (if this project is allowed to proceed). There are many residents (adults and children) who currently suffer from respiratory ailments due to the air quality in Tracy. Any further pollution may be detrimental to their health.* (See AIR QUALITY and PUBLIC HEALTH)

Barbara Shrew

BS-1 *Why 5 in such a concentrated area?*

Response: The comment does not specify what the concern is, but it can reasonably be presumed that she is asking about the siting of five industrial facilities in the immediate area of the proposed TPP, or the siting of five power plants in the general region of the proposed TPP. As to the former, it is the general policy of municipalities to group similar land uses together; in this case, San Joaquin County has designated that the land near the proposed TPP should be reserved for industrial uses. For the latter, the Energy Commission has no authority to decide the locations of power plants; it can only examine the plants proposed by applicants, which are free to chose the location and type of power plant they want to develop in order to meet their business objectives. However, because the emissions from any source can be individually insignificant but cumulatively considerable, the Commission and the San Joaquin Air Pollution Control District conduct analyses of the potential impacts that could be created by the proposed TPP both in isolation and in combination with other proposed or approved but not-yet constructed to ensure the project would not contribute to a cumulatively considerable impact to the environmental or to human health. Please see the "Cumulative Impacts" portions of the various sections in this Staff Assessment that examine potential impacts to the environmental or to human health.

Ranny Chaw

RC-1 *Power Plants: Where is the revenue going to be? How do I benefit from all this? Impact the plants will make towards property value.* (See SOCIOECONOMICS)

Mike Landis

ML-1 *Air Quality: Further air pollution is unacceptable* (See AIR QUALITY)

Ena Aguirre

EA-1 *Air Pollution: Concern that Tracy residents will have worse air quality than now if plant is sited.* (See AIR QUALITY)

EA-2 *Are there any birds, creatures that will be displaced by this plant?* (See BIOLOGICAL RESOURCES)

EA-3 *Economic Benefits: 250-300 jobs – construction, temporary. There are no permanent jobs available. I don't understand the economic benefits. There is no community benefits package that benefits organizations in Tracy that are involved in health/environment?* (See SOCIOECONOMICS)

EA-4 *Your plant will require 30 acre feet of water – daily, monthly, or yearly. This was not made clear to me at the presentation.* (See SOILS & WATER)

Dario Marenco

DM-1 *Recently an information presentation was made to the San Joaquin County Board of Supervisors regarding a 169-megawatt power plant by GWF Energy. They did not ask us either to support or to oppose this proposal, probably for a good reason. We already have a major problem now with air pollution in our immediate area as you are probably aware. GWF paid $6.5 million for pollution points for this plant. Needless to say, this will be another blow to air quality in this basin as there is a 5,000 ft. lid on the Valley. We desperately need more stringent requirements, not another power plant and more pollution. There are two (2) major proposed plants by CalPine in Alameda on our border where the prevailing winds will send the pollution to our air basin where it will remain trapped. We already have a severe out-of-compliance condition with air emissions in the Valley. Please do not add projects to further impact this pollution. I am enclosing some pertinent articles.* (See AIR QUALITY)

ORAL COMMENTS DURING THE INFORMATIONAL HEARING – NOVEMBER 28, 2001

Comments received during the informational hearing are addressed where appropriate in the individual technical sections. Following is a response to questions received at the hearing about why the project being classified as a "peaker" when the applicant plans to operate the power plant as many as 8,000 hours a year – 92% of the total hours in a year.

Response: Though the owner of the proposed TPP has requested authority to operate the plant as much as 8,000 hours per year, the actual hours it will run will be a function of demand for electricity and the cost of meeting that demand. During the recent power emergency, peaking plants that previously had run for only a small fraction of their permitted hours of operation suddenly were pressed into service to provide power nearly around the clock because demand for exceeded the available supply.

However, as more new power plants come on line to supply power to the grid, and as demand was reduced through the effective use of conservation and energy efficiency measures, system dispatchers have had less of a need for peaker plants in a base-load manner, and are able to meet demand using more efficient power plants. Whether the

Tracy Peaker Project would run only a few hours per day or would run for 8,000 hours per year would largely depend on the continual balance of supply and demand for electric power.

AIR QUALITY

Supplemental Testimony of William Walters

Page 5-20 – Construction (bullet 1, line 1)
Strike: "9 acres"
Insert: "10.3 acres"

Page 5-20 – Construction (bullet 1, line 1)
Strike: "5.2 acres"
Insert: "13.4 acres"

Page 5-20 – Construction (bullet 1, line 2)
Strike: "13.2 acres"
Insert: "5.2 acres"

Page 5-31 – Cumulative Impacts (line 1)
After: "below,"
Insert: "(pp. 5-50 – 5-52)

Page 5-31 – Cumulative Impacts (line 7)
Strike: "these"
Insert: "the"

Page 5-31 – Cumulative Impacts (line 8)
After: "projects"
Insert: "analyzed"

Page 5-46 – Air Quality: Table 25 (footnotes)
Strike 2nd footnote "b"
Insert: "c"

Page 5-6 – AQ-C4
Incorporate the following marked changes:

AQ-C4 The project owner shall surrender to the District emission offsets ~~reduction credits~~ in the following amounts, in addition to those listed in Condition AQ-62, to fully mitigate project emissions:

	Required ~~ERCs after application of~~ Ooffsets ~~ratios~~ (lbs/quarter)			
Pollutant	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
~~NO_x~~	~~71,704~~	~~71,704~~	~~71,756~~	~~71,756~~
CO	35,768	35,768	35,852	35,852
PM_{10}	7,300~~41,200~~	7,300~~41,200~~	7,300~~41,200~~	7,300~~41,200~~
VOC	5,000~~6,686~~	5,000~~6,680~~	5,000~~6,680~~	5,000~~6,686~~
SO_2	2,800	2,800	2,800	2,800

This condition serves to augment ~~replace~~ the ERC requirements listed in District condition **AQ-62**, by adding the ~~additional~~ CEQA mitigation proposed by the Applicant for PM_{10}, VOC, CO and SO_2 emissions. ~~The values listed above are discounted for distance offset ratios required by Rule 2201, assume Rule 2201 allowed inter-quarter transfers, and assume SO_2 for PM_{10} distance/interpollutant offset ratio as specified in **AQ-63**.~~ Also, in order to provide additional mitigation of construction PM_{10} emissions the project owner shall surrender the PM_{10} emission offsets, required in this condition, and those required in condition AQ-62, prior to initiating construction.

Verification: At least 5 days prior to commencing construction, the project owner shall provide to the CPM a copy of the documentation from the District proving that the PM_{10} emission offsets have been surrendered, and at least 15 days prior to initial turbine startup, the project owner shall provide to the CPM a copy of the documentation from the District proving that all of the emission offsets, as required in this condition and condition AQ-62,~~required emission reduction credits~~ have been surrendered.

Page 5-58 – Before the heading "**Oral Comments from the Public**"

Insert the following additional responses to public comments:

John C. Lee, M.A., C.D.T.

JL-1 *Thank you for your letter of December 30, 2001, in which you informed me of the TRACY PEAKER PROJECT. I regret to inform you that I have to protest about this project for the reasons as follows:*

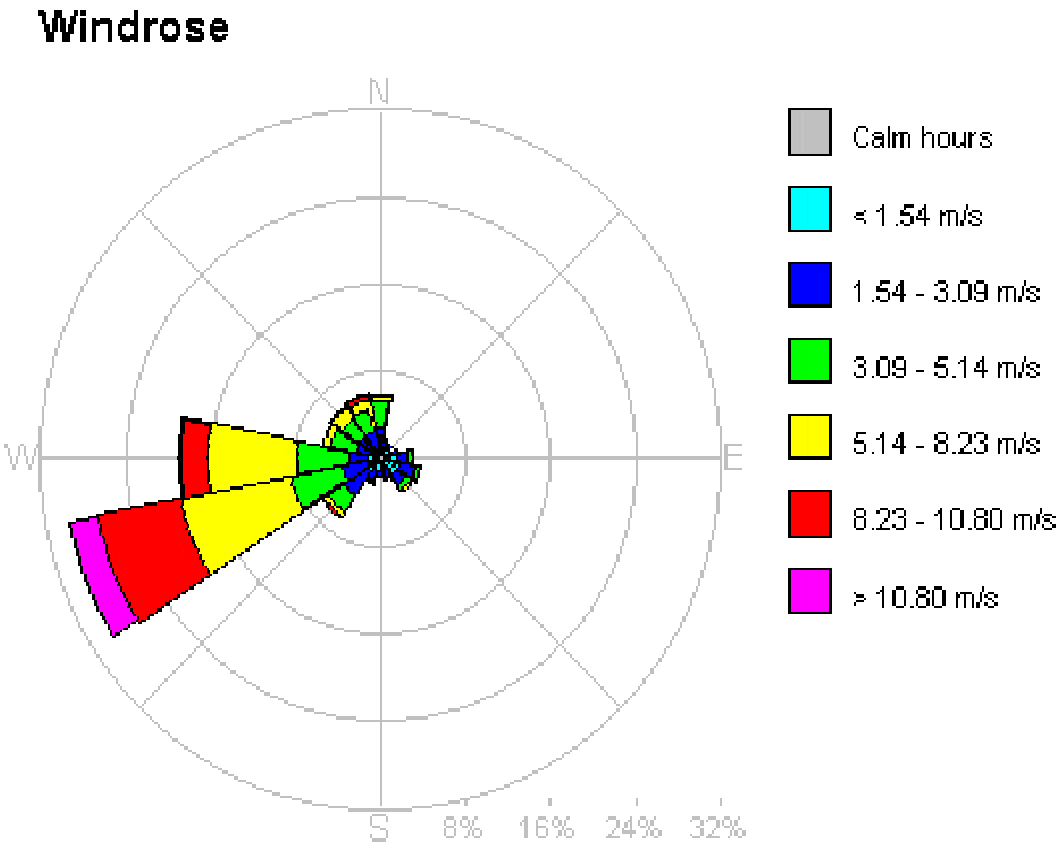
1. *My property is located at 26788 S. Hansen Road, Tracy, which is less than 1,000 feet from the proposed project.*
2. *My property is intended to be used for the Dental Technology School, and the building project will commence sometime this year depending upon the school budget problem.*
3. *We are well aware of the California energy problem, but we are of opinion that the Technical Education in this state is as important as the other.*
4. *For the effective operation of our school, the problem of pollution and noise produced by the Tracy Peaker Project will be an intolerable handicap, and has to be reconsidered.*
5. *The students safety factors also has to be considered.*

Response: Your comments indicate that, based on your current proposed project schedule, the Dental Technology School will not be in operation until after the TPP would be built and operating. Therefore, there will be no construction related impacts from the TPP on the Dental Technology School.

The magnitude of the project's operating impacts is a function of the distance and direction from the project site and more importantly by elevation. The wind directions at the project site (see attached plume rose showing the "from" wind directions) are from the west-southwest to the east-northeast – away from your proposed Dental Technology School.

The TPP simple cycle turbines have very high exhaust temperatures, which cause the plumes to rise high over the valley floor. The center of the dispersed turbine plumes cannot reach the ground of the valley floor anywhere near the project site. Due to the turbine exhaust plume rise, the modeling results predict that the highest pollutant impacts from the turbines occur in the elevated terrain (i.e. terrain that is significantly higher than the top of the turbine exhaust stacks) several miles to the northwest, west, and southwest of the site. The proposed dental school is not located at elevated terrain. Therefore, the TPP should not cause significant air quality impacts to occur at the proposed Dental Technology School site.

Tracy Ambient Monitoring Station
Windrose of Wind Direction and Wind Speed
Winds From the 16 Cardinal Wind Directions
Average Hourly Wind Conditions 1997 – 1999



It should be noted that this windrose was developed from the hourly meteorological data collected at a monitoring site located adjacent to Patterson Pass Road and the I-580, which is the closest meteorological monitoring site to the proposed project location.

Dario Marenco

DM-1 *Recently an information presentation was made to the San Joaquin County Board of Supervisors regarding a 169-megawatt power plant by GWF Energy. They did not ask us either to support or to oppose this proposal, probably for a good reason. We already have a major problem now with air pollution in our immediate area as you are probably aware. GWF paid $6.5 million for pollution points for this plant. Needless to say, this will be another blow to air quality in this basin as there is a 5,000 ft. lid on the Valley. We desperately need more stringent requirements, not another power plant and more pollution. There are two (2) major proposed plants by CalPine in Alameda on our border where the prevailing winds will send the pollution to our air basin where it will remain trapped. We already have a severe out-of-compliance condition with air emissions in the Valley. Please do not add projects to further impact this pollution. I am enclosing some pertinent articles.*

Response: This facility is subject to stringent air pollution control requirements in the form of Best Available Control Technology (BACT) and emission offset requirements, which were developed in order to result in a net air quality benefit. Please also see the Response to Public Comments in the Staff Assessment and those provided below.

Jamie Neuerburg

JN-1 *My children attend a school designated in the EIR as being within 3 miles of the plant. I am concerned about my children's health and breathing polluted air (which is already noncompliant with state and Federal standards). How are you going to inform us of a leak, my children's school, everyone within the vicinity of any health hazards from problems at plant. How do you mitigate health issues for asthmatics and others with breathing problems. I know these chemicals/fumes cause cancer and I don't want my children exposed to such risks. There is a large number of those with Cancers who have been exposed to these chemicals in one way or another. Our children are more important than any need for a power plant. I would hope you would try and avoid an unnecessary plant. We moved away from these plants to a family community!*

Response: This comment primarily refers to public health concerns. However, it should be noted that this project would be controlled to the greatest feasible extent, including the control of air toxics. While the project

is not subject to Maximum Achievable Control Technology (MACT) requirements for its air toxic emissions (it does not trigger the emission level requirements of MACT), the proposed oxidation catalyst control device would be expected to meet USEPA requirements for MACT for Gas Turbines. Oxidation catalysts are designed to oxidize CO emissions to CO_2 and also oxidize a portion of the remaining unburned hydrocarbons in the exhaust, which comprise the majority of the uncontrolled air toxics that are emitted from the turbines. USEPA states in a 1999 memorandum, that oxidation catalysts can reduce the turbines CO emissions by up to 90% and the formaldehyde and other organic air toxics species emissions by up to 85% to 90% by weight.

Blane Hill

BH-2 *Pollution*

Response: While your comment is not specific, as noted in the other responses, the project's air pollution sources would be controlled to the greatest feasible extent and emissions fully offset.

Lance K. Chun

LC-4 *With regards to air pollution. Ozone and PM(10) will increase in the areas surrouding TPP. While I fully understand the concept of pollution credits, and it may be helpful for the entire air region in the aggregate, it will certainly be worse for our immediate area. It may be justifiable to other people outside of Tracy to build this plant here, but it certainly is NOT justifiable to people living immediately around the TPP. No matter how minute the scientific evidence suggests the pollution to be, it nevertheless will be there. And we all can appreciate the difference between the theoretical where everything is 100% perfect and what happens in the real world where things can fail, safety procedures are neglected, and safety inspections are notified in advance. As Will of Staff stated himself during the workshop that he personally issued several citations for violations--during one of his previous jobs--to an industrial plant right next to the proposed TPP. Thus, given the real world with its imperfections, these power plants should not be built so close to residential zones.*

Response: This plant is situated next to the Owens-Brockway glass bottle manufacturing plant and the Tracy biomass to energy plant. These sites, particularly the Owens-Brockway site have been in existence for quite some time, so any property owner in the area of the project site would be fully aware of the heavy industrial land use and associated major air pollution emission sources that currently exist. Staff does not choose the site for the power plant; that is done by the Applicant. Staff reviews the proposed power plant and identifies, in the context of the proposed plant description and proposed power plant site, whether the proposal is in compliance with all

Laws, Ordinances, Regulations and Statutes (LORS). Staff conducts a third party independent review, and cannot show favoritism in its analysis towards the project being reviewed. The Commissioners, who make the decision on whether to license the plant hear all of the evidence as well as the communities' concerns. It is suggested that you voice your concerns to the Commissioners during the project's upcoming hearings.

The TPP does not emit ozone it emits ozone precursors in the form of NO_x and VOC. The reactions that cause the formation of ozone are complex do not occur at the point of any one emission source (i.e. regional in nature). Additionally, the NO_x emission which at the point of release are at least 50% NO (nitric oxide) will act to initially scrub ozone in the TPP turbine exhaust plumes by the following reaction:

$$NO + O_3 \rightarrow NO_2$$

Additionally, the plant emits such a small fraction of the total ozone precursor pollutants in the site area that, even excluding the ozone scrubbing potential of the NO_x emissions, there would be no appreciable increase in ozone caused by the project's ozone precursor emissions. However, this plant does cause a cumulative increase in ozone precursors, which is the rationale for requiring the NO_x and VOC emissions to be offset.

Staff agrees that the project's PM_{10} emissions will cause a marginal increase in the local PM_{10} concentration. However, the project's operating impacts will not measurably increase the PM_{10} concentrations in the populated areas near the project.

Also please see the response to PG-2.

Paula R. Giannini – Buenavista

PG-1 *As a citizen of this city and county I am deeply concerned about "Big Business" attitude toward human life and growing things. It seems as if air Pollution can be explained away by buying credits or mitigation. Air Pollution is "Severe" here in the San Joaquin County/Valley. This means the air is not healthy to breathe.*

Energy is required to be a productive society and is necessary. However, it is not necessary to place these energy producing facilities so close to human life. It is appalling and unacceptable to me that an incredible amount of attention can be paid to the well being of a kit fox, salamander and toads and not a mention of the health impacts on human beings.

Response: Please see the responses to LC-4 and PG-2.

PG-2 *Air in the San Joaquin Valley has been defined as "Severe", placing an air polluting business in an already polluted county an area appears irresponsible. On 1-7-02 Channel 13 News (10pm) report San Joaquin county/valley as the worst pollution in the nation, specifically worse that Los Angeles, Calif.*

Response: Siting of stationary sources, including power plants, can occur regardless of the area's attainment status; however, additional emission controls and emission reductions (i.e. offsets) are required for areas that are not in attainment. For example, there are several new power plants being proposed in the South Coast Air Basin (i.e. Los Angeles) even though it is designated as an Extreme ozone nonattainment area (i.e. one step worse than Severe).

The air quality in the Valley has over the past 20 years been slowly improving, not getting worse. The redesignation of the San Joaquin Valley Air Basin ozone non-attainment status from Serious to Severe was not due to increasing pollutant levels; rather, USEPA redesignated the ozone nonattainment status to Severe because the Valley's ozone concentrations were not decreasing fast enough (i.e not showing enough improvement) to meet the air quality improvement progress goals necessary to maintain the Serious designation.

Any comparison of the San Joaquin Valley air quality with the air quality in the South Coast Air Basin (i.e. Los Angeles) needs to be taken in its proper context. The air quality in the northern San Joaquin Valley (e.g. Tracy and San Joaquin County) is considerably better than the air quality in the southern San Joaquin Valley (e.g. Bakersfield) and is also considerably better than the air quality in the inland areas of the South Coast Air Basin (e.g. Riverside and San Bernardino). This project meets all required control technology requirements and exceeds the emission offset requirements of the SJVAPCD and the Commission. This project would, if it were sited in Los Angeles, meet all of the control technology and offset requirements of the South Coast Air Quality Management District.

Page 5-61 – Before the heading **"Conclusions and Recommendations"**
Insert the following additional responses to oral public comments:

Listed below are paraphrased oral comments expressed by the public during the Staff Assessment Workshop. Staff has attempted to provide a response for each type of question or comment posed if that question was not already addressed in the Staff Assessment, or in the responses given above. The Applicant's response during the hearing or workshop is also provided.

A member of the public asked about the particulate emission from the plant and how their deposition might affect health.

Response: The TPP's particulate emissions will consist of very fine very light particulate that due to the particle characteristics and significant exhaust plume rise should not under normal dry weather conditions deposit in significant quantities near the TPP site. The particulate deposition will occur over a large distance downwind of the site.

A member of the public asked that if the facility were to have excessive emissions, how would this be discovered.

Response: The TPP will be required to have continuous emission monitors that will monitor the NO_x and CO emissions among other exhaust and operating parameters. Direct violations of the NO_x and CO emissions will be discovered by the Continuous Emissions Monitoring System (CEMS) and the overall combustion performance and ammonia slip can be determined using these monitored values (i.e. poor combustion will cause excessive CO emissions and an excessive NH_3 input/NO_x emission ratio will identify excessive ammonia slip emissions). Additionally, the public can report any nuisance conditions resulting from the operation of the plant, including visible emissions, to the District and/or the CEC Compliance Project Manager for investigation.

Page 5-67 – AQ-4 Verification (line 2)

Delete: "quarterly reports of Condition AQ-40."
Insert: "annual reports of AQ-29."

BIOLOGICAL RESOURCES

Revised Testimony of Natasha Nelson and Nick Kautzman

Note: This section replaces the Biological Resources section from the Staff Assessment filed December 28, 2001. The changes are indicated in underline/strikeout.

INTRODUCTION

This section provides the California Energy Commission (Energy Commission) staff's analysis of potential impacts to biological resources from GWF Energy, LLC's (applicant's) proposal for the construction and operation of Tracy Peaker Project (TPP). The analysis is directed toward impacts to state and federally listed species, species of special concern, wetlands, and other areas of critical biological concern. Information presented in this section deals with the affected biotic community, the potential environmental impacts associated with the construction and operation of the proposed project, and where necessary, specifies mitigation planning and compensation measures to reduce potential impacts to non-significant levels. This document also determines compliance with applicable laws, ordinances, regulations and standards (LORS), and specifies conditions of certification.

This analysis is based, in part, on information provided as of August 16, 2001 from GWF's Application For Certification (AFC); GWF's supplement to Data Adequacy submitted October 9, 2001; GWF's Wet Weather Construction Contingency Plan submitted December 11, 2001; letter from Dr. Mark Jennings submitted December 26, 2001 (Jennings 2001); responses to Data Requests submitted on November 9, 2001 and December 28, 2001; staff's November 14, 2001 site visit; the Data Response workshop on November 20, 2001; votes of the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP) Technical Advisory Committee on October 10, 2001, and San Joaquin Council of Governments, Inc. on October 25, 2001; a discussion with San Joaquin Council of Governments Gerald Park on November 16, 2001 (Park 2001); a discussion with California Department of Fish and Game on September 20, 2001 (CDFG 2001); a discussion with Cheryl Johnson of Caltrans on January 10, 2002 (Johnson 2002); and a discussion with U.S. Fish and Wildlife Service on September 19, 2001 (USFWS 2001b) and January 3, 2002 (USFWS 2002a); and letter from USFWS on January 8, 2002 (USFWS 2002b).

LAWS, ORDINANCES, REGULATION AND STANDARDS (LORS)

The applicant would need to abide by the following laws, ordinances, regulations, and standards during project construction and operation.

FEDERAL

- **Clean Water Act of 1977**

  Title 33, United States Code, sections 1251-1376, and Code of Federal Regulations, part 30, section 330.5(a)(26), prohibit the discharge of dredged or fill material into the waters of the United States without a permit.

- **Endangered Species Act of 1973**
  Title 16, United States Code, section 1531 et seq., and Title 50, code of Federal Regulations, part 17.1 et seq., designates and provides for protection of threatened and endangered plant and animal species, and their critical habitat.
- **Migratory Bird Treaty Act**
  Title 16, United States Code, sections 703-712, prohibit the take of migratory birds.

STATE

- **California Endangered Species Act of 1984**
  Fish and Game Code section 2050 et seq. protect California's rare, threatened, and endangered species.
- **Nest or Eggs-Take, Possess, or Destroy**
  Fish and Game Code section 3503 protects California's birds by making it unlawful to take, possess, or needlessly destroy the nest or eggs of any bird.
- **Birds of Prey or Eggs-Take, Possess, or Destroy**
  Fish and Game Code section 3503.5 protects California's birds of prey and their eggs by making it unlawful to take, possess, or destroy any birds of prey or to take, possess, or destroy the nest or eggs of any such bird.
- **Migratory Birds-Take or Possession**
  Fish and Game Code section 3513 protects California's migratory birds by making it unlawful to take or possess any migratory non-game bird as designated in the Migratory Bird Treaty Act or any part of such migratory non-game bird.
- **Fully Protected Species**
  Fish and Game Code sections 3511, 4700, 5050, 5515 prohibit take of animals that are classified as Fully Protected in California.
- **Significant Natural Areas**
  Fish and Game Code section 1930 et seq. designates certain areas such as refuges, natural sloughs, riparian areas and vernal pools as significant wildlife habitat.
- **Native Plant Protection Act of 1977**
  Fish and Game Code section 1900 et seq. designates state rare, threatened, and endangered plants.
- **California Code of Regulations**
  Title 14, sections 670.2 and 670.5 list animals of California designated as threatened or endangered.
- **Regional Water Quality Control Board**
  To verify that the federal Clean Water Act permitted actions comply with state regulations, the project owner would be required to get a Section 401 certification from the San Francisco Bay Regional Water Quality Control Board (RWQCB). The Regional Board provides its certification after reviewing the federal Nationwide Permit(s) provided by the U.S. Army Corp of Engineers.

LOCAL

- **San Joaquin County General Plan**
  The County General Plan provides for the protection of several habitats of major importance, as well as to protect and improve the County's vegetation, fish, and wildlife resources. The Plan also seeks to provide for undeveloped open space for nature study, protection of endangered species, and preservation of wildlife habitat.

SETTING

REGIONAL AND LOCAL

The proposed TPP site and linear facility routes would be located in the northern San Joaquin valley, southwest of the City of Tracy, California in western San Joaquin County. The San Joaquin valley has a Mediterranean climate characterized by hot, dry summers and cool, moist winters. Historically the San Joaquin valley contained many natural habitats that supported a variety of plant and animal species. Agricultural activities and urbanization have reduced these habitats to small fragmented areas scattered throughout the valley. The habitat loss and fragmentation has resulted in the extinction of many plant and wildlife species, and has reduced the populations of many others to the point that Federal or State protection is required.

The area surrounding the project site is predominately agriculture/rangeland, with commercial/industrial development to the north and residential development to the east (City of Tracy). The area is targeted for future urban growth based on the land use designations outlined in the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP; SJMSCP 2000). Although the area around the project site has been highly modified from its original state, several special status plant and animal species are known to, or may occur in the project vicinity. A list of these species is presented in **Table 1**, below.

In California, the U. S. Fish and Wildlife Service (USFWS) has published over 10 recovery plans, most of which cover a complimentary set of species that occur on a county-wide or region-wide basis. Recovery plans help the USFWS and other agencies identify threats and prioritize tasks to reduce those threats. Typically, the USFWS designates critical habitat when a species is not adequately protected by existing federal and state agency owned lands. Designating critical habitat also concentrates recovery efforts to the most essential areas, serves an educational purpose, and can prevent inadvertent harm to remaining habitat by individuals.

The USFWS reviewed the recovery of the San Joaquin kit fox, 10 listed species, and 23 candidates or species of concern within the *Recovery Plan for Upland Species of San Joaquin Valley California* (USFWS 1998). The majority of the Plan's species occur in the arid grasslands and scrublands of the San Joaquin valley, or in the adjacent foothills and valleys. Conversion of this habitat to agricultural and urban uses is the largest threat to these species' recovery. San Joaquin kit fox is used as an umbrella species because it occurs in almost all the natural communities used by the other species. Thus, protection of the kit fox is likely to aid other species. Because of its importance as

a predator, the kit fox is also reviewed as a keystone species, and its protection is given priority over other species.

The USFWS is a participant in the San Joaquin Kit Fox Planning and Conservation Team (Team) a partnership of kit fox experts and federal, state, and local jurisdictions. The Team has identified several migration corridors in the Tracy area that are important for kit fox recovery. Both the Delta Mendota Canal and the Union Pacific Railroad are considered important migration corridors by the Team (Cheryl Johnson, personal communication 2002).

The draft recovery plan for California red-legged frog was released in May 2000 (USFWS 2000). The goals of the plan are to de-list the species by protecting known populations and reestablishing others, protecting habitat (core, migrating), and promoting management actions that stop threats. The Recovery Plan designated the Corral Hollows watershed as a "Core Area" for the frog. Corral Hollows is 1.5 miles south of the TPP, on the west-side of Highway 580. Core areas represent the areas where restoration of habitat is most feasible, where pilot reestablishment efforts are most likely to have success, and where natural recolonization is expected (USFWS 2000).

In March 2001, the USFWS designated 4 million acres of California as critical habitat for the California red-legged frog (USFWS 2001a). The California red-legged frog requires both aquatic and upland habitats. The closest critical habitat to the TPP is Unit 15 (East Bay-Diablo Range Unit), which covers 1 million acres of watersheds within eight central coast counties. The Corral Hollows watershed, in the southwestern tip of San Joaquin County, is part of Unit 15.

BIOLOGICAL RESOURCES - Table 1
Sensitive Species Known to Occur in the Project Vicinity
(GWF 2001a)

Sensitive Plants	Status*
Large-flowered fiddleneck (*Amsinckia grandiflora*)	FE/CE/CNPS 1B
Alkali milk-vetch (*Astragalus tener* var. *tener*)	FSC/CNPS 1B
Heartscale (*Atriplex cordulata*)	FSC/CNPS 1B
Brittlescale (*Atriplex depressa*)	FSC/CNPS 1B
San Joaquin spearscale (*Atriplex joaquiniana*)	FSC/CNPS 1B
Big-scale balsamroot (*Balsamorhiza macrolepis* var. *macrolepis*)	FSC/CNPS 1B
Big tarplant (*Blepharizonia plumosa* ssp. *Plumosa*)	FSC/CNPS 1B
Congdon's tarplant (*Hemizonia parryi* ssp. *congdonii*)	FC/CNPS 1B
Slough thistle (*Cirsium crassicaule*)	FSC/CNPS 1B
Hipsid bird's-beak (*Cordylanthus mollis ssp. hispidus*)	FSC/CNPS 1B
Palmate-bracted bird's-beak (*Cordylanthus palmatus*)	FE/CE/CNPS 1B
Interior California larkspur (*Delphinium californicum ssp. interius*)	FSC/CNPS 1B
Recurved larkspur (*Delphinium recurvatum*)	FSC/CNPS 1B
Contra Costa buckwheat (*Eriogonum truncatum*)	CNPS 1A
Diamond-peteled California poppy (*Eschscholzia rhombipetala*)	FSC/CNPS 1B
Fragrant fritillary (*Fritillaria lilacea*)	FSC/CNPS 1B
Boggs Lake hedge-hyssop (*Gratiola heterosepala*)	FSC/CE/CNPS 1B
Diablo helianthella (*Helianthelle castanea*)	FSC/CNPS 1B
Santa Cruz tarweed (*Holocarpha macradenia*)	FT/CE/CNPS 1B
Contra Costa goldfields (*Lasthenia conjugens*)	FE/CNPS 1B
Showy madia (*Madia radiata*)	FSC/CNPS 1B
Colusa grass (*Neostapfia colusana*)	FT/CE/CNPS 1B
Bearded popcornflower (*Plagiobothrys hystriclus*)	CNPS 1A
Adobe sanicle (*Sanicula maritima*)	FSC/CR/CNPS 1B
Wright's tricoronis (*Trichoronis wrightii var. wrightii*)	CNPS 2
Showy Indian clover (*Trifolium amoenum*)	FE/CNPS 1B
Cape-fruited tropdocarpum (*tropidocarpum capparideum*)	CNPS 1A
Geene's tuctoria (*Tuctoria greenei*)	FE/CNPS 1B

Sensitive Wildlife	Status*
Western spadefoot (*Scaphiopus Hammondii*)	CSC
California horned lizard (*Phrynosoma coronatum frontale*)	CSC
California red-legged frog (*Rana aurora draytonii*)	FT/CSC
California tiger salamander (*Ambystoma californiense*)	FPT/CSC
California horned lark (*Eremophila alpestris actia*)	CSC
Western burrowing owl (*Athene cunicularia*)	FSC/CSC
Loggerhead shrike (*Lanius ludovicianus*)	CSC
LeConte's thrasher (*Toxostoma lecontei*)	CSC
Tricolored blackbird (*Agelaius tricolor*)	CSC
San Joaquin pocket mouse (*Perognathus inornatus*)	CSC
American badger (*Taxidae taxus*)	CSC
San Joaquin kit fox (*Vulpes macrotis mutica*)	FE/CT

*STATUS LEGEND – FE = Federally listed Endangered; FT = Federally listed Threatened; FPT = Federal proposed Threatened; FSC = Federal Species of Concern; California Native Plant Society (CNPS) List 1A = Plants presumed extinct in California; List 1B = Rare and endangered plants of California and elsewhere; List 2 = Plants rare, threatened, or endangered in California but more common elsewhere; CE = State listed Endangered, CT = State listed Threatened; CR = State listed Rare; and CSC = State Species of Special Concern.

PROJECT SITE

The proposed TPP project area would be located on a 40-acre parcel in an unincorporated portion of southwestern San Joaquin County. Historically, the TPP site has been used to grow a variety of irrigated crops. The TPP site is bordered on the southwest by the Delta Mendota canal, to the south, east and northwest by agricultural lands, and to the north by the Union Pacific (UP) railroad. The Owens-Brockway glass container manufacturing plant and the Nutting-Rice warehouse are immediately north of the UP railroad. The TPP would be placed on 10.3 acres of the 40-acre site, near the center of the southwest border adjacent to the Delta Mendota canal. An additional 18.4 acres to the north of the TPP site would be used for temporary construction laydown and parking.

Several plant and animal species listed under state and/or federal Endangered Species Acts potentially occur in the project region (**Table 1**). Of these species, however, only two, the federally endangered and state threatened San Joaquin kit fox (*Vulpes macrotis mutica*), and the federal and state species of concern Western burrowing owl (*Athene cunicularia*) are expected to potentially occur within the TPP study area. San Joaquin kit fox may utilize the project area and surrounding agricultural areas as a migration corridor, and a foraging location. A kit fox core corridor was established as part of the SJMSCP. The corridor is located to the west of the TPP site and is separated from the site by the Delta Mendota canal and I-580. ~~While kit fox are highly mobile and undoubtedly utilize areas not included in the established corridor, the presence of the canal and the interstate effectively isolate the TPP project area from the established corridor.~~ Kit fox are highly mobile and undoubtedly utilize areas not included in the established corridor. The San Joaquin Kit Fox Planning and Conservation Team has identified the Delta Mendota Canal and the Union Pacific (UP) railroad as important migration corridors (Cheryl Johnson, personal communication 2002).

The Delta Mendota canal and UP railroad embankments have both been colonized by ground squirrels. Western burrowing owl are known to occupy ground squirrel burrows and so may be present at or near the site. Burrowing owl may also use the TPP project area for foraging. While no burrowing owl were observed by the applicants biologists during their May 2001 surveys, there is the potential for them to occur on the site or in the immediate area.

Wildlife species of commercial and/or recreational value may occur in the project area. Bird species that provide hunting opportunities for sportsmen such as mourning dove (*Zenaida macroura*), and ring-necked pheasant (*Phasianus colchicus*) are know to occur in the vicinity of the project and may occasionally occur on the TPP site. The TPP will remove a very small amount of habitat (12.2 acres) compared with the large amount of similar habitat surrounding the project. The TPP site at present offers little in the way of hunting opportunities based on its close proximity to residential and commercial properties.

The construction of the proposed TPP site could result in the introduction of invasive plant species. The TPP site and linear routes are already highly disturbed and, to some extent, have been colonized by a variety of invasive plants. However, the widespread

use of herbicides associated with agricultural practices surrounding the TPP site will likely limit the spread of invasive plant species in the vicinity of the TPP.

Linear Facilities

All linear facilities that would serve the proposed simple-cycle power plant are located in San Joaquin County and would be relatively short. No linears will be required for the transmission and natural gas components of the TPP project, since the interconnections will be onsite. ~~The TPP project would require the improvement of 1.1-miles of an existing road and the installation of a 1,470-foot water supply pipeline.~~ The TPP project would require the improvement of 1.1-miles of an existing road for primary plant access, and the temporary use of approximately 4,200 feet of an existing unimproved farm road for a 3 to 4 week period at the start of construction. The project would also require the installation of a 1,470-foot water supply pipeline.

Transmission Lines

The TPP project would tie into an existing 115kV line that runs through the project site. The new line would not impact any additional area not covered under the TPP site.

Storm Water Drain

All storm water would be collected and retained onsite in an evaporation/infiltration detention basin. The detention basin would be located on the TPP site. The TPP site would be fenced, which will limit access to most terrestrial organisms, but birds will be able to access the basin.

Natural Gas Line

The TPP project would tie into an existing PG&E natural gas transmission pipeline that crosses beneath the TPP project site. The gas pipeline would be within the area described for the power plant site, and the construction and tie in would not impact any additional area.

Roads

The project site would be accessed by an improved asphalt road that would run 3,300 feet south from W. Schulte road to the TPP project site. At present the road is used for accessing the agricultural area around the Nutting Rice warehouse. The road would be widened by approximately 5-feet and paved. A change in alignment would occur where the road crosses the train tracks in order to avoid a parcel of Bureau of Reclamation land northwest of the TPP parcel. The road is bordered on the west by an abandoned federal facility that is dominated by nonnative grassland, and on the east by agricultural fields (alfalfa), and the Nutting-Rice warehouse. The improvement of the road would permanently disturb 1.9 acres of land and temporarily disturb another 1.5 acres. Potential kit fox burrows were observed along the proposed road alignment by the applicant's biologists during their May 2001 surveys.

During the first 3 to 4 weeks of project construction, access to the site would be along an alternative route while construction of the railroad crossing on the primary access road is completed. The applicant addressed four possible alternative temporary access routes (GWF 2001c) and the applicant eliminated two. The two remaining routes;

Alternative C and Alternative D, would both access the proposed site from Lammers road to the east of the proposed TPP site. The difference between the access routes is their starting point from Lammers road. Alternative C is north of Alternative D by approximately 1,600 feet. The two proposed routes then meet and follow the same road to the project site. Alternative C passes adjacent to an agricultural runoff area, near its intersection with Lammers road. Both proposed access routes are bordered mainly by agricultural fields, and no undisturbed habitat is present along either alignment. The applicant has indicated that no improvements to the proposed temporary access road will be necessary, other than graveling which may be needed for dust suppression (Grattan 2001).

Waterlines

The TPP would obtain water from the Delta Mendota canal via a 1,470-foot water line that would originate at an existing turnout of the Delta Mendota canal and run north underground to the TPP site. The water line would run between an existing farm road and an agricultural field and would result in the temporary disturbance of 0.6 acres. The water line route is in close proximity to the Delta Mendota canal embankment, which has been colonized by ground squirrels; burrowing owl have been known to utilize ground squirrel burrows. No burrowing owl were observed by the applicants biologists during their May 2001 surveys. The canal embankment may also provide habitat for kit fox, though no individuals or potential burrows were observed by the applicant's biologists.

Worker Parking and Staging Areas

The construction laydown and worker-parking area would be located to the ~~west~~ north of and adjacent to the TPP site. The lay down and parking area as well as the TPP site would be fenced off with a temporary chain link fence. During the November 20, 2001 Data Response workshop, staff discussed with the applicant whether the fence would be installed in such a manner as to exclude moderately small mammals such as the kit fox. The applicant stated that it would be and that daily inspections would be conducted to ensure that the fence is continuing to exclude kit fox from the site.
The laydown and worker parking areas would temporarily disturb 18.4~~5.2~~ acres of land, which would be returned to agricultural production after construction of the TPP facility is completed.

ANALYSIS AND IMPACTS

PROJECT SPECIFIC IMPACTS

The Environmental Checklist (see below) is presented in the California Environmental Quality Act (CEQA) guidelines to assist lead agencies in their analysis of project impacts. We provide this checklist as a summary of staff's conclusions regarding the potential for adverse significant project impacts. Following the checklist is a discussion of staff's analysis and rationale for these conclusions.

Environmental Checklist

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
BIOLOGICAL RESOURCES -- Would the project or related facilities:				
a) Have an adverse effect, either directly, indirectly, or cumulatively, on any species identified as a candidate, sensitive, or special status species in federal, state, local or regional plans, policies, or regulations (including those by the California Department of Fish and Game, National Marine Fisheries Service, U.S. Bureau of Land Management, U.S. Forest Service, or U.S. Fish and Wildlife Service) or habitat used by the above?		X		
b) Have an indirect or direct adverse effect on any riparian habitat or other sensitive natural community identified in federal, state, local or regional plans, policies, and regulations (including those by the California Department of Fish and Game or U. S. Fish and Wildlife Service)?				X
c) Have an adverse effect on surface or ocean waters (including those considered by National Marine Fisheries Service as essential fish habitat), or on local aquatic resources, or on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, tidal and freshwater marshes, vernal pools, etc.) either through direct removal, filling, hydrological interruption, pollution (thermal, particulate, or chemical) or other means?		X		~~X~~
d) Interfere with the movement of any native fish or wildlife species (resident or migratory) or with established native (resident or migratory) wildlife corridors, or limit or impede the use of native wildlife nursery sites?		X	~~X~~	
e) Conflict with any local policies or ordinances protecting biological resources, such as 1) a tree preservation policy or ordinance, or 2) a native landscape requirement?				X

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
BIOLOGICAL RESOURCES -- Would the project or related facilities:				
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan?				X
g) Create an adverse change in commercial or recreational species' distribution or population size, or harvesting opportunities for these species?				X
h) Facilitate the introduction, population growth, or spread of weedy plant species that are difficult to control (such as those classified by the California Department of Agriculture as List A, List B, or Red Alert species) or other invasive or non-native aquatic or terrestrial wildlife species (such as nest parasites)?			X	

a) Effect on Sensitive Species

Projects in developed areas typically have minimal impacts on sensitive biological resources because of the lack of suitable habitat on site. However, such projects are evaluated for the indirect impacts they could have on any surrounding areas that remain in natural conditions and support biological resources.

Power Plant and Switchyard

The TPP power island would consist of a simple-cycle power plant, on a ~~nine~~ 10.3-acre, fenced site and two switchyards (see Biological Resources **Table 2**). The TPP site is currently part of a 40-acre parcel of agricultural land that borders industrial uses to the immediate north, an orchard to the southwest, and open fields to the south, east and northwest. The TPP was managed as intensive agricultural land, and is only marginal habitat for many species. Kit fox and burrowing owl are known to enter these marginal habitats when more optimal habitat is not available. The conversion of open space lands is the principal cause of kit fox and burrowing owl declines. Surveys in May 2001 found three potential kit fox dens within 500 feet of the site, and five within 1,000 feet. Because of the large home range of kit fox (1 to 2 miles), other dens and individuals may be present just outside of the survey area and within traveling range. The Delta-Mendota canal area, just southwest of the plant site, and the Union Pacific Railroad to the north, have been identified as potential migration corridors for the kit fox. ~~-~~The Delta-Mendota canal area, just southwest of the plant site, and areas along the access road (discussed below) also have some potential to support kit fox foraging and denning. Burrowing owl are known to inhabit the area surrounding the TPP. The canal to the southwest and

railroad tracks to the north are bermed and colonized by ground squirrels, and burrowing owl often inhabit the burrows of ground squirrels.

Biological Resources Table 2
Estimates of Temporary and Permanent Habitat Losses
(GWF 2001c)~~(GWF 2001b)~~

Project Feature	Temporary Disturbance (Acres)	Permanent Disturbance (Acres)
Access Road	1.5	1.9
Temporary Access Road	1.9	0.0
Water Supply Line	0.6	0.0
Power Plant Fenced Area	0.0	9.0*
PG&E Switchyard Fenced Area	0.0	1.3
Construction laydown/Parking	~~5.2~~18.4	0.0
Total	**~~7.3~~22.4**	**12.2**

*Includes the GWF switchyard

Staff anticipates that the USFWS would require an incidental take permit and mitigation for the construction of the power plant and the ancillary facilities in southwestern San Joaquin County. The applicant has proposed to gain coverage for incidental take from the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP 2000) and San Joaquin County. In order to minimize impacts to SJMSCP covered species, the permitting agency (in this case San Joaquin Council of Governments, Inc.) must require all project proponents (in this case TPP) to incorporate Incidental Take Minimization Measures (Section 5.2.4 of the SJMSCP 2000) into their planning. Based on the species with the potential to occur at the TPP site, TPP will be required to adhere to the guidelines identified in the SJMSCP for kit fox (Section 5.2.4.25), and burrowing owl (Section 5.2.4.15). To minimize impacts to important kit fox corridors, the TPP should be sited as far as feasible from the Delta Mendota Canal and the Union Pacific Railroad, and the surrounding areas restored to annual grasslands or valley oak woodlands with only a few trees (USFWS 2002; Biological Resources Conditions of Certification **BIO-10** and **BIO-11**).

The USFWS expressed concern over the proposed landscaping for the TPP plan (USFWS 2002). The USFWS is concerned that the proposed large trees (Eucalyptus) could provide nesting habitat for raptors that could potentially prey on young kit fox. The use of large trees along the canal could additionally provide perching points for raptors along the kit fox migration corridor, also increasing the potential for young kit fox being killed. In addition, the conversion of agricultural lands to a dense tree and shrub habitat would not be compatible with kit fox migration because kit fox are a grassland species. The applicant has agreed to change the Landscaping Plan to reduce the density of trees and shrubs, remove large trees from the canal side of the facility where possible, and to consider using tree species that are not conducive to raptor use (thin, drooping branches, etc.). Staff has recommended river shea-oak (*Casuarina cunninghamiana*) as a tree that is not conducive to raptor nesting. Staff will review the Landscaping Plan prior to

construction to ensure that it minimizes the threat to kit fox to the maximum extent possible (Biological Resources Condition of Certification **BIO-11**).

The SJMSCP Master Incidental Take Permit conditions specify that the project acquire, enhance and manage in perpetuity one acre of land for each acre of agricultural habitat lands converted from Open Space use. The TPP will permanently convert 12.2 acres of land and temporarily disturb 7.3 acres of land (see Biological Resources **Table 2**). Thus, under the SJMSCP permitting, the applicant would be required to purchase ~~19.5~~34.6 acres of land or pay a fee of $ ~~32,955.00~~58,474.00 ($1,690 per acre x ~~19.5~~34.6 acres) to the San Joaquin Council of Governments, Inc.; the overseeing body for SJMSCP, for acquisition of an equivalent number of acres.

In addition to the SJMSCP's Incidental Take Minimization Measures, the applicant has proposed Conditions of Certification to ensure that construction and operation do not result in significant impacts to biological resources. Staff has incorporated these measures into its recommended Conditions of Certification. Mitigation includes the hiring of a Designated Biologist to perform pre-activity wildlife surveys (Biological Resources Conditions of Certification **BIO-1, BIO-2, BIO-3**), development of a worker Environmental Awareness Program (**BIO-4**), the flagging of avoidance areas, den excavation and replacement, restrictions on construction personnel regarding trash, pets, and firearms, and preventing wildlife losses during excavation and pipe laying activities (**BIO-6** and **BIO-8**). Compliance with these measures (and the Incidental Take Minimization Measures from the SJMSCP) would be monitored and compliance reports circulated to the responsible agencies as specified in the Biological Resources Mitigation and Monitoring Plan (**BIO-5**).

~~The compliance with the SJMSCP Incidental Take Minimization Measures (**BIO-5**), the purchase of a specified amount of habitat compensation acreage under the SJMSCP (**BIO-9**), and compliance with the measures outlined in *Standardized Recommendations for the Protection of the San Joaquin Kit fox Prior to or During Ground Disturbance* (USFWS 1999) (**BIO-8**), would mitigate losses to San Joaquin kit fox to less than significant levels.~~ Staff's proposed mitigation, as summarized below, would mitigate losses to San Joaquin kit fox to less than significant levels:

- Compliance with the SJMSCP Incidental Take Minimization Measures (**BIO-5**);
- Compliance with the measures outlined in *Standardized Recommendations for the Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance* (USFWS 1999) (**BIO-8**);
- Purchase of a specified amount of habitat compensation acreage under the SJMSCP (**BIO-9**);
- Siting the power plant facilities as far as feasible from migration corridors (**BIO-10**); and
- Landscaping the area in a kit-fox friendly manner (**BIO-11**).

Although no individuals or potential burrowing owl nesting sites were found on site, if construction occurs during the nesting season (February to July), there is a potential for disturbance to burrowing owl. Pre-construction surveys and avoidance measures

would be incorporated to reduce impacts to less than significance (**BIO-6** and **BIO-7**).

There are no recorded occurrences of California red-legged frog within the project site or within one mile of the site, and no individuals or habitat were seen during the May 2001 surveys. Critical habitat at Corral Hollows is isolated physically and hydrologically from the TPP site. No impacts to individuals of this species or its critical habitat is anticipated as a result of the project, and no mitigation is proposed by staff.

Raptors, such as barn owl and great horned owl, likely forage on and near the site and may perch on the lattice towers along the site's southeast boundary. The most abundant prey source, ground squirrels, are concentrated in the berms along the canal. The proposed project would be on ~~abandoned~~ fallow agricultural land, and the berms are not permanently impacted by the project. The temporary loss of ~~7.3~~22.4 acres of flat agricultural land, and the permanent loss of 12.2 acres is unlikely to cause a significant loss to these wide-ranging species.

TPP proposes to build two 100-foot tall, 16-foot-diameter combustion exhaust stacks. Bird collisions with exhaust stacks and other tall structures can result in significant bird losses when these structures are located in areas where suitable habitat attracts bird populations. Most bird collisions/deaths occur during migration in inclement weather. The site and surrounding areas do not contain attractive bird habitat (e.g., freshwater marsh or ponds). Therefore, the proposed exhaust stacks (lighted or unlighted) are unlikely to increase bird collisions or otherwise cause harm to wildlife. Therefore, staff concludes that this potential concern is not applicable to the TPP, and no mitigation is recommended by staff.

The operation of the proposed facility would generate air pollutants from the combustion of natural gas (for the combustion turbines) and diesel (for the emergency generator). The emissions for the power plant and generator would be below a threshold set by the U.S. Environmental Protection Agency for Prevention of Significant Deterioration and the applicant demonstrated the emissions would be appropriately controlled to prevent significant changes to ambient air quality. Impacts to local biological resources would not be likely, and staff does not recommend mitigation.

The operation of the proposed facility would withdraw daily an average of 20 gallons per minute and a maximum of 52 gallons per minute of water from a turnout on the Delta Mendona canal. Most of the withdrawls would be in the summer, when ambient temperatures are high. Drainage canals in the area are known to support warm-water fish, but the Delta-Mendona canal does not contain any special status fish (Bureau of Reclamation 2000). The intake would be screened by design, which would reduce impacts to any fish or invertebrates in the turnout waters.

Linear Facilities

The majority of ancillary facilities are already present on the site, including the transmission lines and fuel supply. A 1,470-foot water supply pipeline,

improvements to 3,300 feet of primary access road, and the use of approximately 4,200 feet of temporary access road are the only proposed off-site linears. ~~and improvements to the access road are the only proposed off-site linears.~~ The water supply pipeline would temporarily disturb 0.6 acre (1,470 feet by 20 feet) of agricultural habitat. The pipeline would not cross any potential kit fox dens, the nearest being located on the west side of the Delta Mendota canal.

The TPP would require the upgrade of a 3,300 foot road for access to the facility during the later stages of construction and during plant operation. The road that would be upgraded is located between an alfalfa field and a parcel with nonnative grassland and abandoned communication antennas. Potential kit fox dens can be found along the road and within 1,000 feet on either side. Alfalfa fields typically provide a substantial prey base for raptors. The construction of the road would be expected to temporarily disturb 1.5 acres, and permanently disturb 1.9 acres of the alfalfa field. Construction noise and traffic could disturb kit fox and discourage foraging by raptors. Mitigation measures implemented during construction and the purchase of habitat compensation credits (as described for the project site in Biological Resources Condition of Certification **BIO-9**) would mitigate impacts to less than significant. During operation, the road would receive use only by TPP's two plant employees, dispatched from other GWF facilities or during an emergency. No biological impacts are expected.

~~The TPP would require the upgrade of a 3,300 foot road. The road is located between an alfalfa field and a parcel with nonnative grassland and abandoned communication antennas. Potential kit fox dens can be found along the road and within 1,000 feet on either side. Alfalfa fields typically provide a substantial prey base for raptors. The construction of the road would be expected to disturb 1.5 acres, and permanently disturb 1.9 acres of the alfalfa field. Construction noise and traffic could disturb kit fox and discourage foraging by raptors. Mitigation measures implemented during construction and the purchase of habitat compensation credits (as described for the project site in **BIO-9**) would mitigate impacts to less than significant. During operation, the road would receive use only by TPP's two plant employees, dispatched from other GWF facilities, or during an emergency. No biological impacts are expected.~~

GWF has proposed four alternatives (A-D) for the temporary access road. Of these, GWF feels that only Alternatives C and D are viable. Both alternatives originate on Lammers road with the proposed entrances approximately 1600 feet apart. Alternative D is located to the south of Alternative C, starting at Lammers road and following an existing unpaved private farm road north, then west to the TPP site. Alternative C starts at Lammers road, following an existing unpaved farm road south then west to the plant site (the later segment of Alternative C is identical to Alternative D). Alternative C passes next to an agricultural runoff area, which the applicant's biologists have characterized as a seasonal marsh. While the proposed road will not directly impact the seasonal wetland, there is the potential for impacts to sensitive species that exist in or utilize the area (see next paragraph). The increase in traffic could also lead to avoidance by common species that utilize the vegetation for cover or foraging, but this is not a significant impact, as similar habitat is nearby and the short time-frame of use.

The seasonal wetland may be habitat for one or more sensitive plant species (see Biological Resources **Table 1**). There are no recorded occurrences of any sensitive plants in the area however, this may be due to a lack of surveys in the past or recent re-establishment or colonization of the area. The surveys of the seasonal marsh by the applicant's biologists were conducted during the late fall and early winter months, when it would be difficult to detect the presence or absence of these species. Surveys for these species need to be done at specific times (as specified in survey protocols) when the probability of detection is the highest. For plants this is typically during the flowering season. Adverse impacts to the plants could result when dust or chemicals from construction traffic enter the seasonal wetland (see Biological Resources Item C). Adverse impacts to sensitive plant populations in the seasonal wetland could be avoided by the use of Alternative D. If Alternative D is used, then any potential impacts can be completely avoided. Biological Resources' staff therefore prefers the applicant use Alternative D exclusively.

Impacts from Alternative D would be the temporary loss of kit fox habitat, which could be mitigated by the purchase of habitat compensation credits (Biological Resources Condition of Certification **BIO-9**).

Worker Parking and Staging Areas

Approximately ~~five~~ 18.4 acres, ~~west of~~adjacent to the power plant site, would be used for construction parking and laydown. Parking and staging areas would be located on agricultural land with no known biological resources. The planned parking and staging areas are similar to the power plant and substation site discussed above. The temporary loss of these agricultural lands is unlikely to cause harm to biological resources, but the loss should be accounted for in the mitigation fee paid in compliance with the SJMSCP (**BIO-9**) to mitigate impacts to state and federally listed species to less than significant levels.

In order to prevent moderately small mammals (such as the kit fox) from entering the site, the applicant has proposed to fence the site. Staff recommends in **BIO-10** that the fencing be installed in such a manner as to exclude moderately small mammals and the fence be monitored daily for integrity. If the fence cannot be built to these standards, the Designated Biologist would need to be on site at all times during the construction of the facility. (Note: the Designated Biologist must be present during construction of the linears.)

b) Effect on Sensitive Habitat

The TPP would generate minimal amounts of wastewater. Any wastewater generated by the facility would be collected in on-site storage tanks and ultimately hauled to the McKittrick waste treatment site, an approved and licensed Class II landfill (Supplemental AFC, page 3.12-2). While wastewater generation will vary based on a number of factors, GWF estimates that the on-site 4,600 gallon storage tanks will need to be emptied twice per week.

Stormwater would be collected and routed to an on-site evaporation/infiltration detention basin, so there would be no stormwater discharge from the site. The site

would be fenced, which would prevent most terrestrial organisms from accessing the basin. Birds would be able to access the basin, but it would contain only uncontaminated non-contact stormwater for the period of time it takes for evaporation/percolation to occur. Thus, staff has determined that potential impacts to biological resources resulting from wastewater would be less than significant.

c) Effect on Aquatic Habitats

~~No surface waters would be impacted and there are no federally protected wetlands, including vernal pools and/or marsh habitat, within or immediately adjacent to the proposed TPP site that could be affected by the project.~~

If Alternative C is chosen as the temporary access route, there is the potential that the applicant will impact a seasonal wetland that is supported by agricultural runoff. The access road would not remove any of the wetland habitat, but the heavy use of the road could lead to increased runoff and sedimentation, which would reduce the habitat value of the area. The use of Best Management Practices (silt fence, etc.) could reduce the impacts to a less than significant level. The recommended Conditions of Certification for the protection of the wetland habitat can be found in the Soils and Water Resources section. The use of Alternative D would eliminate all potential for impacts.

If Alternative D is used as the temporary access route, then no surface waters or federally protected wetlands, including vernal pools and/or marsh habitat, would be affected by the project. Biological Resources staff prefers the applicant use Alternative D exclusively.

d) Effects on Fish and Wildlife Corridors

~~The TPP site or its linear alignments would not cross any known wildlife corridors. The nearest recognized corridor is for the kit fox and is located to the west of the TPP site. This corridor starts at I-580 and extends west in the surrounding foothills. The area between I-580 and the Delta Mendota canal is considered a buffer area under the SJMSCP.~~

~~The TPP site would result in the permanent loss of 12.2 acres of agricultural land and the temporary disturbance of 7.3 acres. This loss does not pose a significant impact to wildlife movement in the TPP vicinity, as the surrounding agricultural lands provide alternate movement routes around the site. In addition, the permanent loss of agricultural lands would be mitigated for by purchasing compensatory land credits through the SJMSCP (**BIO-9**). The SJMSCP uses fees to secure land in perpetuity that will provide movement corridors and other wildlife habitat values. Therefore, staff concludes that, with mitigation, impacts to wildlife movement are less than significant.~~ The TPP site or its linear alignments would not cross any designated wildlife corridors. The nearest SJMSCP recognized corridor is for the kit fox and it is located far to the west of the TPP site. This corridor starts at I-580 and extends west in the surrounding foothills. Protections to potential kit fox migration corridors through the Tracy area such as the Delta Mendota Canal were recognized in the SJMSCP, and additional corridor strategies along the Union Pacific Railroad are currently being developed by a group of federal, state, and local jurisdictions (Cheryl Johnson, personal communication 2002). The USFWS has requested these two

linear features be considered as occupied kit fox corridors because of their importance to the kit fox conservation strategy and that 300 feet from these features be maintained where possible (USFWS 2002).

The landscaping plan will need to be designed in such a way that it does not impact kit fox. The migration corridor which follows the Delta Mendota canal should resemble an annual grassland or valley oak woodland, thus the density of shrubs and trees must be limited. In addition, the use of large trees along the canal may increase the density of raptors by provide nesting and perching points. Nesting of raptors so close to a constriction point in the migration corridor could result in the predation of young kit fox. Trees that do not provide nesting habitat for raptors should be used in the Landscape Plan (Biological Resources Condition of Certification **BIO-11**).

The TPP site would result in the permanent loss of 12.2 acres of agricultural land and the temporary disturbance of 22.4 acres directly adjacent to these two corridors. By ensuring a setback from the Delta Mendota canal and Union Pacific Railroad (Biological Resources Condition of Certification **BIO-10**), the site does not pose a significant impact to wildlife movement in the TPP vicinity, as the surrounding agricultural lands, railroad lands, and Bureau of Reclamation lands provide alternate movement routes around the site. In addition, the permanent loss of agricultural lands would be mitigated for by purchasing compensatory land credits through the SJMSCP (**BIO-9**). The SJMSCP uses fees to secure land in perpetuity that will provide movement corridors and other wildlife habitat values. Therefore, staff concludes that, with mitigation, impacts to wildlife movement are less than significant.

The use of the access road across the Union Pacific Railroad would be infrequent and limited to power plant staff or emergency response teams. Thus, use of the access road during operation would be a less than significant impact.

e) Conflict With Local LORS

No biological-related ordinances or policies pertaining to the TPP site have been identified.

f) Conflicts With Adopted Plans

The proposed TPP would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan (NCCP), or other approved local, regional, or state habitat conservation plan. The TPP has been approved for coverage under an existing Habitat Conservation Plan (see Analysis and Discussion of Impacts-Item A, for a discussion of the SJMSCP).

g) Effects on Commercial or Recreational Species

The proposed TPP would not create an adverse change in commercial or recreational species distribution or population size, or harvesting opportunities for these species. Therefore, no impact is expected.

h) Effects from Invasive Plant or Wildlife Species

Construction of the TPP could facilitate the introduction of weedy species as a result of ground disturbance and introductions by construction equipment. Weedy plant species growth could suppress native vegetation and infest agricultural lands. However, there is little native vegetation in the vicinity, and the use of herbicides as part of agricultural practices on lands surrounding the TPP site should suppress any weed outbreaks resulting from the construction of the TPP. Therefore, a less than significant impact is expected.

CUMULATIVE IMPACTS

Cumulative impacts are those that result from the incremental impacts of an action added to other past, present, and reasonably foreseeable future actions, regardless of who is responsible for such actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

The location of other power plants under development or with applications near completion in the vicinity of the proposed project include East Altamont Energy Center and FPL Tesla Power Project. These plants do not use the same water supply or discharge facility, and are geographically isolated from the proposed plant, but do contribute air pollutants to the same air basin. There are no known sensitive habitats around the TPP area that could be impacted by power plant emissions. In reviewing the projects above, staff would not expect any overlapping, or additive, impacts to biological resources from water pollution, traffic, noise, lighting, or air quality.

There is a continual loss of habitat for species native to the Tracy area. Wildlife friendly landscaping should be considered in order to minimize the loss of habitat resulting from the construction of the TPP. Native landscaping elements would provide cover, forage, and prevent the spread of nonnative landscaping elements into the surrounding area.

MITIGATION

The applicant has proposed several measures to reduce impacts to biological resources in the TPP area. These measures, found in Appendix K-6 and within the draft Biological Resource Mitigation Implementation and Monitoring Plan (BRMIMP) (AFC, Appendix K-6), include:

- avoid all impacts to legally protected species (AFC BIO-1);
- avoid all impacts to legally protected habitats (AFC BIO-2);
- avoid all impacts to locally sensitive species (AFC BIO-3);
- reduce the risk of large bird electrocutions by following “Suggested Practices for Raptor Protection on Power Lines: The State of the Art in 1996” (APLIC 1996) (AFC BIO-4);
- the Designated Biologist will have access to the site, and the authority to halt construction (AFC BIO-5);
- upon decommissioning the site, biological resource values will be reestablished (AFC BIO-6);

- pre-construction surveys will be completed prior to site mobilization (AFC BIO-7);
- pipes of 4-inch diameter or greater will be inspected for kit foxes prior to their use (AFC BIO-8);
- site mobilization will not begin until a Staff approved biologist is available to be onsite (AFC BIO-9);
- the Designated Biologist will have assigned tasks during construction (AFC BIO-10);
- the applicant will submit to the Compliance Program Manager (CPM) a final Biological Resource Mitigation Implementation and Monitoring Plan (BRMIMP) (AFC BIO-11); and,
- the applicant will provide compensation for temporary, permanent and incremental impacts to sensitive species habitats as prescribed in the SJMSCP (AFC BIO-12).

These measures have been incorporated into staff's recommended Conditions of Certification. In addition to these measures, staff and the SJCOG have recommendations for reducing potential impacts to kit fox and burrowing owl. These have also been incorporated into staff's recommended Conditions of Certification.

Staff proposes that GWF utilize native plants and wildlife friendly landscaping techniques to compensate for the loss of habitat to non-listed wildlife species in the Tracy area. Staff is working with GWF to finalize a landscaping plan that would provide some benefit to local species, protect the San Joaquin kit fox corridor, as well as satisfy GWF's landscaping requirements. GWF has agreed to submit a revised landscaping plan and this will be reviewed by Biological Resources and Visual Resources staff prior to construction.

COMPLIANCE WITH LORS

Currently, staff concludes that the proposed TPP would comply with all known and applicable LORS. The San Joaquin County General Plan does not have any biological or open space provisions relevant to the TPP site, or the areas immediately adjacent.

FACILITY CLOSURE

Sometime in the future, the TPP would experience either a planned closure, or be unexpectedly (either temporarily or permanently) closed. When facility closure occurs, it must be done in such a way as to protect the environment and public health and safety. To address facility closure, an "on-site contingency plan" would be developed by the project owner, and approved by the Energy Commission Compliance Project Manager (CPM). Facility Closure mitigation measures will also be included in the BRMIMP prepared by the applicant.

Native vegetation has been cleared and the area is predominantly agriculture, including the area proposed for the project. While structures are being removed and the area is being stabilized during plant closure, all parties involved should follow measures prescribed for construction in the BRMIMP to address potential impacts to biological

resources. If the power plant facilities are closed after an anticipated 30-year operational period, the surrounding areas may be more highly industrialized and densely populated. In this case, restoration to natural habitat (grassland) would probably not be practical.

Staff does not have any biological resource facility closure recommendations in the event of an unexpected temporary closure of the TPP. However, in the event that the Energy Commission CPM decides that the facility is permanently closed, the facility closure measures provided in the on-site contingency plan and BRMIMP would need to be implemented.

RESPONSE TO AGENCY AND PUBLIC COMMENTS

AGENCY COMMENTS

Staff was in contact with USFWS and CDFG representatives to the Technical Advisory Team of the SJMSCP. In a vote on October 10, 2001, they determined that the project could be included under the incidental take permit issued to SJMSCP.

In a letter dated January 8, 2002, the USFWS expressed concerns that the project did not avoid and minimize all impacts to the kit fox to the maximum extent possible, as required by the SJMSCP (USFWS 2002). They suggest the power plant facility be located as far as feasible from the Delta Mendota Canal and the Union Pacific Railroad. In addition, the USFWS recommends planting local native grass, shrubs, and trees, such as valley oak, at low densities. These comments were incorporated in to the Addendum to the Staff Analysis (this text) and Conditions of Certification have been proposed to address these recommendations.

PUBLIC COMMENTS

EA-2 *Are there any birds, creatures that will be displaced by this plant?*

Response: The TPP site and linear facilities would be located on previously disturbed agricultural land and it is unlikely that any sensitive species will be displaced (see **Item A, Impacts and Analysis**). The site may be used to a limited degree for foraging or migration by common species. However, the small amount of land that will be converted from agricultural production to industrial uses (TPP) should not effect these species, see **Setting** and **Item A, Impacts and Analysis** sections.

CONCLUSIONS AND RECOMMENDATIONS

From the information that staff has reviewed, the applicant has successfully reduced construction related impacts to biological resources to a low level of likelihood by siting the proposed simple-cycle plant on a site that currently contains minimal biological resources. Similarly, the proposed project's parking and staging areas has minimal biological value. ~~However, staff cannot reach any final conclusion or recommendation about whether the project will have any potential significant impacts to biological resources until staff has a chance to review the information contained in a supplement~~

~~to the TPP AFC received December 11, 2001.~~Staff feels impacts to biological resources would be less than significant, with the proposed Biological Resources Conditions of Certification and the measures developed in the BRMIMP.

Staff recognizes that the construction of the TPP would cause permanent, temporary, and possible cumulative impacts to kit fox habitat. Impacts to kit fox, however, would be mitigated to less than significant levels, by the purchase of a minimum of ~~19.5~~34.6 acres of land or by paying a fee of $ ~~32,955.00~~58,474.00 ($1,690 per acre x ~~19.5~~34.6 acres) to the San Joaquin Council of Governments, Inc.; the overseeing body for SJMSCP, for acquisition of an equivalent number of acres, and through the implementation of mitigation measures presented in the BRMIMP.

Staff prefers that native ~~California~~ plants and their placement be given careful consideration when planning and implementing a Landscaping Plan for the TPP. Staff will review the Plan prior to construction.

PROPOSED CONDITIONS OF CERTIFICATION

BIO-1 Site and related facilities (including any access roads, transmission lines, water and gas lines, storage areas, staging areas, pulling sites, substations, wells, etc.) mobilization activities shall not begin until an Energy Commission CPM-approved Designated Biologist is available to be on site.

Protocol: The Designated Biologist must meet the following minimum qualifications:

1. Bachelor's Degree in biological sciences, zoology, botany, ecology, or a closely related field;
2. Three years of experience in field biology or current certification of a nationally recognized biological society, such as The Ecological Society of America or The Wildlife Society;
3. At least one year of field experience with biological resources found in or near the project area; and
4. An ability to demonstrate to the satisfaction of the CPM the appropriate education and experience for the biological resources tasks that must be addressed during project construction and operation.

If the CPM determines the proposed Designated Biologist to be unacceptable, the project owner shall submit another individual's name and qualifications for consideration. If the approved Designated Biologist needs to be replaced, the project owner shall obtain approval of a new Designated Biologist by submitting to the CPM the name, qualifications, address, and telephone number of the proposed replacement. No habitat disturbance will be allowed in any designated sensitive areas until the CPM approves a new Designated Biologist and the new Designated Biologist is on site.

Verification: At least 30 days prior to the start of any site and related facilities mobilization activities, the project owner shall submit to the CPM for approval the name, qualifications, address, and telephone number of the individual selected by the project

owner as the Designated Biologist. If a Designated Biologist is replaced, the information on the proposed replacement as specified in the Condition must be submitted in writing at least10 working days prior to the termination or release of the preceding Designated Biologist.

BIO-2 The CPM approved Designated Biologist shall perform the following during any site and related facilities mobilization, construction and operation activities:

1. Advise the project owner's Construction/Operation Manager, supervising construction and operations engineer on the implementation of the biological resources Conditions of Certification;
2. Supervise or conduct mitigation, monitoring, and other biological resources compliance efforts, particularly in areas requiring avoidance or containing sensitive biological resources, such as wetlands and special status species; and
3. Notify the project owner and the CPM of any non-compliance with any biological resources Condition of Certification.

Verification: During site and related facilities mobilization and construction, the Designated Biologist shall maintain written records of the tasks described above, and summaries of these records shall be submitted along with the Monthly Compliance Reports to the CPM. During project operation, the Designated Biologist shall submit record summaries in the Annual Compliance Report.

BIO-3 The project owner's Construction/Operation Manager shall act on the advice of the Designated Biologist to ensure conformance with the Biological Resources Conditions of Certification.

Protocol: The project owner's Construction/Operation Manager shall halt, if necessary, all construction or operation activities in areas specifically identified by the Designated Biologist as sensitive to assure that potential significant biological resource impacts are avoided.

The Designated Biologist shall:

1. Inform the project owner and the Construction/Operation Manager when to resume construction or operation, and
2. Advise the Energy Commission CPM if any corrective actions are needed or have to be instituted.

Verification: Within two working days of notification by the Designated Biologist of non-compliance with a Biological Resources Condition of Certification or a halt of construction or operation, the project owner shall notify the CPM by telephone of the circumstances and actions being taken to resolve the problem or the non-compliance with a condition. For any necessary corrective action taken by the project owner, a determination of success or failure will be made by the CPM within five working days after receipt of notice that corrective action is completed, or the project owner will be notified by the CPM that coordination with other agencies will require additional time before a determination can be made.

BIO-4 The project owner shall develop and implement a CPM-approved Worker Environmental Awareness Program in which each of its employees, as well as employees of contractors and subcontractors who work on the project or related facilities during site mobilization, construction and operation, are informed about sensitive biological resources associated with the project.

Protocol: Worker Environmental Awareness Program must:

1. Be developed by or in consultation with the Designated Biologist and consist of an on-site or training center presentation in which supporting written material is made available to all participants;
2. Discuss the locations and types of sensitive biological resources on the project site and adjacent areas;
3. Present the reasons for protecting these resources;
4. Present the meaning of various temporary and permanent habitat protection measures; and
5. Identify whom to contact if there are further comments and questions about the material discussed in the program.

The specific program can be administered by a competent individual(s) acceptable to the Designated Biologist.

Each participant in the on-site Worker Environmental Awareness Program shall sign a statement declaring that the individual understands and shall abide by the guidelines set forth in the program materials. The person administering the program shall also sign each statement.

Verification: At least 60 days prior to the start of any site and related facilities mobilization, the project owner shall provide two copies of the Worker Environmental Awareness Program and all supporting written materials prepared by the Designated Biologist and the name and qualifications of the person(s) administering the program to the CPM for approval. The project owner shall state in the Monthly Compliance Report the number of persons who have completed the training in the prior month and a running total of all persons who have completed the training to date. The signed statements for the mobilization and construction phase shall be kept on file by the project owner and made available for examination by the CPM for a period of at least six months after the start of commercial operation. During project operation, signed statements for active project operational personnel shall be kept on file for six months, following the termination of an individual's employment.

BIO-5 The project owner shall submit to the CPM for review and approval a copy of the final Biological Resources Mitigation Implementation and Monitoring Plan (BRMIMP) and shall implement the measures identified in the plan. Any changes to the adopted BRMIMP must be made by the Energy Commission staff, in consultation with SJCOG, Inc.

Protocol: The final BRMIMP shall identify:

1. All biological resources mitigation, monitoring, and compliance measures recommended by the Applicant, as well as those contained in the BIO-Condition of Certification (and other mitigation requirements);
2. All mitigation measures provided in the *Standardized Recommendations for Protection of the San Joaquin Kit fox Prior to or During Ground Disturbance* (USFWS 1999);
3. All Incidental take minimization measures as specified by SJCOG (SJCOG, Inc 2001);
4. All sensitive biological resources to be impacted, avoided, or mitigated by project construction, operation and closure;
5. All required mitigation measures for each sensitive biological resource;
6. Required habitat compensation strategy, including provisions for acquisition, enhancement, and management for any temporary and permanent loss of sensitive biological resources or permits obtained;
7. A detailed description of measures that will be taken to avoid or mitigate temporary disturbances from construction activities;
8. All locations, on a map of suitable scale, of laydown areas and areas requiring temporary protection and avoidance during construction;
9. Aerial photographs of all areas to be disturbed during project construction activities - one set prior to any site mobilization disturbance and one set subsequent to completion of mitigation measures. Include planned timing of aerial photography and a description of why times were chosen;
10. Duration for each type of monitoring and a description of monitoring methodologies and frequency;
11. Performance standards to be used to help decide if/when proposed mitigation is or is not successful;
12. All performance standards and remedial measures to be implemented if performance standards are not met;
13. A discussion of biological resources related facility closure measures; and
14. A process for proposing plan modifications to the CPM and appropriate agencies for review and approval.

Verification: At least 60 days prior to start of any site or related facility mobilization activities, the project owner shall provide the CPM with two copies of the draft final version of the BRMIMP for this project, and provide copies to the SJCOG, Inc. The CPM, in consultation with SJCOG, Inc., will determine the plan's acceptability within 45 days of receipt. The project owner shall notify the CPM no less than five working days before implementing any modifications to the BRMIMP to obtain CPM approval.

Within 30 days after completion of project construction, the project owner shall provide to the CPM, for review and approval, a written report identifying which items of the BRMIMP have been completed, a summary of all modifications to mitigation measures

made during the project's construction phase, and which mitigation and monitoring plan items are still outstanding.

BIO-6 The project owner will implement the mitigation measures identified below unless the mitigation measures conflict with mitigation required by the SJCOG, Inc. incidental take minimization measures.

Protocol: The project owner will:

1. Site transmission line poles, access roads, pulling sites, and storage and parking areas to avoid sensitive resources whenever possible;
2. Avoid all wetlands;
3. Design and construct transmission lines and poles to reduce the likelihood of electrocutions of large birds;
4. Implement a Worker Environmental Awareness Program;
5. Clearly mark construction area boundaries with stakes, flagging, and/or rope or cord to minimize inadvertent degradation or loss of adjacent habitat during facility construction/modernization. All equipment storage will be restricted to designated construction zones or areas that are currently not considered sensitive species habitat;
6. Provide a Designated Biologist to monitor all activities that may result in incidental take of listed species or their habitat;
7. Fence and provide wildlife escape ramps for construction areas that contain steep-walled holes or trenches. Fence will be hardware cloth or similar materials that are approved by USFWS and CDFG;
8. Inspect trenches each morning for entrapped animals prior to the beginning of construction. Construction will be allowed to begin only after trapped animals are able to escape voluntarily;
9. Inspect all construction pipes, culverts, or similar structures with a diameter of 4-inches or greater for sensitive species (such as kit foxes) prior to pipe burial. Pipes to be left in trenches overnight will be capped;
10. Provide a post-construction compliance report, within 45 calendar days of completion of the project, to the Energy Commission CPM;
11. Make certain that all food-related trash will be disposed of in closed containers and removed every day. Feeding of wildlife shall be prohibited; and
12. Report all inadvertent deaths of sensitive species to the appropriate project representative. Injured animals will be reported to CDFG, and the project owner will follow instructions that are provided by CDFG.

Verification: All mitigation measures and their implementation methods will be included in the BRMIMP. Two copies of the CPM approved BRMIMP must be provided to the CPM five days prior to site mobilization and a copy provided to the SJCOG, Inc.

BIO-7 Thirty days prior to the beginning of site mobilization, the project site, the laydown and parking area, the permanent road improvement, the temporary access road, and water pipeline route must be surveyed by a qualified biologist in accordance with USFWS and CDFG protocols for San Joaquin kit fox, Western burrowing owl, and other sensitive species listed in **Table 1**.

Verification: Two weeks prior to site or related facility mobilization, the Designated Biologist will submit to the CPM a report detailing the methodology and results of the surveys for approval.

BIO-8 The project owner will implement the construction practices and mitigation measures as outlined in *Standardized Recommendations for Protection of the San Joaquin Kit fox Prior to or During Ground Disturbance* (USFWS 1999).

Verification: The document will be incorporated into the final BRMIMP. The BRMIMP shall be submitted to the CPM for approval at least 60 days prior to start of any site or related facility mobilization activities.

BIO-9 The applicant will purchase habitat credits from the San Joaquin Council of Governments, Inc. that meet or exceed the ~~19.5~~34.6 acres anticipated for the power plant site, substations, construction laydown and worker parking, and any disturbance along linears (Staff assumes a ratio of 1:1 as specified in the SJMSCP compensation ratios). Fees will be assessed based on the most recently adopted rates by the San Joaquin Council of Governments Board of Directors (The 2002 rate for Category C/Pay Zone B [Agriculture] is $1,690/acre).

Verification: A copy of the check issued to San Joaquin Council of Governments, Inc., verifying the funds have been paid, shall be provided to the CPM within five days of certification. Within 20 days, or CPM approved timeframe, of certification the project owner will provide to the CPM a written certificate or letter signed by an authorized officer of the San Joaquin Council of Governments, Inc. that verifies that the contribution has been made according to the conditions specified above.

BIO-10 The TPP site and worker parking and staging areas shall be fenced in a manner to exclude moderately small mammals, such as San Joaquin kit fox. The design shall be incorporated into the BRMIMP. The fence should be patrolled daily by on-site staff prior to the start of each days construction activities. The Designated Biologist must be on-site during all construction activities if a suitable fence design cannot be installed. The permanent fence for the TPP should be capable of excluding moderately small mammals and be placed as far as feasible from the Delta Mendota Canal and the Union Pacific Railroad. Where fencing cannot be located outside of the 300-foot buffer from the Delta Mendota canal's water edge, the interior areas will be considered a loss to a kit fox corridor and a conservation easement on GWF's lands should be established at a 1:1 (impact:mitigation) ratio.

Verification: The fence design will be incorporated into the final BRMIMP. The BRMIMP shall be submitted to the CPM for approval at least 60 days prior to start of any site or related facility mobilization activities. If the CPM determines the fence cannot exclude small mammals including the San Joaquin kit fox, a designated biologist will remain onsite during all construction activities.

BIO-11 The Landscaping Plan plant list shall be limited to species that do not provide abundant nesting habitat or perch points for raptors. Along the Delta Mendota canal side (southwest side) of the site, the use of trees shall be avoided and shrubs shall be either close to the facility's fenceline or widely scattered. The north, east and south sides of the site may be planted with a narrow (<100 foot) band of trees. The western and northwestern sides may be planted with a narrow band of moderately sized (<50 foot tall) native trees or shrubs. All areas that cannot be landscaped to resemble annual grasslands or valley oak woodland will be considered a loss of open space and habitat credits from the San Joaquin Council of Governments, Inc. shall be purchased (see Biological Resources Condition of Certification BIO-9). The Landscape Plan shall be made part of the BRMIMP.

Verification: The Landscaping Plan shall be appended to the final BRMIMP and shall be submitted to the CPM for approval at least 60 days after the start of any site or related facility mobilization activities. If necessary, provide a copy of the check issued to San Joaquin Council of Governments, Inc., verifying funds have been paid.

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USFWS ~~(U. S. Fish and Wildlife Service).~~ 2001a. *Endangered and Threatened Wildlife and Plants: Final Determination of Critical Habitat for the California Red-legged Frog*. Federal Register: 66: 14626-14758. March 13.

USFWS. 2001b. Nancy Pau. Personal Communication with Natasha Nelson on September 19, 2001.

USFWS. 2000. *Draft Recovery Plan for the California Red-legged Frog* (Rana aurora draytonii). U.S. Fish and wildlife Service, Portland, OR. 258 pp.

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HAZARDOUS MATERIALS

Supplemental Testimony of Alvin Greenberg, Ph.D.

Page 5.3-3 – Setting (line 5)

Delete: "9-acre"
Insert: "10.3-acre"

Page 5.3-7 – line 4

Delete: "Patterson Pass Road"
Insert: "Mountain House Parkway"

Page 5.3-8 – **Public Comments** (response to first comment, line 6)

Insert after "250" the word "million"

Page 5.3-9 – end of **Public Comments**

Add the following new comments and responses:

A member of the public asked how it will be determined that the Hazmat trucks actually follow the required routes.

Response: Staff recommends that the project owner be required as a Condition of Certification to contractually obligate any hazardous material hauler to use only the approved route. The route must also be a California Highway Patrol (CHP) approved route for hazmat transport. The project owner, the Energy Commission Compliance Project Manager, and the public are able to inform the CHP if a hazmat transporter takes a route to the facility different from the approved route. Sanctions and penalties can be considerable.

TN-1 *A firefighter and EMS professional, expressed concern about proper emergency response, staffing, and equipment needed to respond to and care for a large number of children and adults due to illness from any chemicals emitted from the plant or from spills.*

Response: The Tracy Fire Department and the Alameda County Department of Environmental Health expressed confidence in their ability to respond adequately to a fire or hazardous material spill. In reality, the chance that a spill would occur is remote and the chances that the spill would be significant enough to impact the off-site public is even more remote. Several mitigation methods, including engineering controls and administrative controls, will be implemented to reduce the likelihood of a spill and that if per chance one does occur, it will be limited to the site. The risk of a transportation mishaps occurring and impacting the public has also been analyzed and found to be insignificant.

JN-1 *This commentor's children attend a school within 3 miles of the proposed power plant. She is concerned about her children's health and the impacts of breathing fumes from a hazardous materials leak. She also*

expressed a desire for a warning to be issued should there be a leak or spill at the power plant.

Response: The extensive controls described in the AFC and in this Staff Assessment limit the risk that off-site impacts would occur. Thus, even if a leak or spill were to occur at the power plant, there would be no impact at the school three miles away or at the nearest home 0.4 mile away. Given this information, staff does not recommend that a warning system be required for this project. However, if the applicant wishes to install a community warning system voluntarily as part of a "good neighbor program," staff has no objection.

Page 5.3-9 – Verification for HAZ-2

Incorporate the following marked changes:

At least 30 days prior to the commencement of ~~construction~~ operation, the project owner shall provide the final plans listed above to the San Joaquin County Department of Environmental Health for review and comment, and to the CPM for approval.

Page 5.3-10 – Verification for HAZ-5

Incorporate the following marked changes:

At least 60 days prior to initial receipt of aqueous ammonia on site, the project owner shall submit copies of the notification letter to supply vendors indicating the transport vehicle specifications to the CPM for review and approval.

Page 5.3-10 – HAZ-6

Incorporate the following marked changes:

The project owner shall direct all vendors delivering any hazardous materials to the site to use only the route approved by the CPM, which is from I-205 to ~~Patterson Pass Road~~ Mountain House Parkway to Schulte Road to the TPP site.

LAND USE

Revised Testimony of Negar Vahidi and Eileen Allen

Note: This section replaces the Land Use section from the Staff Assessment filed December 28, 2001.

INTRODUCTION

This land use analysis of the Tracy Peaker Project (TPP) focuses on two main issues: the project's consistency with local land use plans, ordinances and policies; and the project's compatibility with existing and planned land uses. In general, an electric generation project and its related facilities may be incompatible with existing and planned land uses if it creates unmitigated noise, dust, public health hazard or nuisance, traffic, or visual impacts or when it unduly restricts existing or planned future uses. This analysis replaces in its entirety the analysis filed in the Staff Assessment.

LAWS, ORDINANCES, REGULATIONS, AND STANDARDS (LORS)

This section describes federal, state, regional, and local land use LORS applicable to the proposed project.

FEDERAL

Federal Aviation Administration (FAA) – Determination of No Hazard to Air Navigation
The Federal Aviation Regulations, Part 77, §77.13 ff, requires notification of development of structures more than 200 feet in height, or encroach into areas of navigable airspace extending outward and upward from the runway of designated airports. The proposed project's tallest structure does not exceed 200 feet, nor the most restrictive radius from nearby airport runways. The proposed project would not exceed the height of nearby, existing transmission towers (GWF 2001a).

STATE

Subdivision Map Act (Pub. Resources Code § 66410-66499.58)

The Subdivision Map Act provides procedures and requirements regulating land divisions (subdivisions) and the determining of parcel legality. Regulation and control of the design and improvement of subdivisions, by this Act, has been vested in the legislative bodies of local agencies.

Each local agency by ordinance regulates and controls the initial design and improvement of common interest developments and subdivisions for which the Map Act requires a tentative and final or parcel map.

California Land Conservation Act of 1965

The California Land Conservation Act of 1965, commonly referred to as the Williamson Act, enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space uses. The Williamson Act program is administered by the California Department of

Conservation (DOC), in conjunction with local governments, which administer the individual contract arrangements with landowners. The landowner commits the parcel to a 10-year period wherein no conversion out of agricultural use is permitted. Each year the contract automatically renews unless a notice of non-renewal or cancellation is filed. In return, the land is taxed at a rate based on the actual use of the land for agricultural purposes, as opposed to its unrestricted market value. Participation in the Williamson Act program is dependent on county adoption and implementation of the program, and is voluntary for landowners. The proposed project site is currently under a Williamson Act contract, which is due to expire in March 2002.

The Farmland Security Zone is additional agricultural land conservation legislation that went into effect August 24, 1998. This program allows local governments and landowners to rescind a Williamson contract and simultaneously place the farmland under a Farmland Security Zone contract, which has an initial term of at least 20 years. A Farmland Security Zone contract offers landowners greater property tax reduction than the Williamson Act by valuing enrolled real property at 65 percent of its Williamson Act valuation, or 65 percent of its Proposition 13 valuation, whichever is lower (California State Coastal Conservancy, 1995; California Resources Agency, 1999).

Delta Protection Act of 1992

The California Legislature established the Delta Protection Act in 1992 to declare the Sacramento-San Joaquin Delta as a natural resource to be protected, maintained, and where possible enhanced for agriculture, wildlife habitat, and recreational activities. The act created the Delta Protection Commission with a mandate to develop a long-term resource management plan for the Delta Primary Zone (Public Resources Code § 29700 et seq.). All local government general plans for areas within the Primary Zone are required to be consistent with the Delta Protection Act regional plan for the area.

The Delta Protection Act defines the "Primary Zone" as the delta land and water area of primary state concern and statewide significance that is situated within the boundaries of the delta, but that is outside the urban limit line or sphere of influence line of any local government's general plan or currently existing studies, as of January 1, 1992. The Secondary Zone consists of areas within the statutory Delta (as defined in Section 12220 of the California Water Code) but not part of the Primary Zone. Local plans for land use in the Secondary Zone are not required to conform to the regional plan. The proposed project site exists in the Secondary Zone of the statutory Delta (DPC, 1992).

LOCAL

Staff reviewed various County land use-related planning documents relevant to the TPP. A discussion of the project's conformity with applicable goals, policies, standards and regulations from these planning documents can be found in the subsection entitled **Compliance with Laws, Ordinances, Regulations and Standards**.

San Joaquin County General Plan

Under California State planning law, each incorporated City and County must adopt a comprehensive, long-term General Plan that governs the physical development of all lands under its jurisdiction. The general plan is a broadly scoped planning document and defines large-scale planned development patterns over a relatively long timeframe.

The General Plan consists of a statement of development policies and must include a diagram and text setting forth the objectives, principles, standards and proposals of the document. At a minimum, a General Plan has seven mandatory elements, including Land Use, Circulation, Housing, Conservation, Open Space, Noise and Safety.

The San Joaquin County General Plan goals and policies listed in **Land Use Table 1** are applicable to the TPP project. The General Plan includes community plans for each of the major urban and rural communities grouped by planning area. The proposed project site is located within San Joaquin County's Tracy Planning Area in the unincorporated area of the County, within a broader County Planning region called Mountain View. Although the project site is within the City of Tracy's Sphere of Influence, it is outside the City's boundaries. The County General Plan does not have specified planning guidelines for this region.

San Joaquin County Development Title

The San Joaquin County Development Title functions as the County's zoning ordinance (Title 9 of the San Joaquin County General Code). It establishes zoning districts and contains regulations governing the use of land and improvement of real property within zoning districts. The Development Title implements the land use policies of the San Joaquin County General Plan (San Joaquin County, 1995c). **Land Use Table 2** provides a description of the Development Title sections applicable to the proposed project.

Electric generating facilities such as the TPP fall under the San Joaquin County Development Title use type of "Utility Services, Major." If San Joaquin County was the lead agency for this project, it would require a conditional use permit to be developed in an agricultural zone, with findings to be made by the County. These findings are discussed in the Impacts section, under the LORS, San Joaquin County Development Title heading.

Land Use Table 1
San Joaquin County General Plan Goals and Policies Relevant to the Proposed Project

Relevant County General Plan Goals
Land Use Goal: Provide a well-organized and orderly development pattern that seeks to concentrate urban development and protect the County's agricultural and natural resources.
Relevant Policies – Community Organization and Development Pattern Policies (CODPP)
7. Residential, commercial, and industrial development shall be shown on the General Plan Map only in communities identified in Figure IV-I, except in the following instances: (a) contiguous, industrial expansion of existing industrial areas; (b) Freeway Service areas; (c) Commercial Recreation areas; or (d) Truck Terminal Areas.
8. Outside of communities (identified in Figure IV-1), existing industrial areas (which may be expanded), Freeway Service areas, Commercial Recreation areas, and Truck Terminal areas, the General Plan Map land use designation shall be Agriculture or other open space designations.
10. Development shall be compatible with adjacent uses.
11. Development should complement and blend in with its setting.
25. Existing infrastructure should be maintained and upgraded when feasible, to reduce the need for new facilities.
Relevant Policies – Agricultural Lands
5. Agricultural areas shall be used principally for crop production, ranching, and grazing. All agricultural support activities and non-farm uses shall be compatible with agricultural operations and shall satisfy the following criteria: (a) the use requires a location in an agricultural area because of unusual site area requirements, operational characteristics, resource orientation, or because it is providing a service to the surrounding agricultural area; (b) the operational characteristics of the use will not have a detrimental impact on the management or use of surrounding agricultural properties; (c) the use will be sited to minimize any disruption to the surrounding agricultural operations; and (d) the use will not significantly impact transportation facilities, increase air pollution, or increase fuel consumption.
7. There shall be no further fragmentation of land designated for agricultural use, except in the following cases: (a) parcels for homesites may be created, provided that the General Plan density is not exceeded; (b) a parcel may be created for the purpose of separating existing dwellings on a lot, provided the Development Title regulations are met; and (c) a parcel may be created for a use granted by permit in the A-G zone, provided that conflicts with surrounding agricultural operations are mitigated.
8. To protect agricultural land, non-agricultural uses which are allowed in agricultural areas should be clustered, and strip or scattered development should be prohibited.
Source: San Joaquin County, 1995a

Land Use Table 2
San Joaquin County Development Title Sections Relevant to the Proposed Project

Relevant County Development Title Sections
9-115.580 Use Classification System - Utility Services
The Utility Services use type refers to the provision of electricity, liquids, or gas through wires or pipes. The following are the categories of the Utility Services use type: (a) Minor. Utility services that are necessary to support principal development involving only minor structures. Typical uses include electrical distribution lines, utility poles, and pole transformers. (b) Major. Utility services involving major structures. Typical uses include natural gas transmission lines and substations, petroleum pipelines, and wind farms.
9-605.6(d) Special Use Regulations - Power-Generating Facility
A permit approval shall be subject to all of the following findings: (1) The source of the power requires locating the use in an area designated as Agricultural or Resource Conservation in the General Plan; (2) The use will not have a significantly detrimental effect on the agricultural activities in the vicinity; and (3) The site of the use can be rehabilitated for agricultural production or a permitted use in the AG zone if the power source is temporary.
Table 9-605.2: Uses in Agricultural Zones
Utility Services – Minor is considered a "Permitted Use" in all Agricultural Zones, Major is considered "Use Permitted Subject to Site Approval" in all Agricultural Zones
9-1810.3(b)(1)(Z) Williamson Act Contract Regulations: Uses - Utility Services
Williamson Act Contract Regulations: Uses. Property shall be limited to those uses specified herein. (1) The following uses or use types: …Nonresidential:…(Z) Utility Services.
Source: San Joaquin County, 1995c

Mountain House Master Plan

The Mountain House Master Plan follows state guidelines for Specific Plans, though it is called the Master Plan to distinguish it from Specific Plans for smaller areas within the Mountain House community. The Mountain House community is a "new town" development, currently in the grading stage prior to construction, which is located approximately 3.2 miles northwest of the project site. The Mountain House Master Plan implements the amendment to the San Joaquin County 2010 General Plan which added the Mountain House community to the General Plan. The Master Plan presents plans for land use, infrastructure, environmental resources, public service provisions, objectives, policies, and implementation measures (San Joaquin County, 2000).

City of Tracy

While the TPP project site is within the City of Tracy's Sphere of Influence, the land is currently in San Joaquin County's jurisdiction. Staff recognizes the overlap between the City and the County. Due to the proximity of the project to the City of Tracy, and in response to a January 15, 2002 letter from the City's Development and Engineering Services staff, we have reviewed the Tracy General Plan/Urban Management Plan (UMP). However, the UMP is not included in this LORS section or the Impacts section because the City LORS are not applicable as the site is in San Joaquin County, and San Joaquin County's jurisdiction therefore takes precedence over the City's Sphere of Influence.

San Joaquin County's General Plan section addressing interjurisdictional coordination states that when the County is the lead agency for review of a proposed development, its Community Development Department staff forwards development applications that

are within a city's sphere of influence to that city for review and comments. In this instance, San Joaquin County did not coordinate its September 18, 2001 comments and conditional use permit findings on the project with the City of Tracy staff. According to County staff, the County did not refer the proposed development to the City of Tracy because the Energy Commission is the lead agency for the project. (Martin, 2002b) The Energy Commission staff did contact the City of Tracy, beginning on November 28, 2002. Our contact consisted of several telephone conversations with the City of Tracy's Development and Engineering Services staff regarding the TPP and other projects planned in the TPP vicinity. The City of Tracy staff received the draft Staff Assessment for review in early January 2002.

The City of Tracy has adopted two Specific Plans for development within the TPP vicinity. The Tracy Hills Specific Plan area is located within the City of Tracy's incorporated area, with the northern boundary of the Plan approximately 0.6 mile from the TPP site. The South Schulte Specific Plan area includes the site, but the area has not been annexed to the City. While it is in the City's Sphere of Influence, since no annexation has occurred, the entire area, including the TPP site, is currently within the County's jurisdiction. These Specific Plans are discussed in the Setting section of this analysis under the Planned Land Uses heading, rather than this LORS section, because the City of Tracy LORS do not directly affect the TPP.

SETTING

SITE AND VICINITY DESCRIPTION

The proposed Tracy Peaker Project (TPP) site is located on 10.3 acres within a 40-acre parcel approximately 1 mile outside of the City of Tracy in an unincorporated portion of San Joaquin County. The site is designated as General Agricultural and zoned as AG-40 (minimum 40-acre lots). San Joaquin County is currently in the process of re-zoning all lands under Williamson Act contracts to Agricultural Resource Management (ARM). The site is currently under a Williamson Act contract, which the land-owner put into "non-renewal status" (i.e. the landowner decided in 1992 not to renew the contract once its current term expires). The contract will expire in March 2002. The site is expected to be re-zoned as ARM in January or February of 2002 (Van Buren, 2001).

The site is located 0.6 miles to the west of Lammers Road off an unimproved access road. The access road is located immediately west of an existing industrial parcel, running 0.6 miles south from West Schulte Road.

- The proposed project is bounded to the north by a Union Pacific Railroad right-of-way (ROW);
- Adjacent to the north on the other side of the railroad ROW, an industrial compound contains Owens-Brockway Glass Container, Inc., Nutting-Rice Tracy LLC, and Tracy Biomass Power Plant;
- To the northwest, across the Union Pacific Railroad, a parcel owned by the Federal government and formerly used as a radio communication facility is now overgrown with grasses around the tall, mast-like transmitter poles (Kehoe, 2001);

- The Delta-Mendota Canal bounds the parcel to the southwest; and
- Jepsen Webb Ranch LLC forms the boundary to the east and south.

The 10.3 acres of the project site and laydown areas are located on state designated Prime Farmland. The site is not currently in agricultural production, but has historically been used for growing alfalfa, tomatoes, beans, cauliflower, and sugar beets. The land had been left fallow 3 years out of the last 10 (GWF, 2001b). The soil on the site has been tilled and with the exception of transmission lines crossing the southeast corner of the property is bare of any structures. The remaining acreage of the parcel is proposed to be leased to the previous owner and remain in agricultural use. The adjacent agricultural parcels to the northeast, east, and southeast have traditionally grown alfalfa, grain, and flax (GWF, 2001b).

Agricultural lands extend south from the opposite bank of the Delta-Mendota Canal (GWF, 2001b, Figure 8.4-4).

From West Schulte Road, the industrial parcel containing Tracy Biomass, Nutting Rice, and the Owens-Brockway glass manufacturing operation is fenced off from the road and appears as a single compound containing the following:

- Two large building structures with stacks, one on the north side of the property and one on the south side;
- A warehouse on the south side;
- Two water tanks, approximately 50 feet high, located in the southwest corner of the industrial parcel; and
- A 122-foot high water tower, the most visible landmark of the industrial parcel, at the southeast corner, to the northeast of the proposed project site.

LINEAR FACILITIES

The linear facilities for the project include a 1,470-foot water pipeline along the west boundary of the Jepsen-Webb property and Sam and Marie Tuso properties adjacent to the Delta-Mendota Canal. For a natural gas supply, the plant would tie into PG&E Line 401, which runs from northwest to southeast across the project parcel adjacent to the plant to the east, and would tie into the 115-kV Tracy-Kasson transmission line on the parcel to the south of the project site (GWF, 2001c).

The 12-inch diameter water pipeline proposed for the project runs 1,470 feet parallel to the Delta-Mendota Canal from the project site to canal Turnout 1187 LT, a gate structure allowing the release of water from the canal. The entirety of the proposed pipeline route is located on unincorporated San Joaquin County land beneath an existing dirt road (GWF, 2001a). The water pipeline crosses land uses designated as general agriculture and zoned as AG-40.

SURROUNDING LAND USE

The land surrounding the TPP project site can be characterized as a combination of agricultural and industrial uses with small, but rapidly increasing residential

development. Land uses surrounding the site include agriculture, industry, residential, a railroad ROW, water management projects, agricultural urban reserve, and planned unit development. When assessing land use compatibility (see the Impacts section for a compatibility discussion), staff generally looks at the existing land uses that are located within one mile of the proposed project site. Given the multiplicity of existing uses within the Tracy urban area, we have listed only the uses that we are aware of that are located within approximately one mile of the project, and/or west of Corral Hollow Road and south of Schulte Road (northeastern segment).

Surrounding land uses include:

- The Union Pacific Railroad owns and maintains a railroad line right-of-way (ROW) adjacent to the TPP property to the north, running in an east-west direction;
- Owens-Brockway operates a glass manufacturing facility on the eastern side of the parcel, directly across the railroad ROW, to the north of the property;
- Owens-Brockway operates the warehouse on the Nutting-Rice property in the southwestern corner of the industrial zone;
- Tracy Biomass, with a frontage on the north side of the property along Schulte Road, operates a cogeneration power plant fueled by mainly wood waste material;
- Other industrial uses within a mile of the proposed site include a meatpacking facility on the east side of Hansen Road approximately 0.9 miles southwest of the TPP site (GWF, 2001a);
- The Delta-Mendota Canal water management area, owned and operated by the U.S. Bureau of Reclamation, runs northwest to southeast, bounding the parcel to the southwest;
- A service road ROW runs along the tops of the raised berm banks of the Delta-Mendota canal;
- The California Aqueduct, owned and operated by the State of California, runs from northwest to southeast approximately 0.5 miles to the southwest of the TPP property;
  - A neighborhood of single-family, ranchette-style dwellings/farmhouse residences line the west side of Lammers Road, 0.8 miles to the east, including the following properties:
  - Russell Kagehiro/Jepsen Webb Ranch
  - John and A. Zambetti
  - Roger Traina, Anthony Traina, et al.
  - Sam and Marie Tuso
  - Clare Atkins
  - A Church of Latter Day Saints worship facility located approximately 1.0 mile east of the project site, on Valpico Road, between Corral Hollow and Lammers Roads.
  - The Redbridge residential development is nearing completion within the city limits of Tracy, approximately 0.8 miles to the northeast of the TPP property on the east

side of Lammers Road, north of Schulte Road. The Redbridge development consists primarily of two-story, single family residences in a customhousing style development. The development is surrounded by a wall and also includes a water tower and general store;

- Both the Tracy-Kasson and Tracy-Manteca 115-kV transmission lines on steel-lattice towers and the Tracy-Stockton 115-kV junction line on wooden poles cross the TPP property and extend northeast and southwest through agricultural properties;
- Interstate 580, a four-lane freeway, runs roughly parallel to the Delta-Mendota Canal and California Aqueduct approximately 1 mile to the southwest of the TPP property and Interstate 205 (I-205), also a four-lane freeway, runs east-west approximately 4 miles to the north; and
- Just over 1 mile west of the TPP property along Schulte Road, a number of large truck distribution terminals are located between I-580 and I-205, including terminals for Safeway and Costco.

Agricultural lands zoned as AG-40 surround the TPP property on three sides:

- The Jepsen Webb Ranch property lies to the east and southeast of the site;
- The George Cheng property is located to the northeast of the site;
- The Cheun Hee Lee property exists across the canal to the southwest; and
- Federally owned land to the northwest of the site, which is used as a communications facility, is also zoned for agriculture.

Agricultural lands extend further to the southeast bounded by the Delta-Mendota Canal to the south and Lammers Road to the east; to the south between the Delta-Mendota Canal and the California Aqueduct; and to the southwest to Interstate 580 (I-580).

The staffs for both the West Jefferson and Lammersville Elementary School Districts and the Tracy Joint Unified School District staff, were not aware of any existing school facilities in the region west of Corral Hollow Road, and south of Schulte Road (Tracy Joint Unified School District, 2002; Jefferson Joint Unified Elementary, 2002; Lammersville Elementary School District, 2002.)

Planned Land Uses

The Tracy community is experiencing rapid urban growth and development, including growth in the southwest area in the overall vicinity of the project site. Planned land uses that staff is aware of are listed below and in the Cumulative Impacts section (see Table 4) of this analysis. With respect to land use compatibility, staff is generally concerned with land uses that would be located within one mile of the proposed project. Therefore, staff surveyed the known projects in the general area west of Corral Hollow Road. Several planned uses that are further than one mile from the project site are also listed here in response to comments from members of the Tracy community concerning the proximity of churches and schools.

- Tracy Hills Specific Plan area – The Tracy Hills Specific Plan is the detailed plan and accompanying documents for the development proposed for the area surrounding

the existing interchange around Corral Hollow Road and the proposed Lammers Road interchange on Interstate 580 (I-580). The Tracy Hills Community Area is planned to be approximately 0.6 miles south of the proposed TPP (City of Tracy, 1998). The land has been annexed by the City and lies within the City limits. This new community area surrounds one of the six urban centers defined in the City of Tracy's General Plan. Tracy Hills is planned with distinct residential villages, commercial and retail uses, public recreational facilities, open space, industrial and office uses. The Specific Plan designates land use, zoning, design and architectural standards, road improvement standards, public facilities standards, project phasing, future permit processing and subdivision Covenants, Conditions and Restrictions.

- South Schulte Specific Plan area – The South Schulte Specific Plan is the City of Tracy's detailed plan and accompanying documents for the development proposed for the area bounded on the south and west by the Delta-Mendota Canal and the California Aqueduct, Corral Hollow Road to the east, and Schulte Road and the Upper Main Canal to the north. The South Schulte Specific Plan area has not been annexed by the City, and is currently within San Joaquin County's unincorporated area. The Specific Plan provides for a variety of housing types, industrial and commercial uses for employment, schools, parks, open space, trails, and neighborhood commercial uses to support residential areas. The proposed project site is included in the South Schulte Planning Area in a parcel with a City of Tracy designated land use of Residential Very Low (City of Tracy, 1997).
- St. Bernard's Catholic Church and School – the St. Bernard's property is located at the intersection of Valpico and Corral Hollow Roads, approximately 1.5 miles east of the site. This project is located within the unincorporated area of San Joaquin County. The St. Bernard's staff stated that they have been discussing the project with the County's Community Development staff, and there has been no permitting activity to date (St. Bernard's Catholic Church, 2002).
- The Tracy Joint Unifed School District has identified two school sites located west of Corral Hollow Road:
- An unnamed site at the intersection of Mabel Josephine Drive and Schoolhouse, which would be located approximately 1.5 miles northeast of the TPP site; and
- An unnamed site at the intersection of Tennis Lane and Barcelona, which would be located approximately 2.0 miles northeast of the TPP site. (Tracy Joint Unified School District, 2002)

The Tracy Joint Unified staff did not have a development schedule for these school sites.

- The Jefferson Elementary School District staff has identified two sites in the TPP vicinity. One is south of Valpico Road, near the intersection of Valpico and Corral Hollow Roads. The other site is also south of Valpico, near the intersection of Valpico and Lammers Roads (Jefferson Joint Unified Elementary, 2002). The Jefferson Joint Unified staff did not have a development schedule for these school sites, which have not yet been reviewed by the California Department of Education.
- Staff for the Lammersville Elementary School District were not aware of any school sites planned at this time within their jurisdiction, which is basically north of South

Schulte Road, west of Corral Hollow Road, and south of the northeastern section of Schulte Road (Lammersville Elementary School District. 2002).

- The Church of Latter Day Saints may pursue a building project in the South Schulte area, west of Corral Hollow Road. The exact property location and timing of the project is currently unknown. Other Tracy area churches may also be considering new locations in the South Schulte area because it offers more options for large facilities and/or expansion than their current locations within the developed area of Tracy (Hill, 2002).

ANALYSIS AND IMPACTS

PROJECT SPECIFIC IMPACTS

The Environmental Checklist (see below) is presented in the California Environmental Quality Act (CEQA) guidelines to assist lead agencies in their analysis of project impacts. We provide this checklist as a summary of staff's conclusions regarding the potential for adverse significant project impacts. Following the checklist is a discussion of staff's analysis and rationale for these conclusions.

Environmental Checklist

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
LAND USE – Would the project:				
a) Physically divide an established community?		**X**		
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?		**X**		
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?		**X**		
d) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				**X**
e) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?				**X**
f) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?		**X**		
g) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				**X**
h) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?		**X**		

a) Physical Division of An Existing Community

While the project would convert 10.3 acres of Prime Farmland to a non-agricultural use, the proposed plant is similar enough in use to the facilities in the industrial compound directly to the north that the power plant would blend in with the surrounding facilities. The preservation of the remaining land in the parcel as agriculture would prevent interference, disruption, or division of agricultural uses in adjacent properties.

With implementation of Condition for Certification **LAND-2** regarding agricultural land mitigation, the TPP would not significantly interfere with, disrupt, or physically divide an established community. Impacts would be less than significant with mitigation incorporated.

b) Conflict with any Applicable LORS

Energy Commission staff reviews the project in accordance with federal, state, regional and local LORS and policies to determine applicability, appropriateness and consistency. Energy Commission staff also consults with the applicable agencies to determine conformity. The LORS and policies applicable to the project have been analyzed below to determine the extent to which the project is consistent, or at variance, with each requirement or standard. Note that at the local level, because the Cityof Tracy has not annexed the TPP site, it is the San Joaquin County LORS that apply, rather than the City of Tracy's. While the site is within the City of Tracy's Sphere of Influence, the Commission staff needed to consider the County LORS since the sie is within the County's jurisdiction.

Federal Aviation Administration

Since the height of the project would not exceed 200 feet or the most restrictive radius and slope requirement, the proposed TPP would not pose a hazard to airport operation or flight lines (GWF, 2001a). The proposed TPP site is approximately two miles west of the Tracy Municipal Airport.

California Land Conservation Act of 1965

The 10.3-acre plant site, water supply pipeline, and access route are all proposed to be located on land currently under Williamson Act contract. The 40-acre parcel which contains the site is not currently being used for agricultural production, but was used for agricultural purposes for approximately 30 years (GWF, 2001b). Notice of contract non-renewal for the subject acreage was filed in March 1992. As such, the Williamson Act contract expires in March 2002 and the TPP is scheduled to begin commercial operation in June 2002 (GWF, 2001a). Staff was initially concerned that the applicant would begin construction before March 2002, while the site is still under a Williamson Act contract administered by the California Department of Conservation. Staff pursued the construction timing issue with the Department of Conservation (DOC), program administrator for the Williamson Act, and San Joaquin County Planning Department staff.

The San Joaquin County Planning Department provided a record of findings regarding the Williamson Act contract status for the parcel, stating that the TPP is compatible with the existing Williamson Act Contract (contract number 71-C1-377). The San Joaquin County Planning Department found that "the TPP is compatible with the existing Williamson Act Contract (cite omitted) as a result of the San Joaquin County Development Title 9-1810.3(b)(1)(z) and California Government Code Section 51238.1, which taken together, provide that the Utility Services are allowed as a compatible use." (San Joaquin County Planning Department, 2001.) San Joaquin County Development Title 9-1810.3(b)(1)(z) provides that utility services are an allowed use in a Williamson Act preserve. California Government Code Section 51238.1 permits a board or council to allow as compatible a use that without conditions or mitigation would otherwise be considered incompatible, if the use meets the following conditions:

- The use will not significantly compromise the long-term productive agricultural capability of the subject contracted parcel or parcels or on other contracted lands in agricultural preserves;

- The use will not significantly displace or impair current or reasonably foreseeable agricultural operations on the subject contracted parcel or parcels or on other contracted lands in agricultural preserves. Uses that significantly displace agricultural operations on the subject contracted parcel or parcels may be deemed compatible if they relate directly to the production of commercial agricultural products on the subject contracted parcel or parcels or neighboring lands, including activities such as harvesting, processing, or shipping; and
- The use will not result in the significant removal of adjacent contracted land from agricultural or open-space use.

California Government Code Section 51238 states that unless a board or council finds to the contrary, the construction of water, gas, and electric facilities are determined to be compatible uses within a preserve.

Stephen Oliva, Senior Supervising Staff Counsel for the DOC, discussed the project's Williamson Act contract timing and compatibility items in a September 27, 2001 letter to the Energy Commission:

> "The Tracy project has a limited impact area and the underlying site is at the end of the non-renewal period. As you know, the property owner filed a notice of non-renewal for the Williamson Act contract in 1992, and the contract is due to expire in March 2002. Thus, given the timetable for the project, it will not be operational until after the restrictions imposed by the Williamson act contract are terminated. Under these unique circumstances, the County has considered whether the project meets the Act's principles of compatibility. We accept that determination, in that it was considered in light of the statutory framework specified in the statute." (Oliva, 2001)

Thus, the DOC is deferring to the determination of compatibility by the San Joaquin County Planning Department. Based on the timing of the expiration of the contract, and the letter submitted by the DOC, staff is not in opposition to the County's determination.

Delta Protection Act of 1992

The project site lies within the Secondary Zone of the statutory Delta; therefore it is not required to conform to the State regional land use plan required for the Primary Zone area designated by the Act (DPC, 1992).

Subdivision Map Act, 1972

The legal status of the 40-acre parcel for this project is unknown based on the information provided by the applicant. On AFC page 8.4-6, the applicant states, "The TPP parcel will be created by means of a lot line adjustment. An application for the lot line adjustment has been submitted to the San Joaquin County Community Development Department in August 2001."

The applicant has indicated that the lot line adjustment has been approved and recorded, but has not submitted the approval. With implementation of Condition of

Certification **LAND-1**, the project would be in compliance with the State Subdivision Map Act.

San Joaquin County General Plan

The San Joaquin County General plan calls for county lands to be developed in an orderly, organized manner in which urban uses are concentrated around urban centers and agricultural and natural resources are protected.

Following is a discussion of the proposed project's compliance with the specific applicable General Plan Goals and Policies listed in the LORS section in **Land Use Table 1**:

- **San** Joaquin County General Plan Land Use Goal and Agricultural Lands Policy 7 - The loss of 10.3 acres of agricultural land as a result of the project's construction would not meet the County's goal of protecting County agricultural resources. The applicant has proposed measures to mitigate the agricultural losses/fragmentation of agricultural land and bring the project into LORS compliance both with the General Plan Land Use Goal and Agricultural Lands Policy 7 (San Joaquin County Planning Department, 2001).

  The proposed mitigation measures consist of a signed agreement that the applicant negotiated with the American Farmland Trust (AFT) for the conservation of agricultural lands at a 1:1 ratio of land converted from agricultural to non-agricultural use within San Joaquin County. This agreement would apply to the 10.3 acres of prime farmland GWF intends to convert to non-agricultural use. Staff is now reviewing the signed agreement, which it received on January 23, 2002. This proposed mitigation is reflected in staff's Condition of Certification **LAND-2.**

- **Community Organization and Development Pattern Policies (CODPP) 7 and 8** – As described below in the Zoning Ordinance discussion, the zoning of the site does not need to change. Although the site is zoned for agriculture, the placement of the site adjacent to the railroad ROW and industrial area (i.e., Owens-Brockway, Nutting-Rice, and Tracy Biomass uses) can be deemed an industrial expansion, which is allowed by the General Plan.

- **CODPP 10 and 11** - Placement of the proposed project adjacent to the industrial compound containing Owens-Brockway, Nutting Rice and Tracy Biomass, sites the project in an area of similar character and compatible uses, allowing it to complement and blend in with surrounding uses.

- **CODPP 25** – This General Plan policy states that existing infrastructure should be maintained and upgraded when feasible, to reduce the need for new facilities.

The Energy Commission staff notes that in a September 18, 2001 letter, San Joaquin County found the TPP project to be consistent with its General Plan policies, including CODPP 25. The Commission staff believes that the Tracy Biomass facility, which is

located to the north of the TPP site[1], has the potential to be upgraded, and it could possibly accommodate the proposed project. If the TPP were to be built at the Biomass facility, it would clearly be consistent with CODPP 25. We believe that there are a number of ways to interpret the General Plan language, and staff is therefore prepared to accept the County's conclusions regarding consistency with this General Plan policy.

- **Agricultural Lands Policy 5** - The project complies with the stipulations of the Agricultural Lands Policy 5 in that while the use is non-agricultural, the TPP requires the use of agricultural property to make use of the resources the site provides: 1) the electrical transmission and natural gas linear facilities on site; and 2) the water supply adjacent to the parcel. The project site has also been designed to consolidate non-agricultural uses on the land to prevent disruption of the continued agricultural use on the remaining non-converted land. This is discussed further in the findings of the San Joaquin County Planning Department under the San Joaquin County Development Title section below. The **Air Quality** and **Traffic and Transportation** sections of the Staff Assessment discuss the project compliance items contained under San Joaquin County General Plan Agricultural Land Policy 5(d).

- **Agricultural Lands Policy 8** - The clustering of industrial uses (i.e. the TPP adjacent to Owen-Brockway, and near Nutting-Rice and Tracy Biomass Power Plant) complies with Agricultural Lands Policy 8, restricting non-farm uses on agricultural lands to concentrated clusters instead of scattered or in strips. The TPP is consistent with this policy, in that its location immediately south of the Owens-Brockway facility extends the existing cluster of industrial uses.

San Joaquin County Development Title

The San Joaquin County Planning Department would normally be the CEQA lead agency for development projects proposed in the county. In this instance, the California Energy Commission is the CEQA lead agency for this project, since the proposed power plant is greater than 50 MW in size. To determine consistency with local LORS, the Commission staff asked the County to make the findings that it normally would when considering a conditional use permit application.

With respect to projects proposed in agricultural zones, San Joaquin County has the following conditional use permit requirements that are applicable to the TPP:

(1) The source of the power requires locating the use in an area designated as Agricultural or Resource Conservation in the General Plan;
(2) The use will not have a significantly detrimental effect on the agricultural activities in the vicinity; and
(3) The site of the use can be rehabilitated for agricultural production or a permitted use in the AG zone if the power source is temporary. The proposed project falls within the definition of Major Utility in the San Joaquin County Development Title (as

[1] The Biomass facility is one of the TPP alternative sites, which is described in the AFC Alternatives section.

described in **Land Use Table 2**) as a "provision of electricity…through wires" that involve a "major structure."

The San Joaquin County Planning Department, in a September 18, 2001 record of findings regarding the compatibility of the project with the agricultural zoning of the parcel, states that:

> "The sub findings under Section 9-605.6(d) can be made. Specifically, item (1) is satisfied as the area is designated as agricultural in the General Plan. The source of power (the TPP) requires locating in this area designated as Agriculture, since the TPP requires access to natural gas, electric transmission interconnection, and water. The proximity of the infrastructure bringing natural gas, electrical interconnection and water to this site results in less expense, less environmental impacts, and less impacts to agriculture than another site.
>
> "Item (2) is satisfied since only nine acres[2] are to be disturbed and the immediate area contains existing industrial uses such as the Tracy Biomass Plant, the Owens-Brockway Glass Container Manufacturing Plant, and the Nutting-Rice Warehouse. Finally, the 169 MW produced by this power plant would benefit agriculture in the vicinity significantly more than any possible adverse impacts from the loss of nine acres.
>
> "Lastly, if 30 year life is considered a temporary use, item (3) is satisfied as the site can rehabilitated for either agricultural productions or a permitted use in the agricultural zone, as demonstrated in Section 1.5.8 (i.e. from TPP AFC), regarding Facility Closure, of the Executive Summary of the materials submitted by GWF to the CEC." (San Joaquin County Planning Department, 2001

The Commission staff agrees with the San Joaquin County General Plan's concepts found in CODPP 25, such that existing facilities such as the Tracy Biomass plant should be upgraded when feasible, to reduce the need for new facilities. Furthermore, we consider electric power plants to be an industrial type of land use, which are logically located in industrial zoning districts. We do not agree with the San Joaquin County staff's September 18, 2001, Conditional Use Permit finding 1) that:

> The source of the power requires locating the use in an area designated as Agriculture or Resource Conservation in the General Plan…since the TPP requires access to natural gas, electric transmission, and water.

We discussed our conclusions with the County's Planning staff on December 21, 2001. The County staff agreed with the Energy Commission staff that it was possible that non-agricultural zones/sites in the region could also provide access to natural gas, electric transmission, and water. They stated that uses such as the TPP fall into the "Utility

[2] It should be noted that in the correspondence with the San Joaquin County Planning Department, the County refers to the site being nine acres. The applicant has since revised the acreage proposed for the site to be 10.3 acres.

Services – Major" category, which are conditionally permitted in agricultural as well as industrial zones. They noted that their conditional use permit findings needed to be limited to an examination of whether the applicant's proposal for the TPP would be an allowed use in an agricultural zone, rather than consideration of other zone or site options.

While our opinion is stated above, we acknowledge that that there are a number of ways to interpret local LORS language relevant to new power plant projects in agricultural areas, as defined in the San Joaquin County General Plan and its zoning regulations (i.e. Development Title). We accept the San Joaquin County staff's interpretation of its General Plan goals and policies, and its conditional use permit findings as required in the zoning regulations, as these interpretations are not unreasonable.

Development Title – Consistency with Williamson Act Provisions

The County's Development Title (Section 9-1810.3 (b)(1)(Z) Utility Services permits some "utility services" under its local Williamson Act Contract Regulations. The DOC opinion (stated below) regarding LORS consistency is relevant. Stephen Oliva, Senior Supervising Staff Counsel for the Department of Conservation, states in regard to the use of agricultural preserve land for an electrical generation facility:

> "With respect to the current project, where there is a significant question whether the proposed facility would impair the operation of the preserve as a locus for ongoing agricultural operations, we are not prepared to categorically include or exclude the proposed electrical generating facility as a compatible use."

Mr. Oliva defers the decision to the County and states that the Department of Conservation accepts San Joaquin County's determination that the TPP would be a compatible use with the agricultural zoning (Oliva, 2001).

San Joaquin County is currently in the process of re-zoning all lands under Williamson Act contracts to Agriculture Resource Management (ARM) zones. The re-zoning of Williamson Act contract lands such as the project site's AG-40 zone to ARM may take up to four months, but will have no effect on the compatibility of the project with the site as Major Utilities are permitted with site approval for all agricultural zones, including ARM (Van Buren, 2001). Under the determination of the San Joaquin County Planning Department and California Department of Conservation, the TPP would be compliant with the San Joaquin County Development Title.

Tracy Hills Specific Plan

The Tracy Hills Specific Plan maps out a future community approximately 0.6 miles south of the proposed project, within the city limits of Tracy. Although over 3,850 acres of the planned community is open space, the bulk of which is set aside as part of a kit fox Habitat Management Plan, this open space area lies to the west of the community development and does not encompass the land to the north where the proposed project is located.

AKT Development Corp., which has proposed to develop the residential portion of the Tracy Hills Specific Plan, has expressed concerns over the compatibility of the TPP project with adjacent land uses, and the proximity of the proposed TPP to the medium density residential area planned on the northern side of the community. Mr. Bill Dean of the City of Tracy's Development Services staff expressed a similar concern in a January 15, 2002 letter to the Energy Commission. As discussed in the RESPONSE TO COMMENTS section (see our response to AKT comments), staff believes that the TPP would be an expansion of the long established, existing industrial complex located adjacent to, and north of the TPP.

Staff acknowledges that if the Tracy Hills Specific Plan is fully implemented in its current form, residential development would be located within one-half mile of an industrial area. However, we believe that AKT and Mr. Dean have omitted discussion of the existing industrial uses, which were there long before the planned development. The City of Tracy's 1998 decision to approve the concept (i.e. the Tracy Hills Specific Plan) of residential development that would be located very close to an existing industrial area is a key factor that should be included in any discussion of land use compatibility. Furthermore, we believe that there is room for designing additional open space buffer areas in the planned development, particularly the area next to the Union Pacific rail line. Such a buffer area would be in addition to the buffer provided by the TPP's proposed landscaping/screening, and the 29.7 acres of TPP land that would remain in agriculture.

Mr. Dean stated that, "[i]mplementation of the Tracy Hills Specific Plan is currently in a holding pattern, pending resolution of infrastructure (i.e. water and sewer) development issues with the City of Tracy." He did not have an estimated date for construction in the Tracy Hills Specific Plan area. The infrastructure restrictions in the slow-growth initiative Measure A and a slowing economy have discouraged developers from investing in the infrastructure necessary to move to the next stage of development (Dean, 2002; Lombardo, 2002).

South Schulte Specific Plan

The TPP project site is included in the City of Tracy's South Schulte Specific Plan and has a land use designation of Residential Very Low. The Specific Plan area has not been annexed to the City. Although it is in the City's Sphere of Influence, the Plan area, including the TPP site, is in San Joaquin County's jurisdiction. The Specific Plan labels the parcel to the north of the proposed TPP site as Industrial, consistent with its current use. However, the surrounding agricultural parcels have Specific Plan labels of Residential Low, Residential Very Low, or Park. Other zones in the Specific Plan labeled Industrial are located to the southeast, in an area that appears to overlap with the Tracy Hills Specific Plan (City of Tracy, 1997; City of Tracy, 1998). The proposed TPP site is labeled in the Specific Plan as Residential Very Low and is adjacent to a planned park.

In addressing the proposed TPP, Mr. Dean expressed similar land use compatibility concerns in his January 15, 2002 letter, to those stated above for the Tracy Hills Specific Plan. He did not discuss the presence of the long established, existing industrial area and its compatibility with the recently (i.e. 1997) approved South Schulte

Specific Plan. Our above statements in the Tracy Hills Specific Plan context, regarding the TPP as an expansion of an existing industrial area are applicable to the South Schulte area, as well, Similarly, the City's 1997 decision to approve the South Schulte planned residential areas in extremely close proximity to existing industry is a key factor for any discussion of land use compatibility. An open space buffer adjacent to the existing industrial area could also be integrated into the South Schulte Specific Plan.

The South Schulte Specific Plan is constrained by the same lack of infrastructure development that hinders the Tracy Hills Specific Plan. As such, there are no plans in the near future to develop the project (Dean, 2002).

Summary

Staff has concluded after consideration of the San Joaquin County LORS addressing agricultural land preservation, that with mitigation (i.e., proposed Condition of Certification **LAND-2**) adopted, the TPP would not result in a significant environmental impact. The County staff's interpretation of its General Plan goals and policies, and the conditional use permit findings required in its zoning regulations, are not unreasonable.

The TPP site is within San Joaquin County, and the project would be in the County's jurisdiction but for the Energy Commission's lead agency status. However, the site is also within the City of Tracy's Sphere of Influence, in an area of substantial development planned by the City of Tracy. This situation of the City's Sphere of Influence overlapping the County's jurisdiction is illustrative of the challenge faced by rapidly growing cities, when addressing development projects proposed in unincorporated areas near the City boundaries.

Staff has reviewed the Tracy Hills and South Schulte Specific Plans in the context of the existing industrial development and the proposed TPP, which would expand the industrial area. The City approved the South Schulte Specific Plan and Tracy Hills Specific Plan, both in extremely close proximity to existing industry. Further, staff believes that the City has the latitude to incorporate more open space buffers into these Specific Plans, which would provide more distance and greater compatibility between the planned residential areas and the existing industrial areas, as well as the TPP.

c) Conflict with any Applicable Conservation Plans

The applicant has contacted the U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Game (CDFG) and proposed to mitigate the disturbance caused by construction and operation of the TPP by providing compensation habitat under the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP). The applicant has also requested the support of USFWS and CDFG to gain endangered species "take" permits through the HCP process administered by the SJMSCP. The **Biological Resources** Staff Assessment provides a detailed discussion of impacts on the SJMSCP and associated mitigation.

d) Increase the Use of Recreational Facilities

Physical impacts to public services and facilities such as recreational facilities are usually associated with population growth in an area, which increase the demand for a particular service. An increase in population in any given area may result in the need to

develop new, or alter existing, government facilities in order to accommodate increased demand.

As an electric generation project seeking to meet the existing energy needs of the California populace, the proposed project is not expected to result in an increase in the population of the area. Also, given the availability of local workforce and the temporary nature of construction activities, the proposed project construction is not expected to result in population growth (GWF, 2001a). The **Socioeconomic** section in this Staff Assessment provides a detailed discussion of impacts on the local workforce and population.

Finally, given the small number of operational personnel needed to run the plant, operation would result in only a negligible contribution to the area's population. Therefore, it is not expected that the proposed project would increase the use of existing recreational facilities such that a substantial physical deterioration of these facilities would occur. There would be no impacts to recreational resources.

e) Include Recreational Facilities that would Adversely Affect Environment

As a power generation project, the proposed project does not include recreational facilities or require the construction or expansion of existing recreational facilities. As described above under Item D, the proposed project would not result in a population increase that would require new or expanded recreational facilities that would cause an adverse physical impact on the environment. Therefore, no impact would occur.

f) Convert Farmland to Non-Agricultural Use

The proposed project site would convert 10.3 acres of Prime Farmland to a non-agricultural use. It would also involve the loss of land considered "Prime Farmland" by the California Department of Conservation. This loss of Prime Farmland constitutes a potentially significant impact to agricultural resources under CEQA. To help offset the project-related impacts from the loss of agricultural land, GWF (in coordination with San Joaquin County) has proposed to mitigate the loss of Prime Farmland with a contribution to procure conservation lands on a one-to-one ratio within, or in close proximity to, San Joaquin County. The land preservation mitigation plan proposed by GWF is described in detail in Condition of Certification **LAND-2.**

San Joaquin County Planning Department has provided a record of findings on the loss of prime agricultural land in which they state:

> "The TPP is a temporary conversion of agricultural land and includes a closure plan…. However, GWF has committed to a mitigation fee for the conversion of the nine (9) acres of agricultural land pursuant to the applicable criteria and protocol of the American Farmland Trust (AFT). GWF shall pay to the AFT the appropriate mitigation fee which shall be held by AFT, in trust, in an interest bearing account for a three (3) year period to allow San Joaquin County to develop a mitigation program for the loss of agricultural farmland. At the end of the three (3) years, AFT shall distribute the funds to San Joaquin County, or in the event that San Joaquin County has not approved of a program for the loss of agricultural

land, then AFT shall be allowed to retain the funds." (San Joaquin County Planning Department, 2001)

Staff supports this proposed approach, and proposes Condition of Certification **LAND-2** to ensure that the applicant would implement a final mitigation agreement with AFT and San Joaquin County for the conversion and loss of 10.3 acres of Prime Farmland, as opposed to the nine acres discussed in the correspondence from the County. On January 23, 2002, staff received a copy of a signed agreement between the applicant and the AFT, which is acceptable. Condition of certification **LAND-2** requires the applicant to provide $56,500 ($5,000 for each acre of farmland converted, plus the payment of a one-time fee of $5,000 for stewardship and monitoring) to the AFT to establish the Tracy Peaker Project Trust Fund. With implementation of this condition of certification, this impact would be less than significant.

g) Conflict with Williamson Act Contract or Agricultural Use Zoning

The 10.3-acre plant site, water supply pipeline, and access route are all proposed to be located on land currently under Williamson Act contract. The parcel owner filed a notice of non-renewal in 1992, and the contract is due to expire in March 2002. As discussed under Item B - California Land Conservation Act of 1965, the San Joaquin County Planning Department has found the TPP to be compatible with the Williamson Act contract. Stephen Oliva, Senior Supervising Staff Counsel for the Department of Conservation, stated in a letter to the CEC, "[W]e would defer to the County's determination regarding compatibility within the preserve in this instance" (Oliva, 2001; San Joaquin County Planning Department, 2001). This determination of compatibility by the State and San Joaquin County indicates that there would be no conflict with existing zoning for agricultural use or a Williamson Act contract.

Thus, no impact would occur.

h) Induce Conversion of Farmland to Non-Agricultural Use

The proposed project site would convert 10.3 acres of Prime Farmland to a non-agricultural use. As noted in Items B and F (above), the applicant has signed an agreement regarding mitigation measures to preserve the unconverted land on the parcel for continued agricultural use, and contribute funds to appropriate conservation lands on a one-to-one ratio with farmland lost to non-agricultural uses (San Joaquin County Planning Department, 2001). With the approvals of the State and County, the proposed project would mitigate for the conversion of farmland with implementation of Condition of Certification **LAND-2**. Impacts would be less than significant with mitigation incorporated.

CUMULATIVE IMPACTS

Cumulative impacts may be caused if a proposed project would have effects that are individually limited but cumulatively considerable when viewed together with the effects of related projects. **Land Use Table 3** displays the reasonably foreseeable development projects in the area.

Land Use Table 3
Reasonably Foreseeable Development Projects

Development	Size	Location	Jurisdiction	Status
South Schulte Specific Plan	1,844 acres	Between Schulte Road to the north and the Delta-Mendota Canal and California Aqueduct to the south, Corral Hollow Road to the east and Delta-Mendota Canal, in San Joaquin County west of the City of Tracy	San Joaquin County)/ City of Tracy	The Plan area, including the TPP site, is currently in San Joaquin County's jurisdiction. The land area covered by this Plan is in the City of Tracy's Sphere of Influence, but has not been annexed by the City. The plan is currently on hold for the City of Tracy to find a developer to provide infrastructure for the community. The project site is located within the bounds of this plan and if approved, the plan would need to be modified for its inclusion.
Tracy Hills	6,175 acres	Approx. 1 mile to the southeast, between Corral Hollow Road and the proposed Lammers Road/I-580 interchange	City of Tracy	Final EIR was prepared by the City of Tracy in 1998. The City is in process of finding a developer for the infrastructure needed by the project.
Old River Specific Plan	1,000 acres	North of I-205 and northwest of the TPP site	San Joaquin County	Community meetings have been held regarding what would be a commercial/industrial development. The plan is under consideration as an amendment to the San Joaquin County General Plan.
Auto Auction Facility	200 acres	Patterson Pass Road Business Park	San Joaquin County	Under review by San Joaquin County.
Mountain House Community Service District- "New Town" Development	5,000 acres	Approx. 7 miles northwest of the TPP site, bounded to the west by the Alameda County Line, to the east by Mountain House Parkway and between I-205 to the south and the Old River to the north.	San Joaquin County	Phasing for the Specific Plan I has begun with construction of the Service District's water treatment plant, site grading, and laying of infrastructure on the site property. The project involves development of a new community with residential, commercial, and industrial development.
Catellus Project	Unknown	Approx. 3 miles northwest of the TPP site, between I-205 and Grant Line Road, west of Lammers Road	City of Tracy	Application for annexation to the City of Tracy to be filed.
Bright Development	160 acres	Approx. 2 miles to the north, bounded by Lammers Road to the east, I-205 to the north, and 11th Street to the south.	City of Tracy	Application for annexation to the City of Tracy filed.
Tracy Gateway	538 acres	Approx. 3 miles to the northwest, along I-205	City of Tracy	Application for annexation to the City of Tracy filed and in Draft EIR process.

Development	Size	Location	Jurisdiction	Status
St. Bernard's Catholic Church and School	5-10 acres	Intersection of Corral Hollow and Valpico Rds.	San Joaquin County	St. Bernard's is discussing the project with San Joaquin County. No permitting activity yet.
Tracy Joint Unifed School District planned school sites	5-10 acres each?	Mabel Josephine Drive and Schoolhouse; and Tennis Lane and Barcelona	City of Tracy	The School District has identified the sites, but does not yet have a development schedule, and no permitting activity has occurred.
Califia community	6,800 acres	Approx. 9 miles to the northeast of the TPP, near Lathrop in western San Joaquin County.	City of Lathrop	Lathrop has annexed the property; environmental permitting process is in progress. Groundbreaking is expected in 2004.
East Altamont Energy Center	19 acres	Approx. 8 miles northwest of the TPP site, in Alameda County, just north of the Mountain House Rd./Kelso Rd. intersection	Alameda County	Under the 12-month CEC review process, PSA pending.
FPL Tesla Power Project	25 acres	Aprox. 4 miles west of the TPP site, in Alameda County, just north of the Tesla Substation on Midway Road	Alameda County	Under the 12-month CEC review process, in Data Adequacy.
Source: City of Tracy, 1997; City of Tracy, 1998;TPP, 2001; San Joaquin County, 2000; San Joaquin County, 2001; EAEC, 2001; FPL Tesla, 2001; HDR, 2001; Lombardo, 2001; Lombardo, 2002; Dean, 2002.				

A significant amount of development is occurring in San Joaquin County. In the vicinity of the proposed project on the west side of the City of Tracy, developers have extensive plans for large areas such as the South Schulte and Tracy Hills regions that would become new communities within the overall city. These developments can be characterized as primarily mixed use with residential, commercial, and light industrial sectors. The proposed project is not expected to make a significant contribution to regional impacts related to new development and growth, such as a population influx, the resultant increased demand for public services, and extension of public infrastructure. The TPP in combination with other proposed projects in the region are expected to contribute to a regional loss of open space and agricultural land. The acreage of agricultural land converted in the proposed project is small relative to other projects in the County and is less than power projects proposed nearby in Alameda County. However, without mitigation in the form of open space and agricultural land preservation and land trusts, the project presents a significant cumulative impact on agricultural resources and open space.

After implementation of the agricultural mitigation measures and conditions of certification, these impacts would be mitigated to "a less than significant impact" under CEQA.

The agricultural land preservation agreement (Condition of Certification **LAND-2**) negotiated between the applicant and AFT will help to mitigate the cumulative impacts of this project to a less than significant level. Staff is reviewing a copy of the final agreement, which it received on January 23, 2002.

ENVIRONMENTAL JUSTICE

Staff has reviewed Census 2000 information that shows the minority population is less than 50 percent within a six-mile radius of the proposed TPP (please refer to **Socioeconomics Figure 1** in this Staff Assessment), and Census 1990 information that shows the minority/low-income population is less than 50 percent within a six-mile radius of the project. While pockets of minority persons within six miles have been considered for impacts, staff has not identified significant direct or cumulative land use impacts resulting from the construction or operation of the project that would have a disproportionate impact on minority/low-income populations. There appears to be no Land Use environmental justice issues related to this project.

FACILITY CLOSURE

At some point in the future, the proposed facility would cease operation and close down. At that time, it would be necessary to ensure that closure occurs in such a way that public health and safety and the environment are protected from adverse impacts.

The planned lifetime of the TPP is estimated at 30 years. At least 12 months prior to the initiation of decommissioning, the Applicant would prepare a Facility Closure Plan for Energy Commission review and approval. This review and approval process would be public and allow participation by interested parties and other regulatory agencies. At the time of closure, all applicable LORS would be identified and the closure plan would discuss conformance of decommissioning, restoration, and remediation activities with these LORS. All of these activities would fall under the authority of the Energy Commission.

There are at least two other circumstances under which a facility closure can occur: unexpected temporary closure and unexpected permanent closure. Staff has not identified any LORS from a land use perspective that the applicant would have to comply with in the event of unexpected temporary closure or unexpected permanent closure of the TPP.

MITIGATION

Staff proposes the following mitigation measures to make the project consistent with regional and local LORS, and to eliminate or reduce to a less-than-significant level impacts associated with loss of “prime” agricultural land.

The mitigation measure proposed in **LAND-1** ensures that the proposed TPP would be in compliance with the State Subdivision Map Act. An agricultural mitigation plan, described in Condition of Certification **LAND-2**, proposes to mitigate the loss of prime soils through the preservation and enhancement of existing farmland on the remainder

of the parcel, as well as providing funding to San Joaquin County for acquisition and preservation of additional agricultural land in the County.

RESPONSE TO PUBLIC AND AGENCY COMMENTS

PUBLIC COMMENTS (NON-INTERVENORS)

Clare Atkins

Ms. Atkins expressed her concerns over the City of Tracy's westward growth and the possibility of the city just growing around the Tracy Peaker power plant and the Tracy Biomass plant. She pointed out that the Jefferson School District adjacent to the plant is worried about the compatibility of the plant and the industrial complex with future schools and residences placed nearby.

Response: We have discussed the westward development of the City of Tracy in the discussions of the South Schulte Specific Plan in the Environmental Setting's Planned Land Uses discussion, in the Impact's section under the City of Tracy heading, and in the Cumulative Impacts section. No development schedules have been produced by the school districts and no other residential developments in the immediate area have applied for permits. Therefore, these projects are considered speculative under the California Environmental Quality Act (CEQA) Guidelines and as such, effects of the proposed project on these future development possibilities cannot be effectively estimated. Staff has been in contact with the Jefferson School District staff (i.e. reference citation for Jefferson Elementary School District; Ms. Grace Merritt) regarding possible school sites in the vicinity, which are noted in the Planned Land Uses section. We have encouraged the District staff to contact us regarding any specific concerns.

John C. Lee, M.A., C.D.T.

JL-1 *Thank you for your letter of December 30, 2001, in which you informed me of the TRACY PEAKER PROJECT. I regret to inform you that I have to protest about this project for the reasons as follows:*

1. *My property is located at 26788 S. Hansen Road, Tracy, which is less than 1,000 feet from the proposed project.*
2. *My property is intended to be used for the Dental Technology School, and the building project will commence sometime this year depending upon the school budget problem.*
3. *We are well aware of the California energy problem, but we are of opinion that the Technical Education in this state is as important as the other.*
4. *For the effective operation of our school, the problem of pollution and noise produced by the Tracy Peaker Project will be an intolerable handicap, and has to be reconsidered.*
5. *The students' safety factors also has to be considered.*

Response: According to the San Joaquin County Planning Department, there are no existing roads, or roads planned to the parcel on which the Dental Technology School is proposed, and no record of building permits applied for or issued for the property (Martin, 2002a). The City of Tracy Planning Department indicates that the property is outside of any proposed annexation to the City (Palmer, 2002). Due to these factors,

Staff believes the implementation of the proposed Dental Technology School to be speculative at this time as defined by the California Environmental Quality Act (CEQA) Guidelines. Therefore, it would be difficult to properly analyze the impacts of the TPP on the Dental School, or vice versa.

Melinda Bettencourt

MB-3 *How will this effect the local farm life?*

Response: The proposed project will remove 10.3 acres of prime farmland out of production in an area adjacent to industrial uses. As described in Condition of Certification **LAND-2**, the applicant is required to purchase comparable lands or preservation easements on a 1:1 basis or contribute funds to the American Farmland Trust to develop a mitigation program for the loss of agricultural land. The remaining 29.7 acres on the parcel are to be preserved as agricultural land. The mitigation measures proposed should prevent any interference, disruption, or division of agricultural uses in nearby properties. Pollution control technologies for both air emissions and water supplies are addressed in detail in the SOIL & WATER RESOURCES and AIR QUALITY sections, but will reduce impacts on adjacent lands to less-than-significant levels.

AKT Development

AD-1 *Lack of Discussion Regarding Potential Conflicting Land Uses. As part of the review process, the Commission staff is required to evaluate whether the proposed project is consistent with federal, state, and local laws, ordinances, regulations, and standards. Commission staff has cited San Joaquin General Plan – Community Organization and Development Pattern Policy ("CODPP") Nos. 10 and 11 as relevant. Policy 10 provides that "[d]evelopment shall be consistent with adjacent land uses." The Staff Assessment indicates that the TPP will be consistent with three existing adjacent industrial land uses. However, there is absolutely no discussion about the TPP's compatibility with any other adjacent land uses. With the Tracy Hills project less than one mile to the south, there should be detailed discussion of the potential conflicts of the TPP with the Tracy Hills Project.*

Response: The adjacent surrounding land uses for the proposed TPP have been examined for compatibility in the **Land Use Staff Assessment** under SURROUNDING LAND USE. The character of land use west of the City of Tracy currently shows a mixture of agriculture and industry, with low-density farm residences and development expanding westward from City of Tracy. The proposed TPP, particularly in its location adjacent to the industrial complex on South Schulte Road, is a compatible use for the general land use character of the area.

AD-2 *The City of Tracy has spent a great deal of time developing the Tracy Hills Specific Plan and Final EIR and all of the infrastructure studies related thereto. At the north end of the Tracy Hills Project, nearest to the TPP, there is a planned medium-density residential development, for which the City has already granted zoning entitlements. The Staff Assessment fails to address potential land use*

conflicts between the TPP and this planned development. Ironically, the applicant addressed, although only briefly, the Tracy Hills Project in its Application for Certification Supplement (dated October 2001). Yet, the staff ignored it completely in the Staff Assessment.

Response: The Tracy Hills Specific Plan noted by the applicant in the October AFC Supplement was researched for possible cumulative impacts and was therefore included in the CUMULATIVE IMPACT section of the **Land Use Staff Assessment** (see Land Use Table 3). According to the City of Tracy Planning Department, no building permits for the Tracy Hills Specific Plan have been issued. While the Final EIR for the plan was completed in 1998, no developer has come forward to construct a water treatment plant necessary to provide the adequate infrastructure needed for further development of the plan to commence.

AD-3 *Lack of Discussion Regarding Cumulative Impacts. The Land Use section of the Staff Assessment did not discuss the potential cumulative impacts of the TPP. The TPP project represents approval of another industrial project in an agricultural area. This could lead to additional industrial projects being approved in a portion of San Joaquin County which is currently agricultural in nature and which is designated as agriculture in the County's General Plan. The potential cumulative impacts of such a decision could be significant and should be discussed in the Staff Assessment.*

Response: Staff is concerned about the conversion of agricultural land to non-agricultural uses and discusses this issue in depth in the DISCUSSION OF IMPACTS sections *F. Convert Farmland to Non-Agricultural Use, G. Conflict with Williamson Act Contract or Agricultural Use Zoning, and H. Induce Conversion of Farmland to Non-Agricultural Use*. The CUMULATIVE IMPACT section addresses the issue further by examining the conversion of agricultural and open-space land in San Joaquin County not only for industrial use, but also for commercial and residential uses. Mixed-use projects in western San Joaquin County are proposing to develop and convert over 15,000 acres of agricultural land in the county to non-agricultural uses, so conversion of farmland is a major concern to CEC Staff. The intent of Condition of Certification **LAND-2** is to help mitigate loss of agricultural land impacts, and to ensure the preservation of agricultural lands in San Joaquin County. It should be noted that the Tracy Peaker Project has been proposed to meet the electrical power demands of the rapid growth and development occurring in the project area.

AD-4 *Proposed Condition of Certification LAND-2 is Improper Mitigation. The Staff Assessment identifies the conversion of agricultural land as a potential significant impact from the project. To mitigate the impact, the Staff Assessment recommends Condition of Certification LAND-2. LAND-2 requires the project owner to develop a [sic] agricultural land mitigation plan, before start of construction for review and approval by the Compliance Project Manager. We question whether such a plan is adequate mitigation. However, more importantly, this Condition defers mitigation until after the decision on the project has been made and delegates authority to approve the mitigation from the decision-making body (i.e. the Energy Commission) to the Compliance Project Manager (i.e. a member of the Commission staff). Such a practice is in direct*

conflict with the holding in Sundstrom v. County of Mendocino (1988) 202 Cal. App.3d 296.

Response: GWF and AFT have developed a mitigation agreement, which compels GWF to preserve an equivalent amount, or greater amount, of Prime Farmland elsewhere in San Joaquin County. This mitigation agreement is intended to ensure that Condition of Certification **LAND-2** is implemented by the applicant. **LAND-2** has been revised to reflect AFT review and approval of the agricultural mitigation plan that is to be developed by the applicant. It should be noted that mitigation plans required by environmental review documents are often prepared after project approval. Conditions or mitigation (and associated protocols and verifications) that usually require mitigation plans are considered the vehicle through which the preparation of the mitigation plan is ensured. AFT review and approval of the agricultural mitigation plan will help ensure that an entity familiar with agricultural lands has input into the adequacy of the plan. It should be noted that a CEC Compliance Project Manager is assigned to post-approval activities for the express reason of ensuring that all of the CEC's conditions of certification and approval are implemented. If the Conditions of Certification are not complied with, the CPM has the authority to halt construction and/or operation of the project.

AD-5 *By its terms, the Condition requires the project owner to describe how the conversion of agricultural land will be mitigated. This means that the plan for mitigation will not be formulated until after project approval. This does not allow the public the opportunity to assess and comment on whether the mitigations will be adequate, and it does not allow the Energy Commission to determine whether it is sufficient to mitigate potential impacts.*

Response: Condition of Certification **LAND-2** requires the applicant to submit the finalized agricultural mitigation plan to the Compliance Project Manager and AFT sixty days prior to the start of site mobilization. Staff has reviewed and a signed agreement between the applicant and AFT, which it received on January 23, 2002. We find the agreement to provide for acceptable mitigation. Public comment on the proposed mitigation is welcome and encouraged and will be considered in deliberations for the project's approval.

PUBLIC COMMENTS (INTERVENOR COMMENTS)

Robert Sarvey

RS-2 *Public is now aware of land use conflicts in project area from study of GWF Peaker Plant Appendix B Land Use Issues 8.4-5 (Exhibit 3). Landowners are being contacted and additional time is needed to discuss issues and mitigation. Many landowners live outside the Tracy area and additional time is needed for their participation in land use issues. Intervenor recommends GWF contact affected owners and explain new limitations on their property rights. Real estate around project is highly speculative due to rapid development of Tracy area and development rights are extremely valuable to nearby landowners. The City of Tracy has annexed property around the site and discussions with City Officials on new land use limitations are necessary.*

Response: Currently, the proposed TPP and the immediately adjacent properties are under San Joaquin County's jurisdiction for planning and building and are all zoned for either industrial uses (the parcel to the north of the proposed TPP site containing Nutting-Rice, Owens-Brockway, and Tracy Biomass) or agriculture. The City of Tracy has annexed nearby properties in the Tracy Hills Specific Plan area, taking them out of San Joaquin County's jurisdiction, and therefore taking responsibility for adoption of any new development plans in the annexed areas and resolving potential land use conflicts.

The City of Tracy would have to ensure that new developments in annexed areas near the proposed TPP are compatible with the existing industrial uses. It should be noted that throughout the **Land Use Staff Assessment,** Staff has been consulting with all of the affected jurisdictions (including the City of Tracy) regarding the proposed TPP and any reasonably foreseeable projects. For example, **Land Use Table 3** lists the reasonably foreseeable development projects within the project area. This list and the status of the projects on it were compiled using information provided by the jurisdictions potentially affected by the proposed TPP.

Staff concurs with your comment regarding the speculative nature of development and the rapid growth in the Tracy area. As such, an attempt to analyze the effect of the proposed TPP on future development projects that have not been proposed would be difficult and speculative. It should be noted that the proposed TPP is to be developed in an area where other industrial uses are present. Therefore, as described under the Discussion of Impacts (Items a through h) of the **Land Use Staff Assessment,** staff has concluded that with the incorporation of Conditions of Certification, no land use conflicts would occur.

Any decisions on the development of land use limitations within the City of Tracy for future development projects are not within the scope of this study.

AGENCY COMMENTS

City of Tracy Department of Development and Engineering Services – Mr. Bill Dean

Mr. Dean suggested in his January 15, 2002 letter that the Staff Assessment should discuss the project's location within the City of Tracy's Sphere of Influence, and within the boundaries of the adopted South Schulte Specific Plan. The Staff Assessment should review the standing mitigation measures identified in the City's Urban Management Plan relevant to the juxtaposition of industrial, agricultural, and residential uses. The Commission staff should require San Joaquin County to provide further evidence of compliance with its conditional use permit findings.

Response: In this Supplement we have discussed the Tracy Hills and South Schulte Specific Plans in the Environmental Setting's Planned Land Uses discussion, in the Impact's section under the City of Tracy heading, and in the Cumulative Impacts section. In that the site is within San Joaquin County's jurisdiction, we have reviewed, but not included the City's Urban Management Plan policies in the LORS discussion. We have discussed San Joaquin County's conditional use permit findings in the Impacts

section under the San Joaquin County Development Title heading, and in the summary for the Impacts section.

CONCLUSIONS

1. We have concluded that the proposed project would not physically divide an established community and would not conflict with any applicable habitat conservation plan.
2. The project would convert 10.3 acres of prime farmland, which is a potentially significant impact. However, **LAND-2** provides adequate mitigation.
3. The Commission staff would not have interpreted San Joaquin County's General Plan Policy CODPP 25 regarding upgrading of existing infrastructure in the same manner as the County, or arrived at the Conditional Use Permit Finding 1 conclusion that the TPP must be located in an agricultural area. However, we accept the San Joaquin County staff's interpretation of its General Plan goals and policies and its conditional use permit findings as required in the zoning regulations, as these interpretations are not unreasonable.
4. We recognize the difficult situation of overlapping jurisdictions faced by San Joaquin County and the City of Tracy in the South Schulte Road area. While the County's zoning currently covers the TPP site, the City of Tracy's Sphere of Influence and corresponding Specific Plans for the South Schulte and Tracy Hills are relevant as the City expands to the south and west.

   Staff has reviewed the Tracy Hills and South Schulte Specific Plans, in the context of the existing industrial development and the proposed TPP, which would expand the industrial area. The City's 1997 decision to approve the South Schulte Specific Plan, and its 1998 decision to approve the Tracy Hills Specific Plans in extremely close proximity to existing industry are key factors for any discussion of land use compatibility. If the City finds the planned residential areas to be incompatible with industrial land uses, staff believes that the City has the latitude to incorporate more open space buffers into these Specific Plans. Buffer areas would provide more distance and greater compatibility between planned residential areas and existing industrial areas, as well as the TPP.

PROPOSED CONDITIONS OF CERTIFICATION

LAND-1 The project owner shall provide the Compliance Project Manager (CPM) with a copy of the recorded Certificate of Compliance prepared in accordance to the requirements of the State Subdivision Map Act for the subject property to ensure that the proposed project site is a legally subdivided property.

Verification: Prior to the evidentiary hearing on the proposed project, the project owner shall provide to the CPM for the Tracy Peaker Project (TPP) a copy of the recorded Certificate of Compliance.

LAND-2 To compensate for prime farmland land conversion impacts (i.e., the conversion of 10.3 acres of a 40 acre parcel), the project owner will provide $56,500 to the American Farmland Trust (AFT) to establish the Tracy Peaker

Project Trust Fund. The AFT and the San Joaquin County Planning Director, in conjunction with the California Energy Commission Compliance Manager (CPM) will decide how the funds will be disbursed for the protection of farmland in San Joaquin County.

In addition, the project owner shall develop for the approval of the Energy Commission CPM an agricultural mitigation plan describing long-term management of the remaining agricultural operation on the property. The mitigation plan shall include on-site preservation of any agricultural land on the property not converted for the power generation facility and details as to how the agricultural land on the subject property that is not converted for the power generation facility (i.e., approximately the remaining 29.7 acres of the proposed site parcel) is to to be made available for farming.

The AFT would hold the mitigation fee in trust, in an interest bearing account, for a three-year period to allow San Joaquin County to develop a mitigation program for the loss of agricultural land, through purchase of conservation easements. At the end of the three years, the AFT shall distribute the funds to San Joaquin County, or in the event that San Joaquin County has not approved a program for the loss of agricultural land, then the AFT shall be allowed to retain the funds.

Protocol: The project owner shall submit the mitigation plan for the project to the Director of the San Joaquin County Planning Department for review and comment and the CPM for review and approval. The Director will have 30 calendar days to review and provide written comments to the CPM to review for approval. The 30-day review period shall begin the day the mitigation plan is submitted to the County Planning Department by the project owner.

Verification: Sixty (60) days prior to the start of site mobilization, the project owner shall provide a certified check to the AFT for $56,500 and written verification to the CPM that the check has been provided to the AFT. The project owner shall also provide the CPM with the final agricultural mitigation plan.

The project owner shall provide to the CPM in a monthly compliance report a copy of the executed agricultural conservation easements.

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NOISE AND VIBRATION

Revised Testimony of Fred Greve and Steve Baker

Note: This section replaces the Noise and Vibration section from the Staff Assessment filed December 28, 2001.

INTRODUCTION

This section evaluates the potential noise and vibration effects associated with the construction and operation of the Tracy Peaker Project (TPP), which would be located immediately southwest of Tracy in an unincorporated portion of San Joaquin County. As described in the Application for Certification (AFC), the proposed project would be to construct a natural gas-fired simple-cycle power plant on 10.3 acres within a 40-acre parcel owned by GWF Energy LLC. The plant would have a nominal 169 megawatt (MW) rating. The proposed project would interconnect to a nearby transmission line, interconnect to an on-site natural gas supply, and construct a water supply line approximately 1,470 feet to an existing water source. Additionally, a site access road approximately 3,300 feet extending south from W. Schulte Road would be improved.

LAWS, ORDINANCES, REGULATIONS AND STANDARDS

FEDERAL

Under the Occupational Safety and Health Act of 1970 (OSHA) (29 U.S.C. § 651 et seq.), the Department of Labor, Occupational Safety and Health Administration (OSHA) has adopted regulations (29 C.F.R. § 1910.95) designed to protect workers against the effects of occupational noise exposure. **Table 1** lists permissible noise level exposure as a function of the amount of time during which the worker is exposed. The regulations further specify a hearing conservation program that involves monitoring the noise to which workers are exposed; assuring that workers are made aware of overexposure to noise; and periodically testing the workers' hearing to detect any degradation. It should be noted that there are no federal laws governing offsite (community) noise.

NOISE: Table 1 - OSHA Worker Noise Exposure Standards

Duration of Noise (Hrs/day)	A-Weighted Noise Level (dBA[1])
8.0	90
6.0	92
4.0	95
3.0	97
2.0	100
1.5	102
1.0	105
0.5	110
0.25	115

Source: OSHA Regulation

[1] For definitions of acoustical terms, please refer to **NOISE: Appendix A**, Table A-1.

The Federal Transit Administration (FTA) has published guidelines for assessing the impacts of ground-borne vibration associated with construction of rail projects, which have been applied by other jurisdictions to other types of projects. The FTA-recommended vibration standards are expressed in terms of the "vibration level," (VdB) which is calculated from the peak particle velocity measured from ground-borne vibration. The FTA measure of the threshold of perception is 65 VdB, which correlates to a peak particle velocity of about 0.002 inches per second (in/sec). This is the level of vibration that a person could barely feel. The FTA measure of the threshold of architectural damage for conventional sensitive structures is 100 VdB, which correlates to a peak particle velocity of about 0.2 in/sec. Vibration levels greater than this could cause damage (e.g., cracking in walls) to buildings and other structures.

STATE

California Government Code Section 65302(f) encourages each local government entity to perform noise studies and implement a noise element as part of its General Plan. In addition, the California Office of Planning and Research has published guidelines for preparing noise elements, which include recommendations for evaluating the compatibility of various land uses as a function of community noise exposure.

The State of California, Office of Noise Control, prepared a Model Community Noise Control Ordinance, which provides guidance for acceptable noise levels in the absence of local noise standards. The Model also contains a definition of a "pure tone" which can be used to determine whether a noise source contains significant annoying tonal components. The Model Community Noise Control Ordinance further recommends that, when a pure tone is present, the applicable noise standard should be lowered (made more stringent) by 5 dBA. (For an explanation of this and other noise terms, please see **Noise: Appendix A** following this section.)

California Environmental Quality Act

The California Environmental Quality Act (CEQA) requires that significant environmental impacts be identified, and that such impacts be eliminated or mitigated to the extent feasible. Section XI of Appendix G of CEQA Guidelines (Cal. Code Regs., tit. 14, App. G) sets forth some characteristics that may signify a potentially significant impact. Specifically, a significant effect from noise may exist if a project would result in:

a) Exposure of persons to or generation of noise levels in excess of standards established in the local General Plan or noise ordinance, or applicable standards of other agencies;

b) Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels;

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project; or

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

Energy Commission staff, in applying Item c) above to the analysis of this and other projects, has concluded that a potential for a significant noise impact exists where the noise of the project plus the background exceeds the background by 5 dBA L_{90} or more at the nearest location where the sound is likely to be perceived.

Noise due to construction activities is usually considered to be insignificant in terms of CEQA compliance if:

1. The construction activity is temporary;
2. use of heavy equipment and noisy activities is limited to daytime hours; and
3. all feasible noise abatement measures are implemented for noise-producing equipment.

California Occupational Safety and Health Administration (Cal-OSHA)

Cal-OSHA has promulgated Occupational Noise Exposure Regulations (Cal. Code Regs., tit. 8, §§ 5095-5099) that set employee noise exposure limits. These standards are equivalent to the federal OSHA standards described above.

LOCAL

The San Joaquin County Code (Section 9-1025.9) establishes environmental noise limits for noise sensitive land uses receiving the noise. No noise sensitive land uses directly abut the project. An industrial use lies to the north, the Delta-Mendota Canal to the west, and agricultural uses to the south and east. According to the San Joaquin County noise ordinance, the allowable noise exposure at the receiving noise sensitive property line is 50 dBA Leq during the daytime (7:00 a.m. to 10:00 p.m.) and 45 dBA Leq during the nighttime (10:00 p.m. to 7:00 a.m.). These noise limits would apply during the operational phase of the plant. Noise from construction activities is exempt between the hours of 6:00 a.m. and 9:00 p.m. on any day. Any construction outside of these hours would have to comply with the ordinance limits identified above.

SETTING

The TPP site would be located approximately 3,300 feet (0.63 miles) south of W. Schulte Road and roughly 3,060 feet west of Lammers Road. The uses directly adjacent to the site are agricultural, industrial and a water canal.

SENSITIVE RECEPTORS

The nearest residential land use to the project site is approximately 1,480 feet (0.25 miles) to the west (Site LT-2). (See **Figure 1** and below for a description of site locations.) Residences also lie to the east of the project with the closest property line approximately 2,340 feet from the project site (near Site LT-1). A single farmhouse lies to the southwest of the project site and is about 2,060 feet (0.39 miles) distant (ST-5).

AMBIENT NOISE LEVELS

The Energy Commission's power plant certification regulations require that noise measurements be made at noise-sensitive locations where there is a potential for an increase of 5 dBA or more over existing background noise levels during operation of a power plant. (For an explanation of this and other noise terms, please see **Noise: Appendix A** following this section.)

The applicant monitored ambient noise levels on June 14 and 15, 2001 at two locations for 25 hours at each site. These two sites, designated LT-1 and LT-2 for the long-term noise measurements collected, represent the two closest residential areas. Site LT-1 was at the closest residence east of the site and is described as the "residence on Lammers Road south of the railroad tracks." Site LT-2 is west of the site and is referred to as the "Lopez residence." Since site LT-2 is the closest sensitive receptor site to the plant, it is critical in determining noise impacts. The 24-hour measurement data for LT-2 is presented in **Noise: Table 2.**

Noise: Table 2 – LT-2 Hourly Long Term Noise Data

Time	1 hr L90, dBA	1 hr L50, dBA	1 hr Leq, dBA
13:00	35	38	41
14:00	35	38	43
15:00	35	39	44
16:00	34	37	40
17:00	35	38	42
18:00	37	39	42
19:00	39	41	43
20:00	42	45	46
21:00	45	46	47
22:00	42	47	47
23:00	42	44	45
0:00	42	43	44
1:00	43	46	46
2:00	42	45	46
3:00	43	44	44
4:00	45	46	47
5:00	44	46	46
6:00	46	48	48
7:00	40	42	44
8:00	34	37	40
9:00	36	40	46
10:00	36	39	46
11:00	35	39	45
12:00	34	36	41
13:00	35	37	41

Source: GWF 2001a, AFC Appendix E

Thirteen (13) additional sites were monitored for a short period of time. The noise measurements were performed using acceptable sound measurement equipment. The weather was warm to hot with low wind speeds and low relative humidity. The long term measurements showed that the background noise levels were quietest during the daytime hours. (It is likely that wind, insect noise, or other sources caused the noise levels to increase at night.) The period from 8 a.m. to 4 p.m. is representative of the quietest time of day. Summaries of the 8-hour noise levels recorded for the two long-term monitoring locations are listed in **Noise: Table 3**. Additionally, the short term measurements for Site ST-5 are included in the table. ST-5 is also critical to evaluating plant noise impacts because it will be the closest site to the combustion turbines themselves, which represent the acoustic center of the project site. The measurements at ST-5 are short term (i.e., less than 1 hour); however, it is assumed here that they are representative of the 8 hour period.

Noise: Table 3 - Long-Term Noise Measurement Summary (8-Hour Average From 8 a.m. to 4 p.m.)

Monitoring Location	Ldn, dBA	L90 8-Hour, dBA	L50 8-Hour, dBA	Leq 8-Hour, dBA
LT-1	54	37	40	50
LT-2	52	35	38	44
ST-5	N.A.	36*	38*	39*

*It is assumed that these short-term measurements are representative of an 8-hour period
Source: Derived from GWF 2001a, AFC Appendix E

ANALYSIS AND IMPACTS

PROJECT SPECIFIC IMPACTS

The Environmental Checklist (see below) is presented in the CEQA guidelines to assist lead agencies in their analysis of project impacts. We provide this checklist as a summary of staff's conclusions regarding the potential for adverse significant project impacts. Noise impacts associated with the project can be created by construction activities, and by normal long-term operation of the power plant. Following the checklist is a discussion of staff's analysis and rationale for these conclusions.

Environmental Checklist

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
NOISE – Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		X		
b) Exposure of persons to or generation of excessive ground borne vibration noise levels?				X
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?		X		
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?		X		
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the area to excessive noise levels?				X
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the area to excessive noise levels?				X

Construction

Community Noise Impacts

Power Plant

Construction noise is a temporary phenomenon; the construction period for the TPP facility is scheduled to last approximately 8 months (GWF 2001a). Construction of an industrial facility such as a power plant is typically and unavoidably noisier than what is usually permissible under noise ordinances for the operation phase. In order to allow the construction of new facilities, construction noise during certain hours is commonly exempt from enforcement by local ordinances. San Joaquin County does not have any noise limits for construction as long as the construction occurs between the hours of 6:00 a.m. and 9:00 p.m. The nearest residence is located approximately 1,480 feet to the west of the project site. Consistent with good community noise control practices, staff is recommending construction noise

standards of 60 dBA Leq during daytime hours, and 45 dBA Leq during nighttime hours as measured at a sensitive receptor.

Noise levels were predicted for the construction of the TPP facility using information from a standard reference (Bolt, Beranek, and Newman, Inc., 1977). Due to its intermittent nature, construction noise is best compared to the existing L_{eq} noise level (see Noise: Table 3 above). The predicted worst-case hourly construction noise level at the nearest sensitive receptor is 47 dBA L_{eq}. This noise level would be within the range of existing ambient noise levels at the receptors. As a result, construction noise would be considered less than significant. Staff recommends the implementation of the measures described in proposed Conditions of Certification **NOISE-1, NOISE-2 and NOISE-3** to further reduce any potential for noise impacts to the local community associated with construction activities.

Steam Blows

The highest noise levels that are often associated with construction of power plants are steam blows. Since this plant is a simple-cycle power plant, steam related equipment will not be employed and steam blows will not occur.

Linear Facilities

Construction of the linear facilities transmission lines and water supply would not produce noise at locations near residential receptors. As a result, noise levels associated with construction of the linear facilities would be considered less than significant.

Worker Noise Impacts

Normal construction-generated noise levels would range up to 89 dBA at a distance of 50 feet from the noise source. Therefore, construction workers will be subjected to occasional noise levels above 85 dBA. Where the noise exposure exceeds 85 dBA, Cal-OSHA standards require that warning signs be posted, and that a Hearing Conservation Program be implemented. With proper execution of the Hearing Conservation Program, as well as with the implementation of the measures described in proposed Condition of Certification **NOISE-4**, no occupational noise impacts are anticipated from construction activities.

Operation

Community Noise Impacts

Power Plant

In the AFC (GWF 2001a), the applicant proposed to design and build the TPP to comply with the San Joaquin County noise ordinance, which limits project noise emissions, measured at any receptor, to 50 dBA L_{eq} daytime and 45 dBA L_{eq} nighttime. The project's noise control measures were selected to yield a noise level of 45 dBA L_{eq} at LT-2, a residence representing one of the nearest sensitive noise receptors. Subsequently, the applicant indicated that they could reduce plant noise level to 42 dBA L_{eq} at LT-2 (Greene 2002).

The California Environmental Quality Act, however, requires that noise impacts from the project be mitigated to a level of insignificance, or if this is impractical, to the extent feasible. In determining if a significant impact will likely occur, Energy Commission staff has traditionally followed the noise industry custom of assuming that a project that increases the existing noise level at a sensitive receptor by 5 dBA or more holds the potential to produce a significant adverse impact, and further study is warranted. (Five dBA is considered to represent an increase in noise that is noticeable, but not necessarily annoying, to a majority of receptors. Please see **Noise: Appendix A** following this section.)

A power plant operates as essentially a steady, continuous noise source, unlike the relatively random intermittent sounds that normally comprise a noise environment. As such, power plant noise contributes to, and becomes part of, the background noise level, or the sound heard when most intermittent noises cease. When no traffic is driving by, no airplanes are flying overhead, no dogs are barking, no frogs are croaking, and no strong wind is blowing, what remains is background noise. This is commonly taken to be measured by the L_{90} level, which is the noise level exceeded 90 percent of the time. Although the TPP is intended for peaking duty, GWF proposes to operate the project at a capacity factor exceeding 50 percent (GWF 2001a, AFC §§ 1.6, 2.2.2, 2.2.15). This means the plant will operate for extended hours, perhaps around the clock, for significant periods of the year. The plant will thus contribute to, and often define, the background noise level.

Note that the nighttime ambient noise levels monitored by the applicant (GWF 2001a, AFC Appendix A) were significantly higher than the daytime levels; background levels were generally eight dBA higher at night. This is likely due to the measurements being taken in summer, when insects and frogs are active at night and the delta breeze through the Altamont Pass blows far into the night. In the winter, it is likely that the day and night noise regimes are more similar to each other, and similar to the quiet summer daytime regime reflected in the ambient noise monitoring in the AFC (GWF 2001a, AFC Appendix A). With this assumption, staff believes it both prudent and conservative to employ the lowest (daytime) values as the relevant ambient noise regime.

As noted above, in examining whether a project holds the potential to create significant adverse noise impacts, staff traditionally compares the ambient background noise level at the nearest sensitive receptor(s) with the background noise level during plant operation. If the resultant level has increased 5 dBA or more, the potential exists for a significant adverse impact. In such a case, staff then conducts further analysis to determine if there will likely be a significant noise impact from the project at the nearest sensitive receptor.

The applicant demonstrates that the ambient hourly L_{90} at LT-2, a representative nearby sensitive receptor, reaches as low as 34 dBA L_{90}. (The noise regime, and expected noise impacts, at LT-1 and LT-2 are so similar that LT-2 can be taken to represent both receptors.) If the project were constructed as proposed, the project's noise level at LT-2, 42 dBA L_{eq}, would combine with the existing ambient

background noise level to produce a resultant background level of 43 dBA L_{90}. This represents an increase of nine dBA over the lowest L_{90} of 34 dBA. Such an increase in background noise level would be quite noticeable, and liable to draw complaints.

In noisy urban/industrial environments, staff has traditionally utilized the lowest hourly L_{90} as a basis of measurement. In a quiet rural environment, such as that surrounding the TPP, this is not necessarily the most reliable measure. Under certain circumstances, it is common in the noise industry to average noise descriptors over some relevant period of time. For example, where traffic noise defines the background noise regime, it is common to average the L_{90} measurements over some period of time, typically the nighttime hours.[2] Given the extremely quiet background noise levels encountered at the site, staff believes that it is appropriate to average the L_{90} levels over a representative period such as eight hours. Where the nighttime hours present the quietest time of day, then averaging over the nighttime would be appropriate. At the TPP site, however, the daytime noise regime is quieter. Averaging over eight hours, the daytime background noise level at LT-2 during the quietest hours, from 8:00 a.m. to 4:00 p.m., is approximately 35 dBA L_{90}. (See **Noise: Table 3** above.) This represents an extremely quiet noise regime.

Revisiting the above analysis and substituting this 8-hour average background noise level, if the project, as proposed, produces 42 dBA L_{eq} at LT-2, the resultant background noise level, as described above, would again become 43 dBA L_{90}. This still represents an increase of eight dBA above the existing ambient background noise level, averaged over the eight quietest hours of the day, of 35 dBA L_{90}. Again, such an increase would be expected to be perceived as a significant adverse impact by most observers.

If the project were further mitigated to expose LT-2 to 39 dBA L_{eq}, then the resultant (new) background noise level would be 40 dBA L_{90}. This would represent an increase of five dBA over the existing 8-hour average ambient background level of 35 dBA L_{90}, which is unlikely to cause annoyance. This would represent an insignificant adverse impact under staff's analysis pursuant to CEQA. Staff, therefore, proposes 39 dBA L_{eq}, measured at LT-2, as an appropriate noise limit for the TPP. In addition, since receptors LT-1 and ST-5 are exposed to similar ambient noise regimes (refer to **Noise: Table 3** above), and ST-5 is even nearer to the noise-producing portions of the project, staff further proposes that this limit apply to LT-1 and ST-5 as well.

To better illustrate the above, please refer to **Noise: Table 4** below. In this table, the Lowest L_{90}, or background noise level, figures for LT-2 are taken from the AFC (GWF 2001a, AFC Appendix A) and represent the single lowest hourly reading for summer day and night. The Average L_{90} figures represent an average of eight

[2] Please refer to the Delta Energy Center project (98-AFC-3) and the Metcalf Energy Center project (99-AFC-3).

representative hours. The Resultant L_{90} represents the power plant noise superimposed on the preexisting background noise level; this becomes the new background level when the plant operates. The applicant's proposed Plant Contribution is shown as 42 dBA, with the resulting increase in background level due to the power plant's operation being eight dBA during summer days (and, it is assumed, during winter). Staff's proposed Plant Contribution limit is 39 dBA, as described above, with the resulting increase in background noise being only five dBA.

Noise: Table 4 — Contribution of Plant Noise to Background Noise Levels at LT-2

Noise Descriptor	Summer Daytime*	Summer Nighttime
Lowest L_{90}	34	42
Average L_{90} (8-hour average)	35	43
Applicant's Proposal		
Plant Contribution (L_{eq})	42	42
Resultant L_{90} (plant plus background)	43	46
Increase in L_{90}	+8	+3
Staff's Proposal		
Plant Contribution (L_{eq})	39	39
Resultant L_{90} (plant plus background)	40	44
Increase in L_{90}	+5	+1

*Taken to represent winter conditions as well

At staff's request, the applicant provided an isopleth (see **Noise: Figure 2**) that shows where the plant, as proposed by the applicant, would create noise impacts of 39 dBA L_{eq} or more; areas within this circle would be subjected to noise levels from the plant greater than 39 dBA L_{eq}. An examination of land ownership records shows that approximately 18 plots of land, owned by approximately 14 separate landowners, lie within this 39 dBA isopleth. This represents a significant number of landowners who may be impacted by project noise. For this reason, staff believes mitigating the power plant to a level of 39 dBA L_{eq} at LT-2 is an acceptable solution to mitigation of noise impacts.

The applicant has already proposed to reduce plant noise level by four dBA (from 46 dBA, the AFC proposal without the sound wall, to 42 dBA). While staff has not seen a specific proposal from the applicant, staff believes it is likely that further design changes could be made to reduce plant noise levels an additional three dBA, to achieve the 39 dBA level. To ensure that this noise level is, in fact, achieved, staff has proposed Condition of Certification **NOISE-5**, below.

Linear Facilities

No aboveground linear facilities (transmission lines) will be located near noise sensitive receptors. The connecting transmission line is very short, only traveling from the site to the adjacent power lines, and will not produce significant corona noise. The natural gas interconnect will be on-site, and the water interconnect is close to the site. Thus, there will be no noise impacts associated with linear facilities.

Worker Noise Impacts

The Applicant recognizes the need to protect plant operating and maintenance personnel from noise hazards, and commits to comply with applicable LORS. A measure to be implemented for noise-related impacts includes a Hearing Conservation Program. With proper execution of the Hearing Conservation Program, as well as the implementation of the measures described in proposed Condition of Certification **NOISE-6**, no occupational safety impacts are anticipated from operational noise.

VIBRATION IMPACTS

The primary source of vibration noise associated with a power plant is the operation of the turbines. It is normal operating procedure to maintain the plant's turbines in optimal balance to minimize excessive vibration that can cause damage or long term wear. Consequently, no excessive vibration would be experienced by adjacent land uses.

Another potential source of significant vibration is pile driving during construction. Given the relatively great distances to the nearest sensitive receptors, no vibration effects would be likely if pile driving were to be required.

CUMULATIVE IMPACTS

No other major new or proposed industrial sources of noise were identified that might cause cumulative effects that could exceed the noise standards or criteria for this project. Several projects are proposed around the project site. Most of the projects are general development projects and will not have significant stationary source noise. However, two of the projects in the area are the East Altamont Energy Center and the FPL Tesla Power Project. The East Altamont project is 8 miles from the site, and the Tesla project is 4 miles from the site. Due to the large distance of these projects from the TPP site, the noise levels from the other facilities will not be significant and will not add significantly to the noise generated by the TPP. Staff concludes there are no cumulative noise impacts.

ENVIRONMENTAL JUSTICE

Staff has reviewed Census 2000 information that shows the minority population is less than fifty percent within a six-mile radius of the proposed TPP (please refer to **Socioeconomics Figure 1** in this Staff Assessment), and Census 1990 information that shows the minority/low income population is less than fifty percent within the same radius. However, there is a pocket of minority persons within six miles that staff has considered for impacts. Because the project will not result in significant noise impacts (with mitigation), staff concludes that there will be no significant direct or cumulative impacts related to noise

on the minority population. Therefore, there is no potential disparate impact on the minority population, and there are no Noise and Vibration environmental justice issues related to this project.

PUBLIC AND AGENCY COMMENTS

No agency comments were received regarding noise issues for the TPP.

WRITTEN COMMENTS FROM THE PUBLIC

Laura Swickard

SW-1 *This comment states that "an ugly soundwall is not a good solution."*

Response: Most of the noise reduction features involve modifications or silencer packages to the equipment. However, a soundwall is unlikely to be needed. Additionally, landscaping will be provided around much of the site, which will further diminish the visual impact of any noise mitigation measures.

Don Washburn

DW-2 *This comment raises concerns about how much noise will be produced and whether there will be any impact on health.*

Response: The operation of the plant will not increase the noise levels by more than 5 dBA to 8 dBA during the quietest time of day. This criterion imposed by the Energy Commission is more stringent than the San Joaquin Noise Ordinance, which is the only noise standard most projects in this area would be required to meet. The resultant noise levels will be well below those levels that would generate any health effects.

Annaben Kazemi

AK-3 *This comment raises several issues including how noise pollution is being addressed and what are the potential cumulative noise impacts of the proposed plants.*

Response: Several conditions have been imposed on the plant in regards to the levels of noise that it is allowed to generate. The plant must meet Energy Commission noise standards, which are stricter than the standards imposed by the County of San Joaquin. No noise-related cumulative impacts will occur as discussed in the Cumulative Impact section.

Blane Hill

BH-1 Comment: *General comments stating a concern for noise impacts.*

Response: The potential impacts are identified in the Staff Assessment. Where significant noise impacts have been forecasted, mitigation measures have been developed which will reduce the impacts to a level less than significant.

ORAL COMMENTS RECEIVED

Comment: *Will landscaping affect the noise?*

Response: Landscaping has virtually no effect on reducing noise levels.

Comment: *The plant without mitigation would violate the county standards.*

Response: Without any mitigation the plant would violate the San Joaquin Noise Ordinance. However, several conditions are being imposed on the plant which will require it to meet noise standards even more stringent that the local ordinance. Enclosures, silencers, and noise barriers will be needed to meet the required conditions.

CONCLUSIONS AND RECOMMENDATIONS

Staff concludes that noise from the construction and operation of the proposed TPP will not significantly impact the public or environment if the proposed Conditions of Certification are implemented.

PROPOSED CONDITIONS OF CERTIFICATION

NOISE-1 At least 15 days prior to the start of ground disturbance, the project owner shall notify all residents within one-half mile of the site and the linear facilities, by mail or other effective means, of the commencement of project construction. At the same time, the project owner shall establish a telephone number for use by the public to report any undesirable noise conditions associated with the construction and operation of the project. If the telephone is not staffed 24 hours per day, the project owner shall include an automatic answering feature, with date and time stamp recording, to answer calls when the phone is unattended. This telephone number shall be posted at the project site during construction in a manner visible to passersby. This telephone number shall be maintained until the project has been operational for at least one year.

Verification: The project owner shall transmit to the CPM in the first Monthly Construction Report following the start of ground disturbance, a statement, signed by the project manager, stating that the above notification has been performed, and describing the method of that notification, verifying that the telephone number has been established and posted at the site, and giving that telephone number.

NOISE-2 Construction noise levels as measured at any affected residence shall be limited to 60 dBA Leq during daytime hours (6 a.m. to 9 p.m.) and 45 dBA Leq during nighttime hours (9 p.m. to 6 a.m.).

Verification: The project owner shall transmit to the Compliance Project Manager (CPM) in the first Monthly Construction Report a statement acknowledging that the above restrictions will be observed throughout the construction of the project.

NOISE-3: Throughout the construction and operation of the project, the project owner shall document, investigate, evaluate, and attempt to resolve all project-related noise complaints. The project owner or authorized agent shall:

- use the Noise Complaint Resolution Form (below), or functionally equivalent procedure acceptable to the CPM, to document and respond to each noise complaint;
- attempt to contact the person(s) making the noise complaint within 24 hours;
- conduct an investigation to determine the source of noise related to the complaint;
- if the noise is project related, take all feasible measures to reduce the noise at its source; and
- submit a report documenting the complaint and the actions taken. The report shall include: a complaint summary, including final results of noise reduction efforts; and if obtainable, a signed statement by the complainant stating that the noise problem is resolved to the complainant's satisfaction.

Verification: Within 5 days of receiving a noise complaint, the project owner shall file a copy of the Noise Complaint Resolution Form, or similar instrument approved by the CPM, with the local jurisdiction, and with the CPM, documenting the resolution of the complaint. If mitigation is required to resolve a complaint, and the complaint is not resolved within a 3-day period, the project owner shall submit an updated Noise Complaint Resolution Form when the mitigation is finally implemented.

NOISE-4 Prior to the start of ground disturbance, the project owner shall submit to the CPM for review a construction noise control program consistent with Cal-OSHA regulations (Title 8, Group 15, Article 105, Section 5096). The noise control program shall be used to reduce employee exposure to high noise levels during construction and also to comply with applicable OSHA and Cal-OSHA standards.

Verification: At least 30 days prior to the start of ground disturbance, or a lesser period of time mutually agreed to by the CPM and the project owner, the project owner shall submit to the CPM the above referenced program. The project owner shall make the program available to OSHA upon request.

NOISE-5 The project design and implementation shall include appropriate noise mitigation measures adequate to ensure that operation of the project will not cause plant noise levels at the nearest residential receivers (i.e., Sites LT-2 and ST-5) to exceed 39 dBA (L_{eq}) under normal operating conditions, including startups and shutdowns. Additionally, noise due to plant operations shall comply with the noise standards of the San Joaquin County Code (Section 9-1025.9).

No new pure tone components may be produced by operation of the project. No single piece of equipment shall be allowed to stand out as a source of noise that draws legitimate complaints.

Protocol: Within 30 days of the project first achieving an output of 80 percent or greater of rated capacity, the project owner shall conduct a 25-hour community noise survey at Sites LT-2 and ST-5 used for the ambient noise survey. The survey shall also include the one-

third octave band pressure levels to ensure that no new pure-tone noise components have been introduced. If the results from the survey indicate that the project noise level at the residential location exceeds the standards and requirements cited above, additional mitigation measures shall be implemented to the project to reduce noise to a level of compliance with these limits.

Verification: Within 15 days after completing the post-construction survey, the project owner shall submit a summary report of the survey to the local jurisdiction, and to the CPM. Included in the post-construction survey report will be a description of any additional mitigation measures necessary to achieve compliance with the above listed noise limits, and a schedule, subject to CPM approval, for implementing these measures. Within 15 days of implementation of the mitigation measures, the project owner shall submit to the CPM a summary report of a new noise survey, performed as described above and showing compliance with this condition.

NOISE-6 Within 30 days of the project first achieving an output of 80 percent or greater of rated capacity, the project owner shall conduct an occupational noise survey to identify the noise hazardous areas in the facility. The survey shall be conducted by a qualified person in accordance with the provisions of Title 8, California Code of Regulations, sections 5095-5099 (Article 105) and Title 29, Code of Federal Regulations, section 1910.95. The survey results shall be used to determine the magnitude of employee noise exposure. The project owner shall prepare a report of the survey results and, if necessary, identify proposed mitigation measures that will be employed to comply with the applicable California and federal regulations.

Verification: Within 30 days after completing the survey, the project owner shall submit the noise survey report to the CPM. The project owner shall make the report available to OSHA and Cal-OSHA upon request.

EXHIBIT 1 - NOISE COMPLAINT RESOLUTION FORM

Tracy Peaker Project
(01-AFC-16)

NOISE COMPLAINT LOG NUMBER _____

Complainant's name and address:

Phone number: _____

Date complaint received: _____
Time complaint received: _____

Nature of noise complaint:

Definition of problem after investigation by plant personnel:

Date complainant first contacted: _____

Initial noise levels at 3 feet from noise source _____ dBA Date: _____

Initial noise levels at complainant's property: _____ dBA Date: _____

Final noise levels at 3 feet from noise source: _____ dBA Date: _____

Final noise levels at complainant's property: _____ dBA Date: _____

Description of corrective measures taken:

Complainant's signature: _____ Date: _____

Approximate installed cost of corrective measures: $ _____
Date installation completed: _____
Date first letter sent to complainant: _____ (copy attached)
Date final letter sent to complainant: _____ (copy attached)

This information is certified to be correct:

Plant Manager's Signature: _____

(Attach additional pages and supporting documentation, as required).

REFERENCES

Bolt, Beranek, and Newman, Inc., *Power Plant Construction Noise Guide,* May 1977.

County of San Joaquin, Noise Ordinance Section 9-1025.9, October 1999.

Federal Transit Administration (FTA). *Transit Noise and Vibration Impact Assessment,* PB96-172135, April 1995.

Greene (Rob Greene). 2002. Memo from Rob Greene, URS noise expert for GWF, to Fred Greve, noise consultant for California Energy Commission staff, dated January 22, 2002.

GWF (GWF Energy, LLC). 2001 a. Application for Certification for the Tracy Peaker Project (01-AFC-16). Dated August 3, 2001 and docketed August 16, 2001.

Office of Planning and Research. State of California General Plan Guidelines. June 1990.

NOISE: APPENDIX A
FUNDAMENTAL CONCEPTS OF COMMUNITY NOISE

Noise levels can be measured in a number of ways. One common measurement, the equivalent sound level (L_{eq}), is the long-term A-weighted sound level that is equal to the level of a steady-state condition having the same energy as the time-varying noise, for a given situation and time period. (See NOISE: Table A1, below.) A day-night (L_{dn}) sound level measurement is similar to L_{eq}, but has a 10 dB weighting added to the night portion of the noise because noise during night time hours is considered more annoying than the same noise during the day.

NOISE: Table A1
Definition of Some Technical Terms Related to Noise

Terms	Definitions
Decibel, dB	A unit describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micropascals (20 micronewtons per square meter).
Frequency, Hz	The number of complete pressure fluctuations per second above and below atmospheric pressure.
A-Weighted Sound Level, dB	The sound pressure level in decibels as measured on a Sound Level Meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise. All sound levels in this testimony are A-weighted.
L_{10}, L_{50}, & L_{90}	The A-weighted noise levels that are exceeded 10%, 50%, and 90% of the time, respectively, during the measurement period. L_{90} is generally taken as the background noise level.
Equivalent Noise Level L_{eq}	The energy average A-weighted noise level during the Noise Level measurement period.
Community Noise Equivalent Level, CNEL	The average A-weighted noise level during a 24-hour day, obtained after addition of 5 decibels to levels in the evening from 7 p.m. to 10 p.m. and after addition of 10 decibels to sound levels in the night between 10 p.m. and 7 a.m.
Day-Night Average Sound Level, DNL or L_{dn}	The Average A-Weighted noise level during a 24-hour day, obtained after addition of 10 decibels to levels measured in the night between 10 p.m. and 7 a.m.
Ambient Noise Level	The composite of noise from all sources, near and far. The normal or existing level of environmental noise at a given location.
Intrusive Noise	That noise that intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, and time of occurrence and tonal or informational content as well as the prevailing ambient noise level.
Source: California Department of Health Services 1976.	

In order to help the reader understand the concept of noise in decibels (dBA), NOISE: Table A2 has been provided to illustrate common noises and their associated dBA levels.

NOISE: Table A2
Typical Environmental and Industry Sound Levels

Source and Given Distance from that Source	A-Weighted Sound Level in Decibels (dBA)	Environmental Noise	Subjectivity/ Impression
Civil Defense Siren (100')	140-130		Pain Threshold
Jet Takeoff (200')	120		
Very Loud Music	110	Rock Music Concert	Very Loud
Pile Driver (50')	100		Very Loud
Ambulance Siren (100')	90	Boiler Room	Very Loud
Freight Cars (50')	85		
Pneumatic Drill (50')	80	Printing Press Kitchen with Garbage Disposal Running	Loud
Freeway (100')	70		Moderately Loud
Vacuum Cleaner (100')	60	Data Processing Center Department Store/Office	
Light Traffic (100')	50	Private Business Office	Quiet
Large Transformer (200')	40		
Soft Whisper (5')	30	Quiet Bedroom	
	20	Recording Studio	
	10		Threshold of Hearing
Source: Peterson and Gross 1974			

Subjective Response to Noise

The adverse effects of noise on people can be classified into three general categories:

- Subjective effects of annoyance, nuisance, dissatisfaction.
- Interference with activities such as speech, sleep, and learning.
- Physiological effects such as anxiety or hearing loss.

The sound levels associated with environmental noise, in almost every case, produce effects only in the first two categories. Workers in industrial plants can experience noise effects in the last category. There is no completely satisfactory way to measure the subjective effects of noise, or of the corresponding reactions of annoyance and dissatisfaction, primarily because of the wide variation in individual tolerance of noise. One way to determine a person's subjective reaction to a new noise is to compare the level of the existing (background) noise, to which one has become accustomed, with the level of the new noise. In general, the more the level or the tonal variations of a new noise exceed

the previously existing ambient noise level or tonal quality, the less acceptable the new noise will be, as judged by the exposed individual.

With regard to increases in A-weighted noise levels, knowledge of the following relationships (Kryter 1970) can be helpful in understanding the significance of human exposure to noise.

1. Except under special conditions, a change in sound level of one dB cannot be perceived.
2. Outside of the laboratory, a 3-dB change is considered a barely noticeable difference.
3. A change in level of at least five dB is required before any noticeable change in community response would be expected.
4. A 10-dB change is subjectively heard as an approximate doubling in loudness and almost always causes an adverse community response.

Combination of Sound Levels

People perceive both the level and frequency of sound in a non-linear way. A doubling of sound energy (for instance, from two identical automobiles passing simultaneously) creates a three dB increase (i.e., the resultant sound level is the sound level from a single passing automobile plus three dB). The rules for decibel addition used in community noise prediction are:

NOISE: Table A3
Addition of Decibel Values

When two decibel values differ by:	Add the following amount to the larger value
0 to 1 dB	3 dB
2 to 3 dB	2 dB
4 to 9 dB	1 dB
10 dB or more	0
Figures in this table are accurate to ± 1 dB.	

Source: Thumann, Table 2.3

OSHA noise regulations are designed to protect workers against the effects of noise exposure, and list permissible noise level exposure as a function of the amount of time to which the worker is exposed:

NOISE: Table A4
OSHA Worker Noise Exposure Standards

Duration of Noise (Hrs/day)	A-Weighted Noise Level (dBA)
8.0	90
6.0	92
4.0	95
3.0	97
2.0	100
1.5	102
1.0	105
0.5	110
0.25	115

Source: OSHA Regulation

Relationships

$L_{dn} = 10 \log (1/24)[15x10^{(Ld/10)} + 9x10^{(Ln+10)/10}]$

Note: the 10-dB weighting added to the nighttime noise level. Daytime and nighttime are 15 hours (0700~2200 hrs) and 9 hours (2200~0700 hrs) respectively. L_d and L_n are the L_{eq} values over the 15 and 9 hours respectively. L_{dn} does not contain any consideration for tonal sounds, since it is derived from L_{eq} measurements.

CNEL is essentially the same as L_{dn}, except that different time segments are used in computation. The 24-hour period is divided into three segments instead of two. The day period (0700~1900 hours), evening (1900~2200 hours) and night (2200~0700 hours). The evening period is assigned 5-dB weighting and the nighttime is assigned 10-dB weighting. The extra 5 dB weighting during the evening results in higher values for CNEL that L_{dn}, but the difference is not statistically significant.

Noise Attenuation

$[L_p]$ (at x = r) = $[L_p]$(at r = y) – 20log(x/y).

Where: x = distance to point where noise level is to be determined.
y = reference point.

$\Delta_{Loss} = 20\log (x/y)$.

Special case where x = 2y
$\Delta_{Loss} = 20\log (2y/y). = 20\log (2) = 6$

∴ As we double the distance, from a point source in free space, the noise level decreases by 6 dB.

PUBLIC HEALTH

Supplemental Testimony of Alvin J. Greenberg, Ph.D.

Page 5.6-6 – first full paragraph, line 3

Delete: "0.75"

Insert: "1.2"

~~P~~age 5.6-12 – Cumulative Impacts

Replace existing Cumulative Impacts discussion with the following, noting the marked changes:

CUMULATIVE IMPACTS

The maximum cancer risk for the TPP facility is 0.18 in one million at the southwest project boundary. In comparison, staff reviewed toxic air contaminants (TACs) data from several different monitoring stations. There is no TAC monitoring station in Tracy. The BAAQMD estimated the Bay Area average lifetime cancer risk for inhalation of ambient air to be 199 in one million based on 1998 ambient average toxic concentration data (BAAQMD 1999, p. 11), and the estimate for Fresno is 225 in one million based on 2000 ambient average toxic concentration data (CARB 2001). Staff considers the data from the BAAQMD at Livermore to be more representative of the air quality at Tracy than the data from the other locations. It is important to note that the number of different TACs measured at the different monitoring stations differs slightly while the estimated risk due to the TPP includes all TACs emitted. Thus, in this sense, the risks due to the actual measurements of TACs may be slightly underestimated. Therefore, the incremental risk added by the proposed TPP is even lower than shown in the table below. In comparison to Livermore, the incremental increase in risk would be 0.4% while in comparison to Fresno, the incremental increase in risk would be 0.008%. Both are insignificant increases which would be beyond ability to measure or detect.

Cancer Risk Comparison

TPP (max. projected)	0.18 per million
Livermore (1999)	46 per million
Stockton (2000)	182 per million
Bay Area (1999)	186 per million
Modesto (1999)	197 per million
Fresno (2000)	225 per million

~~the BAAQMD estimated the Bay Area average lifetime cancer risk for inhalation of ambient air to be 199 in one million based on 1998 ambient average toxic concentration data (BAAQMD 1999, p. 11), and the estimate for Fresno is 225 in~~

~~one million based on 2000 ambient average toxic concentration data (CARB 2001). Staff considers the data from the BAAQMD to be more representative of the air quality at Tracy than the data from Fresno.~~

For the proposed TPP project, the maximum impact location occurs where pollutant concentrations from TPP would theoretically be the highest. Even at this location, staff does not expect any significant change in lifetime risk to any person. Modeled facility-related risks are lower at all other locations, and actual risks are expected to be much lower, since worst-case estimates are based on conservative assumptions, and overstate the true magnitude of the risk expected. Therefore, staff does not consider the incremental impact of the additional risk posed by the proposed TPP project to be either significant or cumulatively considerable.

The worst-case long-term health impact from TPP (0.0011 hazard index) would be below the significance level of 1.0 at the location of maximum impact. At this level, staff does not expect any cumulative health impacts to be significant. As with cancer risk, long-term hazard would be lower at all other locations, and cumulative impacts at other locations would also be less than significant.

The Bay Area Air Quality Management District examined the issue of cumulative impacts from facilities affecting the same neighborhood. They concluded that elevated concentrations of toxic air contaminants from stationary sources tend to be quite localized, and that cumulative risks are likely to occur only when multiple facilities with substantial low-level emissions are immediately adjacent to, or very close to, one another (BAAQMD 1993). The proposed Tesla Power Plant is within a 6-mile radius of the TPP and thus cumulative impacts may occur as a result of both power plants operating. (The proposed East Altamont Energy Center is beyond the 6-mile radius.) ~~The applicant will prepare and submit a cumulative air quality impact assessment in the near future.~~Energy Commission staff has prepared a cumulative impact analysis and has concluded there are no significant impacts.

Page 5.6-14 – Public Comments

Make the following changes and additions:

A member of the public expressed concerns that the application doesn't appear to consider background carcinogens and cumulative impacts of existing air pollution. Another issue that was raised is that there are many superfund sites in the area.

Response: Please refer to this Public Health Staff Assessment which describes background carcinogens and cumulative impacts. Because there are no monitoring stations measuring toxic air contaminants (TACs) in the Tracy area, the results from stations located in the Bay Area, Livermore, Stockton, Modesto, and Fresno were used. This data showed that even if the airborne concentrations of toxic air contaminants in Tracy were the same as Livermore (the lowest of the areas measured), the TPP would emit contaminants that would result in a risk of cancer only 0.4% higher. Thus, the incremental increase in risk

due to the TPP would be insignificant. Regarding nearby Superfund sites, these sites typically have very localized impacts that do not extend at significant distances from the site. Often, off-site migration does not even occur. Although staff has not conducted a review of these Superfund sites, it is doubtful that cumulative risks from the proposed TPP and a site would rise to the level of significance.

PG-1 *A member of the public expressed deep concern about the effects of the emissions from the proposed TPP on human beings.*

Response: The emissions from the proposed project will not have a significant impact on the health of residents (even sensitive people), workers, or visitors to the Tracy area. The amount of toxic air contaminants (TACs) emitted from the stack and emergency diesel engines is very low and the stack height, ejection velocity, and temperature all contribute to a significant plume rise. This means that the small amounts of TACs will rise several hundred feet into the air and be dispersed. Most will be dispersed so far away that they will only fall to the ground more than 75 miles to the east. Some minor amounts will be taken to the west and fall to the ground several miles away. The largest short-term (1-hour) ground level concentration will be located 2.2 miles to the southwest and the largest long-term (chronic) ground level concentration will be located 7.5 miles to the northwest. Both of these ground level concentrations are at least 52 times lower than the level which Cal/EPA Office of Environmental Health hazard Assessment states will not cause adverse effects (illness) even in sensitive people. The ground level concentrations at any other location – including the industries located nearby or the home located nearby - will be lower than these levels, indicating that no adverse health impacts are expected to occur as a result of emissions of TACs from this facility

PG-3 *A member of the public expressed concern about the proximity of the plant to residential areas.*

Response: Please see response above.

LS-1 *A member of the public expressed concern about the long-term effects of the health of the Tracy community. Many residents suffer from respiratory ailments and any further pollution may be detrimental to their health.*

Response: Please see response above.

MB-1 *A member of the public asked how the plant will affect the air quality of Tracy and those persons who are already afflicted with respiratory problems, and whether there will be any long term effects*.

Response: Please see response above.

A member of the public asked if staff has considered impacts on the workers at the Owens-Brockway plant.

Response: Please see response above.

TN-1 *A firefighter and EMS professional expressed concern about the ability of local hospitals and staff to care for person who might become ill as a result of emissions from the TPP.*

Response: It is doubtful that person will become ill as a result of emissions from the proposed power plant. The City of Tracy has adequate health-care facilities to treat the public. Please see response above.

JN-1 *This commentor's children attend a school within 3 miles of the proposed power plant. She is concerned about her children's health and the impacts of breathing polluted air (which she states is already noncompliant with state and Federal standards). She asks how the power plant owners propose to mitigate health issues for asthmatics and others with breathing problems.*

Response: Health-protective air dispersion modeling analyses show that the cancer risk due to the small emissions of toxic air contaminants (TACs) is insignificant at the point of maximum ground level concentration compared to regulatory levels or to present levels in surrounding communities. Also, no hazard of other illnesses is expected to exist. Thus, since the airborne concentration of TACs at the school three miles away would be even lower than that projected at the point of maximum impact, no effect on children's health is expected to occur, even in sensitive asthmatic children. Please see the responses above and the section on **Air Quality** for more information.

SOCIOECONOMICS

Supplemental Testimony of Sally Salavea

Page 5.7-2 – **Demographic Characteristics** (line 1)

Delete: "nine-acre"
Insert: "10.3-acre"

Page 5.7-16 – Written Comments from the Public - Don Washburn

Delete existing response to Mr. Washburn's comments and replace with the following:

Don Washburn

DW-3 *Other than the obvious pollution, how will the aesthetics of the area be effected and who makes this judgment? How will this lower/impact property value?*

Response: For a detailed discussion of potential impacts of the TPP related to aesthetics, refer to the section on Visual Resources.

In response to comments raised at both the Data Response Workshop on November 20, 2001 and the Informational Hearing on November 28, 2001, regarding concern as to whether the TPP would affect property values near the site, the applicant reported it planned to undertake a property values assessment. The purpose of this study, entitled "Tracy Peaker Project – Property Value Assessment" was to:

- examine the historical and recent trends of real estate sales and property values in Tracy and see how they compare to trends within San Joaquin County; and
- investigate the property values in the area of the proposed TPP site, especially within 1.5 miles.

Since the proposed TPP was announced on September 5, 2001, it would be difficult to observe any potential effects of the TPP proposal on property values. However, the proposed TPP site is near two existing industrial plants – the Owens Brockway Glass Container Manufacturing facility and the Tracy Biomass Power Plant. Because the existing industrial facilities are larger than the proposed TPP site and are closer to the major residential developments, it is likely that the proposed TPP site would have less of an impact on property values than the existing industrial facilities. Two existing industrial plants were established prior to the area's new home construction, and therefore the study was able to look at how the prices of homes in the vicinity have changed over time, and in relation to distance from the industrial area.

Based on a review of property value in the vicinity of the TPP site, the applicant discovered the following trends:

- During the last six years, home prices have increased at an average annual rate of approximately 6 percent in San Joaquin County, and 10 percent in Tracy.
- Residential development within 1.5 miles of the proposed TPP site began in 1999.
- No rural residential home within the 1.5-mile radius of the proposed TPP site has been sold within the last five years.
- The Tuscanale residential development is the only new residential development breaking ground within 1.5 miles of the proposed TPP site. These homes, which range in size from 1,513 to 2,442 square feet, are being marketed at a price range of $267,999 to $311,999. They will go on sale in early 2002.
- Redbridge and Forecast Homes have sold new homes within 1.5 miles of the proposed TPP site since 1999. The average price of homes sold in 1999 was $232,182. The average price of homes sold in 2000 was $307,395, representing a 32 percent increase in price from 1999. The average price of homes sold in 2001 was $631,705, a 172 percent increase in price from 1999.
- Stoney Glen and Cornerstone (Standard Pacific) have sold new homes from 1.5 to 3 miles of the proposed TPP site since 1999. A total of 16 units were sold in 1999 at an average price of $264,352. A total of 17 units were sold in 2000 at an average price of $277,380, a five percent increase in price from 1999. A total of 56 units were sold in 2001 at an average price of $329,232, a 25 percent increase in price from 1999.

- Larger houses are priced higher within 1.5 miles of the TPP site than those located 1.5 to 3 miles from the site.
- Larger lots are priced higher within 1.5 miles of the site than from 1.5 to 3 miles from the site.
- The prices of homes are increasing at a faster rate within 1.5 miles of the site than those located 1.5 to 3 miles from the site.

The above-listed facts indicate that home values are strong in the area of the proposed TPP site. In comparing the Redbridge and Stoney Glen homes, there is no evidence that the prices of homes have been hurt by their proximity to the Owens Brockway Glass Container Manufacturing facility and the Tracy Biomass Power Plant.

Staff recognizes that there are many factors that influence housing prices and that there may be other reasons for the price increases seen in the vicinity of the glass container manufacturing and biomass plant facilities. This study does not, therefore, conclusively answer the question of whether or not the industrial land uses have an effect on housing prices. It

does, however, provide evidence of a strong residential market in the general area of the TPP site, regardless of the residential developments' proximity to the existing industrial facilities.

The TPP would be small in scale relative to the existing industrial uses in the vicinity and, if built, would not add measurably to the industrial character of the area. It is therefore staff's opinion that the TPP would not significantly affect property values in the area surrounding the site.

Page 5.7 – Written Comments from the Public

Add the following:

Lance Chun

LC-3 *With regards to the property value and how it will be affected by the TPP, it was suggested by an analysis done by the applicant that data suggests that property values has and will continue to rise in and around the Tracy area. They suggest that property values will not decline as a result of the TPP. That is very misleading. Of course property values will rise in this area. The Bay Area, being in such short supply of any kind of housing—be they affordable or not—compels some of that population to move to the closest city in SJ County—which is Tracy. Thus, of course property values in this area will continue to rise, due to the shear demand. But of course the TPP will negatively effect the potential prices of the property increase. If my home (1.5 – 2 miles NE of the TPP) were to sell for $400,000 if there wasn't a TPP, it would definitely sell for a lower price when the potential buyer finds out that a power plant is so close by. Everything else being equal, I definitely would not have purchased my home in Tracy in the March of 2000, had I known a power plant was going to be only 1.5 miles away from it. And if I did, I definitely would NOT have paid as much for it. The TPP will definitely effect the property values in the surrounding area. It may not be obvious due to the fact that housing is in such short supply in CA and the price of housing continues to increase, but the TPP absolutely will reduce the potential rise in property values—as compared to the same property if TPP did not existed.*

Response: Please refer to Response to GW-3.

Soil and Water

Supplemental Testimony of Richard Latteri

Page 5.8-3 – Regional and Vicinity Description (line 2)
Delete: "9-acre"
Insert: "10.3-acre"

Page 5.8-6 – Water Sources (paragraph 1, line 1)
Before: "cooling"
Insert: "evaporative"

Page 5.8-7 – (paragraph 1, line 2)
Replace: "24percent"
With: "24 percent"

Page 5.8-8 – Project Specific Impacts (paragraph 1, line 2)
Replace: "led"
With: "lead"

Page 5.8-9 – Environmental Checklist (item j, line 2)
Replace: ",?"
With: "?"

Page 5.8-11 – Checklist Description d (paragraph 2, line 6)
Replace: "CEC RWQCB"
With: "CEC and RWQCB"

Page 5.8-14 – Response to Comment MB-3 (paragraph 1, line 3)
Replace: "TTP"
With: "TPP"

Page 5.8-15 – Conclusion (paragraph 1, line 1)
Replace: "wold"
With: "wo uld"

Page 5.8-16 – Conditions of Certification (new paragraph)
Insert:
Soil and Water 4: The project owner shall comply with all San Joaquin County Department of Environmental Health requirements necessary to obtain a Commercial Septic Permit and meet all county potable water requirements for a commercial/industrial activity.

Verification: At least 30 days prior to site mobilization, the project owner shall provide proof from San Joaquin County Department of Environmental Health that they have complied with all requirements to

obtain a Commercial Septic Permit and have met all county potable water requirements for commercial/industrial activity.

TRANSMISSION LINE SAFETY AND NUISANCE

Supplemental Testimony of Obed Odoemelam, Ph.D.

Page 5.10-1 – INTRODUCTION (line 2)

Delete: "230"
Insert: "115"
Delete: "running."

Page 5.10-1 – INTRODUCTION (Line 3)

Delete: "Between A New SPP Switchyard And PG&E's Tesla Substation."
Insert: "Interconnection To The Existing Tesla-Kasson Transmission Line That Crosses The Site."

Page 5.10-1 – INTRODUCTION (Lines 3-5)

Delete the entire sentence that begins with: "The line will be owned by PG&E…"
Insert: "The TPP interconnection will be located within the TPP property boundaries."

Page 5.10-6 – SETTING (Line 1)

Delete "nine."
Insert: "10.3."

Page 5.10-6 – SETTING (Lines 2-12)

Delete entire rest of paragraph beginning with: "The site is immediately …."
Insert: "Two new switchyards would interconnect TPP with the electric grid: the TPP Switchyard and the Schulte Switching Station. Both switchyards would be built on the plant site to connect to the PG&E Tesla-Kasson 115 kV line, which is adjacent to the site. The two switchyards would be connected with a 340-foot tie line (GWF 2001e, Section 6). The TPP would have an on-site electrical interconnection (GWF 2001e, Section 2-1)."

Page 5.10-7 – PROJECT DESCRIPTION

Delete entire 3-paragraph section
Replace with: "Two new switchyards would interconnect TPP with the electric grid: the TPP Switchyard and the Schulte Switching Station. Both switchyards would be built on the plant site and connect to the PG&E Tesla-Kasson 115 kV line, which is adjacent to the site. The two switchyards would be connected with a 340-foot tie line (GWF 2001e, Section 6). The TPP would have an on-site electrical interconnection (GWF 2001e, Section 2-1)."

Page 5.10-9 – ELECTRIC AND MAGNETIC FIELD EXPOSURE

Delete the first two sentences.
Replace with: "The maximum magnetic field level within the Tesla-Kasson line corridor was calculated as 120 mG diminishing to 59 mG at the edge of the right-of-way. The maximum level of the companion electric field was calculated as 1.45 kV/m, diminishing to 0.062 kV/m at the edge of the right-of-way. The

maximum magnetic field level for the switchyard tie-in line within TPP property was calculated as 100 mG at the centerline, diminishing to 37.7 mG 40 feet from the centerline. The maximum value for the companion electric field was calculated as 1.3kV/m, diminishing to 0.04 kV/m 40 feet from the centerline."

Page 5.10-10 – RECOMMENDATIONS (Line 1)

Delete "230".
Insert "115."

VISUAL RESOURCES

Supplemental Testimony of Joe Donaldson

Page 5.11-12 – Environmental Checklist

Incorporate the following marked changes:

Environmental Checklist

VISUAL RESOURCES	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect on a scenic vista?				X
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?			X	
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	~~X~~	X		
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?		X		

Page 5.11-16 – Mitigation Measures (for KOP1)

Incorporate the following marked changes:

Mitigation Measures

The Applicant has proposed landscape treatment to help blend the power plant with its surroundings. **VISUAL RESOURCES Figure 2B** is a visual simulation of the project as viewed from KOP 1, 5 years after trees and shrubs are planted based on the applicant's originally proposed landscape plan. **VISUAL RESOURCES Figure 2C** shows the appearance of the project with trees and shrubs at maturity based on the applicant's originally proposed landscape plan. The heights, density, and placement of plantings are not effective in blending the power plant with its surroundings. Condition of Certification **VIS-1** should be implemented to ensure that the plantings will be more effective in helping blend the power plant with its surroundings, and in screening the plant from view to the extent feasible. However, potential areas along the power plant's east edge for planting trees and shrubs that would help blend the power plant with its surroundings and provide partial screening for views from the east are constrained by the existing power transmission lines and proposed switchyard and transmission lines. The Applicant has revised its conceptual landscaping plan to include additional landscaping along the northern and eastern sides of the project site. (GWF 2002e) Staff expects that the additional landscaping will

provide sufficient screening such that the visual impacts for the view area represented by KOP 1 would be less than significant.~~is currently working to identify additional opportunities for planting along the east side of the power plant that would provide partial screening and help blend the project with its surroundings. Staff will review the revised plan and report its evaluation in an addendum to the Staff Assessment. If sufficient additional planting along the east side of the power plant cannot be accomplished, the project would cause potentially significant visual impacts for views from the area represented by KOP 1.~~

Conditions of Certification **VIS-3** and **VIS-4** should be implemented to ensure that project structures, fences, and walls would be treated so they do not unduly contrast with their surroundings in regard to color and finish.

Page 5.11-31 – Conclusions and Recommendations

Incorporate the following marked changes:

CONCLUSIONS

The project as proposed has the potential to cause significant adverse visual impacts to views from several areas because of its location in the view and because of the change that it would cause to the existing setting. Both the Applicant and Staff have identified mitigation measures that would reduce these potential impacts. Staff has incorporated these measures in proposed Conditions of Certification **VIS-1 through VIS-5**. With proper implementation of these conditions, these potential impacts would be less than significant ~~except that the visual impact to the view area represented by KOP 1 would remain significant. Proposed landscaping would not be effective in screening the power plant from view in this area. The applicant is revising its conceptual landscaping plan to achieve effective screening. However, the presence of existing transmission lines and the proposed switchyard on the east side of the project site may prevent this. Staff will review the applicant's revised conceptual landscaping plan and present its evaluation in an addendum to the Staff Assessment~~.

The project as proposed also has the potential to cause significant adverse visual impacts by creating a new source of substantial nighttime light or glare which would adversely affect day or nighttime views in the area. These impacts would be due to the project introducing new sources of night lighting for safety and security during both construction and operation of the project, as well as using some materials, such as galvanized steel and aluminum, with reflective surfaces that could create daytime glare. Both the Applicant and Staff have identified mitigation measures that would reduce these potential impacts to less than significant levels. Staff has incorporated these measures in proposed Conditions of Certification **VIS-3, VIS-4,** and **VIS-5**. With proper implementation of these conditions, visible nighttime lighting and glare and daytime glare impacts would be kept to less than significant levels.

In addition, the project as proposed appears to be inconsistent with four General Plan policies, addressing preservation of visual quality along scenic routes, landscaping requirements for development along scenic routes, blending new development with its setting, and considering aesthetics when reviewing development proposals. Staff has developed conditions of certification (**VIS-1, VIS-2, VIS-3, and VIS-4**) that address these policies. Central to achieving consistency with the County's general plan policies is Condition of Certification **VIS-1,** which would require further development and improvement of the project's landscape plan to ensure that the project landscaping is more effective in helping to blend the project with its surroundings and screen views of it. ~~As discussed above, proposed landscaping would not be effective from the area represented by KOP 1, and the applicant is revising its conceptual landscaping plan to address this. Staff will review the revised plan and report its evaluation in an addendum to the Staff Assessment.~~

Page 5.11-32 – VIS-1

Incorporate the following marked changes:

VIS-1 Prior to start of commercial operation and as early as possible during the construction period, the project owner shall implement an approved revised perimeter landscape plan to help blend the project with its surroundings and to screen the project from public view to the extent feasible. The plan shall indicate types, quantities, sizes, arrangements, and placements of plants in a manner that shall screen views of the power plant to the greatest extent <u>feasible</u>~~possible~~ from I-580 and other KOPs identified for this project. Landscaping shall consist of a mix of trees and shrubs. The use of fast- and tall-growing, evergreen species suitable to the local growing and weather conditions shall be emphasized to ensure that maximum screening is achieved as quickly as possible and year-round. <u>Where constraints such as electric lines exist, species that will attain the tallest height feasible considering the constraints shall be used</u>. The use of additional ~~evergreen and deciduous~~ trees and shrubs with more moderate growth rates and sizes are encouraged to create a varied and aesthetic visual effect and screening. Suitable irrigation shall be installed and maintained to ensure survival of the plantings.

Page 5.11-38 – References

Add the following reference:

GWF (Tracy Peaker Project) 2002e. Revised Landscaping Plan. Dated January 17, 2001 and Docketed January 18, 2002.

WASTE MANAGEMENT

Supplemental Testimony of Alvin Greenberg, Ph.D.

Page 5.12-3 – Setting (line 5)

Delete: “nine-acre”
Insert: “10.3-acre”

Page 5.12-18 – Response to Agency and Public Comments

Insert the following new text at end of section:

THE DEPARTMENT OF TOXIC SUBSTANCE CONTROL

Comment: If hazardous wastes will be stored for more than 90 days, or treated on-site a permit from DTSC may be required. The facility should contact DTSC to initiate pre-application discussions and determine the permitting requirements. DTSC suggested this be included as a proposed Condition of Certification (COC).

Response: This request of DTSC covers an area that is known to the applicant and to the CEC Compliance Project Manager. It is a standard LORS. Therefore, it is not necessary to include it as a proposed COC.

Page 5.12-10 – WASTE-5

Incorporate the following marked changes:

WASTE-5 Both the project owner and , if necessary, its construction contractor shall obtain unique hazardous waste generator identification numbers from the Department of Toxic Substances Control ~~prior to generating any hazardous waste.~~(DTSC) in accordance with DTSC regulatory authority.

WORKER SAFETY/FIRE PROTECTION

Supplemental Testimony of Alvin J. Greenberg, Ph.D.

Page 5.13-3 – Setting (line 4)

Delete: “nine-acre”
Insert: “10.3-acre”