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

January 23, 2008

Amy Cuellar
NAVIGANT Consulting
Project Manager
3100 Zinfandel Drive, Suite 600
Rancho Cordova, CA 95670-6026

Dear Ms. Cuellar:

COMMUNITY POWER PROJECT DATA REQUESTS 1 THROUGH 89 (07-AFC-7)

Pursuant to Title 20, California Code of Regulations, section 1716, the California Energy Commission staff requests that Kings River Conservation District, the project applicant, supply the information specified in the enclosed data requests. The information requested is necessary to: 1) more fully understand the project, 2) assess whether the facility will be constructed and operated in compliance with applicable regulations, 3) assess whether the project will result in significant environmental impacts, 4) assess whether the facilities will be constructed and operated in a safe, efficient and reliable manner, and 5) assess potential mitigation measures.

This set of data requests (#1-89) is being made in the areas of air quality, biological resources, cultural resources, hazardous materials, land use, socioeconomics, transmission systems engineering, visual resources, waste management, as well as water and soil resources. Written responses to the enclosed data requests are due to the Energy Commission staff on or before February 25, 2008, or at such later date as may be mutually agreeable.

If you are unable to provide the information requested, need additional time, or object to providing the requested information, you must send a written notice to both Commissioner Jackalyne Pfannenstiel, Presiding Committee Member for the Community Power Project, and to me, within 20 days of receipt of this letter. The notification must contain the reasons for not providing the information, the need for additional time, and the grounds for any objections (see Title 20, California Code of Regulations, section 1716 (f)).

If you have any questions, please call me at (916) 651-0965, or e-mail me at cmcfarli@energy.state.ca.us.

Sincerely,

Che McFarlin, Project Manager
Energy Facilities Siting

Enclosure
cc: POS
Dockets 07-AFC-7

Community Power Project
Data Requests
(07-AFC-7)

Technical Area: AIR QUALITY
Author: Tuan Ngo

BACKGROUND

Facility Emission Estimates
The Appendix 8.1-5 of the Application for Certification (AFC) outlines the facility's emission estimates for two scenarios: one with the General Electric (GE) combustion turbines; and the other for Siemens combustion turbines. The estimated facility emissions presented in the Appendix do not match those presented in the AFC Tables 8.1-17 to 20 for oxides of nitrogen (NOx), volatile organic compounds (VOC), particulate matter (PM10),sulfur oxides (SOx), and carbon monoxide (CO).

DATA REQUEST

1. Please explain the differences between the emission values presented in Appendix 8.1-5 and Tables 8.1-17 to 20.

2. Please provide the correct facility emissions for NOx, VOC, PM10, SOx and CO.

BACKGROUND

Facility Fine Particulate (PM2.5) Emission Rates
Appendix 8.1-5 lists the PM2.5 emission rates for combustion turbines, cooling tower, emergency generator, diesel fire pump, and auxiliary boiler as approximately between 1 to 6 percent of the combustion equipment PM10 emissions, and about 25 percent of the cooling tower PM10 emissions.

DATA REQUEST

3. Please provide references for the cited PM2.5 emissions for the turbines, cooling tower, emergency generator, diesel fire pump, and auxiliary boiler.

BACKGROUND

Facility Emission Impacts Mitigation
Section 8.1.3.7 of the AFC provides the facility's estimated emissions for NOx, VOC, SOx and PM10 and the estimated emission reduction credits needed to mitigate its impacts. The October 20, 2007 confidential filing indicates that banked emission reduction credits (ERCs) for NOx, VOC, and SOx, from the San Joaquin Valley Unified Air Pollution Control District (District) will be obtained according to the District New Source Review rule (Rule 2201). The timing of these acquisitions is not certain at this time, which may not allow the public and other interested parties ample opportunities to review and comment on the appropriateness of the proposed offsets.

The AFC indicates that some banked PM10 ERCs will be obtained to mitigate part of the project PM10 emissions. The remaining PM10 emission contribution will be mitigated with banked SOx emission reduction credits, i.e., inter-pollutant offset, also in accordance with the District Rule

2201. The proposed inter-pollutant offset ratio is 1.87 pounds of SOx for every pound of new PM10 emissions.

The AFC has not mentioned whether the facility's PM2.5 emission contribution would be mitigated, and how.

DATA REQUEST

4. Please provide option contracts and/or evidence of acquisition of ERCs for the NOx, VOC, SOx, PM10, and PM2.5 liability of the project.

5. If the applicant is unable to adequately respond to the Data Request above, please provide a status report starting February 1, 2008 and continuing monthly until the report identifies option contracts and/or evidence of acquisition of ERCs for the NOx, VOC, SOx, PM10 and PM2.5 liability of the project. The report should be specific to each pollutant and provide new information and update information from previous monthly status reports as appropriate. The reports should include for the ERCs:
   a. contact names and telephone numbers;
   b. company or source names;
   c. pollutant credit types and amounts in lbs/day;
   d. ERC certificate numbers;
   e. the methods of emission reductions (e.g., shutdown, reduction of hours of operation, emission controls, etc.);
   f. the status of ERC or option negotiations; and
   g. the location of the emission reduction credits.

6. Please provide the specific portion of PM10 to be mitigated with SOx emission reduction credits.

7. Please provide an analysis demonstrating the use of the proposed 1.87 to 1 SOx for PM10 trading ratio and how this would mitigate the project's new PM10/PM2.5 emissions impacts.

BACKGROUND

Feasibility of New Technologies to Reduce the Facility Emissions Liability
Appendix 8.1-5 indicates that the facility may employ up to 181 start up and shut down sequences for each turbine. During these sequences, each turbine can emit significantly higher emissions of NOx, VOC and CO than normal operation. Currently, both GE and Siemens can offer turbine packages that employ Rapid Start Process (GE) and Quick Start Process (Siemens) that are specifically designed to reduce turbines' start-up and shut down emissions. The AFC has not mentioned whether these new technologies could be employed to reduce the facility's emissions liability.

DATA REQUEST

8. Please provide an analysis to demonstrate the feasibility of employing either the Rapid Start Process by GE or the Quick Start Process by Siemens as a mitigation measure to reduce the facility's emission liability.

BACKGROUND:

Fire Pump Engine and Emergency Generator Emissions
Appendix 8.1-E lists the expected emissions of the fire pump engine and emergency generator using standard diesel fuel.

DATA REQUEST

9. Please provide discussion about the feasibility of using ultra-low sulfur diesel, which contains no more than 15 ppm sulfur as fuel for the fire pump engine and emergency generator.

BACKGROUND

Air Quality Modeling Analysis
The AFC Section 8.1.3.4 provides a discussion of the method of selecting appropriate air quality models to analyze the project impacts. The section includes tables listing the modeling results. Appendix 8.1-2 provides some modeling support data as well as modeling input and output files in electronic format. Missing from the AFC is a text file describing the modeling input and output files. Without this information, staff can not verify the modeling results that were submitted in Section 8.1.3.4.

Additionally, the modeling output files for the Siemens turbines' one-hour NO_2 emission impacts are missing from the submitted files.

The AFC Section 8.1.3.4 mentions that ozone ambient air quality data from 1989 were used in the ozone limiting modeling analysis for the facility one-hour NO_2 emission impacts.

DATA REQUEST

10. Please provide a text file describing the provided input and output modeling files.

11. Please provide the missing output files (in electronic format) for the Siemens turbines.

12. Please provide a discussion of why more recent ozone data are not used in the modeling analysis to evaluate the project's one-hour NO_2 emission impacts.

BACKGROUND

Cumulative impacts analysis
Section 8.1.3.6 of the AFC states that a one-hour NO_2 cumulative impact analysis will be performed when additional information is received from the District. In addition, there is no analysis of potential PM10/PM2.5 cumulative impacts. Staff will need those analyses of NO_2 as well as PM10/PM2.5 cumulative impacts in order to complete it's analysis.

DATA REQUEST

13. Please provide a cumulative impacts analysis that includes analyses of cumulative impacts for the 1-hour NO_2 and the 24-hour PM10 and PM2.5 standards.

Community Power Project
Data Requests
(07-AFC-7)

Technical Area: Biological Resources
Author: Brian McCollough

BACKGROUND

The project will likely involve a pipeline route crossing the Kings River and Cross Creek and a transmission line crossing the Manning Recharge Basin. Staff contacted Justin Sloan of the California Department of Fish and Game (CDFG) to discuss the permit requirements of the project. Mr. Sloan stated that CDFG uses information provided by a project applicant in a Streambed Alteration Notification Package to determine if a Streambed Alteration Agreement is necessary. Mr. Sloan indicated that streambed alteration agreements would be handled by Brian Erlandsen, who can be reached at (559) 243-4014 ext. 231. Staff needs to know if a Streambed Alteration Agreement will be necessary so staff can complete its analysis.

DATA REQUEST

14. Please contact the California Department of Fish and Game (CDFG) and provide a report of conversation that includes information indicating whether the proposed project will need to acquire a Streambed Alteration Agreement and any guidance provided by CDFG. Please also provide contact information for the CDFG staff person who provides comments, copies of any written materials provided by KRCD to CDFG related to the Streambed Alteration Agreement, an estimated schedule for the CDFG submittals and permits, and a copy of any written correspondence that CDFG provides related to the streambed issue.

Community Power Project
Data Requests
(07-AFC-7)

Technical Area: Cultural Resources
Author: Michael McGuirt

BACKGROUND

The relevant sections (*Engineering*, *Electrical Transmission*, *Water Supply*, and *Soils* sections) of the Application for Certification (AFC) for the proposed Kings River Conservation District Community Power Plant project do not provide information on the anticipated, gross lateral dimensions of the footprint for a number of the project's key components, or information on how far below the present grade of the project site the applicant anticipates that these components would be built. Staff needs to know the gross maximum dimensions of the project's potential ground disturbance in order to reliably assess its potential impacts to historical resources.

DATA REQUEST

15. Please provide descriptions of the anticipated maximum lateral and vertical extents of the ground disturbance that may result from the construction, operation, and maintenance of the main plant facility, the new natural gas pipeline, the new electric transmission line, the water supply line from Lincoln Ponds at the Sanger Wastewater Treatment Plant (WWTP), the water supply line from the Parlier WWTP into the adjacent main plant facility, and the new main plant facility wells.

BACKGROUND

From the applicant's March 2007 *Archaeological Survey Report for the Kings River Conservation District Community Power Plant, Frenso* [sic]*, Kings, and Tulare Counties, California* (ASR)(pp. 11-12), it appears that the applicant did not survey for cultural resources within the entire area that the Energy Commission's April 2007 *Rules of Practice and Procedure & Power Plant Site Certification Regulations* (Rules of Practice) prescribe for a proposed power plant and associated linear facilities. To ensure that the complete inventory of cultural resources in the project's impact areas are included in its analyses, staff needs to know which portions of the required survey area remain to be surveyed for cultural resources.

DATA REQUESTS

16. To facilitate the completion of the cultural resource inventory for the proposed project:
    a. Please identify, describe, and provide maps (scale of 1:24,000) for each portion of the required survey area, including construction staging areas and linear facility corridors, that the applicant has been unable to survey at the surface.
    b. Please provide a schedule for the completion of the surface survey of the required survey area.
    c. Please provide a plan for surveying the private property in the required survey area to which the applicant has had no access.
17. With regard more specifically to the completion of the cultural resource inventory for the proposed natural gas lateral:
    a. Please provide the widths of the rights-of-way (ROW) along the roadways where the construction of the new natural gas pipeline is proposed.

b. Please also describe the variations in the general physical and biological character of each ROW.

c. Explain how the results of the applicant's pedestrian ROW surveys are reliable indices of the archaeological deposits that may be beneath the roadways.

d. Discuss the appropriateness of subsurface testing of the ROWs for any such deposits.

BACKGROUND

The applicant's consultants, Pacific Legacy, Inc. and JRP Historical Consulting, LLC (JRP), each conducted historical resources surveys of portions of the required survey area, but the *Cultural Resources* section of the AFC (section 8.14) provides no cross-check between the partially overlapping results of the two investigations. Pacific Legacy found and recorded 22 "historic archaeological resources" that include one ranch complex, one concrete foundation, one abandoned segment of Atchison, Topeka, and Santa Fe Railroad grade, and 19 functioning irrigation canal or ditch segments. This consultant also found and made note of the locations of 65 other "resources" that include two "existing railroad crossings," two "bridge crossings," and 61 "residences, ranch complexes, and buildings." JRP found and recorded 94 resources that include 89 buildings and 5 water conveyances. Without eliminating overlapping results, a total of 181 resources were noted between the two investigations. Staff needs to have an accurate inventory of the historical resources in the required survey area to complete and properly document the analysis of the project's potential impacts to that list of resources.

DATA REQUEST

18. Please provide a confidential, composite inventory, on one map set and in tabular form, of the resources that Pacific Legacy and JRP have found, to date, in the required survey area. Please provide the map set as a series of unique sheets at a scale of 1:24,000, preferably using the same base maps as those requested above for areas that have yet to be surveyed. Please also develop the table to clearly identify those instances where both surveys found the same resource, but gave it different field designations.

    The requested table should further include:

    a. Separate columns that display Pacific Legacy's and JRP's temporary field designations for each resource.

    b. Any permanent designations that any of the resources may now carry.

    c. Recommendations on the resources' California Register of Historical Resources (CRHR) eligibility.

    d. Each resource's distance (in meters) to the nearest project component.

BACKGROUND

Section 8.14 of the AFC (pp. 19–21) appears to imply that the construction of the proposed project would not physically impact 21 of the 22 potential historical resources that Pacific Legacy found and recorded in the required survey area. The last of the 22 resources, the Barr Ranch

(PLI-1), would be demolished in conjunction with the construction of the main power plant facility, but it is evaluated in the Archeological Survey Report to be ineligible for inclusion in the CRHR (pp. 20 and 21). Section 8.14 does not appear, however, to address the potential for the construction, operation, and maintenance of the project to impact the integrity of the setting of any historical resources that may be in sight of the main power plant facility or the new transmission line. In order to conclude the assessment of the proposed project's impacts to historical resources, staff needs to know how the applicant proposes to physically avoid the above 21 resources, and how many of the up to 181 resources that the applicant's consultants identified in the project area (see discussion on resource number above) are in sight of the proposed power plant and transmission line.

DATA REQUESTS

19. Please discuss how the "various utility routes will avoid impacting" (p. 20, section 8.14 of the AFC) each of the above 21 resources, and provide that information in written and tabular forms.

20. To facilitate a more comprehensive assessment of the proposed project's potential to impact historical resources:

    a. Please provide a list of any potential historical resources found as a result of prior and recent surveys that are in sight of the main plant facility or the new transmission line.

    b. Please have a person who meets the Secretary of the Interior's Professional Qualifications Standards in history or architectural history evaluate which of the resources in that list are historical resources, either individually or as district elements.

    c. Documentation of resources evaluated hereunder needs to include California Department of Parks and Recreation 523B forms (Building, Structure, Object Record), and, as appropriate, 523D forms (District Record).

    d. Please provide the resume of each person responsible for each of the above evaluations, if it has not already been provided.

    e. Please assess the degree to which the integrity of the setting of each historical resource that is ultimately found above may be compromised as a result of the project's construction, operation, or maintenance.

BACKGROUND

The historical theme relative to which JRP evaluates the irrigation canal and ditch segments (Walnut Ditch, Kirby Ditch, Selma Branch, Centerville, and Kingsburg Canal, Fowler Switch Ditch, and Kirby Canal) in the required survey area is "late nineteenth century [sic] agricultural developments" (p. 31, July 2007 draft *Historical Resources Inventory and Evaluation Report for the Kings River Conservation District Community Power Plant Project, Fresno County* (HRIER)). Staff needs to understand why the applicant limited the historical theme to only the late nineteenth and early twentieth centuries, apparently not considering the later twentieth-century period of consolidation of canals as a relevant complementary theme in regional agricultural history.

DATA REQUEST

21. Please discuss why the appropriate historical theme for the subject conveyances is simply the development of the local agricultural economy in the late nineteenth and early twentieth centuries rather than the development *and* the subsequent operation of the canals through the late 1950s, as agriculture remained the mainstay of the local economy through that time.

BACKGROUND

Pacific Legacy records 17 named and unnamed "irrigation canals" in the AFC (section 8.14, p. 14), and JRP's HRIER considers five named "irrigation canals" and ditch segments (Walnut Ditch; Kirby Ditch; Selma Branch, Centerville, and Kingsburg Canal; Fowler Switch Ditch; and Kirby Canal) that JRP identifies as now being parts of the Consolidated Irrigation District system. Staff needs to know how many discrete potential historical resources these 22 canals represent and clarify how the project's construction, operation, and maintenance may affect each one.

DATA REQUESTS

22. Of the 17 water conveyance segments that Pacific Legacy found, please clarify:

    a. Which are parts of the five named conveyances that JRP evaluated, and identified as parts of the Consolidated Irrigation District system.

    b. Which are parts of the Consolidated Irrigation District system while being distinct from the five named conveyances that JRP considers.

    c. Which, if any, are conveyances that operate apart from the Consolidated Irrigation District system.

23. To facilitate a more explicit assessment of the proposed project's potential to impact individual water conveyances and water conveyance districts that are historical resources:

    a. Please have a person who meets the Secretary of the Interior's Professional Qualifications Standards in history or architectural history evaluate any of the conveyances above which are in sight of the main plant facility or the new transmission line as either individual conveyance resources, or as contributing elements to Consolidated Irrigation Canal or Consolidated Irrigation District historic districts.

    b. Documentation for the evaluation of any such resources needs to include California Department of Parks and Recreation 523B forms (Building, Structure, Object Record), and, as appropriate, 523D forms (District Record).

    c. Please provide the resume of each person responsible for each evaluation, if it has not already been provided.

    d. Should the above evaluation result in the recognition of a historical resource not previously considered here, a new individual conveyance or a new conveyance district, please assess the degree to which the integrity of the setting of each such

historical resource may be compromised as a result of the project's construction, operation, or maintenance.

Community Power Project
Data Requests
(07-AFC-7)

Technical Area: Hazardous Materials Management
Author: Dr. Alvin Greenberg

BACKGROUND

Regarding cumulative impacts, Section 8.8.3.5 states that "it is highly unlikely that its impacts will overlap with those from an emergency release by other hazardous materials users in the vicinity of the KRCD CPP". However, no further description of any other "users" in the vicinity was included. Staff needs information on the presence of other users, if any, of hazardous materials within a 1-mile radius of the proposed project in order to fully assess the potential for cumulative impacts.

DATA REQUESTS

24. Please provide information on the location and the identities/quantities of hazardous materials stored at any facility located or proposed to be located within a 1-mile radius of the proposed power plant. If there are no facilities either in existence or proposed to be built, please so indicate.

Community Power Project
Data Requests
(07-AFC-7)

Technical Area: Land Use, Agriculture, and Recreation
Author: Fritts Golden

INTRODUCTION

In order for staff to complete it's analyses, staff needs to know whether Fresno County would normally require the Kings River Conservation District (KRCD) Community Power Project (CPP) to obtain a conditional use permit and height variance, and what conditions Fresno County would attach to this project, but for the exclusive jurisdiction and permit authority of the Energy Commission, were Fresno County the permitting agency.

As part of the County's discussion of the conditional use permit, we are also interested in understanding the County's position on the proposed project's consistency with its General Plan and Zoning Ordinance, including whether certain elements at the proposed facility would exceed any local height restrictions. This may require the project applicant to initiate a formal request to the County regarding the project's conformity and consistency with its general plan and zoning designations.

Because portions of the proposed construction laydown areas and transmission line would lie within Tulare County, staff also encourages KRCD to work with Tulare County to determine the type of use permits and any associated conditions that the County would normally place on the project but for the Energy Commission's exclusive jurisdiction and permit authority.

BACKGROUND

Prior to making findings for its license, the Energy Commission needs to confirm whether the project normally would require a conditional use permit for the project, but for the exclusive authority of the Energy Commission, and what conditions Fresno County would attach to this project, we it the permitting agency. As part of the County's discussion of the conditional use permit, we are also interested in understanding the County's position on the proposed project's consistency with its General Plan and Zoning Ordinance, including whether certain elements at the proposed facility would exceed any local height restrictions.

DATA REQUEST

25. Please provide written confirmation from Fresno County as to whether the project would need a conditional use permit, variance, or any other land use entitlement from the County but for the exclusive authority of the Energy Commission.

26. Please provide written confirmation from Fresno and Tulare counties as to what use permits or land use entitlements they would require for offsite linear facilities, but for the exclusive authority of the Energy Commission.

27. If the project would need a conditional use permit, please provide the conditions, if known, that Fresno County would place on the project or provide a timeline as to when these conditions would become available to staff.

28. Please provide written confirmation from Fresno County whether, in the County's opinion, a variance could be granted and, if so, what conditions Fresno County would require, were it the permitting agency.

29. Please provide Fresno County's position on the proposed project's consistency with its General Plan and Zoning Ordinance.

30. Please cite the section(s) of the zoning or other code that state the findings the County would make for a variance or variances, were it the permitting agency.

BACKGROUND

The proximity of sensitive land uses to power plant related linear facilities is of concern to the Energy Commission.

DATA REQUEST

31. Please provide a figure(s) and descriptive labels or text identifying sensitive receptors within 200 feet of the centerline of linear faciliites and any associated appurtenances.

BACKGROUND

The temporary use of land for construction-related needs such as worker parking, equipment parking and maintenance, laydown and storage facilities, and staging areas may require the installation of gravel or other paving material, and may result in compaction of the soil. This could affect the future use and productivity of the affected property.

DATA REQUEST

32. Please describe what temporary fill or paving would be used and at what locations.

33. Please describe what methods would be used to restore temporarily-used sites to their former condition after construction of the project is complete.

34. Please describe whether, outside of the footprint of project facilities, what practices (such as agriculture) would be permitted within the rights-of-way.

BACKGROUND

KRCD proposes to set aside and preserve agricultural land as mitigation for using agricultural land for the project. This is proposed to be at a ratio of 1:1. As an alternative, funds may be provided to a Trust to preserve land, in lieu of KRCD undertaking this action itself.

DATA REQUEST

35. Please explain on what basis the proposed ratio of preserved to occupied (built upon) agricultural land was determined.

36. If funds will be provided to a Trust for farmland preservation, please discuss how KRCD will ensure that the funds will be sufficient to acquire the amount of land that may be agreed upon by the Energy Commission.

37. Please identify whether preservation of agricultural land by the applicant or other party would be within Fresno County.

38. Please explain how the economic viability of any preserved agricultural land would be assured.

39. Please identify whether any preserved land would be adjacent to already preserved land such that together they would provide a larger agricultural unit.

40. Please document any discussions or other communication with the County regarding the preservation of farmland and any determinations or suggestions that resulted.

41. Please identify the criteria by which land for preservation would be identified and acquired.

42. Please identify the tax implications, if any, for local jurisdictions and the State if preserved land is owned by a non-profit organization.

Technical Area: Socioeconomics
Author: Joseph Diamond Ph. D**.**

BACKGROUND

The years for the IMPLAN model economic impacts (secondary impacts) caused by the construction (2008) and operation (2010) of the project were provided. However, the time value of money should be reflected for all economic estimates. Staff needs to know the year that corresponds to all dollar estimates.

DATA REQUEST

43. Please indicate the year for all economic estimates (e.g., construction costs, construction and operation payroll, property taxes, school impact fees, etc.).

BACKGROUND

Economic benefits, including payment of property taxes on the power plant, are an important component of socioeconomic analysis. The CPP AFC indicates the project owner would be paying property taxes to Fresno County. Since the project would be owned by a public agency it is unclear whether it would be liable for property taxes to Fresno County.

DATA REQUEST

44. Please discuss whether the CPP, which would be owned by the Kings River Conservation District (KRCD), a multi-county special district public agency that provides resource conservation, would be liable for paying property taxes to Fresno County.

45. If the KRCD would be required to pay property taxes, please verify the dollar amount.

BACKGROUND

Economic benefits, including the payment of school impact fees on the power plant, are an important component of socioeconomic analysis. In KRCD's responses to Data Adequacy requests (11/13/2007), the applicant indicated as a local public agency they may or may not be required to pay $11,967 to the Selma Unified School District.

DATA REQUEST

46. Please discuss whether the CPP would be liable for paying school impact fees to the Selma Unified School District and the Parlier Unified School District.

47. If the KRCD would be required to pay school impact fees, please verify the dollar amounts.

BACKGROUND

Economic benefits including secondary employment and income estimates in the CPP AFC appear to be based on 30 permanent operating workers and an estimated $2.5 million operation payroll per year for Fresno County. The applicant's responses to Staff's Data Adequacy

requests (11/13/2007) show the estimated annual payroll for permanent operating staff would be $2.5 million and for short-term (contract) operation workers it would be $250,000.

DATA REQUEST

48. Please provide the number of annual short-term (contract) operation workers.

49. Please verify whether the estimates of employment and income secondary economic impacts included short-term (contract) operation workers with an annual payroll of $250,000 or not.

50. If not, please recalculate the secondary employment and income secondary impacts for operations in Fresno County.

Community Power Project
Data Requests
(07-AFC-7)

Technical Area: Transmission System Engineering
Authors: Laiping Ng & Mark Hesters

BACKGROUND

The California Environmental Quality Act (CEQA) requires the identification and description of the direct and indirect significant effects of the project on the environment. For the identification of impacts on the transmission system resources and the indirect or downstream transmission impacts, staff relies on the System Impact and Facilities Studies as well as review of these studies by the agency responsible for insuring the interconnecting grid meets reliability standards, in this case, the California Independent System Operator (California ISO). The studies analyze the effect of the proposed project on the ability of the transmission network to meet reliability standards. When the studies determine that the project will cause a violation of reliability standards, the potential mitigation or upgrades required to bring the system into compliance are identified. The mitigation measures often include the construction of downstream transmission facilities. CEQA requires the analysis of any downstream facilities for potential indirect impacts of the proposed project. Without a complete System Impact or Facility study, staff is not able to fulfill the CEQA requirement to identify the indirect effects of the proposed project.

Staff needs additional information regarding the proposed project in order to prepare the Staff Assessment for the Community Power Plant Project (CPP).

DATA REQUEST

51. The generator tie-lines for the project have been described in the Application For Certification sections 1.3 and 2.6 as a five mile long, radial line, which would be built with 2156 kcmil ACSR conductor. The SIS indicates the project would use two generator tie-lines which would be built with 795 kcmil ACSS conductor. Please clarify conductor type, size, and number of generator tie-lines which would require interconnecting the CPP project to the PG&E McCall Substation.

52. The SIS indicated that the San Joaquin Valley Energy Center project (SJVEC) is ahead of the CPP in the California ISO generation queue. Having included the SJVEC in the study assumptions, the addition of the CPP will cause overload on the 70kV, 115 kV, and 230 kV transmission line which will require a 187.57 miles of line reconductoring. Without the SJVEC project, the addition of the CPP will require the reconductoring of 53.5 miles of 70 kV, 115 kV, and 230 kV lines. Please provide an environmental analysis sufficient to meet CEQA requirements for an indirect project impact of the required transmission line reconductoring both with and without the SJVEC project.

53. Please provide the Facility Study Report.

Community Power Project
Data Requests
(07-AFC-7)

Technical Area: Visual Resources
Author: William Kanemoto

BACKGROUND

According to the AFC project description (AFC Section 2.4.1, p.3), the project could use either a General Electric (GE) 7FA or Siemens SGT6-5000F combustion turbine generator (CTG). As further noted, the AFC visual analysis simulated the appearance of the Siemens CTG units, which have a slightly larger footprint than the GE units. Although the GE units would have a smaller footprint, the AFC does not provide information on the height of the GE units or their visual character.

DATA REQUEST

54. In order to allow comparison of the appearance of the two possible unit types, please provide a site plan and scaled elevation drawings from two axes of the project with GE 7FA units.

Community Power Project
Data Requests
(07-AFC-7)

Technical Area: Visual Resources - Plume
Author: William Walters

BACKGROUND – COOLING TOWER MODELING ANALYSIS

Staff plans to review the applicant's visible water vapor plume modeling analysis and perform a separate modeling analysis. Staff requires additional information regarding the cooling tower design and the applicant's modeling analysis to complete this review.

DATA REQUEST

55. Please provide the cooling tower manufacturer and model number information and a fogging frequency curve from the cooling tower vendor, if available.

56. Please provide the Seasonal Annual Cooling Tower Impact (SACTI) model input/output files, including the meteorological data input files, from the modeling analysis that was summarized in Appendix 8.3-1.

Community Power Project
Data Requests
(07-AFC-7)

Technical Area: Waste Management
Author: Ellie Townsend-Hough

BACKGROUND

Staff needs additional information on the amount of waste currently onsite, as well as the amount expected to be generated during construction and operation. Staff has reviewed Section 1.7.9, Table 8.9-1, and Table 8.9-3 of the Application for Certification (AFC). Section 1.7.9 denotes various amounts of waste that would be generated from the projects as 200 tons of solid waste during construction, 10 tons demolition of onsite structures, and 1525 tons a year from ongoing operation and maintenance. Tables 8.9-1 and Table 8.9-3 provide limited indication in which phase (demolition, construction or operation) the waste is generated. The numbers in Section 1.7.9 and 8.9 do not seem to be the same.

An estimation of the amount of asbestos or lead to be generated during demolition is not included in the AFC. There is also an abandoned 500-gallon underground storage tank set aboveground at the proposed project site and no mention of the method of disposal.

DATA REQUEST

57. Please provide tables that separate demolition/construction and operation that reconcile the number found in Section 1.7.9.

58. Please conduct an asbestos survey and provide an estimate of the amount of asbestos in the demolition/construction table. Indicate the method and location of disposal.

59. Please collect and analyze soil samples around the 500-gallon tank. Provide information on the method of disposal to be used for the 500-gallon underground storage tank.

BACKGROUND

Recycled water will be delivered via a new five-mile underground pipeline interconnection to the Parlier Waste Water Treatment Plant (WWTP) and the Sanger WWTP effluent percolation and evaporation ponds located on Lincoln Avenue. Although the pipeline will be located along existing roadway, various jurisdictions may be involved in the review of the pipeline.

KRDC plans to treat secondary effluent to tertiary levels on the Community Power Project site. State of California Water Recycling Criteria (adopted in December 2000) requires the submission of an engineering report to the Regional Water Quality Control Board (RWQCB) and the Department of Public Health Services before recycled water projects are implemented. In addition, but for the exclusive jurisdiction of the Energy Commission, a new producer of recycled water must obtain a permit from the RWQCB, which may take as long as 12 months to procure.

DATA REQUEST

60. Please provide a draft engineering report per the provisions of Title 22 Code of Regulations Section 60323 that identifies:

    a. all agencies or entities that will be involved in the design, treatment, distribution, construction, operation and maintenance of the recycle facilities;

b. a description of any legal arrangements outlining authorities and responsibilities between the agencies with respect to treatments; and

c. a description of arrangements for coordinating all reuse-related activities between the two WWTPs and the Applicant.

61. Please provide a full description and schematic of the tertiary treatment train for the Title 22 RWF system; and a discussion of all previous experience in producing tertiary treated recycled water.

62. In addition to the Energy Commission, please specify the local and state agencies which will need to review the pipeline? Please provide the names, telephone number, and address of the agencies included in this process. What permits would be required, but for the exclusive jurisdiction of the Energy Commission, to complete the pipeline? What would be the timeframes for these permits?

63. But for the exclusive jurisdiction of the Energy Commission, please address what permits are required to operate an on-site tertiary treatment plant?

64. Please discuss why the tertiary treatment plant is located on the KRCD CPP projects site instead of the Parlier or Sanger WWTPs?

BACKGROUND

According to the Phase I Environmental Site Assessment for the proposed project site, the domestic water well and septic tank associated with the vacant residential dwelling are located on site. There is also an agricultural well and pump on site. The wells and the septic tank will not be used for the proposed project and will need to be abandoned.

DATA REQUEST

65. When and how will the water well and septic tank be abandoned? What agencies will be involved with the abandonment of the well and tank? What are the procedures and schedule for abandoning the well and tank?

66. When and how will the agricultural well be abandoned? What agencies will be involved with the abandonment of the well and tank?

BACKGROUND

A Phase I Environmental Site Assessment (ESA) needs to be conducted for the entire length of the proposed natural gas and water supply pipeline alignments, as well as for the length of the proposed transmission Interconnection. The KRDC Community Power Plant is proposing a 26-mile long 20-inch underground natural gas pipeline, an approximately five mile long 18-inch underground wastewater supply pipeline, and a five mile 230 Kv transmission line interconnection.

The following types of businesses warrant investigation if they are located on, adjacent, or in proximity to the proposed linear facility routes. Proximity is defined as within a path of migration from these businesses.

a. Automobile dealerships, maintenance /repair, and storage and salvage lots.

b. Golf courses (fertilizers and pesticides).

c. Machine /equipment /appliance servicing operations.

d. Commercial printing operations.

e. Oil distribution facilities.

f. Any industry engaged in the storage /transport /disposal of hazardous waste or the use of hazardous materials.

g. Schools, daycare centers and hospitals.

DATA REQUEST

67. Please provide a Phase I ESA for the 26-mile 20-inch diameter underground natural gas pipeline corridor, the approximately five mile long 18-inch underground wastewater supply pipeline routes, and the approximately five mile long 230 kv transmission interconnection route which, according to ASTM 2000 guidelines, crosses the following:

    a. Property where contamination is known, or suspected at an up-gradient or adjoining site.

    b. Property, which is, or has been used for industrial/manufacturing purposes. Adjoining property with this type of usage should also be included in the investigation.

    c. Property for which any prior environmental investigation indicated the potential for contamination.

    d. Property displaying evidence of hazardous waste storage on site, whether permitted or not. For example, the existence of a former dry cleaner or gas station, which utilized underground or above ground storage tanks. Agricultural properties, where pesticides were stored/mixed and potentially released, should also be investigated.

    e. Property with visible staining.

    f. Property where contaminants exceeding drinking water standards have been detected.

    g. Property where state / federal agency notices of violation have been issued.

    h. Property on which equipment containing PCBs was stored.

    i. Property where fill dirt has been brought that has, or may have originated from a contaminated site.

    j. Property with known or suspected discharges of wastewater (other than storm-water and sanitary waste) into a storm water drain.

    k. Property with an environmental lien on it (imposed either by CERCLA 42USC / 9607(1) or similar state and local laws).

    l. Property along existing or past railroad tracks.

m. For agricultural areas, please provide a representative sample (at least 10 percent) of all parcels randomly selected for a Determination of Pesticide Use assessment.

68. The assessment shall identify the type of crops grown over as long a period as records indicate, the historical use and identity of pesticides (including organic and inorganic pesticides as well as herbicides), and a statement of the likelihood of finding, along the pipeline route, levels of pesticides that might present a risk to pipeline workers and/or the public.

69. Please prepare and implement a soil and groundwater Sampling and Analysis Plan for the site and laydown areas. Please also discuss remediation steps to be taken if soil/groundwater sampling and analysis indicate contamination.

Community Power Project
Data Requests
(07-AFC-7)

Technical Area: Water and Soil Resources
Author: Christopher Dennis, P.G.

BACKGROUND

The AFC discusses that a Construction and Sedimentation Control Plan separate from the Stormwater Pollution Prevention Plan (SWPPP) is not required due to the flat topography and low annual rainfall at the project site. This project involves major construction with the installation of over five miles of electrical transmission lines, five miles of reclaimed water pipeline from the Sanger treatment plant, 26 miles of natural gas pipeline with five 200 by 200 foot staging areas, and the disturbance of 32 acres for construction of the facility. Because this project involves major construction, the California Energy Commission (CEC) requires a draft Drainage Erosion and Sediment Control Plan (DESCP) to determine the potential erosion impacts to water and soil resources from construction of the project. The draft DESCP is to be updated and revised as the project moves from the preliminary to final design phases and is to be a separate document from the construction Storm Water Pollution Prevention Plan (SWPPP). The final DESCP, submitted prior to site mobilization, must be developed and signed by a professional engineer/erosion control specialist.

DATA REQUEST

70. Please provide a draft DESCP containing elements A through I listed below. These elements will outline site management activities and erosion/sediment control Best Management Practices (BMPs) to be implemented during site mobilization, excavation, construction, and post-construction activities. The level of detail in the draft DESCP should correspond to the current level of planning for site construction and corresponding site grading and drainage. Please provide all conceptual erosion control information for those phases of construction and post-construction that have been developed or provide a statement when such information will be available.

    a. Vicinity Map: A map(s) at a minimum scale 1”=100’ shall be provided indicating the location of all Project elements and depictions of all significant geographic features including swales, storm drains, and sensitive areas.

    b. Site Delineation: All areas subject to soil disturbance, such as the construction area, laydown area, parking area, all linear facilities, and landscaping areas, shall be delineated showing boundary lines and the location of all existing and proposed structures, pipelines, roads, and drainage facilities.

    c. Watercourses and Critical Areas: The DESCP shall show the location of all nearby watercourses including swales, storm drains, and drainage ditches. Indicate the proximity of those features to the project construction, laydown, and landscape areas and all transmission and pipeline construction corridors.

    d. Drainage Map: The DESCP shall provide a topographic site map(s) at a minimum scale 1”=100’ showing existing, interim, and proposed drainage

systems and drainage area boundaries. On the map, spot elevations are required where relatively flat conditions exist. The spot elevations and contours shall be extended off-site for a minimum distance of 100 feet in flat terrain.

e. Drainage of Project Site Narrative: The DESCP shall include a narrative of the drainage measures to be taken to protect soil and water resources onsite and downstream. The narrative shall include a summary of the hydraulic analysis prepared by a professional engineer/erosion control specialist. The narrative shall state the watershed size in acres that was used in the calculation of drainage measures. The hydraulic analysis shall be used to support the selection of BMPs and structural controls to divert off-site and on-site drainage around or through the construction and laydown areas.

f. Clearing and Grading Plans: The DESCP shall provide a delineation of all areas to be cleared of vegetation and areas to be preserved. The plan shall provide elevations, slopes, locations, and extent of all proposed grading as shown by contours, cross-sections, or other means. The locations of any disposal areas, fills, or other special features shall also be shown. Illustrate existing and proposed topography tying in proposed contours with existing topography.

g. Clearing and Grading Narrative: The DESCP shall include a table with the quantities of material excavated or filled during construction in all area such as the construction area, laydown area, and transmission and pipeline corridors. This table shall identify whether the materials removed and brought in were temporarily or permanently added or removed and the amount of such material brought in or removed.

h. Best Management Practices Plan: The DESCP shall identify on the topographic site map(s) the location of the site specific BMPs to be employed during each phase of construction, initial grading, project element excavation and construction, and final grading/stabilization. BMPs shall include measures designed to prevent wind and water erosion. Treatment control BMPs used during construction should enable testing of groundwater and/or stormwater runoff prior to discharge.

i. Best Management Practices Narrative: The DESCP shall show the location (as identified in H above), timing, and a maintenance schedule of all erosion and sediment control BMPs to be used prior to initial grading, during project excavation and construction, final grading/stabilization, and post-construction. Separate BMP implementation schedules shall be provided for each phase of construction. The maintenance schedule should include post-construction maintenance of structural control BMPs or a statement provided when such information will be available.

BACKGROUND

A Federal Clean Water Act section 401 certification may be required. If there are potential impacts to surface waters (perennial or ephemeral) of the State and/or Waters of the United States, such as drainages, streams, washes, ponds, pools, or wetlands, this certification will be required by the Central Valley Regional Water Quality Control Board (RWQCB).

DATA REQUEST

71. Please submit a jurisdictional delineation to the United States Army Corps of Engineers and a section 401 water quality certification application to the RWQCB.

72. Please discuss in detail whether a 401 certification is required. If required, please discuss how the project will comply with the 401 certification requirement, and include a copy of the application and a schedule for completion of the certification.

BACKGROUND

The proposed power plant is expected to use approximately 3,484 AF of water for process makeup. This makeup water is proposed to come primarily from the Parlier and Sanger Wastewater Treatment Plants (WWTP), with up to 210 AF per year coming from onsite groundwater wells. If the wastewater supply decreases due to an interruption in service, groundwater would be required to meet the makeup water demand. Also, the peak water demand could exceed the wastewater supply. More information is needed regarding the reliability of the wastewater supply and potential volume of groundwater required.

DATA REQUEST

74. To identify the volume of wastewater supply, please provide the monthly and yearly total effluent wastewater volume from each WWTP for the last 10 years (1997 to 2007) and expected volume during the first 10 years of plant operation.

75. To identify the power plant water demand, please provide the highest daily process water demand for each month in the year.

76. Please discuss whether there are customers, other than the proposed project, of the wastewater and their current and future wastewater requirements.

77. Please provide the number of days/hours and AF per year during which each WWTP experienced an interruption in wastewater discharge over the past 10 years (1997 to 2007).

78. Please discuss the volume of groundwater that will be required to make up for interruptions to the supply of wastewater and when peak water demand exceeds water supply.

79. Please provide a copy of the wastewater supply agreement with the treatment plants at Parlier and Sanger.

BACKGROUND

The proposed power plant will be built within the King Groundwater Sub-basin. This Sub-basin is currently overdrafted. The Sub-basin's overdraft condition is managed by the King River Conversation District (KRCD) in cooperation with other agencies and districts. Approximately 210 acre-feet (AF) per year of groundwater would be required to supplement the wastewater supply until more wastewater is available in the future. Groundwater would also be needed in the event of an interruption in the supply of wastewater. The impact of using groundwater to nearby wells can be estimated by calculating the expected radius of influence and drawdown resulting from the groundwater pumping.

DATA REQUEST

80. Please provide a list of wells that could be affected by the project's use of groundwater.

81. Using Kings Basin Integrated Groundwater Surface Water Model, MODFLOW, or comparable model, please quantify the impact on those wells under the two scenarios listed below and identify all assumptions and data used.

    a. Supplementing the wastewater supply with pumped groundwater during times when peak demand for water from the power plant exceeds the ability of the two wastewater treatment plants to supply water to the power plant project; and

    b. During times of a short and long term interruption of the supply of wastewater.

BACKGROUND

The AFC states a 1.5 million gallon tank will be used for wastewater storage for short-term fluctuations between the plant water demand and the wastewater supply.

DATA REQUEST

82. Please discuss in more detail the use of this tank for surplus wastewater storage when the expected volume of wastewater supply is approximately 210 AF per year less than required.

83. Please discuss the background rationale used in determining the size of the wastewater storage tank.

84. Please discuss the economic and environmental feasibility of sizing the storage tank such that the use of groundwater is avoided.

BACKGROUND

Table 8.5-5 presents, for the cities of Sanger and Parlier, the expected population trend and domestic wastewater effluent.

DATA REQUEST

85. Please provide the basis on which this information population was obtained.

86. Did the per capita wastewater generation take into account new requirements and standards for household and industrial water conservation such as low flush toilets? If not, please include these conservation measures that can be reasonably expected over the life of the project into the wastewater volume estimates or justify their exclusion.

BACKGROUND

The Energy Commission's 2003 IEPR policy discourages the use of high quality groundwater for power plant cooling. The AFC states that up to 4 extraction wells will be installed to capture percolated effluent groundwater from the Parlier percolation ponds. The AFC also states that these wells will be set back approximately 500 feet to provide additional treatment as the effluent flows through the soils, improving the water quality. In addition, use of this groundwater would further take water away from an overdrafted sub-basin. Additional information is required regarding the groundwater proposed to be pumped.

DATA REQUEST

87. Please provide physical and chemical data on the groundwater proposed to be pumped.

88. Please provide modeling or numerical calculations that describe how the percolated wastewater would be captured by the proposed groundwater wells.

BACKGROUND

Reclaimed water will become an increasingly valuable and scarce resource. Several power plants in California have been built with air-cooling or are proposing the use of air-cooling. These include: Avenal (Federal Power), Carlsbad (NRG), Carrizo Solar Farm (Ausra), Colusa (E&L Westcoast), Gateway (PG&E), El Segundo Repower (Dynegy/NRG), Ivanpah (Brightsource), Otay Mesa (Calpine), San Gabriel Generating Station (Reliant), and Sutter (Calpine).

DATA REQUEST

89. Please provide an economic and environmental analysis of air-cooling, air-cooling in combination with a mechanical air-chiller, or a hybrid of air-cooling and limited reclaimed water use.