CALIFORNIA ENERGY COMMISSION

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

July 20, 2007 **DOCKET 07-AFC-2**

DATE JUL 2 0 2007

Anne Connell, PE Senior Project Engineer URS Corporation 221 Main Street, Suite 600 San Francisco, CA 94105

RE: SAN GABRIEL GENERATING STATION PROJECT (07-AFC-2) - DATA REQUEST [SET 1 (#s 1-59)]

Dear Anne:

Pursuant to Title 20, California Code of Regulations, Section 1716, the California Energy Commission staff seeks 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 (#s1-59) is being made in the areas of Air Quality (#s 1-9), Alternatives (# 10), Biological Resources (#s 11-14), Cultural Resources (#15-22), Land Use (#s 23-26), Socioeconomics (#27), Soil and Water Resources (#s 28-43), Traffic and Transportation (#s 44-49), Transmission System Engineering (#s 50-53), Visual Resources (#s 54-55) and Waste Management (#s 56-59). Written responses to the enclosed data requests are due to the Energy Commission staff on or before August 20, 2007, 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, please send a written notice to both the Committee and me within 10 days of receipt of this notice. 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) 651-8843 or email me at syeh@energy.state.ca.us.

Sincerely,

Stanley Yeh
Project Manager

Enclosure

cc: Docket (07-AFC-2)

Proof of Service List

Agencies

PROOF OF SERVICE (REVISED $\frac{5/24/07}{0}$) FILED WITH ORIGINAL MAILED FROM SACRAMENTO ON $\frac{7/20/07}{70}$

Technical Area: Air Quality

Author: Joe Loyer

BACKGROUND: EMISSION REDUCTION CREDITS

The applicant proposes reliance on the South Coast Air Quality Management District's (District) nitrogen oxides (NOx) RECLAIM program for acquiring trading credits for offsetting the project's NOx emission impacts. The applicant also proposes purchasing volatile organic compounds (VOC) and sulfur dioxide (SO₂) emission reduction credits (ERC) from the District's ERC banks. Finally the applicant proposes purchasing particulate matter (PM10) ERCs as part of the due diligence requirements in District Rule 1309.1 (Priority Reserve). However, the applicant has not provided any specific information on how they intend to secure the ERCs.

DATA REQUESTS

- 1. Please provide a list of NOx RECLAIM trading credits (RTCs) that the applicant owns or has under option contract.
- 2. Please update staff as to the status of securing the NOx RTCs, VOC, PM10 and SO₂ ERCs as part of the monthly status reports that are filed with the CEC.

BACKGROUND: NATURAL GAS SULFUR CONTENT

The Application for Certification (AFC) indicates that the facility will use natural gas with a maximum sulfur content of 0.2 grains per 100 standard cubic feet (gr/100scf). Staff has seen in previous siting cases that the delivered natural gas can contain as much as 1gr sulfur/100scf. If higher sulfur content natural gas fuel is used at the facility, sulfur oxide (SOx) and PM emissions may be underestimated, and the project impacts may be underestimated and insufficient offsets may be provided. Thus staff needs additional information to assure that the sulfur content of the fuel does not exceed the levels stated in the AFC.

DATA REQUESTS

- 3. Please provide specific documentation from Southern California Gas Company that the sulfur content of supplied natural gas will not be above 0.2 gr/100scf.
- Please provide documentation from Southern California Gas Company of the upstream injection points for the natural gas that is proposed to be delivered to the project site.
- 5. Please provide the steps the applicant would take to ensure that the natural gas that has higher than 0.2 gr/100scf of sulfur will not be used at the facility.
- 6. Please provide the method for ensuring continuous compliance with the sulfur content limits specified for the supplied natural gas fuel.

BACKGROUND: CUMULATIVE ASSESSMENT

The applicant indicates on page 7.1-51 in the AFC that the required cumulative impact assessment will be completed and submitted after further information from the District is received and evaluated.

DATA REQUESTS

- 7. Please provide the documentation of new sources within six miles of the proposed San Gabriel Generating Station project site.
- 8. Please provide an estimated date of filing of the completed cumulative impact assessment.

BACKGROUND: EMERGENCY ENGINE EMISSIONS

The AFC makes no mention of an emergency generator, which is a typical component of most power projects and which emits criteria air pollutants.

- 9. Please provide the following:
 - a) Please confirm that the proposed San Gabriel Generating Station will not include a diesel power emergency generator and the rationale for excluding this typical power plant component.
 - b) If a diesel emergency generator is part of the project, please discuss the expected emissions and plans for mitigation.

Technical Area: Alternatives

Author: Stanley Yeh

BACKGROUND

The description of alternative sites to the proposed San Gabriel Generating Station site was provided. Staff requests a scaled map depicting the alternative site locations in reference to the proposed San Gabriel Generating Station location. This will provide a visual frame of reference for the reader.

DATA REQUEST

10. Please provide a scaled map depicting the alternative site locations, including the proposed San Gabriel Generating Station site.

Technical Area: Biological Resources

Author: Brian McCollough

BACKGROUND

The Application for Certification (AFC) for the San Gabriel Generating Station (SGGS) contains unclear information regarding the jurisdictional status and nature of the potential wetlands on the project site and off-site construction laydown areas. Section 7.2.1.4 (p. 7.2-6) states that wetland determinations were not conducted, but section 7.2.2.1 (p. 7.2-15) states, "The dry wash/drainage through the proposed off-site construction laydown area is a potentially jurisdictional waters of the United States," and "the construction of the access bridge across Chadwick Channel would result in fill of waters of the United States." Additionally, Figure 7.2-3 shows the off-site construction laydown area, and displays "potential Jurisdictional Wetland and/or Waters of the U.S." on the map.

Although AFC Section 7.2.7 (p. 7.2-26) indicates that the applicant is aware that the proposed project activities in Chadwick Channel and the off-site construction laydown area drainage would require a Streambed Alteration Agreement from the California Department of Fish and Game (CDFG), there is no indication that CDFG has been notified regarding this project. The Energy Commission staff needs more information regarding these issues to complete its analysis.

DATA REQUESTS

- 11. Please provide the following:
 - a) An approved United States Army Corps of Engineers (USACE) wetlands delineation and map for the project site and off-site laydown area (suggested scale of 1:6000), and a calculation of wetland acreage to be impacted.
 - b) Please identify the mitigation measures that will be required for these wetland impacts.
- 12. Please provide the contact information and reports of conversation for your contacts with the USACE.
- 13. Please provide the following:
 - a) Please contact CDFG and complete a Notification of Lake or Streambed Alteration.
 - b) Please provide the contact information and reports of conversation for your contacts with CDFG.

BACKGROUND

The AFC indicates that the off-site construction laydown area will impact sandy soils that may potentially be suitable habitat for the federally-listed endangered Delhi Sands flower-loving fly (DSF fly). Sections 7.2.2.2 (p. 7.2-16) and 7.2.4.2 (p. 7.2-19) regarding the DSF fly state that Dr. Dale Powell, a DSF fly expert, will assess the habitat suitability and map the sandy soils in April, 2007. Additionally, Section 7.2.6 indicates extensive correspondence with Eric Porter of the United States Fish and Wildlife Service (USFWS) regarding this protected species.

- 14. Please provide the following:
 - a) The results of Dr. Powell's DSF fly habitat assessment and soil mapping surveys.
 - b) Copies of the correspondence and reports of conversations with the USFWS regarding the DSF fly.

Technical Area: Cultural Resources
Author: Beverly Bastian

BACKGROUND

The information regarding the number and location of the laydown areas proposed for the San Gabriel Generating Station (SGGS) differs between the AFC's project description (Vol. I, pp. 2-32 to 2-35, Figure 2.7-3) and the introduction to the Cultural Resources Technical Report (Vol. II, Appendix M, p. 1). The latter indicates there would be 11 laydown areas, 9 on the SGGS site and 2 off-site, while the AFC's Figure 2.7-3 shows 8 proposed laydown areas on-site and 2 off-site.

DATA REQUESTS

15. Please clarify which project description/depiction is correct.

16. Please provide the following:

- a) A map depicting the locations of the correct number of laydown areas, labeled with numbers.
- b) A description, like that provided on AFC pp. 32-35, addressing the correct number of laydown areas.

BACKGROUND

On AFC p. 2-29, the discussion of the earthwork which would be needed to construct the proposed SGGS states that topsoil, vegetation, and debris would be removed and disposed of and that a balance of cutting and filling would produce the final "plant grade." To identify all of the project's potential impacts, staff needs more information on the potential of the project to impact cultural resources at the project's soil and debris disposal site, and, additionally, staff needs to know the difference in elevation between existing grade and final "plant grade."

DATA REQUESTS

- 17. If the project's chosen soil and debris disposal site is not a commercial operation and consequently has not been surveyed for cultural resources, please conduct such surveys and provide to staff a brief report including survey personnel qualifications, methods, and findings.
- 18. Please provide a discussion of the grading plan which will be used to achieve the final "plant grade," including the overall difference in elevation between existing grade and "plant grade."

BACKGROUND

In the confidential volume (Vol. II, Appendix B to Appendix M), providing copies of the cultural resources data the applicant received from the California Historical Resources Information System (CHRIS), staff observed that some information was missing. Two of the included reports had missing pages, and three reports that should have been included were not present. Figure 7.3-4, showing the coverage of previous cultural resources surveys of areas immediately adjacent to the proposed project site, indicated that copies of three survey reports that the CHRIS should have provided to the applicant

were not in the confidential materials provided to staff. Additionally, one identified resource, P1084-23 H, was plotted on Figure 7.3-5, but did not have a Department of Parks and Recreation (DPR) form, and the only information provided about it was a single page from an unidentified report. Staff needs to have the complete set of pertinent cultural resources data to complete its analysis.

- 19. Please provide copies of missing pp. 24 and 26 of the CHRIS report # 1063023 (Owen 1995a) on the cultural resources survey of the El Cajon Oil Pipeline.
- 20. Please provide copies of missing pp. 2-5, 8, 10, 12, 14, 16, 18, 20-31, 33, 35, 37, 39, 41, 43, 45, 47, 49, 51, 53, 55, 57, and 59 and of Figures 4-6 and 10, of the CHRIS report # 1063591 (Owen 1995b) on the cultural resources survey of the San Sevaine Redevelopment Project.
- 21. Please provide copies of the following missing reports:
 - a) # 1061894, Stephen J. Bouscaren and Mark T. Swanson, "Cultural Resources Survey of the 27-Acre Proposed Chino Basin Municipal Water District Regional Plant No. 4 in the City of Cucamonga, California," 1989;
 - b) # 1062090, Mark T. Swanson, "Addendum to Cultural Resources Survey of the 27-Acre Proposed Chino Basin Municipal Water District Regional Plant No. 4 in the City of Cucamonga, California," 1990; and
 - c) # 1063592, Deborah McLean and Jani Monk, "Cultural Resource Assessment of the Kaiser West End Project, City of Fontana, San Bernardino County, CA," 1997.
- 22. For resource P1084-23 H, please provide a copy of any DPR forms and a copy of the survey report that discusses the resource.

Technical Area: Land Use **Author**: Amanda Stennick

BACKGROUND

As stated in the applicant's May 2007 Data Adequacy filing, the proposed project would be primarily located within the existing Reliant Energy (Reliant) Etiwanda Generating Station (EGS) property in Rancho Cucamonga, San Bernardino County, California. A portion of the transmission line and an internal road would occupy property currently owned by Inland Empire Utilities Agency (IEUA). No permanent buildings or equipment other than transmission structures would be placed on the IEUA property. The applicant is currently negotiating with the IEUA to acquire an easement for these facilities across this additional area. Therefore, a parcel split or lot line merger would not be required for this additional land area needed for the project.

DATA REQUEST

23. Because staff will have to ensure the project's compliance with the city of Rancho Cucamonga's development standards (including setback requirements) for the Industrial (I) Zone, please show on a map the proposed easement in conjunction with the parcel for the proposed project.

BACKGROUND

Page 7.4-2 of the Application for Certification (AFC) states that the Industrial Area Specific Plan is divided into three zones (A, B, and C) and 17 subareas and the project is located within Zone A. However, Figure 7.4-4 in the AFC illustrates each zone within the Industrial Area Specific Plan and shows the proposed project located in Zone C.

DATA REQUESTS

- 24. Please clarify whether the proposed project is located in Zone A or Zone C of the city of Rancho Cucamonga Industrial Specific Plan.
- 25. Please state which subarea(s) are applicable to the proposed project.

BACKGROUND

As stated in the applicant's May 2007 Data Adequacy filing, the applicant has initiated discussions with the city of Rancho Cucamonga regarding a height variance due to the project's stacks that would exceed the 75-foot limit. To help staff determine whether the proposed facility complies with all applicable state, regional, and local laws, ordinances, regulations, and standards (LORS), staff is preparing a letter to the city to gain their input on these issues, including their process and timeline for issuing the variance.

DATA REQUEST

26. Please provide staff with the status of the discussions with the city of Rancho Cucamonga on the height variance.

Technical Area: Socioeconomics **Authors:** Joseph Diamond

BACKGROUND

The year for the IMPLAN model economic impacts (secondary impacts) caused by the construction and operation of the project was 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

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

Technical Area: Soil and Water Resources

Authors: Cheryl Closson

EROSION AND FLOOD CONTROL

BACKGROUND

The proposed San Gabriel Generating Station project includes construction of a new bridge across Chadwick Channel. Page 7.2-5 of the AFC states that "pylon support structures will be driven into the bank of the channel with riprap erosion protection placed along the channel slopes near the support pillars." While the Biology section of the AFC does acknowledge the need for a Clean Water Act (CWA) Section 401 Water Quality Certification and a CWA Section 404 (dredge and fill) permit for the bridge construction activity, the section does not clearly identify the permitting agencies and agency contacts. In addition, the Water Resources section of the AFC does not address the need for the permits at all and instead states on page 7.14-21 that "the new bridge across Chadwick Channel would be constructed as a clear span bridge; therefore, there would be no encroachment into the channel and no impediment to flood flows or flood elevations." In order to complete its analysis, Energy Commission staff needs more clear and complete information on how the project will comply with all applicable water-related laws, ordinances, regulations and standards (LORS) governing the construction of the proposed bridge.

- 28. Please provide a description of the current design and construction methods to be used for the proposed bridge crossing Chadwick Channel.
- 29. Please provide summaries of consultation and contact information for the agencies responsible for issuing erosion control and water quality-related permits or authorization for the bridge construction, including the California Department of Fish and Game's (CDFG) Streambed Alteration Permit, the Santa Ana Regional Water Quality Control Board's (SARWQCB) CWA Section 401 Water Quality Certification, and the United States Army Corp of Engineer's (USACE) CWA Section 404 permits. In addition, please identify any requirements of certification or authorization that may be imposed on the bridge construction activity.
- 30. As applicable, please provide an updated schedule for application and issuance of the Streambed Alteration Permit, the CWA Section 401 certification, and the CWA Section 404 permit. Please clearly identify any impediments to, or constraints on, issuance of any of the permits, and how the project will address any constraints (such as wet season construction restrictions or other requirements).
- 31. Please provide the following:
 - a) Please identify any other federal, state, or local LORS that may apply to construction of the proposed bridge and any special erosion or water qualityrelated conditions that may be required by those LORS.
 - b) Please discuss any additional erosion control best management practices, waterquality testing, and/or monitoring that may be required related to the bridge construction.

BACKGROUND

To determine the potential impacts to soil and water resources from the construction and operation of the San Gabriel Generating Station project, the Energy Commission requires a draft and final Drainage, Erosion and Sediment Control Plan (DESCP). The DESCP must also be updated and revised as necessary as the project moves from the preliminary to final design phases, on through to construction and operation of the facility. The DESCP would be a separate document from any Construction and/or Industrial Storm Water Pollution Prevention Plans (SWPPP), unless the applicant intends to combine the DESCP and SWPPP into one document.

While the applicant has submitted a draft Construction SWPPP as part of the project AFC, the plan is rough and skeletal, and provides outdated information from the EGS facility instead of addressing conditions and plans for activities specific to the proposed project.

- 32. Please identify whether or not the project will prepare a combined Construction SWPPP, Industrial SWPPP and DESCP document, or if the plans will be prepared and maintained separately.
- 33. Please provide a draft DESCP (or combined DESCP/SWPPP) that contains elements "A through I" below outlining the site management activities and erosion/sediment control Best Management Practices (BMPs) to be implemented during site mobilization, grading, construction, and operation of the proposed project. The level of detail in the draft DESCP should be commensurate with the current level of planning for site grading and drainage. Please provide all conceptual erosion control information for those phases of construction and operation that have been developed or provide a statement identifying when such information will be available.
 - a) Vicinity Map Provide a map(s) at a minimum scale 1"=100' indicating the location of all project elements, including depictions of all significant geographic features including swales, storm drains, and sensitive areas.
 - b) Site Delineation Identify all areas subject to soil disturbance (i.e., project site, lay down areas, all linear facilities, landscaping areas, and any other project elements) and show boundary lines of all construction/demolition areas and the location of all existing and proposed structures, pipelines, roads, and drainage facilities.
 - c) Watercourses and Critical Areas Show the location of all nearby watercourses including swales, storm drains, and drainage ditches. Indicate the proximity of those features to the project construction, lay down, and landscape areas, and all transmission and pipeline construction corridors.
 - d) Drainage Map Provide a topographic site map(s) at a minimum scale 1"=100' showing all 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 should be extended off-site for a minimum distance of 100 feet in flat terrain.

- e) Narrative Discussion of Project Site Drainage Include a narrative discussion of the drainage management measures to be taken to protect the site and downstream facilities. The narrative should include the summary pages from the hydraulic analysis prepared by a professional engineer/erosion control specialist. The narrative should state the watershed size(s) in acres that was used in the calculation of drainage measures. The hydraulic analysis should be used to support the selection of BMPs and structural controls to divert off-site and on-site drainage around or through the project construction and laydown area, as well as post-construction and operation areas.
- f) Clearing and Grading Plans Identify all areas to be cleared of vegetation and areas to be preserved. Provide elevations, slopes, locations, and extent of all proposed grading using contours, cross sections or other means and include locations of any disposal areas, fills, or other special features. Illustrate existing and proposed topography tying in proposed contours with existing topography.
- g) Clearing and Grading Narrative Include a table that identifies all of the following: all project elements where material will be excavated or fill added; the type and quantities of material to be excavated or filled for each element; whether the excavation or fill is temporary or permanent; and the amount of material to be imported or exported.
- h) Construction Best Management Practices Plan 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). The BMPs identified should include measures designed to prevent wind and water erosion in areas with existing soil contamination. Any treatment BMPs used during construction should also allow for testing of stormwater runoff prior to discharge to a receiving water.
- i) Best Management Practices Narrative Provide a narrative discussion of the location, timing, and maintenance schedule for all erosion and sediment control BMPs (as identified in H above) to be used prior to initial grading, during project element excavation and construction, at final grading/stabilization, and for post-construction. Separate BMP implementation schedules should be provided for each project element for each phase of construction. The maintenance schedule should include post-construction maintenance of structural control BMPs, or a statement when such information will be available.

WASTEWATER MANAGEMENT

BACKGROUND

Page 2-28 of the AFC provides a narrative description of the proposed project's sanitary wastewater system, which will include a septic tank and associated leachfield. However, the location of the septic tank and leachfield is not identified on any of the project maps. In addition, the AFC is unclear about the actual size and design of the septic system to be used. Page 2-28 of the AFC does give information on the size of the septic tank to be used and states, in part, that the tank will be approximately 4.75 feet deep, 10.5 feet long and 5.25 feet wide, with the tank inlet having a 2.5 foot depth of cover. Page 2-28 also states that the leachfield will be approximately 30 feet wide by 40 feet long.

However, page 7.14-17 of the AFC (Water Resources section) says that "percolation tests would be conducted in accordance with San Bernardino County's requirements to design and size the septic system" and meet minimum distances for siting individual waste disposal systems. Energy Commission staff needs clear and specific information on the location and design of the septic system in order to properly assess project impacts and compliance with LORS.

DATA REQUESTS

- 34. Please provide a map of the project site at an appropriate scale that clearly shows the location of the proposed septic tank and associated leachfield in relation to other project structures, piping, sumps, retention basins, and erosion control features.
- 35. Please provide the following:
 - a) Please provide specific information detailing San Bernardino County's design requirements compared to the conceptual design for the project septic system.
 - b) Please discuss the city of Rancho Cucamonga role, if any, in reviewing the septic system design.

WATER SUPPLY AND USE

BACKGROUND

The AFC states that water will be supplied to the proposed San Gabriel Generating Station project by the existing Etiwanda Generating Station (EGS) water supply system, which draws water from an existing 4-acre reservoir located on the northeast corner of the EGS property. The EGS reservoir receives water from four sources: reclaimed water, groundwater, Metropolitan Water District (MWD) aqueduct water, and cooling water return. The AFC states that the primary source of water is reclaimed water and that groundwater is "added to the reservoir during periods of high ambient temperatures to reduce the temperature of the makeup water supply." MWD aqueduct water is added only on an emergency basis, but has not been used since the EGS plant began using reclaimed water in 2003. In the last two years, the water in the reservoir has been a mix of roughly 65% reclaimed water and 35% groundwater. Although the proposed San Gabriel Generating Station plant is designed with an air cooled condenser for turbine cooling and 100% reclaimed water use for most other plant needs, by using the existing EGS reservoir water it will in effect be using approximately 35% groundwater for the plant steam cycle and CTG evaporative coolers. (Table 2.5-7 identifies plant water uses as steam cycle make-up water, water to CTG evaporative coolers, and miscellaneous plant uses).

Pages 8-4 and 8-5 of the project AFC provide a discussion asserting that no alternative water supply analysis is needed because the plant would use dry cooling technology (i.e., an air cooled condenser) and reclaimed water. However, the plant will use water for evaporative (wet) cooling associated with gas turbine inlet cooling. As noted above, Table 2.5-7 identifies the project's annual water consumption to be approximately 220 acre-feet of water per year, with 48 acre-feet of that total specifically identified for steam cycle make-up, 90 acre-feet identified for evaporative cooling uses, and the rest going toward "miscellaneous uses".

The Energy Commission's 2003 Integrated Energy Policy Report (IEPR) Policy states that when considering the siting of power plants, "consistent with the Board policy and the Warren-Alquist Act, the Energy Commission will approve the use of fresh water for cooling purposes by power plants which it licenses only where alternative water supply sources and alternative cooling technologies are shown to be environmentally undesirable or economically unsound."

DATA REQUEST

- 36. Please provide an economic and environmental assessment of alternative water supply sources and cooling technologies for gas turbine inlet cooling, in accordance with the Energy Commission 2003 IEPR Policy. Please be sure to provide factual support for all conclusions and assertions made as part of the assessments. The assessments should include consideration of the following potential alternatives:
 - a) Modifying the EGS water supply system to use 100% reclaimed water;
 - b) Not using EGS reservoir water and instead using 100% reclaimed water from Inland Empire Utilities Agency (IEUA); and
 - c) Using other cooling processes or methods for gas turbine inlet cooling.

GROUNDWATER

BACKGROUND

The AFC states that water for the proposed San Gabriel Generating Station project will be supplied by the existing EGS water supply system. In addition to receiving reclaimed water from the IEUA, the EGS system draws groundwater from three offsite water wells. The AFC states that EGS has adjudicated rights to draw 954 acre-feet of groundwater per year from the Chino Groundwater Basin. However, the AFC does not include documentation verifying the adjudicated right, nor does the AFC provide information on any groundwater pumping or monitoring conditions, restrictions, or reporting requirements that may have been imposed as part of the adjudication or required by the Chino Basin Watermaster.

- 37. Please provide the following:
 - a) Please provide a copy of the document establishing the groundwater right currently owned by EGS.
 - b) Please identify any conditions associated with pumping groundwater from the Chino Basin.
- 38. Please provide the following:
 - a) Since the groundwater wells identified in the AFC are not located on the EGS site, please describe who controls the wells and how the wells are controlled and maintained.
 - b) Please identify if any other parties receive water from the wells or have a contractual agreement to receive water from the wells.

39. Please discuss whether groundwater users in the Chino Basin are required to purchase replacement water for groundwater recharge and describe what recharge requirements, if any, may be imposed.

BACKGROUND

As noted above, the EGS water supply system draws groundwater from three offsite water wells located south of the project site. The locations of the wells are shown on the EGS Site Drainage map, Figure 7.14-4. However, Page 6-4 of the Phase I Environmental Site Assessment (Phase I) prepared by URS states that "at the time of the site reconnaissance, another water well was being installed onsite (to replace one of the offsite wells) just to the south of Units 3 and 4." In addition, page 6-7 of the Phase I document states that "the new water production well is located near the center of [onsite laydown] Area 6."

If a new well is being drilled or exists on the project site, the Energy Commission staff will need detailed information on the disposition and impacts of the well in order to complete the analysis of the proposed project.

DATA REQUESTS

- 40. Please clarify the number and location of water wells to be utilized by the project as part of the EGS water system, including information on well construction (i.e., size, depth, screening, etc.) and production capability.
- 41. If a new water well has been drilled onsite, or is planned to be drilled, please provide detailed information on the location, well construction, and production capability.
- 42. Please provide the following:
 - a) Please provide a detailed discussion on the location and impacts of water production from the new well with respect to other wells, septic systems, or groundwater contaminants in the area.
 - b) Please address any impacts that construction and production of the new well might have on contaminants in soil and/or groundwater underlying the site, especially in those areas subject to Department of Toxic Substances Control (DTSC) corrective action orders.
- 43. Please provide the following:
 - a) Please clarify which, if any, of the existing offsite water wells will be retired if a new well is (or has been) drilled and put into production.
 - b) Please provide documentation and confirmation of plugging and abandonment of any wells that are to be taken out of service, including providing evidence of having obtained a Well Destruction Permit from the appropriate authority, if applicable.
 - c) If a well will be converted to a monitoring well, please provide documentation and confirmation of conversion and use of the well.

16

Technical Area:

Traffic and Transportation

Author:

David Flores

BACKGROUND

The project would not have any structures tall enough to trigger the filing of Form 7460 (Notice of Proposed Construction or Alteration) with the Federal Aviation Administration (FAA). However, the restricted airspace for airports with runways longer than 3,200 feet extends 20,000 feet out from any point on the runways. The project site is located within the restricted airspace of Ontario International Airport, which is located approximately 18,000 feet to the southwest and has runways greater than 3,200 feet in length. Please provide the following information to enable staff's evaluation of compliance with FAA's safe air navigational requirements.

DATA REQUEST

- 44. Provide a description of the amount of light to be generated into the airspace by the proposed project.
- 45. Provide a copy of the current FAA approved "Approach and Clear Zone Plan" for the Ontario International Airport, with the exact location of the proposed power generation facility clearly marked.

BACKGROUND

Section 7.10.1 (Existing Transportation Facilities) page 7.10-6 indicates a railroad spur serves the existing Etiwanda power plant. The Application for Certification (AFC) does not indicate whether heavy equipment for the SGGS project will be delivered by rail.

DATA REQUEST

46. If the rail line spur is to be used to transport heavy equipment and materials for the proposed project, please provide the location where the loading and transfer of the cargo to trucks would occur and the number of railroad deliveries that would occur.

BACKGROUND

Section 7.10.2.2 (Construction Impacts) page 7.10-19 discussed three-grade crossings which are proposed to be placed across the southerly Burlington Northern Santa Fe (BNSF) spur track for access to the offsite laydown and parking sites. The AFC also indicated that discussions with BNSF representatives are on-going as to what measures may be incorporated to support a safe railroad crossing. Staff will need copies of BNSF and related California Public Utilities Commission (CPUC) approved documents for completion of its traffic analysis.

- 47. Please provide a status report on the applicant's discussion with BNSF on approvals of the rail crossings from the laydown and parking areas to the project site.
- 48. Please provide a schedule that BNSF agrees with for securing its approval for rail crossings and a similar schedule showing timelines necessary for California Public Utilities Commission (CPUC) rail crossing approvals.



Technical Area: Transmission System Engineering

Authors: Laiping Ng

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." The Application for Certification requires discussion of the "energy resource impacts which may result from the construction or operation of the power plant." 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 (CA 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 San Gabriel Generating Station (SGGS) project.

- 50. Please provide a one-line diagram for the Rancho Vista Substation before the interconnection of the SGGS.
- 51. Provide a one-line diagram for the Rancho Vista Substation after the addition of the SGGS. Show all equipment ratings including breakers, disconnect switches, buses and any other features required for the addition of the SGGS.
- 52. Please provide the System Impact Study. The study should analyze the system impact with and without the project during peak and off-peak system conditions, which will demonstrate conformance or non-conformance with the utility reliability and planning criteria. Please include the following items:
 - a) Identify major assumptions in the base cases including imports to the system, major generation and load changes in the system and queue generation;
 - Analyze system for N-0, N-1 and N-2 contingency conditions and provide a list of criteria violations in a table showing the loadings before and after adding the new generation;
 - c) Analyze the post-project system for Short Circuit studies;
 - d) Analyze system for transient stability and post-transient voltage conditions under N-1 and N-2 contingencies, and provide related plots, switching data and a list for voltage violations in the studies.
 - e) Provide a list of contingencies evaluated for each study.

- f) List mitigation measures considered and those selected for all criteria violations.
- g) Provide electronic copies of *.sav and *.drw PSLF files.
- h) Provide power flow diagrams (MW, % loading & P. U. voltage) for base cases with and without the project. Power flow diagrams must also be provided for all N-0, N-1 and N-2 studies where overloads or voltage violations appear.
- 53. Provide a CA ISO Preliminary Approval Letter for interconnection of the proposed SGGS to the CA ISO control grid or the schedule for when the preliminary approval would be granted.

Technical Area: Visual Resources **Author:** David Flores

BACKGROUND

The AFC discusses the need for SGGS project night lighting and the controls that would be utilized to minimize the visibility of night lighting (AFC pg.7.11-25.). However, the discussion of lighting does not describe the extent to which night lighting in combination with the adjacent existing EGS facility would be visible from nearby viewing locations.

- 54. Please describe the visibility of project components (including exhaust stacks and vapor plumes) due to illumination from: a) existing ambient lighting and b) the combination of existing ambient lighting and proposed project lighting.
- 55. Please provide a more specific discussion of night lighting to be used during project construction. Discussion shall include the following:
 - a) the location of construction areas to be lit at night;
 - b) description of type of lighting to be used and methods to limit offsite visibility; and
 - c) a discussion on the intensity of project night lighting to the surrounding area.

Technical Area: Waste Management Author: Cheryl Closson

BACKGROUND

The Phase I Environmental Site Assessment (Phase I) prepared by URS Corporation for the proposed San Gabriel Generating Station project (Attachment S, Volume II of the project Application for Certification (AFC)) cites and summarizes certain findings and recommendations contained in other environmental assessments, studies, and reports previously conducted to evaluate conditions at the project site. The information provided in these assessments was used in part to support the conclusions and recommendations provided in the URS Phase I. Review of these reports will assist California Energy Commission (CEC) staff assessment of existing site conditions and impacts of the proposed project.

DATA REQUEST

- 56. Please provide copies of the following reports and publications identified in the Phase I report prepared by URS and in the project AFC.
 - a) Phase I Environmental Site Assessment, Etiwanda Generating Station, prepared by CH2M HILL, May 1997.
 - b) Etiwanda Generating Station, Phase II Environmental Site Assessment, Volumes 1 and 2, prepared by Geraghty & Miller, Inc., June 6, 1997.
 - Leak Detection Investigation, Etiwanda Generating Station, prepared by Pat Hamilton, June 11, 1997.
 - d) Data Report, Shallow Soil Investigation, Etiwanda Steam Station, Units 1 and 2 Cooling Towers, prepared by URS, August 11, 2005.
 - e) Annual Groundwater Monitoring Report, Etiwanda Generating Station, prepared for Southern California Edison by Pat Hamilton, February 14, 2004.
 - f) Annual Groundwater Monitoring Report, Groundwater Detection Monitoring Program with Fourth Quarter 2006 Sampling Data, Etiwanda Generating Station, prepared by Pat Hamilton, February 4, 2007.

BACKGROUND

The AFC identifies the area around the existing EGS unit 1 and 2 cooling towers as an area to be developed as part of the proposed project. However, based on the results of the Phase 1 report, the area is also identified in the AFC as a Recognized Environmental Condition (REC) due to the presence of treated wood that contains arsenic and elevated arsenic concentrations present in the soil. Page 7.13-1 of the AFC states that "when the cooling towers are demolished, the arsenic treated wood will need to be handled and disposed of according to applicable local, state, and federal regulations." In addition, the AFC states that "an investigation beneath the cooling

July 20, 2007 22 Waste Management

A Recognized Environmental Condition is a term used in Phase 1 Environmental Site Assessments and by the United States Environmental Protection Agency, denoting areas where there has been a release of a regulated toxic substance or pesticide.

tower basins will be required as part of the Resource Conservation and Recovery Act (RCRA) closure requirements for the facility..."

While the AFC states that demolition of the unit 1 and 2 cooling towers is not part of the proposed project, the area underneath and around the towers will be used for proposed project structures and activities. Therefore, since the area is already identified as an REC, the environmental investigation of the site after demolition, and completion of any necessary remedial action, should be done well in advance of any project construction to ensure that any possible contamination is identified and mitigated to a less than significant level. Investigation and remediation of hazardous waste during the construction phase of a project should only be done as a contingency measure, when previously unknown contamination is encountered during the normal construction activities.

DATA REQUEST

- 57. Please provide the following:
 - a) Please provide an estimated date for the demolition of the unit 1 and 2 cooling towers.
 - b) Coordinated with 59(a) above, please provide a schedule and workplan for investigation and possible remediation of soils in the vicinity of the cooling towers. The schedule and workplan should also be reviewed and approved by the Department of Toxic Substances Control (DTSC) prior to submittal to the Energy Cornmission, unless other arrangements are made with Commission staff to address or accommodate DTSC review.

BACKGROUND

The AFC states that the plant wastewater will be discharged to the County sewer/wastewater treatment plant through the Inland Empire Utility Agency's (IEUA) nonreclaimable industrial waste lines via the existing Etiwanda Generating Station's (EGS) wastewater discharge system. In describing the system, Page 7.14-14 of the AFC states that "EGS manages discharge using two active retention ponds, one 600,000 gallon aboveground tank, and, if needed, an inactive retention pond, all of which are at the EGS facility."

However, the Phase I prepared by URS and the Waste Management section of the AFC indicate that four retention basins (including two general use basins, referred to as the north and south basins) are currently under a court order to conduct closure and corrective action under DTSC oversight. Yet, page 7.14-4 of the AFC states that Southern California Edison closed three retention basins in 1996, including two basins known as the North and South basins.

The status, actual location, and elements (such as pipeline location and points of discharge to the sewer) of the existing EGS wastewater system are unclear in the AFC due to vague or incomplete information, conflicting statements in various portions of the AFC, and the lack of clear identification of the EGS wastewater system elements on site maps. Staff needs consistent information on the existing EGS wastewater system including the retention basins for completing its waste analysis.

- 58. Please provide the following:
 - Please provide clarification on the location, elements, and status of any investigations or corrective action relating to the existing EGS wastewater treatment system.
 - b) Please provide a site map (1"= 250' scale) clearly showing the size and location of any system piping, points of plant process wastewater discharge to the system, retention basins, and points of discharge to the IEUA industrial waste pipelines.
- 59. If the existing EGS wastewater system includes retention basins or other elements that are currently subject to DTSC corrective action or further investigation, please provide information on the schedule, workplan, and studies or assessments that may be required to complete site characterization and/or corrective action. If closure and/or corrective action have already been completed for any of the wastewater system elements, please provide documentation that the required work has been done and no further action is necessary.

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

APPLICATION FOR CERTIFICATION FOR THE SAN GABRIEL GENERATING STATION

Docket No. 07-AFC-2 PROOF OF SERVICE (Est. 5/24/2007)

<u>INSTRUCTIONS:</u> All parties shall 1) send an original signed document plus 12 copies <u>OR</u> 2) mail one original signed copy AND e-mail the document to the web address below, AND 3) all parties shall also send a printed <u>OR</u> electronic copy of the documents that <u>shall include a proof of service declaration</u> to each of the individuals on the proof of service:

CALIFORNIA ENERGY COMMISSION Attn: Docket No. 07-AFC-2 1516 Ninth Street, MS-4 Sacramento, CA 95814-5512 docket@energy.state.ca.us

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DECLARATION OF SERVICE

I, <u>Terry Piotrowski</u>, declare that on <u>July 20, 2007</u>, I deposited copies of the attached <u>Data Request [Set 1 (#s 1-59)]</u>in the United States mail at <u>Sacramento</u>, <u>California</u> with first-class postage thereon fully prepaid and addressed to those identified on the Proof of Service list above.

OR

Transmission via electronic mail was consistent with the requirements of California Code of Regulations, title 20, sections 1209, 1209.5, and 1210. All electronic copies were sent to all those identified on the Proof of Service list above.

I declare under penalty of perjury that the foregoing is true and correct.

Original Signed by
Terry Piotrowski
Siting Office