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

November 21, 2007

Tim Hemig
Director, Environmental & New Business
NRG Energy, Inc.
1817 Aston Avenue, Suite 104
Carlsbad, CA 92008

Dear Mr. Hemig,

CARLSBAD ENERGY CENTER PROJECT (07-AFC-6) DATA REQUESTS

Pursuant to Title 20, California Code of Regulations, section 1716, the California Energy Commission staff requests 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 (#1-73) is being made in the areas of air quality, cultural resources, efficiency, socioeconomics, soil and water resources, transmission systems engineering, visual resources, and waste management. Written responses to the enclosed data requests are due to the Energy Commission staff on or before December 20, 2007, or at such later date as may be mutually agreed.

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 James Boyd, Presiding Committee Member for the Carlsbad Energy Center 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) 653-1245, or E-mail me at jreede@energy.state.ca.us.

Sincerely,

Ellen Allen FOR JAMES W. REEDE, JR. ED.D

James W. Reede, Jr., Ed.D.
Energy Facility Siting Project Manager

Enclosure
cc: POS

PROOF OF SERVICE (REVISED 11/6/07) FILED WITH
ORIGINAL MAILED FROM SACRAMENTO ON 11/21/07
TP

Technical Area: Air Quality
Author: William Walters

BACKGROUND: San Diego Air Pollution Control District Information Requests

Staff will need the applicant to provide copies of all of the information provided to the San Diego Air Pollution Control District (SDAPCD or District) to respond to the District information requests provided in the District's October 17, 2007, Application Status letter. The District's letter can be viewed at the following electronic link: http://www.energy.ca.gov/sitingcases/carlsbad/documents/others/2007-10-17_COMPLETE+INFORMATION_REQUEST.PDF

DATA REQUESTS

1. Please provide the Best Available Control Technology (BACT) information requested for the evaporative cooler and reclaimed water in the District's October 17th Letter (page 1).

2. It is likely that the project may be operated continuously or intermittently on natural gas derived from imported liquefied natural gas (LNG). Please provide the LNG operations impact information requested in the District's October 17th Letter (page 2).

3. Please provide the revised Air Quality and HRA modeling analysis information, including electronic input and output files, using the current or other District approved version of the AERMOD modeling system that was requested in the District's October 17th Letter (pages 2 through 4).

4. Please provide the toxic air contaminant emission factor and emission rate information requested in the District's October 17th Letter (pages 4 and 5).

BACKGROUND: GAS TURBINE OPERATING HOURS

The Application for Certification (AFC) is inconsistent regarding the maximum operating hours for the gas turbines. The project description and water resources technical section of the AFC use different maximum bases for operating hours (8,760 hours) than the air quality section of the AFC (4,100 hours), and the application's Data Adequacy Supplement A did not explicitly clarify whether the applicant will be willing to stipulate to the limited operations assumed in the air quality emissions calculations. Staff needs the applicant to clarify the maximum operating basis to confirm the air quality emissions basis.

DATA REQUEST

5. Please confirm that the applicant is willing to stipulate to maximum turbine operations as presented in the air quality emission calculations, or if not, please revise the air quality emissions calculations and modeling analysis to a maximum operating basis to which the applicant will stipulate.

BACKGROUND: OPERATIONS MITIGATION – EMISSION REDUCTIONS

Staff's position for a California Environmental Quality Act (CEQA) impact determination of operating emissions is that all nonattainment pollutants and their precursors need to be mitigated through emission reductions at a minimum ratio of 1:1. The San Diego Air Basin in the area of the project site is classified as nonattainment for the state ozone, PM10 and PM2.5 standards and federal ozone standard. Without proper emission reduction mitigation, this project could contribute to existing violations of the state and federal ambient air quality standards.

The applicant does not appear to propose to fully mitigate the project's emissions with actual emission reductions from the shutdown of existing Boilers 1 through 3 at the adjacent Encina Power Station (Encina). Additionally, the boiler shutdown emissions as presented may not be allowed per District rules, and the shutdown is not proposed to occur prior to the first fire of the project turbines, which raises additional District Rule compliance questions. Staff needs additional information to understand the sequencing and emission offset potential of the boiler shutdown and a determination of whether the applicant will propose to mitigate the project's emissions of nonattainment and precursor pollutants to address staff's impact concerns.

DATA REQUESTS

6. Please discuss and provide a schedule as to when the applicant will provide a list of potential offset sources or other emission mitigation programs to be used by the applicant to obtain emission reduction credits that would mitigate the project's NOx, PM10, PM2.5, VOC and SOx emissions on a 1:1 basis.

7. Please discuss the amount of mitigation fees the applicant is willing to pay to the SDAPCD and the basis for calculating those fees.

8. Please provide written confirmation from the District that shows that they agree with the emission reduction values identified in the AFC for the proposed Boilers 1 through 3 shutdown.

9. Please provide written confirmation from the District that they will allow the boiler shutdown to occur after the start of commercial operation, rather than before first turbine fire.

BACKGROUND: CONSTRUCTION – WORST CASE CONDITIONS

The AFC, pg 2-17, indicates that some construction activities may occur 24 hours per day and 7 days per week, while the construction impact modeling assumed a schedule of 9 hours per day and 5 days per week. Staff needs additional information from the applicant to ensure that the worst case construction emissions conditions were estimated and modeled.

DATA REQUEST

10. Please describe the types of construction activities and related emissions, if any, that could occur 24 hours per day and 7 days per week.

11. Please demonstrate that the 24/7 construction activities would not create higher daily emissions or higher short-term impacts (1, 3, 8, and 24 hour) than result from the worst-case conditions used in the construction emission estimate and modeling analysis.

BACKGROUND: CONSTRUCTION EMISSIONS DISPERSION MODELING

The applicant's construction emission dispersion modeling analysis, using the ISCST3 model with the NOx ozone limiting method (NOx_OLM), predicts offsite impacts that are higher than the NO_2 1-hour standard. The model and modeling method can be improved using modeling methods similar to those that were used for the operation modeling (AERMOD with Plume Volume Molar Ratio Method [PVMRM] for 1-hour NO_2 impact determination), along with the use of concurrent NO_2 hourly background data rather than use of a single maximum background value. Staff needs the applicant to remodel the construction 1-hour NOx emissions using these improved modeling methods to determine a more reasonable worst-case maximum impact. Staff also needs additional information to assess the volume source height and area source size used in the construction modeling analysis.

DATA REQUESTS

12. Please provide a revised 1-hour NOx modeling analysis for construction using AERMOD with PVMRM that uses both hourly ozone and concurrent hourly NO_2 background to determine the maximum hourly NOx impacts.

13. Please describe the derivation of the area source height (6 meters) used for the construction equipment exhaust emission modeling and used for the equipment caused fugitive dust emission modeling. In particular, staff would like to know why the same value was used for both equipment and fugitive dust emissions.

14. Please confirm staff's estimate of 40,383 square meters as the size of the polygon area source used to model the wind caused fugitive dust in the construction modeling analysis.

BACKGROUND: CONSTRUCTION MODELING – ANNUAL EMISSIONS

The AFC and the modeling analysis are inconsistent regarding the construction annual emissions for NOx, PM10 and PM2.5. The AFC shows annual emissions of 18.04 tons of NOx, and the modeling analysis, per staff calculation using the 9 hours per day and five days per week construction schedule used in the model, indicates a value of 19.55 tons was modeled. There is a similar issue with the PM10 and PM2.5 construction equipment emissions and the PM10 fugitive dust emissions. Staff needs the applicant to confirm which emission values are correct.

DATA REQUEST

15. Please confirm the annual construction emission for NOx, PM10, and PM2.5.

BACKGROUND: GAS TURBINE SCREENING MODELING ANALYSIS

The screening level modeling analysis was described on page 5.1-40 to 5.1-42 of the AFC, and the results were summarized in Tables 5.1D-2, -3. However, the modeling input and output files for the screening level modeling analysis were not provided. Staff needs the applicant to provide these files to confirm the results of the screening modeling analysis.

DATA REQUESTS

16. Please provide the modeling input and output files for the gas turbine screening modeling analysis.

BACKGROUND: STARTUP AND INITIAL COMMISSIONING MODELING ANALYSIS

The modeling analysis for startup and initial commissioning, unlike the modeling for normal operations, did not include modeling of the existing Encina Boilers 4 and 5 and the existing gas turbine. In order to determine the worst-case impacts from the operation of the entire power generation site, staff needs the applicant to include the potential for the concurrent operation of all site emission sources.

DATA REQUEST

17. Please model the project startup and initial commissioning short-term emissions from the proposed project along with the other site emission sources (Boilers 4 and 5 and existing gas turbine) that may operate concurrently during turbine startup and during initial commissioning.

BACKGROUND – BACT GAS TURBINE VOC EMISSIONS

The AFC Section 5.1 notes proposed BACT emission levels for VOC to be 2.0 ppm, while the BACT analysis provided in Appendix 5.1C (Table 5.1C-4) provides a proposed BACT level for VOC to be 1.5 ppm. Staff needs the applicant to clarify the proposed BACT level for VOC.

DATA REQUEST

18. Please confirm the value of the proposed VOC BACT emission concentration level.

BACKGROUND: OPERATING EMISSIONS ASSUMPTIONS – PM10 EMISSIONS

The AFC and the modeling analysis are inconsistent regarding the gas turbine PM10 emissions. The AFC notes that the hourly PM10 emissions will be 9.5 lbs/hour, while the modeling analysis uses 10.0 lbs/hour. Staff needs to understand which emission level is being proposed and needs revision of the emission values or modeling results depending on which is the correct value.

DATA REQUESTS

19. Please confirm the gas turbine PM10 hourly emissions limit.

20. Please revise facility PM10 emission calculations and all impacted emissions tables if the gas turbine PM10 emission limit should be 10.0 lbs/hour.

BACKGROUND – FIRE PUMP ENGINE DESIGN

Staff believes that the fire pump engine should be a new engine meeting the latest available US Environmental Protection Agency (US EPA) and California Air Resources Board (CARB) non-road diesel engine emission standards. A Tier 2 compliant engine has been proposed by the applicant; however, for the engine size proposed and considering the time frame for construction, staff believes that a Tier 3 engine may be available prior to the necessary equipment purchase date. Staff needs the applicant to identify whether they would be willing to stipulate to the use of a Tier 3 engine, if such engines are available prior to the necessary engine purchase date.

DATA REQUEST

21. Please identify whether the applicant would be willing to stipulate to using a Tier 3 compliant fire pump engine if such engines are available in time for purchase.

BACKGROUND: SOURCE TEST PORT COMPLIANCE

Staff has not found any information regarding the location of the source test ports for this project. Due to the relatively low stacks and large stack diameters, staff has concerns regarding the effectiveness of EPA Method 1 compliance and source test and continuous emission monitoring accuracy. Furthermore, there are concerns regarding potential safety issues if the test ports and platforms are located too close to the top of the stacks. Staff needs additional information from the applicant to assess compliance with relevant stack test port regulations.

DATA REQUESTS

22. Please identify the height of the stack test ports and stack test platform.

23. Please discuss the stack port's location compliance with U.S.EPA Method 1 requirements.

24. a. Please discuss additional source test procedures (i.e. cyclonic flow testing) that might be necessary due to the test port location to ensure that both source testing and continuous monitoring results are accurate.

    b. Please discuss the potential for long-term problems with source test/monitoring accuracy for this stack/port configuration.

25. Please discuss the potential for the source test platform location to create an undue safety hazard to source test personnel or negatively impact source test equipment performance or method compliance if the base of the source test platform is proposed to be less than 15 feet from the top of the stack (i.e. from stack tip downwash, etc.).

BACKGROUND: AIR QUALITY PERMIT APPLICATION

A Determination of Compliance (DOC) analysis from the District will be needed for staff's analysis. The application for the DOC has been submitted to the District. Staff will need to coordinate with the District to keep apprised of any air quality issues determined during their permit review.

DATA REQUESTS

26. Please provide copies of any permit application materials, other than AFC materials, submitted to the District.

27. Please provide copies of any subsequent submittals to or from the District within 5 days of their submittal to or their receipt from the District.

Technical Area: Cultural Resources
Author: Dorothy Torres

Please provide any documents under confidential cover that may reveal the location of an archaeological site.

BACKGROUND

On page 5.3-17 of the Application for Certification (AFC), there is a reference to four historical societies that were contacted for information regarding historical resources in the project vicinity. Section 5.3.3.5.6 states that a summary of contacts is included in Appendix 5.3A; however, staff cannot identify any information regarding contacts with historical societies in that appendix.

DATA REQUEST

28. Please provide copies of correspondence or summaries of telephone conversations with local historical and/or archaeological societies that might have knowledge of historical or archaeological resources in the project area.

BACKGROUND

Page 5.3-16 of the AFC states that storage tanks Nos. 5, 6, and 7 on the Carlsbad project site are metal tanks that sit in deep containment pits with sloping concrete walls forming berms. Page 2-2 states that Cabrillo Power I LLC is currently removing the existing storage tanks and completing allowed general remediation of a portion of the storage tank area as part of ongoing operations and maintenance.

DATA REQUEST

29. Please provide a discussion of the fate of the cement berms that enclose tanks 5, 6, and 7, and include information regarding whether the area will be filled and graded, including the estimated depth of the fill or depth of the grading.

BACKGROUND

Page 5.3-13 of the AFC states that prior geotechnical evaluations within the plant site identify 10 feet of fill in the project area. Some of the archaeological reports identify archaeological sites that could not be completely evaluated because portions of the sites were located below existing pipes and structures. Appendix 5.4A includes EIR information produced by geotechnical borings that were conducted for the proposed Regional Seawater Desalination Project at Encina. The geotechnical report identified fill at various levels, and on page 8 describes different locations where the depth of fill varies from three to nine feet.

DATA REQUEST

30. If additional geotechnical borings are to be completed for this project, please have the borings inspected for cultural resources by an archaeologist and provide the information.

31. Please explain whether tanks 5, 6, and 7 sit on fill or on native soil and the depth of the fill or soil.

32. Please provide a discussion of the estimated depth of ground disturbance needed for power plant and linear facilities construction.

BACKGROUND

Section 5.3.3.5 states that the area of potential effect (APE) for the project was determined in advance of field surveys in cooperation with Beverly Bastian of the Energy Commission on July 17, 2007. Ms. Bastian remembers, and her notes of the conversation support that the APE under discussion was an APE for built environment resources. Since the APE for built environment and archaeological resources is likely to be different, staff needs to know exactly how the project is defining the archaeological APE.

DATA REQUEST

33. Please identify the boundaries of the archaeological APE.

Technical Area: Power Plant Efficiency
Author: Shahab Khoshmashrab

BACKGROUND

Section 2.2.8 of the AFC states that the plant's air-cooled condenser system will be designed to normally operate at a pressure of about 17 psig (pounds-force pre square inch gage). Figure 2.2-5 of the AFC indicates that all pressures are absolute, or psia. Staff needs clarification about the units used in the AFC.

DATA REQUEST

34. Please clarify which one of the above units is correct.

Technical Area: Public Health
Author: Dr. Alvin Greenberg

Background

An applicant's health risk assessment should be both transparent and verifiable to reviewers. Staff has spent some time reviewing the modeling files provided by the applicant and is unable to find all of the information needed to quantitatively verify the risk results.

DATA REQUEST

35. Please provide the following information on sources and buildings at this project site:

    - Stack parameters and locations in Universal Transverse Mercator (UTM) coordinates (2 turbines and the firewater pump).
    - Information on project buildings and tanks used in the building downwash analysis (locations in UTM coordinates and dimensions).

Technical Area: Socioeconomics
Author: Vida Strong

BACKGROUND

The applicant states on page 5.10-19, Section 5.10.4.3.5, that of the $245 to $315 million in materials and supplies required for construction that "the estimated value of materials and supplies that will be purchased locally (within San Diego County) is $30 million." However, the applicant assumes on pages 5.10-19, Single Phase Construction, and 5.10-20, Phased Construction, that all of the sales will be made in Carlsbad.

DATA REQUEST

36. Given the relatively small size of the city of Carlsbad, please clarify whether the $30 million local materials and supplies construction budget would be spent within the city or over a much larger geographic area.

CARLSBAD ENERGY CENTER PROJECT
(07-AFC-6)
DATA REQUESTS

Technical Area: Soil and Water Resources
Author: Richard Latteri

BACKGROUND

In a letter dated July 6, 2007, the applicant for the proposed Carlsbad Energy Center Project (CECP), requested that the City of Carlsbad provide a "Will Serve" letter for the supply of reclaimed and potable water and for the City to provide the interconnection for sewer discharge.

The city's Planning Department, by letter dated October 24, 2007, provided Energy Commission staff with a list of concerns regarding the Application for Certification (AFC) for the project.

Issue No. 47 of the city's letter states: *The City does not have adequate recycled water production capacity to satisfy the process water demands of the CECP in the peak summer months.*

Issue No. 48 states: *The waste water (sewer) needs consist of two components; domestic and industrial waste. The City has adequate capacity and treatment capabilities for all domestic needs identified in the AFC. The industrial waste, as described in the AFC would be transmitted via a dedicated pipeline to the ocean outfall system located at the Encina Water Pollution Control Facility (EWPCF)*

Staff needs the "Will Serve" letters from the city for the long-term delivery of recycled and potable water for CECP and for the acceptance of domestic and industrial wastewater to complete its analysis.

DATA REQUEST

37. Please provide a "Will Serve" letter from the city of Carlsbad, which commits the City to the long-term delivery (30 – 35 years) of 516 acre-feet per year of recycled water with a peak delivery rate of 945 gallons per minute.

38. Please discuss the applicant's plans for addressing the city's Issue No. 47 regarding inadequacy of reclaimed water supply for meeting CECP needs during peak summer months.

39. Please explain the discrepancy between the city's letter of October 24, 2007, and the AFC Supplement Record of Conversation Attachment WR-3A with the City Engineer stating that there is adequate reclaimed water.

40. Please provide a table of the current recycled water customers served by the city of Carlsbad Water Recycling Facility (CWRF), and list their contractual delivery amounts from the CWRF.

41. Please provide a discussion of the recycled water supply reliability based on current and future supply and demand projections for recycled water from the CWRF.

42. Please provide a "Will Serve" letter from the city of Carlsbad, stating that the City will accept CECP's domestic wastewater at an average discharge rate of 12 gallons per minute.

43. Please list and discuss any conditions the city may have for domestic wastewater quantity and quality limits, hookup requirements and fees, and ownership of all infrastructure required to transmit the CECP's domestic wastewater to the City's wastewater treatment plant.

44. Please provide a "Will Serve" letter from the city of Carlsbad, stating that the city will accept CECP's industrial wastewater at an average discharge rate of 107.2 gallons per minute.

45. Please list and discuss any conditions the city may have for quantity and quality limits for industrial wastewater, hookup requirements and fees, and ownership of all infrastructure required to transmit the CECP's industrial wastewater to the ocean outfall system located at the EWPCF.

BACKGROUND

The CECP proposes to use California Code of Regulations (CCR) Title 22 recycled water as the primary source of process water for the CECP as well as the source for landscape irrigation water. The California Code of Regulations has a number of treatment standards and use restrictions for recycled water under the provisions of Title 22 recycled water.

46. Please define the level of Title 22 treatment (disinfected tertiary, disinfected secondary-2.2, or disinfected secondary-23) of all recycled water sources proposed for use at the CECP.

47. Please provide a discussion of the permits and oversight requirements of the San Diego Regional Water Quality Control Board (SDRWQCB), Department of Health Services (DHS), and the city of Carlsbad for the supply and use of recycled water at the CECP.

48. Please discuss whether a board hearing will be required per the provisions of Water Code Section 13523 et seq.

49. Please provide the names and telephone numbers of the SDRWQCB and DHS personnel who are responsible for the proposed recycled water permitting and use.

BACKGROUND

Due to the proximity of the proposed CECP to sensitive aquatic resources, the CECP would need to comply with all federal and state stormwater discharge requirements. Pursuant to the Clean Water Act, a Municipal Storm Water NPDES Permit (No. CAS0108758) was issued to San Diego County and 18 cities including the city of Carlsbad. The city's municipal permit requires the development and implementation of

stormwater regulations addressing stormwater pollution in development and construction of private and public projects. In order for the CECP to meet the city's municipal permit requirements, proper integration of the CECP site design that identifies specific source and treatment control best management practices (BMPs) is essential for compliance with federal and state stormwater pollution standards.

50. Please provide a completed Stormwater BMP Applicability Checklist that meets the city's municipal permit standards.

51. Per the city's municipal permit requirements, please provide the Preliminary Storm Water Management Plan for the CECP site and linear facilities (based on the CECP's priority as determined by the Stormwater BMP Applicability Checklist). Include existing and proposed drainage patterns based on the CECP's design plans and preliminary hydrology calculations.

CARLSBAD ENERGY CENTER PROJECT
(07-AFC-6)
DATA REQUESTS

Technical Area: Transmission System Engineering
Author: Ajoy Guha, P. E. and Mark Hesters

Introduction

Staff needs to determine the system reliability impacts of the project interconnection and to identify the interconnection facilities including downstream facilities needed to support the reliable interconnection of the proposed CECP. The interconnection must comply with the Utility Reliability and Planning Criteria, North American Electric Reliability Council (NERC) Planning Standards, NERC/Western Electricity Coordinating Council (WECC) Planning Standards, and California Independent System Operator (CAISO) Planning Standards. In addition CEQA requires the identification and description of the "direct and indirect significant effects of the project on the environment." For compliance with planning and reliability standards and identification of indirect or downstream transmission impacts, staff relies on the System Impact Study (SIS) as well as review of this study by the agencies responsible for insuring the interconnecting grid meets reliability standards, in this case, San Diego Gas & Electric (SDG&E) and CAISO. The SIS analyzes the effect of the proposed project on the ability of the transmission network to meet reliability standards. When the study determines that the project will cause the transmission system to violate reliability requirements, the potential mitigation or upgrades required to bring the system into compliance are identified. The mitigation measures often include modification and construction of downstream transmission facilities. CEQA requires environmental analysis of any downstream facilities for potential indirect impacts of the proposed project.

BACKGROUND

The description of the proposed 230 kV and 138 kV interconnecting transmission lines between the new generating units' generator step-up (GSU) transformers and existing 230 kV and 138 kV Encina Switchyards are incomplete as provided in the revised AFC (AFC, section 3.1, Page 3-1, Figures TSE1a-1 to TSE1a-4).

DATA REQUEST

52. Please provide the type and size of the overhead conductors and terminating cables for the new interconnecting 230 kV and 138 kV transmission lines between the new generating units' GSU transformers and existing 230 kV and 138 kV Encina switchyards.

BACKGROUND

The AFC provided the System Impact Study (SIS) agreement, plan and proof of payment, but did not include a complete SIS report (AFC, section 3.2.3).

DATA REQUEST

53. Submit a complete SIS report prepared by SDG&E and/or CAISO for interconnection of the project's 540.4 MW net output based on 2010 summer peak and 2011-2012 winter conditions (scheduled on-line dates of the CECP

units). The study should include a power flow, short circuit, transient stability, post-transient voltage and reactive power deficiency analyses (as stated in the study plan).

54. Please work with SDG&E and CAISO on ensuring all major assumptions are listed in the report's base cases, including major path flows, major generators including queue generation and loads in the area systems.

55. Please identify the reliability and planning criteria utilized to determine the reliability criteria violations.

56. If the SIS identifies any reliability criteria violations, identify the specific mitigation measure that will be used to mitigate each reliability criteria violation. If the SIS identifies more than one mitigation measure for a particular criteria violation, specify which measure will be used.

57. Provide power flow diagrams with and without the CECP for base cases. Power flow diagrams should also be provided for all overloads or voltage criteria violations under normal system (N-0) or contingency (N-1 & N-2) conditions

58. Provide electronic copies of *.sav,*.drw. *.dyd and *.swt GE PSLF files and EPCL contingency files in a CD (if available).

59. Provide a complete Facility Study report if it is available.

60. Provide an environmental analysis to meet CEQA requirements for an indirect project impact reconductoring activity that will be required to interconnect the CECP.

CARLSBAD ENERGY CENTER PROJECT
(07-AFC-6)
DATA REQUESTS

Technical Area: Visual Resources
Author: William Kanemoto

BACKGROUND

In order to assess the visual effects of the project, a clearer understanding of the heights and configuration of the facility components is needed. The AFC project description did not include scaled elevations of the facility.

DATA REQUEST

61. Please provide scaled elevations of the proposed facility from two axes.

BACKGROUND

Similarly, in order to understand both the ultimate height and visibility of project components, and potential project development impacts on existing vegetation, it is necessary to understand both existing and proposed site grading. The relationship between the existing trees and other vegetation and the proposed limits of grading for laydown Area "A" and for spoil berms needs clarification for staff to complete its analysis.

DATA REQUEST

62. Please provide a site survey in Computer-Aided Design (CAD) form showing existing grades on site.

63. Please provide proposed site grading plans in CAD form, including indication of proposed limits of work, and an inventory of the trees and shrubs that would be removed.

64. Please overlay the grading limits for Laydown Area A (per Figure 2.2-10) on an accurate site survey depicting existing tree canopy and/or an aerial photo of the site.

65. Please provide an overlay of proposed grading for construction of spoil berms on an accurate site survey showing existing tree canopies and/or an aerial photo of the site.

66. Please discuss the feasibility of lowering the proposed finished grade of the project to reduce visual prominence of the facility.

BACKGROUND

A letter from the city of Carlsbad dated October 24, 2007 on the CECP cites visual concerns connected to several cumulative projects, including the Caltrans proposed I-5 widening; the proposed adjacent desalination plant; and an anticipated public use/viewing area within the Encina facility boundaries connected to development of the desalination project.

DATA REQUEST

67. Please provide a detailed discussion of these potential cumulative visual impact scenarios based on currently available information, particularly:

    a. Anticipated loss of existing vegetation/visual screening due to Caltrans I-5 widening;

    b. Potential direct and cumulative visual impacts from the CECP combined with the proposed desalination plant, to the anticipated public use area/viewpoint within the existing Encina facility property (city comment 36).

    c. Please provide a new visual simulation depicting the CECP as it would be seen from the proposed public use area for the Encina facility, per city of Carlsbad comment 36.

BACKGROUND

The city of Carlsbad has also expressed concern about potential visual impacts of the project on rail passengers. In addition, the project site includes a designated segment of the Coastal Rail Trail (CRT).

DATA REQUEST

68. Please provide a new visual simulation of the project from the adjoining railroad right-of-way, representative of views of rail passengers and future CRT users.

BACKGROUND

The city of Carlsbad has recommended that new transmission lines be placed underground. Furthermore, proposed new transmission lines would closely parallel the edge of the railroad right-of-way, making them a prominent feature to rail passengers and future CRT users.

69. Please provide a discussion of the feasibility and visual benefit of undergrounding proposed transmission lines.

BACKGROUND

The city of Carlsbad also requested an (arborist's) assessment of health and probable longevity of existing trees bounding the CECP site.

DATA REQUEST

70. Please prepare an arborist's assessment of existing trees surrounding the project site and provide copies to Energy Commission staff and the city of Carlsbad.

BACKGROUND

The AFC does not identify whether CECP stacks or other prominent parts of the facility would require night lighting. Staff needs this information for completing its visual resource analysis.

DATA REQUEST

71. Please describe any stack or other prominent night lighting that may be required of the CECP.

CARLSBAD ENERGY CENTER PROJECT
(07-AFC-6)
DATA REQUESTS

Technical Area: Waste Management
Author: Ellie Townsend-Hough

BACKGROUND

The AFC identifies the area around the existing fuel tanks as an area to be developed as part of the proposed project. However, the area is also identified in the AFC as having Historical Recognized Environmental Conditions (HREC) and area of concern (AOC) as defined by the American Society for Testing and Materials (ASTM), due to elevated levels of Total Extractable Hydrocarbons in soil samples and, cadmium, silver and lead detected in groundwater. Lead and silver were also detected in the equipment sample (CH2MHILL 2007, Page 5.14-6). The AFC states the areas within the project site such as tanks, piping, and buildings where samples could not be collected beneath existing structures remain as potential environmental conditions that should be addressed at the time when such facilities are removed as part of normal operation and maintenance of the site (CH2MHILL 2007, Page 2-2).

While the AFC states that removal of two existing fuel tanks are a part of the Encina facility's ongoing operations and maintenance activity and are not part of the proposed project, the area underneath these fuel tanks will be used for proposed project structures and activities. Therefore, since the area is already identified as an HREC, 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 level of insignificance. The San Diego Regional Water Quality Control Board (SDRWQCB) is the Lead Agency for the Phase II Environmental Site Assessment and all necessary remedial activities and is working with the Department of Toxic Substances Control as a Responsible Agency. 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

72. Please provide an estimated date for the removal of existing fuel tanks, along with a schedule and workplan for investigation and possible remediation of contaminated soils in the vicinity of the existing fuel tanks. The schedule and workplan should also have been reviewed and approved by the San Diego Regional Water Quality Control Board prior to submittal to the Energy Commission, unless other arrangements are made with Energy Commission staff to address or accommodate SDRWQCB review.

73. Please provide the Phase II Environmental Site Assessment and the name and contact information for SDRWQCB staff assigned to the proposed Carlsbad project.

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

APPLICATION FOR CERTIFICATION
FOR THE *CARLSBAD ENERGY CENTER PROJECT*

Docket No. 07-AFC-6
PROOF OF SERVICE
(Est. 11/6/07)

INSTRUCTIONS: All parties shall 1) send an original signed document plus 12 copies OR 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 OR electronic copy of the documents that shall include a proof of service declaration to each of the individuals on the proof of service:

CALIFORNIA ENERGY COMMISSION
Attn: Docket No. 07-AFC-6
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DECLARATION OF SERVICE

I, Terry Piotrowski, declare that on November 21, 2007, I deposited copies of the attached Carlsbad Energy Center Project Data Requests in the United States mail at Sacramento, California 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