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





Quail Brush Genco, LLC Mrs. Connie Farmer Senior Environmental Project Manager 143 Union Blvd., Suite 1010 Lakewood, CO 80228

# Regarding: QUAIL BRUSH GENERATION PROJECT (11-AFC-3), Staff's Data Requests, 1 through 58

Dear Mrs. Farmer,

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.

These data requests, numbered 1 through 58, are being made in the technical areas of Air Quality, Biological Resources, Cultural Resources, Land Use, Socioeconomics, Traffic & Transportation, Soil and Water, Transmission System Engineering and Worker Safety & Fire Protection. Written responses to the enclosed data requests are due to the Energy Commission staff on or before March 8, 2012.

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 the Committee and me within 20 days of receipt of this notice. The notification must contain the reasons for the inability to provide the information or the grounds for any objections (see Title 20, California Code of Regulations, section 1716 (f)).

If you have any questions regarding the enclosed data requests, please call me at (916) 651-0966.

Sincerely,

Eric Solorio Siting Project Manager

PROOF OF SERVICE (REVISED 2/7/12) FILED WITH ORIGINAL MAILED FROM SACRAMENTO ON 2/7/12 DLS

Enclosure (Data Request Packet) cc: Docket (11-AFC-3)

# QUAIL BRUSH GENERATION PROJECT (11-AFC-3)

Energy Commission Staff's Data Requests 1-58

February 7, 2012

## **BACKGROUND: PROJECTS PERMITS**

The proposed project will require the Preliminary Determination of Compliance and Final Determination of Compliance from the San Diego Air Pollution Control District (SDAPCD or "District"). These documents will be integrated into the staff analysis. Therefore, staff will need copies of relevant correspondence between the applicant and the District in a timely manner in order to stay up to date on any permit issues that arise prior to completion of the Preliminary or Final Staff Assessment.

## DATA REQUEST

1. Please provide copies of all substantive District correspondence regarding the Quail Brush Generation Project (QBGP) permit application, including e-mails, within one week of submittal or receipt. This request is in effect until the final Commission Decision has been recorded.

#### BACKGROUND: MITIGATION FOR NON-ATTAINMENT FOR NON-ATTAINMENT EMISSIONS AND PRECURSOR EMISSIONS

The applicant proposes to mitigate a portion of the non-attainment emissions and precursor emissions (i.e. nitrogen oxides [NOx], volatile organic compounds [VOCs], particulate matter [PM10/PM2.5], and sulfur oxides [SOx]) to comply with California Environmental Quality Act (CEQA) by securing emission reduction credits (ERCs), but the proposed mitigation package is uncertain. Information submitted by QBGP to Energy Commission staff does not provide sufficient detail regarding the specific ERCs that would be used for the project. Staff eventually needs to know the exact location, the amount, and the ratios of emissions to reductions, including inter-pollutant mitigation ratios, applicable to each ERC that QBGP proposes to use. This information may be submitted under confidential cover to staff, but staff expects to make this information available to the public when publishing the staff assessment. Staff requires a finalized mitigation package to complete our analysis.

## DATA REQUEST

2. Please provide a tabulated list showing expected emissions and Emission Reduction Credits (ERCs) indicating the proposed quantity of all ERC reductions, including their locations, in a quantity sufficient to fully mitigate the project's emissions (once combined with the results of Data Request 3), including appropriate mitigation ratios. Please show the current updated ERC certificate number(s) and former certificate numbers for certificates that have been recently split and/or re-issued in the name of the project.

#### BACKGROUND

At the December 2<sup>nd</sup>, 2011 workshop the QBGP proposed using non-traditional emission reduction programs to mitigate a portion of the non-attainment emissions and precursor emissions; these are programs that generate emissions reductions that may be ineligible for use in an air district's traditional ERC banking program. Examples of

non-traditional programs include street sweeping and tree planting. The actual emissions reduced by these programs depend highly on their permanence and upkeep, which may or may not be sponsored or controlled by the project.

## DATA REQUEST

3. Please identify and quantify a complete package (when including data from Data Request 2) of proposed CEQA mitigation for non-attainment pollutants and precursor emissions. For example, proposed strategies to reduce emissions in the near vicinity of the project and the effectiveness of such strategies need to be explicitly identified by QBGP.

#### BACKGROUND: SO<sub>2</sub> EMISSIONS

Staff is concerned SO<sub>2</sub> emissions from lube oil burn-off are being over estimated. Appendix F, table F.1-9 notes Wartsila has estimated that approximately 0.1 lbs of sulfur per hour is combusted and converted to 0.2 lbs SO<sub>2</sub> per hour as a result of lube oil burn-off, however the basis for this estimation is unclear. The applicant also notes it is anticipated that the SO<sub>2</sub> mass emissions will be far less than this value once compliance testing is completed.

#### DATA REQUESTS

- 4. Please provide the sulfur content (gr S/scf) of the lubrication oil for the engine.
- 5. When ignition occurs, a portion of the oil is combusted, and a portion is contaminated and removed from the piston and collected in the lube oil sump. Please provide the quantity of lubrication oil that is combusted per hour (scf/hr).
- 6. Please explain the potential for using synthetic lubricating oil to further reduce SO<sub>2</sub> emissions.

# BACKGROUND: ENGINEERING SPECIFICATIONS AND MANUFACTURES GUARANTEES

The Application for Certification (AFC) and appendices provides information on the proposed operating equipment for the QBGP. Staff would like to verify emission factors for this equipment. QBGP proposes a Wartsila 80.18 MMBtu/hr power cycle engine, model number 20V34SG-C2. However, information was provided for the Wartsila 73 MMBtu/hr power cycle engine, model number 20V34SG and used to recalculate commissioning emissions.

- 7. Are manufacture guarantees or source testing information available to verify emissions for the 80.18 MMBTU/hr power cycle engine? If so, please provide this information.
- 8. Was the information for the 73 MMBtu/hr power cycle engine also used to calculate normal operations? If so, please provide the deriving calculations and

assumptions used in converting emissions from the 73 MMBtu/hr engine to the 80.18 MMBtu/hr engine.

9. Once the fuel gas heater and warm start heater are selected, please provide information confirming that actual emission factors are consistent with estimations provided from AP-42, Section 1.4, 7-98.

#### BACKGROUND: FUEL GAS HEATER AND WARM START HEATER

Staff would like to better understand the operating assumptions for the fuel gas and warm start heaters. The AFC indicates that 4,232 hours/year of heater operation have been assumed for heating of the natural gas fuel to the reciprocating engines and 4,928 hours/year of heater operation have been assumed for heating of the engine cooling water system for 10 minute-start capability. 200 hours have been assumed for contingency.

# DATA REQUEST

10. Please explain the warm start heater operating assumptions associated with 4,928 hours/year operation.

## BACKGROUND: DIESEL ENGINE FIRE PUMP

Page 4.7-4 of the AFC assumes a John Deere diesel fire pump system listed as a Tier 3, 144 BHP diesel engine, capable of 2.8 g/hp-hr NOx and 0.09 g/hp-hr PM10/2.5. However, Tier 3 standards require capability of 2.6 g/hp-hr NOx. Furthermore, staff will be requiring the newest, cleanest engine available at time of purchase. Interim Tier 4 is required by 2012, capable of 2.5 g/hp-hr NOx and 0.015 g/hp-hr PM10/2.5.

## DATA REQUEST

- 11. Please confirm that the air quality impact analysis used worst case emissions data.
- 12. Please confirm that the fire pump engine has not yet been purchased. Also, describe the availability of currently-required Tier 4i diesel-fueled engine fire pumps in the size range needed for this project that are expected to be available at the time of purchase.

# BACKGROUND: FEDERAL 1-HOUR NO<sub>2</sub> NATIONAL AMBIENT AIR QUALITY STANDARD (NAAQS) MODELING

Staff is concerned with the in stack NO<sub>2</sub>/NOx ratio used in the Ozone Limiting Method for compliance with the Federal 1-hour NO<sub>2</sub> NAAQS. The Draft California Air Pollution Control Officers Association (CAPCOA) Guidance Document, *Modeling Compliance of the Federal 1-hour NO<sub>2</sub> NAAQS* provides recommended in stack NO<sub>2</sub>/NOx ratios for typical equipment. However, staff is concerned the 1.15% NO<sub>2</sub>/NOx ratio chosen from appendix C of the document is not representative of the 12,874 horse power (hp) Wartsila engine that will be utilized at the QBGP. The value chosen does not seem to represent a lean burn engine which has a recommended 10% NO<sub>2</sub>/NOx ratio default value.

#### DATA REQUESTS

- 13. Is there any source testing available for the Wartsila engine that would support the use of the 1.15% NO<sub>2</sub>/NOx ratio? If so, please provide this information.
- 14. If not, please select a more appropriate NO<sub>2</sub>/NOx ratio (representative of the 12,874 hp lean burn Wartsila engine that would be utilized at the QBGP) for use in the Ozone Limiting Method for compliance with the Federal 1-hour NO<sub>2</sub> NAAQS and revise and resubmit modeling.

#### BACKGROUND: CTSCREEN MODELING

The applicant used the AERMOD modeling system (version 11103 with associated receptor processing program AERMAP version 11103) for modeling operational and construction impacts in both simple and complex terrain. For receptors located in complex terrain that predicted PM2.5 or PM10 concentrations in excess of the relevant increment, NAAQS or Significant Impact Level (SIL), the applicant also used CTSCREEN to provide substantially lower results.

US EPA Permit Modeling Guidance list AERMOD Modeling System as one of the "preferred/recommended models" under Appendix W. The modeling guidance lists CTDMPLUS as "other preferred/recommended dispersion models" making it another acceptable option. CTSCREEN is a screening version of the CTDMPLUS model. CTSCREEN is a Gaussian plume dispersion model designed as a screening technique for regulatory application to plume impaction assessments in complex terrain. CTSCREEN uses pre-defined meteorological categories instead of on-site meteorological measurement. CTDMPLUS uses on-site meteorological inputs including PROFILE, SURFACE, and RAWIN. CTSCREEN uses scaling ratios to convert 1-hour concentrations to 3-hour, 24-hour, and annual concentrations that may not be representative of the project site.

"AERMOD's complex terrain component has been evaluated extensively by comparing model-estimated regulatory design values and concentration frequency distributions with observations. These comparisons have demonstrated AERMOD's superiority to ISC3ST and CTDMPLUS (Complex Terrain Dispersion Model PLUS unstable algorithms) in estimating those flat and complex terrain impacts of greatest regulatory importance" (40 CFR 51, Appendix W).

"For incidental and unique situations involving a well-defined hill or ridge and where a detailed dispersion analysis of the spatial pattern of plume impacts is of interest, CTDMPLUS in the Guideline's appendix A remains available." (40 CFR 51, Appendix W).

#### DATA REQUEST

15. Please explain the justification for rejecting AERMOD modeling system results and using a screening tool (CTSCREEN) to provide substantially lower results?

## BACKGROUND: CUMULATIVE MODELING

An air quality cumulative modeling assessment will need to be completed to show compliance with all Ambient Air Quality Standards (AAQS). Attachment 4 of the Workshop Action Items Response Memo from the December 2, 2011 workshop provides QBGP's inquiry to the District requesting the list of appropriate projects to be included in the analysis.

## DATA REQUESTS

- 16. Once the District has responded, provide the list of sources to be included in the cumulative modeling analysis. This list should be presented and discussed by the applicant, APCD, and CEC AQ staff.
- 17. Please provide the cumulative modeling analysis after receiving CEC AQ staff approval of the modeling protocol and list of projects to be modeled.

#### BACKGROUND: MODELING PM10/2.5 CONSTRUCTION EMISSIONS

24-hour PM10/PM2.5 impacts were modeled using emissions rates of 9.43 lb/day and 9.34 lb/day respectively. These emission rates are consistent with the lb/day PM10/PM2.5 totals during construction of Phase 1. Phase 1 is projected to last approximately 1.5 months, with the remaining 14.5 months occurring during Phase 2. The estimated PM10/PM2.5 emissions during Phase 2 are 11.0 lb/day and 10.90 lb/day respectively.

# DATA REQUEST

18. Please re-model the worst-case 24-hour PM10/PM2.5 impacts using Phase 1 emissions rates or justify why the lower Phase 2 emissions rates were used.

## BACKGROUND: CONSTRUCTION RELATED EMISSIONS

Staff would like to better understand construction related impacts. Construction of the project is expected to last approximately 16 months and will occur in two phases. Phase 1 would be site preparation which would last approximately 1.5 months and phase 2 would be foundation work and installation of major equipment that would last approximately 14.5 months. Construction emission estimates include project linears, although it is unclear what linear construction activity would occur.

- 19. Please describe offsite linear construction activities including but not limited to: type of construction activity, emissions associated with linear construction, and duration of linear construction activities.
- 20. Would there be a potential for reconductoring of transmission lines for the QBGP, and if so how would it affect project linear construction emissions?
- 21. How would linear construction activities change with the alternative transmission line tie-in location?

Technical Area:Biological ResourcesAuthor:Andrea Martine

#### BACKGROUND

Page 4.12-40 of the AFC describes nitrogen deposition as a potentially significant indirect impact on Quino checkerspot butterfly habitat. The Quino checkerspot butterfly is a federal listed endangered species. The project's anticipated NOx emissions may contribute to the ongoing (cumulative) degradation of endangered species habitat located near the project site. NOx emissions are a concern of U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Game (CDFG), and staff will be pursuing the issue with those agencies, and share information with the applicant as it becomes available.

Thresholds for nitrogen deposition by vegetation type are available within the March 2007 California Energy Commission PIER report, titled "Assessment of Nitrogen Deposition: Modeling and Habitat Assessment," available at: http://www.energy.ca.gov/2006publications/CEC-500-2006-032/CEC-500-2006-032.PDF, and the May 2006 2007 California Energy Commission PIER report, titled "Impacts of Nitrogen Deposition on California Ecosystems and Biodiversity, available at: http://www.energy.ca.gov/2005publications/CEC-500-2005-165/CEC-500-2005-165.PDF. Utilizing the March 2007 data from the PIER report, the background NOx levels for the project site have been determined to be 10.77 kilograms/hectare/year (kg/ha/yr). When analyzing nitrogen deposition impacts to plant communities, the level at which nitrogen emissions effect vegetation is 5 kg/ha/yr.

- 22. Please specify the amount of total nitrogen deposition in kg/ha/yr in special status habitats and vegetation types for wet and dry deposition for the Quail Brush Generating Project. Please provide the complete citation for references used in determining this number.
- 23. Please provide an isopleths graphic over USGS 7.5 minute maps (or equally detailed maps) of the anticipated nitrogen deposition rates for the proposed project. The geographical extent of the nitrogen deposition mapping should be directed by the results, i.e. extend geographically to where the deposition is considered below any stated threshold of significance for vegetation communities and where the NOx plume could affect Quino checkerspot butterfly habitat and occurrences including critical habitat.
- 24. Please also provide a cumulative impact analysis of the nitrogen deposition values in kg/ha/yr. Please identify other NOx sources that were considered as part of the cumulative impacts analysis. Provide an isopleths graphic over USGS 7.5-minute maps of the direct nitrogen deposition values in the cumulative analysis and specify the cumulative nitrogen deposition rate in kg/ha/yr at any affected special status habitat and vegetation type. The geographical extent of the cumulative nitrogen deposition mapping should be directed by the results, i.e. extend geographically to where the deposition is considered below any stated threshold of significance.

25. Please describe potential mitigation strategies (e.g. weed management) to decrease cumulative nitrogen deposition impacts to less than significant levels for any affected resources, particularly Quino checkerspot butterfly critical habitat, special status vegetation types (e.g. Coastal sage scrub), or other special status species habitat. Please provide the list of sources considered in the cumulative air quality impact analysis.

#### BACKGROUND

Page 4.12-19 of the AFC indicates that the locations of the proposed switchyard and temporary construction areas are not known, but will be located in areas that do not contain sensitive plant species. This information is insufficient for staff to conduct an impacts analysis of construction activities such as loss of habitat, noise, and lighting, as well as impacts to state waters and Waters of the U.S. During a recent conference call with the applicant and regulatory agencies on January 12, 2012, the applicant indicated that this information is expected to be provided in a biological report. Staff will not be able to complete its impact analysis unless the exact locations of all project facilities are known.

#### DATA REQUEST

26. Please provide on a map at a scale of 1:6,000 or color aerial photographs taken at a recommended scale of 1 inch equals 500 feet (1:6,000) with a 30 percent overlap that show the proposed switchyard and temporary construction areas.

#### BACKGROUND

Page 4.12-32 of the AFC discusses waters and/or wetlands that are potentially subject to the jurisdiction of the U.S. Army Corps of Engineers (USACE) Section 404 of the Clean Water Act, and/or CDFG. Appendix H of the AFC has the preliminary Jurisdictional Delineation Report and Table 4.12-7 provides a summary of potential jurisdictional wetlands and waters for the project. Staff requires a determination of jurisdictional status from the USACE to complete its analysis.

#### DATA REQUEST

27. Please provide the final determination from the USACE regarding whether or not jurisdiction will be asserted. Should the USACE assert jurisdiction, please explain the project-specific circumstances that would necessitate substantial temporary or permanent impacts to jurisdictional waters. If mitigation will be required, please discuss what suitable mitigation will likely be. Please provide the anticipated schedule of USACE permitting for (and verification of) jurisdictional waters.

#### BACKGROUND

Page 4.12-47 of the AFC discusses mitigation for the loss of vegetation communities (Diegan coastal sage scrub, granitic chamise chaparral and non-native grasslands) and wildlife habitat. Habitats will be replaced by habitat preserved within the Multispecies Habitat Planning Area (MHPA) in the city of San Diego. Staff needs to know where mitigation is proposed for the project to determine its adequacy to mitigate for project impacts.

#### DATA REQUEST

28. Please provide on a map at a scale of 1:6,000 or color aerial photographs taken at a recommended scale of 1 inch equals 500 feet (1:6,000) with a 30 percent overlap of location(s) of potential mitigation sites.

#### BACKGROUND

Page 4.12-31 of the AFC discusses the requirement for conducting Quino checkerspot butterfly surveys for the proposed project site. Surveys will be required for the project site since it does not meet the exclusion criteria in the U.S. Fish and Wildlife Service Quino checkerspot butterfly survey protocol. During a recent conference call with the applicant and regulatory agencies on January 12, 2012, the applicant indicated that these surveys are expected to begin late January or early February 2012. The applicant will need to coordinate with USFWS to determine proper timing of surveys.

#### DATA REQUESTS

- 29. Please conduct Quino checkerspot butterfly protocol surveys of the project following U.S. Fish and Wildlife Service Quino checkerspot butterfly survey protocol (February 2002) and provide the results of the field surveys.
- 30. Also please provide a map at a scale of 1:6,000 or color aerial photographs taken at a recommended scale of 1 inch equals 500 feet with a 30 percent overlap depicting locations of any host plants, Quino checkerspot butterfly adults, and larvae found during surveys.

**Technical Area:** Cultural Resources **Authors:** Michael D. McGuirt and Amber Grady

Where the disclosure of information on the location or the character of cultural resources may create a substantial risk of harm, theft, or destruction, one must submit such information under cover of an application for confidential designation pursuant to Title 20, California Code of Regulations, Section 2505.

#### BACKGROUND

The basic physical contexts for the understanding of the distribution of archaeological deposits across a landscape are the landforms that, taken together, form that landscape. Geomorphology is the branch of geology that describes, and reconstructs the processual origins and history of landforms. Staff has been unable to find basic reconstructions of the processual and historic origins of the landforms in and adjacent to the proposed project area in the Cultural Resources, Paleontological Resources, or Geological Hazards and Resources sections of the AFC (sections 4.1, 4.15, and 4.16), the confidential cultural resources technical report (section 2.1.2, Farmer and King 2011), or the October 2011 supplement to the AFC (Cultural Resources section and attachment C). This information is necessary for staff to understand and interpret the basic physical context of the local archaeological record.

## DATA REQUEST

31. Please provide a concise summary of the processual and historical geomorphology of the proposed project area and near vicinity. The summary need not be exhaustive.

#### BACKGROUND

The applicant, in a submission to the Energy Commission on November 7, 2011 (tn 62831), made a commitment to conduct supplemental fieldwork to identify cultural resources in the project area, as proposed in the original AFC, and provide the final report of that work within 90 days of the date of the subject submission. Completion of this fieldwork is essential for staff to provide a comprehensive analysis of cultural resources in the project area. To date, that report has not been received.

On January 12, 2012, staff met the applicant's cultural resources consultants on the proposed project area and were informed that a small number of additional archaeological deposits had been identified during the supplemental fieldwork. Based on the information provided in the anticipated draft report, newly found deposits may require additional field investigation to assess their historical significance, and staff reserves the opportunity to request that information prior to completion of the Preliminary Staff Assessment (PSA).

#### DATA REQUEST

32. Please provide the draft report of the supplemental archaeological fieldwork as identified in the applicant's November 7, 2012 submission (tn 62831). If additional time is needed to complete the fieldwork or report, please provide a schedule for completion of the fieldwork and date of report submission.

#### BACKGROUND

The historic context provided in the AFC is very brief and general and does not provide sufficient detail with regard to the time periods and the historic themes associated with the Old Mission Dam, Camp Elliot, and the Sycamore Landfill. Staff needs this information to properly contextualize the proposed project area and particular cultural resources found in and around it.

## DATA REQUEST

33. Please provide historic contexts as they relate to the Old Mission Dam, Camp Elliot, and Sycamore Landfill and, respectively, to the local development of water control infrastructure in the Spanish Colonial era, the military use of the project area vicinity, and the local development of waste disposal systems.

## BACKGROUND

The area of analysis for the proposed project can reasonably be set to include the Sycamore Landfill, which appears to be over 45 years old. No evaluation of the landfill was provided, pursuant to the Energy Commission's siting regulations that pertain to cultural resources (Cal. Code Regs., tit. 20, § 1701 et seq., appen. B, subd. (g)), to determine if the resource is potentially eligible as a historical resource.

February 7, 2012

#### DATA REQUEST

34. Please provide an evaluation of the Sycamore Landfill as a potential historical resource on the appropriate DPR 523 form(s). Or, alternately, please provide a compelling rationale for why the landfill should not be subject to such an evaluation.

Technical Area:	Land Use
Author:	Andrea Koch

# BACKGROUND: CONSTRUCTION LAYDOWN AND PARKING LOCATIONS

The AFC states on page 2-3: "The proposed approximately 5-acre temporary construction laydown and parking area is proposed to be located on previously disturbed Sycamore Landfill property approximately one-half mile from the plant site, subject to approval of the property owner, Sycamore Landfill, Inc. Additional construction personnel parking will be located offsite on Mission Gorge Road with shuttle service to construction areas".

AFC Figures 2.1-2 and 2.1-3 show the approximate location of the construction personnel parking on Mission Gorge Road, but the precise location is difficult to determine. Also, this parking area appears to be located in the City of Santee.

#### DATA REQUESTS

- 35. Please provide sufficient information (APN, address, and/or cross-streets) to identify the exact location of the proposed construction personnel parking area on Mission Gorge Road.
- 36. For the Mission Gorge Road property, please identify existing land uses and the City of Santee's applicable zoning and General Plan land use designations.
- 37. After finalization of the proposed location of the five-acre laydown and parking area on Sycamore Landfill property, please provide a map showing the location of this area in relation to the project site.

## BACKGROUND: COPIES OF CUP AND SDP SUBMITTALS

The Warren-Alquist Act gives permitting authority for this project to the Energy Commission. As such, the issuance of a certificate by the Commission shall be in lieu of any permit, certificate, or similar document required by any state, local or regional agency. As part of the Energy Commission's project review, staff must analyze whether the project complies with the laws, ordinances, regulations, and standards (LORS) of the local agencies (in this case, the City of San Diego) that would normally have jurisdiction if the project did not meet the thresholds for Energy Commission review. If not for the Energy Commission's jurisdiction over the project, the City of San Diego would need to issue a Conditional Use Permit (CUP) and Site Development Permit (SDP) for project construction. Therefore, Energy Commission staff must evaluate in the Staff Analysis whether or not the project would meet the requirements for issuance of a CUP and SDP.

February 7, 2012

During a meeting between Energy Commission staff and City of San Diego Planning staff on 1/9/12, it was agreed that the City would provide review and comment regarding whether the project meets the requirements for a CUP and SDP. The applicant has agreed to voluntarily submit application materials to the City to enable City staff to review and comment on the project.

#### DATA REQUEST

38. Please provide copies of the application materials submitted to the City of San Diego for the Conditional Use Permit (CUP) and Site Development Permit (SDP) review.

Technical Area:SocioeconomicsAuthor:Lisa Worrall

#### **BACKGROUND: SCHOOLS**

On page 4.6-19, the AFC states that the proposed project is in the attendance area for West Hills High School (Grossmont Union High School District) and the nearest K-8 school in the Santee School District is Carlton Oaks. The current school impact fee for commercial/industrial projects for Grossmont Union High School is \$0.16 per square foot, and \$0.29 per square foot for the Santee School District. There is no mention in the AFC of "charged covered and enclosed space," which can be used to determine the amount of the impact fee.

#### DATA REQUEST

39. Please provide an estimation of the project's applicable square footage and the school impact fees for the project for the Grossmont Union High School and the Santee School District.

**Technical Area:** Soil and Water Resources **Author:** Abdel-Karim Abulaban, P.E.

## BACKGROUND

The proposed project site is located in a steep sloped canyon which drains to tributary creeks of the San Diego River. These conditions suggest the site would be prone to significant erosion from uncontrolled runoff to creeks and the San Diego River. The San Diego River is identified as an impaired waterbody and is on the Clean Water Act Section 303(d) list of impaired water bodies. According to the City of San Diego'sclassification system the site would be in a "high priority" area for mitigation of potential stormwater quality impacts.

The City of San Diego has adopted a Low Impact Development (LID) approach for management of stormwater discharges. The LID approach includes requirements for continuous hydrologic modeling for 30 years to ensure that peak flows corresponding to the 2- and 10-year return periods stay within 10 percent of pre-development conditions. The LID approach also requires that developers identify and implement treatment methods so that stormwater flows do not exceed water quality limits set by the Regional Water Quality Control Board (RWQCB) to protect impaired receiving water bodies.

These requirements are part of a Hydromodification Plan (HMP) required for compliance with the City of San Diego's stormwater management program.

Upon examination of the Application for Certification (AFC), staff concluded that the applicant did not address the specific stormwater quality requirements of the City of San Diego and did not present any specific plans as to how the applicant plans to address those requirements.

#### DATA REQUEST

40. Please provide a conceptual hydromodification plan which shows what methods will be used to satisfy the requirements of the City of San Diego pertaining to the collection and discharge of stormwater from the project site as well as management of off-site flows.

**Technical Area:** Traffic and Transportation **Author:** John Hope

#### BACKGROUND

On page 4.4-6 of the AFC, Table 4.4-4 lists the recommended level of service (LOS) requirements and volume-to-capacity (V/C) ratio thresholds. Specifically, Table 4.4-4 identifies a recommended minimum LOS on county roadways by SANDAG, a recommended target LOS for freeways by Caltrans, and a recommended allowable increase in V/C for freeways and roadways by the City of San Diego and City of Santee.

#### DATA REQUEST

41. Please provide the sources used to obtain this information for each jurisdiction (i.e., SANDAG, Caltrans, City of San Diego, and City of Santee) including names of agencies with ownership of the documents, the document titles, and page numbers.

## BACKGROUND

On page 4.4-7 of the AFC, Table 4.4-5 identifies the *Sycamore Landfill Master Plan Draft EIR* (2008) as the information source for LOS and V/C ratios at intersections and on freeway and roadway segments in the project area. We consider the baseline data provided in the *Sycamore Landfill Master Plan Draft EIR* to be outdated. However, the *Sycamore Landfill Master Plan Draft EIR* recommends mitigation measures (e.g., improvements to Mast Boulevard/Sycamore Landfill Road intersection) that could be applicable to reducing potential impacts of the Quail Brush generation project.

- 42. Please provide a traffic impact analysis that utilizes more recent baseline data from a reliable source.
- 43. Please provide updated information regarding the development status of the Sycamore Landfill Expansion project.

#### BACKGROUND

On page 4.4-10 of the AFC, Table 4.4-6 lists the estimated average and peak traffic generated by construction activities. Table 4.4-8 lists the estimated trip distribution during construction of the project.

#### DATA REQUEST

- 44. Please provide information showing how trip numbers add up to or correlate with traffic numbers listed in Table 4.4-6.
- 45. Please provide information showing how trip percentages add up to 100 percent.

#### BACKGROUND

On page 4.4-11 of the AFC, it is stated that anticipated materials and equipment hauling route is expected to originate from I-5 or I-15, to SR 52 east, to Mast Boulevard exit, Mast Boulevard to Sycamore Landfill Road, and then the project site road.

On page 4.4-11 of the AFC, it is stated that anticipated worker commuting route is expected to originate from I-5 or I-15, to SR 52 east, exiting to Mast Boulevard, and then accessing Sycamore Landfill Road.

#### DATA REQUEST

46. Please identify why SR 125 and SR 67 are not considered as potential routes for accessing the project site.

#### BACKGROUND

On page 4.4-12 of the AFC, it is concluded that the addition of maximum construction trips to the offsite parking area and the project site would comprise less than 4 percent of 2009 peak hour trips on SR 52 in the project area. On page 4.4-12 of the AFC, it is concluded that the addition of maximum construction trips to the offsite parking area and the project site would not increase the V/C ratio on SR 52 above the 0.01 threshold.

## DATA REQUESTS

- 47. Please provide calculations used to reach the conclusion that construction traffic would comprise less than 4 percent of 2009 peak hour trips on SR 52 in the project area.
- 48. Please provide calculations used to reach the conclusion that construction traffic would not increase the V/C ratio on SR 52 above the 0.01 threshold.

## BACKGROUND

On page 4.4-12 of the AFC, it is concluded that the addition of maximum construction trips to the offsite parking area and the project site would comprise less than 2 percent of 2009 peak hour trips on West Hills Parkway in the project area. On page 4.4-12 of the AFC, it is stated that most construction workers would use West Hills Parkway and Mission Gorge Road to access the offsite parking area.

#### DATA REQUESTS

- 49. Please provide calculations used to reach the conclusion that construction traffic would comprise less than 2 percent of 2009 peak hour trips on West Hills Parkway in the project area.
- 50. Please provide calculations used to reach the conclusion that construction traffic would not result in significant impacts on Mission Gorge Road in the project area.

#### BACKGROUND

Page 4.4-17 of the cumulative impact section of the AFC, states that only one project is considered to have the potential for cumulative impacts.

#### DATA REQUEST

51. Please provide explanation as to why the Castelrock and Fanita Ranch projects would not contribute to cumulative traffic impacts during construction activities.

#### BACKGROUND

On page 4.4-18 of the AFC, it is noted that Phase 2 of the SR 52 Expansion Project could be under construction during the first portion of QBGP construction timeframe.

## DATA REQUEST

52. Please provide the estimated average and peak traffic generated by construction activities and trip distribution for the SR 52 Expansion Project.

#### BACKGROUND

The AFC and Action Item Response Memo (January 2012) do not provide information related to the truck traffic generated by existing operations at the Sycamore Landfill.

## DATA REQUESTS

- 53. Please provide the existing average daily truck trips along Sycamore Landfill Road generated by operations at the Sycamore Landfill.
- 54. Please identify and quantify (e.g., changes in LOS, V/C ratio, delay) any potential impacts the Quail Brush project could create when its construction traffic is combined with existing truck traffic generated by Sycamore Landfill operations. Please discuss feasible mitigation for any significant cumulative impacts.

**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 Quail Brush Generation Project (QBGP) in the San Diego Gas & Electric (SDG&E) transmission system. The interconnection must

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comply with the Utility Reliability and Interconnection standards, North American Electric Reliability Corporation (NERC) Reliability Standards, Western Electric Coordinating Council (WECC) Regional System Performance Criteria, and California Independent System Operator (California ISO) Planning and Interconnection Standards. In addition 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 compliance with planning, reliability and interconnection standards and criteria, and the identification of direct or indirect downstream transmission impacts, staff relies on the Phase II Interconnection Study Report (Group Report with the cluster projects in a transmission area including the proposed project) and the corresponding Phase II Individual Project Report for the interconnection of the proposed project (QBGP) performed by the agencies responsible for insuring the interconnecting grid meets the reliability standards, performance criteria, and interconnection standards, in this case, the California ISO and SDG&E. 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 the transmission 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 QBGP 230/13.8 kV switchyard regarding its physical layout is incomplete in the AFC (AFC, section 2.5.5, page 2-27).

# DATA REQUEST

55. Provide a physical layout drawing of the QBGP 230/13.8 kV switchyard showing all major equipment (generators, buses, transformers, breakers and disconnect switches etc.) and transmission line outlet(s).

## BACKGROUND

The submitted design diagram for 230 kV cable termination/riser pole is incomplete and the underground 230 kV cable line (part of generator tie line) construction design diagram was not provided (Data Adequacy Supplement to AFC, Attachment G, Exhibit 2).

- 56. Resubmit your Drawing Exhibit 2 and provide a clear design diagram of the proposed underground 230 kV single circuit cable termination/riser steel pole showing configuration of the phase conductors & insulators, aluminum/PVC conduits & conduit adapters, insulated 230 kV cable rise and cable terminators/potheads, surge arresters, and post insulators (if any) with their respective position measurements on the pole.
- 57. For the proposed 230 kV underground cable line, submit design diagram of the Duct Bank construction details which would be embedded in concrete base

showing its depth and width below the ground level and configuration of a single circuit 230 kV cable line with three single core insulated cables (with provision of a spare cable, if necessary) including grounding & communication cables within PVC conduits with their sizes and respective position measurements. Provide the depth of the concrete base from the ground surface and positions of the warning tapes.

Technical Area:	Worker Safety and Fire Protection
Author:	Rick Tyler

#### BACKGROUND

The Quail Brush Generating Project will bring a large scale industrial facility into the jurisdiction of City of San Diego Fire-Rescue Department (SDFRD). First responder and fire protection services will be required for the project and will be provided by the SDFRD. Construction and operation of the project will increase the assets that the fire department must protect and potentially increase call frequency for emergency first aid and medical services. Energy Commission staff requires assurance that after applying any proposed mitigations, the fire department's increased responsibility will not adversely affect to a significant extent its ability to continue providing service to the public.

## DATA REQUEST

58. Please provide a letter, email, or record of conversation with the SDFRD that confirms the absence, or mitigation, of any expected impacts on the local fire district resulting from construction and operation of the proposed project. This should consider new funding of the Department through property tax revenue changes resulting from the project.

Or, in the absence of a letter or communication confirming agreement between the applicant and the SDFRD, please provide a Fire and Emergency Services Risk Assessment and a Fire Protection and Emergency Services Needs Assessment for the construction and operation of the project that provides an objective estimate of both equipment and staffing shortfalls (if any) and the associated recommended mitigations (if any) that would be required by SDFRD to maintain adequate level of readiness to respond to the public.

The Fire and Emergency Services Risk Assessment and a Fire Protection and Emergency Services Needs Assessment should take into account the guidance provided by <u>NFPA 1710</u>: <u>Standard for the Organization and Deployment of Fire</u> <u>Suppression Operations, Emergency Medical Operations, and Special</u> <u>Operations to the Public by Career Fire Departments</u> and by <u>NFPA 551</u>: <u>Guide</u> <u>for the Evaluation of Fire Risk Assessments</u>. The Fire Protection and Emergency Services Needs Assessment should address emergency fire and medical response and equipment, staffing, and location needs while the Risk Assessment should be used to establish the risk (chances) of significant impacts occurring. The Fire Protection and Emergency Services Needs Assessment and Risk Assessment should evaluate the following: (a) the risk of impact on the local population that could result from potential unmitigated impacts on local fire protection and emergency services (i.e. "drawdown" of emergency response resources, extended response times, etc.) and (b) recommend an amount of funding that should be provided and used to mitigate any identified impacts on local fire protection and emergency medical response services.



BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION OF THE STATE OF CALIFORNIA 1516 NINTH STREET, SACRAMENTO, CA 95814 1-800-822-6228 – WWW.ENERGY.CA.GOV

#### APPLICATION FOR CERTIFICATION FOR THE QUAIL BRUSH GENERATION PROJECT

#### APPLICANT

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Cogentrix Energy, LLC Gary Palo, VP Development 6 Belcourt Drive Newport Beach, CA 92660 garypalo@cogentrix.com

#### APPLICANT'S CONSULTANTS

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\*Tetra Tech EC, Inc. Barry McDonald VP Solar Energy Development 17885 Von Karmen Avenue, Suite 500 Irvine, CA 92614-6213 <u>e-mail service preferred</u> <u>barry.mcdonald@tetratech.com</u>

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#### **INTERESTED AGENCIES**

California ISO <u>e-mail service preferred</u> <u>e-recipient@caiso.com</u>

\*City of Santee Department of Development Services Melanie Kush, Director of Planning 10601 Magnolia Avenue, Bldg. 4 Santee, CA 92071 <u>mkush@ci.santee.ca.us</u>

#### DOCKET NO. 11-AFC-3

PROOF OF SERVICE (Revised 1/19/2012)

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#### **DECLARATION OF SERVICE**

I, <u>Diane Scott</u>, declare that on, <u>February 7</u>, 2012, I served and filed copies of the attached, <u>OUAIL BRUSH</u> <u>GENERATION PROJECT (11-AFC-3)</u>, <u>Staff's Data Requests</u>, <u>1</u> through <u>58</u>, dated <u>February 7</u>, 2012. The original document, filed with the Docket Unit or the Chief Counsel, as required by the applicable regulation, is accompanied by a copy of the most recent Proof of Service list, located on the web page for this project at: [http://www.energy.ca.gov/sitingcases/guailbrush/index.html].

The document has been sent to the other parties in this proceeding (as shown on the Proof of Service list) and to the Commission's Docket Unit or Chief Counsel, as appropriate, in the following manner:

#### (Check all that Apply)

For service to all other parties:

- X Served electronically to all e-mail addresses on the Proof of Service list;
- X Served by delivering on this date, either personally, or for mailing with the U.S. Postal Service with firstclass postage thereon fully prepaid, to the name and address of the person served, for mailing that same day in the ordinary course of business; that the envelope was sealed and placed for collection and mailing on that date to those addresses **NOT** marked "e-mail preferred."

#### AND

#### For filing with the Docket Unit at the Energy Commission:

- X by sending an electronic copy to the e-mail address below (preferred method); OR
- by depositing an original and 12 paper copies in the mail with the U.S. Postal Service with first class postage thereon fully prepaid, as follows:

CALIFORNIA ENERGY COMMISSION – DOCKET UNIT

Attn: Docket No. 11-AFC-3 1516 Ninth Street, MS-4 Sacramento, CA 95814-5512 docket@energy.state.ca.us

#### OR, if filing a Petition for Reconsideration of Decision or Order pursuant to Title 20, § 1720:

Served by delivering on this date one electronic copy by e-mail, and an original paper copy to the Chief Counsel at the following address, either personally, or for mailing with the U.S. Postal Service with first class postage thereon fully prepaid:

California Energy Commission Michael J. Levy, Chief Counsel 1516 Ninth Street MS-14 Sacramento, CA 95814 <u>mlevy@energy.state.ca.us</u>

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct, that I am employed in the county where this mailing occurred, and that I am over the age of 18 years and not a party to the proceeding.

Originally Signed by Diane Scott