DOCKETED	
Docket Number:	12-AFC-03
Project Title:	Redondo Beach Energy Project
TN #:	200849
Document Title:	Data Request Set 1 (Nos. 1-47)
Description:	N/A
Filer:	Alicia Campos
Organization:	California Energy Commission
Submitter Role:	Commission Staff
Submission Date:	10/15/2013 9:25:09 AM
Docketed Date:	10/15/2013

CALIFORNIA ENERGY COMMISSION

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



October 15, 2013

Stephen O'Kane AES Southland, LLC 690 Studebaker Road Long Beach, CA 90803

Regarding:

REDONDO BEACH ENERGY PROJECT (12-AFC-03)

DATA REQUEST SET 1 (Nos. 1-47)

Dear Mr. O'Kane,

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 (Nos. 1-47) are being made in the technical areas of: Air Quality (Nos. 1-19), Biological Resources (Nos. 20-25), Noise and Vibration (Nos. 26-30), Socioeconomics (Nos. 31-33), Traffic and Transportation (Nos. 34-40), Transmission System Engineering (Nos. 41-42), and Visual Resources (Nos. 43-47). Written responses to the enclosed data requests are due to the Energy Commission staff on or before November 15, 2013.

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) 654-4063.

Sincerely.

Patricia Kelly, Siting Project Manager Siting, Transmission and Environmental

Protection Division

Enclosure (Data Request Packet) cc: Docket (12-AFC-03)

REDONDO BEACH ENERGY PROJECT (12-AFC-03)

Energy Commission Staff's Data Requests Set 1 (Nos. 1-47)

October 15, 2013

Technical Area: Air Quality

Authors: Joseph Hughes & Brewster Birdsall

PROJECT PERMITS: BACKGROUND

The proposed project will require a Preliminary Determination of Compliance (PDOC) and a Final Determination of Compliance (FDOC) from the South Coast Air Quality Management District (SCAQMD 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 may arise during preparation of the Preliminary or Final Staff Assessments.

DATA REQUEST

1. Please provide copies of all substantive District correspondence regarding the Redondo Beach Energy Project (RBEP) PDOC and FDOC preparation, including emails, within one week of submittal or receipt. This request is in effect until the final Energy Commission Decision has been adopted.

EMISSION ESTIMATES: BACKGROUND

Appendix 5.1A (Construction Emission Calculations), and 5.1B (Operational and Commissioning Emission Calculations) of the AFC are used to document emission calculations. Staff needs the original spreadsheet files of these estimates with live, embedded calculations to complete their review.

DATA REQUEST

2. Please provide the spreadsheet version of Appendix 5.1A and Appendix 5.1B work sheets with embedded calculations, live and intact.

EMERGENCY EQUIPMENT: BACKGROUND

The Application for Certification (AFC), Section 5.1.2, proposes the use of two electric fire pumps, connected to two independent power feeds from the Southern California Edison distribution system, to provide onsite fire protection. It is unclear if the electric fire pumps would be able to provide fire protection during times of electric grid blackouts. Staff is concerned that if these engines are not able to provide fire protection during electric grid black outs, alternative fire pump engines (e.g. natural gas or diesel) would be needed and the potential emissions from these engines should be included in the AFC. Additionally, the AFC does not propose the use of an emergency generator for backup power support necessary to bring equipment offline to avoid equipment damages and for other auxiliary equipment support.

DATA REQUEST

3. Please explain how the fire pump engines could be operational during times when electricity is not available from the independent power feeds. Are these two independent power feeds sufficient to ensure that electric power would always be available for fire protection?

- 4. If the fire pump engines are unable to provide fire protection during times electricity is unavailable from the independent power feeds, how would AES Southland Development, LLC (AES or applicant) provide fire protection? Would AES consider using either natural gas or diesel fire pump engines? If so, please quantify the emissions from these engines for readiness testing and maintenance purposes, and include emissions from these fire pump engines in the air quality modeling assessment.
- 5. If the applicant is considering the use of an onsite natural gas or diesel-fueled generator engine for backup power support, please quantify emissions from the engine for readiness testing and maintenance purposes, and include emissions from the generator engine in the air quality modeling assessment.

DEMOLITION AND OPERATION OVERLAP IMPACTS: BACKGROUND

AFC Section 5.1.1 explains that the first activities to occur onsite would be the dismantling and partial removal of existing units 1-4 starting January 2016, while the existing units 5-8 and auxiliary boiler number 17 would remain in service until the second quarter of 2018. The construction and demolition emission estimates in AFC Appendix 5.1A do not appear to include simultaneous operation of the existing power plant or the proposed RBEP. Staff needs to evaluate the impacts associated with the overlap in emissions from demolition of units 1-4 and potential worst-case permitted operation of units 5-8 and auxiliary boiler number 17. Similarly, staff needs to evaluate the impacts associated with the overlap in emissions from operation of the proposed RBEP during demolition of units 5-8 and auxiliary boiler number 17.

DATA REQUEST

- 6. Please provide operating permits and emission limits for existing units 5-8 and auxiliary boiler number 17.
- 7. Please provide emission estimates associated with the worst-case potential operation of units 5-8 and auxiliary boiler 17, and demolition of units 1-4.
- 8. Please model the impacts from emissions associated with the demolition of units 1-4 and simultaneous operation of units 5-8 and auxiliary boiler 17, as quantified in the prior data request.
- 9. Please model the impacts from emissions associated with the demolition of units 5-8 and auxiliary boiler 17 and simultaneous operation of the proposed RBEP.

COMMISSIONING IMPACTS: BACKGROUND

Section 5.1.6.1.2 and Section 5.1.6.3 (Table 5.1-28) of the AFC say that the annual-average impacts for the commissioning period were not evaluated because commissioning is expected to be completed within 180 days and the combined commissioning and operation emissions for a rolling 12-month period are not expected to exceed the maximum permitted annual emissions evaluated in Section 5.1.6.1. However, Section 5.1.8.2.2 estimates SCAQMD nitrogen oxides (NOx) RECLAIM requirements to be higher for the first year of operation than that of subsequent years

due to commissioning and worst case routine annual operations occurring in the same (first) year. Staff needs to evaluate the annual impacts for the commissioning period plus routine operation for the remainder of that year to determine compliance with the corresponding ambient air quality standards.

DATA REQUEST

10. Please provide air quality modeling for the annual impacts during the commissioning phase and subsequent operations to determine compliance with the annual-average ambient air quality standards.

CUMULATIVE IMPACTS: BACKGROUND

Section 5.1.7 and Appendix 5.1F, Section 8, of the AFC, describe the methodology for the cumulative effects analysis, but the AFC does not include the analysis because a project list had not been provided by the District at the time the AFC was prepared. The cumulative analysis should include all reasonably foreseeable projects within a six mile radius, i.e. projects that have received construction permits but are not yet operational, and those that are in the permitting process or can be reasonably expected to be in permitting in the near future. A complete impacts analysis should identify all existing and planned stationary sources that affect the baseline conditions and consider them in the modeling effort.

DATA REQUEST

- 11. Please provide a copy of the applicant's correspondence to and from the District regarding existing and planned cumulative sources located within six miles of the project site.
- 12. Please provide a list of all sources to be considered in the cumulative air quality impact analysis for staff review and approval.
- 13. Upon approval of the list of sources to be included in the cumulative air quality impact analysis, please provide the cumulative modeling and impact analysis.

MITIGATION FOR NON-ATTAINMENT EMISSIONS AND PRECURSOR EMISSIONS: BACKGROUND

Section 5.1.8.2.2 of the AFC indicates that although RBEP would otherwise be required to provide emission offsets for particulate matter (PM10/PM2.5), sulfur oxides (SOx), and volatile organic compounds (VOCs) under SCAQMD Rule 1303(b)(2), the RBEP would be exempt from this requirement under SCAQMD Rule 1304(a)(2), which transfers the responsibility to the SCAQMD to provide offsets consistent with Rule 1303. Using Rule 1304(a)(2) would make the project subject to the new Rule 1304.1 regarding fees, adopted September 6, 2013, although the AFC does not address this rule because the project was proposed before the rule was established. The applicant acknowledges that it would be required to provide RECLAIM trading credits (RTC) for nitrogen oxides (NOx) under SCAQMD Rule 2005.

However, staff's analysis under the California Environmental Quality Act (CEQA) must determine the significance of impacts, which is based on whether all non-attainment emissions and precursor emissions (i.e. NOx, VOCs, PM10/PM2.5, and SOx) would be mitigated. This could be demonstrated through the emissions reductions achieved by the permanent retirements of existing electric generating facilities, by securing and surrendering formal emission reduction credits (ERCs), or using non-traditional emission reduction programs to mitigate non-attainment emissions and precursor emissions. Non-traditional reductions would be from programs that reduce emissions in ways that may be ineligible for use in an air district's official ERC banking program, such as through mobile source control measures.

Information submitted by AES to Energy Commission staff does not provide sufficient detail regarding the specific CEQA mitigation plan. Section 5.1.8.2.2 describes plans for permanently retiring the existing Redondo Beach Generating Station Unit 7 (480 MW) and using 50 MW from the retirement of Redondo Beach Generating Station Units 6 and 8 and Huntington Beach Generating Station Units 1 and 2. The AFC Table 5.1-17 shows past actual emissions for the Redondo Beach Generating Station units, but the potential emissions reductions from all the retirements described are not totaled in the AFC. If ERCs 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 AES proposes to use. If non-traditional mitigation programs would be used, staff needs to know the proposed strategies to reduce emissions in the near vicinity of the project and the effectiveness of such strategies. 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

- 14. Please provide a tabulated list showing all emission reductions expected to be used, including: retiring existing electric generation facilities (consistent with Rule 1303), offsets, and Emission Reduction Credits (ERCs). The list should indicate the proposed quantity of each reduction, including their locations, in a quantity sufficient to fully mitigate the project's emissions of non-attainment pollutants and their precursors. This list should show the emission reductions AES expects to achieve by retiring the existing Redondo Beach Generating Station Unit 7 (480 MW) and using 50 MW from the retirement of Redondo Beach Generating Station Units 6 and 8 and Huntington Beach Generating Station Units 1 and 2, as described on AFC p. 5.1-32.
- 15. Please identify and describe the applicability of SCAQMD Rule 1304.1, adopted September 6, 2013, and outline how AES intends to achieve compliance with this new regulation.

Technical Area: Greenhouse Gas Emissions

Authors: Joseph Hughes & Brewster Birdsall

CONFIRMATION OF HEAT INPUT AND OPERATING PROFILE: BACKGROUND

The Project Description in AFC Section 2.7, Thermal Efficiency, identifies a maximum fuel consumption (heat input) rate of 3,948 MMBtu/hr, although much higher heat input rates (5,996 MMBtu/hr) appear in the AFC Air Quality section (Table 5.1-16). Additionally, the SCAQMD will need to determine under the Prevention of Significant Deterioration (PSD) program whether the thermal efficiency achieves the Best Available Control Technology (BACT) for greenhouse gas emissions (GHG). The determination may also need to address compliance with New Source Performance Standards for Electric Utility Generating Units (revised proposal on September 20, 2013). These determinations will be based on SCAQMD's review of the proposed carbon dioxide (CO₂) emissions rate and comparisons to similar power plants. Although RBEP would be a combined-cycle power plant and the project could be operated at base load (AFC Section 2.4), the applicant requests that since RBEP is designed for peak and intermediate loads it should be compared "with simple cycle or peaking units instead of combined-cycle or more base-loaded units" (GHG BACT analysis in Section 3 of AFC Appendix 5.1D).

- 16. Please confirm the maximum heat input rates for the units, and describe what caused the apparent discrepancies in fuel consumption values in AFC Section 2.7 and AFC Air Quality Table 5.1-16.
- 17. Please describe whether the applicant would be willing to accept a limit on facility-wide annual electrical output (megawatt hours per year) or CO₂ emissions (metric tons per year), if necessary, for example, to avoid classification as a base-loaded facility for purposes of determining BACT for GHG emissions.
- 18. Under what condition would the RBEP need to limit operation to avoid the limit imposed by the data request above?
- 19. How would RBEP comply with the (currently proposed) September 20, 2013 federal New Source Performance Standards for Electric Utility Generating Units (Proposed Rule at 40 CFR 60 Subpart TTTT)?

Technical Area: Biological Resources

Author: Andrea Martine

NITROGEN DEPOSITION: BACKGROUND

Impacts of excessive nitrogen deposition to plant communities include direct toxicity and changes in species composition among native species such as enhancement of nonnative invasive species. The increased dominance and growth of invasive annual grasses is especially prevalent in low-bio-mass vegetation communities that are naturally nitrogen limited. Although the Redondo Beach Energy Project (RBEP) site does not contain suitable habitat for listed species, there is critical habitat for western snowy plover, federally listed as threatened and a state Special Species of Concern, within 1 mile north of the project site and at the Madrona Marsh Nature Preserve, which is approximately 3.4 miles southeast. The Madrona Marsh Nature Preserve has federally listed fairy shrimp and vernal marsh, back dune, and vernal pool habitats that are sensitive to increased nitrogen levels. Although air emissions including nitrogen oxides (NOx) were discussed in the AFC, no model or data to determine the total nitrogen deposition rate as well as the extent of the plume from the proposed project site were provided. Energy Commission staff believes that nitrogen deposition resulting from emission of nitrogen oxides (NOx) and ammonia (NH3) during operation of the proposed project could have negative impacts on biological resources nearby if the nitrogen deposition plume covers these areas.

DATA REQUESTS

- 20. Please quantify the existing baseline total nitrogen deposition rate, in the vicinity of the RBEP, in kilograms per hectare per year (kg/ha/yr). 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. Thresholds for nitrogen deposition by vegetation type are available within the March 2007 California Energy Commission 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 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. Please include references and guidelines used in your baseline analyses.
- 21. Please use AERMOD or an equivalent model to provide an analysis of impacts due to total nitrogen deposition from operation of the RBEP. The analysis should specify the amount of total nitrogen deposition in kg/ha/yr at the designated critical habitat for western snowy plover (*Charadrius nivosus nivosus*), Madrona Marsh Nature Preserve, and any other sensitive vegetation communities or habitats that occur in the project area for wet and dry deposition. Please provide complete citation for references used in determining this number.

- 22. Please provide an isopleths graphic over the most recent aerial photographs (or equally detailed maps) of the direct nitrogen deposition rates caused by the RBEP. This will be a graphical depiction of the project's nitrogen deposition.
- 23. Please provide a comprehensive cumulative impact analysis for the nitrogen deposition in kg/ha/yr caused by RBEP in combination with other reasonably foreseeable projects and provide an isopleths graphic over the most recent aerial photographs of the nitrogen deposition values.

EL SEGUNDO BLUE BUTTERFLY

Habitat for the El Segundo blue butterfly (federally endangered) occurs along the southeastern shores of Santa Monica Bay. It has been the target of major restoration efforts by numerous government agencies, including the city of Redondo Beach. No impact analysis for this species was provided in the AFC. This species has been observed at the Esplanade Bluff Cliffs south of the project site (Aaron Jones pers. comm.).

DATA REQUEST

24. Please provide an impact (direct and indirect) analysis and proposed mitigation measures for any significant impacts to the El Segundo Blue Butterfly.

WESTERN BURROWING OWL

The AES Redondo Application Data Adequacy Assessment (TN 69046) submitted by Building a Better Redondo, NoPowerPlant.com, and Redondo City Councilman Bill Brand mentions an observation of burrowing owl (State Species of Special Concern and protected under the Migratory Bird Treaty Act) in the Southern California Edison right-of-way east of the project site. A reconnaissance survey was conducted on September 29, 2011, which is too late to detect species that may utilize the area for nesting or foraging. Although the project site provides no habitat for the species, any existence of potential suitable foraging habitat near the project site should be analyzed.

DATA REQUEST

25. Please provide an impact (direct and indirect) analysis for burrowing owl and proposed mitigation measures for any significant impacts.

Technical Area: Noise and Vibration

Author: Edward Brady

BACKGROUND

AFC § 5.7 and Appendix 5.7A provide existing ambient noise measurements and analysis of project noise impacts at only two receptor locations, one to the south and another to the west of the project site, designated M1 and M2 (respectively) in AFC Figure 5.7-1. No noise measurements or analysis for the residential communities northwest, northeast, and southeast of the site have been provided in the AFC. For staff to adequately evaluate project noise impacts at all of the project's noise-sensitive receptors within both Redondo Beach and Hermosa Beach, staff needs the following data.

DATA REQUESTS

- 26. Please perform 25-hour continuous ambient noise measurements at or near the residential areas in Hermosa Beach north of Herondo Street and northwest of the project site, particularly at the single-family residences on Herondo Street bounded by Hermosa Avenue, Lyndon Street, and Monterey Blvd (AFC Figure 2.1-1) and provide the results in terms of L_{eq} , L_{10} , L_{50} , L_{90} , L_{min} and L_{max} . Using these measurements, calculate the average L_{90} for the four quietest consecutive hours during the nighttime period of 10 p.m. 7 a.m. and the average L_{eq} for the daytime period of 7 a.m. 10 p.m.
- 27. Please perform 25-hour continuous ambient noise measurements at or near the residential areas in Hermosa Beach north of Herondo Street and northeast of the project site, particularly at the multifamily residences bounded by 1st and 2nd Streets, Valley Drive and Ardmore Avenue (AFC Figure 5.7-3) and provide the results in terms of L_{eq} , L_{10} , L_{50} , L_{90} , L_{min} and L_{max} . Using these measurements, calculate the average L_{90} for the four quietest consecutive hours during the nighttime period of 10 p.m. 7 a.m. and the average L_{eq} for the daytime period of 7 a.m. 10 p.m.
- 28. Please perform 25-hour continuous ambient measurements at or near the residential areas in Redondo Beach east of North Catalina Avenue bounded by Beryl Street, North Elena Avenue, and North Broadway (AFC Figure 2.1-1) and provide the results in terms of L_{eq} , L_{10} , L_{50} , L_{90} , L_{min} and L_{max} . Using these measurements, calculate the average L_{90} for the four quietest consecutive hours during the nighttime period of 10 p.m. 7 a.m. and the average L_{eq} for the daytime period of 7 a.m. 10 p.m.
- 29. Provide the expected project operational noise levels at the locations described in Data Requests 26 and 27 above and compare these noise levels with the applicable city of Hermosa Beach noise limitations given in AFC Table 5.7-14 and Figure 5.7-3.
- 30. Provide the expected project operational noise level at the location described in Data Request 28 above and compare this noise level with the applicable city of Redondo Beach noise limitations given in AFC Tables 5.7-12 and 5.7-13 and Figure 5.7-2.

Technical Area: Socioeconomics

Author: Lisa Worrall

BACKGROUND: CONSTRUCTION WORKFORCE

Table 5.10-B from Appendix 5.10-B of the AFC presents the RBEP craft construction workforce by month and by trade type (e.g. boilermakers, carpenters, plumbers). This information is helpful for staff to match up workforce needs with labor supply, as reported by the California Employment Development Department's Projections of Employment by Industry and Occupation. Table 5.10-B does not specify the supervisors by trade type or standard occupation classification code (SOC). So that staff can more accurately match project workforce with labor supply, please provide information on the supervisor workforce as described below.

DATA REQUEST

31. Please identify the types of occupations associated with the supervisor labor estimates provided in Table 5.10-B of the AFC. This should include a description of the work conducted by each type of supervisor and the identification of an associated SOC code, where applicable.

BACKGROUND: HOUSING

The region of influence for socioeconomics impacts associated with the RBEP is identified on page 5.10-1 of the AFC as the city of Redondo Beach and Los Angeles County. Housing data has been provided for the region of influence, specifically the number of housing units by type (e.g. single-family, multi-family, mobile homes) and vacancy rate. The housing impacts discussion on page 5.10-9 of the AFC notes there are numerous hotels/motels in Los Angeles County and other neighboring counties to accommodate workers who may choose to commute to the project site on a workweek basis. The AFC also notes there are a few recreational vehicle (RV) parks within driving distance of Redondo Beach.

So staff can analyze the potential project impacts related to the adequate supply of housing and lodging, additional information is needed, as identified below.

DATA REQUESTS

- 32. Please provide hotel/motel lodging availability in the project area (the cities in and adjacent to the project area six mile buffer), including the number of hotels/motels and lodging rooms in the project area and average occupancy rate.
- 33. Please provide the names and number of spaces at campgrounds and RV parks available for use by the project's workforce.

Technical Area:

Traffic and Transportation

Author:

John Hope

BACKGROUND

AFC Figure 5.12-3 depicts the heavy/oversize truck route that would be used to deliver heavy and large project components to the site from the Port of Long Beach.

Staff has identified several schools and child care facilities on Torrance Boulevard, 223rd Street, and Aviation Boulevard along the proposed heavy/oversize haul route, including but not limited to, Bishop Montgomery High School, St. Abraam Child Care, Meyler Street Elementary, Carson High School, Dolores Street Elementary, Delores Children Center, Meyler Street Elementary School, Wilmington Christian School and Broad Avenue Elementary.

Often schools have events and activities in the evenings that spectators, parents and students may attend. Although the AFC states that the heavy and oversized loads would be permitted for late night deliveries, it is not clear when those deliveries would occur and there is no discussion of this in the Environmental Analysis section.

DATA REQUESTS

- 34. Please provide the time frame that the heavy/oversize components would be transported to the project site.
- 35. Please provide a discussion of the feasibility of an alternate heavy/oversize haul route(s) that would avoid schools and residential areas to the greatest possible extent.

BACKGROUND

In addition to the heavy/oversize haul route, AFC Section 5.12.1.4 (Truck Routes) identifies several potential routes for project-related trucks (construction, demolition, and operations). It appears that a portion of Aviation Boulevard used for the project truck traffic may lie within the city of Hermosa Beach and the city of Lawndale. In addition, there is reference to the use of Compton Boulevard within the city of Redondo Beach.

The AFC does not include a figure identifying the potential truck routes within the project vicinity and although staff has reviewed the potential routes, it appears that Compton Boulevard is not within the city of Redondo Beach limits. In addition, the cities of Hermosa Beach and Lawndale are not included in the list of jurisdictions having permit authority. It is unclear as to which jurisdictions will be impacted by the truck routes.

DATA REQUESTS

36. Please provide a map identifying the potential truck routes that may be utilized during the construction, demolition and operations of the proposed project as discussed in AFC Section 5.12.1.4.

37. Please identify on the map the jurisdictional boundaries that the truck routes cross, and provide an analysis of how the project would comply with track route requirements for each jurisdiction.

BACKGROUND

As identified in the Section 5.12.2.2.1 (Construction Trip Generation), the applicant proposes to use a passenger car equivalent (PCE) ratio of 1.5 passenger cars for each truck and refers to the 2000 Highway Capacity Manual (HCM) guidelines.

The most recent Transportation Research Board HCM was updated for 2010 and recent project staff assessments have used higher PCE ratios for local road impact analysis. Staff has confirmed that the PCE ratio used in the AFC is appropriate for the city of Redondo Beach. However, as indicated above, it is unclear as to what routes may be utilized and the corresponding jurisdictions.

DATA REQUESTS

- 38. Please explain why the 2000 HCM was used for the traffic analysis instead of the recently updated 2010 HCM.
- 39. Please provide updated tables that identify all the agencies that would have permitting authority, associated applicable LORS, and contact information.

BACKGROUND

As identified in the Section 5.12.1.1.3 (Existing Intersection LOS), the applicant identifies that only the PM peak hour was analyzed because this "provides the most conservative traffic operations analysis." It is unclear why analysis of only the PM peak hour is most conservative.

DATA REQUESTS

40. Please explain why analysis of only the PM peak hour and why both the AM and PM peak hour was not considered for the most conservative analysis of traffic operations.

Technical Area:

Transmission System Engineering

Authors:

Sudath Edirisuriya and Mark Hesters

BACKGROUND

Staff requires the complete Phase I and Phase II Interconnection Studies to identify potential downstream transmission facilities required to reliably interconnect the RBEP to the California ISO grid and to determine if the interconnection would comply with the NERC/WSCC, and/or Utility planning standards and reliability criteria.

DATA REQUESTS

Please submit complete Phase I and Phase II Interconnection Studies prepared by Southern California Edison (SCE) and /or California ISO for interconnection of the net output of 496 MW RBEP.

- 41. The study should include a power flow, short circuit and transient stability analyses with a mitigation plan for any identified reliability criteria violations. In the report, list all major assumptions in the base cases including major path flows, major generations including queue generation, and loads in the area systems.
- 42. Identify the reliability and planning criteria utilized to determine the reliability criteria violations.

Technical Area: Visual Resources

Author: Jeff Juarez

INTRODUCTION

In 2012, staff discussed with the applicant the selection of Key Observation Points (KOPs) for this project; however, concerns raised by the Redondo Beach community over the adequacy of the information provided in the AFC and about potential visual impacts to residential areas adjacent to the project site prompted staff to re-evaluate the KOPs for this project. As a result of this evaluative process, the following data requests are being made.

BACKGROUND

Section 5.13.1.2 of the AFC, "Regional Setting," observes that "The land on the immediate area of the project site is mostly flat... The land east of the site slopes upward – gaining approximately 200 feet within 0.5 mile – where the area is predominately neighborhood residential (single and multi-family), and where the project site, harbor, and ocean are all at least partially visible where views are unobstructed, due to the increased elevation."

The AFC describes the variation in topography that exists within a 0.5-mile distance from the project site, and it notes the predominately residential areas to the east that are situated on the elevated slope and have unobstructed views toward the project site. However, the AFC does not include a topographic map depicting the variation in elevation that exists within one half mile of the project boundary. More importantly, the AFC does not show a relationship between the viewpoint locations and the topographic elevations of the RBEP site and its surroundings.

DATA REQUEST

43. For all AFC figures depicting the locations of Key Observation Points (KOPs) please show annotated elevation contours up to 1 mile from the RBEP site. The contour intervals shall be shown as 25 foot contours.

BACKGROUND

Section 5.13.1.5 of the AFC, "Sensitive Viewing Areas and Observation Points," describes five KOPs as the representative viewpoints from the sensitive receptor locations within the project area's viewshed. The sensitive receptor locations are the view areas that would be the most sensitive to the project's potential visual impacts, and the sensitive receptors in those view areas are typically residents and recreationists.

Section 5.6.2.1.4 of the AFC, "Specific Land Uses within the Project Study Area — Residential," states "The residences closest to the RBEP site are located approximately 100 feet north of the RBEP site across Herondo Avenue within the city of Hermosa Beach." In addition, the AFC states "The closest residence to the noise-producing equipment (combustion turbine) is located approximately 600 feet to the east of the closest combustion turbine, on the northeast corner of North Catalina Avenue and North Francisca Avenue."

Additionally, Section 5.13.2.5 of the AFC, "Impact Significance," concludes "No. The proposed project would not substantially degrade the existing visual character of the project site and its surroundings." And that "The existing visual quality of the project area would be improved in all views, due to the removal of the Redondo Beach Generating Station and/or the placement of the smaller RBEP in a location that substantially reduces its prominence in views."

However, the AFC does not demonstrate that the new facilities would substantially reduce their presence in views from surrounding areas. Staff observes that the AFC did not include KOPs from the residential areas to the east, and the KOPs submitted to represent views from sensitive receptors to the north are insufficient, as discussed below.

The **KOP 4** location at Pacific Coast Highway (PCH) and Anita Street is situated at an intersection within a low-scale commercial area, and it is at an elevation similar to that of the project site, whereas multi-story residences are situated along Anita Street, which has a steep slope between PCH and Prospect Avenue, located to the east. The residences on the slope and those residential areas on a similar elevated grade that are located south of Anita Street, in Redondo Beach, and north of Diamond Street have a view down toward the ocean, the beach, and the project site.

The proposed **KOP 5** location, while it does demonstrate a high degree of visibility from residences to the north, offers only a partial view of the project site and its existing and proposed facilities, whereas the multi-story residential buildings adjacent to the park would presumably have a much more expansive view of the site. **KOP 5** does not represent the views from multi-story residences along the north side of Anita Street, in Redondo Beach, many of which are situated at higher elevations.

Considering the existing residential areas to the north and east of the project site, the current visual impacts to these areas by the existing facilities, and that the proposed project will build and operate power generating facilities (albeit smaller in scale) on the existing site but closer to residences to the north and east, little analysis was done on the potential visual impacts to these residential areas; therefore, the visual impacts to these areas and the mitigation measures proposed for the project to address visual impacts cannot be adequately assessed by staff. Additional KOPs from the north and east are necessary to assess potential visual impacts to residences, businesses, and travelers in the neighborhoods within these areas.

DATA REQUEST

44. Please prepare and submit a <u>revised KOP 5</u> to evaluate potential impacts to the multi-story residences along the north side of Herondo Street The revised KOP 5 should be located on the north side of Herondo Street at Valley Drive, and it should show the clearest possible view of the RBEP site from the residential buildings at that location. A photograph showing existing visual conditions and a visual simulation should be prepared and submitted for the revised KOP in the same format as the other KOPs in the AFC for the proposed project.

- 45. Please prepare and submit a <u>new KOP</u> to evaluate potential impacts to the multistory residences along Anita Street and to travelers (motorists, bicyclists, and pedestrians) moving west on Anita Street. The new KOP should be located east along the north side of Anita Street and just west of Prospect Avenue, where the street slope begins to descend west toward Pacific Coast Highway and the project site. This KOP will be used by staff to also assess potential impacts to the residential areas situated along the same or similar topographic slope between Anita Street and Beryl Street and that have a view down toward the RBEP site. A photograph showing existing visual conditions and a visual simulation should be prepared and submitted for the new KOP in the same format as the other KOPs in the AFC for the proposed project.
- 46. Please prepare and submit a <u>new KOP</u> to evaluate potential visual effects on the residential area just east of the project site between North Catalina Avenue, Pacific Coast Highway, and Beryl Street. The new KOP should be located on North Catalina Avenue at North Francisca Avenue and it should show the clearest possible view of the RBEP site, particularly the location of the new facilities, from that location. A photograph showing existing visual conditions and a visual simulation should be prepared and submitted for the new KOP in the same format as the other KOPs in the AFC for the proposed project.

BACKGROUND

The Harbor/Civic Center Specific Plan 2008, 5.6 Catalina Avenue Corridor Sub-Area Goals, Objectives, and Policies, 5.6.1 Goals and Objectives, state "Ensure that the physical and environmental (relative to noise, light and glare, and traffic) integrity of the larger, intact, and established lower-density residential areas along the corridor (particularly on the eastern side of the Avenue between Beryl Street and Garnet Street) are respected, maintained, and protected."

AFC Figure 5.6-2, General Plan Land Use Designations, depicts both Low- and Medium-Density Residential, Commercial (primarily hotels), and Mixed-Use (which includes the Roland Mindeman Senior Residence at the Salvation Army) land uses along the Catalina Avenue Corridor (The Corridor). In addition, a Class II Bike Lane exists along the Corridor, a secondary arterial, south of Beryl Street. The proposed project, particularly the new facilities on the east side of the project site, may be highly visible from the Corridor; however, the AFC does not include a KOP representing a viewpoint from sensitive receptors within this view area.

In considering that the proposed project's new facilities will be located on the eastern portion of the project site and potentially highly visible as viewed north from Catalina Avenue, and the presence of residential areas, hotels, high traffic volume, and mix of travelers within the Corridor, a view from the Corridor is necessary to adequately assess the potential effects of the proposed project on sensitive receptors within this area.

DATA REQUEST

47. Please prepare and submit a <u>new KOP</u> from North Catalina Avenue to evaluate the potential effects of the proposed project on sensitive receptors within the Corridor. The KOP should be located to show the clearest possible view of the RBEP site from the northeast corner of North Catalina Avenue at Beryl Street. A photograph showing existing visual conditions and a visual simulation should be prepared and submitted for the new KOP in the same format as the other KOPs in the AFC for the proposed project.

REFERENCES

City of Redondo Beach (1992). City of Redondo Beach General Plan Land Use Element.
(2008). City of Redondo Beach Harbor/Civic Center Specific Plan.
(2009). City of Redondo Beach (2009). City of Redondo Beach General Plan Circulation Element.