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# Alamitos Energy Center

(13-AFC-01)

# Preliminary Staff Assessment Initial Comments

Submitted to California Energy Commission

Prepared by AES Southland Development, LLC

With Assistance from



2485 Natomas Park Drive Suite 600 Sacramento, CA 95833

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## Introduction

Listed below, for California Energy Commission (CEC) staff's consideration, are initial comments from AES Southland Development, LLC (the Applicant or AES) on the Preliminary Staff Assessment (PSA) for the Alamitos Energy Center (AEC) Supplemental Application for Certification (SAFC) (13-AFC-01). The Applicant is submitting these comments in advance of the PSA workshop for the AEC, and reserves the right to file additional comments, as necessary, prior to the close of the comment period.

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## EXECUTIVE SUMMARY

Page 1-2, Proposed Project Location and Description, 2<sup>nd</sup> paragraph – Assessor Parcel Number (APN) 7237-019-005 was inadvertently omitted from the list of applicable parcels. Please include this parcel in the list of AEC parcels.

Page 1-5, Public and Agency Coordination, 1<sup>st</sup> paragraph – This paragraph indicates that property owners within 1,000 feet of the linears received a notification of the SAFC. However, page 2-4 (under the heading Initial Outreach Efforts) notes that staff issued the required notice within 500 feet of the linear facilities. Please reconcile these two conflicting statements.

Page 1-10, Noise and Vibration – The PSA states "Also, staff's proposed conditions of certification require that nighttime concrete pouring activities remain within the required noise limits, and provide for a process of noise complaint investigation and resolution." The Applicant has concerns with the proposed condition of certification relating to nighttime concrete pouring, particularly as this is a short-term construction activity. Please see the Noise comments below for more details.

Page 1-12, Traffic and Transportation – The PSA states "A condition of certification is proposed to require the applicant to request that the FAA implement various notifications advising pilots of the location of the power plant and the potential aviation hazards associated with thermal plumes, and to avoid direct overflight of the facility, consistent with the FAA's Aeronautical Information Manual." The Applicant has concerns with the proposed condition of certification limiting overflight, as the Federal Aviation Administration (FAA) has jurisdiction over aviation safety. Please see the Traffic and Transportation comments below for more details.

Page 1-13, Visual Resources, 2<sup>nd</sup> paragraph – The PSA states "Staff proposes a condition of certification to require preparation of landscaping plans prior to project implementation to satisfy the requirements of the city of Long Beach's South East Area Development and Improvement Plan Specific Plan, the certified local coastal program for this area of the state." The Applicant has concerns with the proposed condition of certification relating to landscaping. Please see the Visual Resources comments below for more details.

Page 1-13, Visual Resources, 2<sup>nd</sup> paragraph – This paragraph should note that only the southern portion of the AEC site is located within the state's Coastal Zone.

Page 1-16, Approach to Cumulative Impact Analysis, Executive Summary Table 2, ID# 5 – The Los Angeles Department of Water and Power (LADWP) Haynes Generating Station's installation of six LMS100 simple cycle gas turbines has been completed and these units are operational. Please revise the project status from Under Construction to Operational.

Page 1-31, Environmental Justice, 3<sup>rd</sup> bullet – The description of the analysis should be clarified to state: "A determination of whether there may be a significant adverse impact <u>from the project, and if so, whether that</u> <u>impact falls disproportionately</u> on a<u>n environmental justice</u> population, of minority persons or persons below the poverty level caused <u>either</u> by the proposed project alone, or in combination with other existing and/or planned projects in the area."

### INTRODUCTION

No comments

### **PROJECT DESCRIPTION**

No comments

## **Environmental Assessment**

## AIR QUALITY

Page 4.1-1, Summary of Conclusions, 1<sup>st</sup> paragraph – AES mailed notices to parents/guardians of students attending Rosie the Riveter Charter School and all addresses within ¼ mile of the outer boundary of the facility on July 12, 2016. Notices to parents/guardians of students attending Kettering Elementary School was mailed on July 25, 2016. Additionally, per page 180 of the Preliminary Determination of Compliance (PDOC), AES has agreed to provide at least 1 pound per day (lb/day) of emission reduction credits (ERCs) for sulfur oxides (SOx) emissions (see Transaction # 212045). Therefore, the Final Staff Assessment should reflect that the AEC project does not significantly impact air quality and complies with applicable air quality regulations.

Page 4.1-12, Air Quality Table 3 – There is no federal ambient air quality standard for sulfates. Please replace the word Attainment with No Federal Standard.

Page 4.1-17, Air Quality Table 8 – The annual particulate matter with aerodynamic diameter less than or equal to 2.5 microns (PM2.5) concentration for 2009, measured at the North Long Beach monitoring station, should be 13.0 micrograms per cubic meter ( $\mu$ g/m<sup>3</sup>) and not 30.5  $\mu$ g/m<sup>3</sup>.

Page 4.1-20, Air Quality Table 12 – The 24-hour PM2.5 concentration should be 25.6  $\mu$ g/m<sup>3</sup>, based on the 3-year average of maximum values, rather than the 3-year maximum value of 27.2  $\mu$ g/m<sup>3</sup>. This change should be made to all modeling results tables in the PSA, where applicable.

Page 4.1-22, Project Description and Proposed Emissions, 4<sup>th</sup> paragraph – Existing Alamitos Generating Station Unit 3 will be retired once the AEC simple-cycle turbine generator (SCTG) reaches the commissioning stage and becomes operational or by the December 31, 2020, whichever occurs first.

Page 4.1-23, Construction, 3<sup>rd</sup> paragraph – The PSA states "This offsite laydown area is also being proposed for use in the Huntington Beach Energy Project (HBEP)." As described on page 4.11-25, Traffic and Transportation, maximum of 24 heavy/oversized deliveries could possibly be diverted to the offsite AES laydown area, if the HBEP project is not yet ready to receive those deliveries. HBEP has an incentive to avoid using the AEC site whenever possible for these 24 deliveries, since temporary use of the laydown results in HBEP equipment being moved twice.

Page 4.1-25, Initial Commissioning, 1<sup>st</sup> paragraph – Abated commissioning activities should be 336 hours, not 338 hours.

Page 4.1-25, Air Quality Table 15 – It appears that the SOx and particulate matter with aerodynamic diameter less than or equal to 10 microns (PM10)/PM2.5 emission values data are switched. Please correct the SOx and PM10/PM2.5 emission data and emission factors in Air Quality Table 15.

Page 4.1-31, Air Quality Table 26 – Hourly volatile organic compound (VOC) emissions for the hot start scenario should be 0.96 pounds per hour (lbs/hr), not 0.69 lbs/hr.

Page 4.1-33, Air Quality Table 30 -

- The daily usage for four SCTGs should be 84,384 million British thermal units (MMBtu), based on the per unit data provided. This requires a revision of the facility's total daily usage to 194,127 MMBtu.
- The monthly usage for one SCTG should be 654,972 MMBtu, based on the hourly data provided. This requires a revision of the total SCTG monthly usage to 6,017,145 MMBtu and the facility's total monthly usage to 2,615,888 MMBtu.
- The annual usage for two combined-cycle turbine generators (CCTGs) should be 20,880,000 MMBtu, based on the per unit data provided. This requires a revision of the facility's total annual usage to 29,331,552 MMBtu.

Page 4.1-34, Air Quality Table 31 –

- Please provide the calculations for the auxiliary boiler's Maximum Daily Operation emissions (non-30-day averages), associated with Table Note a, and the Maximum Monthly Operation emissions, associated with Table Note b.
- The SOx and PM10/2.5 Maximum Annual Operation emissions in tons per year (tpy) are swapped for the SCTG.
- The Maximum Monthly Operation (tons/year) header should be revised to Maximum Monthly Operation (tons/month).

Page 4.1-35, Air Quality Table 32 – The VOC emissions for the auxiliary boiler should be 1,223 pounds per year (Ibs/year) instead of 1.223 lbs/year.

Page 4.1-40, Routine Operation Impacts – In the first bullet, it is stated "the maximum 1-hour impacts assumed that all four GE LMS-100PB were in start-up mode." Per PDOC Table 53, the 1-hour emission rates were based on one startup, one shutdown, and the balance of the hour in steady-state operation.

Page 4.1-49, Air Quality Table 41 – The minimum distance for Crystal Cove State Park should be 30.3 kilometers.

Page 4.1-51, Air Quality Table 43 – The modeled results presented in Air Quality Table 43 are identical to those presented in Air Quality Table 42, for Construction Overlap Scenario 1. The Air Quality Table 43 modeled results should be revised consistent with Table 5.1-44 of the revised SAFC, which was submitted in April 2016 (see TN# 211013).

Page 4.1-56, Air Quality Table 45 – The Annualized Auxiliary Boiler and Oil/Water Separator Emissions (lbs/day) for SOx and PM10 should be 1.05 lbs/day and 3.73 lbs/day, respectively, based on the Maximum Annual Auxiliary Boiler and Oil/Water Separator Emissions data presented in this table, assuming operation 365 days per year.

Page 4.1-73, 40 CFR Part 64 – Compliance Assurance Monitoring (CAM), 1<sup>st</sup> paragraph – The carbon monoxide (CO) emissions for the SCTG should be 50.07 tpy, based on data presented in Air Quality Table 32.

Page 4.1-77, Rule 475 – The PM10 emissions for the SCTGs should be 0.005 grains per dry standard cubic foot (gr/dscf), consistent with page 149 of the PDOC (see TN# 212045).

Page 4.1-79, Air Quality Table 49 – The emissions presented for the proposed AEC do not match those presented in Table 45 of the PDOC (see TN# 212045). Rather, the emissions presented are for the existing Alamitos Generating Station. Air Quality Table 49 should be revised as shown below. With this change, the AEC no longer exceeds the major facility threshold for PM10.

	Emissions tons/year				
	NOx	СО	VOC	SOx	PM10
Major Facility	10	50	10	100	70
Threshold	10				
Proposed AEC	137	270	68.3	10.2	69.5
Exceed	Vac	Yes	Yes	No	No
Threshold	Yes				

Page 4.1-96, Air Quality Table 55 – South Coast Air Quality Management District (SCAQMD) Condition C1.6, associated with Condition AQ-C4, should specify that shutdown events are limited to 13 minutes.

Page 4.1-97, Air Quality Table 55 -

- SCAQMD Condition A195.14, associated with Condition AQ-A14, should specify that the CO emission limit of 50 parts per million (ppm) is based on a correction to 3 percent oxygen.
- SCAQMD Condition D12.9, associated with Condition AQ-D1, should specify a low ammonia injection rate of 44 pounds per hour, as listed in the written condition on page 4.1-124.

Page 4.1-98, Air Quality Table 55 – SCAQMD Condition D12.11, associated with Condition AQ-D6, should instead be referenced to SCAQMD Condition D12.14, as that is specific to the SCTG selective catalytic reduction (SCR)/CO catalyst.

Page 4.1-104, Condition AQ-SC8 – The Applicant has already purchased 5 lbs/day of VOC and PM10 ERCs and agreed to provide 1 lbs/day of SOx ERCs for the AEC. Additionally, the SCAQMD is prohibited by law and regulation from issuing a Permit to Construct without satisfying the ERC surrender requirements. Therefore, the amount of ERCs should be left to the SCAQMD to satisfy local, state, and federal regulations and Condition AQ-SC8 should be revised as proposed below:

AQ-SC8 The project owner shall provide mitigation in the form of offsets or emission reduction credits (ERCs) in the quantities of at least 4 lbs/day of for VOC, and 5 lbs/day of PM10, and SOx emissions for the auxiliary boiler and 1 lb/day of VOC emissions for the oil/water separators. The project owner shall demonstrate that the reductions are provided in the form required by the District.

The project owner shall provide an ERC list and surrender the ERCs as required by the District. The project owner shall request CPM approval for any substitutions, modifications, or additions to the ERCs.

The CPM, in consultation with the District, may approve any such change to the ERC list provided that the project remains in compliance with all applicable laws, ordinances, regulations, and standards, and that the requested change(s) will not cause the project to result in a significant environmental impact. The District must also confirm that each requested change is consistent with applicable federal and state laws and regulations.

**Verification:** The project owner shall submit <del>any project air permit and any proposed air permit</del> modification to the CPM within five working days of its submittal either by 1) the project owner to an agency, or 2) receipt of proposed modifications from an agency. The project owner shall submit all modified air permits to the CPM within 15 days of receipt.<u>to the CPM records showing that the project's</u> offset requirements have been met prior to initiating construction. If the CPM approves a substitution or modification to the list of ERCs, the CPM shall file a statement of the approval with the project owner and Energy Commission docket. The CPM shall maintain an updated list of approved ERCs for the project.<sup>1</sup>

Page 4.1-107, Conditions – It is stated that "SCAQMD conditions (AQ-1 to AQ-4) apply to each unit of equipment and the AEC facility as a whole." However, there are neither SCAQMD nor CEC conditions numbered AQ-1 to AQ-4.

Page 4.1-108, Condition AQ-F1 – FF11, FF12, and FF13 should be associated with Turbine Nos. SCGT-2, SCGT-3, and SCGT-4, respectively.

Page 4.1-109, Condition AQ-F4 – The citation provided in the first sentence should be 112(r)(7).

Page 4.1-117, Condition AQ-A13 – The CO limit for the SCTGs should be 4.0 parts per million by volume (ppmv), averaged over 1 hour, dry basis at 15 percent oxygen.

Page 4.1-117, Condition AQ-A8 – This condition applies to the auxiliary boiler. However, the verification requires natural gas usage records for the turbines.

Page 4.1-117, Condition AQ-A13 – The CO emission limit should be 4.0 ppmv, averaged over 1 hour, dry basis at 15 percent oxygen, consistent with SCAQMD Condition A195.12.

<sup>&</sup>lt;sup>1</sup> Page 4.1-104 – The "Verification" for AQ-SC8 is incorrect. It is the same as the Verification for AQ-SC5, related to notice of air permits. The Verification should be revised as set forth above.

Page 4.1-119, Condition AQ-A17 – The ammonia (NH3) emission limit should be corrected to 3 percent oxygen, consistent with SCAQMD Condition A195.16. This condition also makes reference to turbines, although it is only applicable to the auxiliary boiler.

Page 4.1-120, Condition AQ-C1 – The start-up restrictions are not consistent with the maximum month emissions, place undue operating restrictions on the equipment without justification, and would result in the equipment being unable to respond to dispatch orders from the local balancing authority. Since the warm and hot start-up emissions and durations are identical and are in all cases less than the emissions from a cold start, there should be no restriction on hot and warm starts other than the total monthly and annual limits on any start condition. The following revisions to Condition AQ-C1 are necessary:

**AQ-C1** The project owner shall limit the number of start-ups to no more than 62 in any one calendar month.

The number of cold startups shall not exceed 15 in any calendar month, the number of warm startups shall not exceed 12 in any calendar month, and the number of hot startups shall not exceed 35 in any calendar month, with no more than 2 startups in any one day.

The number of cold startups shall not exceed 80 in any calendar year, the number of warm startups shall not exceed 88 in any calendar year, and the **total** number of hot startups shall not exceed 332500 in any calendar year.

For the purposes of this condition, a cold startup is defined as a startup which occurs after the combustion turbine has been shut down for 48 hours or more. A cold startup shall not exceed 60 minutes. The NOx emissions from a cold startup shall not exceed 61 lbs. The CO emissions from a cold startup shall not exceed 325 lbs. The VOC emissions from a cold startup shall not exceed 36 lbs.

For the purposes of this condition, a warm<u>non-cold</u> startup is defined as a startup which occurs after the combustion turbine has been shut down <del>10 hours or more but</del> less than 48 hours. A warm<u>non-cold</u> startup shall not exceed 30 minutes. The NOx emissions from a warm<u>non-cold</u> startup shall not exceed 17 lbs. The CO emissions from a warm<u>non-cold</u> startup shall not exceed 25 lbs.

For the purposes of this condition, a hot startup is defined as a startup which occurs after the steam turbine has been shut down for less than 10 hours. A hot startup shall not exceed 30 minutes. The NOx emissions from a hot startup shall not exceed 17 lbs. The CO emissions from a hot startup shall not exceed 137 lbs. The VOC emissions from a hot startup shall not exceed 25 lbs.

The beginning of startup occurs at initial fire in the combustor and the end of startup occurs when the BACT levels are achieved. If during startup the process is aborted the process will count as one startup.

The project owner shall maintain records to demonstrate compliance with this condition and shall make such records available to the Executive Officer upon request. The records shall be maintained for a minimum of 5 years in a manner approved by SCAQMD.

Page 4.1-133, Condition AQ-D14 – This condition requires source testing for SOx, VOC, and PM10. However, the associated SCAQMD Condition D29.6 only requires source testing for CO emissions. For consistency, the table presented in Condition AQ-D14 should be revised as shown below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
CO emissions	District Method 100.1	1 hour	Outlet of the SCR serving this equipment

Page 4.1-142, Condition AQ-H1 – The table in this condition should be applicable to CO, not hydrogen sulfide (H2S), consistent with SCAQMD Condition H23.7.

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Page 4.1-142, Condition AQ-I1 – Since this condition consolidates SCAQMD Conditions I297.1 and I297.2, it should specify that the facility must hold 108,377 pounds of oxides of nitrogen (NOx) Regional Clean Air Incentives Market (RECLAIM) Trading Credits (RTCs) per turbine.

Page 4.1-143, Condition AQ-I2 – Since this condition consolidates SCAQMD Conditions I297.3, I297.4, I297.5, and I297.6, it should specify that the facility must hold 68,575 pounds of NOx RTCs per turbine.

Page 4.1-162, Greenhouse Gas Table 3 – Based on information presented on pages 109 and 188 of the PDOC, Greenhouse Gas Table 3 should be revised as shown below.

AEC	Operational GHG Emissions (MTCO <sub>2</sub> E/yr)
Carbon Dioxide (CO <sub>2</sub> )	1,109,964
Methane (CH <sub>4</sub> )	523
Nitrous Oxide (N <sub>2</sub> O)	623
Sulfur Hexafluoride (SF <sub>6</sub> ) Leakage	15.8
Total Project GHG Emissions (MTCO <sub>2</sub> E/yr)	1,111,126
Estimated Annual Energy Output (MWh/yr)	3,215,293
Estimated Annualized GHG Performance (MTCO <sub>2</sub> /MWh)	0.35

## ALTERNATIVES

No comments

## **BIOLOGICAL RESOURCES**

Page 4.3-1, Summary of Conclusions, 1<sup>st</sup> paragraph – Staff states "The proposed offsite wastewater pipeline alignment and adjacent areas could support the southern tarplant (California Rare Plant Rank [CRPR] 1B.1)." The southern tarplant (Centromadia parryi ssp. australis) typically occurs along the margins of marshes and swamps, vernally mesic valley and foothill grasslands, and vernal pools (California native Plant Society [CNPS], 2016).<sup>2</sup> These habitat types do not occur within the proposed offsite linear alignment. According to the California Natural Diversity Database (CNDDB; California Department of Fish and Wildlife [CDFW], 2016),<sup>3</sup> this species can also occur in disturbed sites along marsh edges near the coast and in alkaline soils. The habitat associated with the offsite linear alignment consists of industrial, developed, disturbed upland habitats, and the Los Cerritos Channel. The upland areas within the proposed offsite linear alignment do not appear to be mesic in nature and are vegetated with weedy, upland species. Although this species has been documented within the Los Cerritos Wetlands, the habitat associated with the occurrence record differs from the disturbed lot within the proposed offsite linear alignment. The habitat where the occurrence record was documented is more gradually sloping and vegetated. The lot north of Loynes Drive is predominantly dry, upland habitat at the intersection of Loynes Drive and Studebaker Road, which transitions to a cleared, dirt lot and riprap-lined margin along the Los Cerritos Channel. In addition, the occurrence probability should be ranked as "moderate" or "low" based on the differences in habitat types. Based on the differences in habitat type between documented occurrence records and the lot north of Loynes Drive, Condition BIO-9 should not be included. However, the Applicant will conduct a preconstruction clearance survey for southern tarplant during the appropriate floristic period (May through November; CNPS, 2016).

Pages 4.3-10 to 4.3-11, Special-Status Species – The PSA states "However, nearby marshes, parks, and other natural areas support special-status species that may be affected by construction or operation of the proposed project." These resources are located off-site. The PSA should identify how the project may have impacts on these off-site resources.

<sup>&</sup>lt;sup>2</sup> California Native Plant Society (CNPS), Rare Plant Program. 2016. Inventory of Rare and Endangered Plants (online edition, v8-02). California Native Plant Society, Sacramento, CA. Website: <u>http://www.rareplants.cnps.org</u> (accessed July 20, 2016).

<sup>&</sup>lt;sup>3</sup> California Department of Fish and Wildlife (CDFW). 2016. California Natural Diversity Database (CNDDB).

Page 4.3-28, Construction and Demolition Impacts to Special-Status Wildlife, 2<sup>nd</sup> paragraph – Staff states "The state-listed Belding's savannah sparrow breeds in the Los Cerritos Wetlands, and the local breeding populations of light-footed clapper rail (federally and state-listed), western snowy plover (federally listed), and California least tern (federally and state-listed) may expand their ranges into the Los Cerritos Wetlands during the 56-month project construction and demolition period." Project impacts need to be clearly defined and not speculative. Currently, there is no nesting habitat for light-footed clapper rail (Ridgway's rail; Rallus longirostris levipes; Federal Endangered [FE], State Endangered [SE], California Department of Fish and Wildlife [CDFW] Fully Protected [FP]), western snowy plover (Charadrius alexandrines nivosus; Federal Threatened [FT], CDFW Species of Special Concern [SSC]), and California least tern (Sternula antillarum browni; FE, SE, CDFW FP) within the Los Cerritos Wetlands. In addition, there is no nesting habitat for these species within the project site; therefore, impacts to these species are not anticipated. Furthermore, although nesting Belding's savannah sparrow (Passerculus sandwichensis beldingi; SE) have been documented within the Los Cerritos Wetlands, suitable habitat for this species will not be removed. Section 86 of the California Fish and Game Code defines take as to, or attempt to, "hunt, pursue, catch, capture, or kill." Take as defined by Section 86 of the California Fish and Game Code is not expected as a result of project construction, demolition, operation, or closure activities. Therefore, impacts to Belding's savannah sparrow are not anticipated.

Page 4.3-29, Noise, 1<sup>st</sup> paragraph – Staff states "Noise from construction and demolition activities could discourage special-status wildlife from foraging and nesting near the proposed project area, due to interference with communication, disturbance or disruption of activities, or startling from loud noises." The Applicant requests that Staff clarify this statement, since discouragement of nesting and foraging is not a violation of federal and state regulations or codes.

Page 4.3-41, Noteworthy Public Benefits – The AEC does provide "Noteworthy Public Benefits," as noted in other sections of the PSA. See, for example, page 4.10-21, Soil and Water Resources, noting water benefits of the AEC. As one example, AEC will result in an "approximately 0.24 mgd reduction in discharge of industrial wastewater to the San Gabriel River and ultimately the Pacific Ocean, and a similarly proportional decrease in pollutant loading, which would result in an improvement of the water quality in the Pacific Ocean and the Alamitos Bay. (*Id.*)" These benefits should be recognized in the PSA.

Page 4.3-44, Condition BIO-1 – AES suggests the following language be added to the verification of Condition BIO-1 related to the Designated Biologist:

### BIO-1 ...

**Verification:** The project owner shall submit the specified information at least 75 days prior to the start of site mobilization or construction-related ground disturbance activities. No pre-construction site mobilization or construction related activities shall commence until a Designated Biologist has been approved by the CPM.

The Project Owner shall provide the Compliance Project Manager (CPM) with the resume and qualifications of its Designated Biologist (DB) for review and approval. A proposed DB previously approved by Commission Staff within the preceding five (5) years shall be deemed approved ten (10) days after project owner provides a resume and statement of availability of the proposed DB. The CPM may disapprove a previously approved DB within seven (7) days of Project Owner submission of the Proposed DB's resume and statement of availability only if non-compliance or performance issues events were documented in the compliance record for the previous CEC project work conducted by the proposed DB previously approved within the last five (5) years by the Commission shall be automatically approved and the project owner shall provide a resume and statement of availability. The CPM may disapprove a previously approved DB if non-compliance or performance issues were documented in the record during the previous project work by the DB or the DB's qualifications are not applicable to the specific biological resources identified in the project area.

If a Designated Biologist is replaced, the specified information of the proposed replacement must be submitted to the CPM at least ten working days prior to the termination or release of the preceding

Designated Biologist. In an emergency, the project owner shall immediately notify the CPM to discuss the qualifications and approval of a short-term replacement while a permanent Designated Biologist is proposed to the CPM for consideration.

Page 4.3-47, Condition BIO-5 – Impacts to light-footed clapper rail (Ridgway's rail), western snowy plover, and California least tern are not anticipated because there is no suitable nesting habitat for these species within the Los Cerritos Wetlands; therefore, specialized education about these species is not warranted. Accordingly, the Applicant proposes the following revisions to Condition BIO-5:

- **BIO-5** The project owner shall develop and implement a project-specific Worker Environmental Awareness Program (WEAP) and shall secure approval for the WEAP from the CPM. The WEAP shall be administered to all onsite personnel including surveyors, construction engineers, employees, contractors, contractor's employees, supervisors, inspectors, and subcontractors. The WEAP shall be implemented during site mobilization, ground disturbance, grading, construction, operation, and closure. The WEAP shall:
  - 1. Be developed by or in consultation with the Designated Biologist and consist of an on-site or training center presentation in which supporting electronic media and written material is made available to all participants;
  - 2. Discuss the locations and types of sensitive biological resources on the project site and adjacent areas, explain the reasons for protecting these resources, and the function of flagging in designating sensitive resources and authorized work areas;
  - 3. Discuss federal and state resource protection laws and explain penalties for violation of applicable laws, ordinances, regulations, and standards (e.g., federal and state endangered species acts);
  - Place special emphasis on the light footed clapper rail, western snowy plover, California least tern, Belding's savannah sparrow, and southern tarplant, including information on physical characteristics, distribution, behavior, ecology, sensitivity to human activities, legal protection and status, penalties for violations, reporting requirements, and protection measures;
  - 5. Include a discussion of fire prevention measures to be implemented by workers during project activities; request workers to dispose of cigarettes and cigars appropriately and not leave them on the ground or buried;
  - 6. Include a discussion of the biological resources conditions of certification;
  - 7. Identify whom to contact if there are further comments and questions about the material discussed in the program; and
  - 8. Include a training acknowledgment form to be signed by each worker indicating that they received the WEAP training and shall abide by the guidelines. The project-specific WEAP shall be administered by a competent individual(s) acceptable to the Designated Biologist.

**Verification:** At least 45 days prior to the start of any planned project-related siteground disturbance activities, the project owner shall provide to the CPM a copy of the draft WEAP and all supporting written materials and electronic media prepared or reviewed by the Designated Biologist and a resume of the person(s) administering the program. The Notice to Proceed will not be issued until the WEAP has been revised according to the CPM's direction, and approved by the CPM.

The project owner shall provide in the monthly compliance reports the number of persons who have completed the training in the prior month and a running total of all persons who have completed the training to date.

Throughout the life of the project, the worker education program shall be repeated annually for permanent employees, and shall be routinely administered <u>either in person or via video</u> within one week of arrival to any new personnel, foremen, contractors, subcontractors, and other personnel potentially working within the project area. Upon completion of the orientation, employees shall sign a form stating

that they attend the program and understand all protection measures. These forms shall be maintained by the project owner and shall be made available to the CMP upon request. Workers shall receive and be required to visibly display a hardhat sticker or certificate indicating that they have completed the required training.

Training acknowledgement forms signed during construction shall be kept on file by the project owner for at least six months after the completion of all project construction activities. During project operation, signed statements for operational personnel shall be kept on file for six months following the termination of an individual's employment.

Page 4.3-50, Condition BIO-7 – There are no wetlands located along the southeastern fence line. The Applicant requests that Staff clarify the text within BIO-7, as suggested below.

- **BIO-7** The project owner shall ensure implementation of the following measures during site mobilization, construction, operation, and closure to manage their project site and related facilities in a manner to avoid or minimize impacts to biological resources:
  - 1. The boundaries of all areas to be temporarily or permanently disturbed (including staging areas, access roads, and sites for temporary placement of spoils) shall be delineated with stakes and flagging prior to demolition or construction activities in consultation with the Designated Biologist. Spoils shall be stockpiled in disturbed areas which do not provide habitat for special-status species. Parking areas, staging and disposal site locations shall similarly be located in areas without native vegetation or special-status species habitat. All disturbances, vehicles, and equipment shall be confined to the flagged areas.
  - 2. At the end of each work day, the Designated Biologist, Biological Monitor, and/or site personnel shall ensure that all potential wildlife pitfalls (trenches, bores, and other excavations) have been backfilled. If site personnel are inspecting trenches, bores, and other excavations and wildlife is trapped, they will immediately notify the Designated Biologist and/or Biological Monitor. If backfilling is not feasible, all trenches, bores, and other excavations shall be sloped at a 3:1 ratio at the ends to provide wildlife escape ramps, or covered completely to prevent wildlife access. Should wildlife become trapped, the Designated Biologist or Biological Monitor shall remove and relocate the animal to a safe location. Any wildlife encountered during the course of construction shall be allowed to leave the construction area unharmed.
  - Transmission lines and all electrical components shall be designed, installed, and maintained in accordance with the Avian Power Line Interaction Committee's (APLIC's) Suggested Practices for Avian Protection on Power Lines (APLIC 2006) and Reducing Avian Collisions with Power Lines (APLIC 2012) to reduce the likelihood of large bird electrocutions and collisions.
  - 4. Spoils shall not be stockpiled adjacent to the southeastern <u>outlet channel</u> fence line to minimize potential for spoils to enter into adjacent wetlands waterways.
  - 5. Soil bonding and weighting agents used on unpaved surfaces shall be non-toxic to wildlife and plants.
  - 6. To the extent feasible, any aviation warning lighting shall employ only strobed, strobe-like or blinking incandescent lights, preferably with all lights illuminating simultaneously. Minimum intensity, maximum "off-phased" duel strobes are preferred, and no steady burning lights (e.g., L-810s) shall be used.
  - 7. Water applied to dirt roads and construction areas (trenches or spoil piles) for dust abatement shall use the minimal amount needed to meet safety and air quality standards to prevent the formation of puddles, which could attract predators of special-status species to construction sites. During construction, site personnel shall patrol these areas to ensure water does not puddle and attract

crows and other wildlife to the site, and shall take appropriate action to reduce water application rates where necessary.

- 8. Report all inadvertent deaths of special-status species to the appropriate project representative, including road kill. Species name, physical characteristics of the animal (sex, age class, length, weight), and other pertinent information shall be noted and reported in the monthly compliance reports. For special-status species, the Designated Biologist or Biological Monitor shall contact CDFW and USFWS within 1 working day of receipt of the carcass for guidance on disposal or storage of the carcass. Injured animals shall be reported to CDFW and/or USFWS and the CPM, and the project owner shall follow instructions that are provided by CDFW or USFWS. During construction, injured or dead animals detected by personnel in the project area shall be reported immediately to a Biological Monitor or Designated Biologist, who shall remove the carcass or injured animal promptly. During operations, the Project Environmental Compliance Monitor shall be notified.
- 9. All vehicles and equipment shall be maintained in proper working condition to minimize the potential for fugitive emissions of motor oil, antifreeze, hydraulic fluid, grease, or other hazardous materials. The Designated Biologist shall be informed immediately of any hazardous spills. Any onsite servicing of vehicles or construction equipment shall take place only at a designated area approved by the Designated Biologist. Service/maintenance vehicles shall carry a bucket and pads to absorb leaks or spills.
- 10. During construction all trash and food-related waste shall be placed in self-closing containers and removed weekly or more frequently from the site. Workers shall not feed wildlife, or bring pets to the project site.
- 11. Except for law enforcement personnel, no workers or visitors to the site shall bring firearms or weapons.
- 12. The project owner shall implement the following measures during construction and operation to prevent the spread and propagation of nonnative, invasive weeds:
  - a. Limit the size of any vegetation and/or ground disturbance to the minimum area needed for safe completion of project activities, and limit ingress and egress to defined routes;
  - b. Use only weed-free straw, hay bales, and seed for erosion control and sediment barrier installations. Invasive non-native species shall not be used in landscaping plans and erosion control. Monitor and rapidly implement control measures to ensure early detection and eradication of weed invasions.
- 13. During construction and operation, the project owner shall conduct pesticide management in accordance with standard BMPs. The BMPs shall include non-point source pollution control measures. The project owner shall use a licensed herbicide applicator and obtain recommendations for herbicide use from a licensed Pest Control Advisor. Herbicide applications must follow EPA label instructions. Minimize use of rodenticides and herbicides in the project area and prohibit the use of chemicals and pesticides known to cause harm to non-target plants and wildlife. The project owner shall only use pesticides for which a "no effect" determination has been issued by the EPA's Endangered Species Protection Program for any species likely to occur within the project area or adjacent wetlands. If rodent control must be conducted, zinc phosphide or an equivalent product shall be used.

**Verification:** All mitigation measures and their implementation methods shall be included in the BRMIMP and implemented. Implementation of the measures shall be reported in the monthly compliance reports by the Designated Biologist. Within 30 days after completion of project construction, the project owner shall provide to the CPM, for review and approval, a written Construction Completion Report identifying how measures have been completed (see Condition of Certification **BIO-6** verification).

Monthly and annual compliance reports will include results of all regular inspections by the Designated Biologist and Biological Monitor(s), including but not limited to the requirements cited above and in Condition of Certification **BIO-2**.

The project owner will maintain written records of vehicle and equipment inspection and maintenance, and will provide summaries in each monthly and annual compliance report. The complete written vehicle maintenance record will be available for the CPM's inspection during normal business hours.

The BRMIMP (Condition of Certification **BIO-6**) will include affirmation by the project owner that:

- All electrical component design conforms to applicable APLIC guidelines; and
- All soil binders conform to the requirements stated above.

Page 4.3-53, Condition BIO-8 – The Applicant requests that Staff amend the nesting season from January 1 through August 31 to align with more typical nesting season timeframes, as suggested below:

- **BIO-8** Pre-construction nest surveys shall be conducted if construction or demolition activities on the project site or wastewater pipeline will occur from January <u>February</u> 1 through August 31. The Designated Biologist or Biological Monitor shall perform surveys in accordance with the following guidelines:
  - 1. Surveys shall cover all potential nesting habitat and substrate within the project site and areas surrounding the project site within 300 feet of the project boundary.
  - 2. At least two pre-construction surveys shall be conducted, separated by a minimum 10-day interval. Pre-construction surveys shall be conducted no more than 14 days prior to initiation of construction activity. One survey needs to be conducted within the 3-day period preceding initiation of construction activity. Additional follow-up surveys may be required if periods of construction inactivity exceed three weeks during JanuaryFebruary 1 through August 31 in any given area, an interval during which birds may establish a nesting territory and initiate egg laying and incubation.
  - 3. If active nests are detected during the survey, a no-disturbance buffer zone (protected area surrounding the nest) shall be established around each nest. Specific buffer distances are provided below for applicable avian groups (**Biological Resources Table 5**); these buffers may be modified with the CPM's approval. For special-status species, if an active nest is identified, the size of each buffer zone shall be determined by the Designated Biologist in consultation with the CPM (in coordination with CDFW and USFWS). Nest locations shall be mapped using GPS technology.

### [Table 5 was not included to reduce the amount of text.]

- 4. If active nests are detected during the survey, the Designated Biologist or Biological Monitor shall monitor all nests with buffers at least once per week, to determine whether birds are being disturbed. If signs of disturbance or distress are observed, the Designated Biologist or Biological Monitor shall immediately implement adaptive measures to reduce disturbance in coordination with the CPM. These measures could include, but are not limited to, increasing buffer size, halting disruptive construction activities in the vicinity of the nest until fledging is confirmed, or placement of visual screens or sound dampening structures between the nest and construction activity.
- 5. If active nests are detected during the survey, the Designated Biologist will prepare a Nest Monitoring Plan. The Designated Biologist or Biological Monitor shall monitor the nest until he or she determines that nestlings have fledged and dispersed or the nest is no longer active. Activities that might, in the opinion of the Designated Biologist or Biological Monitor, disturb nesting activities (e.g., exposure to exhaust), shall be prohibited within the buffer zone until such a determination is made.

**Verification:** Within ten (10) days of completion of the field work, the project owner shall provide the CPM, CDFW, and USFWS a letter-report describing the findings of the preconstruction nest surveys,

including a description and representative photographs of habitat; the time, date, methods, and duration of the surveys; identity and qualifications of the surveyor(s); and a list of species observed. If active nests are detected during the surveys, the reports shall include a map or aerial photo identifying the location of the nest(s) and shall depict the boundaries of the proposed no disturbance buffer zone around the nest(s). The CPM will consider any timely comments received from CDFW and USFWS in review of the letter-report.

Additionally, the nest monitoring plan shall be submitted to the CPM for review and approval prior to any planned demolition or construction activities in the vicinity of any active nest. No such demolition or construction activities may proceed without CPM approval of the monitoring plan, in consultation with CDFW and USFWS. All impact avoidance and minimization measures related to nesting birds shall be included in the BRMIMP and implemented. Implementation of the measures shall be reported in the monthly compliance reports by the Designated Biologist.

Page 4.3-56, Condition BIO-9 – Significant impacts to the southern tarplant have not been identified. In addition, the 10 percent threshold is vague and not supported by any applicable Laws, Ordinances, Regulations, and Standards (LORS). Impacts should be assessed at a population level. Therefore, mitigation is not warranted and BIO-9 should be removed from consideration.

#### SOUTHERN TARPLANT SURVEY AND MITIGATION

- **BIO-9** The project owner shall determine if southern tarplant is present on the wastewater pipeline alignment and, if the project would substantially affect the local population, mitigate or offset the project's impacts as follows:
  - 1. The project owner shall contract with a qualified biologist to conduct a field survey for southern tarplant on the wastewater pipeline alignment and all potential habitat in the surrounding 100-foot buffer area to determine presence or absence of southern tarplant or other special-status plants. The field survey and reporting will conform to current CDFW botanical field survey protocol (CDFG 2009) or more recent updates, if available. The field survey will be conducted at the appropriate time of year to locate the target species and the report will describe any conditions that may have prevented the target species from being located or identified, even if it could be present as dormant seed (e.g., poor rainfall).
  - 2. If southern tarplant is present, the qualified biologist will inventory the number of plants and area of occupied habitat on the alignment and nearby habitat within 0.25 mile of the occurrence(s). The qualified biologist will prepare a report and maps indicating locations and numbers of all southern tarplants inventoried within the survey area.
  - If pipeline construction would affect 10 percent or more of the plants or occupied habitat within the 0.25-mile survey area, then the project owner will mitigate the impact by reintroducing southern tarplant to the site following construction, or to another suitable local site.

**Verification:** No fewer than 45 days prior to planned start of wastewater pipeline construction, the project owner will submit the results of the southern tarplant field surveys and, if the species would be substantially affected by pipeline construction (per Item 3 above), a reintroduction plan to mitigate impacts. Documentation will be submitted to the CPM, CDFW, and USFWS. The CPM will consider any timely comments received from CDFW and USFWS in review of the documents. The Notice to Proceed will not be issued until the reports and reintroduction plan have been revised according to the CPM's direction, and approved by the CPM.

If southern tarplant occurs on the pipeline alignment or within the 100 foot buffer, the survey report will include a full inventory of all southern tarplant occurrences (including numbers of plants and occupied acres) within a 0.25 mile radius of the location(s). If project activities would affect 10 percent or more of the plants, or 10 percent or more of occupied habitat within the survey area, then the project owner will

also submit a Draft Southern Tarplant Reintroduction Plan, for the CPM's review and approval on the schedule outlined above.

The Southern Tarplant Reintroduction Plan will specify location(s) for reintroduction, to be either on the disturbed site or at another suitable site selected in coordination with the CPM and local wetlands management authorities. In addition, the Plan will specify methods for evaluating specific habitat suitability; obtaining seed or other propagules; site preparation for the reintroduction site(s); weeding, irrigation, or other maintenance; and monitoring methods and reporting.

Success criteria for the Reintroduction Plan shall be: achievement of a self-sustaining southern tarplant occurrence at the reintroduction site(s), consisting of as many or more plants and acres of occupied habitat as are lost during pipeline construction, and persisting over a minimum verification period of 5 years. The Reintroduction Plan shall specify methods for quantitative monitoring and reporting of reintroduction success. In addition, the Plan will specify remedial measures to be implemented if reintroduction success is not achieved.

## CULTURAL RESOURCES

Page 4.4-23, Environmental Justice/Socioeconomic Methods – The applicable standard should be clarified to read, "In accordance with federal and state law, regulations, policies, and guidance, staff considered the proposed project's potential to cause <u>disproportionate</u> significant adverse impacts to environmental justice (EJ) populations."

Page 4.4-61, 1<sup>st</sup> full paragraph – The following sentence should be clarified in light of the PSA's conclusion that there are no known archaeological resources on the site: "Although staff concludes that the proposed AEC could result in significant impacts on <u>unidentified</u> archaeological resources that qualify as either historical or unique archaeological..."

Page 4.4-64, Condition CUL-1 – The scope of the potential activities requiring a Cultural Resource Specialist (CRS) and Cultural Resource Monitor (CRM) in the verification is unclear and broad. The Applicant recommends the revision proposed below. The Applicant also requests clarification of the activities that are denoted with "" in the verification.

### CUL-1 APPOINTMENT AND QUALIFICATIONS OF CULTURAL RESOURCES SPECIALIST (CRS)

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### 2. Duties of Cultural Resources Specialist

The CRS shall manage all cultural resource monitoring, mitigation, curation, and reporting activities, and any pre-construction cultural resource activities, unless management of these is otherwise provided for in accordance with the cultural resource conditions of certification (conditions). The CRS shall serve as the primary point of contact on all cultural resource matters for the Energy Commission. The CRS may elect to obtain the services of Cultural Resource Monitors (CRMs), Native American Monitors (NAMs), and other technical specialists, if needed, to assist in monitoring, mitigation, and curation activities. The project owner shall ensure that the CRS makes recommendations regarding the eligibility for listing in the California Register of Historical Resources (CRHR) of any cultural resources that are newly discovered or that may be affected in an unanticipated manner.

After all ground disturbances are completed and the CRS has fulfilled all responsibilities specified in these cultural resources conditions, the project owner may discharge the CRS, after receiving approval from the CPM.

The conditions described in this subsection of the PSA shall continue to apply during operation of the proposed power plant.

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Page 4.4-64, Condition CUL-1 – AES suggests the following language be added to the verification of Condition CUL-1 related to the Cultural Resource Specialist:

The Project Owner shall provide the Compliance Project Manager (CPM) with the resume and qualifications of its Cultural Resource Specialist (CRS) for review and approval. A proposed CRS previously approved by Commission Staff within the preceding five (5) years shall be deemed approved ten (10) days after project owner provides a resume and statement of availability of the proposed CRS. The CPM may disapprove a previously approved CRS within seven (7) days of Project Owner submission of the Proposed CRS' resume and statement of availability only if non-compliance or performance issues events were documented in the compliance record for the previous CEC project work conducted by the proposed Cultural Resource Specialist previously approved within the last five (5) years by the Commission shall be automatically approved and the project owner shall provide a resume and statement of availability. The CPM may disapprove a previously approved CRS if non-compliance or performance issues were documented in the record during the previous project work by the CRS or the CRS's qualifications are not applicable to the specific cultural resources identified in the project area.

Page 4.4-66, Condition CUL-2 – Given the broad project area of analysis, the Applicant recommends limiting the National Register of Historic Places (NRHP)/CRHR eligible cultural resources to those located in the power plant site, linear facilities, access roads, and laydown areas.

Maps shall include any NRHP/CRHR-eligible cultural resources, including any historic built environment resources, identified in the project area of analysis.

Page 4.4-70, Condition CUL-4 – This condition provides for the preparation of a final Cultural Resources Report (CRR), and a draft CRR upon a suspension of ground disturbance and/or construction activities. The Applicant is concerned with the burden of having to prepare a complete draft CRR for a short-term suspension of ground disturbance and/or construction activities, and suggests the revision proposed below.

### CUL-4 FINAL CULTURAL RESOURCES REPORT (CRR)

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If the project owner requests a suspension of **all**ground disturbance and/or construction activities <u>for</u> <u>more than 30 days</u>, then a draft CRR that covers all cultural resources activities associated with the project shall be prepared by the CRS and submitted to the CPM for review and approval on the same day as the suspension/extension request. The draft CRR shall be retained at the project site in a secure facility until ground disturbance and/or construction resumes or the project is withdrawn. If the project is withdrawn, then a final CRR shall be submitted to the CPM for review and approval at the same time as the withdrawal request.

Page 4.4-72, Condition CUL-6 – This condition provides for full-time archaeological monitoring under circumstances where such monitoring may not be necessary. The Applicant proposes that the Condition CUL-6 language approved by the Commission in the Final Decision for the Huntington Beach Energy Project be adopted instead, as presented below.

### CUL-6 UNDISCOVERED CULTURAL RESOURCES

In the event that a CRHR eligible (as determined by the CPM) cultural resource is discovered, at the direction of the CPM, the project owner shall ensure that the CRS or alternate CRS monitors full time all ground disturbances in the area where the CRHR-eligible cultural resources discovery has been made. The level, duration, and spatial extent of monitoring shall be determined by the CPM. In the event that the CRS believes that a current level of monitoring is not appropriate, a letter or email detailing the justification for changing the level of monitoring shall be provided to the CPM for review and approval prior to any change in the level of monitoring.

<u>Full-time archaeological monitoring for the project, if deemed necessary due to the discovery of a</u> <u>CRHR-eligible cultural resource, shall consist of archaeological monitoring of all earth-moving activities</u> <u>in the area(s) of discovery(ies), for as long as the CPM requires.</u>

The project owner shall obtain the services of one or more NAMs to monitor construction-related ground disturbance in areas, if any, where Native American artifacts have been discovered. Contact lists of interested Native Americans and guidelines for monitoring shall be obtained from the NAHC. Preference in selecting an NAM shall be given to Native Americans with traditional ties to the area that shall be monitored. If efforts to obtain the services of a qualified NAM are unsuccessful, the project owner shall immediately inform the CPM. The CPM will either identify potential monitors or will allow construction-related ground disturbance to proceed without an NAM.

If monitoring should be needed, as determined by the CPM, due to the discovery of a CRHR-eligible cultural resource, the CRS shall keep a daily log of any monitoring and other cultural resources activities and any instances of non-compliance with the Conditions and/or applicable LORS on forms provided by the CPM. Copies of the daily monitoring logs shall be provided by the CRS to the CPM, if requested by the CPM. From these logs, the CRS shall compile a monthly monitoring summary report to be included in the MCR. If there are no monitoring activities, the summary report shall specify why monitoring has been suspended.

The CRS, at his or her discretion, or at the request of the CPM, may informally discuss cultural resource monitoring and mitigation activities with Energy Commission technical staff. Cultural resources monitoring activities are the responsibility of the CRS. Any interference with monitoring activities, removal of a monitor from duties assigned by the CRS, or direction to a monitor to relocate monitoring activities by anyone other than the CRS shall be considered non-compliance with these Conditions.

Upon becoming aware of any incidents of non-compliance with the Conditions and/or applicable LORS, the CRS and/or the project owner shall notify the CPM by telephone or e-mail within 24 hours. The CRS shall also recommend corrective action to resolve the problem or achieve compliance with the Conditions. When the issue is resolved, the CRS shall write a report describing the issue, the resolution of the issue, and the effectiveness of the resolution measures. This report shall be provided in the next MCR for the review of the CPM.

The research design in the CRMMP shall govern the collection, treatment, retention/disposal, and curation of any archaeological materials encountered. The daily monitoring logs shall at a minimum include the following:

- <u>First and last name of the CRM and any accompanying NAM.</u>
- <u>Time in and out</u>
- Weather. Specify if weather conditions led to work stoppages.
- Work location (project component). Provide specifics—.e.g., power block, landscaping.
- Proximity to site location. Specify if work conducted within 1000 feet of a known cultural resource.
- Work type (machine).
- Work crew (company, operator, foreman).
- Depth of excavation.
- Description of work.
- <u>Stratigraphy.</u>
- Artifacts, listed with the following identifying features:

- Field artifact #: When recording artifacts in the daily monitoring logs, the CRS shall institute a field numbering system to reduce the likelihood of repeat artifact numbers. A typical numbering system could include a project abbreviation, monitor's initials, and a set of numbers given to that monitor: e.g., AEC-MB-123.
- o <u>Description</u>.
- o <u>Measurements.</u>
- Universal Transverse Mercator coordinates.
- Whether artifacts are likely to be isolates or components of larger resources.
- Assessment of significance of any finds.
- Actions taken.
- Plan for the next work day.

A cover sheet shall be submitted with each day's monitoring logs, and shall at a minimum include the following:

- Count and list of first and last names of all CRMs and of all NAMs for that day.
- <u>General description (in paragraph form) of that day's overall monitoring efforts, including monitor</u> <u>names and locations.</u>
- Any reasons for halting work that day.
- <u>Count and list of all artifacts found that day: include artifact #, location (i.e., grading in Unit X),</u> measurements, UTMs, and very brief description (i.e., historic can, granitic biface, quartzite flake).
- <u>Whether any artifacts were found out of context (i.e., in fill, caisson drilling, flood debris, spoils pile).</u>

If requested by the CPM, copies of the daily monitoring logs and cover sheets shall be provided by email from the CRS to the CPM, as follows:

- <u>Each day's monitoring logs and cover sheet shall be merged into one PDF document</u>
- <u>The PDF title and headings, and emails shall clearly indicate the date of the applicable monitoring logs.</u>
- PDFs for any revised or resubmitted versions shall use the word "revised" in the title.

Daily and/or weekly maps shall be submitted along with the monitoring logs as follows:

- <u>The CRS shall provide daily and/or weekly maps of artifacts at the request of the CPM. A map shall</u> <u>also be provided if artifact locations show complexity, high density, or other unique considerations.</u>
- <u>Maps shall include labeled artifacts, project boundaries, previously recorded sites and isolates,</u> <u>aerial imagery background, and appropriate scales.</u>

The Cultural Resources section of the MCR shall be prepared in coordination with the CRS, and shall include a monthly summary report of cultural resources-related monitoring. The summary shall:

- List the number of CRMs and NAMs on a daily basis, as well as provide monthly monitoring-day totals.
- <u>Give an overview of cultural resource monitoring work for that month, and discuss any issues that arose.</u>
- Describe fulfillment of requirements of each cultural mitigation measure.

- <u>Summarize the confidential appendix to the MCR, without disclosing any specific confidential details.</u>
- Include the artifact concordance table (as discussed under the next bullet point), but with removal of UTMs.
- <u>Contain completed DPR 523A forms for all artifacts recorded or collected in that month shall be</u> <u>submitted as one combined PDF that includes an index and bookmarks. For any artifact without a</u> <u>corresponding DPR form, the CRS shall specify why the DPR form is not applicable or pending (i.e. as</u> <u>part of a larger site update). A concordance table that matches field artifact numbers with the</u> <u>artifact numbers used in the DPR forms shall be included. The sortable table shall contain each</u> <u>artifact's date of collection and UTM numbers, and note if an artifact has been deaccessioned or</u> <u>otherwise does not have a corresponding DPR form. Any post-field log recordation changes to</u> <u>artifact numbers shall also be noted.</u>
- If artifacts from a given site location (in close proximity of each other or an existing site) are collected month after month, and if agreed upon with the CPM, a final updated DPR for the site may be submitted at the completion of monitoring. The monthly concordance table shall note that the DPR form for the included artifacts is pending.

### Verification:

- 1. <u>At least 30 days prior to the start of ground disturbance, the CPM will provide to the CRS an</u> <u>electronic copy of a form to be used as a daily monitoring log.</u>
- 2. <u>While monitoring is on-going and as required by the CPM, the project owner shall submit each day's</u> monitoring logs and cover sheet merged into one PDF document by email within 24 hours.
- 3. <u>The CRS and/or project owner shall notify the CPM of any incidents of noncompliance with the</u> <u>Conditions and/or applicable LORS by telephone or email within 24 hours</u>
- 4. If resources are discovered as outlined in this Condition of Certification, the project owner shall notify all local Native American groups of the discovery of the resource within 48 hours of its discovery. If resources are discovered as outlined in this Condition of Certification, the project owner shall appoint one or more NAMs. Within 15 days of receiving from a local Native American group a request that a NAM be employed, the project owner shall submit a copy of the request and a copy of a response letter to the CPM. The project owner shall include a copy of this Condition of Certification in any response letter.
- 5. <u>While monitoring is on-going, the project owner shall include in each MCR a copy of the monthly</u> <u>summary of cultural resources related monitoring prepared by the CRS and shall attach any new</u> <u>DPR 523A forms completed for finds treated prescriptively, as specified in the CRMMP.</u>
- 6. <u>Final updated DPRs with sites (where artifacts are collected month after month) can be submitted</u> <u>at the completion of monitoring, as agreed upon with the CPM.</u>
- 7. <u>At least 24 hours prior to implementing a proposed change in monitoring level, the project owner</u> <u>shall submit to the CPM, for review and approval, a letter or email detailing the CRS's justification</u> <u>for changing the monitoring level.</u>
- 8. <u>Within 15 days of receiving them, the project owner shall submit to the CPM copies of any</u> comments or information provided by Native Americans in response to the project owner's transmittals of information.

### HAZARDOUS MATERIALS MANAGEMENT

Page 4.5-18, Condition HAZ-4 – The Applicant proposes the following changes to Condition HAZ-4, consistent with the proposed conditions of certification for the Huntington Beach Energy Project (HBEP).

**HAZ-4** The aqueous ammonia storage facilities shall be designed to the ASME code for Unfired Pressure Vessels, Section VIII, Division 1. The storage tanks shall be protected by a secondary containment vault capable of holding precipitation from a 24-hour, 25-year storm event **or 150**plus 100 percent of the capacity of the largest tank within its boundary. The containment vaults shall incorporate a cover design that allows free flow of any aqueous ammonia release into the containment, yet limits the total vent area to not more than 25 square feet. The final design drawings and specifications for the ammonia storage tanks and secondary containment basins shall be submitted to the CPM for review and approval.

**Verification:** At least 3060 days prior to start of construction of the aqueous ammonia storage and transfer facilities, the project owner shall submit final design drawings and specifications for the 30,000 and 40,000 ammonia storage tanks, ammonia pumps, ammonia detectors, and secondary containment basins to the CPM for review and approval.

Page 4.5-20, Condition HAZ-8 – The Applicant proposes the following changes to the verification of Condition HAZ-8:

At least 30 days prior to receiving anyinitial hazardous materials on site for commissioning or operations, the project owner shall notify the CPM that a site-specific operations site security plan is available for review and approval. In the annual compliance report, the project owner shall include signed statements similar to Attachments A and B that all current project employee and appropriate contractor background investigations have been performed, and that updated certification statements have been appended to the operations security plan. In the annual compliance report, the project owner shall include a signed statement similar to Attachment C that the operations security plan includes all current hazardous materials transport vendor certifications for security plans and employee background investigations.

## LAND USE

Page 4.6-2, Land Use Table 1, Local, City of Long Beach General Plan – The Applicant suggests noting that, as of July 2016, the Draft Land Use Element has not been adopted.

Page 4.6-18, Land Use Table 2, City of Long Beach, Municipal Code – The Applicant suggests referencing Table 33-2 instead of Table 33-3.

Page 4.6-21, Land Use Table 3, City of Long Beach, General Plan – The Applicant suggests updating the Draft Land Use Element from October 2015 to "February 2016 (not adopted)." In addition, the Applicant suggests noting "Allowable Non-building Height at AEC site: No restrictions" and that AEC is designated as "I-industrial Placetype."

Page 4.6-25, Land Use Table 4, Label ID# 5 – The LADWP Haynes Generating Station's installation of six LMS100 simple cycle gas turbines has been completed and these units are operational. Please revise the project status from Under Construction to Operational.

Page 4.6-30, Condition LAND-1 – The CEC process preempts the local site approval process. Issues of local LORS compliance are within the jurisdiction of the CEC and should be decided in this proceeding. The project has submitted a site plan, which should be reviewed in this proceeding. The CEC should not defer to post-Certification the determination of whether the project complies with applicable LORS. As written, Condition LAND-1 could be read as delegating to the City the review and *de facto* approval of the project's compliance with applicable local LORS. Because the CEC preempts local approvals, Condition LAND-1 should be deleted.

**LAND-1** The project owner shall provide a site plan consistent with the design and performance standards for the city of Long Beach General Industrial (IG) Zone requirements, including height limits, parking requirements, setbacks, and other municipal code requirements as set forth by the Long Beach Municipal Code sections 21.33.060 through 21.33.230.

**Verification:** At least 30 calendar days prior to the start of construction, the project owner shall submit written documentation to the Compliance Project Manager (CPM), including evidence of review by the city of Long Beach that the project meets the above referenced requirements.

### NOISE AND VIBRATION

Page 4.7-3, Noise Table 1 – Staff's Noise Table 1 does not include the following additional detail (refer to SAFC Table 5.7-13):

- If the measured ambient noise level at a receptor exceeds the levels presented in Noise Table 1 or the levels with the time characteristic corrections, the allowable standard is increased in 5 decibel (dB) increments to encompass or reflect such ambient noise. (Long Beach Noise Ordinance, 8.80.150(C))
- If the measurement location is on a boundary between two different districts, the noise level limit applicable shall be the arithmetic mean of the two districts. (Long Beach Noise Ordinance, 8.80.150(D))
- In the event the noise contains a steady audible tone such as a whine, screech, or hum, or is a repetitive noise such as hammering or riveting or contains music or speech conveying informational content, the standards are reduced by 5 A-weighted decibels (dBA). (Long Beach Noise Ordinance, 8.80.160)

Page 4.7-4, Noise Table 1 – Staff's Noise Table 1 includes the City of Seal Beach under the heading "Applicable Law". The Applicant notes that, while staff may review or refer to adjacent jurisdictions' regulations, they are not "applicable" as no part of the project resides within the boundary of the City of Seal Beach. Additionally, if Staff are going to include reference to the City of Seal Beach Municipal Code, they should also include Section 7.15.015(C), which states that in the event the ambient noise levels exceed either of the first four noise limit categories [items 1 through 4 in Staff's Noise Table 1], the cumulative period applicable to such category shall be increased to reflect that ambient level. Furthermore, in the event the ambient noise level exceeds the fifth noise limit category, the maximum allowable noise level under that category will be increased to reflect the maximum ambient noise level.

Page 4.7-6, City of Long Beach LORS – Staff are correct that AEC is located within District 4 and the District 4 limit is 70 dBA. The Applicant notes that this limit applies at the boundary of District 4. With respect to the residences located in District 1, the District 1 limits are not applicable to AEC as AEC is not located in District 1. While not strictly applicable, the project will comply with the average of the District 4 and 1 limits (58 dBA during the night and 60 dBA during the day) at the residences (consistent with Long Beach Noise Ordinance, 8.80.150(D) referred to above). Staff's current analysis also does not incorporate Long Beach Noise Ordinance, 8.80.150(C).

Page 4.7-6, City of Seal Beach LORS – Staff may choose to summarize the City of Seal Beach's regulations, but the Applicant notes that these are not the applicable regulations for AEC. In addition, the summary should reflect the complete ordinance, including Section 7.15.015(C).

Page 4.7-13, CEQA Impacts – Staff's construction noise analysis implies that a cumulative 5 dBA increase is a firm fixed or absolute California Environmental Quality Act (CEQA) criteria. The Applicant is unware of bright line threshold having been adopted and notes that Staff is correct that LORS do not limit sound levels from construction activities. In addition, Staff's uses the average existing sound level as the Daytime Ambient Level in Noise Table 5 and does not consider that existing Leq's were as high as 76 dBA at M1, 65 dBA at M2, and 70 dBA at M3. In addition, while not applicable, but for context and comparison to the operational limits established for District 4 of 70 dBA, it is noted that the majority of construction/demolition activities are setback further than 375 feet from the boundary. That is, construction/demolition activities are likely in substantial compliance with the *operational* sound limit established for District 4 of 70 dBA. The Applicant recommends that Staff reconsider their assessment of a potentially significant impact at M1 and suggest that, at times Staff may wish to identify the potential increase as substantial, it is not significant nor adverse in a manner that requires mitigation.

Page 4.7-15, Nighttime Concrete Pouring Activities – Staff's analysis of nighttime concrete pours does not identify a potentially significant impact yet Condition NOISE-9 imposes a set of specific conditions and threshold for this activity. The Applicant notes that Conditions NOISE-1 and NOISE-2 provide effective means to address potential noise concerns during construction. It is unclear why Condition NOISE-9 is required, particularly as this short-term construction activity is likely to comply with the *operational* sound limit established for District 4 of 70 dBA and existing nighttime levels exceed those identified for concrete pouring.

Page 4.7-16, Vibration – Staff do not identify that pile driving is likely to generate substantial levels of vibration at residences, yet impose a specific vibration threshold in Condition NOISE-8. Similar to the Applicant's comments on Staff's Noise Table 5, Noise Table 7 does not consider that existing Leq's were as high as 76 dBA at M1, 65 dBA at M2, and 70 dBA at M3.

Page 4.7-20, Compliance with LORS, last paragraph – This text should be revised to reflect Long Beach Noise Ordinance, 8.80.150(C), which states that "If the measured ambient noise level at a receptor exceeds the levels presented .... or the levels with the time characteristic corrections, the allowable standard **is increased in 5 dB increments [emphasis added]** to encompass or reflect such ambient noise."

The adjusted limits result in the predicted levels at M1 and M2 of 55 and 51, respectively, complying with Long Beach's District 1 limits had they been applicable. Note that they are not applicable as the facility is located in District 4 and the District 4 limit of 70 dBA at the district boundary is the applicable LORS.

Page 4.7-22, CEQA Impacts – Staff's CEQA analysis is based on applying a firm threshold of 5 dBA, which is applied on a cumulative basis, thus really only allowing a 4 dBA differential; their baseline uses the average measured 4hour L90. While Staff's approach with respect to L90 as the basis of CEQA may be debated, what is most challenging in this analysis is that it does not account for the variability in existing sound levels. When this variability is taken into consideration, the existing ambient measurements exceed Staff's CEQA threshold on at least one night and the "allowable" increase is substantially reduced on other nights. Thus the project is potentially non-compliant even before construction commences. For example, the minimum 4-hour L90 at M2 was 51 dBA on August 23<sup>rd</sup>, which exceeds the average baseline selected by staff of 45 dBA by more than 5 dBA. Given this, it would appear appropriate to either adjust the baseline values to reflect the maximum of the 4-hour minimum L90's and/or utilize the more typical and broader range of between 5 and 10 dBA being potentially less than significant. The table below summarizes the minimum 4-hour L90's for reference

Receptor	Description	Min 4-hour Average L90	
		Max	Avg
M1	Residence at 6333 Eliot Street, Long Beach	51	49
M2	Residence at 6810 East Septimo Street, Long Beach	51	45
M3	Residence at the intersection of El Durado Drive and Nassau Drive, Seal Beach	47	46

For additional context, it is also likely helpful to consider that the LADWP Haynes Generating Station is located between AEC and M3. The most recent Environmental Impact Report (EIR) for Haynes repower project identified 65 dBA as the appropriate threshold and the facility impact of over 60 dBA was noted to be less than significant in the draft and final EIR.

Page 4.7-31, Condition NOISE-4 – AES proposes the following revisions to Condition NOISE-4:

NOISE-4 The project design and implementation shall include appropriate noise mitigation measures adequate to ensure that the operation of the project will not cause the noise levels due to normal steady-state plant operation alone, during the four quietest consecutive hours of the nighttime, to exceed an average of 53 55 dBA L90 measured at or near monitoring location M1, 49 51 dBA L90 measured at or near monitoring location M2, and 50 53 dBA L90 measured at or near monitoring location M3.

No new pure-tone components (as defined in Noise Table A1, bottom row defining pure tone)

shall be caused by the project. No single piece of equipment shall be allowed to stand out as a source of noise that draws project-related noise complaints.

When the project first achieves a sustained output of 85 percent or greaterof its rated capacity for each power block, the project owner shall conduct a 25- hour community noise survey at monitoring locations M1, M2, and M3, or at a closer location acceptable to the CPM. This survey shall also include measurement of one-third octave band sound pressure levels to ensure that no new puretone noise components have been caused by the project.

The measurement of power plant noise for the purposes of demonstrating compliance with this condition of certification may alternatively be made at a location, acceptable to the CPM, closer to the plant and this measured level then mathematically extrapolated to determine the plant noise contribution at the affected residence. The character of the plant noise shall be evaluated at the affected receptor locations to determine the presence of pure tones or other dominant sources of plant noise.

If the results from the noise survey indicate that the power plant noise at the affected receptor sites exceed the above values, mitigation measures shall be implemented to reduce noise to a level of compliance with these limits.

If the results from the noise survey indicate that pure tones are present, mitigation measures shall be implemented to reduce the pure tones to alevel that complies with **Noise Table A1** (bottom row defining pure tone) below.

**Verification:** The above noise survey shall be conducted each time a power block becomes operational and shall take place within 90 days of the power block first achieving a sustained output of 85 percent or greater of its rated capacity. The second survey shall include the combined operation of both power blocks at 85 percent, or greater, of the overall plant rated capacity with all turbine generators operating. Within 15 days after completing this survey, the project owner shall submit a summary report to the CPM. Included in the survey report shall be a description of any additional mitigation measures necessary to achieve compliance with the above listed noise limits, and a schedule, subject to CPM approval, for implementing these measures. When these measures are implemented and in place, the project owner shall repeat the noise survey.

Within 15 days of completion of the new survey, the project owner shall submit to the CPM a summary report of the new noise survey, performed as described above and showing compliance with this condition.

Page 4.7-33, Condition NOISE-6 – AES proposes the following revisions to Condition NOISE-6:

**NOISE-6** Heavy equipment operation and noisy construction and demolitionwork relating to any project features, including pile driving, shall be restricted to the times delineated below:

Mondays through Fridays and designated holidays:	7:00 a.m. to 7:00 p.m. Saturdays:	
	9:00 a.m. to 6:00 p.m.	
Sundays:	Construction not allowed	

Nighttime concrete pour shall comply with Condition of Certification NOISE 9.

## Limited construction activities may be performed outside of the above hours, with CPM approval as set forth below.

Haul trucks and other engine-powered equipment shall be equipped with adequate mufflers and other state-required noise attenuation devices. Haul trucks shall be operated in accordance with posted speed limits. Truck engine exhaust brake use (jake braking) shall be limited to emergencies.

**Verification:** Prior to ground disturbance, the project owner shall transmit to the CPM a statement acknowledging that the above restrictions will be observed throughout the construction of the

#### project.

Construction equipment generating excessive noise shall be updated or replaced. Temporary acoustic barriers shall be installed around stationary construction noise sources, if required to minimize construction noise. Reorient construction equipment, and relocate construction staging areas, when possible, to minimize the noise impactat nearest noise sensitive receptors.

In consultation with the CPM, construction equipment generating excessive noise shall be updated or replaced if beneficial in reducing the noise and if feasible. In addition, temporary acoustic barriers shall be installed around stationary construction noise sources if beneficial in reducing the noise and if feasible. The project owner shall reorient construction equipment, and relocate construction staging areas, when possible, to minimize the noise impact at nearest noise-sensitive receptors.

At least 10 days prior to any heavy equipment operation or noisy construction activities that would occur outside of the above hours, the project owner shall submit a request to the CPM for review and approval.

The request submitted to the CPM shall specify the activities that need to occur outside of the restricted days and times set forth above; the need for such activities; the days, dates, and times during which these activities will occur; the approximate distance of activities to residential and sensitive receptors; the expected sound levels at these receptors; and a statement that the activities will be performed in a manner to ensure excessive noise is prohibited as much as practicable. At the same time, the project owner shall notify the residents and property owners within one-half mile of the project site of the request. In this notification, the project owner shall state that it will perform this activity in a manner to ensure excessive noise is prohibited as much as practicable.

<u>"Noisy" means noise</u> that draws legitimate complaint (for the definition of "legitimate complaint", see the footnote in condition of certification **NOISE-2**)

<u>"Excessive noise" means noise</u> that draws a legitimate complaint (for the definition of "legitimate complaint", see the footnote in condition of certification **NOISE-2**)

Page 4.7-33, Condition NOISE-8 – AES proposes the following revisions to Condition NOISE-8:

**NOISE-8** The project owner shall perform pile driving in a manner to reduce the potential for any project-related noise and vibration complaints. The project owner shall notify the residents and business owners in the vicinity of pile driving prior to start of these activities. <del>Vibrations from pile driving shall be limited to a peak particle velocity of 0.16 in/sec at the nearest noise-sensitive receptors, M1, M2, and M3.</del>

**Verification:** At least 15 days prior to first pile driving, the project owner shall submit to the CPM a description of the pile driving technique to be employed, including calculations showing its projected noise impacts <u>and peak particle velocity</u> at monitoring locations M1, M2, and M3.

At least 10 days prior to first production pile driving for each power block, the project owner shall notify the residents and business owners within one mile of the piledriving. The notification may be in the form of letters, or other effective means, as approved by the CPM. In this notification, the project owner shall state that it will perform thisactivity in a manner to reduce the potential for any project-related noise and vibration complaints. The project owner shall submit a copy of this notification to the CPM prior the start of pile driving for each power block.

Page 4.7-34, Condition NOISE-9 – AES recommends that Condition NOISE-9 be removed in its entirety, as shown below.

#### CONCRETE POUR NOISE CONTROL

NOISE 9 When concrete work requires continuous pouring that may extend beyond the times specified in Condition of Certification NOISE-6, the project ownershall notify all residences in the vicinity of the project site of the commencement date and the duration of concrete pouring activities.

The average Leq noise levels from these activities shall not exceed the hourly average nighttime ambient Leq levels at M1, M2, and M3, by more than 5 dBA. In the event that noise complaints require resolution pursuant to Condition of Certification **NOISE-2**, the complaint will be resolved according to the procedures outlined in **NOISE-2**.

<u>Verification:</u> At least 10 days prior to concrete pouring activities that are anticipated to extend beyond the times specified in Condition of Certification **NOISE-6**, the project owner shall submit a statement to the CPM, specifying the time of night and the number of nights for which activities will occur, the approximate distance of activities toreceptor locations M1, M2, and M3, and the expected sound levels at these receptors, stating that the expected sound levels from this activity do not exceed the nighttime noiselimits specified above.

At the same time, the project owner shall notify the residents within one mile of this work. The notification may be in the form of letters, or other effective means as approved by the CPM. In this notification, the project owner shall state that it will perform this activity in a manner to ensure excessive noise is prohibited, and include a telephone number that will be staffed throughout this activity for use by the public report any undesirable noise conditions associated with this activity. The projectowner shall submit a copy of this notification to the CPM prior to the start of this work.

## PUBLIC HEALTH

Page 4.8-10, Cancer Risk and Estimation Process – It is stated "the health assessment considers the risk of developing cancer and assume that a continuous exposure to the carcinogen would occur over a 70-year lifetime" with a reference to Footnote 4, which points to Footnote 3. Footnote 4 should direct the reader to Footnote 2.

Page 4.8-14, Fugitive Dust – The third bullet indicates that fugitive dust could occur from an onsite concrete batch plant. However, the project is not expected to have an onsite concrete batch plant.

Page 4.8-19, Public Health Table 3 – Hexane should be included in the Non-criteria Pollutants column of this table as it is emitted from the auxiliary boiler.

Page 4.8-20, Public Health Table 4 – Hexane should be included in this table as it is emitted from the auxiliary boiler.

Page 4.8-23, Project-Related Impacts at Area Residences – The maximum resident acute hazard index should be 0.018, consistent with Public Health Table 6.

Page 4.8-23, Risk to Workers – The cancer exposure period for comparison to workers should be revised from 70 years to 30 years, consistent with the revised Office of Environmental Health Hazard Assessment methodology for determining residential risk, as described in Footnote 2 (see PSA page 4.8-9).

## SOCIOECONOMICS

Page 4.9-26, School Impact Fees – The PSA states "The rate for the 2015-2016 fiscal year for new or commercial or industrial development for the LBUSD is \$0.54 per square foot of covered and enclosed, non-residential space (CLB 2015). Based on the preliminary project design, approximately 5,000 square feet of the administration building, 5250 square feet of the water treatment building, and 6,000 square feet of the warehouse would be subject to assessment. Based on this estimate, approximately \$8,775 in school fees would be assessed for LBUSD." In the SAFC, the Applicant states "Any industrial development within the Long Beach Unified School District is currently charged a one-time assessment fee of \$0.47 per square foot of principal building area (Ahn, 2013, personal communication). Based on 16,250 square feet of occupied structures, AEC will pay \$7,638 in school impact fees. These school impact fees are considered full mitigation for any potential impacts on these school districts." Please revise the PSA to reflect the 2013 rates presented by the Applicant in the SAFC.

Page 4.9-29, Property Tax – The PSA states "Assuming a capital cost of \$940 million to \$1.11 billion and a property tax rate consistent with the current rate for the existing AGS site (1.122072 percent), the project would generate \$10.5 million to \$12.5 million in property taxes during the first operation year of the project (CEC 2016i). The property taxes assessed on the existing AGS for FY 2011-2012 were \$2.63 million. An estimated increase of approximately \$7.9 million to \$9.8 million would be generated by the AEC." In the SAFC, The Applicant states "The assumed capital cost is between \$1.1 billion and \$1.3 billion and the AEC will generate approximately \$12.3 million to \$14.6 million in property taxes annually. The property tax assessed on the existing AGS in FY 2011-12 was \$2.63 million. Thus, the estimated increase in property tax revenues generated by the construction of the AEC will be approximately \$9.71 million to \$11.95 million." Please revise the PSA to reflect the updated capital cost range presented by the Applicant in the SAFC.

## SOIL AND WATER RESOURCES

Page 4.10-24, Condition SOIL&WATER-2 – The hydrostatic testing will occur well after site mobilization and AES suggests the following change to the verification to better reflect when this documentation should be submitted.

**Verification:** 30 days prior to <u>the first scheduled hydrostatic testing event</u><u>site mobilization</u>, the project owner shall submit to the CPM documentation that all necessary NPDES permits were obtained from the Los Angeles RWQCB or State Water Board.

Page 4.10-25, Condition SOIL&WATER-3 – Please delete the following sentences or, in the alternative, move them to the Verification: "The project owner shall pay all necessary fees for filing and review of the RWD and all other related fees. Checks for such fees shall be submitted to the RWQCB and shall be payable to the State Water Resources Control Board." This will avoid the need to file an amendment if the State changes the payee or payee information.

Page 4.10-25, Condition SOIL&WATER-3 – Please delete the following sentences or, in the alternative, move them to the Verification: "In furtherance of that objective, the Energy Commission hereby delegates the enforcement of the waiver or permit requirements, and associated monitoring, inspection, and annual fee collection authority, to the RWQCB. Accordingly, the Energy Commission and the RWQCB shall confer with each other and coordinate, as needed, in the enforcement of the requirements." The RWQCB may argue that this is a federal responsibility delegated to the Board. This legal question need not be resolved in Condition language for this project.

Page 4.10-26, Condition SOIL&WATER-6 – The requirement for a maximum allowable quantity of sanitary water use is not necessary and should be eliminated. In order to document the sanitary water use, AES will need to install water meters on water supply pipelines to all buildings that include sanitary water uses. This represents an unneeded burden when the sanitary water use represents approximately 1 percent of the maximum allowable water use. Furthermore, AES will install sanitary facilities that comply with the California Building Code requirements for energy and water conservation, which will reduce sanitary water use consistent with state law. AES suggests the following revision to Condition SOIL&WATER-6:

Water supply for project construction and industrial uses during project construction and operation shall be potable water supplied by the City of Long Beach Water Department (LBWD). Water use for project operation shall not exceed 130 AFY, of which a maximum of 1.6 AFY shall be for sanitary purposes. Water use for construction shall not exceed 22 AFY during the 56-month construction period. A monthly summary of water use shall be submitted to the CPM.

## TRAFFIC AND TRANSPORTATION

Page 4.11-32, Cumulative Impacts, Traffic and Transportation Table 11, Project Number 5 – The LADWP Haynes Generating Station's installation of six LMS100 simple cycle gas turbines has been completed and these units are operational. Please revise the project status from Under Construction to Operational.

Page 4.11-42, Condition TRANS-3 – The construction employee commute traffic is not likely to result in the damage referenced in the Condition TRANS-3 and AES requests that this condition be tailored to those non-highway/freeway roadways impacted by construction material, equipment, and heavy haul deliveries. As such, AES proposes the following changes to Condition TRANS-3:

### TRANS-3 Restoration of All Public Roads, Easements, and Rights-of-Way

The project owner shall restore all public roads, easements, rights-of-way, and any other transportation infrastructure damaged due to project-related construction <u>deliveries</u>activities. Restoration shall be completed in a timely manner to the infrastructure's original condition. Restoration of significant damage which could cause hazards (such as potholes, deterioration of pavement edges, or damaged signage) shall take place immediately after the damage has occurred.

Prior to the start of site mobilization, the project owner shall notify the relevant agencies, including the city of Long Beach, Los Angeles County, and Caltrans, of the proposed schedule for project construction. The purpose of this notification is to request that these agencies consider postponement of any planned public right-of-way repairs or improvement activities in areas affected by project construction until construction is completed, and to coordinate any concurrent construction-related activities that cannot be postponed.

**Verification:** Prior to the start of site mobilization, the project owner shall videotape all <u>non-highway/freeway</u> public roads, easements, right-of-way segment(s), and intersections along the route construction <u>equipment and material delivery</u> vehicles would take in the vicinity of the project site. The project owner shall provide the videotapes to the CPM.

Page 4.11-44, Condition TRANS-8 – This condition provides that the project owner shall submit letters to the FAA and Los Alamitos Army Airfield Manager requesting that certain notices and actions be taken recommending avoidance of overflight of the project site below 2,180 feet above ground level (AGL). The Applicant does not object to the provisions of Condition TRANS-8 requiring the project owner to notify various entities regarding the location of the power plant. However, Condition TRANS-8 also requires the Applicant to advise against direct overflights of the project below 2,180 AGL. In effect, the Condition asks the Applicant to advise these agencies that the power plant poses a threat to air navigation flying over the plant below 2,180 AGL.

Determining whether there is a hazard to air navigation is within the exclusive jurisdiction of the FAA. The CEC has neither the legal authority nor the expertise to determine at what altitude planes should fly. The Applicant notes that the FAA has not made a determination that the AEC poses a hazard to air navigation nor is the existing Alamitos Generating Station or the neighboring LADWP Haynes Generating Station designated as a Notice to Airmen (NOTAM).

Furthermore, the recommended elevation limits described in the PSA assume that plume velocities of 4.3 meters per second (m/s) pose a threat to aviation. There is no scientific basis for this assumption, and the FAA has not adopted this standard. In fact, 4.3 m/s (or 14.1 feet per second) is classified as light turbulence, which poses no risk to aircraft. If the CEC is going to attempt to usurp the exclusive role of the FAA, it should do so in an open and transparent manner though a noticed rulemaking:

- a. Where the Staff's analysis and assumptions are tested by independent, qualified third parties with actual aviation expertise.
- b. Where all stakeholders can participate.
- c. Where the CEC findings, at the end of the process, will apply to all power plants under its jurisdiction.

The Applicant recommends striking all specific references to elevations in Condition TRANS-8.

## TRANSMISSION LINE SAFETY AND NUISANCE

Page 4.12-15, Condition TLSN-2 – The purpose of this condition is to determine the maximum electric and magnetic field strengths of the AEC gen-tie lines at the edges of the right-of-way (ROW) to protect public health. However, considering that the AEC gen-tie lines and the ROWs are wholly located within the fenced 71-acre Alamitos Generating Station, measuring electric and magnetic field strengths would appear unwarranted as the public is precluded from approaching the AEC gen-tie by the existing power plant security fence. The Applicant suggests deleting Condition TLSN-2 in its entirety, as shown below.

**TLSN-2** The project owner shall measure the maximum strengths of the line electric and magnetic fields at the edge of the right-of-way to validate the estimates the applicant has provided for these fields. These measurements shall be made (a) according to the standard procedures of the American National Standard Institute/Institute of Electrical and Electronic Engineers (ANSI/IEEE) and (b) before and after energization. The measurements shall be completed no later than six months after the start of operations.

**Verification:** The project owner shall file copies of the pre-and post-energization measurements with the CPM within 60 days after completion of the measurements.

## VISUAL RESOURCES

Page 4.13-1, Summary of Conclusions – The statement that "Impacts at KOP 4 are considered less than significant with mitigation incorporated (Condition of Certification **VIS-2**)" is inconsistent with the findings on page 4.13-17 in the Direct and Indirect Impacts and Mitigation Measures section, which finds that the impacts on the view from Key Observation Point (KOP) 4 are less than significant but that the impacts on the view from KOP 3 would require mitigation to be less than significant. As explained below, the Applicant disagrees with the finding that the impacts on KOP 3 would produce significant impacts that require mitigation to be reduced to a level that is less than significant.

Page 4.13-17, Direct and Indirect Impacts and Mitigation Measures, KOP 3 – The Applicant disagrees with the PSA's conclusion that significant visual impacts would occur in the view from KOP 3 that require mitigation to be brought to a level that is less than significant. The SAFC analysis, which was completed using the systematic Federal Highway Administration (FHWA) visual impact assessment methodology, determined that overall, with the AEC in place, the visual quality of the view will remain the same. With the AEC, the view from KOP 3 will be slightly more unified and intensified by creating a horizontal pattern across the middleground that reinforces the visual cohesion of the view. The AEC will have a low and streamlined profile in the landscape that is consistent with the scale of the landscape's other elements. This positive effect will be counterbalanced by a slight decrease in the intactness of the view created by the introduction of the new structures and stacks in the now-open area seen at the far end of the Los Cerritos Channel. The overall effect will be that the visual quality of the views from KOP 3 will remain the same. Given that the visual quality of this view will not be altered, there is no basis for requiring the imposition of Condition VIS-2 to attenuate project visual impacts on this view.

Page 4.13-17, Direct and Indirect Impacts and Mitigation Measures, KOP 3 – Based on the analysis of the impacts of this view provided in the SAFC, the Applicant disagrees that significant visual impacts would occur in the view from KOP 3 that require mitigation to be brought to a level that is less than significant.

Page 4.13-21, Summary of Project Effects, Substantially Degrade the Visual Character and Quality of the Site and its Surroundings – The statement that "At KOP 4, visual impacts are considered **less than significant with mitigation incorporated"** is inconsistent with the findings on page 4.13-17 in the Direct and Indirect Impacts and Mitigation Measures section, which finds that the impacts on the view from KOP 4 are less than significant but that the impacts on the view from KOP 3 would require mitigation to be less than significant. As explained above, the Applicant disagrees with the finding that the impacts on KOP 3 would produce significant impacts that require mitigation to be reduced to a level that is less than significant under this CEQA criterion.

Page 4.13-27, Condition VIS-1 – AES proposes the following revisions to Condition VIS-1:

- VIS-1 Lighting Project Construction. Consistent with applicable worker safety regulations, the project owner shall ensure that lighting of on-site construction areas and construction worker parking lots minimizes potential night lighting impacts by implementing the following measures:
  - <u>The Lighting Management Plan shall include three printed sets of full-size plans (24" x 36",</u> <u>minimum), three sets of 11" x 17" reductions, a digital copy in PDF format, and contain the</u> <u>following information.</u>
  - All fixed-position lighting shall be hooded and shielded to direct light downward and toward the construction area to be illuminated to prevent illumination of the night sky and minimize light

trespass (i.e., direct light extending beyond the boundaries of the parking lots and construction sites, including any security-related boundaries).

- Lighting of any tall construction equipment (e.g., scaffolding, derrick cranes) shall be directed toward areas requiring illumination and shielded to the maximum extent practicable.
- Task-specific lighting shall be used to the maximum extent practicable.
- Wherever and whenever feasible, lighting shall be kept off when not in use and motion sensors shall be used to the maximum extent practicable.
- The Compliance Project Manager (CPM) shall be notified of any construction-related lighting complaints. Complaints shall be documented using a form in the format shown in Attachment 1, and completed forms shall record resolution of each complaint. A copy of each completed complaint form shall be provided to the CPM. Records of lighting complaints shall also be kept in the compliance file at the project site.

**Verification:** Within 7 calendar days after the first use of fixed-position parking area and construction lighting for major construction milestones, the project owner shall notify the CPM that the lighting is ready for inspection. Verification is to be repeated for these construction milestones:

- construction of Power Block 1
- construction of Power Block 2

If the CPM determines that modifications to the lighting are needed for any construction milestone, within 14 calendar days of receiving that notification, the project owner shall correct the lighting and notify the CPM that modifications have been completed.

Within 48 hours of receiving a lighting complaint for any construction activity, the project owner shall provide to the CPM a copy of the complaint report and resolution form, including a schedule for implementing corrective measures to resolve the complaint. The project owner shall report any lighting complaints and document their resolution in the Monthly Compliance Report for the project, accompanied by copies of completed complaint report and resolution forms for that month.

Page 4.13-28, Condition VIS-2 – AES has the following comments on Condition VIS-2, which are incorporated into the revised language proposed below.

- The reference to elevation drawings at "life-size scale" appears to be a carry-over from conditions in which simulations are required where the "life-size scale" requirement could be argued to have some relevance. When it comes to elevation drawings, the "life-size scale" requirement is neither meaningful nor relevant. AES requests that this language be removed.
- Instead of providing the information on structure dimensions and proposed color and finish for each of the structures on the elevation drawing, it would be more practical and easier to follow to provide this information on a spreadsheet that is linked to the elevation drawing. We have suggested language that would make this change.
- The language in this condition now calls for visual simulations depicting the project's color treatment for the views from two KOPs, which have not been specified. Given the fact that the project's structures will not be visible in the view from KOP 1, will be barely visible in the view from KOP 2, and will be small elements of the distant view in KOP 3, our assessment is that the only view for which it would be useful to prepare a simulation depicting the project's color treatment would be the view from KOP 4. We have revised the language of this part of the condition to specify that a simulation of the color treatment plan will be prepared for the view from KOP 4.
- VIS-2 Surface Treatment of Project Structures and Buildings. Prior to commercial operation of the Power Block 1, the project owner shall prepare and implement a Surface Treatment Plan addressing treatment of the

surfaces of all project structures and buildings visible to the public such that proposed colors and finishes (1) minimize visual intrusion and reduce contrast by blending with the existing visual environment, (2) avoid creating new sources of substantial glint and glare, and (3) are consistent with all applicable laws, ordinances, regulations, and standards.

The Surface Treatment Plan shall include, at a minimum, the following elements:

- Description of the overall rationale for the proposed surface treatments, including selection of the proposed colors and finishes;
- Discussion of proposed opportunities and options for using color to enhance design quality;
- Schedule for completing the surface treatments;
- Procedure to ensure proper surface treatment maintenance for the life of the project;
- Three printed sets (11" x 17"), and a digital copy in PDF format of elevation drawings depicting at life-size scale-the major project structures and buildings, and specifying keyed to a spreadsheet that for each structure and building specifies: (1) the proposed color and finish; and (2) the height, length, and width or diameter;
- Two sets of color brochures, color chips, and or physical samples showing each proposed color and finish. Digital files showing proposed colors may not be submitted in place of original samples. Colors must be identified by vendor, name, and number, or according to a universal designation system; and
- Three printed sets (11' x 17") and a digital copy in PDF format of color <u>of a</u> visual simulation<u>s</u>-at life-size scale showing the surface treatment proposed for the project structures. The visual simulations for key observation point (KOP) X and KOP X KOP 4 shall be used to prepare <u>an</u> images showing the proposed surface treatment plan.

The Surface Treatment Plan shall be submitted to the Compliance Project Manager (CPM) for review and approval. The project owner shall not submit instructions for colors and finishes to manufacturers or vendors of project structures, or perform final field treatment on any structures, until written approval of the final plan is received from the CPM. Modifications to the Surface Treatment Plan are prohibited without the CPM's approval.

**Verification:** At least 90 calendar days before submitting instructions for colors and other surface treatments to manufacturers or vendors of project structures, and/or ordering prefabricated project structures, the project owner shall submit the Surface Treatment Plan to the CPM for review and comment.

If the CPM determines that the plan requires revision, the project owner shall provide a plan with the specified revision(s) for review and approval by the CPM. No work to implement the Surface Treatment Plan shall begin until final plan approval is received from the CPM.

Prior to the start of commercial operation of Power Block 1, the project owner shall notify the CPM that surface treatments of all publicly visible structures and buildings identified in the Surface Treatment Plan have been completed and that the facilities are ready for inspection. The project owner shall obtain written confirmation from the CPM that the project complies with the Surface Treatment Plan.

Page 4.13-29, Condition VIS-3 – This condition contains language that states "The objective shall be to create landscape of a semi-permanent manner with California-native, drought-tolerant groundcover and tree species of colorful, interesting, and distinctive character." The specification that the plant species be of "colorful, interesting, and distinctive character." The specification to subjectivity in the evaluation of the final planting plan, and should these criteria be interpreted too literally, they could be difficult to meet when using a palette of site-appropriate native plant materials. AES requests that the text of VIS-3 be edited, as proposed below, to drop

these criteria. The landscape plan will be developed by a well-qualified, professional, California licensed landscape architect, and should be assumed that the designer will use his or her best professional judgment in taking aesthetics into account in the development of the planting design.

In addition, there is a preference to initiate planting in the first optimal planting season after grading and construction of permanent perimeter fences. To ensure that landscaping does not have to be replanted or moved after the project has been constructed, the Applicant also recommends revising the verification of VIS-3.

VIS-3 Perimeter Landscape Screening. The project owner shall provide landscaping that provides minimum open space areas on the project site in accordance with local policies. The objective shall be to create landscape of a semi-permanent manner with California-native, drought-tolerantgroundcover and tree species-of colorful, interesting, and distinctive character.

The project owner shall submit to the Compliance Project Manager (CPM) for review and approval and simultaneously to the city of Long Beach for review and comment a landscaping plan whose proper implementation will satisfy these requirements. The plan shall include:

- a) A detailed landscape, grading, and irrigation plan, at a reasonablescale. The plan shall demonstrate how the requirements stated above shall be met. The plan shall provide a detailed installation schedule.
- b) A list (prepared by a qualified professional arborist familiar with local growing conditions) of proposed species, specifying installation sizes, growth rates, expected time to maturity, expected size at five years and at maturity, spacing, number, availability, and a discussion of the suitability of the plants for the site conditions and mitigation objectives, with the objective of providing the widest possible range of species from which to choose;
- c) Maintenance procedures, including any needed irrigation and a planfor routine annual or semiannual debris removal for the life of the project; and
- d) A procedure for monitoring for and replacement of unsuccessful plantings for the life of the project.

The plan shall not be implemented until the project owner receives final approval from the CPM.

**Verification:** The landscaping plan shall be submitted to the CPM for review and approval and simultaneously to the city of Long Beach for review and comment at least 90 days prior to installation.

If the CPM determines that the plan requires revision, the project owner shall provide to the CPM and simultaneously to the city of Long Beach a revised plan for review and approval by the CPM.

The planting must occur during the first optimal planting season following site mobilization. Planting must be completed or bonded by the start of commercial operation. Planting must occur during the optimal planting season, but not later than 6 months after the start of commercial operation. The project owner shall simultaneously notify the CPM and the city of Long Beach within seven days after completing installation of the landscaping that the landscaping is ready for inspection.

The project owner shall report landscape maintenance activities, including replacement of dead or dying vegetation, for the previous year of operation in each Annual Compliance Report.

Page 4.13-30, Condition VIS-4 – The Applicant proposes the following revisions to Condition VIS-4 for additional clarity and flexibility.

VIS-4 The project owner shall prepare and implement a comprehensive Lighting Management Plan for project operations. The project owner shall not purchase or order any permanent lighting fixtures or apparatus until written approval of the final plan is received from the CPM. Modifications to the Lighting Management Plan are prohibited without the CPM's approval.

Consistent with applicable worker safety regulations, the project owner shall design, install, and maintain all permanent exterior lighting such that light sources are not directly visible from areas beyond the

project site, glare is avoided, and night lighting impacts are minimized or avoided to the maximum extent feasible. All lighting fixtures shall be selected to achieve high energy efficiency for the facility. The project owner shall meet these requirements for permanent project lighting:

- 1. The Lighting Management Plan shall include three printed sets offull-size plans (24" x 36", minimum), three sets of 11" x 17" reductions, a digital copy in PDF format, and contain the following information.
- 2. The Lighting Management Plan shall be prepared with the direct involvement of a certified lighting professional trained to integrate efficient technologies and designs into lighting systems.
- 3. Exterior lights shall be hooded and shielded and directed downward or toward the area to be illuminated to prevent obtrusive spill light (i.e., light trespass) beyond the project site.
- 4. Exterior lighting shall be designed to minimize backscatter to the nightsky to the maximum extent feasible.
- 5. Energy efficient lighting products and systems shall be used for all permanent new lighting installations. Smart bi-level exterior lighting using high efficiency directional LED fixtures shall be used as appropriate for exterior installations. The lighting system shall work in conjunction with occupancy sensors, photo sensors, wireless controls, and/or other scheduling or controls technologies to provide adequate light forsecurity and maximize energy savings.
- 6. Lighting fixtures shall be kept in good working order and continuously maintained according to the original design standards.
- 7. The Lighting Management Plan shall be consistent with all applicable laws, ordinances, regulations, and standards.

The Compliance Project Manager (CPM) shall be notified of any complaints about permanent lighting at the project site. Complaints shall be documented using a form in the format shown in Attachment 1, and completed forms shall record resolution of each complaint. A copy of each completed complaint form shall be provided to the CPM. Records of lighting complaints shall also be kept in the compliance file at the project site.

**Verification:** At least 90 calendar days before **installation of** <del>ordering</del> any permanent lighting equipment for the project, the project owner shall submit the comprehensive Lighting Management Plan to the CPM for review and approval.

If the CPM determines that the plan requires revision, the project owner shall provide a plan with the specified revision(s) for review and approval by the CPM. No work to implement the plan (e.g., **installation**purchasing of fixtures) shall begin until final plan approval is received from the CPM.

Prior to the start of commercial operation of the project, the project owner shall notify the CPM that installation of permanent lighting for the project has been completed and that the lighting is ready for inspection. If the CPM notifies the project owner that modifications to the lighting system are required, within 30 days of receiving that notification, the project owner shall implement all specified changes and notify the CPM that the modified lighting system(s) is ready for inspection.

## FACILITY DESIGN

No comments

## GEOLOGY AND PALEONTOLOGY

Page 5.2-27, Condition GEO-2 – AES appreciates Staff's consideration for mitigating potential tsunami risks and is willing to incorporate applicable tsunami recommendations and procedures into the Emergency Action Plans specified in Conditions Worker Safety-1 (Project Construction Safety and Health Program) and Worker Safety-2 (Project Operations and Maintenance Safety and Health Program) similar to other known geologic hazards that exist. In fact, AES's existing site safety plan already includes tsunami response as part of the Emergency Action Plan. As there is no regulatory basis for development of a Tsunami Hazard Mitigation Plan at either the local, state, or federal level, AES requests Condition GEO-2 be deleted in its entirety.

Page 5.2-29, Condition PAL-1 – AES suggests the following language be added to the verification of the Condition PAL-1, and any other conditions related to the Paleontological Resource Specialist and replacement of said specialist:

The Project Owner shall provide the Compliance Project Manager (CPM) with the resume and qualifications of its Paleontological Resource Specialist (PRS) for review and approval. A proposed PRS previously approved by Commission Staff within the preceding five (5) years shall be deemed approved ten (10) days after project owner provides a resume and statement of availability of the proposed PRS. The CPM may disapprove a previously approved PRS within seven (7) days of Project Owner submission of the Proposed PRS' resume and statement of availability only if non-compliance or performance issues events were documented in the compliance record for the previous CEC project work conducted by the proposed Paleontological Resource Specialist previously approved within the last five (5) years by the Commission shall be automatically approved and the project owner shall provide a resume and statement of availability. The CPM may disapprove a previously approved PRS if non-compliance or performance or performance issues were documented in the record during the previous project work by the PRS or the PRS's qualifications are not applicable to the specific paleontological resources identified in the project area.

...

3. Prior to any **planned** change of the PRS, the project owner shall submit the resume of the proposed new PRS to the CPM for review and approval.

## POWER PLANT EFFICIENCY

Page 5.3-3, Adverse Effects on Energy Supplies and Resources, 2<sup>nd</sup> paragraph, last sentence – This sentence indicated AEC will start up the first quarter of 2017 to the third quarter of 2021. This is the construction period for the project. The expected first fire dates for the two power blocks are 3<sup>rd</sup> quarter 2019 for the combined-cycle power block and 3<sup>rd</sup> quarter 2021 for the simple-cycle power block.

## POWER PLANT RELIABILITY

Page 5.34-3, Fuel Availability, 1<sup>st</sup> full paragraph, last sentence – This sentence indicated AEC will start up the first quarter of 2017 to the third quarter of 2021. This is the construction period for the project. The expected first fire dates for the two power blocks are 3<sup>rd</sup> quarter 2019 for the combined-cycle power block and 3<sup>rd</sup> quarter of 2021 for the simple-cycle power block.

## TRANSMISSION SYSTEM ENGINEERING

Pages 5.5-10 and 5.5-11, Condition TSE-3 – The purpose of the condition is to ensure that the transmission facilities are designed, constructed, and operated in conformance with all applicable LORS. Because the

documents requested and specific items necessary to implement this condition are detailed in the verification, the Applicant recommends that the condition be streamlined as follows. The Applicant does not have any proposed changes to the verification language.

**TSE-3** The project owner shall ensure that the design, construction, and operation of the proposed transmission facilities will conform to all applicable LORS, and the requirements listed below. The project owner shall submit the required number of copies of the design drawings and calculations, as determined by the CBO.

Once approved, the project owner shall inform the CPM and CBO of any anticipated changes to the design, and shall submit a detailed description of the proposed change and complete engineering, environmental, and economic rationale for the change to the CPM and CBO for review and approval.

- a) The power plant switchyard and outlet line shall meet or exceed the electrical, mechanical, civil, and structural requirements of CPUC General Order 95 or National Electric Safety Code (NESC); Title 8 of the California Code and Regulations (Title 8); Articles 35, 36 and 37 of the High Voltage Electric Safety Orders, California ISO standards, National Electric Code (NEC) and related industry standards.
- b) All components, including breakers and busses in the power plant switchyard and other switchyards, where applicable, shall be sized to comply with a short-circuit analysis.
- c) Outlet line crossings and line parallels with transmission and distribution facilities shall be coordinated with the transmission line owner and comply with the owner's standards.
- d)—The project conductors and all components like buses, Breakers, and Transformers etc. shall be sized to accommodate the full output of the project.
- e) Termination facilities shall comply with industry standards and applicable SCE interconnection standards.
- f) The project owner shall provide the following for all seven AEC units to the CPM
  - i. The Special Protection System (SPS) sequencing and timing if applicable,
  - ii. The pre-LGIA final interconnection analysis report by the California ISO and/or SCE including the short circuit report.
  - iii. The electrical one-line diagrams for two AEC switchyards with all updates for generator ratings, including final percentage impedances of the GSU transformers.
  - iv. The electrical one-line diagram of the SCE Alamitos Switchyard West and East 230 kV buses, with all updates including configuration of buses and circuit breakers with associated disconnect switches, including their types and/or ampere ratings and leveled transmission outlets, considering decommissioning and disconnection of all the existing AGS generator units.
  - v. The operational study report(s) based on in-service dates or current commercial operation dates (CODs) system conditions from the California ISO and/or SCE.
  - vi. A copy of the executed LGIA (s) signed by the California ISO and the project owner, and approved by the Federal Energy Regulatory Commission.

#### Verification: [No changes.]

Pages 5.5-10 and 5.5-11, Condition TSE-4 – While the Applicant will most certainly provide the California Independent System Operator (CAISO) with CAISO-required information, there is no need to have those CAISO obligations repeated in Conditions of Certification. Moreover, CAISO requirements are federal requirements, not State LORS, given that the CAISO is a Federal Energy Regulatory Commission (FERC)-regulated entity. Condition TSE-4 should be deleted.

- **TSE-4** The project owner shall provide the following notice to the California Independent System Operator (California ISO) prior to synchronizing the facility with the California transmission system:
  - 1.—At least one week prior to synchronizing the facility with the grid for testing, provide the California ISO a letter stating the proposed date of synchronization; and
  - 2. At least one business day prior to synchronizing the facility with the grid for testing, provide telephone notification to the California ISO Outage Coordination Department.

**Verification:** The project owner shall provide copies of the California ISO letter to the CPM when it is sent to the California ISO one week prior to initial synchronization with the grid. The project owner shall contact the California ISO Outage Coordination Department, Monday through Friday, between the hours of 0700 and 1530 at (916) 351–2300 at least one business day prior to synchronizing the facility with the grid for testing. A report of conversation with the California ISO shall be provided electronically to the CPM one day before synchronizing the facility with the California transmission system for the first time.

### WASTE MANAGEMENT

Page 4.13-19, Waste Management Table 5 -

- Waste Management Table 5 notes that the Savage Canyon Landfill has a permitted capacity of 15 million cubic yards. However, the SAFC notes that the permitted capacity is 19,337,450 million cubic yards, as of October 2015, based on CalRecycle Solid Waste Information System Database (CalRecycle, 2015). In addition, the estimated closure date listed in the PSA is 2048, while the SAFC notes a closure date of 2055. The remaining capacity is consistent. Please reconcile these discrepancies.
- The Puente Hills Landfill was not included in SAFC Table 5.14-4, Solid Waste Disposal Facilities in the Vicinity of the AEC. However, the Puente Hills Landfill is listed in Waste Management Table 5 as having available capacity. The Applicant did not include the Puente Hills Landfill in the SAFC because it is/was closing.<sup>4</sup> Please reconcile this discrepancy.

## WORKER SAFETY AND FIRE PROTECTION

Page 5.7-18, Condition WORKER SAFETY-8 – This condition requires compliance with 49 Code of Federal Regulations (CFR) Part 192, Sections 163 through 173, which describe fire protection measures, and would treat the compressor enclosure as an industrial enclosure. Part 192 normally would not be applicable, as these provisions apply only to compressor enclosures along a natural gas transmission pipeline. For these reasons, the Applicant proposes deletion of Condition WORKER SAFETY-8.

WORKER SAFETY-8 The project owner shall ensure that the natural gas compressor buildings at the Alamitos Energy Center shall comply with NFPA requirements for compressor enclosures and that it shall also comply with the requirements set forth in 40 CFR 192 Sections 163 through 173 regarding fire and explosion protection systems. All documentation of plans for the compressor enclosure shall be submitted to the CPM for review and approval.

> **Verification:** At least 60 days prior to the start of construction of the natural gas compressor building the project owner shall submit to the LBFD for review and comment, and to the CPM for review and approval, documentation of plans for the compressor enclosure at the Alamitos Energy Center demonstrating compliance with the condition described above.

<sup>&</sup>lt;sup>4</sup> Website: <u>http://www.calrecycle.ca.gov/SWFacilities/Directory/19-AA-0053/Detail/</u>

## **Compliance Conditions**

Page 6-2, Site Assessment and Pre-Construction Activities – This section states, "The below-listed site assessment and pre-construction activities may be initiated or completed prior to the start of construction, subject to the CPM's approval of the specific site assessment or pre-construction activities." Demolition activities are exempt from CEQA. Landowners can demolish structures by obtaining a ministerial demolition permit. The PSA should add a sixth category of CEQA-exempt activities: "6. Demolition activities that would be permitted by obtaining a ministerial demolition permit from the local government (city or county)."

Page 6-14, Condition COM-11 – The five (5) day timeline for reporting complaints should be modified to indicate six (6) business days to allow for weekend/holiday work schedules, as proposed below:

#### COM-11

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Within five (5)six (6) business days of receipt, the project owner shall report and provide copies to the CPM of all complaints (including, but not limited to, noise and lighting complaints, notices of violation, notices of fines, official warnings, and citations).

Page 6-15, Condition COM-13, Item #1 – There are numerous events that could potentially occur to the AEC generating units that may last longer than 15 minutes and reduce the maximum output capability of a generating unit by at least 10 megawatts, which would not result in an unsafe condition or materially affect facility operations. These events could be a temporary outage of a pump or valve, loss of a fan in the cooling system, or the resetting of a programmable logic controller. These minor events could affect plant output without causing any potential environmental effect, even if the plant output is affected for hours while repairs are initiated. These types of events would have no effect on the project's compliance with the proposed conditions of certification and applicable LORS, and it is not clear what, if anything, the CEC would do with the requested information, given the CEC's statutory authorities. Therefore, AES suggests the following revision to Condition COM-13:

**COM-13** Incident-Reporting Requirements. The project owner shall notify the CPM or Compliance Office Manager, by telephone and e-mail, within one (1) hour after it is safe and feasible, upon identification of any incident at the power plant or appurtenant facilities that results or could result in any of the following:

> **1.** a reduction in the maximum output capability of a generating unit of at least ten (10) MW or five (5) percent, whichever is greater, that lasts for fifteen (15) minutes or longer (or such values as trigger CAISO no prior notice outage reporting requirements under any subsequent modifications to CAISO tariff 9.3.10.3.1); facility's ability to respond to dispatch (excluding forced outages cause by protective equipment or other typically encountered shutdown events);

Pages 6-17 through 6-21, Conditions COM-14 and COM-15 – The Applicant has significant concerns regarding Conditions COM-14 and COM-15 and would like to discuss them with CEC Staff at the upcoming AEC PSA workshop.