

DOCKETED

Docket Number:	12-AFC-02
Project Title:	Huntington Beach Energy Project
TN #:	201142
Document Title:	Applicant's Comments on PSA, Part A
Description:	Applicant's Comments on PSA, Part A
Filer:	Kimberly Hellwig
Organization:	Stoel Rives LLP
Submitter Role:	Applicant Representative
Submission Date:	11/7/2013 2:43:16 PM
Docketed Date:	11/7/2013



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November 7, 2013

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VIA ELECTRONIC DOCKETING

Ms. Felicia Miller, Siting Project Manager
California Energy Commission
1516 Ninth Street
Sacramento, California 95814

Re: Huntington Beach Energy Project (12-AFC-02)
Applicant's Comments on the Preliminary Staff Assessment (Part A)

Dear Ms. Miller:

On October 10, 2013, the California Energy Commission ("Commission") Staff published the Preliminary Staff Assessment, Part A ("PSA" or "Part A") for the Huntington Beach Energy Project ("HBEP" or the "Project"). Herein please find Applicant AES Southland Development, LLC's ("Applicant") comments on specific sections of the PSA, Part A.¹ At this time, Applicant has no comments on those sections of Part A that are not identified herein. Nevertheless, Applicant also reserves the right to provide additional comments, if needed, after Staff's Workshop on PSA Part A.

CEC Staff indicated that PSA Part A addresses all issue areas except Air Quality, Public Health, and Alternatives. These three issue areas will be covered in PSA Part B, which Staff indicated will be published 45 days from the date that the South Coast Air Quality Management District issues its Preliminary Determination of Compliance. In addition, Applicant is concerned that Staff has left various other issue areas incomplete in PSA Part A and has indicated that they will be completed in the FSA, which will not allow Applicant opportunity for comment prior to evidentiary hearings. Applicant is concerned that Staff's conclusions in various issue areas are left open-ended, and, in some instances, are overreaching and describe impacts that simply do not exist. Therefore, Applicant respectfully requests that Staff update certain issue areas as part of the publication of PSA Part B; namely, Biological Resources, Land Use, Noise and Vibration, Visual Resources, and Transmission System Engineering. If Staff does not finalize these draft sections in PSA Part B, Applicant reserves the right to provide comments on the FSA within 30 days of its publication, prior to evidentiary hearings.

¹ Applicant's proposed edits to Conditions of Certification set forth herein are identified as **bold**, **underlined** or ~~strikethrough~~ text.



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I. ENVIRONMENTAL ASSESSMENT COMMENTS

A. Biological Resources

1. Noise-related issues

a. Wetlands and Wildlife Care Center

The PSA improperly analyzes the potential noise impacts to the Wetlands and Wildlife Care Center (“WCC” or “Center”) located near the intersection of Pacific Coast Highway (“PCH”) and Newland Street. The biological resources section of the PSA characterizes the WCC as a “sensitive wildlife receptor.” The WCC has been open since 1998, situated between an operational power plant site and a major state highway for more than fifteen years. The Center clearly does not fall within the definition of a sensitive receptor. The City’s General Plan does not identify the WCC as a “sensitive receptor.” (*See* General Plan, Noise Element, V-N-4.) Only local hospitals, public schools, institutions (affecting churches, museums, and private schools) are identified as “sensitive land uses.” This is further supported by the definition that is routinely used by the CEC. (*See, e.g.*, Final Decision, Carlsbad Energy Center Project, at p. I-5, fn.3 (May 31, 2012) (defining sensitive receptors as “people or institutions with people that are particularly susceptible to illness, such as the elderly, very young children, people already weakened by illness (e.g., asthmatics), and persons engaged in strenuous exercise.”); Final Decision, Pio Pico Energy Center Project (“PPEC”), at p. I-5, fn. 2 (Sept. 12, 2012) (citing same definition) also referred to as “a receptor at which there is a reasonable degree of sensitivity to noise (such as residences, schools, hospitals, elder care facilities, libraries, cemeteries, and places of worship).” (Final Decision, PPEC at p. 8.4-4, fn.1).)

Additionally, the WCC should not be classified as a “sensitive receptor” because it has been knowingly located in a General Industrial zoning district. In fact, the initial CUP identified the WCC as an animal hospital located in a Heavy Industrial – Oil - Floodplain - Coastal Zone (M2-O-FP2-CZ), a zone that allows for the full range of manufacturing, industrial processing, resource and energy production, general service and distribution uses. (*See* Zoning Code § 204.12.) Because the WCC is located in a General Industrial zone, and adjacent to an operating power plant (HBGS), neighboring facilities such as HBGS and future facilities such as HBEP that are consistent with the industrial zoning should not be held to more stringent noise standards than otherwise apply to the zone.



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The WCC is not and should not be considered a sensitive biological resource on the basis that wildlife species are being rehabilitated within the facility. If noise was a concern for the rehabilitating wildlife, then the WCC should have been located in an area with less auditory disturbances. As previously stated, the WCC is located between PCH and a historically industrial use, an operational power plant, which are sources of both continuous and intermittent noise. While there is a concrete fence/wall in front of the WCC, it has been designed with equally-spaced gaps that negate its acoustical effectiveness, but does provide for views of the beach. If noise was a concern for the WCC, then a very tall solid block wall would be more effective and suitable for buffering PCH traffic-related noise from affecting the facility. At PCH, near Newland Street, there has been an average increase in annual average daily trips (AADT) of 0.95% (360 AADT per year) from 1992 to 2012 (Caltrans, 2013), which has resulted in an increase in the traffic-related noise levels at the WCC over time. Evaluation of peak traffic hourly volumes along Pacific Coast Highway results in a predicted traffic noise level of 70 dBA at the WCC. The project-related noise is a continuation of the noise from the existing HBGS and is not expected to significantly affect WCC because it is not a sensitive receptor and is within a General Industrial zoning district.

The PSA requests that the Applicant conduct a 25-hour continuous ambient noise survey at the WCC. (PSA at p. 4.2-38.) As discussed above, since WCC does not meet the definition of a sensitive receptor, such ambient monitoring is unnecessary, inappropriate, and irrelevant. Moreover, it is also extremely burdensome to collect additional baseline sound level information. Applicant conducted an extensive additional noise monitoring campaign, as documented in “Additional Responses to Jason Pyle’s Data Request, Set 1 (#1-16) (Jan, 17, 2013). Figure DR PYLE 7-1 depicts measured sound levels outside the main entrance to WCC at 69 to 75 dBA (HHM 10, L_{90} = 69 dBA and HHM 02, L_{90} = 75 dBA). Similarly, as noted above, evaluation of peak traffic hourly volumes along Pacific Coast Highway results in a predicted level of 70 dBA at the WCC.

The PSA states, “The operational noise level at the Wildlife Care Center is estimated to be between 67 and 69 dBA. It is unknown what the ambient noise levels are at this receptor so staff is unable to determine whether this would be a significant change” (PSA, p. 4.2-44.) As indicated above, the operational levels are consistent with the measured existing levels and predicted traffic noise levels.

The noise section of the PSA includes specific conditions of certification (COCs) to protect sensitive receptors from excessive noise (NOISE-4) and that condition is specifically referenced in the discussion of biology impacts. With the implementation of suggested changes noted



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herein to the noise COCs, the Project meets the noise standards for an industrial facility and the PSA concludes that the project would produce no significant direct or cumulative adverse noise impacts under CEQA guidelines. (PSA, p. 4.6-21.)

Staff is also requesting that the Applicant select several noise reduction measures and provide updated construction and demolition noise modeling that assumes implementation of these measures. (PSA, p. 4.2-1.) As noted in the noise section, proposed COCs, inclusive of suggested changes noted herein, ensure compliance with applicable noise standards and no additional modeling is necessary.

b. Construction and Demolition Noise Impacts to Special-Status Birds

Anticipated construction sound levels are described in Section 5.7.4.2.1 of the AFC and additional information is provided in Applicant's responses to Staff's Data Requests, Set 1A (#1-72), Additional Responses to Intervenor Pyle's Data Requests, Set 1 (PYLE-1 through PYLE-16) and Supplemental Data Response, DR31 (Biological Resources). (CEC TN# 68366, 69180, and 69888, respectively.) Average sound levels at 375 feet from construction and demolition activities for HBEP are anticipated to range between 60 and 71 dBA. These levels will dissipate with distance at a rate of approximately 6 dBA per doubling of distance, which yields 48 to 59 dBA at 1,500 feet, representing the range in average construction and demolition sound levels expected within the Magnolia Marsh, including the Upper Magnolia Marsh (hereafter collectively referred to as Magnolia Marsh). Based on the estimated noise levels at 1,500 feet, impacts from construction and demolition noise are not expected to be significant at the Newland Marsh, Brookhurst Marsh and Talbert Marsh.

In addition, existing noise levels within the Magnolia Marsh indicate sound levels between 60 and 66 dBA were repeatedly achieved at the Pier (M5) while sound levels ranged between approximately 50 to 57 dBA at the Huntington Beach Generating Station Property Line (M6), which denotes a relatively high level of baseline ambient noise within the Magnolia Marsh. Ambient noise levels within portions of the Magnolia Marsh already exceed the 60 dBA screening threshold, which indicates that a higher screening threshold is warranted for these locations in particular. The noise measurements collection as part of the analysis of HBEP document that the area in which the Magnolia Marsh is located is not acoustically pristine and sound levels are influenced by a number of sources, both natural (surf and wind) and anthropogenic (an urban setting which includes traffic on PCH, the existing generating station, and other typical urban noise sources).



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To augment the analysis of project-related construction and demolition noise impacts analyzed in the AFC and in response to the biological analysis in the PSA, an additional California Department of Fish and Wildlife (“CDFW”) California Natural Diversity Database (“CNDDDB”) search as part of the Applicant’s response to biological assessment included in the staff’s PSA was conducted to determine if any new special-status species observations have been documented within one mile of HBEP; the result of this additional CNDDDB search found that no new occurrence records have been identified (CDFW, 2013). As previously stated in the AFC, Applicant’s Responses to Staff’s Data Requests, Set 1A (#1-72) and Supplemental Data Response, DR31 the only breeding special-status avian species that has been documented within Magnolia Marsh is Belding’s savannah sparrow (*Passerculus sandwichensis beldingi*). The light-footed clapper rail (*Rallus longirostris levipes*) has not been documented within the Magnolia Marsh. (*Ibid.*) According to Zembal and Hoffman (2012), a pair of light-footed clapper rail was detected within the Brookhurst Marsh. However, the Brookhurst Marsh is a minimum of 1,350 feet from Block 1 of HBEP and construction and demolition noise are not expected to impact nesting within this marsh. Regarding the other special-status avian species, the California brown pelican (*Pelecanus occidentalis*), California least tern (*Sterna antillarum browni*) and western snowy plover (*Charadrius alexandrinus nivosus*) may use the Magnolia Marsh for foraging and loafing; however, there is other higher quality habitat available in the immediate vicinity. The existing 60 to 66 dBA noise levels in the Magnolia Marsh are a result of various noise sources, including the HBGS, PCH and Magnolia Street traffic and other urban noise producers. Currently these existing noise levels do not deter wildlife species from utilizing the area, as previously indicated Belding’s savannah sparrow nests within the Magnolia Marsh. The noise levels from HBEP are not expected to result in a significant increase in these existing noise levels; therefore, wildlife uses are not expected to be significantly different.

In addition, as noted in Applicant’s Supplemental Data Response, DR-31 (Biological Resources), the Magnolia Marsh restoration was completed in February 2010 and restoring salt marsh structure and function requires significant time to develop to resemble natural and/or desired conditions. For example, within smooth cordgrass marshes (*Spartina alterniflora*) restored conditions began to resemble natural construction for primary producers and heterotrophic activity (i.e., cordgrass and benthic invertebrates) within 5 to 15 years post-construction and soil organic carbon and nitrogen levels did not reach equivalence within the first 28 years (Craft et al., 2003). For Pacific cordgrass (*Spartina foliosa*), a San Diego Bay mitigation site failed to produce plants of sufficient height after 13 years, including multiple fertilization experiments, and the cordgrass canopy is not expected to become suitable nesting habitat for the light-footed clapper rail (Trnka and Zedler, 2000; Zedler and Callaway, 1999; Boyer and Zedler, 1998). Therefore, it most likely will take many years for the Magnolia Marsh to develop suitable habitat. HBEP construction and demolition is expected to take 7-8 years to complete, and there



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is a chance suitable habitat would not have developed during that time within the Magnolia Marsh. If vegetation becomes of sufficient height and density during the construction and demolition phase of HBEP, the noise will be preexisting and temporary in nature. Any light-footed clapper rail that may eventually utilize the Magnolia Marsh would already be pre-exposed to construction and demolition noise levels because they currently do not nest within the marsh. Furthermore, there is a possibility that tall, dense stands of Pacific cordgrass may not become established within Magnolia Marsh, which is consistent with other restoration sites in southern California where Pacific cordgrass has not become established to desired heights and densities.

As discussed previously in the Applicant's Supplemental Data Request responses, if after many years, suitable habitat conditions are present within the Magnolia Marsh, light-footed clapper rails have successfully nested in areas with high levels of ambient noise. According to Kimley-Horn and Associates, noise levels within the Tijuana Marsh wetland mitigation area ranged from 40 to 61 dBA and noise levels northeast of Tijuana Marsh, near residences, were 35 to 60 dBA. Sound levels often exceed 60 dBA over Tijuana Marsh because of aircraft activity, including helicopter training activities, and at specific times these activities are continuous noise sources (Kimley-Horn and Associates, 2005). Despite the ambient noise levels, the Tijuana Marsh is one of the most important nesting habitats for light-footed clapper rails.

During construction and demolition of HBEP, noise minimization strategies include locating semi-permanent stationary equipment such as compressors or generators away from sensitive habitat or in locations where it is shielded by other equipment or structures. In addition, equipment will be in good working order and outfitted with adequate mufflers. Where appropriate, sound attenuated equipment packages may be evaluated (air compressors, generators, etc.) and exhaust may be oriented away from sensitive areas to reduce any noise-related impacts.

2. BIO Conditions of Certification

Staff recommends that HBEP employ a Designated Biologist and a Biological Monitor. (PSA at p. 4.2-35.) While Staff does not state specifically that full-time biological monitoring is required, the analysis and conditions imply that a full-time biologist be employed.

At page 2 of the PSA, Staff states, “[i]n order to minimize potentially adverse impacts to biological resources, staff recommends that a Designated Biologist and Biological Monitor(s) ***be employed*** to ensure impact avoidance and minimization measures described below and protection of sensitive biological resources described above are implemented.” (Emphasis added.) Staff’s analysis as quoted above appears to imply that both a biological monitor and



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designated biologist are to be on-site at all times. In addition, language in conditions BIO-1, BIO-2, and BIO-6 (see below highlighted) implies that a designated biologist is required to be onsite at all times.

Applicant proposes the following changes to the Staff's COCs included in the PSA.

BIO-1 The project owner shall assign at least one Designated Biologist to the project. The project owner shall submit the resume of the proposed Designated Biologist, with at least three references and contact information, to the Energy Commission Compliance Project Manager (CPM) for approval in consultation with CDFW and USFWS.

The Designated Biologist must meet the following minimum qualifications:

1. Bachelor's degree in biological sciences, zoology, botany, ecology, or a closely related field;
2. Three years of experience in field biology or current certification of a nationally recognized biological society, such as The Ecological Society of America or The Wildlife Society; and
3. At least one year of field experience with biological resources found in or near the project area.

In lieu of the above requirements, the resume shall demonstrate to the satisfaction of the CPM, in consultation with CDFW and USFWS, that the proposed Designated Biologist or alternate has the appropriate training and background to effectively implement the conditions of certification.

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 ~~an approved~~ Designated Biologist is ~~available to be on site~~ **has been approved by the CPM, in consultation with CDFW and USFWS.** 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.



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BIO-2 The project owner shall ensure that the Designated Biologist performs the following during any site (or related facilities) mobilization, ground disturbance, grading, construction, operation, closure, and restoration activities. The Designated Biologist may be assisted by the approved Biological Monitor(s) but remains the contact for the project owner and CPM. The Designated Biologist Duties shall include the following:

1. Advise the project owner's Construction and Operation Managers on the implementation of the biological resources conditions of certification;
2. Consult on the preparation of the Biological Resources Mitigation Implementation and Monitoring Plan (BRMIMP) to be submitted by the project owner;
3. Be available to supervise, conduct and coordinate mitigation, monitoring, and other biological resources compliance efforts, particularly in areas requiring avoidance or containing sensitive biological resources, such as special status species or their habitat;
4. Clearly mark sensitive biological resource areas and inspect these areas at appropriate intervals for compliance with regulatory terms and conditions;
5. Inspect active construction areas where animals may have become trapped prior to construction commencing each day. ~~At the end of the day, inspect for~~ **or direct the site personnel how to inspect** the installation of structures that prevent entrapment or allow escape during periods of construction inactivity. Periodically inspect areas with high vehicle activity (e.g., parking lots) for animals in harm's way;
6. Notify the project owner and the CPM of any non-compliance with any biological resources condition of certification;
7. Respond directly to inquiries of the CPM regarding biological resource issues;
8. Maintain written records of the tasks specified above and those included in the BRMIMP. Summaries of these records shall be submitted in the monthly compliance report and the annual compliance report;
9. Train the Biological Monitors as appropriate, and ensure their familiarity with the BRMIMP, Worker Environmental Awareness Program (WEAP) training, and all permits; and
10. Maintain the ability to be in regular, direct communication with representatives of CDFW, USFWS, and CPM, including notifying these agencies



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of dead or injured listed species and reporting special status species observations to the California Natural Diversity Database.

Verification: The Designated Biologist shall submit in the monthly compliance report to the CPM copies of all written reports and summaries that document construction activities that have the potential to affect biological resources. If actions may affect biological resources during operation the Biological Monitor(s), under the supervision of the Designated Biologist, shall be available for monitoring and reporting. During project operation, the Designated Biologist(s) shall submit record summaries in the annual compliance report unless their duties cease, as approved by the CPM.

BIO-7 The project owner shall implement 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 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) outside the permanently fenced area have been backfilled. **If site personnel are inspecting trenches, bores, and other excavations and wildlife if 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 individual to a



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safe location. Any wildlife encountered during the course of construction shall be allowed to leave the construction area unharmed.

3. 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 fence line to minimize potential for spoils to enter into adjacent wetlands.
5. Soil bonding and weighting agents used on unpaved surfaces shall be non-toxic to wildlife and plants.
6. Facility lighting shall be designed, installed, and maintained to prevent side casting of light towards the project boundaries. Lighting shall be shielded, directional, and at the lowest intensity required for safety. Lighting shall be directed away from biologically sensitive areas (e.g., Magnolia Marsh). FAA visibility lighting shall employ only strobed, strobeline or blinking incandescent lights, preferably with all lights illuminating simultaneously. Minimum intensity, maximum "off-phased" dual 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 in an effort to prevent the formation of puddles, which could attract California least tern predators 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



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- 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 of any hazardous spills immediately as directed in the project Hazardous Materials Plan. Hazardous spills shall be immediately cleaned up and the contaminated soil would be properly disposed of at a licensed facility. Servicing of construction equipment shall take place only at a designated area. 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. Standard best management practices (BMPs) from the project Stormwater Pollution Prevention Plan shall be implemented during all phases of the project (construction, demolition, operation, and decommissioning) where stormwater run-off from the site could to enter adjacent marshes or channels. Sediment and other flow-restricting materials shall be moved to a location where they shall not be washed back into the jurisdictional waters. All disturbed soils within the project site shall be stabilized to reduce erosion potential, both during and following construction.



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13. 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 absolute minimum 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.
14. 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 would 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 termination report identifying how measures have been completed.



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Pre-construction Nest Surveys and Impact Avoidance and Minimization Measures for Breeding Birds

Preconstruction nest surveys were proposed by the Applicant in the AFC. However, in BIO-9 of the PSA, two surveys need to be completed within 30 days prior to construction. Since there is minimal nesting habitat within the project area, one preconstruction survey within 14 days of construction adequately assess any potential nesting within the area. Additionally in BIO-8, surveys are required within the project site and surrounding areas that are exposed to construction and demolition noise levels above ambient or 60 dBA. To prevent any areas from not being surveyed, a standardized preconstruction survey buffer would be appropriate to use at HBEP.

BIO-8: Pre-construction nest surveys shall be conducted if construction activities will occur from February 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 within **a 100-foot buffer of** the project site and areas surrounding the project site ~~that are exposed to construction and demolition noise levels above ambient or 60 dBA in areas where ambient levels are below 60 dBA.~~
2. **One pre-construction survey will be conducted within 14 days before construction is initiated.** ~~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 30 days prior to initiation of construction activity. One survey needs to be conducted within the 14-day period preceding initiation of construction activity. Additional follow-up surveys may be required if periods of construction inactivity exceed three weeks 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) **of 100 feet shall be established for all non-raptor species and 500 feet for any raptors** shall be established around



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- each nest. The **buffer sizes will be confirmed by** ~~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 and submitted, along with a weekly report stating the survey results, to the CPM in the monthly compliance reports.
4. 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. 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. The 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, disturb nesting activities (e.g., excessive noise above ambient levels or 60 dBA in areas where pre-construction noise levels were below 60 dBA, exposure to exhaust), shall be prohibited within the buffer zone until such a determination is made.

Verification: Prior to the start of any pre-construction site mobilization, the project owner shall provide the CPM a letter-report describing the findings of the preconstruction nest surveys, including the time, date, and duration of the survey; identity and qualifications of the surveyor(s); and a list of species observed. If active nests are detected during the survey, the report shall include a map or aerial photo identifying the location of the nest and shall depict the boundaries of the no disturbance buffer zone around the nest, and a monitoring plan shall be submitted to the CPM for review and approval. Additional copies shall be provided to the CDFW and USFWS for review and comment. Approval of the plan is required before construction may commence. 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.



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B. Cultural Resources

The PSA states that “it is unclear whether the proposed project would comply with all [LORS]...” as the Huntington Beach Generating Station (also known as the Edison Plant and designated as resource number P-30-176946) is currently listed on the City of Huntington Beach’s Local Landmarks list as a result of a 1986 survey. (PSA at pp. 4.3-56 and 4.3-44, respectively.) However, a more recent survey has recommended that the Edison Plant is not eligible for HRHP, the CRHR or for local listing. (See *City of Huntington Beach Historic Contact & Survey Report* by Galvin Preservation Associates Inc., 2012 (the “2012 Galvin Report”); PSA at 4.3-44.) The PSA states the 2012 Galvin Report has not been formally accepted by the City and, therefore, this section remains an outstanding issue for Staff. (PSA at 4.3-44.) However, Staff indicated that if the Edison Plant is not determined to be a historical resource, then the Project would be in compliance with all applicable LORS as related to Cultural Resources. (PSA at 4.3-56.) The PSA clearly states that “Staff does not believe that the Edison Plant is eligible for the NRHP, CRHR, or the local register; therefore, it is not a historical resource pursuant to the California Environmental Quality Act and no mitigation measures are recommended at this time.” Applicant encourages Staff to make its own determination that the Edison Plant is not eligible for the NRHP, CRHR, or the local register based on the preponderance of evidence.

In addition, Applicant reviewed the COCs for the Cultural Resources section. Although most conditions appear to contain standard language for this resource topic, much of the specific language in CUL-6 is unwarranted and unprecedented. In particular, the requirement for a full-time archaeological monitor for a project without an identified potential to impact archaeological resources is not warranted given the “low sensitivity for buried archaeological resources to be present. Therefore, Applicant proposes that Staff’s proposed CUL-6 be replaced with a more commensurate set of conditions. Given the similarities, the recent licensing case for the Mariposa Energy Project (09-AFC-03) and its final CUL-6, as modified below, serves as an appropriate condition.

CUL-6 In the event that a CRHR eligible (as determined by the CPM) cultural resources is discovered, at the direction of the CPM, the project owner shall ensure that the CRS or alternate CRS monitor full time all ground disturbances in the area of 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 e-mail detailing the justification for changing the level of monitoring shall be



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provided to the CPM for review and approval prior to any change in the level of monitoring.

Full-time archaeological monitoring for the project, if deemed necessary due to the discovery of a CRHR-eligible cultural resource, shall be the archaeological monitoring of all earth-moving activities in the areas specified in the previous paragraph, for as long as the CPM requires. Where excavation equipment is actively removing dirt and hauling the excavated material to a location farther than fifty feet from the location of active excavation, full-time archaeological monitoring shall require at least two monitors per excavation area. In this circumstance, one monitor shall observe the location of active excavation and a second monitor shall inspect the disposal of the excavated soil. For excavation areas where the excavated soil is disposed of no farther than fifty feet from the location of active excavation, one monitor is sufficient to observe both the excavation and soil disposal.

The research design in the CRMMP shall govern the collection, treatment, retention/disposal, and curation of any archaeological materials encountered during archaeological monitoring.

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



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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.

Verification:

1. At least 30 days prior to the start of ground disturbance, the CPM will provide to the CRS an electronic copy of a form to be used as a daily monitoring log.
2. Monthly, while monitoring is on-going, the project owner shall include in each MCR a copy of the monthly summary report of cultural resources-related monitoring prepared by the CRS and shall attach any new DPR 523A forms completed for finds treated prescriptively, as specified in the CRMMP.
3. At least 24 hours prior to implementing a proposed change in monitoring level, the project owner shall submit to the CPM, for review and approval, a letter or email (or some other form of communication acceptable to the CPM) detailing the CRS's justification for changing the monitoring level.
4. Daily, as long as no cultural resources are found, the CRS shall provide a statement that "no cultural resources over 50 years of age were discovered" to the CPM as an e-mail or in some other form of communication acceptable to the CPM.
5. At least 24 hours prior to reducing or ending daily reporting, the project owner shall submit to the CPM, for review and approval, a letter or e-mail (or some other form of communication acceptable to the CPM) detailing the CRS's justification for reducing or ending daily reporting.



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6. No later than 30 days following the discovery of any Native American cultural materials, the project owner shall submit to the CPM copies of the information transmittal letters sent to the Chairpersons of the Native American tribes or groups who requested the information. Additionally, the project owner shall submit to the CPM copies of letters of transmittal for all subsequent responses to Native American requests for notification, consultation, and reports and records.

7. Within 15 days of receiving them, the project owner shall submit to the CPM copies of any comments or information provided by Native Americans in response to the project owner's transmittals of information.

C. Land Use

1. Condition of Certification LAND-1

Proposed Condition of Certification LAND-1 provides:

The project owner shall comply with the Subdivision Map Act (Pub. Resources Code, §§ 66410-66499.58) by adhering to the provisions of Title 25, Subdivisions, City of Huntington Beach Zoning and Subdivision Ordinance to ensure legality of parcels.

Verification: At least 30 days prior to construction of the first power block, the project owner shall submit evidence to the compliance project manager (CPM), indicating approval of a Lot Line Adjustment by the City of Huntington Beach, establishing a single parcel for the 28.6 acre HBEP site. The submittal to the CPM shall include evidence of compliance with all conditions and requirements associated with the approval of the Lot Line Adjustment by the city.

(PSA Part A at p. 4.5-30.) LAND-1 is intended to ensure the Project site is a single parcel, in accordance with the CEC's siting regulations. (Title 20 Cal. Code Regs., Ch. 5, Art. 6, App. B(g)(3)(C).) While compliance with the Subdivision Map Act is required, the Subdivision Map Act is not the basis for the Condition and the parcels on the Project site are currently legal parcels. To better reflect the basis for the Condition, we proposed the following revisions to LAND-1:



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LAND-1 The project owner shall comply with Appendix B(g)(3)(C) of the Siting Regulations by ensuring the Project, excluding linears and temporary laydown or staging area, will be located on a single legal parcel ~~with the Subdivision Map Act (Pub. Resources Code §§ 66410-66499.58) by adhering to the provisions of Title 25, Subdivisions, city of Huntington Beach Zoning and Subdivision Ordinance to ensure legality of parcels.~~

The Applicant does not propose any revisions to Staff's proposed Verification language for LAND-1.

2. Coastal Access and Coastal Act Consistency

The PSA discusses the requirements of the Warren-Alquist Act to ensure adequate public coastal access and states Staff is working "with the city of Huntington Beach and the California Coastal Commission to determine whether adequate access exists or if the Project would be required to provide additional access." (PSA, p. 4.5-11.) The PSA also defers the analysis of consistency with the Coastal Act and the local coastal plan, pending comments from the City and the Coastal Commission. (PSA, p. 4.5-12.) The PSA notes the Coastal Commission's role in the CEC's AFC proceedings is to review those proposals that are within the coastal zone and to provide findings with respect to the proposed project's conformity to relevant provisions of the Coastal Act and certified local coastal program. (PSA, p. 4.5-12.)

Applicant again wishes to clarify the potential role of the California Coastal Commission in this proceeding. (*See also* CEC TN# 67020.) In the PSA, Staff overstates the function or authority of the California Coastal Commission in an AFC proceeding. HBEP, as a project subject to an AFC, is under the exclusive jurisdiction of the California Energy Commission (Pub. Resources Code § 25500) and the California Coastal Commission may participate in CEC AFC proceedings related to the HBEP. (Pub. Resources Code § 30413(e) ("The [California Coastal Commission] may, at its discretion, participate fully in other proceedings conducted by the [CEC] pursuant to its powerplant siting authority. In the event the commission participates in any public hearings held by the [CEC], it shall be afforded full opportunity to present evidence and examine and cross-examine witnesses").)

The PSA, however, states that the California Coastal Commission is required to prepare a report regarding HBEP. (PSA at pp. 4.5-12; 4.12-35 (referencing Public Resources Code § 30413(d).) Section 30413(d) provides, however:



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Whenever the [CEC] exercises its siting authority and undertakes proceedings pursuant to the provisions of Chapter 6 (commencing with Section 25500) of Division 15 with respect to any thermal powerplant or transmission line to be located, in whole or in part, within the coastal zone, the commission shall participate in those proceedings and shall receive from the [CEC] any notice of intention to file an application for certification of a site and related facilities within the coastal zone. The commission shall analyze each notice of intention and shall, prior to completion of the preliminary report required by Section 25510, forward to the [CEC] a written report on the suitability of the proposed site and related facilities specified in that notice.

(Pub. Resources Code § 30413(d) (emphasis added).) The language of section 30413(d) is abundantly clear that the requirements for a “report” from the Coastal Commission involve “notices of intention” (“NOI”) proceedings. While NOI proceedings are required for certain kinds of powerplant siting (*e.g.*, nuclear facilities or coal plants), new thermal natural-gas fired powerplant facilities are statutorily exempt from the NOI process. (Pub. Resources Code § 25540.6(a)(1).)

To date, Coastal Commission staff has submitted two letters providing comments on the Project.² As noted above, there is no specific requirement that the Coastal Commission must submit input or participate in the CEC process, nor is there a requirement that if the Coastal Commission submits comments on a project (such as in this case) that the Coastal Commission must continue to participate. CEC staff may proceed with preparation of the FSA and evaluation of the Project’s consistency with the Coastal Act, taking into account the Applicant’s responses to the Coastal Commission letters, without further input or a report from the Coastal Commission.

As noted in the PSA, the Project is located on an existing industrial site and will replace an existing operating power plant, located entirely within the footprint of the existing HBGS, which will avoid the construction of new linears. “Siting the HBEP on the HBGS site is consistent with existing zoning regulations, and will result in reducing potential offsite environmental

² On November 2, 2012, the applicant provided responses to the issues raised by the Coastal Commission in its August 3, 2012 letter that included comments on biological resources, geologic hazards, cumulative impacts, and site layout. The second letter submitted by the Coastal Commission, dated January 23, 2013, was provided in the form of a status report and, while reiterating the comments raised in the August 3, 2012 letter, did not include any additional comments.



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impacts....” (PSA, p. 3-5.) Moreover, the PSA acknowledges that the HBEP has a smaller footprint and lower profile than the existing HBGS. (*Id.*) Because the Project will not result in any changes to coastal access, the Project is consistent with the Warren-Alquist Act requirements to ensure adequate public coastal access is maintained. Moreover, mitigation measures have been added to ensure that adequate public access is maintained during construction. (PSA, pp. 4.5-5, 4.10-12, TRANS-3.) Coastal resources will not be impacted because the use will not change, and the Project will have a smaller footprint and lower profile than the existing HBGS, resulting in aesthetic improvements. (PSA, p. 3-5.) The project will not result in any change to the existing land use and will not impact public coastal access or otherwise affect coastal resources. (PSA, p. 3-5.) Notwithstanding this, AES reserves the right to provide additional comments on any additional analysis or proposed conditions pertaining to coastal resources.

3. Variance for Height Limits

The PSA includes staff’s unsubstantiated opinion that the findings in support of a variance from the height limits cannot be made. (PSA, p. 4.5-1, 4.5-19.)

In relation to issue areas such as Visual Resources, Air Quality and Public Health, the PSA states that staff cannot conclude if the Project would or would not result in land use compatibilities because information from the City or other entities is outstanding (PSA, p. 4.5-1). In the FSA, staff will provide conclusions on project compatibility related to these areas based on the record of these proceedings at the time staff prepares its FSA. The Applicant suggests that staff continue its analysis based on the information included in the record and additional information that may be added to the record in relation to the findings required for a variance, rather than to draw a conclusion in the PSA that the required findings cannot be made.

The Applicant is engaged in ongoing discussions with City staff and management regarding land use compatibility, including visual issues and height limits. The Applicant continues to work with the City to meet the City’s needs in these areas. Until the City provides additional information in this regard, the staff’s conclusions regarding a height variance are not supported by complete information and premature.

4. Land Use Related Visual Issues

The PSA concludes that the Project’s consistency with visual related land use policies remains undetermined pending additional information about screening and design enhancements. (PSA, p. 4.5-14.)



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The PSA acknowledges that siting the HBEP entirely within the footprint of the existing HBGS site is consistent with existing zoning regulations, and will result in reducing potential offsite environmental impacts and ensures no new site is converted to industrial use. The design of the proposed HBEP is a smaller footprint and lower profile than the existing HBGS, which will be a significant aesthetic improvement of the Project. (PSA, p. 3-5.) As noted in the PSA, the existing HBGS's Units 1-4 stacks are over 200 feet tall. The stacks for the proposed HBEP Blocks 1 and 2 would be approximately 120 feet tall. Removal of existing equipment and replacement with project elements that are shorter and, in some instances, set back further from PCH will be a significant improvement over the existing visual conditions. A specific analysis of the visual benefits and enhancement of the proposed HBEP are included in the Visual section of Applicant's response to the PSA and staff's land use determination and findings should take into account the findings of the Applicant's Visual Resources response to the PSA.

The Applicant and the City have engaged in ongoing discussions regarding appropriate visual screening and enhancements, with discussions continuing after the PSA was released. Both Applicant and the City seek to ensure that HBEP complies with the Coastal Act, and, in particular, section 30251, which requires that "development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas." The Applicant will communicate the City's decisions on the Project's visual enhancements with the CEC as soon as they are made available. As Staff noted in its CEC Staff Status Report #7 (TN# 201094), "the City reports that the visual treatment options were well received by the public and council, and reports they will continue to work with AES on exploring additional design options, as well as a mutually acceptable visual enhancement plan." Applicant is confident that Staff's concerns related to land use-related visual issues will be addressed by visual screening and enhancements and HBEP will be consistent with all visual resources LORS, including section 30251 of the Coastal Act.

The Applicant also refers staff to the sections on Biological Resources, and Noise and Vibration for a discussion of the Project's land use compatibilities associated with other relevant issue areas.

D. Noise and Vibration

1. Noise

Staff concludes that there are no direct construction noise impacts to sensitive receptors. (PSA at p.p. 4.6-8 - 4.6-13.) Staff also recommends Condition NOISE-8 as "preventative mitigation in



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the form of active workers consideration toward residents.” (*Id.* At 4.6-13.) NOISE-8 is proposed as mitigation for increased traffic noise at M2, a mobile home park. NOISE-8 prescribes a “practice in care” policy that Staff notes would do the followings:

The “practice in care policy” would require construction workers to avoid unnecessary blowing of car horns, revving engines, loud radios, tailgate meetings or any loud noise that would affect residents in the project area. These practices would not only contribute to noise control in the parking lot adjacent to the mobile home park, but would contribute to controlling noise at the confluence of traffic at the Newland and Hamilton intersection and serve as a behavioral guideline for the entire project.

(*Id.*) However, without justification, and, in fact, contrary to the preventative mitigation deemed sufficient by Staff, Staff requests that Applicant evaluate the feasibility of a sound wall along the private property boundary between the mobile home park and the construction worker parking area to “further mitigate the noise generated by workers activities in this lot.” (*Id.*) There is no evidence supporting this request and no impacts identified that require any additional mitigation. Moreover, the PSA does not acknowledge the existence of the concrete block wall that currently separates the mobile home park from the temporary worker parking area. In addition, Staff has already proposed Condition NOISE-2 which establishes a complaint resolution process. Thus, Applicant opposes the need for such additional mitigation. Applicant believes that without the implementation of NOISE-8, any additional worker noise at M2 associated with construction will be less than significant and that NOISE-2 provides the appropriate mechanism to address concerns should they arise.

Noise Table 3 “Sensitive Receptor Summary” (PSA at p. 4.6-7) indicates it is a summary of the ambient monitoring data collected by the Applicant. It is not clear how the values in Noise Table 3 were derived. Measurements conducted while the facility was operating at approximately 890 MW between the hours of midnight and 6 a.m. on September 21, 2013 are presented in “Additional Responses to Intervener Pyle’s Data Requests, Set 1 (PYLE-1 through PYLE-16)” (docketed on January 17, 2013). As this document was not referenced in the PSA, it appears to have been overlooked. As discussed below, it is unclear how staff have arrived at their determination of baseline given the available measurements of HBGS.

M1 – Figure DR PYLE 7-1 depicts two locations on the opposite side of Newland Street from the Gas Metering Station. These locations, HHM 02 and HHM 10 are on the sidewalk adjacent to the RV Park and were collected between approximately 1 am and 4



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am on September 21, 2012. HHM 02 and HHM 10 had sound levels of 76/75 dBA (Leq/L90) and 69/69 dBA respectively. These measurements accurately represent the existing facilities operational sound levels in the vicinity of the Gas Metering Station. It is not clear how Noise Table 3 level of 63 dBA L₉₀ is substantiated.

M2 – Measurements at M2, the Mobile Home Park, were 65 dBA between the hours of midnight and 6 am on September 21, 2012. This is summarized in Table DR PYLE 7-1, charts of M2 measurements in Appendix A and tabular summary of M2 measurements in Appendix B. Similar daytime levels would be expected in those location with the facility operating at its rated capacity. It is not clear how Noise Table 3 daytime or nighttime levels of 55 dBA are substantiated.

M3 – Measurements at M3, the backyard of the Hula Circle residence, are depicted in Appendix A and B of the PYLE-7 data response. Inspection of the graph of measured sound levels and HBGS MW load at M3 presented in Appendix A shows that sound levels at this residence did not correlate strongly with the operation of the existing facility. Rather the sound levels in this area followed a typical diurnal pattern of louder levels during the daytime or early commute hours and quietest levels between the midnight to 4 am periods. AFC Table 5.7-4 identified the average four hour minimum L₉₀ as 38 dBA as did Table DR PYLE 7-1. Appendix A and B of the PYLE-7 data response show that higher nighttime levels occur, for example, on September 20th, 2012 between the hours of midnight and 4 am the L₉₀ was 40 dBA. Measurements HHM 07 and HHM 08 (Figure DR PYLE 7-1 and Appendix C of PYLE 7-1) document levels of 41/39 dBA (Leq/L90) and 41/45dBA respectively in this area during the 1 am to 4 am time period. Outside of this limited time period, higher levels were found. For example, at 10 pm on September 19th, 2012 the L₉₀'s varied between 42 and 44 dBA and the L_{eq} 45 to 48 dBA. Similarly at 10 pm on September 20th, 2012, the L₉₀'s varied between 43 and 44 dBA while the L_{eq} ranged between 46 and 48 dBA (Appendix A and B of PYLE-7 data response). It is not clear how Noise Table 3 daytime or nighttime levels are substantiated.

M4 – Measurements at M4, the residence on Sandy Hook Drive, had a minimum 4-hour L₉₀ of 46 dBA between the hours of midnight and 6 am on September 21, 2012 (Table DR PYLE 7-1). Figure DR PYLE 7-1 depicts L₉₀ levels between 43 and 46 dBA and L_{eq}s between 45 and 48 dBA in this vicinity (HHM 05, HHM 06 and HHM 15) between the hours of midnight and 4 am on September 21, 2012. Higher levels were reported outside of the sound walls that surround this residential area. HHM 13 and 14 document



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levels (L_{eq}/L_{90}) of 58/54 and 56/55 dBA respectively. Approximately 600 feet north, HHM 04 documents a L_{eq}/L_{90} level of 56/50 dBA. It is not clear how Noise Table 3 daytime or nighttime levels are substantiated.

Noise Table 5, Prediction of Construction Noise Levels (PSA at 4.6-9) compares predicted levels to baseline levels in Noise Table 3 which should be revisited in light of the above information. Staff's analysis of construction noise indicates the requirement is to "not create annoyance" (PSA at p. 4.6-9). This not a reasonable nor required threshold. Annoyance is subjective and depends on numerous factors, many of which are non-acoustical. Annoyance does not indicate a significant impact. For example, "most people around airports are annoyed by aircraft noise but this does not necessarily mean that aircraft noise is not acceptable as airports provide opportunities for air travel, airports are major employers and airports are net economic contributors" (Dr. Ian Flindell, Institute of Sound and Vibration Research, University of South Hampton, UK, 2012). The PSA also indicates a concern that certain activities or construction phases may overlap increasing noise levels, for example, demolition of Units 3 & 4 with the construction of PB-1 (PSA at 4.6-8 and p. 4.6-10). The Federal Highway Administration notes the opposite, and suggest the scheduling of simultaneous construction activities as a best practice: "It may be possible to schedule several noisy operations concurrently to take advantage of the fact that the combined noise levels produced may not be significantly greater than the level produced if the operations were performed separately." (Construction Noise Handbook; FHWA-HEP-06-015; DOT-VNTSC-FHWA-06-02; NTIS No. PB2006-109102, Final Report, August 2006).

The PSA appears not to consider the fact that construction noise estimates are conservative given "the only attenuating mechanism considered was the divergence of the sound waves in open air" (AFC at p. 5.7-9). Comparison of unshielded measurements HHM 13 and 14 to those behind a barrier such as HHM 05, HHM 06 or HHM 15 (refer to Figure DR PYLE 7-1), indicate the shielding afforded by existing barrier walls throughout much of the project area provides an approximate 10 dBA reduction in exterior levels. Interior levels could be expected to be an additional 10 to 20 dBA lower than exterior levels. The PSA also does not acknowledge that a limited number of activities must be conducted on a continuous basis, extending throughout the day and night (AFC at p. 5.7-10). The necessity to conduct some activities at night is not unlike other infrastructure projects.

It is unclear how the peak hour traffic volumes were derived (PSA at 4.6-12). The peak hour traffic volumes for construction workers are identified below:



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Street	Trip Distribution	Peak Hour Trips
Beach Boulevard	10%	35
Newland Street	40%	133
Hamilton Avenue	35%	116
PCH South of Brookhurst	15%	52
	100%	336

In addition to the foregoing, the following revisions to NOISE conditions are proposed:

NOISE-1 ~~At least 15 days prior~~ Prior to the start of ground disturbance, the project owner shall notify all residents within one mile of the project site boundaries, by mail or by other effective means, of the commencement of project construction. At the same time, the project owner shall establish a telephone number for use by the public to report any undesirable noise conditions associated with the construction and operation of the project. If the telephone is not staffed 24 hours a day, the project owner shall include an automatic answering feature, with date and time stamp recording, to answer calls when the phone is unattended. This telephone number shall be posted at the project site during construction where it is visible to passersby. This or a similarly effective telephone number shall be maintained throughout the operational life of the project.

Verification: At least 15 days prior to ground disturbance, the project owner shall transmit to the compliance project manager (CPM) a statement, signed by the project owner's project manager, stating that the above notification has been performed, and describing the method of that notification. This communication shall also verify that the telephone number has been established and posted at the site, and shall provide that telephone number.

NOISE-2 Throughout the construction and operation of the project, the project owner shall document, investigate, evaluate, and attempt to resolve all legitimate³ project-related noise complaints. The project owner or authorized agent shall:

³ A legitimate complaint refers to a complaint about noise that is caused by the HBEP project as opposed to another source (as verified by the CPM). A legitimate complaint constitutes a violation by the project of any noise condition of certification (as confirmed by the CPM), which is documented by an individual or entity affected by such noise.



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- use the Noise Complaint Resolution Form (below), or a functionally equivalent procedure acceptable to the CPM, to document and respond to each **legitimate** noise complaint;
- attempt to contact the person(s) making the noise complaint within 24 hours;
- conduct an investigation to determine the source of noise in the complaint;
- if the noise is project related, take all feasible measures to reduce the source of the noise; and
- submit a report documenting the complaint and actions taken. The report shall include: a complaint summary, including the final results of noise reduction efforts and, if obtainable, a signed statement by the complainant, stating that the noise problem has been resolved to the complainant's satisfaction.

Verification: Within five days of receiving a noise complaint, the project owner shall file a Noise Complaint Resolution Form, shown below, with ~~both the local jurisdiction and~~ the CPM, which documents the resolution of the complaint. If mitigation is required to resolve the complaint, and the complaint is not resolved within a three **business**-day period, the project owner shall submit an updated Noise Complaint Resolution Form when the mitigation is **implemented** ~~performed and complete.~~

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

Mondays through Saturdays: 7 a.m. to 8 p.m.

~~Sundays and Federal Holidays: Construction not allowed~~

Construction activities may be performed outside the above hours, with CPM approval.

Haul trucks and other engine-powered equipment are equipped with adequate mufflers and other state-required noise attenuation devices.



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Haul trucks shall be operated in accordance with posted speed limits. Truck engine exhaust brake use (jake braking) shall be limited to emergencies. ~~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 impact at nearest noise sensitive receptors.~~

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.

In consultation with the CPM, construction equipment generating excessive noise(*) shall be updated or replaced if beneficial and feasible. In addition, temporary acoustic barriers may be installed around stationary construction noise sources, if beneficial and feasible, to minimize construction noise complaints. Reorient construction equipment, and relocate construction staging areas, if beneficial and feasible, to minimize construction noise complaints.

At least 5 days prior to working outside of the above hours, 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, and the approximate distance of activities to residential receptors, and the expected sound levels at these receptors.

NOISE-7 If a traditional, high-pressure steam blow process is used the project owner shall equip steam blow piping with a temporary silencer that quiets the noise of steam blows to no greater than 89 dBA measured at a distance of 50 feet. The steam blows shall be conducted between ~~7:00~~8:00 a.m. and ~~8:00~~5:00 p.m. If a low-pressure, continuous steam blow process is used, the project owner shall submit to the CPM a description of the process, with expected noise levels and planned hours of steam blow operation.

Verification: At least 15 days prior to the first steam blow, the project owner shall notify all residents or business owners within one mile of the project site boundary. The notification may be in the form of letters, phone calls, fliers, or



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other effective means as approved by the CPM. The notification shall include a description of the purpose and nature of the steam blow(s), the planned schedule, expected sound levels, and explanation that it is a one-time activity and not part of normal plant operation.

Applicant proposes deleting NOISE-8 in its entirety.

Finally, the PSA at page 4.6-5 states: “The proposed construction would take place over an eight-year period due to the desire of the applicant to keep as much electrical generation capacity online and available as possible.” Applicant requests that this language be revised to state: “The proposed construction would take place over an eight-year period due to the desire of the applicant to keep as much electrical generation capacity online and available as possible, **consistent with the needs of the electrical grid system operator and utility.**”

2. Pile Driving

The discussion of construction vibration (PSA at 4.6-10) compares predicted exterior pile driving sound levels (without consideration of existing barriers or outdoor to indoor sound reductions) to the existing levels summarized in PSA NOISE Table 3, discussed above. Staff also indicates that the significance threshold is the onset of “annoyance”. Staff have not substantiated that daytime pile driving results in a significant impact nor acknowledged that pile driving occurs for a limited period of time during construction. There are generally three methods for reducing noise generated by pile driving for power plant foundation piles: (1) the use of pads, (2) the use of dampers and (3) the use of a vibratory method of pile driving.

1. **Padded Drive**—Pads or impact cushions of plywood or other materials are placed between the hammer and pile. This method results in some loss of driving efficiency.
2. **Damped Drive**—Dampened driving involves placing some form of blanket or enclosure around the hammer. The pad absorbs some of the sound energy of the driver’s impact on the pile. The blankets can be placed near the hammer (10 inches or so), or can be hung, curtain-like, around the pile driver on a frame from a crane.
3. **Vibratory Drive**—Vibratory (rather than impact) drivers are powered by a hydraulic power unit that is usually run by a diesel engine. Vibratory drivers are normally used to drive lighter, steel piles or sheet pile in loose, granular soils or in soft silty deposits. The project geotechnical consultant’s recommendation will ultimately identify if vibratory



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driving is acceptable. Ultimately, vibratory driven piles typically require some level of impact driving to proof them (a method used to verify their bearing capacity).

The U.S. Army Corps of Engineers Construction Engineering and Research Laboratory (CERL) conducted a demonstration program that compared the sound levels of pile driving with unsilenced impact drivers, padded impact drivers, dampened impact drivers, and vibratory drivers (Kessler and Schomer 1981). The results were reported both in acoustical energy level (Leq) and in L1 or, the sound level exceeded 1 percent of the time. The results are summarized in Table 1, below:

Table 1. Sound levels from unsilenced, padded, dampened, and vibratory pile driving, 80 meters.

Method	Piles	Leq Range	Improvement *	L1 Range	Improvement*
Unsilenced	4	78.5-83.7	0	86-89	0
Pad	2	70.6-72.7	7.9-11.0	77-81	8-9
Damping	2	69.2-70.0	9.3-13.7	73-76	13
Pad and damping	2	70.3-70.4	8.2-13.3	76	10-13
Vibratory	3	67.5-68.7	11.0-15.0	70-71	16-18
*Over unsilenced impact driver.					
Source: Kessler and Schomer 1981.					

According to this study, using pads alone would realize an 8-9 dB sound attenuation and using damping alone would result in a 13 dB attenuation using the L1 basis. Using pads and damping together did not result in a significant difference over using the most effective single method, damping without padding.

Vibratory drivers appear slightly quieter than pads and damping on a Leq basis and about 5 dB better on an L1 basis. This advantage is somewhat offset, however, by the necessity of using a larger diesel engine-driven hydraulic pump with the driver, which adds about 8 dB (from a distance of 50 feet) to the Leq sound levels for the unsilenced impact pile driver.

In addition to the foregoing, the following revisions to NOISE conditions are proposed:



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NOISE-9 ~~The project owner shall perform pile driving using a quieter process than the traditional pile driving techniques to ensure that noise from this operation does not cause annoyance at monitoring locations M2, M3 and M4.~~ **The project owner shall notify the residents in the vicinity of pile driving prior to start of pile driving activity.**

Verification: At least 15 days prior to first production 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 at monitoring locations M2-M4. **At least 5 days prior to first production pile driving, the project owner shall notify the residents within 0.5 miles of the pile driving. In this notification, the project owner shall state that it will perform this activity in a manner to reduce the potential for any legitimate noise complaints, as much as practicable. The project owner shall submit a copy of this notification to the CPM prior to the start of pile driving.**

3. Noise Restrictions

The City of Huntington Beach Noise Ordinance (Section 8.40) establishes designated noise zones summarized below.

City of Huntington Beach Exterior Noise Standards		
Noise Zone	Sound Level (L ₅₀)	Time Period
1	55 dBA	7:00AM-10:00PM
1	50 dBA	10:00PM-7:00AM
2	55 dBA	Anytime
3	60 dBA	Anytime
4	70 dBA	Anytime

Noise Zone 1: All residential properties



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City of Huntington Beach Exterior Noise Standards

Noise Zone	Sound Level (L ₅₀)	Time Period
Noise Zone 2: All professional office and public institutional properties		
Noise Zone 3: All commercial properties with the exception of professional office properties		
Noise Zone 4: All industrial properties		

The noise ordinance clarifies the above limits indicating that,

It shall be unlawful for any person at any location within the incorporated area of the City to create any noise, or to allow the creation of any noise on property owned, leased, occupied, or otherwise controlled by such person, which causes the noise level when measured on any residential, public institutional, professional, commercial or industrial property, either within or without the City, to exceed the applicable noise standards:

- (a) For a cumulative period of more than thirty (30) minutes in any hour [L₅₀];
- (b) Plus 5 dBA for a cumulative period of more than fifteen (15) minutes in any hour [L₂₅];
- (c) Plus 10 dBA for a cumulative period of more than five (5) minutes in any hour [L_{8.3}];
- (d) Plus 15 dBA for a cumulative period of more than one (1) minute in any hour [L_{1.7}]; or
- (e) Plus 20 dBA for any period of time.

In the event the ambient noise level exceeds any of the first four noise limit categories above, the cumulative period applicable to said category shall be increased to reflect said ambient noise level. In the event the ambient noise level exceeds the fifth noise limit category, the maximum allowable noise level under said category shall be increased to reflect the maximum ambient noise level.

HBEP is located on industrial property and the specified exterior noise limit for industrial property lines is an L₅₀ of 70 dBA. Noise Table 6, "Predicted Operational Noise Levels at Sensitive Residential Receptors and LORS Limits" (PSA at 4.6-14) identifies the limit as 55 dBA during the daytime and 50 dBA during the night at M3 and M4 and 57/55 dBA (day/night)



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at M2. This is incorrect and also references Noise Table 3 which has been questioned above. It is important to note that the LORS are based primarily on the L_{50} not the L_{eq} as Staff summarizes (incompletely) in Noise Table 3. The maximum measured L_{50} at M2 is 67 dBA the night of 9/20/2012 – it is unclear how staff have arrived at their 57/55 dBA (day/night) assessment. The 67 dBA level would be expected during both the day and nighttime hours with HBGS operating at near maximum capacity.

The PSA theorizes that “super low-noise ACC fans which have the blade shape similar to the screws on a modern submarine” could be deployed. While such fans blades are commercially available, they generally require larger and more ACC cells and substantially larger motors which reduce overall plant efficiency. Given the site space constraints it is not clear that such measures are feasible, nor has it been demonstrated that they are necessary. As noted above, the anticipated project sound levels comply with applicable LORS.

Noise Table 7, Predicted Operational Noise levels at Sensitive Residential Receptors and CEQA Limits, correctly identifies the Applicants Projected Operational Noise Level (61, 45 and 49 dBA at M2, M3 and M4 respectively). However, its analysis relies on Noise Table 3 which is questioned above. It is also unclear why Noise Table 7 acoustically sums the existing level with the projected operational noise level, particularly given that the current existing source of noise, HBGS, will be removed from operation as part of this project.

M2. A project level of 61 dBA at M2 is 4 dBA lower than the measured operational four hour L_{90} of 65 dBA.

M3. A project level of 45 dBA at M3 is within 5 dBA of the lowest measured operational L_{90} on September 20th, 2012 of 40 dBA noted above. Similarly, it is consistent with the range of measured existing nighttime levels of where the existing L_{eq} ranged between 45 to 48 dBA at 10 pm on both September 19 and 20, 2012.

M4. A project level of 49 dBA at M4 is only 3 dBA more than the measured 4 hour L_{90} of 46 dBA at this location and is less than the measured levels at HHM 04, HHM 14 and HHM 13 which varied between 50 to 55 dBA L_{90} .

Noise Table 8, Cumulative Noise Levels at Sensitive Residential Receptors” also relies on the questionable data in Noise Table 3. The EIR for Poseidon Desalination Facility states that “All stationary equipment shall be designed to insure that noise levels at the Huntington Beach Generating Station property line do not exceed the City’s industrial noise standard of 70.0 dBA”



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(AFC at 5.7-13). As noted in response to PYLE-14 and PYLE-15, “it is expected that a majority of the time the plant would be in operation, only two gas turbines in each power block would be operating...” and “it is expected that the HBEP would be shut down during these times [10 pm to 7 am] more often than if the current generating station were to remain.” Updating staff’s analysis of Poseidon with the Applicants anticipated full load project sound levels yields the same conclusion of no cumulative impact as discussed below.

M2. A project level of 61 dBA at M2 plus a Poseidon level of 49 dBA is 61 dBA, therefore there is no cumulative change.

M3. A project level of 45 dBA at M3 plus a Poseidon level of 41 is 46 dBA, this is consistent with the level in Noise Table 8 that Staff determined acceptable.

M4. A project level of 49 dBA at M4 plus a Poseidon level of 43 dBA results in a 1 dBA increase, 50 dBA.

In addition to the foregoing, the following revisions to NOISE conditions are proposed:

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 hours of 10:00 p.m. to 7 a.m., to exceed an average of 55 dBA Leq, and during the hours of 7:00 a.m. and 10:00 p.m., to exceed an~~ hourly L₅₀ of 61 dBA ~~average of 57 dBA Leq~~ measured at or near monitoring location M2.

Also, 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 plant operation alone, during the four quietest consecutive hours of the nighttime to exceed an average of ~~44~~ 45 dBA L₉₀ measured at or near monitoring location M3 and an average of ~~45~~ 49 dBA L₉₀ measured at or near monitoring location M4.

No new pure-tone components (as defined in Noise Table A1) shall be caused by the project. No single piece of equipment shall be allowed to stand out as a source of noise that draws legitimate complaints⁴.

⁴ A legitimate complaint refers to a complaint about noise that is caused by the HBEP project as opposed to another source (as verified by the CPM). A legitimate complaint constitutes a violation by the project of any noise condition of certification (as confirmed by the CPM), which is documented by an individual or entity affected by such noise.



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When the project first achieves a sustained output of 90% or greater of rated capacity, the project owner shall conduct a 25-hour community noise survey at monitoring locations M2, M3 and M4, 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 pure-tone 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 (e.g., 400 feet from the plant boundary) 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 eliminate the pure tones to a level that complies with Noise Table A1.**

Verification: The above noise survey shall be conducted in two parts. Part one shall take place within 90 days of Power Block 1 (PB-1) first achieving a sustained output of ~~80~~90% or greater of rated capacity. Part two shall take place within 90 days of Power Block 2 (PB-2) first achieving a sustained output of ~~80~~90 % or greater of rated capacity and shall include the combined operation of PB-1 and PB-2 at ~~80~~90 percent or greater of overall plant rated capacity **with all combustion turbines operating.**

Within 15 days after completing each part, the project owner shall submit a summary report of the survey to the CPM. Included in the survey report will 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 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.



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E. Socioeconomics

There are two Conditions of Certification in the Socioeconomics section of the PSA. SOCIO-1 sets forth the requirement for the payment of school impact fees, which both the Applicant and Staff calculated to be \$8,554.00 based on a preliminary project design involving 18,200 applicable square feet of chargeable covered and enclosed space. (PSA at 4.8-24; AFC at 5.10-15.) Applicant has no comments regarding SOCIO-1.

SOCIO-2, however, discusses the payment of development impact fees; in particular, fees for police and park facilities. The fee calculations are discussed in detail on pages 4.8-25 and 4.8-26 of the PSA.

Staff concludes that the Project would not result in law enforcement response times being affected so that they exceed adopted response time goals. In addition, Staff concludes that the Project would not necessitate alterations to the police station or the construction of a new police station to maintain acceptable response times for law enforcement services; therefore, no associated physical impact would result from the Project. Staff concludes that for the above reasons, the Project would create a less than significant impact. (PSA at p. 4.8-15.) Staff also concludes that the Project would “not increase the use of neighborhood or regional parks or recreational facilities to the extent that substantial physical deterioration of the facility would occur or be accelerated. The project would not necessitate the construction of new parks in the area, nor does the Project propose any park facilities.” (PSA at p. 4.8-17.)

However, Condition of Certification SOCIO-2 requires the project owner to pay development impact fees for police facilities and parkland acquisition and park facilities pursuant to Chapters 17.75 and 17.76 of the City of Huntington Beach Municipal Code. The intent of these development impact fees, as described in Chapters 17.75 and 17.76 of the City Municipal Code, is inconsistent with the conclusion provided in the PSA. Specifically, the intent behind the Police Facilities Development Impact Fees is to “provide costs for equipment and vehicle costs required to support needed police facilities and related costs necessary to accommodate such development” and the intent behind the Parkland Acquisition and Park Facilities Development Impact Fees is to “assur[e] that the impacts created by new development in the City of Huntington Beach pay a fair share of the proportional costs of the acquisition, relocation and expansion of parkland, park development and community use facilities and related costs.” (City of Huntington Beach Municipal Code Chapter 17.76.020 and Chapter 17.75.020, respectively.)

Requiring payment of these fees is inconsistent with the conclusions in the PSA that the Project will not create any additional needs or impacts to police and park facilities. Furthermore, the



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AFC does not consider any of these development fees. The section entitled “Impacts on Public Services and Facilities,” in section 5.10.3.4.7 of the AFC states that “HBEP’s operation is not expected to result in significant impacts on either the [Huntington Beach Fire Department] or the City of Huntington Beach Police Department.” (AFC, p. 5.10-15.) There is no other discussion in the AFC of the Project’s impact to park facilities.

Moreover, the calculation of police and park fees in the PSA is inaccurate. The PSA includes an estimate of the combined development fees for HBEP of \$114,372.28, which is based on an estimated assessable area of 217,438 square feet. However, the estimated assessable area of 217,438 square feet is incorrect. Based on the information provided to the CEC in response to the informal email request dated March 8, 2013 ((TN # 69878), HBEP will have two new buildings: New Building No. 33 and New Building No. 34. New Building No. 33 is the New Control/Administration Building, which has two floors each consisting of 7,200 square feet. The Ground level (1st floor) includes an electrical room, storage, staging area, and a break room. The First level (2nd floor) includes office space, worker locker space, a control room and equipment rooms. New Building No. 33 is a mix of industrial space, operational support space and office space. New Building No. 34, the New Maintenance/Warehouse Building, is a new one-story industrial use building consisting of 4,320 square feet. Thus, HBEP has a total of 18,720 square feet of new assessable area and not 217,438 square feet as stated in the PSA.

Using the square footage for New Building Nos. 33 and 34 and assuming that both floors in New Building No. 33 are for industrial uses (and thus rates for industrial/manufacturing uses are applicable), the total combined development fees for HBEP is \$33,958.08. This estimate is based on the total square footage of 18,720: 14,400 square feet in New Building No. 33 (there are two floors each with 7,200 square feet) and 4,320 square feet in New Building 34. The industrial/manufacturing uses rates are: \$0.133 per square foot for Law Enforcement Facilities, \$0.009 per square foot for Fire Suppression Facilities, \$1.279 per square foot for Circulation System, and \$0.393 per square foot for Park Land/Open Space & Facilities.

Alternatively, assuming that only one floor (i.e., 7,200 square footage) in New Building No. 33 is for industrial/manufacturing uses while the other floor is for commercial uses (i.e., office space, operational space) and using both the commercial/office uses and industrial/manufacturing uses rates, the combined development fees for HBEP is \$57,134.88. The total square footage assumed to be industrial/manufacturing is 11,520 while that assumed to be commercial is 7,200.



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All the estimates above assume that the development fees are only applicable to new developments/buildings and, thus, the square footage for the existing buildings was not included in the calculations.

Based on the foregoing, Applicant proposes minor revisions to the Verification of SOCIO-2:

Verification: At least 90 days prior to the start of commercial operation, the project owner shall confer with the CEC's assigned Chief Building Official (CBO) for HBEP to calculate the applicable one-time development impact fee(s) as set forth in Chapter 17 of the City of Huntington Beach Municipal Code. At least 30 days prior to commercial operation, the project owner shall provide to the Compliance Project Manager (CPM) proof of payment to the city of Huntington Beach of the required Development Impact Fee(s).

F. Soil and Water Resources

Regarding Soil & Water Resources, Applicant is concerned with Staff placing a limit on potable water use at 115 acre-feet a year ("AFY"). (PSA at p. 4.9-2.) The AFC indicated that 115 AFY would be the average annual use at the average maximum temperatures and assumes 6,665 hours of operations a year. Although the Applicant agrees that this is the typical water use, there will be variation on a year-to-year basis and it is not appropriate to consider this amount to be a "cap" on water use in every year given year-to-year variations (*e.g.* in average temperature conditions). Applicant also wants to clarify that for a portion of operation of HBEP, HBGS Units 1&2 will remain operational and could run concurrently with HBEP Block 1. Thus, SOIL&WATER-6 should indicate that the 115 AFY average annual water use applies only to the HBEP equipment and does not include the existing HBGS units. For these reasons, the Applicant proposes the following revisions to SOIL&WATER-6:

SOIL&WATER-6: Water supply for project operation and construction shall be potable water supplied from the City of Huntington Beach. Water use **for operation of new equipment constructed for the Huntington Beach Energy Project** shall not exceed **an average of 115 AFY, based on an assumed 30-year project life**; water use for construction shall not exceed 22 AFY. A monthly summary of water use shall be submitted to the CPM.

Second, Staff indicates that the groundwater beneath the HBEP site may be contaminated. (PSA at pp. 4.9-12; 4.9-20.) Staff incorrectly states that Applicant did not provide a discussion of how contaminated groundwater would be discharged. (*Id.*) As noted in Applicant's responses to



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Staff's Data Request 84 and 85, if water from HBEP construction activities is determined to exceed the pollutant thresholds for the regional General NPDES Permit for low-threat discharges, then the permit could not be used and an alternative disposal method would be developed. In such event, Applicant anticipates that water would be stored onsite (e.g., in Baker tanks) and the Applicant or its representative would contract with a licensed waste hauler to remove the contaminated water. (CEC TN # 69208.)

As an alternative to Applicant's approach, Staff states the following:

If groundwater dewatering is necessary, the project owner shall apply for coverage for discharges of petroleum contaminated water in the Santa Ana region. Under Order No. R8-2007-0008, NPDES No. CAG918001. Coverage under Order No. R8-20070008, NPDES No. CAG918001 may not be necessary if water quality tests reveal that local groundwater contamination does not exist. Staff proposes Condition of Certification SOIL&WATER-3, which would require the applicant to apply for coverage for the discharge of petroleum contaminated water if the applicant engages in groundwater dewatering at the proposed site.

(PSA at p. 4.9-12.) Note that on page 4.9-20 Staff incorrectly references Condition SOIL&WATER-4 as requiring Applicant to apply for coverage under a permit that would allow for the discharge of petroleum contaminated water:

Groundwater at the site is relatively shallow and potentially contaminated by petroleum products and by-products. Trench and foundation excavations will likely encounter shallow groundwater and dewatering would be required for stabilization. If the applicant engages in dewatering, staff would require that the applicant comply with Condition of Certification SOIL&WATER-4, which would require the applicant to apply for coverage under a permit that would allow for the discharge of petroleum contaminated water.

(PSA at p. 4.9-20.) Applicant accepts Staff's recommended approach of using Order No. R8-2007-008/NPDES No. CAG18001 rather than the low threat discharge permit.

The language within SOIL&WATER-3 is unclear as to whether coverage is required if dewatering occurs, or whether coverage is dependent on what water quality tests reveal. Although it is possible that dewatering may not be required, it is clear that the discharge of any water found during construction will need to be discharged consistent with *some* regulatory



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standard. To clarify the requirements if dewatering is required at the site, Applicant proposes the following revisions to SOIL&WATER-3 (and also requests similar revisions to the text on pages 4.9-12 and 4.9-20 of the PSA):

SOIL&WATER-3: Prior to initiation of groundwater dewatering discharge, the project owner shall apply for coverage under Order No. R8-2007-0008, NPDES No. CAG918001 for the discharge of general groundwater cleanup wastes. ~~Coverage under Order No. R8-20070008, NPDES No. CAG918001 may not be necessary if water quality tests reveal that local groundwater contamination does not exist.~~ The project owner shall provide a copy of all permit documentation sent to the Santa Ana Regional Water Quality Control Board or State Water Quality Control Board to the CPM and notify the CPM in writing of any reported non-compliance.

Verification: Prior to construction mobilization, the project owner shall submit to the CPM documentation that all necessary NPDES permits were obtained from the Santa Ana Regional Water Quality Control Board or State Water Quality Control Board. ~~Sixty~~ **Thirty (30)** days prior to **construction mobilization** ~~HBEP operation~~, the project owner shall submit to the CPM a copy of the relevant plans and permits received. The project owner shall submit to the CPM all copies of any relevant correspondence between the project owner and the Board regarding NPDES permits in the annual compliance report.

G. Traffic and Transportation

TRANS-4, Encroachment of Public Rights-of-Way, requires the project owner to obtain all required encroachment permits from the City of Huntington Beach, Orange County, Caltrans, and any other relevant jurisdiction. The timing of this requirement is “[P]rior to any ground disturbance, improvements, or obstruction of traffic within any public road, easement, or right-of-way ...” The Verification of TRANS-4 requires the project owner to provide copies of permits “at least 10 days prior to ground disturbance **or** interruption of traffic” (emphasis added). The text of TRANS-4, that copies of permits should be submitted to the CPM “prior to any ground disturbance, improvements, or obstruction of traffic within any public road ...”, makes it clear that this Condition of Certification does not apply prior to ground disturbance of the Project as a whole, but rather, prior to any ground disturbance within a public road, easement, or right-of-way. However, the Verification does not clearly make this distinction between ground disturbance of the Project and ground disturbance in a public right-of-way pursuant to an



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encroachment permit. Thus, to aid in clarity, we would ask that the Verification for TRANS-4 be revised to state:

At least 10 days prior to ground disturbance **in or along any public road, easement, or right-of-way** or interruption of traffic in or along any public road, easement, or right-of-way, the project owner shall provide copies of all permit(s), relevant to the affected location(s), received from Caltrans or any other affected jurisdictions/s to the CPM. In addition, the project owner shall retain copies of the issued/approved permit(s) and supporting documentation in its compliance file for a minimum of 6 months after the start of commercial operation.

Applicant has additional minor comments regarding the Traffic & Transportation section of the PSA, which are forth below.

- There is an incomplete sentence on p. 4.10-2. The last sentence of the fourth paragraph should read “The applicant has identified an area on-site that would be used for limited construction **worker parking**.” Currently the sentence ends with “limited construction work,” which is incorrect.
- The third sentence of the verification of TRANS-2 “The purpose of this notification ...” seems out of place with the purpose and intent of the Condition. Although this is the case, it is innocuous and does not impose any additional requirement. Applicant, therefore, does not have any proposed changes to TRANS-2.

H. Visual Resources

Applicant’s overarching concern about the Visual Resources section in the PSA is that CEC staff’s analysis does not take sufficient account of the fact that the Project is proposed for development on a large site that has been the location of a major electric generation facility since 1958, and is part of a half square mile area historically devoted to a large power plant, major electric substation, tank farms, a landfill, and light industrial and warehouse uses. Of particular concern is Staff’s analysis in the PSA does not sufficiently acknowledge the physical reality of the existing two large, 1950’s era electrical generation power blocks, with their massive, 214 foot tall stacks and their 140 foot high, 300 foot wide boiler structures that have a highly industrialized appearance because of the dense webs of support scaffolding, stairways, pipes, tanks, and equipment that cover their exteriors. The PSA fails to give sufficient weight to the fact that because the Project will replace the massive and industrial appearing structures on the site with modern power generation facilities that are substantially shorter and less massive than



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those that are now on the site (the new stacks will be 120 feet high, the air cooled condensers 104 feet high, and the heat recovery steam generation (HRSG) units, 92 feet high), the overall visual effect of the Project will be to create a substantial visual improvement and enhancement.

Figure PSA Response VR-1 is a simulation of the view toward the Project site from KOP 1 (Huntington State Beach) which depicts the Project on a photograph on which the existing power plant facilities have been retained but given a ghosted treatment. This image clearly shows the Project will substantially improve the views toward the site and result in an overall visual enhancement, because the new power plant facilities will be much smaller in comparison to those that are currently on the site. It also depicts that the Project will be less “industrial” with smooth, enclosed surfaces with an absence of external support scaffolding and a minimum of exposed pipes, tanks, and equipment. In light of the substantial, positive change and visual enhancement that the Project will make to the existing visual conditions on this existing power plant site, CEC staff’s conclusions in the Visual Resources section that the Project will lead to a “substantial degradation” of the existing visual character or quality of the site and its surroundings are not supported. Rather, the positive visual change of the Project meets and achieves the “visual enhancement” requirements of the City. More specific comments on this section of the PSA are provided below.

1. Visual Screening

As Staff correctly notes, Applicant and the City of Huntington Beach have been diligently working on developing appropriate visual screening for the Project. As part of this effort, both Applicant and the City seek to ensure that HBEP complies with LORS, including section 30251 of the Coastal Act, which requires that “development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas.” To that end, and as the PSA Project Description correctly notes:

The HBEP will be located entirely within the footprint of the existing HBGS site, which will result in avoiding the need to construct new linear facilities, including gas and water supply lines, discharge lines and transmission interconnections. Siting the HBEP on the HBGS site is consistent with existing zoning regulations, and will result in reducing potential offsite environmental impacts, the cost of construction, and ensures no new site is converted to industrial use.

The design of the proposed HBEP is a smaller footprint and lower profile than the



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existing HBGS, which will be an improvement to the aesthetic quality of the Project. Removal of an assemblage of structures, tanks, and cooling tower and replacement with project elements that are shorter and set back further to the north of the PCH will reduce some of the existing visual conditions. HBEP will utilize an existing power generation site with a General Plan Land Use designation of Public and a zoning designation of Public-Semipublic, consistent zoning, and electrical, water, wastewater, and natural gas infrastructure in place. Retiring the once-through cooling system would minimize potential offsite environmental impacts, and the project would eliminate the need for a new site to be converted to Public-Semipublic use. In addition, the HBEP will replace an older, dirtier and less efficient power generation plant with a cleaner, more efficient power generation plant.

(PSA p. 3-5.) Most recently, on October 21, 2013, the City Council held a Study Session regarding the visual screening options available for HBEP. (CEC TN# 201046.) The materials the Applicant submitted to the City Council at that time are provided as figures in the attached addendum. Figure PSA Response VR-2 is a simulation of the view from KOP 1 (Huntington State Beach) that depicts the appearance of the Project with the landscape and color treatment plans the Applicant developed in consultation with the City, and also with the additional aesthetic enhancement measures the Applicant generated in response to a City request. Figures PSA Response VR-3 through VR-5 are simulations of additional views of the Project as it would appear with implementation of the landscape and color treatment plans and the additional aesthetic enhancement measures. Figure PSA Response VR-6 is a simulation of the view from KOP 1 that has been annotated to identify the colors that will be used on the various project features. Figure PSA Response VR-7 is a project site plan that shows the footprints of the Project features and the landscape plan the Applicant has developed and which is depicted in the simulations presented on Figures PSA Response VR-2 through VR-6.

The City's initial response to the proposed visual enhancements has been positive, but to date, the City has not taken any official action related to visual screening at HBEP. Applicant will docket the City's decision(s) on visual screening with the CEC when the decision(s) are available. Applicant is confident that Staff's concerns related to visual resources will be addressed by visual screening and that HBEP will comply with all visual resources LORS, including section 30251 of the Coastal Act. Nevertheless, Applicant takes this opportunity to point out numerous deficiencies in Staff's analysis of HBEP's alleged visual resources impacts.



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2. Impacts at KOP-4 and KOP-5

As an initial matter, it is premature for Staff to determine whether there are significant impacts at KOP 4 or KOP 5. It is incomplete, and inaccurate, for Staff to assess visual impacts at KOPs 4 and 5 when accurate proposed views of HBEP, with visual screening, have not yet been considered. In addition to the foregoing, Staff must also take into account existing conditions, including HBGS, at these KOPs to accurately gauge the impact of HBEP. Staff's analysis of potential impacts at KOP 4 does not adequately take into account the baseline conditions at the Project site, with HBGS providing an existing industrial character. The PSA description of KOP 4, however, accurately describes these baseline conditions, noting that:

- The mechanical structures are distinctly visible one-third mile away, at KOP 4. (PSA, p. 4.12-12.)
- Foreground views of wetland vegetation and open water contrast sharply with views of HBGS stacks and power blocks. (*Ibid.*)
- HBGS dominates views westward from KOP 4 and overshadows the subtle visual variety of natural elements in the marshlands. (*Ibid.*)
- Motorists on PCH are likely to be impressed by the incongruous and intrusive presence of the HBGS in views near the coastline. (*Id.* at p. 4.12-13.)
- Views from KOP 4 to HBGS are unimpeded, as there is no visual screening of HBGS from KOP 4. (*Ibid.*)
- Visibility of the existing power plant at KOP 4 is high. (*Ibid.*)

In the analysis of the existing visual quality of this view (pages 4.12-12 and 4.12-13), the visual quality of this view is rated as “moderate.” The analysis suggests that the marsh that occupies a large portion of this view is the view's primary visual asset, indicating that:

Views of the water, soft brown and gray-green colors of the wetland vegetation, and wildlife that use the wetlands provide a respite from views of the HBGS and other nearby development;

and also that:

The Huntington Beach Wetlands are likely considered an important visual resource by the city's residents.

In contrast, the existing conditions analysis of this view asserts that:



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the power plant dominates views westward from KOP 4 and overshadows the subtle visual variety of natural elements in the marshlands. The nearby residences and concrete streetscape encroach on views in other directions from KOP 4.

The PSA, therefore, acknowledges the valued portion of this view is the marsh, and the power plant located to the west of the marsh is highly visible and has a massive and industrial character that detracts from the view

The analysis of the effects of the project-related changes on the existing view, however, fails to account for the fact the Project will have absolutely no effect on Magnolia Marsh itself. None of the Project facilities will be built in the area now occupied by the marsh, and project operations will not result in changes to the marsh's water levels or flow regimes that would lead to changes in the marsh's existing water features or vegetative patterns. Thus, the Project will have no effect on this view's most important visual asset.

The PSA also discusses the change to the power plant facility visible to the west of the marsh in the view's middle ground zone. The PSA analysis concludes that:

Compared to existing conditions, the new power plant structures would cause a *moderate to high* degree of view dominance from KOP 4 and other nearby viewpoints...

(PSA at p. 4.12-22.) This conclusion is flawed because, as already noted, the existing conditions analysis indicates that the existing power plant already dominates views westward from KOP-4. Thus redevelopment of the site through replacement of the HBGS with the HBEP would not change this portion of the view from one without a dominating power plant facility to one with such a facility. Comparison of the existing conditions view (VR Figure 10a) with the simulation of the view as it would appear with the Project in place (VR Figure 10b) make it very clear that overall, there would be little to no change in the level of visual dominance, with placement of a modern, compact, clean-lined power block and air cooled condenser in the area adjacent to the marsh on the right side of the view now occupied by large tanks, and removal of the massive, highly industrial appearing Units 1 and 2 and Units 3 and 4 boilers and stacks now seen in the left portion of the view, and replacement with a power block that is considerably shorter, less massive, and less industrial appearing than the existing units.



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“View blockage” should be removed as a variable considered in determining the impacts of the changes to KOP-4 brought about by replacement of the existing facilities with the HBEP. As review of PSA VR Figure 10a reveals, the existing view westward across the Magnolia Marsh essentially terminates with the existing power plant facilities on the HBGS site and there are no views beyond to distant mountains, other landmark features, or elements that are considered important or sensitive visual resources. Thus, the reconfiguration of built elements on the existing power plant and tank farm site in the portion of the view that the proposed project will occupy will not lead to blockage of views toward visual features of importance.

In several places, the analysis of impacts on views from KOP 4 makes reference to these impacts as being impacts that are visible from residential areas, and the effects of these impacts on sensitive residential viewers is presumably one of the considerations contributing to the finding that the impacts would be significant. Analysis of air photos and extensive field work in the project area reveals that the assertion that the views from KOP 4 would be seen by viewers in nearby residential area is not supported by the facts. As review of the air photo of the project site and surrounding area seen on PSA VR Figure 20 indicates, the residential areas closest to the Magnolia Marsh are located on the east side of Magnolia Street and north of the Huntington Beach Flood Control Channel. In virtually all of this area, views in the direction of the project site are screened by the Plains All American Pipeline tank farm that lies between Magnolia Street and the project site. The tank farm’s frontage along Magnolia Street is bordered by a wide setback with a lawn and high berms that are covered with large trees. As a consequence, views into the tank farm and toward the project site beyond are completely screened.

A further consideration is that the residential subdivisions east of Magnolia are bordered by walls and fences along their western edges, so there are no residences with unobstructed views toward the west. Inside the subdivisions, views in the direction of the project site are highly constrained by structures and trees in the foreground zone. Given these realities, all references to residential views should be removed from the discussion of project impacts on views from KOP 4 and should not be relied on to support a conclusion that impacts at KOP-4 are significant.

A number of revisions are called for in the analysis of the Project’s impacts on views from KOP 5 on pages 4.12-22 and 4.12-23. In the first paragraph, there is a statement that:

Although **VR Figure 12b** shows new landscape trees beyond the entrance to the power plant site (the area to the left of the arrow in the center of the simulation), the applicant’s site plan in **VR Figure 16** shows vegetation removed from the area inside the entrance with no new vegetation planted in its place. Some of the



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trees visible in the background of **VR Figure 12b** (the area to the right of the arrow in the center of the simulation) are in an area where the existing vegetation would be removed and replaced (**VR Figure 16**).

This language should be deleted because VR Figure 16 does not clearly reflect the Project landscape plans. The plans for this area as shown on Figure PSA Response VR-7 specify the proposed landscaping in some detail. As this figure indicates, the area behind the wall near the gate will be planted with a mix of California native trees and shrubs as well as a row of California fan palms. The KOP 5 simulation on PSA VR Figure 12b provides a correct representation of this planting. The arrow on PSA VR Figure 12b should thus be removed, along with the annotation stating “No Replacement Vegetation Proposed” and the language on page 4.12-23 related to this issue should be removed as well.

Likewise, at the existing view of KOP 5, the “massive complex of structures at HBGS Units 3 and 4 are clearly visible and prominent in the foreground view from Newland Street and the area near KOP 5,” with Units 1 and 2 also visible from the area near KOP 5. (PSA, p. 4.12-14.) “The visual clutter of the piping and steel support structures of the power blocks are displayed, and no exterior structure or façade encloses the inner mechanical apparatus of the power plant.” (*Ibid.*) Similarly, Staff notes that landscaping across Newland Street only partially screens views of the SCE switchyard. (*Ibid.*) In addition, the PSA states that the view southeast from KOP 5 is “dominated by the massive size and distinct structural elements of the HBGS power blocks and the one exhaust stack in front of Units 3 and 4. No visual coherence or harmony is present in the view.” (*Ibid.*)

Based on this, the analysis of the Project impacts on KOP 5 should be revised to reflect that although the new Power Block 2 and its air cooled condenser will be prominently visible in this view, the change to the view will not represent a “substantial degradation” of the view’s existing character and quality and thus will not result in a significant visual impact. The PSA’s analysis of this view’s existing condition classifies this view as having a low level of visual quality based on the high visibility of the HBGS structures. With the proposed project, the massive and industrial appearing 1950’s power plant boiler, stack, and appurtenant structures now visible in the view will be removed, and replaced with lower and more sleekly designed power generation structures. Although these structures will be located in an area of the view that is currently open, it is incorrect to characterize the proposed facility as having a “high degree of view blockage”. As review of PSA VR Figure 12a reveals, the existing view eastward from the exit from the Huntington-By-The Sea Mobile Estates is into the HBGS site, where what is visible is a large lift structure, transmission structures, tall parking lot light standards, and distant tanks. This view



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includes no distant mountains, other landmark features, or elements that would be considered to be important or sensitive visual resources. Thus, in this situation, view “blockage” is not a factor that is valid to include in the calculation of visual effects. What the analysis fails to take into account and is very pertinent, is that compared to the appearance of the existing power plant structures, the new structures will be lower and less massive, and their surfaces will be relatively free of the external framing and other appurtenances that give the existing facility a dated and heavily industrial appearance. Overall, the visual quality of this view will be improved in comparison with the exiting view because of the more attractive appearance of the new power plant structures, the extension of the screening wall into the power plant entrance area and the notable increase in landscape plantings along the perimeter of the site that will be attractive in their own right, will screen the lower portions of the power plant facilities, and will relate to the landscape themes of the surrounding area. Given the unimportance of the “view blockage” variable in the changes to this view and the improvement in the view’s formal compositional qualities, there is no basis for concluding that the visual quality of this view be no lower than it is at present.

Despite Staff’s accurate rendering of the existing impacted landscape at HBGS, Staff’s analysis of impacts to KOP 4 and KOP 5 as a result of the proposed HBEP do not accurately account for this baseline. Instead, Staff’s analysis appears to assess the impacts to these KOPs as if these views were not already significantly impacted by an existing power plant. However, as Staff’s own description of the existing views from these KOPs, summarized above, makes clear, KOP 4 and KOP 5 are, to varying degrees, dominated by views of the existing HBGS facility and the overall visual change at each KOP from the existence of the HBGS to HBEP is, at most, moderate.

For the foregoing reasons, Applicant disagrees that there will be significant visual resources impacts at KOP 4 and KOP 5.

2. Light and Glare Effects

Applicant disagrees with the PSA’s determination that the Project’s operational lighting would create a significant impact. The proposed project will dramatically reduce the amount of light visible on the site and the minimal amount of lighting the Project will require will be designed in accordance with standards and practices that minimize off-site light trespass and spill of light into the night sky. Figure PSA Response VR-9 is a nighttime photograph of the Wetland Conservation facility and the HBGS taken from Huntington State Beach. As this photograph clearly depicts, the existing power generation facility is brightly illuminated at night, with large numbers of poorly shielded lights arrayed along the boiler structure’s external catwalks and



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stairways, red aviation safety lights at the top of the stack, bright white lights at the midpoint of the stack, and bright lights on poles illuminating the areas around the power block. With the proposed project, all of these existing lights would be removed. For the new project, no aviation safety lighting is currently expected to be required on the stacks, and no lighting will be required on the enclosed sides of the HRSGs and ACCs beyond those switched lights required for compliance with worker health and safety, LORS, and security requirements. Exterior lighting will be restricted to lighting and equipment areas on the tops of the HRSGs and any lighting needed in paved areas around the power blocks. The lighting at the tops of the HRSGs will be turned on only for maintenance activities, and when on, will have a limited visual effect because it will be highly shielded and directed only where needed. Any lighting required to illuminate areas around the power blocks will be the minimum required for safety and security, and will be designed to be hooded and highly directed to minimize off-site visibility and light spill into off-site areas or into the sky.

3. Proposed Changes to Visual Resources Table VR-2

PSA Visual Resources Table 2, Proposed Project Consistency with Applicable Visual Resources LORS is an inventory of visual resources-related plan policies, laws, ordinances, regulations, and standards Staff believes are applicable to the proposed project and an assessment for each of the LORS of whether Staff believes that the Project will be consistent with it. This inventory contains many items that have no applicability to the proposed project. For example, City of Huntington Beach General Plan Land Use Element Goal LU 14 – Preserve the City’s open spaces states:

Objective LU 14.1. Preserve...open spaces for the City’s existing and future residents that maintain and protect significant environmental resources, recreational opportunities, and visual relief from development.

This goal has no relevance for the Project as the Project is proposed for a pre-existing site that has been developed for decades and is thus not an open space that is a candidate for being preserved. It is important to note that this policy refers to preservation of the open spaces themselves and includes absolutely no mention of the need to preserve views from open spaces.

Applicant requests that all items presented on Table VR-2 be critically reviewed, and that those that are not of direct relevance to the Project be removed.



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In addition, Applicant requests that the consistency of the Project with the LORS remaining on the Table be evaluated taking into account the color treatment and landscape plans the Applicant prepared in consultation with the City of Huntington Beach, and the visual enhancement plan that has been submitted to the City for review.

4. Proposed Changes to Condition VIS-1

Aside from the comments noted in Part H, *supra*, Applicant also proposes changes to Condition of Certification VIS-1, specifically related to the requirement that twelve-foot construction screening fencing remain along the full site perimeter for the duration of construction of HBEP. VIS-1 should take into account that construction will be staged, and that during some phases of construction, the construction fencing may not be required along the entire outer perimeter of the Project site. For example, during Development Phase 1, when the construction activity will be taking place in the northeast corner of the site, there will be no need for installation of screening fencing along Newland Street, which is far from where the construction will be taking place, and where views toward the construction activities will be screened by existing HBGS Units, which will still be in place at this time, and by the existing decorative screening wall and plantings that line the Newland Street perimeter of the site. Installation of 12-foot high screening fences along Newland Street at this time would be unnecessary, and would be physically awkward and visually incompatible with what is now present along this perimeter. During Construction Phases 2 and 3, the demolition of Units 3 and 4 and the construction of the new HBEP Block 2 would be taking place far from the perimeter of the site along the marsh and would be substantially screened in views from the east by Units 1 and 2, which would still be in place.

Also, as Staff is aware, Applicant has indicated that an eight (8) foot tall masonry wall would be constructed along the southeast perimeter of the site (adjacent to the wetland). (*See* CEC TN# 71338.) With the perimeter wall and landscaped berm in place along the wetland perimeter of the project site, requiring a 12-foot screening fence along this perimeter after completion of Construction Phase 1 would add little value. Since the masonry wall was incorporated into the Project, and due to the fact that it will be constructed after the completion of HBEP Block 1, Applicant believes that no additional construction screening on the southeast perimeter is necessary upon completion of the masonry wall. During Construction Phase 4, the demolition of Units 1 and 2 will be taking place in the area east of the new HBEP Block 2, and at this time, views of the demolition activity from Newland Street would be blocked by Power Block 2 and the perimeter wall along the Newland Street edge of the property. As a consequence, screening fencing along Newland Street would be unnecessary during this phase. As such, Applicant proposes the following revisions to VIS-1:



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Prior to the start of site mobilization, the project owner shall prepare and implement a Construction Screening and Site Restoration Plan describing methods and materials that will be used **during each phase of the project** to screen project ~~construction and~~ parking areas **and views into the project site from areas where the construction activities occurring during that phase have the potential to be visible.** ~~And~~ **The plan will also include provisions to** restore areas where ground disturbance occurred during construction.

To minimize the visual impacts of project construction, **during each phase of the project,** the project owner shall install and maintain construction screening fencing along the perimeters of the project site ~~for all areas that could be visible where there would be views~~ from public use areas **toward construction activities occurring during the phase.** ~~including~~ **The areas where screening would take place during phases it would be required could include** the wetland along the southeast site boundary, the west side of the project site on Newland Street, and the southwest side of the site along the Huntington Beach Wetlands Conservancy property adjacent to the Pacific Coast Highway (PCH). The screening fencing for the power plant site shall be no less than 12 feet tall. **Upon completion of the installation of the eight (8) foot tall masonry wall along the southeast boundary by the wetland, the CPM shall allow project owner to remove all construction screening fencing from that portion of the site.**

Screening fencing shall be installed to visually screen the open lots that will be used for parking on Newland Street across from the project site and along the PCH at Beach Boulevard. The screening fencing for the parking lots shall be no less than 8 feet tall.

To effectuate this proposed revision to VIS-1, Applicant also proposes that the following language be added to the end of the Verification for VIS-1:

Within ten (10) days of receipt of confirmation from the project owner that the eight (8) foot tall masonry wall along the southeast project boundary has been completed, the CPM shall notify the project owner that construction



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screening fencing can be removed from the portion of the southeast site boundary where the masonry wall is erected.

5. Proposed Changes to Condition VIS-5

Applicant recognizes Condition of Certification VIS-5, as a standard Condition that the Commission generally applies. Applicant proposes one change to this condition. At present, the condition contains a provision that states:

The monopoles for the on-site 230-kV transmission line shall be constructed using self-weathering steel to blend with the environment to the greatest extent feasible, and the finish shall appear as a matte patina. No galvanizing process shall be used that produces a reflective or shiny metallic finish.

(PSA at p. 4.12-50.) Applicant understands the intent of this provision, to ensure that the steel poles have a color and texture that is visually compatible with their surroundings, but based on our long-experience with integration of electric transmission facilities into their visual settings, we know that use of self-weathering steel is not the right solution for this situation. Experience has shown that self-weathering transmission structures can be a very good fit with natural settings, where the dark brown color and rough texture of the weathered steel can relate well with the colors and textures of their backdrops. However, in more urban settings, particularly in situations where the structures are seen at close range and in relationship to features that have more refined surfaces, the dark, mottled color and rough texture of the self-weathering steel surfaces can appear out of place. For a situation like the proposed project, where the transmission structures will be seen at close range as a part of an overall assemblage of equipment, screening walls, and sculptural elements, transmission structures with a more refined surface and more nuanced color treatment would be more appropriate. The desired effect could be achieved by use of either galvanized structures that have been dulled to reduce their reflectivity and darkened to the right level to fit with the overall composition, or by use of structures that have a powder-coat finish. Powder coating permits a range of color choices, providing options for selection of a color that is most appropriate in the overall visual context. Applicant proposes the following revision of the provision of VIS-5 related to the surface treatment of the transmission structures:

The monopoles for the on-site 230-kV transmission line shall **have a surface treatment that enables them** ~~be constructed using self-weathering steel to blend with the environment to the greatest extent feasible, and the finish shall appear as a matte patina. No~~



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~~galvanizing process shall be used that produces a reflective or shiny metallic finish.~~

I. Waste Management

The Applicant objects to CEC staff's assertion in the PSA (p 4.13-9 0 4.13-10) that states:

Prior to the Final Staff Assessment (FSA) HBEP owners should specify which areas identified in **Waste Management Table 2** require cleanup or remediation prior to construction. Once these areas have been identified the applicant should be required to comply with a condition of certification similar to Condition of Certification **WASTE-1**, which would require completion of Phase II investigations to evaluate the extent of contamination and identify the necessary remedial actions. If a site is considered contaminated, a Phase II environmental site assessment may be conducted, ASTM test E1903, a more detailed investigation involving chemical analysis for hazardous substances and/or petroleum hydrocarbons is performed. It would also require the applicant to coordinate with the appropriate regulatory authority that would otherwise regulate the activity if not for the in-lieu authority of the Energy Commission. The condition would then require monitoring and reporting on the progress of remediation of the various areas of contamination located on the HBEP site. Staff will finalize this condition of certification once the additional data on sites needing additional characterization are provided by the applicant.

Thus, based on the foregoing language, it appears that Staff is seeking additional site investigation as part of the PSA/FSA process. It is inappropriate, however, for Staff to require Applicant to conduct an additional investigation (a Phase II environmental site assessment) or require the Applicant to comply with a proposed COC (WASTE-1) during the Staff analysis phase of the AFC licensing proceeding.

The Applicant will not be conducting any additional site investigations or evaluations prior to the issuance of a license by CEC for HBEP; therefore, Staff's request for an update of Waste Management Table 2 will not occur prior to the issuance of the FSA or during the remainder of



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the CEC licensing proceedings for HBEP. WASTE-1 will be completed post-licensing and will be submitted to the CPM as specified in the Verification to WASTE-1.

The PSA notes in the second paragraph under “Operation Impacts and Mitigation” on page 4.13-13 that the Project will generate ZLD filter cake. As the HBEP utilizes an ACC and does not have a ZLD system, reference to the ZLD filter cake is requested to be removed as follows:

Non-Hazardous Solid Wastes

The generation of as much as 39 tons per year of non-hazardous solid wastes ~~(including ZLD filter cake)~~ expected during project operation include routine maintenance wastes (such as used air filters, spent deionization resins, sand and filter media), as well as domestic and office wastes (such as office paper, newsprint, aluminum cans, plastic, and glass). All non-hazardous wastes will be recycled to the extent possible, and non-recyclable wastes will be regularly transported off site to a local solid waste disposal facility (HBEP 2012a, § 5.14.1.2.3).

II. ENGINEERING ASSESSMENT COMMENTS

A. Transmission System Engineering

Applicant docketed the Phase I Interconnection Study on September 24, 2013 and the CEC docket unit provided a copy to the parties and the HBEP listserve on September 30, 2013, approximately ten days before publication of PSA Part A. Thus, there is no analysis regarding the Phase I Study in PSA Part A. Applicant will provide comments, if any, to Transmission System Engineering after Staff’s complete analysis on the topic is made available.

III. COMPLIANCE CONDITIONS COMMENTS

The majority of the Compliance Conditions contain standard language. Two conditions regarding facility closure, however, impose extreme and unnecessary requirements on the Project.

COC COM-15 describes the procedures for and contents of required closure plans. In various locations throughout COM-15, reference is made to “long-term, post-closure maintenance” or similar post-closure activity. The CEC does not retain jurisdiction over the Project post-closure and, therefore, any references to post-closure activity or requirements should not be included in the COCs. COM-15 would also require that closure cost estimates be projected assuming closure “at a time in the facility’s projected life span when the mode and scope of facility



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operation would make permanent closure the most expensive.” There is no basis for assuming closure costs based on a projected worst-case scenario, particularly given that COM-15 also requires that the estimate be updated every five years. Additionally, COM-15 prohibits the use of salvage value to estimate closure costs. Such a requirement is entirely arbitrary and contrary to actual decommissioning practice. Ignoring salvage value in the cost estimate ignores a key component of the true cost of closure and decommissioning, will result in significantly overstating the actual cost of decommissioning, and is not based on any evidence or support.

COM-16 would require financial assurance for closure and post-closure care. As noted above, the CEC does not have jurisdiction over the Project post-closure, so any conditions relating to post-closure activities exceed the authority of the CEC. More importantly, however, there is no support whatsoever for requiring the maintenance of “an irrevocable closure surety bond and standby trust fund” for closure costs. There is no potential for significant environmental impacts that supports imposition of COM-16. Without substantial evidence of a nexus between some impact and the proposed condition, the condition is unlawful. (*Nollan v. California Coastal Commission* (1987) 483 US 825, 837; *Dolan v. City of Tigard* (1994) 512 US 374, 386; *Ehrlich v. City of Culver City* (1996) 12 Cal.4th 854, 880; *see also* Sutter Power Plant Project Final Decision (97-AFC-2) at pp. 293-296.)

Indeed, we are aware of no other gas-fired power plant located on private land in California that is burdened by a similar condition. While in some instances it may be appropriate to require financial assurance for closure of facilities located on public lands where public rights must be protected, such conditions on private land have no justification. The financial obligation (particularly if no salvage value is accounted for) has the potential to significantly impact the economics of the Project. Without specific evidence to support financial assurance for closure, any efforts by the CEC to develop such conditions addressing financial assurance for closure should be done through a regulatory process, with full notice and opportunity for all members of the public and all affected parties to participate. Including such conditions on an ad hoc, case-by-case basis, without any evidence of or relationship to potential environmental impacts, is arbitrary, unlawful, and amounts to underground regulation.

For the reasons set forth above, Applicant proposes changes to COM-15 as set forth below and requests that COM-16 be stricken in its entirety (~~COM-16~~). Applicant also requests that revisions to pages 7-8 and 7-9 of the PSA be made in accordance with the comments set forth herein.



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COM-15: Facility Closure Planning. To ensure that a facility's eventual permanent closure and long-term maintenance do not pose a threat to public health and safety and/or to environmental quality, the project owner shall coordinate with the Energy Commission to plan and prepare for eventual permanent closure.

A. Provisional Closure Plan and Estimate of Permanent Closure Costs

To assure satisfactory long-term site maintenance and adequate closure for "the whole of a project," the project owner shall submit a Provisional Closure Plan and Cost Estimate for CPM review and approval within sixty (60) days after the start of commercial operation. The Provisional Closure Plan and Cost Estimate shall consider applicable final closure plan requirements, ~~including interim and long-term, post-closure site maintenance costs and~~ reflect **the use of an independent third party to carry out the permanent closure.**

1. ~~facility closure costs at a time in the facility's projected life span when the mode and scope of facility operation would make permanent closure the most expensive;~~
2. ~~the use of an independent third party to carry out the permanent closure; and no use of salvage value to offset closure costs~~

The Provisional Closure Plan and Cost Estimate shall provide for a phased closure process and include but not be limited to:

1. comprehensive scope of work and itemized budget;
2. closure plan development costs;
3. dismantling and demolition;
4. recycling and site clean-up;
5. mitigation and monitoring direct, indirect, and cumulative impacts;
6. site remediation and/or restoration;
7. interim **and long-term** operation ~~and post-closure~~ monitoring and maintenance, including long-term equipment replacement costs; and
8. contingencies.

The project owner shall include an updated Provisional Closure Plan and Cost Estimate in every fifth-year ACR for CPM review and approval. Each updated Provisional Closure Plan and Cost Estimate shall reflect the most current regulatory standards, best management practices, and applicable LORS.



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B. Final Closure Plan and Cost Estimate

At least three (3) years prior to initiating a permanent facility closure, the project owner shall submit for Energy Commission review and approval, a Final Closure Plan and Cost Estimate, which includes any long-term, post-closure site maintenance and monitoring. Final Closure Plan and Cost Estimate contents include, but are not limited to:

1. a statement of specific Final Closure Plan objectives;
2. a statement of qualifications and resumes of the technical experts proposed to conduct the closure activities, with detailed descriptions of previous power plant closure experience;
3. identification of any facility-related installations not part of the Energy Commission certification, designation of who is responsible for these, and an explanation of what will be done with them after closure;
4. a comprehensive scope of work and itemized budget for permanent plant closure and ~~long-term~~ site maintenance activities, with a description and explanation of methods to be used, broken down by phases, including, but not limited to:
 - a. dismantling and demolition;
 - b. recycling and site clean-up;
 - c. impact mitigation and monitoring;
 - d. site remediation and/or restoration; **and**
 - e. ~~post closure maintenance; and~~ **any** contingencies.
5. a revised/updated Final Cost Estimate for all closure activities, by phases, including ~~long-term, post-closure~~ site monitoring and maintenance costs, and **long-term equipment** replacement of ~~long-term post-closure equipment~~;
6. a schedule projecting all phases of closure activities for the power plant site and all appurtenances constructed as part of the Energy Commission certified project;
7. an electronic submittal package of all relevant plans, drawings, risk assessments, and maintenance schedules and/or reports, including an above- and below-ground infrastructure inventory map and registered engineer's or delegate CBO's assessment of demolishing the facility; additionally, for any facility that permanently ceased operation prior to submitting a Final Closure Plan and Cost Estimate and for which only minimal or no maintenance has been done since, a comprehensive condition report focused on identifying potential hazards;
8. all information additionally required by the facility's conditions of certification applicable to plant closure;



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9. an equipment disposition plan, including:
 - a. recycling and disposal methods for equipment and materials; and
 - b. identification and justification for any equipment and materials that will remain on-site after closure;
10. a site disposition plan, including but not limited to:
 - a. proposed rehabilitation, restoration, and/or remediation procedures, as required by the conditions of certification and applicable LORS, **and**
 - b. ~~long-term~~ site maintenance activities;~~and;~~
11. ~~anticipated future land use options after closure;~~ identification and assessment of all potential direct, indirect, and cumulative impacts and proposal of mitigation measures to reduce significant adverse impacts to a less-than-significant level; potential impacts to be considered shall include, but not be limited to:
 - a. traffic
 - b. noise and vibration
 - c. soil erosion
 - d. air quality degradation
 - e. solid waste
 - f. hazardous materials
 - g. waste water discharges
 - h. contaminated soil
12. identification of all current conditions of certification, LORS, federal, state, regional, and local planning efforts applicable to the facility, and proposed strategies for achieving and maintaining compliance during closure;
13. updated mailing list or listserv of all responsible agencies, potentially interested parties, and property owners within one (1) mile of the facility;
14. identification of alternatives to plant closure and assessment of the feasibility and environmental impacts of these; and
15. description of and schedule for security measures and safe shutdown of all non-critical equipment and removal of hazardous materials and waste (see conditions of certification for **Public Health, Waste Management, Hazardous Materials Management, and Worker Safety**).

If **implementation of** an Energy Commission-approved Final Closure Plan and Cost Estimate is not ~~implemented~~ **initiated** within one (1) year of its approval date, it shall be updated and resubmitted to the Commission for supplementary review and approval. If a project owner initiates but then suspends closure



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activities, and the suspension continues for longer than one (1) year, or subsequently abandons the facility, the ~~Energy Commission may access the required financial assurance funds to complete the closure~~ **Final Closure Plan and Cost Estimate shall be resubmitted to the Commission for supplementary review and approval.** The project owner remains liable for all costs of contingency planning and closure.

In addition to the foregoing, Applicant also proposes the following revisions to COM-13. As currently drafted, it contains overly burdensome reporting requirements.

COM-13: Incident-Reporting Requirements. Within ~~one~~ **twenty-four (24)** hours, the project owner shall notify the CPM or Compliance Office Manager, by telephone and e-mail, of any incident at the power plant or appurtenant facilities that results or could result in any of the following:

1. ~~reduction in the facility's ability to respond to dispatch (excluding forced outages caused by protective equipment or other typically encountered shutdown events);~~
2. health and safety impacts on the surrounding population;
3. property damage off-site;
4. response by off-site emergency response agencies;
5. serious on-site injury;
6. serious environmental damage; or
7. emergency reporting to any federal, state, or local agency.

The notice shall describe the circumstances, status, and expected duration of the incident. If warranted, as soon as it is safe and feasible, the project owner shall implement the safe shutdown of any non-critical equipment and removal of any hazardous materials and waste that pose a threat to public health and safety and to environmental quality (also, see specific conditions of certification for the technical areas of Hazardous Materials Management and Waste Management).

Within ~~one (1) week~~ **ten business days** of the incident, the project owner shall submit to the CPM a detailed incident report, which includes, as appropriate, the following information:

1. a brief description of the incident, including its date, time, and location;
2. a description of the cause of the incident, or likely causes if it is still under investigation;



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3. the location of any off-site impacts;
4. description of any resultant impacts;
5. a description of emergency response actions associated with the incident;
6. identification of responding agencies;
7. identification of emergency notifications made to federal, state, and/or local agencies;
8. identification of any hazardous materials released and an estimate of the quantity released;
9. a description of any injuries, fatalities, or property damage that occurred as a result of the incident;
10. fines or violations assessed or being processed by other agencies;
11. name, phone number, and e-mail address of the appropriate facility contact person having knowledge of the event; and
12. corrective actions to prevent a recurrence of the incident.

The project owner shall maintain all incident report records for the life of the project, including closure. After the submittal of the initial report for any incident, the project owner shall submit to the CPM copies of incident reports within ~~twenty-four (24) hours~~ **five (5) business days** of a request.

IV. SUMMARY AND CONCLUSION

Applicant believes the comments identified herein can be resolved in a manner that will not delay publication of PSA Part B or the Final Staff Assessment, nor will they hinder the proceeding's schedule. Furthermore, Applicant believes that upon publication of the Final Staff Assessment, the Committee will be in a position to quickly move forward toward the Project's evidentiary hearing and a final decision approving the Project.

Respectfully submitted,

Melissa A. Foster

MAF:jmw



View from KOP 1, Huntington Beach State Park. Simulation of the proposed power plant overlaid over a ghosted image of the existing power generating facility, permitting a direct comparison of the scale and visual character of the existing and proposed facilities.

FIGURE PSA RESPONSE VR-1
Simulation of the View from KOP 1 Providing
a Comparison of the Existing and Proposed
Power Plant Facilities

AES Huntington Beach Energy Project
Huntington Beach, California



FIGURE PSA RESPONSE VR-2
KOP 1. Simulation of the Project With Visual
Treatment Submitted for Consideration by
the City of Huntington Beach
AES Huntington Beach Energy Project
Huntington Beach, California



FIGURE PSA RESPONSE VR-3
KOP 4. Simulation of the Project With Visual
Treatment Submitted for Consideration by
the City of Huntington Beach
AES Huntington Beach Energy Project
Huntington Beach, California



FIGURE PSA RESPONSE VR-4
KOP 5. Simulation of the Project With Visual
Treatment Submitted for Consideration by
the City of Huntington Beach
AES Huntington Beach Energy Project
Huntington Beach, California



**FIGURE PSA RESPONSE VR-5
KOP 6. Simulation of the Project With Visual
Treatment Submitted for Consideration by
the City of Huntington Beach**

AES Huntington Beach Energy Project
Huntington Beach, California



FIGURE PSA RESPONSE VR-6
View from a Location on the Beach West of the Project Site.
Simulation of the Project With Visual Treatment Submitted
for Consideration by the City of Huntington Beach
AES Huntington Beach Energy Project
Huntington Beach, California

HBEP - Color Chart (see visualization for reference)

Colors based on Valspar color chart

- 1 Tender Twig 3001-7B Tan
- 2 Glacier Mist 4005-3B Light Blue
- 3 Tinsel Beam 4005-3A Medium Blue
- 4 Cincinnati Hotel Linder Blue 4005-3C Dark Blue



Simulation of the proposed project from KOP 1 that has been annotated to indicate the colors to be used for the surfaces of the various project features.

FIGURE PSA RESPONSE VR-7 Proposed Color Treatment for Project Structures

AES Huntington Beach Energy Project
Huntington Beach, California

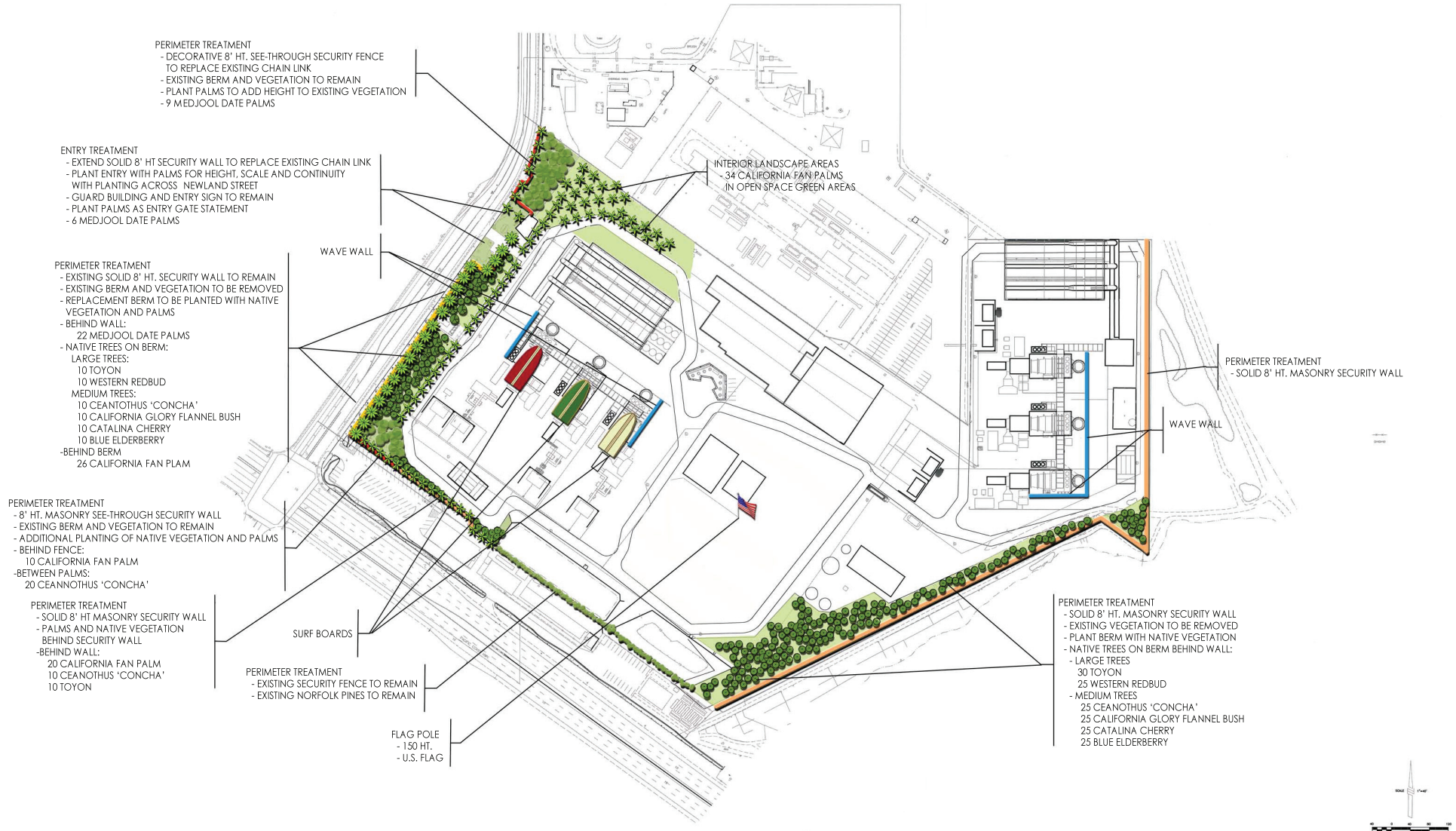


FIGURE PSA RESPONSE VR-8
Proposed Landscape Plan
 AES Huntington Beach Energy Project
 Huntington Beach, California



Photograph of the existing HBGS taken at night from Huntington State Beach, documenting the existing nighttime lighting at the Wetland Conservancy Facility and the HBGS.

FIGURE PSA RESPONSE VR-9
Nighttime Photograph of the Existing HBGS
Taken from Huntington State Beach

AES Huntington Beach Energy Project
Huntington Beach, California