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January 21, 2014

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 Staff's Supplemental Focused Analysis, PSA Part A

Dear Ms. Miller:

On December 20, 2013, the California Energy Commission ("Commission") Staff published a Supplemental Focused Analysis ("Supplement") related to the October 10, 2013 Preliminary Staff Assessment, Part A ("PSA Part A") for the Huntington Beach Energy Project ("HBEP" or the "Project"). Herein please find Applicant AES Southland Development, LLC's ("Applicant") comments on the Supplement.[1]

I. BIOLOGICAL RESOURCES

A. Noise

Ambient Noise Levels

Staff's Biological Resources Table 2 (Supplement at p. 4.2-2) presents a "Summary of Noise Levels at Locations with Noise-sensitive Biological Resources." It is not clear where Staff obtained certain noise levels listed in Table 2. The record should reflect that the measured Leq's at M5 (Wetland Pier) exceeded 66 dBA and that statistical levels (L1.67 and L8.33) were substantially higher; in fact, levels up to 75 dBA were reported. Similarly, higher Leq and statistical levels were reported at M6 (Wetlands Back), with statistical levels repeatedly exceeded the 60 dBA compliance target suggested by Staff. It is also unclear how Staff estimated the sound levels for the southeastern corner of the Magnolia Marsh in Biological Resources Table 2, but it is clear that the complexity of the existing acoustical environment is not fully reflected in Biological Resources Table 2.

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

Staff also introduces a new metric, the Lmax, in Table 2 and only briefly define it. Often in environmental acoustics the term "maximum" is used, but the Lmax is a precise term and, depending on the particular sound meter settings, reflects the sound pressure level over a period of less than one second. As such, the Lmax statistic is very unstable; that is, it can fluctuate dramatically for a variety of reasons that are not related to the source of interest. Sources of contamination of the Lmax include momentary gusts of wind, birds chirping, rustling vegetation, and passing vehicles. By definition, the Lmax will be greater than the Leq or any other statistical metric. Given this, it is curious that Staff would deem it appropriate to discuss 24-hour average sound levels when describing the existing environment, yet rely on a one-second (or a fraction thereof) sound level when discussing compliance.

It also appears that Staff fails to rely on the proper and complete set of responses to Pyle's Data Requests filed by Applicant on January 17, 2013 (TN# 69180) and instead Staff solely relies on the initial response filing dated December 13, 2012. (Supplement at p. 4.2-3.)

The 60dB(A) Threshold

A potential noise threshold of 60 dBA has been referenced by Staff as being applicable for some bird species in various settings. However, before applying this numeric level, it is critical to understand it was based on research conducted in a laboratory setting designed to evaluate the effects of highway noise on avian vocal communication (Dooling and Popper, 2007). As discussed by Dooling and Popper (2007), the 60 dBA threshold is outdated and advances in science support higher thresholds of potential concern, such as 70 dBA, are readily acceptable particularly in a noisy urban environment where ambient noise levels can reach 70 dBA.

For example, USFWS has established a disturbance threshold of 70 dBA for both marbled murrelets and northern spotted owls (WSDOT, 2013), two species that inhabit dense coniferous forests (USFS, 1996; USFWS, 2003). Staff's suggested 60 dBA threshold does not account for various strategies of a freely moving bird in a natural environment such as turning its head, adjusting height or location, or increasing the level of its vocalizations. Furthermore, the dBA noise scale is not completely analogous to avian hearing, which is generally limited to frequencies between 1-5 kHz, with the greatest sensitivity from 2-4 kHz (Dooling and Popper, 2007). Dooling and Popper (2007) point out that "examination of traffic noise and non-strike construction noise generally shows a sloping spectrum with less energy from 2-4 kHz than at lower frequencies," suggesting that much of the noise from construction activities at HBEP would likely be outside of the most sensitive range (2-4 kHz) of avian hearing and communication.

In addition, Dooling and Popper (2007) indicated that habituation, a phenomenon seen in many birds and other wildlife species, is a complicating and generally unaccounted for factor in assessing avian sensitivity to anthropogenic noise. As an example of habituation, a study of the effects of military weapons testing on nesting bald eagles in Maryland, Brown, et al. (1999) found no statistically significant difference in eagle nest success as a result of ordnance activities with peak decibel levels (dBP) ranging from 82 to 126 dBP, suggesting the eagles in the study had habituated to the elevated noise levels. As noted in the *Supplemental Data Response to Biological Resources DR31*, ambient noise levels can exceed 60 dBA at the Tijuana Marsh in southern San Diego County, yet light-footed clapper rails are successfully nesting within the area. Zembal et al. (2012) determined that the Tijuana Marsh is one of the most productive and important marshes for the species.

It should also be noted that many natural sounds can readily exceed 60 dBA; surf noise, wind blowing through foliage, flowing water or waterfalls, and the sound of rain drops impacting foliage or ground surfaces are just some examples. Therefore, it is difficult to understand how Staff can justify such strict application of the proposed threshold.

Magnolia Marsh

Magnolia Marsh is located within an urban setting and associated land uses include the existing Huntington Beach Generating Station ("HBGS"), the Pacific Coast Highway ("PCH"), Plains American Tank Farm, residences and Brookhurst Marsh. As mentioned previously, existing ambient noise levels within Magnolia Marsh were found to repeatedly vary between 60 and 66 dBA at the Pier (M5) as shown in the *Additional Responses to Intervenor Pyle's Data Requests, Set 1 (PYLE-1 through PYLE-16)*, docketed on January 17, 2013. As previously noted in *Supplemental Data Response to Biological Resources DR31*, docketed on March 11, 2013, portions of the marsh already experience ambient noise levels above 60 dBA. Although birds primarily communicate with one another through vocalizations and auditory cues, some species will adjust their vocalizations to prevent masking in an urban setting (Slabbekoorn and Peet, 2003). In addition, waterfowl behaviors are associated with shoreline development in urban habitats and interspecific variation exists in how species respond to urbanization (Donaldson et al., 2007 and references therein). As discussed above, many species habituate to urban noise. The Supplement (p. 4.2-3) indicate that Francis et al. (2009) demonstrated that noise alone reduced nesting species richness, which led to different compositions in avian communities. However, it should be noted that this study also found that noise indirectly facilitates reproductive success for noise tolerant species (Francis et al., 2009). Therefore, existing noise levels in an urbanized setting can benefit noise tolerant species and the Magnolia Marsh is bordered on three sides by noise sources, including PCH, Magnolia Street and the Huntington

Beach Generating Station. Noise tolerant species also benefit from reduced nest parasitism (Francis et al., 2009). Additionally, Francis et al. (2009) stated, "[t]he higher reproductive success for birds within noisy habitats may be a previously unrecognized factor contributing to the success of urban-adapted species and the loss of birds less tolerant of noise." Therefore, there is a high probability that noise sensitive species would not use Magnolia Marsh currently since ambient noise levels are already high because of the current approved long-term adjacent land uses and existing urban activities in the area.

As previously noted in Applicant's *Supplemental Data Response to Biological Resources DR31*, there is nesting habitat for light-footed clapper rail (*Rallus longirostris levipes*) within the Tijuana Slough National Wildlife Refuge (Tijuana Marsh, San Diego). Tijuana Marsh is one of the most important habitats for the species. In 2012, 101 breeding pairs were documented within Tijuana Marsh, second only to Upper Newport Bay, which had 165 breeding pairs (Zembal et al., 2012). General land use and significant noise sources within the vicinity of Tijuana Marsh include the Imperial Beach Naval Air Station (see *Supplemental Data Response to Biological Resources DR31*, Figure DR31-1), Brown Field Municipal Airport, Tijuana International Airport, Interstate 5, and Customs and Border Patrol vehicles (Kimley-Horn and Associates, 2005). According to Kimley-Horn and Associates (2005), noise levels often exceed 60 dBA over Tijuana Marsh because of aircraft activity, including helicopter training activities and at specific times these activities were continuous sources of noise. The Imperial Beach Naval Air Station is adjacent to a large portion of the Tijuana Marsh and is a regular source of noise within the area. The available evidence indicates the light-footed clapper rail is not particularly noise sensitive compared to less tolerant species, such as the greater sage-grouse (*Centrocercus urophasianus*). Greater sage-grouse rely heavily on acoustic communication and have elaborate mating behaviors, such as females assessing male vocalizations and their display to select an appropriate mate and to locate the lek (Patricelli et al., 2013 and reference therein). Francis et al. (2009) detected noise avoidance via nest placement in gray flycatchers (*Empidonax wrightii*), gray vireos (*Vireo vicinior*), black-throated gray warblers (*Dendroica nigrescens*), and spotted towhees (*Pipilo maculatus*). However, this trend was not observed with all species, such as black-chinned hummingbird (*Archilochus alexandri*) and house finch (*Carpodacus mexicanus*) which were strongly associated with sites adjacent to natural gas wells (treatment sites). Additionally, there was an increase in nest parasitism by brown-headed cowbird (*Molothrus ater*) with an increased distance (i.e., decreasing sound level) from noise sources (Francis et al., 2009). That is, nest parasitism increased with decreasing sound level. This provides additional evidence further demonstrating interspecific variation in noise tolerance among avian species.

Moreover, as noted in the *Supplemental Data Response, DR31* (Biological Resources), Magnolia Marsh is not known to currently support nesting light-footed clapper rails (or any potentially noise sensitive species) and may never develop into suitable light-footed clapper rail nesting habitat. In the event suitable nesting habitat for the species does eventually develop at Magnolia Marsh, the results of noise studies and census surveys at Tijuana Marsh (Kimley-Horn and Associates, 2005; Zembal et al., 2012) suggest that existing and future sound levels from HBEP would be unlikely to prevent light-footed clapper rails from nesting within the marsh. Further, there is also other more suitable habitat nearby, such as the Talbert Marsh that contains cordgrass or the Brookhurst Marsh that contains rush (*Juncus* sp.) habitat (*Spartina* sp.; CSULB, 2013), the latter of which is located over 3,000 feet from the HBEP.

Nesting Buffers

Recommended buffer distances based on sensitivity to anthropogenic noise have been developed for many bird species and the Applicant has proposed buffers for specific avian groups in the *Preliminary Staff Assessment (Part A) Workshop Notes and Action Items*, docketed on December 13, 2013. A study that assessed flushing responses of Belding's savanna sparrows to pedestrian surveys, recommended a minimum buffer distance of 207 feet (Fernandez-Juricic, et al., 2009), which could be used by HBEP as an appropriately-sized buffer for this species.

B. Air Emissions – Nitrogen Deposition

Overall, Applicant agrees with the basic air dispersion modeling approach Staff used in assessing HBEP's nitrogen deposition impacts on sensitive habitats and species. However, Applicant has concerns regarding some statements and data used in Staff's analysis. On January 7, 2014, the Applicant requested copies of the GIS and air modeling files used in Staff's analysis for determining nitrogen deposition impacts from HBEP. Applicant's consultants received the air modeling files from Staff on January 8, 2014 and the GIS files on January 13, 2014.

Based on Applicant's review of the air modeling files, it appears that the maximum modeled HBEP impact for the Talbert Nature Preserve (Biological Resources Table 4, pg. 4.2-7), reported as 1.5 kilograms of nitrogen per hectare per year (kg N/ha-yr), is incorrect. Applicant believes the correct value is 0.97 kg N/ha-yr.

Additionally, the Applicant disagrees with the overly conservative approach used in Staff's nitrogen deposition impacts assessment. As noted in Applicant's November 4, 2013 filing (TN# 201106), Applicant included many conservative assumptions with regard to nitrogen formation and deposition. These assumptions were as follows:

- The approach assumes 100 percent conversion of nitrogen oxides (NO_x) and ammonia (NH_3) into atmospherically-derived nitrogen (ADN) within the turbine stacks.
- Depositional rates and parameters were based upon nitric acid (HNO_3), which, of all the depositing species, has the highest affinity for impacts to soils and vegetation and tendency to stick to what it is deposited on.
- Maximum settling velocities were selected to produce conservative deposition rates.
- Maximum potential emissions for the HBEP facility were assumed to occur each year.
- The approach assumes no net benefit from the discontinuation of the existing boilers at the Huntington Beach Generating Station. Huntington Beach Generating Station Units 3 and 4 were recently shut down and Units 1 and 2 will be shut down upon completion of the project.

For the following reasons, the assumptions relied upon by Applicant in its November 4, 2013 filing result in a conservative assessment. First, assuming 100 percent of the NO_x and NH_3 convert to ADN within the exhaust stacks ignores the physical reality of atmospheric chemistry. Nitrogen compounds emitted from an exhaust stack require sunlight, moisture, and time to convert to ADN. Because the nitrogen deposition impacts assessment is considering habitat areas within six (6) miles of the project site, one of which is adjacent to HBEP, it is unlikely that much of HBEP's nitrogen emissions would deposit on these habitat areas. However, this is not to say that HBEP would not contribute to regional nitrogen deposition. Rather, HBEP would contribute to regional nitrogen deposition, but not at the levels predicted by the model due to the limited time the exhaust plume has to travel to these habitat areas and the conservative assumptions included in the analysis. Second, HBEP is being permitted to operate 6,835 hours per year with 624 start ups and shutdowns per turbine. Applicant used this operating profile along with the annual average NO_x (and NH_3) emission rate, assuming all 6 turbines would be in operation, to estimate the annual nitrogen emissions. However, Applicant expects HBEP to operate approximately 5,000 hours per year, with a majority of the operating hours in a 2 on 1 configuration (2 turbines and 1 steam turbine per power block), which is HBEP's most efficient operating mode. Therefore, the nitrogen emissions used in the air modeling include a significant overestimation. Lastly, in addition to the above conservative assumptions, Applicant (and Staff) used the maximum annual nitrogen deposition rate modeled for the 5-year meteorological

dataset, as opposed to an average of the nitrogen deposition rate over the entire 5-year period for each habitat area.

Following review of Staff's HBEP nitrogen deposition impacts assessment, Applicant identified several additional assumptions used by Staff that worsens the already conservative approach established by the Applicant. First, Staff assumed the lowest Critical Load (CL) for each habitat type. For instance, Staff analyzed impacts at the Bolsa Chica Ecological Reserve assuming a CL of 10 kg N/ha-yr, when the CL range for this habitat type is 10 to 100 kg N/ha-yr. Using the lowest CL adds yet another conservative assumption to many other conservative assumptions. Applicant suggests Staff instead use the median of the CL range. In addition, various studies that have examined nitrogen loading in intertidal salt marsh wetlands have found critical loads to range from between 63 and 400 kg N ha^{-1} yr^{-1} (Pardo et al., 2011), which indicates that using a median value would be more appropriate. Using the median CL of 55 kg N/ha-yr for the Bolsa Chica Ecological Reserve, the HBEP's already conservative nitrogen deposition impact of 1.82 kg N/ha-yr combined with the maximum baseline nitrogen deposition shows that the CL will not be exceeded anywhere within the Bolsa Chica Ecological Reserve.

As noted in the Biological Resources section of the AFC, the CL for atmospheric nitrogen deposition into coastal wetlands is difficult to establish because coastal wetlands are not closed systems and are subject to tidal exchange, which have open nutrient cycles. Unlike freshwater wetlands, these systems are not as sensitive to nitrogen deposition (Prado et al., 2011). In addition, nitrogen loading from marine/estuarine water sources exceed atmospheric inputs by one or two orders of magnitude (Greaver et al., 2011 and references therein). Furthermore, the direct impacts of atmospheric nitrogen deposition on California salt marshes have not been determined (Weiss 2006). Nitrogen loading from marine/estuarine water sources is expected to contribute more nutrients to salt marshes than atmospheric nitrogen deposition. Based on this, impacts to intertidal wetland habitats within the Bolsa Chica Ecological Reserve (including western snowy plover habitat, *Charadrius nivosus nivosus*), Huntington Beach Wetlands and Talbert Nature Preserve are expected to be less-than-significant. In addition, coastal dune habitats within these three preserves are not expected to be significantly impacted. Since intertidal wetlands and coastal dune systems are inherently two different habitat types, the CLs should not be combined. As previously noted, intertidal wetlands are not closed systems and receive more nitrogen from marine/estuarine water sources. Moreover, as stated in Weiss (2006), coastal dunes are located in relatively clean coastal air and are not expected to be at risk, unlike the inland sand dune systems.

Additional habitat types being considered in the nitrogen deposition analysis include vernal pool and coastal sage scrub habitats within the Talbert Nature Preserve. The coastal California

gnatcatcher (*Polioptila californica*) and the San Diego fairy shrimp (*Branchinecta sandiegonensis*) are special-status species, including critical habitat for the San Diego fairy shrimp, of interest associated the Talbert Nature Preserve. Weiss (2006) assessed nitrogen deposition exposure levels to special-status species with a rough parallel to plants in associated habitat types. For San Diego fairy shrimp, the mean is 8.2 kg-N ha^{-1} yr^{-1} and a mean 8.7 kg-N ha^{-1} yr^{-1} was assigned to the coastal California gnatcatcher as both of these species are vulnerable to habitat conversion (Weiss, 2006). Based on the modeled results, nitrogen deposition from HBEP is not expected to exceed these limits and impacts are less-than-significant.

Second, Staff included overly conservative nitrogen deposition baseline concentrations for some habitat types. Based on the Applicant's review of the GIS files provided by Staff, the baseline values include acreage covered by the value. For instance, the three baseline values for the Huntington Beach Wetland Conservancy were 2.15 kg N/ha-yr – 6.5 acres, 2.18 kg N/ha-yr – 108.2 acres, and 15.17 kg N/ha-yr – 45 acres. In reviewing the Appendix A to the Supplement, the only baseline value used to assess HBEP's nitrogen deposition impact in the analysis for Huntington Beach Wetland Conservancy was the highest value of 15.17 kg N/ha-yr, which represents less than one-third of the entire Huntington Beach Wetland Conservancy. Applicant suggests Staff instead use a weighted baseline value that uses the baseline concentrations and acreage covered by the baseline concentration.

Third, Staff oversimplified the sources of ADN within the project area. Based on the California Air Resources Board's 2008 emission inventory for Orange County[2], over 95 percent of the NO_x emissions inventory is attributable to mobile and area emission sources, with the remaining portion of the NO_x emission inventory attributable to stationary sources (including commercial and service-oriented fuel combustion emissions). Electrical generation (utilities and cogeneration) represents less than 0.1 percent of the total Orange County NO_x emission inventory. The overly conservative nature of Staff's analysis tends to place the burden of nitrogen deposition mitigation on sources with the least contribution to the problem (*i.e.*, electrical generation).

Finally, Staff completely ignored the Applicant's commitment to mitigate actual NO_x emissions from HBEP on an annual basis, consistent with the federal and state Clean Air Act. This mitigation would be expected to offset some, if not most, of the nitrogen deposition associated

[2] http://www.arb.ca.gov/app/emsinv/emssumcat_query.php?F_DIV=-4&F_DD=Y&F_YR=2008&F_SEASON=A&SP=2009&F_AREA=CO&F_CO=30.

with the operation of HBEP. While Staff recognized that Applicant would be retiring the existing generating units at the HBGS, Staff assessed no benefit for retiring such units.

C. Conditions of Certification

Based on the foregoing, Applicant proposes the following changes to the BIO Conditions of Certification as stated in the Supplement. Strikethrough text has not been included from the Supplement. Proposed text additions are included in **bold underlined** text and ~~strikethrough~~ has been used for text edits and text comments are included in brackets.

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 ~~and substrate~~ within 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~~ **within 300 feet of the Project boundary**.

2. ~~At least two~~ **One** pre-construction surveys shall be conducted~~, separated by a minimum 10-day interval. Pre-construction surveys shall be conducted~~ no more than 14 days prior to initiation of construction activity. ~~One survey needs to be conducted within the 3-day period preceding initiation of construction activity~~. Additional follow-up surveys may be required if periods of construction inactivity exceed three weeks in any given area, an interval during which birds may establish a nesting territory and initiate egg laying and incubation.

3. If active nests[3] are detected during the survey, a no-disturbance buffer zone (protected area surrounding the nest) shall be established around each nest. The size of each buffer zone shall be determined by the Designated Biologist

[3] Note that Applicant provided information to CEC Staff on nesting buffers for specific avian groups, excluding special-status species, on December 13, 2013. Those comments are incorporated herein by reference.

in consultation with the CPM (in coordination with CDFW and USFWS). Nest locations shall be mapped using GPS technology.

4. If active nests are detected during the survey, the Designated Biologist or Biological Monitor shall monitor all nests with buffers at least once per week, to determine whether birds are being disturbed. If signs of disturbance or distress are observed, the Designated Biologist or Biological Monitor shall immediately implement adaptive measures to reduce **disturbance in coordination with the CEC CPM**. These measures could include, but are not limited to, increasing buffer size, halting disruptive construction activities in the vicinity of the nest until fledging is confirmed, or placement of visual screens or sound dampening structures between the nest and construction activity.

5. If active nests are detected during the survey, the Designated Biologist **or Biological Monitor** shall monitor the nest until he or she determines that nestlings have fledged and dispersed or the nest is no longer active. ~~Activities that might,~~ **I**n the opinion of the Designated Biologist **or Biological Monitor**, **activities that might** disturb nesting activities ~~(e.g., exposure to exhaust),~~ shall be prohibited within the buffer zone until such a determination is made.

~~a. Sound levels above ambient levels or 60 dBA (Lmax) in areas where pre-construction noise levels are below 60 dBA are prohibited within the buffer zone, unless otherwise agreed to by the CPM in consultation with USFWS and CDFW.~~
~~b. Vibratory pile driving shall be used. If active nests are detected during the survey, pile driving shall be prohibited between February 1 and August 31, unless it can be demonstrated to the satisfaction of the CPM that pile driving will not exceed ambient levels or 60 dBA in areas where pre-construction noise levels are below 60 dBA.~~

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

proposed no disturbance buffer zone around the nest. Additionally, ~~and~~ a monitoring plan shall be submitted ~~that describes the project owner's proposal for documenting that the breeding bird(s) identified were not impacted, consistent with (4) and (5), above; this shall include reporting Leq and Lmax noise levels in the vicinity of the nest if it is in an area expected to exceed ambient levels or 60 dBA (Lmax) in areas where pre-construction noise levels are below 60 dBA. The survey report and 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.

BIO-9

As explained in detail above and previously in Applicant's November 7, 2013 and December 13, 2013 comments, the evidence does not support the conclusion for a significant impact on species; therefore, no mitigation is required. Additionally, there is no Condition in the Noise section that requires noise monitoring for construction and demolition. Thus, BIO-9 should be deleted in its entirety.

BIO-10

As discussed above and as Applicant's analysis indicates, HBEP's nitrogen deposition impacts are less than significant and therefore BIO-10 should be deleted. [4] Applicant reiterates that Staff should rely on the nitrogen deposition analysis conducted by Applicant or reanalyze HBEP's nitrogen deposition impacts based on the parameters set forth by Applicant herein.

References (Biological Resources)

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[4] Without waiving its position that BIO-10 should be deleted in its entirety, Applicant also objects to any requirement that Applicant conduct a Property Analysis Record.

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Weiss, S. B. 2006. *Impacts of Nitrogen Deposition on California Ecosystems and Biodiversity.* California Energy Commission, PIER Energy-Related Environmental Research. CEC-500-2005-165.

Zembal, R., S.M. Hoffman, and J. Konecny. 2012. Status and Distribution of the Light-footed Clapper Rail in California, 2012. California Department of Fish and Game, Wildlife Branch, Nongame Wildlife Program Report 2012-02, Sacramento, CA, 19 pp. August 21.

II. CULTURAL RESOURCES

Staff's continued assertion that full-time monitoring during construction is a necessary mitigation measure to address the potential for historical resources to be impacted by the Project is simply not supported by the evidence Such a Condition is not commensurate with actual sensitivity in the Project area and the low potential for historical resources to be impacted. Applicant continues to assert that preparation of a CRMMP and the discovery plans required therein, as well as implementation of a WEAP, is adequate and commensurate mitigation.

As previously noted by Applicant, the Block 2 foundation slab, measuring approximately 50 feet x 130 feet, is the primary component of the Project that could have a potential to impact previously undisturbed soils. Planned excavations in this small area are expected to be up to 9 feet deep. Up to 6 inches of soil at the bottom of these excavations could possibly intrude into undisturbed soils; however, this 6 inches lies beneath the 8 to 9 feet of overburden of disturbed soil and artificial fill, so less than 5 percent of the total volume of soil that will be impacted could

theoretically be undisturbed. In addition, the 5 percent of soil has a very low potential (less than 10 percent according to professional opinion of the CRS) of containing historical resources.

Therefore, to impose automatic full-time cultural resource monitoring as a mitigation measure would be to account for a tiny fraction of a percentage of sensitivity of the overall volume of soil to be impacted during construction. Such an imposition to the Project is considered impractical, overreaching, onerous, and not commensurate with actual sensitivity. As previously noted by Applicant's CRS professional, the mitigation measures of preparation and implementation of the CRMMP and WEAP are appropriate and effective measures in this circumstance. For the reasons set forth herein and in Applicant's November 7, 2013 and December 13, 2013 comments, Applicant maintains that CUL-6 should be revised as proposed by Applicant in its November 7, 2013 PSA Part A comments, which are incorporated herein by reference.

III. VISUAL RESOURCES

Staff's supplemental analysis of visual resources does not constitute a supplemental focused analysis of the Project's visual resource issues. It presents no new data or analysis to provide a better understanding of the HBEP visual effects and the relationship of those effects to the CEQA standards for determining whether visual impacts are significant. Instead, it repeats elements of the flawed analysis presented in the PSA Part AVisual Resources section and makes sweeping assertions that are unsupported by the evidence in the record or by new, concrete data.

Central themes of Staff's analysis in PSA Part A are that the HBEP would have significant visual impacts, that because of these impacts the Project would be inconsistent with the provisions of the California Coastal Act that require restoration and enhancement of visual quality in degraded areas where feasible, and that the impacts of the Project in relationship to the Coastal Act requirements cannot be evaluated without consideration of the visual enhancement plan that the Applicant has been developing in collaboration with the City of Huntington Beach.

For reasons described in more detail below, the PSA Part A analysis and the analysis set forth in the Supplement have failed to establish that the HBEP with the design enhancements reflected in the landscape plans and simulations provided to the CEC prior to the preparation of the PSA would have anything but a positive visual effect, making the HBEP consistent with Coastal Zone policies promoting visual enhancement. It is true that with the additional visual enhancement measures that the Applicant has been developing in collaboration with the City of Huntington Beach, the degree of visual enhancement of the site will be even greater. However, Staff's approach to the analysis of the Project's visual effects has failed to acknowledge and give proper weight to the visual improvements related to the replacement of a large, industrial-appearing

1950's era power generation facility with a modern facility with a lower profile and more refined design, and to the effects of the screening walls and intensive landscaping that are visible in the simulations on which the PSA analysis was based. Contrary to Staff's assertions, Applicant maintains that even without the additional visual enhancement measures, the Project will bring about an improvement in the visual quality of views toward the site, and will thus be consistent with Coastal Zone visual enhancement policies.

Much of the Supplement's Visual Resources section is devoted to repeating the flawed analysis set forth in PSA Part A, which found that the HBEP would have significant impacts on views from KOPs 4 and 5, and protesting that Staff's conclusions really were based on an assessment of the changes between the existing conditions and those that would be present with the HBEP in place. In spite of these protests, the PSA analysis did not present a close comparison of the elements of the existing KOP views toward the site and the elements of the views as they would appear with HBEP. As a consequence, neither the PSA Part A nor the Supplement provide a basis for pinpointing the changes to the views and assessing the extent to which those changes would constitute either negative or positive changes to the existing view character and quality.

This flaw in Staff's analysis is a result of Staff's reliance on the visual impact analysis method documented in Appendix 1 of the PSA Visual Resources section. This method is not in conformance with the principles of mainstream visual impact assessment practice in that it does not provide a consistent framework for assessing existing views and with-project views that permits the two conditions to be directly compared. For example, two of the most widely used visual impact assessment systems, those developed by the Federal Highway Administration and the Bureau of Land Management ("BLM"), use view scenic quality rating forms that provide a framework for documenting visual conditions under existing and with-project conditions using the same criteria and comparing the conditions to identify the overall level of change.

The method the CEC staff applied in conducting the PSA visual analysis uses the Buhyoff scale to rate the existing visual quality of each view. The Buhyoff scale is a legitimate landscape scenic quality scale, but it has its limitations. It evolved out of the landscape assessment methods developed by federal agencies like the U.S. Forest Service ("USFS") and the BLM and works well in making initial classifications of the overall visual quality of the kinds of open, more natural appearing, large-scale landscapes that agencies like the USFS and BLM manage. It is not well adapted, however, to evaluating the visual quality of more urban and developed views like those in the HBEP project area. In addition, although the Buhyoff scale is good at making overall assessments of the visual quality of the large scale landscapes it was intended to rate, the final Buhyoff scale applied by CEC Staff does not document the qualities of the landscape at the

granular level - a level of documentation that is necessary for tracking and evaluating project-related change. Although the CEC methodology specifies that the Buhyoff scale be used to assess the existing visual quality of views, the methodology makes no further use of this scale as a part of the impact assessment process. For example, the Buhyoff scale is not specified for use as a framework for tracking the differences between the existing and with-project conditions (as already indicated the Buyhoff scale would not be well-suited for this purpose in any case.) Instead, in evaluating the views with the HBEP in place, Staff's analysis focuses on the degree of visual contrast, dominance, and view blockage that would exist in the with-project view. By focusing on these three visual impact variables in a vacuum, without documentation of these conditions in the existing view to provide a point of comparison, this approach is predisposed to concluding that a project will have impacts. This is particularly the case in Staff's assessments of KOPs 4 and 5, views in which the view blockage variable has no relevance, and in which levels of visual contrast and dominance would generally be reduced with development of the Project. An additional issue with the PSA visual analysis approach is that because it does not provide a basis for establishing the precise nature and degree of visual change, it does not provide the information needed to answer the CEQA question of whether the change constitutes a "substantial degradation" of the visual character and quality of the site and its surroundings.

In an effort to understand Staff's analysis and put it into a form that is more consistent with mainstream visual impact assessment practice and that more specifically relates to the components evaluated pursuant to CEQA, Applicant prepared Tables VIS-Supp-1 and VIS-Supp-2, which are included herewith as Attachment A. These Tables create a systematic framework for documenting the visual character and quality of the views from KOPs 4 and 5 under existing and with-project conditions, and permit the levels of character and quality under the two conditions to be readily compared to derive an assessment of the nature and level of the change, as well as a determination of whether such change represents a "substantial degradation." Although the PSA Visual Resources section did not include an evaluation of visual character, this landscape dimension was added to the Tables because it is one of the concerns specified in the CEQA impact significance criteria. The Tables also provide for a systematic consideration of visual contrast and visual dominance, two of the three variables Staff focused on in making its impact determination. View blockage was not evaluated in the analysis presented in the Tables because view blockage is not an applicable variable for KOPs 4 and 5. The CEC methodology for visual impact assessment specifies that the view blockage variable applies to blockage of views of built or natural landscape features and mentions blockage of higher quality landscape features by lower quality landscape features. In the views looking into the project site from KOPs 4 and 5, there are no views of "higher quality" built or natural features that are being blocked by the existing facility or that would be blocked by the proposed facility, thus, this variable was not evaluated in this analysis.

Tables VIS-Supp-1 and VIS-Supp-2 present a side-by-side evaluation of existing and with-project conditions for each of the evaluative dimensions or variables, providing a basis for systematic comparison of the differences between the two conditions. This analysis was based on the same visual simulations that were available to CEC Staff in preparing the PSA Visual Resources analysis and does not take into account the additional visual enhancement measures included in the plans the Applicant has developed in collaboration with the City of Huntington Beach. The text in the Existing Conditions and With-Project Conditions columns in the tables represents a mix of statements found in the PSA analysis that relate to the condition and variable and additional analysis the Applicant developed to complete the assessment. The Applicant prepared the assessments in the Change from the Existing to the With-Project Conditions and Degree of View Degradation Columns. In evaluating the changes to overall visual quality that are documented in the Change from the Existing to the With-Project Conditions column, the Applicant assessed these changes in terms of vividness, unity, and intactness, the view dimensions that the FHWA visual impact assessment system uses for evaluating visual quality. This systematic, side-by side analysis of the existing and with-project visual conditions in the views from KOPs 4 and 5 make it clear that, contrary to the conclusions of the PSA Part A visual resources analysis and the repeated assertions made in the Supplement, the HBEP will bring about positive changes to the character and quality of the views seen from KOPs 4 and 5 and will clearly not create the "substantial degradation" required to create an adverse visual impact.

Review of Tables VIS-Supp-1 and VIS-Supp-2 suggests the limitations of the PSA method's focus on project contrast, dominance, and view blockage at the with-project phase as the sole basis for determining project visual impact, and the need for visual impact assessments to be based on systematic documentation of visual conditions of both the existing and with-project views using an evaluative framework that is appropriate for the landscape context and that permits changes in visual conditions to be readily compared. Applicant strongly recommends that in preparing the Final Staff Assessment, CEC Staff use the Federal Highway Administration procedure for visual impact assessment, which will provide a systematic and appropriate framework for documenting existing and with-project conditions and explicitly tracking the nature and degree of visual change from existing conditions that HBEP will bring about.

References

Buhyoff, G.J., P.A. Miller, J.W. Roach, D. Zhou, and L.G. Fuller. 1994 — An AI Methodology for Landscape Visual Assessments. *AI Applications.* 8(1):1–13.

Bureau of Land Management (BLM). 1986b. Visual Contrast Rating, BLM Manual Handbook 8431-1. January.

Federal Highway Administration (FHWA). 1988. *Visual Impact Assessment for Highway Projects*. Publication No. FHWA-HI-88-054. United States Department of Transportation.

IV. COMPLIANCE CONDITIONS

Applicant incorporates by reference its November 7, 2013 and December 13, 2013 comments regarding compliance conditions COM-13, COM-15, and COM-16. Applicant maintains that additional revisions to COM-13 and COM-15 are necessary, and that COM-16 should be deleted in its entirety as there is no justification, regulatory or as mitigation for an identified significant impact, to require such a condition. Moreover, the ad hoc application of COM-16 to this project when similar conditions have not been imposed on past projects and when there is no CEC policy or regulation allowing for the imposition of such requirements is, in effect, an illegal underground regulation. Applicant's specific revisions to COM-13 and COM-15 are set forth below.

COM-13

While CEC Staff deleted subpart (1) from COM-13, the timing triggers for incident reporting remain unnecessarily stringent. Thus, Applicant proposes that the one (1) hour reporting notification requirement, the one (1) week incident report timeline, and the 24-hour deadline for providing a copy of the incident report be changed to twelve (12) hours, ten (10) business days, and two (2) business days as specifically noted below.

> **COM-13: Incident-Reporting Requirements. As soon as is feasible, but w~~W~~ithin no more than ~~one~~ twelve (12) 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~~1. health and safety impacts on the surrounding population;
> ~~3~~2. property damage off-site;
> ~~4~~3. response by off-site emergency response agencies;
> ~~5~~4. serious on-site injury;
> ~~6~~5. serious environmental damage; or
> ~~7~~6. 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 (10) 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;
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~~ **two (2) business days** of a **CPM** request **for such information**.

COM-15

While CEC Staff agreed to some of the changes proposed by Applicant in Applicant's November 7, 2013 comments (primarily related to the use of the term "post-closure"), Applicant maintains

that additional revisions to COM-15 are warranted. The changes set forth below reflect the changes previously proposed by Applicant on November 7, 2013 and December 13, 2013.

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~~

3. ~~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.

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;

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 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.

V. SOIL & WATER RESOURCES

For the first time in the 18+ month history of the HBEP AFC proceeding, Staff is indicating that HBEP shall use recycled water for industrial purposes instead of potable water as proposed by Applicant in the AFC and as analyzed and approved by Staff in PSA Part A. Staff fails to provide support for this change in water source, other than to note that LORS "require the use of this water when feasible" and that "[t]he recycled water supply seems feasible based on applicant's responses and information provided by OCSD." (Supplement at 4.9-1 - 4.9-2 (emphasis added).) Based on an analysis of applicable LORS, it is clear that the use of reclaimed water for HBEP is not feasible and thus should not be required.

The Warren-Alquist Act states that it is the "policy of the state and the intent of the Legislature to promote all feasible means of energy and water conservation and all feasible uses of alternative energy and water supply sources." (Pub. Res. Code § 25008 (emphasis added).) In addition, Water Code section 13550 provides that the use of potable water for non-potable uses is an unreasonable use of the water "if recycled water is available" and such recycled water meets all of the conditions set forth below. (Water Code § 13550 (emphasis added).)

(1) The source of recycled water is of adequate quality for the uses and is available for the uses.

(2) The recycled water may be furnished for these uses at a reasonable cost to the user. In determining reasonable cost, the state board shall consider all relevant factors, including, but not limited to, the present and projected costs of supplying, delivering, and treating potable domestic

> water for these uses and the present and projected costs of supplying and delivering recycled water for these uses, and shall find that the cost of supplying the treated recycled water is comparable to, or less than, the cost of supplying potable domestic water.
>
> (3) After concurrence with the State Department of Health Services, the use of recycled water from the proposed source will not be detrimental to public health.
>
> (4) The use of recycled water for these uses will not adversely affect downstream water rights, will not degrade water quality, and is determined not to be injurious to plantlife, fish, and wildlife.

(Water Code § 13550(a) (emphasis added).) Thus, when the State Board is the entity determining if a use is "reasonable," the State Board must consider the impact of the cost and quality of the nonpotable water on each user. The Supplement, however, fails to note - let alone analyze - the four express requirements of Water Code section 13550(a).

Here, OCSD's potentially available recycled water fails to meet items 1 and 2. Secondary treated effluent is not of the appropriate quality for use at HBEP and tertiary treated water is not available due to options on existing use contracts. Thus, the water that is possibly available (secondary) is not of adequate quality for the proposed use. Moreover, when comparing the costs for obtaining potable water versus tertiary treated water (item 2 above), the costs associated with potable would be far less as the infrastructure is already in place to deliver potable to the site. Even if the OCSD is not going to charge for recycled water, the infrastructure alone (2+ miles of pipeline plus a treatment facility) would be an exorbitant cost, not to mention the legal, design, and engineering costs associated therewith.

The use of potable water at HBEP is also allowed under various state policies, including State Water Resources Control Board ("SWRCB") Resolution Nos. 75-58, 77-1, and 2009-0011, as well as the Commission's Integrated Energy Policy Report ("IEPR") (2003). SWRCB Resolution 75-58 and the 2003 IEPR both prohibit the use of fresh inland waters for powerplant cooling unless "use of other water supply sources or other methods of cooling would be environmentally undesirable or economically unsound." (Res. 75-58 at p. 4; 2003 IEPR at p. 40 (emphasis added).) The 2003 IEPR then notes that the Energy Commission will approve the use of fresh inland water for cooling purposes only where alternative water supply sources are shown to be "environmentally undesirable" or "economically unsound." (*Id.*) The Energy Commission

interprets "environmentally undesirable" to mean the same as having a "significant adverse environmental impact" and "economically unsound" to mean the same as "economically or otherwise infeasible." "'Feasible' is defined under CEQA and by the CEC in its siting regulations as being "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors." (14 Cal. Code Regs. § 15364; 20 Cal. Code Regs. § 1702(f); *see* 2003 IEPR at 40.)

As noted in Section 6.6.3 of the AFC, "HBEP will use air-cooled condensers (dry cooling) to supply plant cooling, rather than the once-through seawater cooling system used for the existing Huntington Beach Generating System. An air-cooled plant typically uses less than 7 percent of the total water use of a comparable wet-cooled plant. . . . [HBEP's] annual water use is approximately 48 percent lower than historical use by the existing Huntington Beach Generating Station Units 1 through 4 of 290 acre-feet per year (2004 to 2011)." (AFC at p. 6-6.)

In addition, Applicant evaluated the availability and cost of recycled water in the AFC. As noted in Section 6.6.3:

> Potential water supply sources for the HBEP include seawater from the Pacific Ocean, potable water from the City of Huntington Beach municipal water system, tertiary treated wastewater through the Green Acres reclaimed water program operated by the Orange County Sanitation District (OCSD) and Orange County Water District (OCWD), and secondary treated wastewater from the OCWD's Huntington Beach Wastewater Treatment Facility, located adjacent to the mouth of the Santa Ana River approximately 1.5 miles east of the HBEP.
>
> ***
>
> Using tertiary treated reclaimed water under the Green Acres program would require construction of a pipeline from the HBEP site to the nearest available connection to the Green Acres reclaimed water pipeline system, located just south of the Mesa Verde Country Club golf course near where Adams Avenue crosses over the Santa Ana River. The pipeline would likely be located under city streets, requiring construction of approximately 3.7 miles of new pipeline. However, according to the OCWD, the Green Acres program is already nearly fully subscribed, and remaining capacity will be used for the County's groundwater recharge

program (Steinbergs, 2011). Therefore, tertiary treated wastewater from the Green Acres program is not a viable source of makeup water for the HBEP.

Use of secondary treated wastewater from the OCSD's Huntington Beach treatment facility would require construction of a treatment facility either at the OCSD site or at the HBEP site to further treat the wastewater to the standards required for power plant use, as well as storage facilities to ensure sufficient treated water is on hand at all times, and an approximately 1.5-mile-long pipeline connecting the two facilities. Construction and operation of the tertiary treatment facility and the 1.5-mile pipeline would create their own environmental impacts, including those associated with disposal of the waste products created during the treatment process. Cost of constructing the additional treatment facilities is estimated at $1.5 million to $2 million, and cost of constructing the pipeline is estimated at $1 million to $1.6 million, assuming a suitable right-of-way could be obtained. Both the treatment and conveyance estimates were made for planning and comparison purposes only, based on known costs of conventional mono-media sand filtration and sodium hypochlorite disinfection, as well as typical urban water pipeline engineering, permitting, procurement and construction costs. The estimates did not include detailed investigations of permitting, exact locations of treatment facilities, interference with existing utilities, nor jurisdictional agreements for the preliminary pipeline routes.

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Use of the City of Huntington Beach's potable water system is both economically feasible and environmentally desirable. Potable water is available onsite in sufficient quantities to supply all freshwater needs, and avoids the need to construct pipelines or additional treatment facilities for the use of secondary treated wastewater.

HBEP fresh water use would amount to less than 0.8 percent of total projected freshwater deliveries in the City in 2015, and less than 10 percent of the lowest projected available surplus of water supply in the City, in multiple dry years. These estimates do not reflect HBEP's overall

> net reduction in water consumption over the historical water use by the existing Huntington Beach Generating Station's operation. Service through the City's water system would require no new construction of facilities to meet the HBEP's demand. Therefore, because other sources would create additional environmental impacts and be more costly, use of the City's potable water system is the preferred source of water for the HBEP.

(*Id.* at pp. 6-9 - 6-10.) Thus, contrary to Staff's assertion in the Supplement, the information provided in Applicant's responses to Staff's Email Requests 5-7 (Water Resources) (September 30, 2013; TN #200675) is not new information. (Supplement at p. 4.9-1.) Rather, the information provided on September 30, 2013 reiterates information provided in the AFC in response to questions posed by CEC Staff in the context of the "No Project Alternative." Specifically, the information Applicant provided on September 20, 2013 responded to Staff's inquiries about the use of secondary treated wastewater at the HBGS "where the existing HBGS would be converted for continued wet cooling use compliant with the SWRCB's OTC Policy." (TN# 200675 at Attachment 1, p. 2.[5]) Just as Applicant previously noted in the AFC, OCSD has tertiary treated and second treated water, the former of which is fully contracted. Applicant then noted that treatment of the secondary treated wastewater would be required before use at the HBGS, and would require a treatment facility at the HBGS site or at the OCSD facility. (*Id.* at p. 3.) CEC Staff in the Supplement, however, misconstrues this information and states that recycled water is available and that Applicant's response "describes . . . where and how treatment facilities could be constructed on the HBEP site." The response does not state that recycled water is available for HBEP; it states that "OCSD Plant No. 2 could potentially be a source of secondary treated effluent water for the No Project alternative at HBGS." (*Id.* at p. 2.) Moreover, Applicant's response does not state "where or how treatment facilities could be constructed on the HBEP site" as Staff claims, as the HBEP site is fully constrained with the proposed project and the data responses are specifically related to the No Project alternative and possible water source for the continued wet cooling of HBGS.

Furthermore, the use of recycled water at HBEP is "economically unsound" and therefore is not required pursuant to Resolution 75-58. As noted above, the CEC considers that "economically unsound" means the same as "economically or otherwise infeasible." As noted above, recycled

[5] Email correspondence from Negar Vahidi, Aspen Engineering, to Robert Mason, CH2M Hill, regarding Alts: Orange County Sanitation District, dated August 13, 2013, with cc's to Scott Debauche, Amanda Stennick, and Felicia Miller.

water for HBEP is clearly infeasible as it is not capable of being accomplished in a reasonable period of time and would involve exorbitant costs related to the 2+ miles of pipeline that would be required to transport recycled water to the HBEP site as well as a new treatment facility (for which a site has not been identified), as well as additional economic, environmental, legal, social and technological factors involved in such processes.

Aside from the fact that the use of potable water at HBEP is consistent with LORS, Staff has also not identified a significant impact under CEQA based on such water use that would require mitigation (or, in this instance, a proposed change in the project description). As noted above, the HBEP results in a significant reduction in the historic use of potable water by HBGS. Moreover, as noted by Staff in PSA Part A:

> The proposed project would include use of air cooled condensers for cooling of the steam cycle. This technology significantly reduces the potential for use of water supplies and is encouraged in accordance with the Energy Commission's water policy. Development of alternative water supplies for remaining industrial uses does not appear to be feasible. In addition, the project would use a number of systems to reuse wastewater and reduce wastewater volume. Staff believes the project water use is consistent with Energy Commission water policy.

(PSA Part A at pp. 4.9-2, 4.9-20.) In evaluating the use of potable water at HBEP, Staff stated:

> The California Energy Commission, under legislative mandate specified in the 2003 Integrated Energy Policy Report, (policy) and State Water Resources Control Board Resolution 75-58, will approve the use of fresh water for cooling purposes by power plants it licenses only where alternative water supply sources and alternative cooling technologies are shown to be environmentally undesirable or economically unsound. The IEPR policy also requires the use of zero-liquid discharge (ZLD) technologies unless such technologies are shown to be "environmentally undesirable" or "economically unsound."
>
> Alternative sources were evaluated for their potential to supply the project's process water needs. Two nearby wastewater treatment

plants were considered in the applicant's analysis for their potential to supply recycled water to HBEP. Staff agrees that these alternatives are not superior because the project's proposed water supply would significantly reduce water use at the existing facility and be a net benefit relative to the baseline. Other alternatives would require substantial construction in densely populated urban areas.

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Staff concurs with the applicant that the use of an air cooled condenser is an economically sound practice that provides environmental benefits from significantly reduced water use. Staff also notes that although the project would include limited freshwater use for inlet air cooling, it would also include use of dry low NOx combustors which would limit water use.

In addition, the Energy Commission's water policy also seeks to protect water resources from power plant wastewater discharges. To that end, the water policy specifies that the Energy Commission will require zero liquid discharge technologies (for management of power plant wastewaters) unless such technologies are shown to be 'environmentally undesirable' or 'economically unsound.' The HBEP would not utilize ZLD technologies, because the project would allow for a substantial reduction (0.16 mgd) in wastewater volume to the Pacific Ocean. Staff notes that the applicant proposes a number of water reuse and wastewater reduction systems which would include the following:

• The reject water stream from the reverse osmosis system would be discharged to a holding tank for reuse onsite such as equipment wash down, fire water loop, and closed-loop cooling.

• Blowdown (condensate removed from the HRSGs to reduce water contaminants) would be discharged to an atmospheric flash tank, where the flash steam would be vented to the

> atmosphere and the condensate would be cooled prior to transfer to a holding tank for reuse.
>
> • Blowdown from the combustion turbine evaporative coolers would be discharged to the plant process drain system and stored for reuse onsite.
>
> • Service water would be used for makeup to the combustion turbine evaporative coolers, equipment washdown, and other miscellaneous plant uses.
>
> Therefore, staff finds that the wastewater management would be in compliance with the intent of the water policy because it eliminates the significant portion of process wastewater discharge from the facility.

(*Id.* at pp. 4.9-17 - 4.9-18 (emphasis added).) In addition to the fact that Staff determined that HBEP's use of potable water is consistent with CEC policy, Staff also determined that HBEP's reduction in potable water use from the amount used by the existing HBGS is a "net beneficial impact on local water supplies." (*Id.* at p. 4.9-13 - 4.9-14.) Thus, it is undisputed that HBEP will use significantly less potable water than the existing HBGS and will rely on existing infrastructure for the delivery of potable water to the site. Hence, contrary to Staff's meek assertion in the Supplement that "the recycled water supply seems feasible," the reality is that reliance on a potable water supply for HBEP's maximum 134 AFY water supply needs is reasonable whereas the use of recycled water is not required by law, is economically unsound, and is environmentally undesirable.

Based on the foregoing, the requirements set forth in sections 13550(a)(1) and (2) are not met. Recycled water is not "available" for HBEP nor if the cost of furnishing recycled water to HBEP comparable to, or less than, the cost of supplying potable water to the Project. The use of potable water at HBEP is consistent with LORS, including CEC policy, and will have a net beneficial impact on local water supplies.[6]

[6] Notwithstanding all of the above arguments, HBEP also would not be using potable water for "cooling," as contemplated by the statutes and policies cited herein.

Conditions of Certification

For the foregoing reasons, Applicant requests that the proposed **new** Conditions (new SOIL&WATER-6 and SOIL&WATER-7, and related changes) be stricken from Staff's analysis. The Conditions should be as written in the PSA Part A, and not as written in the Supplement. In order to minimize the potential for confusion with the various versions of the Soil and Water conditions, the following list presents the Applicant's comments (or lack thereof) for each condition.

- **SOIL&WATER-1**: No comments.

- **SOIL&WATER-2**: No comments.

- **SOIL&WATER-3**: Applicant requested revisions to this condition (see Applicant's Comments on PSA Part A). In response, Staff prepared a new version of this condition (mistakenly labeled in the Supplement as SOIL&WATER-5). Instead of the precise (and simplifying) language changes proposed in the Applicant's comments, the new version of this condition includes general language regarding the need to comply with the regulatory standard for construction dewatering. While this general language may be appropriate because, as Staff notes, the RWQCB has a number of permits that could apply depending on the quality of the discharge water and where it could be discharged, there is some problematic and unnecessary language in the proposed new condition. If Staff prefers to include the general language instead of the changes proposed by Applicant, Applicant requests that the following additional changes be made to the Condition.

  > **SOIL&WATER-3:** Discharge of dewatering water shall comply with the Santa Ana Regional Water Quality Control Board (RWQCB) and State Water Resources Control Board regulatory requirements. ~~The project owner shall submit a Report of Waste Discharge (RWD) to the compliance project manager (CPM) and RWQCB for determination of which regulatory waiver or permit applies to the proposed discharges. The project owner shall pay all necessary fees for filing and review of the RWD and all other related fees. Checks for such fees shall be submitted to the RWQCB and shall be payable to the State Water Resources Control Board.~~ The project owner shall ensure compliance with the provisions of the waiver or permit applicable to the discharge. ~~Where the regulatory requirements are not applied pursuant to a National Pollutant Discharge~~

~~Elimination System permit, it is the Commission's intent that the requirements of the applicable waiver or permit be enforceable by both the Commission and the RWQCB. In furtherance of that objective, the Commission hereby delegates the enforcement of the waiver or permit requirements, and associated monitoring, inspection, and annual fee collection authority, to the RWQCB. Accordingly, the Commission and the RWQCB shall confer with each other and coordinate, as needed, in the enforcement of the requirements.~~

Verification: Prior to any dewatering water discharge, the project owner shall **consult with the RWQCB for a determination of which regulatory waiver or permit applies to the proposed discharges.** ~~submit a RWD to the RWQCB to obtain the appropriate waiver or permit.~~ The appropriate waiver or permit must be obtained at least 30 days prior to the discharge. The project owner shall submit a copy of any correspondence between the project owner and the RWQCB regarding the waiver or permit and all related reports to the CPM within 10 days of correspondence receipt or submittal.

- **SOIL&WATER-4**: No comments.

- **SOIL&WATER-5**: No comments.

- **SOIL&WATER-6**: Staff proposes several changes that result in this condition being divided into three conditions – a new SOIL&WATER-6 and SOIL&WATER-7 (and subsequent renumbering), and a new SOIL&WATER-9 (modification of the old SOIL&WATER-6). Most of Staff's proposed changes are in regard to the use of reclaimed water, with additional changes in SOIL&WATER-9 to address maximum water use. For the reasons described above, changes in the conditions requiring the use of reclaimed water should be rejected: reclaimed water is not available. Therefore, new conditions SOIL&WATER-6 and SOIL&WATER-7 should be deleted.

  As stated above, Staff also proposes the addition of new SOIL&WATER-9, which is a modification of the old SOIL&WATER-6. Staff's proposed text regarding reclaimed water use should be rejected. Staff also proposes text regarding maximum water use, which presents two issues for consideration. First of all, what is the expected annual maximum water use? Secondly, are there variations from year to year? Engineering data

presented in the AFC show an average monthly water use condition (AFC Figure 2.1-5a) as well as peak summer period water use (AFC Figure 2.1-5b). All water use engineering data is presented in gallons per minute (gpm). To determine overall impacts to the regional water supply system, the engineering data was converted from gpm to AFY, which is the generally accepted metric for analyzing water supply impacts. The annual water use number reported in the AFC – 115 AFY – is an extrapolation of the average monthly water use condition. In the Supplemental Focused Analysis, Staff presents an alternative calculation. Using the peak summer period water use data and extrapolating that to the *entire June through October period*, with average condition water use for the rest of the year, Staff calculates annual water use at 208 AFY. Applicant believes that Staff is overstating the expected water use, and recommends replacing the maximum use number in SOIL&WATER-9 (208 AFY) with 134 AFY as presented in Applicant's Follow-Up to PSA Part A Workshop (December 13, 2013).. This higher number was developed in order to acknowledge that there is annual variability in water use: average annual water use of 115 AFY would not be an appropriate as a cap, but 134 AFY is acceptable because it acknowledges that some years will be warmer than others (and require greater than average water use).

For these reasons, SOIL&WATER-6 should be revised as follows:

> **SOIL&WATER-6:** Water supply for project operations 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 **134 AFY**; water use for construction shall not exceed 22 AFY. A monthly summary of water use shall be submitted to the CPM.

- **SOIL&WATER-7**: The condition should remain as proposed in PSA Part A (regarding water metering), and the suggested revisions in the Supplement (changing "a water source" to "recycled or potable water" and renumbering to SOIL&WATER-8) should not be accepted.

- **SOIL&WATER-8**: Not used in the PSA. As noted above, the suggestion to renumber SOIL&WATER-7 as SOIL&WATER-8 should not be accepted.

- **SOIL&WATER-9**: For the reasons described above, SOIL&WATER-9 should be deleted.

VI. CONCLUSION

HBEP is critical to maintaining electrical system reliability in Southern California. Applicant looks forward to receipt of Staff's PSA Part B and the Final Staff Assessment ("FSA"). Applicant believes that upon publication of the FSA, the Committee will be in a position to quickly move toward the Project's evidentiary hearing and a Final Decision approving the Project.

Respectfully submitted,

Melissa A. Foster

MAF:jmw

ATTACHMENT A

VISUAL TABLES VIS-SUPP-1 AND VIS-SUPP-2 (KOP 4 & KOP 5)

Table VIS-Supp-1
KOP 4 – View Toward the Project Site from Magnolia Street

Variable	Existing Conditions	With-Project Conditions	Change from the Existing to the With-Project Conditions	Degree of View Degradation
Visual Character	A flat landscape with a natural-appearing tidal wetland in the foreground, bordered in the background by a major electric generation complex, including a pair of tall, massive stacks, large boilers covered with structural supports, a large electric substation, electric transmission structures, and oil tanks.	A flat landscape with a natural-appearing tidal marsh in the foreground, bordered in the background by a major electric generation complex, including two compact combined cycle power blocks with short stacks, two rectangular air cooled condensers, a large electric substation, and electric transmission structures. A short wall along the perimeter of the electric generation complex, backed by a row of dense plantings, creates a neat transition between the marsh and the electric generation site.	Little change in overall visual character. No change at all to the tidal wetland that occupies much of the view. In the background, the marsh will continue to be bordered by a major electric generation complex. The tall stacks and the tall boilers covered with structural supports at the left side of the electric generation complex will be replaced by a lower, more compact and sleeker appearing power block and rectangular, cubic appearing air cooled condenser. The tank farm on the right side of the view will be replaced by a large power block and air cooled condenser that have a neat appearance. The overall mass of the structures on the power generation site will be only slightly increased under the with-project conditions.	There will be no degradation of the existing character of the view.
Overall Visual Quality	AFC: Moderate PSA: Moderate The PSA existing conditions 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;"	AFC: Moderate PSA: Not stated The marsh, which occupies most of the area seen in the view, and which CEC staff identifies as a key component of the view's visual quality, will not be altered in any way. The addition of the perimeter wall and enhanced landscaping along the edge of the project site will create a neat-appearing transition between the marsh and the electric generation complex.	The overall visual quality of this view will remain moderate, but will be slightly improved. This overall improvement in the visual quality of this view can be explained through application of the criteria developed by the Federal Highway Administration (FHWA) to evaluate visual quality: **Vividness** Because the marsh, which is the primary contributor to the vividness of this view will remain unchanged, there will be no change to this view's level of vividness.	There will be no degradation of the overall visual quality of this view.

Table VIS-Supp-1
KOP 4 – View Toward the Project Site from Magnolia Street

Variable	Existing Conditions	With-Project Conditions	Change from the Existing to the With-Project Conditions	Degree of View Degradation
	And also that: "The Huntington Beach Wetlands are likely considered an important visual resource by the city's residents." The PSA existing conditions analysis also asserts that: "the power plant dominates views westward from KOP 4 and overshadows the subtle visual variety of natural elements in the marshlands." The picture that emerges from the PSA existing conditions assessment is that the important and valued portion of this view is the marsh, and that the power plant located in the area beyond the marsh is highly visible and has a massive and industrial character that detracts from the view	In the portion of the view occupied by the electric generation complex, removal of Units 3 and 4 will eliminate the tall stacks and massive boilers covered with structural supports, which are now the most visually discordant elements of the view, and replace them with a power block and stacks with substantially reduced heights and more uniform appearance. In addition, a new power block, set of stacks, and air cooled condenser will be visible in the portion of the view now occupied by the large oil storage tanks. These facilities will also have a uniform appearance without the cluttered looking and industrial-appearing structural supports that encase the existing power block.	**Intactness** The removal of Unit 3 and 4's tall stacks and massive boilers will eliminate the most visually discordant elements in the view, increasing the overall level of visual intactness. **Unity** Because of the lower heights, more uniform proportions, and consistent surface treatments, of the power plant components on the redeveloped site, the view will have a higher level of visual unity	
Contrast	The PSA analysis implies that the existing HBGS in the background of the view has a high degree of visual contrast with the marshlands in the foreground.	The PSA concludes that "Similar to the existing power plant, the massive industrial-type structures of the HBEP would contrast sharply with the natural landscape and colors and textures of the marsh" and that the proposed project will have a moderate to high level of visual contrast.	Using CEC staff's assessments of the levels of contrast the electric facility has or would have for this view (high level of contrast for the existing condition and moderate to high level of contrast for the with-project condition), with the proposed project, the level of contrast would be no more than, or could even be slightly lower than the high level of visual contrast which now exists.	Because there will be no negative change to, and perhaps even a slight improvement in the level of visual contrast, there will be no degradation of the view in terms of changes to the level of visual contrast.

Table VIS-Supp-1
KOP 4 – View Toward the Project Site from Magnolia Street

Variable	Existing Conditions	With-Project Conditions	Change from the Existing to the With-Project Conditions	Degree of View Degradation
Dominance	The PSA analysis clearly states that the existing HBGS dominates the view, overshadowing the subtle visual elements of the marsh in the foreground.	The PSA concludes that "the new power plant structures would cause a moderate to high degree of view dominance.	Using CEC staff's assessments of the levels of visual dominance the electric facility has or would have with this view (high level of dominance for the existing condition and moderate to high level of dominance for the with-project condition), with the proposed project, the level of dominance would be no more than, or could even be slightly lower than the high level of visual dominance which now exists.	Because there will be no negative change to , and perhaps even a slight improvement in the level of visual dominance, there will be no degradation of the view in terms of changes to the level of visual dominance.
View Blockage	Not Applicable[1]	Not Applicable	Not Applicable	Not Applicable

[1] This variable is not applicable for this view in that the CEC methodology for visual impact assessment specifies that this variable applies to blockage of views of built or natural landscape features and mentions blockage of higher quality landscape features by lower quality landscape features. In the views looking into the project site from KOPs 4 and 5, there are no views of "higher quality" built or natural features that are being blocked by the existing facility or will be blocked by the new facility that will be developed on the existing power plant site.

Table VIS-Supp-2
KOP 5 – View Toward the Project Site from the Driveway of Huntington-By-The Sea Mobile Estates

Variable	Existing Conditions	With-Project Conditions	Change from the Existing to the With-Project Conditions	Degree of View Degradation
Visual Character	A flat, highly developed urbanscape, with a wide, landscaped driveway in the near foreground and a power generation complex in the remainder of the foreground, across the street from the driveway. The character of this view is mixed. Palm trees dominate the borders of the driveway, and a fringe of landscaping frames the street frontage of the power generation site. The power generation complex has an industrial appearance, with a tall, bulky boiler covered with structural supports, a tall, thick exhaust stack, a fixed, horizontal crane, tanks, transmission structures and conductors, and tall light standards. In the words of the PSA analysis, "The visual clutter of the piping and steel support structures of the power blocks are displayed, and no exterior structure or façade encloses the interior mechanical apparatus of the power plant."	A flat, highly developed urbanscape, with a wide, landscaped driveway in the near foreground and a power generation complex in the remainder of the foreground, across the street from the driveway. The character of this view is mixed. Palm trees dominate the borders of the driveway, and a dense fringe of landscaping frames the street frontage of the power generation site. The power generation complex has a modern industrial appearance, with a power block and set of stacks of moderate height, and a large air cooled condenser of similar height. The power generation facilities are all enclosed, and the surfaces of the structures have a generally smooth appearance, free of exterior structural supports.	A slight but positive change in the overall visual character of this view. No change at all to the driveway bordered by palm trees that occupies the near foreground of the view. The fringe of landscaping that frames the street frontage of the power generation site will be reinforced, with layers of tall, dense vegetation that will extend across the entire mid-foreground of the view, creating a dense, highly textured tapestry that creates visual interest and increases the visual screening of the lower portions of the power generation facilities. The massive 1950's era stack and industrial-appearing boiler that currently occupy the right portion of the power generation site will be removed. They will be replaced by a lower, more compact power generation structure with low stacks and an adjacent air cooled condenser, which are located in the center of the view. Although the power generation site will appear to have a more dense level of development when seen from this viewpoint, the overall character of this view as a view toward a power generation facility will not be substantially altered.	There will be no degradation of the existing character of the view.
Overall Visual Quality	AFC: Moderately Low PSA: Low 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, transmission	AFC: Moderately Low PSA: Not stated The driveway and the trees that border it that are visible in the immediate foreground of this view will not be changed by the project.	With the development of the proposed project, the overall visual quality of this view will be improved to a small degree. This modest improvement in the visual quality of this view can be explained through application of the criteria developed by the Federal Highway	There will be no degradation of the overall visual quality of this view.

Table VIS-Supp-2
KOP 5 – View Toward the Project Site from the Driveway of Huntington-By-The Sea Mobile Estates

Variable	Existing Conditions	With-Project Conditions	Change from the Existing to the With-Project Conditions	Degree of View Degradation
	structures, electric switchyard, and a decommissioned fuel oil tank. The PSA further states that "No visual coherence or harmony is present in the view." (4.12-14)	The fringe of landscaping that frames the street frontage of the power generation site will be reinforced, with layers of tall, dense vegetation that will extend across the entire mid-foreground of the view, creating a dense, highly textured tapestry that creates visual interest and screens the lower portions of the power generation facilities. The massive stack and structural support-covered boiler that currently occupy right portion of the power generation site will be removed. They will be replaced by a lower, more compact power generation structure with low stacks and an adjacent air cooled condenser, which are located in the center of the view. The surfaces of these structures will be relatively free of the external framing and other appurtenances that give the existing facility a dated and heavily industrial appearance.	Administration (FHWA) to evaluate visual quality: **Vividness** The vividness of this view, which is now low, will be slightly increased by the dense band of vegetation that will be created along the Newland Street frontage of the project site. **Intactness** The removal of Unit 1 and 4's tall stacks and scaffold-covered structures will eliminate the most visually discordant elements in the view, increasing the overall level of visual intactness. **Unity** Because of the lower heights, more uniform proportions, and consistent surface treatments, of the power plant components on the redeveloped site, and their integration into the view by the heavy landscaping along the perimeter of the site, the level of visual unity of this view will be substantially increased.	
Contrast	The PSA analysis is silent on the question of visual contrast in the existing view.	The PSA asserts that the level of visual contrast would be greater for this KOP than compared to existing conditions even though the existing level of visual contrast had not been established. An objective comparison of the existing and with-project views would suggest that because of the more modern, compact, and less exposed appearance of the new power generation facilities, compared to those that	No increase in level of visual contrast.	Because there will be no substantial change in the level of visual contrast, contrast will not be a factor that would contribute to a substantial degradation of view character or quality.

Table VIS-Supp-2
KOP 5 – View Toward the Project Site from the Driveway of Huntington-By-The Sea Mobile Estates

Variable	Existing Conditions	With-Project Conditions	Change from the Existing to the With-Project Conditions	Degree of View Degradation
		are now on the site, the degree of contrast will not be increased.		
Dominance	The PSA states that "The view southeast from KOP 5 is dominated by the massive size and distinct structural elements of HBGS power blocks and the one exhaust stack in front of Units 3 and 4." (4.12-14)	The structural mass on the project site will be shifted, with elimination of the existing tall, bulky boiler and stack now visible at the right side of the view, and the construction of the new power block and ACC in the center portion of the view. Because the proposed facilities will not be substantially more massive than those that are now on the site, and because their structures and equipment will be less exposed, the visual dominance of the power plant equipment visible in this view will not be substantially increased.	A modest, less than substantial increase in the overall level of visual dominance related to the shift of the mass of the structures on the site to the area in the center portion of the view.	Because there will be only a modest increase in the level of visual dominance, dominance will not be a factor that would contribute to a substantial degradation of view character or quality.
View Blockage	Not Applicable[1]	Not Applicable	Not Applicable	Not Applicable

[1] This variable is not applicable for this view in that the CEC methodology for visual impact assessment specifies that this variable applies to blockage of views of built or natural landscape features and mentions blockage of higher quality landscape features by lower quality landscape features. In the views looking into the project site from KOPs 4 and 5, there are no views of "higher quality" built or natural features that are being blocked by the existing facility or will be blocked by the new facility that will be developed on the existing power plant site.