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CALIFORNIA COASTAL COMMISSION

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September 7	, 2016			
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Subject:	Addendum for 15-AFC-01 – Commission's 30413(d) review and report on the NRG Puente Power Project ("P3")
From:	Alison Dettmer, Deputy Director Joseph Street, Environmental Scientist
To:	Coastal Commissioners and Interested Persons

This addendum provides correspondence received on the above-referenced document, staff's response to the correspondence, and several minor revisions to the Commission's report. The proposed revisions do not change staff's recommendation that the Commission **approve** submittal of the report to the Energy Commission ("CEC").

CORRESPONDENCE RECEIVED

- August 22, 2016 letter from Douglas Bosco (attached; received prior to staff report);
- September 1, 2016 letter from Brian Segee and Matthew Vespa, representing the Environmental Coalition of Ventura County, Environmental Defense Center, and Sierra Club (attached);
- September 1, 2016 letter from Tim Flynn, Mayor, City of Oxnard (attached);
- September 2, 2016 letter from Michael Carroll, Latham & Watkins LLP, representing NRG Energy Center Oxnard LLC ("NRG") (attached);
- September 6, 2016 letter from Michael Carroll, Latham & Watkins LLP, representing NRG (attached);
- September 6, 2016 letter from California Environmental Justice Alliance, Environmental Coalition, Environmental Defense Center, Sierra Club, Surfrider Foundation, Ventura Audubon Society, Ventura Coastkeeper, and Wishtoyo Foundation (attached).

The letters from the City of Oxnard and environmental organizations support the adoption of the proposed 30413(d) review and report to the CEC, but provide a number of additional comments.

Both letters raise the issue of environmental justice, expressing concern that the proposed project would result in disproportionate impacts to low-income and underserved communities in Oxnard. Additionally, the letter from the environmental groups questions whether on-site wetlands should also be considered environmentally sensitive habitat areas (ESHA). The City of Oxnard letter also states that the project would be inconsistent with both the City's recent 2030 General Plan amendment and its interpretation of a Local Coastal Program (LCP) policy governing the siting of energy-related facilities. The NRG letters raise issues regarding the proposed 30413(d) Report's findings and recommendations regarding wetlands, ESHA and site flooding hazards, and requests that the Commission eliminate the recommendation to relocate the project to an alternative site. These issues are addressed below.

Note: To accurately reflect the Commission's action, staff's modifications to the August 26, 2016, staff-recommended report are shown herein as strikethrough and **bold underline** text. The recommended modifications are as follows:

PROPOSED REVISIONS TO 30413(d) REPORT AND RESPONSE TO COMMENTS

30413(d) REPORT, COVER LETTER

Proposed Revision, page 1-2, first bullet:

• **Direct impacts to wetlands:** The P3 would be constructed in an area supporting hydrophytic plant species and thus meeting the definition of a wetland under the Coastal Act and Oxnard LCP. The project as proposed would result in the fill of approximately two acres of wetland habitat. This Report recommends that the CEC require NRG to relocate the project to a feasible on- or off-site alternative location which would avoid direct impacts to coastal wetlands. <u>If the CEC determines that no feasible, less environmentally damaging alternative exists, this Report recommends that the CEC require compensatory mitigation (wetland restoration) at a 4:1 ratio.</u>

Proposed Revision, page 2, second bullet, lines 9-13:

This Report first recommends that the CEC require NRG to relocate the project to an offsite alternative location that is free of current and future flood hazards. If it is <u>the CEC</u> determineds that no <u>feasible</u>, less environmentally-damaging such-alternative is feasible <u>available</u>, the Report recommends additional measures to bring the project into conformity with relevant Coastal Act and LCP policies to the extent feasible ...

30413(d) REPORT, SECTION I.C – LAND USE

Proposed Additions, page 9, following paragraph 1:

<u>Response to City of Oxnard Comments</u> <u>In a letter submitted on September 2, 2016, the City of Oxnard's stated that the staff</u> <u>report did not fully address the project's inconsistency with the City's recent 2030</u> <u>General Plan amendment, which prohibits the siting of power plants of 50 MW or</u> <u>greater capacity in areas subject to environmental hazards, including coastal hazards.</u> <u>This General Plan amendment is acknowledged on page 8 of the proposed 30413(d)</u> <u>report. However, as explained in Section I.B ("Regulatory Framework and Standard</u> <u>of Review") of the report, the Commission's review of the proposed project is limited</u> <u>to its conformity with the Chapter 3 policies of the Coastal Act and the certified LCP.</u> <u>The CEC must nevertheless consider the project's inconsistency with the City's</u> <u>General Plan when evaluating this project; this concern is not, however,</u> <u>appropriately included in the Commission's 30413(d) Report.</u>

The City of Oxnard's letter also states that the proposed project would "not be consistent with the City's interpretation of its LCP." The letter appears to be referring to the policies governing development within the Coastal Energy Facilities (EC) zoning designation (see Oxnard Coastal Zoning Ordinance Section 17-20), specifically the policy stating that "coastal dependent energy facilities shall be encouraged to locate or expand within existing sites and shall be permitted reasonable long-term growth, where consistent with this article." The City asserts that this policy allows only coastal dependent energy-related facilities to be located within the EC sub-zone. The Commission disagrees with this interpretation of the LCP, and on previous occasions has found that the "power generating facilities and electrical substations" allowed under the EC zoning designation are not limited to coastaldependent facilities (see Appeal No. A-4-OXN-07-096).

Environmental Justice

The issue area of environmental justice is not one that is addressed by the policies of Chapter 3 of the Coastal Act or the City of Oxnard LCP. Although both contain policies protecting and encouraging low-cost, visitor-serving recreational facilities and opportunities, and the LCP contains policies protecting low-cost housing within the coastal zone, neither contain policies addressing potential environmental justice issues associated with power plant siting. Accordingly, the avoidance and mitigation of any adverse effects on the environment that are significant only because of their disproportionate impacts on minority or low-income populations are outside the scope of the Commission's authority under both the Coastal Act and the City's LCP. Environmental justice concerns have been raised by the City and members of the public, however, so this section constitutes the Commission's response to these comments.

<u>Comments submitted by both the City of Oxnard (see September 2, 2016 letter) and a</u> <u>coalition of environmental and social justice organizations (see September 2, 2016 and</u> <u>September 6, 2016 letters) note that Oxnard has a high proportion of low income and</u> <u>minority residents, and is the site of a disproportionate number of power plants,</u> <u>landfills, oil and gas development and other polluting industries compared to the</u> <u>surrounding region. The commenters suggest that in light of this present and</u> <u>historical burden, Oxnard should not be the site of another coastal power plant.</u>

These concerns are partially addressed by CEC staff in the PSA, which used the most recent U.S. Census data to identify minority and below-poverty level populations within a six-mile radius of the P3. The demographic screening identified environmental justice populations based on race (greater than 50% minority) within the six-mile radius, particularly in Oxnard and Port Hueneme. The analysis also identified these cities having a higher percentage of residents living below the federal poverty level compared with Ventura County as a whole. Following CEQA guidelines, the PSA then evaluates potential impacts to environmental justice populations from the project related to air quality, hazardous materials management, land use, noise and vibration, public health, socioeconomics, soil and water resources, and waste management. In each subject area, the PSA concludes that, with the recommended conditions of certification, that there would be no significant environmental impacts, and thus no significant impacts on environmental justice populations. Given the current lack of enforceable Coastal Act policies addressing environmental justice, the Commission is not recommending that the CEC include additional conditions of approval to specifically address this issue. It nevertheless believes that the CEC should consider the environmental justice concerns raised by the commenters as a factor in its alternatives analysis as it considers the least environmentally damaging location for the proposed new power plant.

30413(d) Report, Section I.D – Wetlands and Environmentally Sensitive Habitat Areas (ESHA)

Proposed Revision, p. 11, paragraph 3:

As described in the PSA, the MGS property, including the proposed 3-acre P3 site, was graded during the development of the power plant in the 1950s, and at present consists largely of developed, paved and disturbed areas dominated by ruderal and ornamental vegetation. However, **t**<u>T</u>he proposed P3 site, located on approximately three acres in the northwest corner of the MGS, has previously been used for temporary storage of dredge spoils from the Edison Canal and contaminated soils, but currently supports a mixture of non-native and native vegetation, including several hydrophytic species considered to be wetland indicators.

Proposed Revision, p. 11, paragraph 3:

In the section devoted to "Wetlands and Other Jurisdictional Waters" (PSA p. 4.2-11), the PSA concludes that the site, having been "actively maintained to facilitate operation of existing power generation" and experiencing "varied uses such as a marine dredging spoils storage" does not contain wetlands or other waters under the jurisdiction of the U.S. Army Corps of Engineers or California Department of Fish and Wildlife. <u>A formal wetland</u> <u>delineation commissioned by NRG also concluded that there were no wetlands on the site (AECOM 2015).</u> However, under the definition of a wetland contained in the Coastal Commission's regulations and the City of Oxnard's certified LCP, only one of three parameters – the presence of hydric soils, hydrophytic vegetation, or wetland hydrology – is needed to delineate a coastal wetland. As noted in the PSA, NRG's conducted a formal wetland delineation within the proposed project site and noted <u>documents</u> the presence of

three hydrophytic plant species <u>on the project site</u>, including pickleweed (*Salicornia pacifica*), woolly seablite (*Suaeda taxifolia*), and slenderleaf iceplant (*Mesembryanthemum nodiflorum*),. Each of these species is included on the U.S. Army Corps of Engineers wetland plant list (Lichvar et al. 2014) ...

Proposed Revision, p. 12, paragraph 1, line new footnote:

... The proposed project would result in the removal of hydrophytic vegetation (including approximately 1,000 woolly seablite plants) and the fill of this 2-acre wetland area.³

³ The hydrophytic plant species found on the project site are relatively common in coastal wetlands, and the area is not known to support listed, rare or sensitive wildlife species. Thus, the project site does not meet the definition of an environmentally sensitive habitat area (ESHA) under Section 30107.5 of the Coastal Act.

Proposed Revision, p. 14, paragraph 1:

The PSA concludes that a wetland habitat mitigation ratio of 2:1 is appropriate due to what is described as the "diminished value, form and function" of the existing on-site wetlands, which are purported to "provide little beneficial value to wildlife" and few of the "positive benefits of a wetland, such as water filtration, foraging and habitat for wildlife, or water reabsorption." The PSA does not indicate the basis for these conclusions, and Commission staff is unaware of any comprehensive studies establishing the detailed hydrological and ecological characteristics of the site. Regardless, the Commission notes that prior to the development of the MGS, the site was a part of a major coastal dune and wetlands complex extending between the Santa Clara River Estuary and Mugu Lagoon. In this landscape, small, backdune swale and alkali meadow wetlands were common. Some were hydrologically isolated; some were likely seasonal, displaying wetland hydrology for short periods at certain times of year, but nonetheless sufficient to support wetland vegetation (Beller et al. 2011). Speculatively, the presence of wetland vegetation within the project area may indicate the partial re-emergence of vegetation native to this historical landscape during a recent decrease in site disturbance. Alternatively, the presence of salt-tolerant hydrophytic plants at the project site may be related to past deposition of saline dredge spoils at this location. Saline soils, possibly combined with soil compaction and impaired drainage, may have caused or contributed to the predominance of salttolerant hydrophytes on the project site (AECOM 2016).

Regardless, for purposes of conformance with Coastal Act Section 30233(a), the Commission evaluates wetland indicators at a site in its present state, and, where fill of coastal wetlands is unavoidable, requires mitigation sufficient to minimize adverse impacts. Typically, the Commission has found that mitigation at a ratio of 4:1 (mitigation area to impact area) is necessary in order to account for temporal losses of wetland habitat (i.e., the period of time between the filling of the wetlands and the achievement of successful mitigation) and the significant likelihood that a wetland restoration project will fail (or only partially succeed) in meeting its performance standards. In cases where a wetland mitigation site has already been selected and a comprehensive restoration plan with rigorous performance criteria is available for

review, the Commission has at times adopted a reduced mitigation ratio. For the P3 project, absent a well-defined wetland mitigation plan, the Commission recommends that a 4:1 mitigation ratio be applied.

30413(d) REPORT, SECTION I.E – FLOOD, SEA LEVEL RISE, AND TSUNAMI HAZARDS

Proposed Revision, p. 25, paragraph 2:

Several other existing studies support the conclusion that the project site is currently vulnerable to flooding during a large storm or flood event. Recently, the City of Oxnard commissioned a vulnerability assessment of existing and future coastal hazards at the MGS (Revell 2015).¹⁰ This assessment is based largely on coastal hazards modeling and mapping carried out as part of The Nature Conservancy (TNC)'s Coastal Resilience Ventura project (see ESA PWA 2013).¹¹ In contrast to the FEMA maps and PSA analysis, which do not account for erosion during a large storm event, the TNC and Revell analyses take a highly conservative approach to modeling coastal erosion, essentially allowing high waves and water levels during an extreme storm to operate on the beach and dunes at the site for an "undefined" duration. Consistent with the FEMA draft Work Map, these studies indicate project that water levels during a 100-year flood event would near the crest of the dunes west of the project site (ESA PWA 2013, see Fig. 3). A 100-year storm event is also projected to result in significant beach and dune erosion, leaving the site vulnerable to subsequent storm events. and that mMuch of the MGS site is currently could be exposed to flooding during a 500-year event (modeled using wave conditions observed during the 1982-83 El Nino) (Exhibit 9d). The P3 site, due to its slightly higher elevation, would escape flooding, but necessary supporting facilities such as the SCE switchyard would flood and access to the P3 would be restricted. Perhaps more crucially, Although this site-specific assessment should be considered a "worst case" scenario due to its extreme treatment of the erosion potential at the site, also concludes that the beach and dunes fronting the MGS site are vulnerable to wave-driven erosion -- which is not directly accounted for in either the FEMA maps or the PSA analysis -- and it nonetheless highlights that such erosion is likely to be a major determinant of the severity of flooding at the site (Revell 2015). The assessment indicates that a 100 year wave erosion event could remove more than 125 feet of the protective dunes and leave the site vulnerable to subsequent storm events.

Proposed Revision, p. 29, paragraph 2, beginning line 6:

The City of Oxnard's flood hazard vulnerability assessment (Revell 2015) attempts to account for both erosion and temporary increases in water level related to an extreme storm event. The modeling in this analysis assumes water levels and wave conditions observed during the historical "storm of record" (wave heights up to 25 feet NAVD88 during a

¹⁰ Revell, D. (2015). Vulnerabilities of the Proposed Mandalay Generating Station to Existing and Future Coastal Hazards and Sea Level Rise. Revell Coastal, LLC, April 6, 2015.

¹¹ ESA PWA (2013). *Coastal Resilience Ventura – Technical Report for Coastal Hazards Mapping*. Prepared for the Nature Conservancy, July 31, 2013, 59 pp.

http://maps.coastalresilience.org/ventura/methods/CRV_Hazards_Mapping_Technical_Report.pdf

January 1983 storm) and extreme dune erosion, as noted above, makes very conservative assumptions about the amount of dune erosion that could occur during such a storm. In the report, this approach to modeling erosion is described as being qualitatively similar to what might occur during a series of storms with no time for dune recovery. The modeling also assumes that sediment supply (riverine + sand bypass) will remain unchanged from the present. The results of this analysis, shown in Exhibit 10b, suggest that the P3 site could be essentially surrounded by floodwaters during an extreme storm in 2030 (8 inches of sea level rise), and that most of the project site would be vulnerable by 2060 (25 inches of sea level rise). The hazard maps presented in the City's analysis represent extreme, but plausible, scenarios, approximating the potential effects of a 500-year storm under future sea level rise conditions.

Information submitted by NRG provides a contrasting view of the flooding and sea level rise hazards at the site. Comments submitted on September 2, 2016, can be summarized as follows:

- <u>A comparison of aerial photos indicates that the beach fronting the MGS site</u> <u>has increased by more than 300 feet since 1947;</u>
- Even if Ventura Harbor dredging ceased, a bypass bar would likely form and sand transport past the harbor would eventually resume;
- No actual flooding of the project site occurred during the January 1983 storm which provides oceanographic inputs for the Revell (2015) and ESA PWA (2013) modeling studies, suggesting that no flooding would occur during a similar storm in the future; furthermore, beach and dune widths fronting the MGS have increased since 1983;
- Historical rates of sea level rise have not resulted in narrowing of the beach;
- Assuming a beach slope of 3%, even the "high scenario" of two feet of sea level rise by 2050 would result in beach narrowing of only approximately 70 feet, leaving behind a beach over 200 feet wide;
- <u>Tsunami or storm waves entering the Edison canal would be rapidly</u> <u>attenuated, making flooding of the project site from the Canal unlikely.</u>

Based on these considerations, NRG believes that the potential for flooding at the site during the project's proposed 30-year life is minimal.

Proposed Revision, p. 29, paragraph 4:

In summary, **although the amount and impacts of sea level rise at the site remain uncertain**, sea level rise would exacerbate existing coastal hazards at the project site, and increase the likelihood that the site could be flooded during the 30-year project life. Assuming a **present-day** coastal base flood elevation of +20 feet NAVD88, **up to** two feet of sea level rise would likely lead to **increase the likelihood of** breaching or overtopping of the protective dunes during a 100-year storm event, resulting in some degree of flooding at the MGS. **Sea level rise will also increase the area subject to flooding during a 500year storm.** Moreover, high waves and fast-moving water during a major storm event are also likely to result in **some** erosion of the protective dunes adjacent to the MGS, which would increase the extent and severity of flooding at the site. The potential for long-term changes in shoreline sand supply (related to variable riverine sediment input and sand bypassing at Ventura Harbor) add an additional element of uncertainty to future flooding projections.

Proposed Revision, p. 32, paragraph 4:

Third, the project site may also be vulnerable to tsunami flooding via the Edison Canal along the southern margin of the MGS. The Canal is directly connected to the ocean via Channel Islands Harbor, and its banks on the MGS site near the existing cooling intake are at an elevation of approximately 12 feet NAVD88. As a result, the project site may be subject to tsunami-driven seiches running up the canal.¹⁹ In its September 2, 2016 comment letter, NRG references a recent study (Thio et al. 2015) examining the progression of a large tsunami wave entering Channel Islands Harbor and the Edison Canal. Based on this study, a tsunami wave with an amplitude of 5.7 feet (1.75 m) in the ocean would attenuate to an amplitude of just 1.3 feet (0.4 m) approximately 2.5 miles up the canal. Although modeling for such an event is apparently not available, it is conceivable that sustained in-flow (tsunami waves typically have a 20 to 30 minute wave period that would result in about 10 to 15 minutes of sustained inflow) a Although it is not clear if a larger, 9.51-foot tsunami wave proceeding up the Edison Canal at high tide would attenuate to a similar degree, -could overtop the banks of the channel and flood the MGS site, either at present or in the future. the risk of project site flooding via the Edison Canal appears to be low during the proposed 30-year life of the project.

Proposed Revision, page 34, paragraph 1:

The PSA states that the proposed P3 would not represent a "critical facility" in the context of the electricity generation and distribution system, and on this basis concludes that a higher tolerance for flooding risk is appropriate. However, the Commission notes that the proposed facility would remain an important component of the regional system [insert evidence from PSA], and that electrical generating stations are typically classified as critical facilities for purposes of natural hazards and emergency planning.

30413(d) Report, Appendix A – Substantive File Documents

Proposed Additions to List of File Documents, beginning page 44:

<u>AECOM (2016). Puente Power Project – Wetland Technical Studies Summary (with attachments), August 31, 2016.</u> Submitted to CCC staff September 2, 2016.

Correspondence Received:

August 22, 2016 letter from Douglas Bosco, "Re: Section 30413(d) Review of Puente Power Project."

¹⁹ A seiche is a wave generated by the same types of events that cause a tsunami, but that occurs within an enclosed water body such as a bay, reservoir, or, in this case, a flood control channel.

September 1, 2016 letter from Brian Segee and Matthew Vespa, representing the Environmental Coalition of Ventura County, Environmental Defense Center, and Sierra Club, "Re: Proposal to Upgrade Mandalay Generating Station (Energy, Ocean Resources and Federal Consistency) (Agenda Item F10a)."

September 1, 2016 letter from Tim Flynn, Mayor, City of Oxnard, "RE: Item F10a Comment Letter Supporting Staff Recommendation (9/9/16 Coastal Commission Meeting)."

September 2, 2016 letter from Michael Carroll, Latham & Watkins LLP, representing NRG Energy Center Oxnard LLC, "Re: Puente Power Project."

<u>September 6, 2016 letter from Michael Carroll, Latham & Watkins LLP,</u> representing NRG, "Re: Puente Power Project – Response to Recommended Specific Provisions in August 26, 2016 Proposed Report."

<u>September 6, 2016 letter from California Environmental Justice Alliance,</u> <u>Environmental Coalition, Environmental Defense Center, Sierra Club, Surfrider</u> <u>Foundation, Ventura Audubon Society, Ventura Coastkeeper, and Wishtoyo</u> <u>Foundation, "Re: Proposal to Upgrade Mandalay Generating Station (Energy, Ocean</u> <u>Resources and Federal Consistency) (Agenda Item F10a)."</u> August 22, 2016

VIA EMAIL

Alison Dettmer, Deputy Director Energy, Ocean Resources, and Federal Consistency 45 Fremont, Suite 2000 San Francisco, CA 94105-2219 <u>Alison.Dettmer@coastal.ca.gov</u>

Tom Luster, Senior Environmental Scientist Energy, Ocean Resources, and Federal Consistency 45 Fremont, Suite 2000 San Francisco, CA 94105-2219 <u>Tom.Luster@coastal.ca.gov</u>

Re: Section 30413(d) Review of Puente Power Project

Dear Ms. Dettmer and Mr. Luster,

I am the Chairman of the State Coastal Conservancy (the Conservancy) and have served on the Board of the Conservancy since 2003. This letter expresses my personal thoughts and not those of the Conservancy, as I have not brought this matter to our Board as of yet.

I am writing to urge the Coastal Commission (the Commission) to carefully consider certain issues as part of its review of the proposed Puente Power Project (the Project), given the fundamental inconsistency of the proposed Project with the work of the Conservancy over the last two decades to preserve and restore the Ventura County coastline.

As the Commission is aware, the Conservancy was established in 1976 to protect and improve natural lands and waterways along the entire length of the California coastline. To date, working closely with local communities, the Commission, other State and Federal agencies, environmental organizations, and private companies, the Conservancy has completed over 1,500 projects and is actively engaged in hundreds more. Among our most significant projects have been efforts in Ventura County to restore the waterways and coastal environments. All told, the Conservancy has expended nearly \$60 million through these efforts in Ventura County, allowing the acquisition of 6,000 acres and preservation of an additional 1,900 acres to conserve and restore the waterways, the wetlands, and the coastal environments. Specifically, the Conservancy has been directly involved in the following efforts in Ventura County that are near the proposed Project:

<u>Ormond Beach Wetlands</u>: Acquired 265 acres from Southern California Edison, provided funding to The Nature Conservancy to acquire 276 acres from the Municipal Water District, and prepared a restoration plan for 1,000 acres of wetlands.

Santa Clara River Parkway: Acquired 16 miles of Santa Clara River plus seven miles of river corridor.

<u>Mandalay Dunes</u>: In February 2000, the Conservancy authorized the acquisition of the Mandalay Dunes, which is directly proximate to the proposed Project. The Conservancy determined that this area comprised rare coastal dune scrub habitat and, according to biologists, former backdune swale wetlands. The authorization was made with letters of support from numerous agencies and environmental organizations. The Conservancy Board recognized the opportunity to restore this area and integrate it with the surrounding parks, preserves, and endangered species habitat while providing continuous public management. Since that time, the Conservancy has also acted to fund acquisition of the adjoining Santa Clara River Estuary, acquisition of in holdings within McGrath State Beach, and the establishment of a Tern/Plover Restoration program in the area.

I believe that the Project would undermine this long-running effort to restore the coastal environments in Ventura County. It is my view that the analysis provided in the Preliminary Staff Assessment recently issued by the CEC obscures this fact and provides a scant, dismissive discussion of real, acceptable alternatives that may have greater relative merit than the proposed Project site, that would not impact wetlands, and that would avoid incurable inconsistencies with important Coastal Act policies and the work of the Conservancy.

As the Commission is aware, both the Coastal Act and the City of Oxnard Local Coastal Program prohibit the construction of new or expanded energy facilities that would result in the fill of wetlands where there is a feasible, less environmentally damaging alternative. *See* Coastal Act (Public Resources Code) § 30233(a). Likewise, Section 30264 of the Coastal Act permits construction of power plants in the coastal zone only where the CEC has determined the coastal site has greater relative merit than alternative sites that are suitable for power plant development. Pursuant to these Coastal Act requirements, the CEC may only authorize expansion of a coastal power plant upon finding that the site is of greater relative merit than other available sites and that there are no acceptable alternatives that would avoid filling wetlands. I do not believe the CEC's alternatives analysis is sufficient to allow the Coastal Commission to determine whether either of these requirements is satisfied.

The CEC's analysis rejects numerous feasible alternatives outside the coastal zone that may have greater relative merit and would avoid filling wetlands. The CEC's reasoning in this regard is cursory, rejecting acceptable alternatives due only to a lack of present site control by NRG. This narrow consideration of alternatives is insufficient for the purposes of determining consistency with Coastal Act policies. This is especially true here, given the existence of acceptable alternative sites that would allow for development of a power plant fulfilling the same local capacity requirements and generation needs that would be met by the proposed Project.

The proposed Project's inconsistency with Coastal Act policies relating to placement of fill in wetlands is unavoidable. The Coastal Act narrowly limits which facilities and uses are eligible to place fill in wetlands, the overwhelming majority of which are coastal-dependent. When the Coastal Act was drafted, it made sense to include energy facilities within these exceptions, as energy facilities located in the coastal zone were once dependent on the use of ocean water for cooling. Yet, four decades later, this no longer holds true. It simply makes no sense to build a new power plant on the coast. The risks presented by sea level rise cast further doubt on the wisdom of siting the Project in an area of the coast that will be significantly impacted by

flooding and inundation in coming decades. For these reasons, allowing the Project to fill wetlands, even with mitigation, would not conform with the requirements of the Coastal Act.

These views are consistent with the significant efforts of the City of Oxnard and its residents in opposition to the proposed Project, efforts which the Conservancy has long supported.¹ As the Commission is aware, the City is in the midst of preparing a comprehensive update to its Local Coastal Program for consideration and approval by the Commission in 2017. Separate from this effort, on June 7, 2016, the City adopted a revision to its 2030 General Plan narrowly tailored to the purpose of prohibiting construction or modification of power plants that are under the exclusive jurisdiction of the CEC. The Project would not and cannot conform with this prohibition. Additionally, the City has taken great efforts to implement the Commission's Sea Level Rise Policy Guidance by identifying potential impacts of sea level rise within the area covered by its Local Coastal Program. The CEC's analysis all but ignores these efforts and instead concludes that the risks to the Project are low, disregarding the Commission's guidance for siting of critical infrastructure by essentially finding that the Project is not critical because its power is only needed at periods of peak demand.

As established by the Coastal Act and the Commission's Memorandum of Agreement with the CEC, the Commission's Section 30413(d) report must include consideration of many findings, including on the compatibility of the Project with the goal of protecting coastal resources. Given the Project's inconsistencies with requirements of the Coastal Act, the City of Oxnard's Certified Local Coastal Program, and the City's recent amendments to its 2030 General Plan, I would urge the Commission to provide a report to the CEC that details the incurable inconsistencies between the proposed Project and Coastal Act policies. Doing so would avoid perpetuating for decades to come one of the largest remaining deterrents to access on the Ventura County coastline and would avoid needless impacts to the coastal resources that both the Commission and the Conservancy have fought so hard to protect in Ventura County.

Thank you for your consideration of my views.

Sincerely,

Douglas H. Bosco

¹See Letter from Peter S. Brand, State Coastal Conservancy, to Oxnard City Council (June 30, 2014), http://oxnard.granicus.com/MetaViewer.php?view_id=68&clip_id=2805&meta_id=141474.



September 1, 2016

California Coastal Commission 45 Fremont, Suite 2000 San Francisco, CA 94105-2219

SIERRA CLUB



Re: <u>Proposal to Upgrade Mandalay Generating Station (Energy, Ocean</u> Resources and Federal Consistency) (Agenda Item F10a)

Sent via email to alison.dettmer@coastal.ca.gov

Dear Honorable Commissioners:

On behalf of Environmental Coalition of Ventura County, Environmental Defense Center, and Sierra Club, we respectfully urge you to adopt staff's proposed Report (prepared pursuant to section 30413(d) of the Coastal Act) to the California Energy Commission ("CEC") for NRG Energy's proposed "Puente Power Project," which would be the *fourth* fossil-fuel power plant to be sited on the City of Oxnard's beaches. Our organizations, which are also formal intervenors in the CEC certification process for Puente, believe that CCC staff has done a commendable and thorough job in preparing the Report, and we support the detailed recommendations identified by staff as necessary to bring the project in compliance with the Coastal Act, including the fundamental recommendation "that the CEC require NRG to relocate the project to an off-site alternative location that is free of current and future flood hazards."

Although proposed power plants such as Puente do not require a coastal development permit, your Commission still plays an essential and substantive role in the CEC power plant certification process by providing findings with respect to specific measures necessary to bring the project into compliance with Coastal Act policies. The CEC can only disregard these recommendations if it finds that they are infeasible or would cause greater environmental impacts than the project as proposed.

Here, the Puente Power Project 30413(d) Report concludes that the project as proposed and as analyzed by the CEC in its Preliminary Staff Assessment ("PSA") does not address all environmental impacts, including direct impacts to wetlands; indirect impacts to wetlands and environmentally sensitive habitat areas ("ESHA"); site exposure

September 1, 2016 California Coastal Commission re Proposal to Upgrade Mandalay Generating Station (Agenda Item F10a) Page 2

to present and future hazards from flooding, sea level rise, and tsunamis; and effects on public access to the shoreline. The Report also notes that the Puente project would conflict with several land use policies under the Coastal Act and the City of Oxnard's Local Coastal Program.

CCC staff's clear-eyed review of this project illustrates that the proposed site is counter to basic Coastal Act policies:

Ultimately, in spite of the uncertainty surrounding the exact degree of risk, there is substantial evidence that the project site could be exposed to flooding during its proposed 30-year operating life, and that over the long-term, this possibility would become a certainty. In this situation, Coastal Act Section 30253 requires that risks to life and property be minimized, and the stability and structural integrity of new development be assured, without resorting to the construction of shoreline protective devices. The Commission believes that the requirements of this policy can best be met through risk avoidance, that is, by the selection of an alternative inland site that is free of flooding hazards. (Staff Report, at p. 34).

Accordingly, the 30413(d) Report recommends "that the CEC require NRG to relocate the proposed project to an alternative site that is (a) outside the current 100-year and 500-year flood zones, and (b) would not be at risk of flooding related to high water levels, storm waves, or coastal erosion, including the effects of sea level rise, over the full 30-year project term." Similarly, the 30413(d) Report recommends that "the Energy Commission require that the proposed project be relocated to an alternative site that would not result in direct impacts to or fill of coastal wetlands." (Staff Report, at p. 13). Although the 30413(d) Report makes several additional laudable recommendations in an effort to lessen or mitigate Puente's array of adverse environmental impacts, we write primarily to support the most basic recommendation asking that the CEC require NRG to locate an alternate site.

In addition to our general support for the recommendations made in the 30413(d) report, we offer the following comments:

1. Direct Impacts on ESHA

Although the 30413(d) Report addresses indirect impacts to ESHA in detail, it does not appear to address the potential for onsite ESHA. The PSA dismisses the potential for onsite ESHA without discussion. Although the PSA does acknowledge that the project site contains more than 2 acres of wetlands (as defined by CCC wetlands policy), it does not take the next step to address whether these wetlands are ESHA. This

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omission is particularly notable given that coastal wetlands and other natural waters are generally presumed to also be an ESHA. *Bolsa Chica Land Trust v. Superior Court* (1999) 71 Cal. App. 4th 493, 515.

Should the coastal wetlands or other areas within the project site also be determined as ESHA, section 30240 of the Coastal Act "does not permit its restrictions to be ignored based on the threatening or deteriorating condition of a particular ESHA." *Id*.at 507. The underlying policy rationale for the Coastal Act's strict protection of ESHAs has particular relevance to the proposed siting of this fourth power plant on the City of Oxnard's beaches:

[I]f, even though an ESHA meets the requirements of section 30107.5, application of section 30240's otherwise strict limitations also depends on the relative viability of an ESHA, developers will be encouraged to find threats and hazards to all ESHAs located in economically inconvenient locations. The pursuit of such hazards would in turn only promote the isolation and transfer of ESHA habitat values to more economically convenient locations. Such a system of isolation and transfer based on economic convenience would of course be completely contrary to the goal of the Coastal Act, which is to protect *all* coastal zone resources and provide heightened protection to ESHAs. *Id.* (emphasis in original).

We respectfully ask staff to clarify whether onsite ESHA, and potential direct impacts to that ESHA, was considered in preparation of the 30413(d) Report.

2. Environmental Justice

The 30413(d) Report appears to also omit consideration of environmental justice issues. As stated in the CCC's 2015 Sea Level Rise Policy Guidance, the Coastal Act "recognizes the fundamental importance of the fair distribution of environmental benefits." Accordingly, the Policy directs that "[e]nsuring low-income and underserved communities are included in environmental decisions is a key tenet of environmental justice and will minimize disproportionate environmental and public health impacts."

The environmental justice implications of the Puente project are undeniable. The City of Oxnard is a majority-minority community, with 74% of residents of Hispanic descent and an additional 10% of residents identified as non-white. In addition to the three existing coastal power plants, Oxnard also contains an EPA Superfund site, landfills, and extensive oil and gas development adjacent to residences. State of California data contained within CalEnviro Screen 2.0 characterizes much of the City as disadvantaged, with several census tracts classified within the highest "score" (91%-

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100%). When all census tracts are considered, the City of Oxnard ranks within the top 10% of California communities in terms of the environmental burden of dangerous and polluting industries. This community should not be saddled with yet another coastal power plant.

3. Conclusion

The siting of any additional fossil-fueled power plants on California's irreplaceable beaches is shortsighted under any circumstance; NRG's proposal to build the Puente project in an area uniquely vulnerable to sea level rise, beach erosion, and tsunami risk is simply reckless. We respectfully request that the California Coastal Commission fully and responsibly exercise its statutory authority under the Coastal Act and Warren-Alquist Act by adopting staff's 30413(d) Report (and recommendations) for the Puente Power Project, and transmitting that Report to the California Energy Commission.

Thank you for considering our recommendation.

Sincerely,

Brian Segee, Senior Attorney Environmental Defense Center

Matthew Very

Matthew Vespa, Senior Attorney Sierra Club

cc: California Energy Commission, Docket No. 15-AFC-01

Tim Flynn Mayor



Honorable Supervisor and Chair Steve Kinsey California Coastal Commission 45 Fremont Street, #2000 San Francisco, CA 94105

RE: Item F10a Comment Letter Supporting Staff Recommendation (9/9/16 Coastal Commission Meeting)

Chair Steve Kinsey:

I write on behalf of the City Council of the City of Oxnard (City) to fully support adoption of the Section 30413(d) August 26, 2016 report prepared by Coastal Commission staff regarding the new 262 MW Puente Power Plant (Project) now being considered by the California Energy Commission (CEC) to replace Units 1 and 2 of the Mandalay Generating Station (MGS) located at 393 N. Harbor Boulevard.

The City strongly supports the report's recommendation that the Project be relocated to an alternative site that avoids present and future risks from sea level rise, coastal flooding, dune and beach erosion, and tsunami inundation at the MGS site. As the report acknowledges, the Mandalay site is not only at risk from sea level rise and other coastal hazards, the Project presents many other inconsistencies with the City's Local Coastal Plan (LCP) and the Coastal Act. Specifically, the Project will result in the filling of coastal wetlands and additional impacts on adjoining wetlands due to the largely unknown subsurface connections and interactions between the fluctuating high water table and intruding ocean water. The U.S. Fish and Wildlife Service found that "Operation of the existing power plant has impacted western snowy plover and its critical habitat...new power plant at this location could potentially impact listed species and critical habitat in the future."¹ And, as noted in the 30413(d) report, the existing power plant already inhibits public beach access as a result of the existing discharge of industrial wastewater from the plant over the beach and across State tidelands that front the facility. In short, this is a terrible place to build a new power plant.

While the City agrees with the staff's discussion of the Project's impacts and inconsistency with various City policies, it would like to emphasize that the Project is also inconsistent with the City's recent 2030 General Plan amendment, which were not fully addressed in the staff report. First, the City has long interpreted its existing LCP policies to allow only coastal dependent energy related facilities. Since the proposed project is not coastal dependent, it would not be consistent with the City's interpretation of its LCP. Moreover, the City's recently adopted amendment to its 2030 General Plan prohibits the siting of power plants of 50 MW or greater generating capacity in areas subject to environmental hazards including

¹ US F&W Service comment letter to Shawn Pittard, CEC docket 15-AFC-01 dated August 18, 2016.

City of Oxnard Comment Letter on Item F10a September 1, 2016 Page 2

seismic hazards, coastal hazards, and sea level rise. Although the report acknowledges these amendments, it does not address the Project's clear inconsistency with the 2030 General Plan.

While Commission staff is correct that the City has not yet submitted its updated LCP, which currently allows energy facilities as a conditionally permitted use, the City's 2030 General Plan establishes the City's land use goals for the City as a whole.² The recent 2030 General Plan amendment acts as an overlay policy that identifies additional criteria that should be applied when determining whether a new power plant, or substantial expansion or replacement of an existing plant, of 50 MW or greater capacity, should be permitted in areas with greater known and uncertain risk compared to areas of less risk. The amendment reflects the City's policy judgment that large power plants should not be built in areas subject to higher environmental hazards, including landslide, flooding, seismic, or wildfire risks than areas with less risk. The amendment is also consistent with Government Code section 65302(g)(4), which requires the City to update its general plan to include policies to respond to climate change, including an assessment of vulnerabilities and the adoption of measures to avoid and adapt to climate change impacts.

The 30413(d) report validates the City's interest in preventing the development of large energy facilities in areas subject to known and increasing coastal hazards. In fact, the report explicitly finds: "The Commission believes that the requirement of this policy [to address coastal hazards] can best be met through risk avoidance, that is, by the selection of an alternative inland site that is free of flooding hazards." 30413(d) Report at p. 34.³ There are at least two inland properties that meet all the siting criteria and avoid the impacts of the Puente Project, including inland sites in the City of Oxnard and one in unincorporated Ventura County near Santa Paula.

The City also concurs with the report's discussion on page 5 that the CEC is improperly assuming that absent the approval of the Project, the existing MGS Units 1 and 2 would remain in place indefinitely after decommissioning in 2020. It is not reasonable to assume that NRG will be permitted to allow a closed power plant to remain as a visual blight, attractive nuisance, possible source of polluted runoff and deteriorating airborne asbestos, and a source of raptor nesting sites that would prey on adjacent nesting sites of endangered Snowy Plovers and Least Terns. The CEC should assume that MGS Units 1 and 2 would be removed after their decommissioning and that the CEC's evaluation of alternative sites cannot state that the alternative sites are environmentally inferior to the Project because the old MGS units remain undemolished for another 30 years.

 $^{^2}$ Gov't. Code §§ 65300, 65302. The City has a reasonable time to bring the coastal zoning into consistency with the General Plan. Gov't. Code § 65860(c). When the City updates its LCP, it will ensure that the LCP is consistent with the City's General Plan and the Coastal Act.

³ The 30413(d) report also demonstrates that the Mandalay site is no longer an appropriate location for the "reasonable expansion" of existing electrical generating facilities. Although the Commission previously identified the site as such in a report first issued in 1978, since that time, significant new research has been conducted which demonstrates that this site in particular is subject to risk from sea level rise and coastal hazards. Moreover, these facilities are no longer coastal dependent because they are prohibited from using once through cooling systems that rely on ocean water. Given the Commission's policy to require the consideration of sea level rise when locating new or expanded electrical generating facilities, it no longer makes sense to rely on a report issued over 3 decades ago to determine now whether a site is appropriate for the reasonable expansion of an aging, obsolete facility.

City of Oxnard Comment Letter on Item F10a September 1, 2016 Page 3

Finally, the City must stress the issue of Environmental Justice (EJ) and how the majority minority population of Oxnard (85 percent not "White alone"⁴) is disproportionally impacted by being the location of three regional power plants, three closed landfills, and a large EPA Superfund site all either on the coast or relatively close to the coast or the Santa Clara River. State of California data contained within CalEnviro Screen 2.0 characterizes much of the City as disadvantaged, with several census tracts classified within the highest "score" (91%-100%). When all census tracts are considered, the City of Oxnard ranks within the top 10% of California communities in terms of the environmental burden of dangerous and polluting industries.

Our community is engaged in a long struggle to crawl out of this infamous legacy, and we have made progress with the Coastal Conservancy's Ormond Beach Wetlands Restoration project and the conversion of two landfills to a municipal golf course. The update to the City's LCP will reflect its long-term goals to protect the natural resources and coastal recreational opportunities in its coastal zone. The Puente Project represents a big step in the wrong direction and would interfere with the City's long-term goals for its coast. It is also inconsistent with the low-cost, low-intensity recreational opportunities afforded by the adjacent McGrath State Beach to the north, Mandalay Beach Park to the south, and public trust lands to the west—all of which serve a local, primarily minority low-income community, and the greater Central Coast region.

In closing, the City fully supports all the findings and recommendations of the 30413(d) Report and urges the Commission to adopt the Report and forward it to the CEC.

Sincerely

Tim Fujm

Tim Flynn Mayor

cc: Chair Robert Weisenmiller, Ph.D., CEC Janea A. Scott, CEC President Pedro Pizarro, SCE President and CEO Stephen Berberich, California ISO President and CEO Mauricio Gutierrez, NRG Energy, Inc.

^{4 &}lt; http://www.census.gov/quickfacts/table/RHI125215/0654652,06>

September 2, 2016

Mr. Joseph Street California Coastal Commission 45 Fremont Street, Suite 2000 San Francisco, CA 94105

Re: <u>Puente Power Project</u>

Dear Mr. Street:

We are writing on behalf of NRG Energy Center Oxnard LLC ("NRG") regarding the Puente Power Project ("Project" or "P3"), which is currently under review by the California Energy Commission ("CEC") (Docket No. 15-AFC-01). We are in the process of reviewing the proposed "California Coastal Commission Report to California Energy Commission on Application for Certification 15-AFC-01 – NRG Puente Power Project" prepared by California Coastal Commission ("Coastal Commission") staff and released on August 26, 2016 ("Proposed Report").¹ The Proposed Report sets forth recommended findings on the Project's conformity to relevant policies of the California Coastal Act and the City of Oxnard's Local Coastal Program (LCP) and recommendations that, if included by the CEC as Conditions of Certification, would allow the Project to conform to the extent feasible with applicable Coastal Act and LCP policies. We appreciate that Coastal Commission staff issued the Proposed Report on a timely basis to allow for its consideration by the Coastal Commission and transmittal to the CEC in accordance with the schedule established by the CEC Committee reviewing the Project.

Based on our initial review of the Proposed Report, we believe that Coastal Commission staff has not fully considered critical information with respect to two areas in particular: i) identification of a portion of the Project site as wetlands; and ii) exposure of the Project site to flooding risk. As a result, the Proposed Report overstates the Project's potential impacts on

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¹ The Proposed Report indicates that the Coastal Commission is reviewing the Project pursuant to Public Resources Code Section 30413(d). We note that the Section 30413(d) process applies only to notice of intention ("NOI") proceedings, and that thermal natural gas-fired power plant facilities, such as the Project, are statutorily exempt from the NOI process. (Pub. Resources Code, § 25540.6(a)(1)) The focus of this letter is on the substantive analysis and recommendations in the Proposed Report, as opposed to its statutory underpinnings; however, NRG reserves the right to assert any claims that it may have based on statutory authority.

wetlands and its exposure to flooding risks, which leads, in turn, to a recommendation that the Project be relocated to an alternative site. The purpose of this letter is to bring to staff's attention additional critical information that demonstrates that the Project, as proposed, is consistent with the Coastal Act and LCP policies in these two areas, and that the recommendation to relocate the Project is unfounded.

We note that the Proposed Report concludes that should the CEC deem alternative sites infeasible, the Project at the proposed site would be consistent to the extent feasible with relevant policies of the Coastal Act and LCP assuming implementation of certain alternative recommendations to relocating the Project. As set forth in its Alternatives Analysis prepared in the CEC proceedings (TN # 207096), NRG believes the many alternative sites that have been analyzed, including those evaluated in the Proposed Report, are infeasible. While we recognize that this is a determination that the CEC will make, as opposed to the Coastal Commission, we nevertheless bring to your attention some of the concerns related to the alternative sites evaluated in the Proposed Report, particularly in the two areas where concerns related to the proposed site have led the staff to make a recommendation to relocate the Project. Even though the Coastal Commission is not charged with completing a comprehensive alternatives analysis, we are providing information about how development of the Project at the proposed alternative sites may well lead to greater impacts, relative to development at the proposed site, in the very areas that led to consideration of alternative sites in the first place.

NRG believes that if staff and the Coastal Commission take into consideration the additional information provided herein, both will conclude that: i) the Project, as proposed, is consistent with the Coastal Act and LCP policies related to the areas of concern identified in the Proposed Report; ii) the identified alternative sites raise even greater concerns in these areas; and iii) the recommendation to relocate the Project is unfounded and should be eliminated from the final report submitted by the Coastal Commission to the CEC. None of the alternative sites analyzed by the CEC, including those highlighted in the Proposed Report, are superior to the proposed Project site, particularly with implementation of the CEC's proposed Conditions of Certification and the feasible recommendations of the Coastal Commission.

Wetlands Determination

NRG disagrees with the conclusion in the Staff Report that 2.03 acres of the Project site meet the criteria to be classified as a "wetland," as defined by the Coastal Act or the Coastal Commission's administrative regulations. The Project site is a portion of the Mandalay Generating Station (MGS), an industrial power generating facility that has been in existence since the 1950s. The Project site was originally slated for development of future steam-generating units; however, they were never constructed at this location. A 30-inch diameter gas line traverses the Project site, which was intended to be the gas supply for the future steam-generating units. Uses of the Project site over the past 60-plus years include the following:

• 1950s: The Project site was graded for the original MGS construction, and the 30-inch diameter gas line was installed.

- 1970s: The existing flood protection berm along the northern boundary of the property was constructed.
- 1970s: An insulator testing facility was constructed in 1970, and was used by Southern California Edison from 1971 to 1978 to study mean time to flash-over rates on various insulators in a coastal environment.
- 1983: Approximately 7,000 cubic yards of dredged spoils from the Edison Canal were temporarily stored on the Project site.
- 1996-1997: A 10-inch diameter gas line was installed across the Project site from the gas metering station to MGS Unit 3.
- 2000: Approximately 7,000 cubic yards of dredged spoils from the Edison Canal were temporarily stored on the Project site.
- 2003-2005: Approximately 75,000 cubic yards of accumulated sediment from the Edison Canal were placed on the Project site. Site preparation included excavation and placement of liner fabric. The dredged spoils were pumped into geotextile containment tubes, and placed on the Project site to dry.
- 2011: The Project site was used for temporary storage of contaminated soil removed in connection with Southern California Edison's remediation of the on-site retention basins. (See, Project AFC, pp. 2-3 through 2-4.)

The relevant definitions of "wetland" are set forth in the Proposed Report and restated here for ease of reference. The Coastal Act defines a wetland as:

"Wetland" means lands within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens. (Pub. Resources Code § 30121)

The Coastal Commission regulations contains the following definition of a wetland:

Wetland shall be defined as land where the water table is at, near, or above the land surface long enough to promote the formation of hydric soils or to support the growth of hydrophytes, and shall also include those types of wetlands where vegetation is lacking and soil is poorly developed or absent as a result of frequent or drastic fluctuations of surface water levels, wave action, water flow, turbidity or high concentrations of salt or other substance in the substrate. Such wetlands can be recognized by the presence of surface water or saturated substrate at some time during each year

and their location within, or adjacent to, vegetated wetlands or deep-water habitats. (14 Cal. Code Regs. § 13577)

Applying the Coastal Act definition, the subject 2.03 acres is not covered periodically by shallow water, nor will it be covered permanently. The Project site is approximately 14 feet above sea level, is protected by approximately 30-foot tall dunes seaward, and an approximately 5-foot high earthen berm northward. It is also 5 to 9 feet above any potential subsurface waters. Applying the regulatory definition, the subject 2.03 acres do not have a water table at, near, or above the land surface long enough to promote the formation of hydric soils or to support the growth of hydrophytes.

Wetland conditions do not exist on the Project site despite the presence of certain wetland indicator species. The presence of wetland indicator plant species on the Project site is more than likely the result of stored dredge materials. Because the Edison Canal is a saltwater environment, it is likely that the dredged spoils placed on the P3 site were saturated with saltwater, and that during the time of storage, saltwater infiltrated into the site soils. Over time, this practice likely resulted in an accumulation of salt in the site soils, making them more suitable for salt tolerant plant species such as woolly seablite, slenderleaf iceplant, and pickleweed.

A jurisdictional determination/wetland delineation prepared in March 2015 confirmed that neither hydric soils nor wetland hydrology is present on the Project site. The jurisdictional determination/wetland delineation specifically described the Coastal Commission's wetland delineation criteria and applied those criteria in its evaluation of the Project site. The jurisdictional determination/wetland delineation concluded that the Project site is not a wetland in accordance with the federal or Coastal Act definitions. Please refer to the memorandum entitled Puente Power Project - Wetland Technical Studies Summary, and attached hereto as Attachment A, which summarizes previously conducted technical studies, including the abovereferenced jurisdictional determination/wetland delineation, evaluating the potential for wetlands at the Project site.

The Proposed Report fails to apply sound wetland science and practice to the Project site. The Coastal Commission's determination of the presence of a "one parameter wetland" typically follows methods promulgated by the U.S. Army Corps of Engineers, which require the presence of three wetland indicators (hydrology, hydrophytes and hydric soils). For federal determinations, the corroboration provided by the required presence of both wetlands hydrology and hydric soils greatly reduces the misidentification of plants as growing in wetlands, as opposed to uplands. Under the Coastal Commission's "one parameter" test, a finding of one of these three indicators creates a rebuttable, non-conclusive, presumption that an area is a wetland. Therefore, one may demonstrate that, despite the presence of a single wetland indicator, the area is, in fact, *not* a wetland. Such a demonstration has been made with respect to the Project site.

Based on the incorrect conclusion that a wetland exists on the Project site, the Proposed Report recommends that proposed CEC Condition of Certification BIO-9 be modified to require compensatory mitigation for direct impacts to wetlands in the form of wetland restoration at a ratio of 4:1 at a nearby location. (Proposed Report, p. 14) Compensatory mitigation should not

be required at all because the Project site does not include wetlands. Further, even if the subject 2.03 acres did constitute a wetland, the recommended 4:1 mitigation ratio is not appropriate given the poor quality of the subject acreage. Wetland mitigation ratios are typically determined based on the functions and values affected versus the function that is being restored, replaced or enhanced such that a 1:1 replacement of both acreage and function is accomplished; that is, if a higher quality mitigation is provided, the mitigation ratio may be lower than if lower quality mitigation is provided. For example, using the Army Corps' recent worksheet for establishing mitigation ratios for impacts to aquatic resources,² given the highly disturbed character of the plants identified on the Project site, the high percentage of non-native species, and general lack of wetland functions, a mitigation ratio of between 1:1 and 1.5:1 would be appropriate if the mitigation provided consists of moderate to high quality wetlands, and 1.5:1 if the mitigation provided consists of low to moderate quality. Even though NRG does not believe that any mitigation is required, it is prepared to accept CEC Condition of Certification BIO-9 as proposed, and to provide compensatory mitigation at the recommended 2:1 ratio.

The Proposed Report states that in the PSA, CEC staff recommended that 2.03 acres of the Project site be classified as a wetland pursuant to Coastal Act regulations. (Proposed Report, p. 12). While this is true, the PSA also makes clear that this recommendation is based exclusively on the Coastal Commission's highly conservative "one parameter approach" to defining wetlands, and that no portion of the Project site would be deemed a wetland under any other applicable criteria or definitions. The PSA states that "[t]he Coastal Commission uses this broad approach (i.e. a one-parameter approach) in determining wetland extent as a conservative means of defining and conserving wetlands, including conserving upland habitat surrounding a wetland." (PSA, p. 4.2-26).

In fact, the PSA emphasizes that the Project site does not exhibit any wetland indicators other than hydrophytic plants, and that even if this one indicator is sufficient to bring a portion of the Project site within the Coastal Commission's definition of a wetland, it is a poor quality wetland, at best. For example, the PSA makes the following points:

- The Project site has been actively maintained to facilitate operation of existing power generation, and has experienced varied uses, including as a marine dredging spoils storage; and therefore does not support wetlands or other waters under the jurisdiction of the Corps or CDFW. (PSA, p. 4.2-11).
- No other wetland indicators [other than hydrophytic plants], such as hydric soils or wetland hydrology were documented during the applicant's wetland delineation. (PSA, p. 4.2-11).
- Woolly seablite in the Project area is interspersed with the invasive iceplant, forming thick mats. These thick mats are of diminished value to wildlife, and woolly seablite is likely present only because the Project site is artificially saline, due to historical storage of ocean-dredged sediment. (PSA, p. 4.2-23).

² http://www.spd.usace.army.mil/Portals/13/docs/regulatory/qmsref/ratio/12501.2-7-13.pdf.

- The wetlands on-site are degraded and contain plants suited to upland growth, and there is little to no differentiation between upland habitat surrounding the wetland, and the wetland, itself. (PSA, p. 4.2-26).
- There is no tidal influence to cause increased salinity, and water inputs are only from rainfall. (PSA, p. 4.2-26).
- The approximately 2.03-acre wetland has diminished value, form, and function. For these reasons, staff considers the wetlands to provide little beneficial value to wildlife, nor does the site on its own provide many of the positive benefits of a wetland, such as water filtration, foraging and habitat for wildlife, or water reabsorption. (PSA, p. 4.2-26).

Contrary to the assertion in the Proposed Report at page 14 that the CEC staff's assessment of the site is unsupported, the PSA references the staff's support for its assessment of the Project site, which includes the technical studies summarized in Attachment A to this letter. On the basis of its assessment of the Project site, the CEC staff concludes that compensatory mitigation at a 2:1 ratio would satisfy the Coastal Commission regulations in appropriately mitigating for development of the site, and the staff specifically rejects a ratio of 3:1 (PSA, p. 4.2-26).

Finally, the Proposed Report concludes its discussion of wetland impacts with the following statement: "Speculatively, the presence of wetland vegetation within the project area may indicate the partial re-emergence of vegetation native to this historical landscape during a recent decrease in site disturbance." (Proposed Report, p. 14). There is no evidence to support this claim, which is admittedly speculative. To the contrary, the CEC staff's PSA states "Researchers have deduced that in the early 1800s, the project site itself was sand dunes, with scattered alkali meadows in the low spots between the dunes (Bellar et al., 2011)." (PSA, pp. 4.2-5 through 4.2-6). According to the PSA, historical soil surveys of the area establish the fact that the area has never supported a wetland, nor provided the form or functions of a wetland. (PSA, p. 4.2-11).

Based on the foregoing, the Coastal Commission's determination that 2.03 acres of the Project site constitutes a wetland, which is driving the same reluctant conclusion on the part of the CEC staff, is unfounded and cannot serve as the basis for recommending that the Project be relocated to an alternative site. Further, while NRG is prepared to provide compensatory mitigation for the loss of hydrophytic plants at a ratio of 2:1, the mistaken determination that a portion of the Project site constitutes a wetland cannot be relied upon to recommend increasing the compensation ratio to anything higher than 2:1.

Flood, Sea Level Rise and Tsunami Hazards

The other primary justification provided in the Proposed Report for recommending an alternative site is the perceived vulnerability of the Project site to flood, seal level rise ("SLR") and tsunami hazards. For the reasons set forth below, the Proposed Report overstates these potential risks. In addition to extensive analysis of these issues in the CEC proceedings, as reflected in the PSA, these issues were the subject of expert testimony and briefing before the California Public Utilities Commission ("CPUC") in connection with the CPUC's consideration and approval of the resource adequacy purchase agreement between NRG and Southern California Edison for the Project.³ Expert testimony presented in the CPUC proceedings, and relevant to the issues raised in the Proposed Report, is summarized in the Reply Brief of NRG Energy Center Oxnard LLC and NRG California South LP ("CPUC Reply Brief") attached hereto as Attachment B.

The Mandalay Generating Station ("MGS") site, of which the P3 site is a part, is located at an elevation of between 12 and 14 feet (NAVD88). Relative to the local tidal datums, the MGS site is approximately 7-9 feet above Mean Higher High Water (MHHW) and 11-13 feet above Mean Lower Low Water (MLLW). The P3 site is on the higher portion of the MGS site (~14 feet) and is, therefore, approximately 9 feet above MHHW. Compared to the local active tide gages (Santa Barbara and Santa Monica), the P3 site is over 5 feet higher than the highest observed water level (8.31 feet in November 1982).

Flooding Risk

Potential sources of flooding risk for the proposed Project site are the Santa Clara River (riverine flooding) if it overtopped its banks, or coastal flooding if a large storm in the Pacific Ocean overwhelmed the beach and dunes fronting the site. The entire MGS site, including the proposed P3 site, is outside the FEMA 100-year floodplain from either of these potential sources, riverine or coastal flooding.

If the Santa Clara River were to overtop its banks, flood waters would need to flow overland 3 to 4 miles before reaching the MGS site, and would be expected to be shallow. As shown on FEMA's Flood Insurance Rate Map (FIRM) Community Panel Numbers, No. 06111C0885E and 06111C0905E (Effective Date of January 20, 2010), a portion of the MGS site, including a very small portion of the P3 site on which nothing is planned for development, is shown in the FEMA "Zone X – Other Flood Areas" (areas protected by levees from 1 percent annual chance flood, areas of 0.2 percent annual chance flood; areas of 1 percent chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile). For the MGS site, including the P3 site, this flood hazard zone would be best described as an area of 0.2 percent annual chance flood, which corresponds to the 500-year floodplain, or an area of 1 percent chance flood (i.e., 100-year flood event) with average depths of less than 1 foot.

³ Application of Southern California Edison Company (U338E) for Approval of the Results of Its 2013 Local Capacity Requirements Request for Offers for the Moorpark Sub-Area, Application No. 14-11-016, Filed November 26, 2014.

The FEMA maps, and a map from a recent study of the Santa Clara River provided in the Proposed Report, show flooding near the Project site from the Santa Clara River where it breaks out of its banks near its mouth. On the FEMA maps, the elevation is 10-12 feet, which is below the elevation of the flood protection berm along the north MGS property line. Furthermore, the Edison Canal would act as a drain limiting the amount of water that could flood the site from an upland source.

The other potential source of flooding, coastal flooding, is shown on the 2010 effective FEMA maps at the MGS site as a VE zone. VE zones are defined as "areas subject to inundation by the 1-percent-annual-chance flood event with additional hazards due to storm-induced velocity wave action." Unlike the more common AE zones, which show the depth or elevation of flood water, VE zones show the elevation of wave run-up. The effective FIRM shows a VE zone with a value of 13 feet.

FEMA is in the process of updating FIRMs of Ventura County. FEMA's Draft Work Map, which was included in the PSA as Soil & Water Figure 5 (PSA, p. 4.10-37), and is the precursor to preliminary maps, shows the VE zone has increased to 20 feet. This wave run-up level at 20 feet represents the ocean still water level (water level excluding waves) of approximately 7 to 9 feet in elevation plus the level of wave run-up on the beach, not the level of flooding. If FEMA determined that a dune would be overtopped by wave run-up (e.g., dune was lower in elevation than the VE zone), FEMA would include an estimate of the depth of flooding on the back side of the dune due to the water that overtopped the dune, typically shallow flooding of a few feet (not the elevation of the VE zone). FEMA did not include any flood zones on the back side of the dune since no overtopping was predicted. Additionally, since wave runup is based on the beach slope, if the slope stays the same, the run-up would be the same. The dunes directly in front of the Project site are over 100 feet in width, and thus any future overtopping of shallow water, if it were to occur, would have to travel a significant distance prior to reaching the Project site. It is also overly simplistic to assume that 2 feet of SLR will result in a wave run-up level that is 2 feet closer to the top of the dune, because the dune itself could accrete and grow in size.

Coastal Erosion

NRG agrees that with Coastal Commission staff that "[t]he vulnerability of the project site to flood hazards, now and in the future, will be determined in part by the status of the coastal dunes immediately west of the MGS, and by the condition of the artificial berm along the site's northern boundary." (Proposed Report, p. 28). As stated in the Proposed Report, "The single most important determinant of flooding risk at the site, at least in the near term, appears to be the status of the beach and fronting dunes." (Proposed Report, p. 33). NRG also agrees with the staff conclusion that "sediment discharge from the Santa Clara River has comprised the majority of the shoreline sediment supply in the project vicinity, with sand bypassing from Ventura Harbor a secondary source." (Proposed Report, p. 28). These facts led the CEC staff to conclude in the PSA that "[t]he site specific characteristics of the beach (e.g., wide, dune backed, relatively low exposure to southern swells, and downcoast from a

large sediment source, the Santa Clara River) support this long-term shoreline accretion [referring to an increase in the width of the beach in front of the MGS site of over 200 feet during the period 1947-2016]." (PSA, p. 4.10-58).

In fact, the PSA significantly understates the extent of historic beach accretion. Since 1947, the beach fronting the MGS site has increased in width by more than 300 feet (see AFC Figure 4.15-7, which shows the growth in width based on aerial photos). The estimated width is the distance from the outfall headwall to the water line at the time of each photo. The estimate is approximate because the water level changes with the tides and season; however, all the photos, taken at different times over the decades, are consistent in showing the continual increase in beach width. In the 1950s and 1960s, a paved road ran along the beach just above the outfall headwall. The road is currently buried about 3 to 4 feet beneath the sand (based on an exploratory excavation done in 2014). As can be seen by comparing historic photos, the dunes have expanded farther towards the beach and ocean, and the old road is now partially covered by new dunes, indicating an increase in beach volume as well as width. The dunes' growth would appear to have been limited primarily by the outflow from the MGS outfall, rather than by erosion caused by extreme water levels or storms. This is indicated by the larger width in the dune field farther south from the outfall, where the outfall discharge impacts the beach less.

Having acknowledged the history of beach accretion fronting the MGS site, and the secondary role played by sand bypassing from the Ventura Harbor in contributing to such accretion, the Proposed Report then gives undue weight to concerns regarding possible future variability of dredging and sand bypassing. Even if Ventura Harbor dredging ceased, a bypass bar would likely form and sand transport past the harbor would eventually return to near preharbor construction conditions. The sand trap updrift of Ventura Harbor usually fills within a year or two, after which sand bypasses the trap and deposits in the channel and harbor requiring annual dredging to keep the harbor open. This year (2015-2016) resulted in a large amount of sediment bypassing the sand trap updrift of the Ventura Harbor and depositing sand into the Ventura Harbor inlet. The January 21, 2016 Ventura County Star newspaper reported that this past winter about 900,000 cubic yards of material was deposited at Ventura Harbor, filling the sand trap and overflowing into the inlet channel to the harbor. The newspaper reported that the harbor entrance normally has a depth of 40 feet but was down to 14 feet this year, and that the harbor entrance normally has a navigable area about 300 feet wide but was down to about 40 feet this winter. The harbor was dredged this winter, but if dredging did not occur, the harbor would likely be completely blocked within a few years. After that, most of the sediment that normally collected in the harbor and was dredged would bypass the harbor and continue south as it did before harbor construction. Thus, if dredging was completely and permanently discontinued at Ventura Harbor, which is unlikely, there would be only a short-term impact on the transport of sand.

The Proposed Report then expresses concern that wave driven erosion during a major storm event could result in significant erosion, reducing both the height and width of the protective dunes. (Proposed Report, p. 29). The Proposed Report relies heavily on the work of Dr. Revell. Dr. Revell's model has been shown to be inaccurate and flawed as applied to the Project site. The model predicted that an El Nino-type storm event, such as the one that

occurred in January 1983, would flood the entire Project site under current conditions, but that prediction is contrary to what actually happened. The January 1983 El Nino storm and other large storm events have occurred in the past, and the resulting waves and storm surges have had no impact on the MGS site – there was no flooding and no impact to MGS operations.

Since the 1983 event, the beach fronting the MGS site has accreted and is now wider than it was in 1983. In addition, foredunes have formed and stabilized farther out towards the ocean. Thus, under "current conditions," the Project site is not more vulnerable to coastal hazards than it was in 1983, but is actually less vulnerable. Under current conditions, the Project site is protected by a beach that is 300 feet wide, with dunes that are 20 to 30 feet high. If the same event occurred today, the waves would break onto a wider beach and would need to erode the newly formed foredunes before impacting the main dunes protecting the Project site. Given that no damage occurred in 1983, it is unlikely that any damage would occur under current conditions. (See, CPUC Reply Brief, pp. 10-13).

The Proposed Report then analyzes the potential effects of long-term sea level rise (SLR). For historical perspective, during the period of 1947-2016, SLR has been 0.004 foot per year (1.34 millimeters per year (mm/yr)), as measured at the Santa Monica gage. This amounts to about 3 inches since construction of the original MGS power plant approximately 60 years ago. Although the historical rate of SLR is less than the predicted future rate, the fact that the beach has grown in width notwithstanding SLR indicates a stable beach. We also note that for the projected SLR scenario of 24 inches by 2050 to occur, the rate of SLR would need to increase by more than tenfold over recent historical levels to 14.1 mm/yr. If the supply of sand from the north is not sufficient to keep up with SLR, the beach will contract. The existing slope of the beach averages approximately 3 percent, based on the 2013 LiDAR data. Assuming the high-scenario SLR of 24 inches by 2050, and that the beach slope remains the same, the beach would be expected to shrink by about 70 feet (24 inches/0.03/12 inches/foot) by 2050. For the FEMA VE zone calculations a beach slope of 10% was used. In this case the beach erosion is expected to be 20 feet. Over the expected 30-year life of the proposed project (2020 through 2050), the high-scenario SLR rate is considered to be extremely conservative, considering that recent historic rate of SLR is considerably less than the predicted future rate. Assuming the low or medium SLR scenarios, the estimated beach reduction would be on the order of about 20 or 45 feet, respectively. The 2013 Coastal Resilience Study (specifically, Figure 16 in that report) shows that the sediment yield from the Santa Clara and Ventura Rivers should remain about the same as the historical yield until about 2050. Thus, the existing data indicate that loss of beach is unlikely to occur over the life of the Project, and even under the most conservatives analysis, the width of the beach fronting the MGS site would continue to be over 200 feet wide.

Edison Canal Flooding

The Proposed Report expresses concern regarding the potential for flooding as a result of elevated levels of water in the Edison Canal due to a severe storm or flood event or tsunami. The Edison Canal is a 2.5-mile-long, manmade canal. The entrance to the canal is at the northern end of the Channel Islands Harbor under Channel Islands Boulevard; approximately 2 miles from the harbor entrance.

The MGS roads and parking lot near the canal are at elevation 12 feet NAVD88, or more. Most of the canal banks on the MGS property are greater than 14 feet in elevation, although they decrease to about 12 feet at the head of the canal. An extreme tidal elevation is unlikely to exceed 8 feet. The maximum observed water levels at NOAA gages at Los Angeles, Santa Barbara, Port San Luis, and Rincon Island are all less than 8 feet. The historical peak at Santa Monica is 8.3 feet NAVD88, or about 0.3 foot above the 100-year water level. Therefore, flooding from the Edison Canal due to extreme water levels is unlikely. Even assuming an increase in sea level of 24 inches by the year 2050, the extreme water levels in the canal would be about 10 feet, that is, approximately 8 feet for a 100-year (or more) return period tide, plus 2 feet of high-scenario SLR. The water level would be expected to stay within the canal, but freeboard at the head of the canal (i.e., at the MGS inlet) would be reduced by about 2 feet, or to about 4 to 5 feet.

NRG has also analyzed the potential for flooding of the Edison Canal from a tsunami. The harbor entrance is between two jetties and is protected by a parallel offshore breakwater that extends across the entire mouth of the harbor entrance. Several studies on the effects of breakwaters on tsunami run-up height have been conducted (for example, Irtem et al. [2011], Adrichem and Aranguiz [2010], and Ha et al. [2014]). The general conclusion is that breakwaters can reduce the height and extent of tsunami run-up. The amount of reduction depends on the exact configuration of the breakwater and local beaches, but a reduction is anticipated. In addition to the breakwater, parallel jetties restrict the harbor entrance width to about 400 feet. There are two small beaches (Kiddie Beach and Hobie Beach) near the harbor entrance that the United States Army Corps of Engineers (USACE) created when it constructed the harbor. These beaches were specifically designed as surge beaches to absorb the impact of tidal surges that would otherwise damage facilities or boats in the harbor.

Inside the harbor, the channel is further restricted to less than 300 feet wide by residential developments on both sides of the channel. The harbor contains more than 2,000 boat slips, which will tend to reduce the energy of a tsunami. A little more than 2 miles into the harbor, the Edison Canal starts. The channel is further narrowed at this point to approximately 100 feet wide. The MGS facility is located another 2 miles from the start of the canal. The narrow canal restricts the inflow of water upstream. The canal dimensions are approximately 10 feet deep and 40 to 100 feet wide in the vicinity of the MGS intake. The depth of water fluctuates with the tide and ranges from approximately 2.5 to 7.5 feet MLLW (or approximately 2.3 to 7.3 feet NAVD88). Freeboard in the canal is on the order of approximately 6 to 7 feet.

Attachment C to this letter is a figure from a recent simulation for a tsunami generated by an earthquake on the Ventura-Pitas Point fault, which has an estimated return period of approximately 800 to 2,500 years (Thio et al., 2015). The figure shows the maximum wave amplitude plotted from the entrance to the harbor, through the harbor, and up the canal. The amplitude initially decreases as the waves enter the harbor, but increases toward the end of the harbor where the canal starts due to the restricted flow through the canal, which causes a local buildup of the wave. The restriction of the flow in the canal causes rapid attenuation of the

waves as it propagates further north. Based on the foregoing, flooding of the Project site from the Edison Canal is unlikely.

Tsunami Flooding on the MGS Beach

Studies of distant earthquakes (teletsunamis) indicate that the Project site is unlikely to be in the inundation zone. Studies of tsunamis generated by local earthquakes indicate that the site is unlikely to be in an inundation zone for "frequent" events (events with return periods of 1,000 to 1,500 years or less). Studies that used conservative assumptions indicate that the Project site might be in an inundation zone for less frequent events, e.g., 2,500-year return period; however, the predicted water level is lower than the top of the dunes. Analysis of return periods for various tsunami sources indicate return periods of between 800 and 10,000 years. In all cases, the maximum projected wave height is well below the top of the existing dunes that protect the Project site.

Alternative Site Locations

As reflected in its Revised Preliminary Staff Assessment ("PSA") (TN #211885-1), CEC staff has undertaken a robust analysis of alternative site locations for the Project, which includes multiple off-site locations, and two alternative configurations within the existing Mandalay Generating Station ("MGS") site. The CEC staff's analysis was informed, in part, by an alternatives analysis prepared by NRG (TN # 207096). The Proposed Report focuses on three of the alternative sites – the "Ormond Beach" site and the two alternative configurations within the MGS site.

Under the California Environmental Quality Act ("CEQA"), the CEC is tasked with completing an analysis of alternatives to the Project, including alternative sites. The Proposed Report acknowledges the CEC's role in this regard and does not purport to contain a comprehensive alternatives analysis. However, the Proposed Report does addresses alternative sites based on concerns related to impacts on coastal wetlands and risk from flooding, SLR and tsunami hazards associated with the proposed Project site. As explained above, the Proposed Report overstates the impacts and risks in these two areas. Once all of the available and relevant data and analysis is taken into consideration, it is clear that Project impacts to wetlands and the risk of flooding are not significant enough to warrant recommending relocation of the Project to an alternative site. This conclusion alone eliminates the need for analysis of alternative sites in the Proposed Report.

Nevertheless, and notwithstanding the primary role of the CEC in evaluating Project alternatives, we are providing the following information regarding the feasibility issues associated with the alternative sites analyzed in the Proposed Report. Perhaps most important for purposes of the analysis in the Proposed Report, the alternative sites under consideration may pose impacts and risks that are greater than those of the proposed Project site in the very areas that led to Coastal Commission staff's consideration of alternative sites in the first place – biological resource impacts and flooding risks.

Ormond Beach Alternative Site

The Ormond Beach Alternative Site is adjacent to property proposed for inclusion in the Ormond Beach Wetlands Restoration Project, a joint effort of the California Coastal Conservancy, the Nature Conservancy, the Southern California Wetlands Recovery Project, the County of Ventura and the City of Oxnard, to restore the Ormond Beach wetlands and uplands habitat. A May 26, 2016 Coastal Conservancy Staff Recommendation that the Conservancy authorize disbursement of funds to prepare a restoration/public access plan and associated technical studies for the restoration of the coastal wetlands, beach, dunes, and associated uplands at Ormond Beach described the significance of this project as follows:

At over 1,000-acres, the Ormond Beach wetlands complex is the largest wetland restoration opportunity in southern California. The Conservancy, The Nature Conservancy (TNC), and the City of Oxnard (City) collectively own 645 acres at Ormond Beach. The U.S. Fish and Wildlife Service last month approved a grant to the Conservancy to acquire an additional 13 acres.

Ormond Beach is considered by many wetland experts to be the most important wetland restoration opportunity in southern California. Restoration of the wetlands is a high priority of the Southern California Wetlands Recovery Project. Although large areas of the wetlands have been drained, filled and degraded over the past century, this is one of the few places in coastal southern California with an intact dune-transition zone–marsh system, allowing restoration of an intact wetland ecosystem and providing a buffer against sea level rise and the impacts of climate change. The largely agricultural surroundings provide an opportunity unique in most of coastal southern California to expand the current protected areas and to restore the approximate extent of the historic wetland area.

The Ormond Beach Alternative Site analyzed in the Proposed Report is adjacent to more than 500 acres of land proposed for inclusion in the Ormond Beach Restoration Project. The alternative site is on the north side of McWane Boulevard, and the lands proposed for acquisition and inclusion in the Ormond Beach Restoration Project are across the street and south of McWane Boulevard. (See, <u>http://archive.vcstar.com/news/local/oxnard/ormond-beach-wetlands-preservation-effort-looks-for-boost-from-grant-2f5c6f1e-7ed0-1e6c-e053-0100007-374326751.html</u>). Since one of the primary drivers for the Proposed Report's consideration of alternative sites is concern regarding the Project's potential impacts to biological resources (coastal wetlands), consideration of an alternative site in such a potentially biologically sensitive area seems misplaced. This is particularly true in light of the discussion above regarding whether or not a portion of the proposed Project site is a wetland.

Furthermore, while the Ormond Beach Alternative Site is not in the coastal zone, it could be susceptible to flooding, sea level rise and tsunami hazards due to its proximity to the coast,

less extensive dunes relative to the proposed Project site, and its relatively low elevation. The tops of the dunes along the beach in the southern portion of Oxnard are much lower than the dunes fronting the proposed Project site; therefore, this site would be expected to be more susceptible to sea-level rise and tsunami-related impacts than the Project site. Thus, the suggested alternative site may be more at risk from the very hazards that led to the analysis of alternatives to the proposed Project site in the first place. Again, this may be particularly true when the actual risks associated with the proposed Project site are properly analyzed and put into context.

In addition to its adjacency to lands slated for inclusion in the Ormond Beach Restoration Project, and its potential susceptibility to flooding, the Ormond Beach Alternative Site presents the following additional feasibility constraints that are not fully reflected in the Proposed Report:

- Potentially significant impacts associated with construction of new linear infrastructure, such as gas pipelines, water supply pipelines and transmission lines, that are not required in connection with the proposed Project site.
- Connection to the nearest natural-gas trunk line of sufficient capacity would require an approximately 2,100-foot pipeline, which would require constructing the buried pipeline under Edison Drive and the transmission line that parallels Edison Drive.
- Connection with the City's recycled water supply would require an approximately 4,200-foot linear to the AWPF at West Hueneme Road and South J Street and/or the potable water pipeline that borders the site along Arcturus Avenue and E. McWane Boulevard.
- The nearest 220-kV electrical interconnection is approximately 1,000 feet from the alternative site.
- Impacts associated with ground disturbance during construction (e.g., soil erosion, dust, etc.) would be substantially more for this alternative site than for the Project.
- Construction phase traffic impacts would also increase, due to the installation of offsite linears along McWane Boulevard and Edison Drive.
- Potential visual impacts would be more than for the Project due to the new offsite transmission lines and development of a power-generating facility, with its associated infrastructure, on a site that is generally surrounded by low commercial and industrial structures and farmland.

For all of the above reasons, the Ormond Beach Alternative Site is not practically or environmentally superior to the proposed Project site.

MGS Site Reconfiguration #1 and #2

As acknowledged in the Proposed Report, the MGS Site Reconfiguration Alternatives are at lower elevations than the proposed Project site, and, therefore, at greater risk of flooding hazards than the Project as proposed. Presumably then, these alternative sites were evaluated because of their ability to avoid impacts to areas determined to be wetlands. The discussion above with respect to wetlands establishes that no portion of the Project site constitutes a wetland under even the Coastal Commission's conservative approach, and that NRG is nevertheless willing to provide compensatory mitigation at a ratio of 2:1. Thus, there is no basis for increasing the risk of Project flooding by relocating the Project to a lower elevation area of the MGS site.

In addition to the increased risk of flooding, the Proposed Report does not appear to take into consideration the following feasibility issues associated with the MGS Site Reconfiguration Alternatives.

MGS Site Reconfiguration #1

- This proposed P3 power block location would require the relocation of the existing gas metering station and main 30-inch gas line for the existing MGS Units 1, 2, and 3. This would also cause interruption of the existing units operation during the relocation of the metering station and main gas line.
- The existing MGS leach field would have to be relocated.
- The P3 combustion turbine generator unit would need to be rotated 180° from what is proposed in the PSA (i.e., inlet filter facing the road), and the unit would need to move approximately 75 feet west, in order to provide the required space for the tempering air fans and ducting.
- This proposed location would likely require significant additional noise mitigation compared to the proposed site to avoid offsite noise impacts.
- This proposed location would create significantly greater visual impact by moving the power block approximately 425 feet closer to the roadway.
- This location reduces access for P3 constructability, which would adversely impact the P3 project construction schedule.
- The proposed relocation of the stack would require the Project air modeling and air permit application to be revised, which could significantly impact the permitting schedule.

• In this reconfiguration, the northern portion of the power block would be placed directly on the existing earthen dike, which would need to be rebuilt to provide flood protection.

MGS Site Reconfiguration #2

- This proposed P3 power block location would require the shutdown of MGS Units 1 and 2 prior to the construction of the P3 for removal of the existing circulating water piping that partially underlies the proposed site.
- The proposed relocation area for the existing warehouse building is the current location of the existing plant gas metering station and leach field. The relocation of these facilities would have significant impacts on the existing units' operations and P3 construction schedule.
- This proposed P3 power block location would interfere with the planned demolition of existing MGS Units 1 and 2. The demolition execution plan would have to be revised from explosive to mechanical demolition, significantly increasing the cost.
- This proposed P3 power block location will have a significant impact on the planned construction corridor for the P3 project electrical and water lines.
- The proposed relocation of the stack would require the Project air modeling and air permit application to be revised, which could significantly impact the permitting schedule.
- The proposed P3 power block location will restrict or eliminate a major access area for the construction and assembly of the P3 combustion turbine generator unit.
- The proposed P3 power block location will restrict access to maintain the GSU, Unit Aux transformer, and GT electrical equipment.
- The suggested reconfiguration would interfere with the existing MGS Units 1 and 2 transmission line interconnection to the SCE switchyard. As proposed in the PSA, the P3 selective catalytic reduction unit would be in direct conflict with the existing transmission line.
- The suggested reconfiguration does not satisfy P3's objective to reuse existing MGS infrastructure, such as the existing warehouse.
LATHAM&WATKINS

Conclusion

When all of the relevant information regarding whether or not a portion of the proposed Project site meets the definition of a wetland, and the Project's potential exposure to flooding, sea level rise and tsunami hazards, is taken into consideration, the extent of the impacts and risk associated with the Project as proposed do not warrant a recommendation to relocate the Project to an alternative site. Furthermore, all of the alternative sites analyzed in the PSA present their own set of environmental and feasibility issues. In fact, if the impacts and risks of the proposed Project are accurately characterized, developing the Project at the alternative site locations analyzed in the Proposed Report may well lead to greater impacts and risks, relative to the proposed Project site, in the very areas that the Coastal Commission staff has expressed concerns.

Based on the information and analysis contained herein, NRG urges the Coastal Commission staff to modify the Proposed Report, and the recommendations contained therein, as follows:

- Reverse the determination that a portion of the Project site meets the definition of a wetland;
- Reassess the level of risk to the proposed Project site from flooding, sea level rise and tsunami; and
- Eliminate the recommendation to relocate the Project to an alternative site.

Thank you for your consideration of these comments. We look forward to continuing discussions with you as this matter proceeds.

Best regards,

Michael J. Carroll J. Carroll Of LATHAM & WATKINS L

Attachments cc: Mark Delaplaine

ATTACHMENT A

AECOM

AECOM 130 Robin Hill Road Suite 100 Santa Barbara, CA 93117 www.aecom.com 805 692 0600 tel 805 964 0259 fax

Memorandum

То	Joseph Street, California Coastal Commission Page 1 of 2						
Subject	Puente Power Project - Wetland Technical Studies Summary						
From	Julie Love						
Date	August 31, 2016						

This memorandum serves to summarize previously conducted technical studies evaluating the potential for wetlands at the Puente Power Project (P3) as documented in the Application for Certification.

Local Habitats

P3 will encompass approximately 3 acres within the fenced boundaries of the existing MGS, near the northern edge of the facility. The site itself has been graded and subjected to various human uses in the past, and the vegetation is significantly disturbed. Dominant plants include many invasive weeds, including freeway iceplant (*Carpobrotus edulis*), slenderleaf ice plant (*Mesembryanthemum nodiflorum*), and Russian thistle (*Salsola tragus*); and horticultural species such as lollypop tree (*Myoporum laetum*). Remnant coastal dune scrub habitats occur in the southern portion of the site, supporting native species including coyote brush (*Baccharis pilularis*) and woolly seablite (*Suaeda taxifolia*). However, even this area is disturbed, and invasive species are prevalent. Soils in the P3 site appear to have been artificially compacted, and infiltration may be impaired. The presence of woolly seablite, a facultative wetland plant commonly found in salt marshes, supports this notion, because unimpacted soils in the vicinity are generally sandy and well-drained, and would not naturally retain water in the upper soil layers as required by this species.

Wetlands and Other Waters of the United States

During the botanical survey conducted in March 2015, a wetland delineation was performed within the P3 site. The investigation revealed that wetland hydrology and hydric soils were absent, but that the disturbed vegetation on the site exhibits a predominance of salt-tolerant hydrophytes. Because all three wetland parameters (hydrophytic vegetation, wetland hydrology, and hydric soils) were not present, the site does not constitute a wetland as defined by U.S. Army Corps of Engineers (USACE) regulations.

The California Coastal Act provides protection for wetlands within California's Coastal Zone, and defines wetlands as "...lands within the Coastal Zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens." The Coastal Commission has issued regulations and guidance directing that the delineation of coastal wetlands should employ the



three-parameter approach used by the USACE, but that a positive wetland determination can be made based on the presence of any one parameter, rather than requiring all three parameters to be present. Although the P3 site exhibits a predominance of hydrophytic vegetation, this vegetation is the result of chronic disturbance and human intervention, and is not indicative of wetland conditions.

As shown on data sheets in Attachment 1, the P3 site contains three hydrophytes among its dominant plant species: woolly seablite, slenderleaf ice plant, and pickleweed (Sarcocornia pacifica). However, many obligate upland species are also abundant on the site, including coyote brush, freeway ice plant, Russian thistle, and others. It is uncommon for wetland species and obligate upland plant species to co- occur this extensively in natural settings, and the presence of hydrophytes on the P3 site is probably the result of past human uses. As described above, the P3 site was graded and used for storage of dredged spoils from the Edison Canal for a period of several years. Because the Edison Canal is a saltwater environment, it is presumable that the dredged spoils placed on the P3 site were saturated with saltwater, and that during the time of storage, saltwater infiltrated into the site soils. Over time, this practice likely resulted in an accumulation of salt in the site soils, making them more suitable for salt- tolerant plant species such as woolly seablite, slenderleaf ice plant, and pickleweed. This hypothesis is supported by the fact that none of the surrounding areas in the MGS facility, which exhibit disturbed conditions similar to the proposed P3 site but which were not used for storage of dredged material, support these salt-tolerant hydrophytes. Although it is not known, it is possible that the stored spoils may have contained propagules of these species and facilitated their introduction onto the site.

Due to the highly disturbed and anthropogenically influenced nature of the onsite vegetation, this parameter is not a reliable indicator of the site's wetland status. As directed by the USACE's Arid West Regional Supplement to the Wetland Delineation Manual, in cases where one parameter is naturally problematic or significantly disturbed, the other two parameters should be relied upon in greater detail for making the wetland determination. The site did not exhibit wetland hydrology or hydric soils, suggesting that despite the presence of hydrophytic vegetation under disturbed conditions, the site does not qualify as a wetland. This notion is further supported by a direct comparison with wetland definition in the Coastal Act statute: the site is not covered periodically or permanently by shallow water, and is not similar to a marsh or swamp. The site contains no hydrologic features, receives no hydrologic inputs other than direct rainfall, and is not connected to freshwater or tidal habitats. Indicators of wetland hydrology, which should have been evident if the site ponded water for considerable periods of time, were found to be absent. Considering this information, the P3 site is not a wetland as defined by the Coastal Act.

Attachments

Attachment 1 – USACE Wetland Determination Data Forms

ATTACMENT 1

WETLAND DETERMINATION DATA

FORMS

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Ma	andalay Puente Power S	ite	City/County	:	Oxnard/Ventura	Sampling Date	: 3/12/20)15 and 4/0	2/15
Applicant/Owner: NF	RG Energy			State	: CA Sampling Point: 1				
Investigator(s): Ju	Investigator(s): Julie Love and Elihu Gevirtz			Section, Township, Range:					
Landform (hillslope, terrace,	Local Relief (concave, convex, none): None Slope (Slope (%): 0-1%		
Subregion (LRR): C	La	at: 34.2080839)	Long	: -119.2512036	[Datum: N	NAD 83 UTI	VI Zone 1
Soil Map Unit Name:					NWI Classification	:			
Are climatic/hydrological con	ditions on the site typica	for this time o	of the year?	ত	Yes 🗌 No				
Are Vegetation, 🔲 So	il, 🖸 or Hydrold	gy 🗖	significantly	disturbed?	Are "Normal Circur	nstances" Presen	nt? 🗆	Yes 🗆	No
Are Vegetation, So	Are Vegetation, Soil, O or Hydrology			blematic?	(If needed, explain	answers in remai	rks)		
SUMMARY OF FINDI	NGS - Attach site r	nap showi	ng sampli	ing point	locations, trans	sects, import	tant fea	atures, e	tc.
Hydrophytic Vegetation Pres	ent? 🖸 Yes [] No	T						
Hydric Soil Present?	□ Yes □	No	Is the Sam	pled Area		Yes	🖸 No)	
Metland Hydroleev Dresent2		No	within a we	mano 7					
Remarks:			Į						
Typical conditions but drough 2005 with water from dredge	nt. Vegetation sampled 3 spoils from Mandalay ca	/12/15. Soil an inal that cover	d hydrology s ed site. Wate	sampled 4/2 r gradually l	/15. Historically distu eft tubes. Tubes were	rbed w/ vehicles a e on site for 2-3 y	& equipri ears.	nent. Floode	ed in
VEGETATION									
Tree Stratum	Plot size: 30ft radius	Absolute %	Dominant	Indicator	Dominance Test V	Vorksheet;			
		Cover	Species?	Status	Number of Dominal	nt Species That			
1. N/A			L		Are OBL, FACW, o	r FAC:	-		<u>3 (</u> A)
2.					Total Number of Do	minant Species			
3					Bereest of Deminer	t Cresies That			<u>5</u> (B)
4	Total Cove	r			Are OBL, FACW, or	r FAC:		609	6 (A/B)
Capling/Chrub Stephurg	Dist size: 20ft radius	···	1						- (/ 0.2)
Sapling/Shrub Stratum					Prevalence Index	worksheet:			
1. Baccharis pilularis		5	Y	UPL	Total %	Cover of:	Mult	iplied by:	
2. Suaeda taxifolia		20	Y	FACW	OBL species	45	x1 =	45	
3.					FACW species	20	x2 =	40	
4.					FAC species	23	X3 =	69	
5.	Total Cove	r 25			UPL species	25	x4 =	125	
		20			Column Totals:	115	(A)	287	(B)
Herb Stratum	Plot size: 10ft radius				Prevalence index = B/A = 2.495652174		2174		
1. Salicornia pacifica (NWI: S	Sarcocomia pacifica)	45	Y	OBL	Flevalence			2.43000	21/4
2. Carpobrotus edulis		20	Y	UPL	Hydrophytic Veget	ation Indicators	:		(
3. Mesembryanthemum nod	iflorum	23	Y	FAC	Dominance Te	est is >50%			
4. Salsola tragus (dead/alive)	2	N	FACU					
5.					Prevalence Inc	dex is ≤3.0'			
6.		+			. Marshalasiaal	A destation of (De		enertine dat	- i-
/	· · · · · · · · · · · · · · · · · · ·				Remarks or or	a separate shee	ovide suj st)	porung dar	an
<u>.</u>	Total Cove	r 90				•			
Woody Vine Stratum	Plot size: 10ft radius				Problematic H	ydrophytic Vegeta	ation ¹ (Ex	(plain)	
1. N/A					1.				
2.					Indicators of hydric	soil and wetland	hydrolog	ly must be p	present.
	Total Cove	r.			Hydrophytic	— ··		a.	
% Bare Ground in Herb Strat	um: 10	% Cover of	Biotic Crust:	0	Vegetation Present?	⊡ Yes		L) No	
Remarks: Suaeda taxifolia/Mesembryar	nthemum nodiflorum com	munity.							

SOIL	SOIL Sampling Point:1							
Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth	Matrix	<	Re	edox Fea	tures			
(inches)	Color (moist)	%	Color (moist) % Type ¹ Loc ² Texture Remarks		Remarks			
0-16	10YR 3/2	100	N/A SaLo very gritty			very gritty		
		[
	·	<u> </u>						
		h			-			
<u> </u>		[[[<u> </u>	
							ļ	
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, ² ocation: PL=Pore Lining, RC=Root Channel, M=Matrix						hannel M≖Matrix		
			t				,	
Hydric Soil	Indicators: (Applica	able to all LRR	s, unless otherw	/Ise note Peday (S	d.)			Indicators for Problematic Hydric Solis":
Histic E	pinedon (A2)			d Matrix	(S6)			\square 2 cm Muck (A10) (LRR C)
Black H	istic (A3)			Mucky M	lineral (F	1)		Reduced Vertic (F18)
Hydrone	en Sulfide (A4)			Gleved I	Matrix (E2	·? •}		Red Parent Material (TE2)
Stratifie				oreyeu i ad Matriv	/E3)	.)		Other (Evaluin in Remarks)
	uck (A9) (LRR D)	-,		Dark Sur	(F6)			
	d Below Dark Surfac	e (A11)		ed Dark S	Surface (F	7)		
Thick D	ark Surface (A12)	- ()		Depressi	ions (F8)	• /		
Sandy M	Aucky Mineral (S1)		U Vernal	Pools (F	9)			³ Indicators of hydrophytic vegetation and
Sandy (Sleved Matrix (S4)				-,			wetland hydrology must be present
Restrictive I	ayer (if present):							
Type:						Ну	dric Soil Pres	sent? 🔲 Yes 🗹 No
Depth (inches):								
Remarks:								
Soils may be	influenced by prior s	stock piling/stor	age of estuarine s	spoils and	d water th	at were d	leposited on	the site in 2005 and remained there for 2-3 years.
May not be s	ignificant anymore ri	Naturany proble	smalic sandy soll.	Shovern	eiusaiat	TO INCINES	s ane to pig to	ock. Rocks unoughout, maybe asphalt?
			·····					
HYDROL	DGY							
Wetland Hyd	trology indicators:	ster in eufficient	N					Secondary Indicators (2 or more required)
Primary Indic	ators (any one indica	ator is sufficient	.) []					Vvaler Marks (B1) (Riverine)
Surface	Water (A1)		Satt Crust (E	511) (D40)				Sediment Deposits (B2) (Riverine)
	ater Table (A2)			(812)	(240)			
	on (A3) Lecter (B4) (Neuroleceri			Intebrates	(B13)			
	aiks (Bi) (Nonriven	nie) nikuonia - \			ui (U1) a ala== ' '	uine De-	+= (C2)	This Muck Surface (CZ)
	n Depusits (B2) (Nor	niveriile) dae)		rzopnere	a along Li d iron (Cri		ia (03)	
	Soil Cracke (P6)	nie)		Reductio	u iron (C4 n in Plow	t/ ed Soile /	(C6)	Saturation Visible on Aerial Imagen (C9)
	on Vicible on Aerial II	magaaa (87)		in in Per	narke)		(00)	Shallow Aquitard (D3)
Water-S	tained Leaves (89)	magery (D7)			na(KS)			EAC-Neutral Test (D5)
Field Oheen	(ations:		· · · · · · · · · · · · · · · · · · ·				[
Surface Wate	er Present?	Yes 🗹 I	No Depth (inches):				
Water Table	Present?	Yes 🖸 I	VO Depth (inches):				
Saturation Pr	esent? (Includes	Yes 🗹 I	VO Depth (inches):			Wetland Hy	drology Present? 🔲 Yes 🗹 No
capillary fring	e)			· •				
Describe Rec	orded Data (stream	gauge, monitor	ing well, aerial ph	otos, pre	vious insp	pections)	, if available:	
Remarks:								
		F	AC Neutral = 2:2.	Conditior	ns are sar	ne for 3/1	2/15 and 4/1	2/15.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site:	Mandalay Puente Power Site	9	City/County	:	Oxnard/Ventura	Sampling Date	: 3/12/201	5 and 4/02	2/15
Applicant/Owner:	NRG Energy			State	: CA	Sampling Point	: 2		
Investigator(s):	Julie Love and Elihu Gevirtz			Sectio	n, Township, Range	:			
Landform (hillslope, terra	ce, etc.): Flat		Loca	I Relief (con	cave, convex, none)	None		Slope (%)): 0-1%
Subregion (LRR):	C Lat	34.2080103	1	Long	: -119.2515025	[Datum: NA	AD 83 UTA	Zone 1
Soil Map Unit Name:					NWI Classification:	:			
Are climatic/hydrological	conditions on the site typical t	or this time o	f the vear?	Ū	Yes 🗌 No		,		
		<u>, </u>	significantly	disturbed?	Ara "Normal Circun	netonoor" Brecor		Yes [7]	No
		<u>, </u>	sigrancarity		Ale Normal Circun	istances Preser			
	Soll, 🗠 or Hydrolog	<u>y u</u>	naturally pro	polematic?	(ir needed, explain	answers in rema	:KS)		
SUMMARY OF FIN	DINGS - Attach site m	ap snowli	ng sampli	ng point	locations, trans	sects, impor	ant feat	ures, et	<u>c.</u>
Hydrophytic Vegetation F	resent? 🗹 Yes 🛛	No	is the Same	led Area					
Hydric Soil Present?	🗌 🗌 Yes 🖸	No	within a We	tland?	🗋 Yes 🛛				
Wetland Hydrology Prese	ent? 🛛 Yes 🖸	No							
Remarks:									
Typical conditions but dro	ought. Vegetation sampled 3/1	2/15. Soil an	d hydrology :	sampled 4/2	15. Site previously d	isturbed w/ vehic	les & equip	pment. Flo	oded in
2005 with water from dre	dge spoils from Mandalay car	al in geo tube	es. Tubes we	ere on site to	r 2-3 years.				
VEGETATION									
Tree Stratum	Plot size: 30ft radius	Absolute %	Dominant	Indicator	Dominance Test V	Vorksheet:			
		Cover	Species?	Status	Number of Domina	nt Species That			
1. N/A					Are OBL, FACW, O	r FAG:		2	<u>?</u> (A)
2.		L			Total Number of Do	minant Species			
3.					Across All Strata:			2	2 (B)
4					Percent of Dominar	nt Species That			
	Total Cover.				AIE OBL, FACW, O	FAC.		100%	(A/B)
Sapling/Shrub Stratum	Plot size: 20ft radius				Prevalence Index v	worksheet:			
1. Suaeda taxifolia		65	Y	FACW	Total %	6 Cover of:	Multip	lied by:	
2.					OBL species	3	x1 =	3	
3.					FACW species	65	x2 =	130	
4.					FAC species	17	x3 =	51	
5.					FACU species	3	x4 =	12	
	Total Cover:	25			UPL species	5	x5 =	25	
Herb Stratum	Plot size: 10ft radius				Column Totals:	93	(A)	221	(B)
					Prevalence Index = B/A = 2.37634400		086		
1. Salicornia pacifica (NV	VI: Sarcocornia pacifica)	3	<u>N</u>	OBL					
2. Carpobrotus edulis		<u> </u>	<u>N</u>	UPL	Hydrophytic Veget	ation indicators	:		
3. Mesembryanthemum	nodiflorum	15	Y	FAC	Dominance Te	est is >50%			
4. Salsola tragus (dead/a	llive)	1	<u>N</u>	FACU		1			
5. Solanum douglasii		1	<u>N</u>	FAC	Prevalence Inc	dex is ≤3.0'			
6. Atriplex semibaccata		2	<u>N</u>	FAC	l				.
7. Medicago polymorpha		<1	N	FACU	Morphological Remarks or or	Adaptations' (Pro	ovide supp	orting data	in
<u>8.</u>	Talal Cause				Kennarke er er		.,		
	I otal Cover.	28				udrophytic Veget	tion ¹ (Eva	lain)	
Woody Vine Stratum	Plot size: 10ft radius					ydrophylic vegeta	mon (cxp	an i j	
1. N/A					ł,				
2.					Indicators of hydric	soil and wetland	hydrology	must be p	resent.
	Total Cover:				Hydrophytic				
% Bare Ground in Herb S	Stratum: 5	% Cover of I	Biotic Crust:	0	Vegetation	☑ Yes	C] No	
					Fiesent?				
Remarks:									
Suaeda taxifolia/Mesemb	ryanthemum nodiflorum comn	nunity.							1

SOIL	OIL Sampling Point: 2							
Profile Des	Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)							
Depth	Matrix	{	Redox Features				1	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-3.5	10YR 3/2	100	N/A				SaLo	
3.5-4.5	10YR 4/2	100		<u> </u>		<u> </u>	SaLo	
4.5-12	10YR 2/2	100					SaLo	
4 5-12	Rust	<1					Salo	Two <1mm specks of rust color on soil clumps/roc
				<u> </u>				
						L		
¹ Type: C=C	oncentration, D=Depl	etion, RM=Red	uced Matrix.	² Location	n: PL=Po	re Linin	g, RC=Root C	hannel, M=Matrix
Hydric Soll	Indicators: (Applica	able to all LRR	s, unless otherv	/ise note	d.)			indicators for Problematic Hydric Soils ³ :
Histoso	I (A1)		Sandy	Redox (S	55)			1 cm Muck (A9) (LRR C)
Histic E	pipedon (A2)		C Strippe	ed Matrix	(S6)			2 cm Muck (A10) (LRR B)
Black H	listic (A3)		🗌 Loamy	Mucky N	lineral (F	1)		Reduced Vertic (F18)
Hydroge	en Sulfide (A4)		Loamy	Gleyed M	Matrix (F2	:)		Red Parent Material (TF2)
Stratifie	d Layers (A5) (LRR C)	Deplet	ed Matrix	(F3)			Other (Explain in Remarks)
	uck (A9) (LRR D)		Redox	Dark Sur	face (F6)			
Deplete	d Below Dark Surface	e (A11)		ed Dark S	Surface (F	-7)		
	ark Surface (A12)		니 Redox	Depressi	ions (F8)			
Sandy M	Mucky Mineral (S1)		L Vernal	Pools (F	9)			Indicators of hydrophytic vegetation and
Sandy (Gleyed Matrix (S4)					<u> </u>		wetland hydrology must be present.
Type:	Layer (if present):					н	vdric Soil Pres	sent? 🔲 Yes 🖾 No
Depth (i	inches):							
Remarks:								
Soils may be	influenced by prior s	tock piling/stor	age of estuarine :	spoils and	d water th	at were	deposited on	the site in 2005 and remained there for 2-3 years.
May not be s	Ignificant anymore? I	Naturally proble	matic sandy soil.	Shovel r	efusal at	12 inche	s. Rocks thro	ughout but not as much as Sample Point 1. Soil is
little clay. Lic	ihter laver 3.5-4.5 doe	es all around th	e pit		il-like loc	KS. OdL		ch hubben but leels and sticks together like there's a
HYDROL	OGY							
Wetland Hyd	drology indicators:							Secondary Indicators (2 or more required)
Primary Indic	cators (any one indica	itor is sufficient)				······	Water Marks (B1) (Riverine)
Surface	Water (A1)		☐ Salt Crust (I	311)				Sediment Deposits (B2) (Riverine)
High Wa	ater Table (A2)		L Biotic Crust	(B12)				Drift Deposits (B3) (Riverine)
Saturati	on (A3)			rtebrates	(813)			Drainage Patterns (B10)
	narks (B1) (Nonriveri	ne)		unice Od	or (C1) - elecció	lular D-	ata (02)	Ury-Season vvater Lable (C2) This Musk Surface (C7)
	ni Deposits (B2) (Nor	iriverinê) ine)		Lophere	s along Li	wing Kö N	uis (U3)	min Muck Surrace (C7) Crowfieb Burrows (C2)
	Soil Cracks (BS)	ine)		Peductio	n in Plow	t) od Soile	(C6)	Crayist Burlows (Co) Saturation Visible on Aerial Imageny (CO)
	on Visible on Aerial Ir	magery (87)	Other (Expla	in in Ren	narke)	60 0013	(00)	Shallow Aquitard (D3)
Water-S	Stained Leaves (B9)	nagory (D1)			ilainay			FAC-Neutral Test (D5)
Field Obsen	vations:		·····					
Surface Wate	er Present?	Yes 🖸 M	VO Depth (inches):				
Water Table	Present?	Yes 🖸 N	NO Depth (inches):				
Saturation Pr	resent? (Includes 🛛	Yes 🗹 🕅	NO Depth (inches):			Wetland Hy	/drology Present? 🔲 Yes 🗹 No
capillary fring	je)							
Describe Red	corded Data (stream (gauge, monitor	ing well, aerial ph	otos, pre	vious insp	pections), if available:	
Remarke:								······································
Including.		=/	C Neutral = 1.0	Condition	is are can	ne for 2	12/15 and 4/1	12/15
		F#	(o risurdi - 1.0.	Condition	a a c adi		12/10 anu 4/1	12 TO.
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ATTACHMENT B

a.

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of Southern California Edison Company (U338E) for Approval of the Results of Its 2013 Local Capacity Requirements Request for Offers for the Moorpark Sub-Area.

Application 14-11-016 (Filed November 26, 2014)

REPLY BRIEF OF NRG ENERGY CENTER OXNARD LLC AND NRG CALIFORNIA SOUTH LP

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Attorneys for NRG Energy Center Oxnard LLC and NRG California South LP

August 5, 2015

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BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of Southern California Edison Company (U338E) for Approval of the Results of Its 2013 Local Capacity Requirements Request for Offers for the Moorpark Sub-Area.

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REPLY BRIEF OF NRG ENERGY CENTER OXNARD LLC AND NRG CALIFORNIA SOUTH LP

NRG Energy Center Oxnard LLC ("NECO") and NRG California South LP ("NRG South") (together, "NRG") submit their reply brief pursuant to Rule 13.11 of the Rules of Practice and Procedure of the California Public Utilities Commission ("Commission"), and the schedule in the Assigned Commissioner's Scoping Memo and Ruling dated March 13, 2015. This reply brief responds to the opening briefs filed by the Office of Ratepayer Advocates ("ORA"), the City of Oxnard ("City"), Sierra Club, California Environmental Justice Alliance ("CEJA"), Center for Biological Diversity ("CBD") and World Business Academy ("WBA").

I. INTRODUCTION

ORA, Sierra Club and WBA oppose approval of the tolling agreement with NRG South for the existing 54 megawatt ("MW") Ellwood Generating Station ("Ellwood"), which will be refurbished (without any change in size or capacity) to achieve a remaining 30-year design life ("Ellwood Refurbishment Contract"). The Ellwood Refurbishment Contract was selected as a mutually inclusive offer with a tolling agreement for a new 0.5 MW energy storage facility to be built at the Ellwood site ("Ellwood Storage Contract"). As explained below, procurement of the bundled Ellwood Refurbishment Contract and Ellwood Storage Contract is consistent with the Commission's procurement rules and the procurement authority of Southern California Edison Company ("SCE"). Approval of these contracts adds energy storage (which will be incremental capacity) at the Ellwood site, and lengthens Ellwood's useful life and enhances its operations, all as allowed under the Commission's procurement rules. Selection of the Ellwood Refurbishment Contract is also consistent with the Commission's prior decision approving an application by Pacific Gas and Electric Company ("PG&E") for approval of the results of its new generation request for offers ("RFO"), which procured contracts for new, incremental capacity and contracts for existing capacity that did not count toward PG&E's new generation procurement authorization.

The City, Sierra Club, CEJA, CBD and WBA oppose approval of the resource adequacy purchase agreement with NECO for the 262 MW simple cycle peaking facility known as the Puente Power Project ("Puente") (the "Puente Contract"). Puente will be built on a portion of the site of the existing Mandalay Generating Station ("Mandalay") in Oxnard, which is a plant that uses once-through cooling ("OTC") technology and is scheduled to retire. The City and Sierra Club rely on a modeling exercise prepared by the City's retained consultant, Dr. Revell, to assert that locating Puente at the Mandalay site will be "unreliable." As explained below, the modeling results have been discredited in the record and shown to be unreliable. The assertions of the City and Sierra Club do not support a finding regarding Puente's future reliability. The City also attempts to discredit the testimony of NECO's expert witness, Mr. Mineart, but the City's arguments misrepresent the record and are not credible.

The City also wrongly argues that procurement of the Puente Contract does not ensure reliability in the Moorpark sub-area because Puente is not in Goleta. The City fails to understand that Decision 13-02-015 authorized procurement for the Moorpark sub-area to address reliability issues arising largely due to the retirement of almost 2,000 MW of OTC capacity. All of this existing OTC capacity is located in Oxnard. The Puente Contract provides the opportunity to replace the almost 2,000 MW of aging OTC capacity with 262 MW of new fast-start peaking

capacity that repurposes and reuses existing gas and transmission infrastructure at the Mandalay site. This is an ideal local reliability solution.

The City and Sierra Club urge the Commission to delay approval of the Puente Contract until after the California Energy Commission ("CEC") renders its licensing decision for the Puente Application for Certification ("AFC"), but they have not shown how the CEC's decision would help "illuminate" issues, "assist" review, or allow the Commission to "better evaluate" the Puente Contract. The Puente Contract is final and has been executed by SCE and NECO. Delay serves no valid purpose. In the Puente Contract, NECO agreed to assume the risk of an unfavorable CEC licensing decision. The Commission should approve the Puente Contract without delay, and thereby allow NECO to undertake its obligation to obtain CEC approval for Puente in accordance with its contractual commitment. This result would be consistent with the Commission's prior decisions approving contracts for new generation.

The City wrongly asserts that Commission approval of the Puente Contract will prejudice the CEC's ability to consider a full range of alternatives and potential mitigation for Puente. This is not true. The City's relies entirely on the "Alternatives" section of the AFC for Puente, which was prepared by NECO's permitting team and submitted to the CEC. Regardless of what is written in the AFC, it is obvious that an applicant cannot dictate what the CEC will consider or require as part of its review of the Puente AFC. The City's argument is contrary to all reason and common sense. NECO's statements in the AFC are also consistent with CEQA, which does not require consideration of alternatives that cannot achieve a project's fundamental purpose.

The City further errs in asserting that Commission approval of the fixed price in the Puente Contract somehow limits the CEC's authority to require changes in the Puente project that might substantially increase its costs. This is wrong. The Puente Contract specifies a fixed resource adequacy payment with no mechanism for increasing that price during the contract term. Under the Puente Contract, NECO will be responsible for paying for and implementing any mitigation required by the CEC. Commission approval of the Puente Contract does not, and could not, limit the CEC's authority to consider and require mitigation that is shown to be necessary to mitigate significant environmental impacts or ensure reliability.

The City also wrongly argues that the Commission must act as the lead agency under the California Environmental Quality Act ("CEQA") and conduct an environmental review of Puente. It is well established that Commission approval of a utility power purchase agreement is not a "project" for purposes of CEQA and does not trigger a requirement for environmental review under CEQA.

In a new twist on an old, wrong argument, the City alleges that the Commission must act as the lead agency under CEQA for Puente because approval of the Puente Contract would foreclose alternatives or mitigation measures that would ordinarily be part of CEQA review of Puente. This is also wrong. The City again distorts the statements in the Alternatives section of the Puente AFC. NECO does not have the power to dictate or constrain the CEC's authority to consider project alternatives or require mitigation. The City also misrepresents the testimony of NECO's witness, Ms. Gleiter, by alleging that Ms. Gleiter testified that Commission approval of the Puente Contract "makes it far more likely that the CEC will approve" the Puente AFC. In actuality, when Ms. Gleiter was asked to confirm this during cross-examination, she replied: "No, that is definitely not true."¹ Contrary to the City's arguments, Commission approval of the Puente Contract does not, and could not, commit the CEC to approve the Puente AFC or limit the scope of the CEC's environmental review of Puente.

The City also alleges that Puente provides more capacity than needed, but the City's position is contrary to the record. The CAISO's testimony shows that the selected contracts actually are only a portion of the resources needed to meet reliability needs in the Moorpark

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Reporter's Transcript, Volume 2 (NRG/Gleiter), p. 340 lines 16-21.

sub-area. SCE's testimony also explains that the Puente Contract was necessary to meet the minimum procurement level of 215 MW that the Commission required in Decision 13-02-015.

CEJA argues that SCE's evaluation of offers in the RFO failed to comply with Commission decisions requiring consideration of environmental justice impacts, but its argument misinterprets the Commission's guidance on the use of qualitative considerations in an RFO. In directing utilities to consider certain qualitative bid evaluation metrics, the Commission did not specify that utilities must give disproportionate consideration to environmental justice factors over other qualitative considerations such as the preference for using brownfield sites rather than greenfield sites. The Commission also did not specify that qualitative considerations would override the utilities' quantitative analysis of which resources are the lowest cost and best fit for the utility's need. SCE has shown that the Puente Contact was the most cost-effective gas-fired offer, and it also satisfies the Commission's preference for locating new capacity at brownfield sites instead of greenfield sites. Siting Puente at the existing Mandalay site also provides environmental benefits because it provides the opportunity to replace almost 2,000 MW of aging OTC capacity with 262 MW of new fast-start peaking capacity. Construction of Puente thus would result in a net environmental benefit to the local community.

CEJA also incorrectly argues that SCE's selections of the Puente Contract and the Puente Refurbishment Contract were inappropriately based on a "qualitative" assessment regarding the risk of resource shortages due to the possible retirement of existing non-OTC units owned by NRG South. This claim is contrary to the record, which shows that SCE selected the winning contracts for the Moorpark sub-area based primarily on its quantitative analysis of net market value. Additional qualitative factors may have supported its selection, but the Puente Contract won due to its net market value. SCE's testimony also shows that the Ellwood Refurbishment Contract offered a low cost solution to improve reliability in the Goleta service area. The Independent Evaluator performed an independent, parallel evaluation of the offers and confirmed that the contracts' economics and their general terms and conditions represented the best resources available from a competitive solicitation.

Sierra Club, the City and WBA unreasonably urge the Commission to reject the RFO results, and to require SCE to start over and conduct another RFO to procure a greater quantity of preferred resources. SCE explained that it selected every preferred resources offer for the Moorpark sub-area other than energy storage, and still had to select a large gas-fired generation offer to meet the minimum procurement authorization of 215 MW. Given that SCE has just completed an exhaustive RFO process, it is not reasonable to expect that the results of a second RFO would produce materially greater amounts of preferred resources. WBA's witness also confirmed that the resources advocated by WBA were not bid into the RFO and are "speculative numbers." It would not be prudent to risk local reliability based on speculation about alternative resources.

II. DISCUSSION

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A. The Ellwood Refurbishment Contract Does Not Violate Commission Rules Or SCE's Procurement Authority.

ORA and Sierra Club oppose approval of the Ellwood Refurbishment Contract based on their view that SCE lacks authority to procure capacity from a refurbished existing plant in the LCR RFO.² Sierra Club argues that SCE violated procurement rules adopted on page 28 of Decision 14-02-040, but review of that decision shows that SCE's procurement of the bundled Ellwood Refurbishment Contract and Ellwood Storage Contract is consistent with the Commission's procurement rules. In Decision 14-02-040, the Commission stated:

While current rules do not specifically prohibit the combination of RFOs for existing or new facilities, we hereby clarify that upgraded and repowered plants are allowed to bid in new generation RFOs. We clarify the rules so as to oversee the

ORA Opening Brief, pp. 5-7; Sierra Club Opening Brief, pp. 5-7.

administration of RFOs that fill defined reliability needs in the most cost effective way.

Allowing for the incremental capacity of existing plants or repowered plants to participate in long-term RFOs appropriately acknowledges the varied technological capabilities and improvements possible with today's generation stock, and may alleviate some need to build additional capacity. In addition, it may be possible for an existing power plant to add capabilities (e.g., energy storage, more optimal ramp rate, or start up times) that would enhance the operation of the plant and increase its value to the system.

In discussing this issue, first we need to define the term "incremental capacity." We will take SCE's recommendation that the definition should be "capacity incremental to what was assumed in the underlying needs assessment." In other words, these are net additions. We agree with SDG&E that an existing facility may provide value to IOU ratepayers if it has a useful life extending beyond its current contract or is able to lengthen its useful life by upgrading or repowering various facility components. The following terms are defined herein:

- <u>Upgraded plants</u>: Upgrades are defined as expanding the generation capacity at, or enhancing the operation of, a generation facility, so long as such incremental MW and/or enhanced operating characteristics can provide the necessary attributes that the Commission has authorized the utility to procure. An upgraded plant or a plant with incremental capacity additions would be a plant where the main generating equipment is retained and continues to operate.
- <u>Repowered plants</u>: Repowers are defined as capital investments that extend the useful life of a generation facility, after the planned retirement date. A repowered facility is a facility where the main generating equipment (such as the turbine) is changed out for new equipment.³

Procurement of the bundled Ellwood Refurbishment Contract and Ellwood Storage Contract is consistent with these rules. First, as quoted above, the Commission recognized that the rules do not "prohibit the combination of RFOs for existing or new facilities." Sierra Club

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Decision 14-02-040, pp. 28-29 (emphasis added).

tries to read such a prohibition into the rules, but none actually exists. Second, the combination of the Ellwood Refurbishment Contract and the Ellwood Storage Contract adds energy storage, which will be incremental capacity and a "net addition" at the existing Ellwood site. This is specifically allowed under the rules cited above. Third, refurbishing the Ellwood plant will "lengthen its useful life" and "enhances the operation of" the existing Ellwood plant, and provides the necessary attributes that SCE is authorized to procure. This is specifically allowed under the definition of an upgraded plant.

Sierra Club also misses the point that when a plant is repowered or upgraded to add incremental capacity, the utility would be expected to contract for all of the plant's available capacity, not just the portion that is incremental. Thus, while only the incremental capacity or "net addition" counts toward the amount of capacity that the utility is authorized to procure from new generation, it is reasonable to expect the utility to contract for all of the available capacity in order to meet reliability needs and obtain the best value from the upgrade. Certainly it would make no sense to buy only incremental capacity without also taking advantage of the existing capacity that was assumed to continue operating in the underlying need determination. To continue operating, an expanded plant also would need to have an off-taker for all of the plant's capacity, not just the portion that is incremental.

The Commission has previously approved contracts with existing plants that were procured through a utility's long-term RFO for new generation. In Decision 10-07-045, the Commission approved three contracts procured by PG&E through its 2008 long-term RFO. Of the three approved contracts, only one was for a new generating facility. The other two approved contracts were (1) a tolling agreement for the existing 674 MW Contra Costa Generating Station, and (2) a power purchase agreement for the existing 129 MW Midway Sunset Project. The Commission approved both contracts as part of its approval of PG&E's RFO results, and neither

contract involved upgrades or incremental capacity.⁴ This precedent supports approval of the Ellwood Refurbishment Contract in this proceeding. As stated above, in Decision 14-02-040 the Commission noted that current rules do not prohibit the combination of RFOs for existing or new facilities, and did not adopt such a prohibition.

This precedent also shows that ORA's arguments are unfounded. ORA argues that the Ellwood Refurbishment Contract exceeds SCE's procurement authority and "subverts" the long-term procurement process.⁵ As explained above, the procurement rules do not prohibit SCE from entering into agreements that accomplish the dual purpose of adding incremental storage capacity at Ellwood and lengthening its useful life. The Commission also previously approved the results of PG&E's long-term RFO process, which included two contracts for existing generation. ORA also acknowledges that SCE could contract with Ellwood through "bilateral contracts."⁶ If SCE had executed the Ellwood Refurbishment Contract through a bilateral negotiation, SCE would file an application to obtain Commission approval. ORA has not shown why a separate bilateral negotiation and application process for the Ellwood Refurbishment Contract in the RFO for the Moorpark sub-area, and it is most efficient to consider the Ellwood Refurbishment Contract in this proceeding given its role in addressing unique reliability concerns in a portion of the Moorpark sub-area.

ORA also mistakenly suggests that the Ellwood Refurbishment Contract has a "premium capacity price" similar to new capacity.⁷ This is not true. SCE has explained that the Ellwood Refurbishment Contract offers a low cost option for enhancing long-term reliability in the Goleta

⁴ Decision 10-07-045, pp. 36-40.

⁵ ORA Opening Brief, pp. 6-9.

⁶ ORA Opening Brief, p. 8.

⁷ ORA Opening Brief, p. 8.

service area.⁸ The Independent Evaluator also performed an independent, parallel evaluation of the offers and concluded that all of the selected contracts, which include the Ellwood Refurbishment Project, merit Commission approval "because the contracts' economics and their general terms and conditions represented the best resources available from a competitive solicitation."⁹

Finally, ORA's argument that the 54 MW Ellwood Refurbishment Contract must count toward the 215 to 290 MW of incremental procurement authorized in Decision 13-02-015 makes no sense.¹⁰ The 54 MW is existing, not incremental, capacity and SCE has been very clear on that point. The CAISO's studies also assumed that Ellwood would continue operating. Treating Ellwood as incremental capacity would falsely inflate the amount of incremental capacity to be added to the system.

B. The City Has Not Shown That Puente Will Be "Unreliable."

The City relies solely on the modeling exercise presented by its retained consultant, Dr. Revell, to allege that locating Puente at the Mandalay site would be "unreliable."¹¹ NRG's opening brief explained that the predictions of Dr. Revell's model have been shown to be inaccurate and flawed as applied to the Puente site. The model predicted that an El Nino-type storm event such as the one that occurred in January 1983 would flood the entire Puente site under current conditions, but that prediction is contrary to what actually happened. The January 1983 El Nino storm and other large storm events have occurred in the past, and the resulting waves and storm surges have had no impact to the Puente site – there was no flooding

⁸ Exhibit SCE-7 (Cushnie), p. 6 lines 15-17.

⁹ Exhibit SCE-2, Appendix D (Independent Evaluator Report), p. 39.

¹⁰ ORA Opening Brief, p. 6.

¹¹ City of Oxnard Opening Brief, pp. 6-7 and Exhibit A. Sierra Club makes the same assertions, but relies solely on the reports provided by the City's consultants. Sierra Club Opening Brief, pp. 2-4.

and no impact to Mandalay's operations.¹² Since the 1983 event, the beach fronting the Puente site has accreted and is now wider than it was in 1983.¹³ In addition, as can be seen in the historic photos included with Mr. Mineart's testimony, foredunes have formed and stabilized farther out towards the ocean.¹⁴ Thus, under "current conditions," the Puente site is not more vulnerable to coastal hazards than it was in 1983, but is actually less vulnerable. Under current conditions, the Puente site is protected by a big sandy beach that is 300 feet wide, with dunes that are 20 to 30 feet high.¹⁵ If the same event occurred today, the waves would break onto a wider beach and would need to erode the newly formed foredunes before impacting the main dunes protecting the Puente site. Given that no damage occurred in 1983, it is unlikely that any damage would occur under current conditions.

Under cross-examination, Dr. Revell admitted that he did not consider what actually happened (or did not happen) at Mandalay during the 1983 storm event that he modeled.¹⁶ Dr. Revell also admitted that he did not validate his model to actual events at the Mandalay site (which would have shown him that the model's predictions are wrong), and he did not try to calibrate the model with data regarding historical events to improve its accuracy.¹⁷ Dr. Revell also stated that he does not intend to re-evaluate the model's accuracy now that he has the benefit of knowing Mandalay's site experience.¹⁸ Dr. Revell also admitted that he is aware that the

¹² Exhibit NRG-2 (Mineart), Appendix B, p. 2; Reporter's Transcript (NRG/Mineart), Vol. 2, p. 382 line 24 through p. 383 line 3.

¹³ Exhibit NRG-2 (Mineart), Appendix B, p. 5 and Attachment 1.

¹⁴ Exhibit NRG-2 (Mineart), Appendix B, Attachment 1.

¹⁵ Exhibit NRG-2 (Mineart), Appendix B, p. 4; Reporter's Transcript (NRG/Mineart), Vol. 2, p. 386 lines 22-24.

¹⁶ Reporter's Transcript, Vol. 3 (City of Oxnard/Revell), p. 515 lines 20-25 and p. 517 lines 17-21.

¹⁷ Reporter's Transcript, Vol. 3 (City of Oxnard/Revell), p. 527 line 12 through p. 528 line 1.

¹⁸ Reporter's Transcript, Vol. 3 (City of Oxnard/Revell), p. 616 lines 11-25 ("And so it's possible, but I'm not currently – you know, it's not currently in the works.").

beach has grown.¹⁹ Despite these flaws in Dr. Revell's analysis, the City repeats its alarmist predictions and sticks to its story that Puente "faces significant coastal hazards."²⁰ As shown above, the City's assertions are not credible and do not support a finding regarding Puente's future reliability.

, The City also misleadingly suggests that by 2060 sea level rise will overtake the coast and flood "the majority of the Puente site" "under the lowest sea level rise projections."²¹ The City fails to note that this dire prediction also relies on Dr. Revell's modeling of an extreme storm event similar to the January 1983 storm, but occurring in 2060 in combination with projected sea level rise. As explained above, the model's inaccuracy in predicting impacts from a storm that actually occurred in 1983 with no impact to the Puente site shows that the model cannot be trusted to predict what could happen from a recurrence of the same storm in 2060. Dr. Revell's modeled results also assumed that coastal erosion would occur due to wave impacts and sea level rise, but this contradicts evidence showing that the beach has not eroded and instead has grown steadily.²² As Mr. Mineart explained, the likelihood of damage to the Puente site due to wave run up and storm surge flooding during an extreme storm event in 2050 "is remote," because for this to occur the beach would need to erode most of the way back to the dunes, a distance of over 300 feet.²³ Thus, for the City's prediction to be accurate, not only would the beach need to stop growing, it also would need to shrink substantially – by over 300 feet – to

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¹⁹ Reporter's Transcript, Vol. 3 (City of Oxnard/Revell), p. 595 lines 17-21.

²⁰ City of Oxnard Opening Brief, pp. 6-7 and Exhibit A.

²¹ City of Oxnard Opening Brief, p. 7.

²² Exhibit NRG-2 (Mineart), Appendix B, p. 5 (showing that the beach has widened by approximately 200 feet since 1947 and is currently approximately 300 feet wide); Reporter's Transcript, Volume 2 (NRG/Minear), p. 408 lines 22-25 ("You could see from the photos it has grown from '47 up to 2012 where our photos cover you can see that the beach has grown fairly regularly.").

²³ Exhibit NRG-2 (Mineart), Appendix B, p.4.

reduce the level of protection historically provided by the beach. The City has not shown that this is probable.

The City also relies on Dr. Revell's theory, which has been discredited, that sediment supply to the beach fronting the Puente site is likely to decrease and leave the Puente site more exposed to coastal hazards and the impacts of sea level rise in the future.²⁴ Recognizing that Dr. Revell admitted that the beach has grown,²⁵ the City now warns that the beach "can't grow much wider," and insists that the "long-term trend for beach conditions indicates diminished sediment supply and more erosion."²⁶ Dr. Revell's statement that the beach "can't grow much wider" is unsupported – he made this assertion by looking at a photograph of the current beach without any explanation.²⁷ As explained above, the record shows that the beach in front of the Puente site has grown steadily over time. There is no evidence demonstrating that the beach "can't grow much wider." Dr. Revell's theory that sediment supply will diminish and lead to more erosion is also contrary to evidence showing that sediment supply is not likely to decrease significantly during Puente's operating life. Sediment yield from the Santa Clara River is a significantly during Puente's useful life.²⁸ Dr. Revell's unsupported statements to the contrary are unreliable.

The City attempts to discredit the testimony of NECO's expert witness, Mr. Mineart, but the City's arguments misrepresent the record and are not credible. First, NECO did not present

²⁷ Reporter's Transcript, Volume 3 (City of Oxnard/Revell), p. 601 lines 4-27.

²⁴ City of Oxnard Opening Brief, p. 7.

²⁵ Reporter's Transcript, Volume 3 (City of Oxnard/Revell), p. 595 lines 17-21.

²⁶ City of Oxnard Opening Brief, p. 7.

²⁸ Reporter's Transcript, Volume 2 (NRG/Mineart), p. 409 line 17 through p. 410 line 10; Exhibit CO-4 ("Coastal Resilience Ventura: Technical Report of Coastal Hazards Mapping"), Figure 16 (fourth to last page of document) (showing substantial increases in sediment yield from the Santa Clara River, with decreases below historic levels not occurring until after almost 2050, the end of Puente's useful life).

expert testimony in order "to cast doubt" on long-term threats to Puente as the City alleges.²⁹ The City falsely suggests that NECO is trying to hide risks. In fact, NECO undertook an analysis of coastal hazards to inform its own investment decision. NECO made a contractual commitment to spend hundreds of millions of dollars to build a new plant at the Mandalay site, and bears the full risk under the Puente Contract if the plant cannot operate reliably due to coastal hazards.³⁰ The results of NECO's analysis show that coastal hazards do not prevent Puente from providing a reliable source of resource adequacy capacity.³¹ NECO has millions of dollars on the line if its analysis is wrong. As the only party bearing that investment risk, NECO has zero incentive "to cast doubt" on threats to the plant.

Second, the City wrongly asserts that Mr. Mineart's analysis is "unreliable," and attacks his experience and credentials.³² Mr. Mineart is a registered professional engineer with more than 30 years of experience in the fields of hydrologic, hydraulic and hydrodynamic analysis, erosion and sediment transport modeling, risks assessments, climate change and sea level rise, and surface and groundwater fate and transport modeling.³³ His resume describes his extensive experience assessing risks to infrastructure projects from wave impacts and flooding hazards, including due to projected sea level rise.³⁴ Compared to Dr. Revell's resume, Mr. Mineart has far greater experience conducting project-specific and site-specific risk assessments for infrastructure projects. Dr. Revell also admitted that he did not factor site-specific

²⁹ City of Oxnard Opening Brief, p. 7.

³⁰ Exhibit NRG-1 (Gleiter), pp. 8-9.

³¹ Exhibit NRG-2 (Mineart), Appendix B, p. 6 ("The combined effects of [sea level rise ("SLR")], potential erosion of the berm, wave events, and storm surge run-up that could occur during the life of the project through planning horizon 2050 are not expected to adversely impact the project. The potential anticipated elevation of SLR, in combination with any of these natural phenomena or weather-induced events, would be well below the beach dunes in proximity to the west boundary of the project site.").

³² City of Oxnard Opening Brief, p.

³³ Exhibit NRG-2 (Mineart), Appendix A.

³⁴ Exhibit NRG-2 (Mineart), Appendix A.

considerations such as the operating experience at Mandalay into his analysis. Mr. Mineart's site-specific analysis is more appropriate to assess potential risks to Puente than the general Ventura County coastline analyses commissioned by the City.

Third, the City argues that Mr. Mineart's analysis was "improperly truncated," but Mr. Mineart correctly considered potential impacts during Puente's planned operating life, which is expected to last approximately 30 years between 2020 and 2050.³⁵ The City states that a 30-year useful life is contrary to the Coastal Commission's guidance recommending that sea level rise planning use a 100-year lifespan for critical infrastructure, including "power plants and energy transmission infrastructure."³⁶ The CEC disagrees with the Coastal Commission's blanket characterization of power plants as "critical infrastructure," and the resulting recommendation that all power plants "warrant special considerations such as applying a 500-year event design standard, assuming the highest sea-level rise projections, and protection from the worst-case future impacts."³⁷ The CEC explained that CEC staff analyzes information specific to each proposed project and site location, and expressed concern that "the public and intervening parties may believe that the Guidance recommends special considerations to all power plants without question."³⁸ The CEC therefore asked the Coastal Commission to remove "power plants" from the critical infrastructure category "to avoid a default assumption that all power plants are critical."³⁹ Applying these comments, the Coastal Commission modified the final recommended policy guidance so that "critical infrastructure" now only includes "some power plants and

³⁵ NRG-2 (Mineart), Appendix B, p. 3.

³⁶ City of Oxnard Opening Brief, p. 8.

³⁷ CEC Comments on Public Review Draft, California Coastal Commission Sea-Level Rise Policy Guidance, July 20, 2015, attached to this reply brief as Appendix A.

³⁸ Id.

³⁹ *Id*.

energy transmission infrastructure."⁴⁰ Given that the CEC has exclusive jurisdiction to evaluate the threat to Puente's reliability from coastal hazards and sea level rise, the CEC will decide the applicable considerations to apply to Puente in light of its useful life and site-specific conditions.

Fourth, the City falsely asserts that Mr. Mineart "simply assumed that beach accretion would keep up with sea level rise."⁴¹ This misrepresents Mr. Mineart's analysis. Mr. Mineart's analysis assumed that beach accretion *would not* keep up with sea level rise. Despite the fact that accretion "has been occurring along the stretch of beach adjacent to the project site," Mr. Mineart applied a worst-case assumption that the beach would not keep up with sea level rise and would erode "about 130 feet from its current location by year 2060."⁴² However, even applying this "worst-case scenario and assuming that historical accretion will not continue, the beach would be approximately the same width in 2050 as it was in 1947."⁴³ Thus, even if beach accretion does not keep up with sea level rise, the existing accreted beach is wide enough to accommodate the worst-case erosion scenario without jeopardizing the Puente site.

Fifth, the City faults Mr. Mineart for assuming 130 feet of *beach* erosion rather than 130 feet of *dune* erosion, citing the Coastal Resilience Ventura report, but the City has not shown how 130 feet of *dune* erosion in front of the Puente site is plausible given that the existing dunes are fronted by a 300-foot wide beach. Mr. Mineart explained during hearings that "they have such a huge protective beach right now," and "[t]he beach is 300-feet wide."⁴⁴ He also explained that "the beach is big enough that the dunes are not going to take a constant full force of wave

⁴⁰ California Coastal Commission Sea Level Rise Policy Guidance, Recommended Final Draft – July 31, 2015, p. 80 (insert to draft shown in bold underlined text), available at: http://documents.coastal.ca.gov/assets/slr/guidance/July2015_Full_RecFinal.pdf.

⁴¹ City of Oxnard Opening Brief, p. 9.

⁴² Exhibit NRG-2 (Mineart), Appendix B, p. 5.

⁴³ Exhibit NRG-2 (Mineart), Appendix B, p. 5.

⁴⁴ Reporter's Transcript, Volume 2 (NRG/Mineart), p. 386, lines 22-24.

action."⁴⁵ Mr. Mineart also explained that "we know the dunes have been stable," and "[t]here's no evidence of erosion," and "[t]here's no evidence that waves have ever impacted the dunes historically."⁴⁶ Mr. Mineart's site-specific analysis of the beach in front of the Puente site shows that the dune erosion predicted in the Coastal Resilience Ventura report is not accurate as applied to this particular site.

Sixth, the City incorrectly asserts that the 1984 aerial photograph attached to Mr. Mineart's testimony "shows significant erosion of the dune in front of the Mandalay site from just one large storm event from over 30 years ago."⁴⁷ Dr. Revell's "observation" from the 1984 photograph is contrary to Mr. Mineart's testimony as cited above, and also contradicts reports from the Mandalay plant staff, who confirmed that the 1983 storm event had no impact to the Mandalay site.⁴⁸ Significant dune erosion in front of the Mandalay site would have been reported by staff, and likely would have taken years to repair itself.

Dr. Revell's assertion that the 1984 photograph shows substantial erosion is not substantiated. Dr. Revell said that "vegetation has been substantially denuded or eroded in front of the site" in the 1984 photograph, but this is not evidence of dune erosion. The amount of visible vegetation varies in the aerial photographs. The most credible explanation for these differences is the relative resolution of the photographs. Scattered vegetation on the dunes cannot be seen as easily in the low resolution photographs as in the high resolution photographs. The 1984 photograph has a low resolution compared with, for example, the photograph from 1959, which more clearly shows vegetation and the road that used to be visible between the

⁴⁵ Reporter's Transcript, Volume 2 (NRG/Mineart), p. 387, lines 25-28.

⁴⁶ Reporter's Transcript, Volume 2 (NRG/Mineart), p. 381, lines 17-21.

⁴⁷ City of Oxnard Opening Brief, p. 10.

⁴⁸ Exhibit NRG-2 (Mineart), Appendix B, p. 2 ("A review of large storm events that have caused damage at Oxnard Shores (1960, '63, '65, '71, '78, '83, '88, '95 and '97-98) indicated no impact to the project site with the exception of the need to repair rip-rap at the MGS outfall in 1983).

Puente site and the beach. As shown in the photographs from 1977, 1994, 2005, 2009, 2010 and 2012, that road has been covered with accumulated sand,⁴⁹ and the accumulated sand also could explain why vegetation is sometimes less visible in the photographs. Dr. Revell's willingness to testify to "significant erosion of the dune" based solely on the low resolution 1984 aerial photograph is not credible.

Finally, the City asserts that the Puente site is exposed to flooding from a tsunami triggered by an underwater landslide known as the "Goleta 2 Landslide," even under current conditions.⁵⁰ The City's analysis is based on modeling assumptions and mapping that assumed hydraulic connections between the tsunami wave and the Puente site.⁵¹ The City's analysis for current conditions is contrary to the Tsunami Inundation Map for Emergency Planning developed by the California Emergency Management Agency, which shows that the Puente site is not currently in the tsunami inundation zone, including for a tsunami triggered by a Goleta 2 Landslide.⁵² As Mr. Mineart testified, accretion of the beach in front of the Puente site so far has kept up with sea level rise.⁵³ Thus, the evidence does not suggest that the tsunami inundation map is wrong today. The City's claim to the contrary again casts doubt on the City's modeling prediction for future years.

In addition, NRG's opening brief explained that the Goleta 2 Landslide has an expected return rate of once every 15,000 years, which means it has a 0.2 percent chance of occurring during Puente's useful life.⁵⁴ Given this extremely low probability of occurrence, it is not

⁵⁴ NRG Opening Brief, p. 28.

⁴⁹ Exhibit NRG-2 (Mineart), Appendix B, Attachment 2.

⁵⁰ City of Oxnard Opening Brief, p. 11.

⁵¹ Exhibit CO-2 (Cannon), Attachment 2, pp. 5-6.

⁵² Exhibit NRG-2 (Mineart), Appendix B, Attachment 2; Exhibit NRG-4 ("Tsunami Inundation Map for Emergency Planning), Table 1: Tsunami sources modeled for Ventura County coastline (showing Goleta Landslide #1 and Goleta Landslide #2 in the list of Local Sources).

⁵³ Reporter's Transcript, Volume 2 (NRG/Mineart), p. 376 line 28 through p. 377 line 4 (explaining that the beach "has been growing even though the sea has been rising").

reasonable to reject the Puente project based on a Goleta 2 Landslide. Even the City's witness Mr. Cannon acknowledged that "it's going to be up to the coastal engineer and the client that he's working for"⁵⁵ to decide how to plan for a Goleta 2 Landslide.

C. Contrary To The City's Arguments, Puente Is Ideally Located To Meet Local Reliability Needs In The Moorpark Sub-Area.

The City argues that procurement of the Puente Contract does not ensure reliability in the Moorpark sub-area because Puente is not in Goleta.⁵⁶ The City's argument is wrong. Puente is ideally located at the site of one of the existing OTC plants. The Commission previously found that replacing the OTC units with new generation at the same site would be "certain" to meet reliability needs. In Decision 13-02-015, the Commission found that: "Gas-fired resources at the current OTC sites are certain to meet the ISO's criteria for meeting LCR needs"; and "Other resources can also meet or reduce LCR needs, but may not be effective in doing so."⁵⁷ The Commission also found that "[t]he most likely locations for to meet LCR needs in the Moorpark sub-are are the sites of the current OTC plants."⁵⁸ The CAISO's testimony confirms that procurement of the Puente Contract meets local reliability needs and enhances the safe and reliable operation of SCE's electrical system.⁵⁹

The City also misconstrues the reliability issue identified for the Goleta service area. Reliability in Goleta was not the only driver for LCR procurement for the Moorpark sub-area. As confirmed in Decision 13-02-015, the Commission authorized procurement for the Moorpark sub-area to address reliability issues arising largely due to the assumed retirement of almost 2,000 MW of OTC capacity. All of the relevant OTC capacity is currently located in Oxnard, at

⁵⁵ Reporter's Transcript, Volume 3 (City of Oxnard/Cannon), p. 634 lines 10-17.

⁵⁶ City of Oxnard Opening Brief, p. 13.

⁵⁷ Decision 13-02-015, Finding of Fact 26.

⁵⁸ *Id.*, Finding of Fact 39.

⁵⁹ Exhibit CAISO-1 (Sparks), p. 4 lines 8-13; Exhibit CAISO-3 (Millar), pp. 4-5.

Mandalay and the Ormond Beach Generating Station. The Puente Contract offers an opportunity to replace almost 2,000 MW of aging OTC capacity with 262 MW of new fast-start peaking capacity that repurposes and reuses existing gas and transmission infrastructure. This is an ideal local reliability solution for the Moorpark sub-area.

D. Parties Have Not Shown That CEC Approval Is Necessary For The Commission's Evaluation Of The Puente Contract.

The City and Sierra Club argue that the Commission should delay approval of the Puente Contract until after the CEC approves the Puente AFC, based on assertions that CEC approval somehow would "illuminate" issues, "assist" review, and allow the Commission to "better evaluate" the Puente Contract.⁶⁰ These vague arguments do not explain how delay would help the Commission evaluate the reasonableness of the Puente Contract. The Puente Contract is final and has been executed by SCE and NECO. Delay would not change the terms of the Puente Contract. In reality, the only result of delay would be to delay the full effectiveness of the Puente Contract, and miss the deadline for Commission approval that is specified therein. This would expose NECO to the risk of termination, which likely is what the City and Sierra Club are attempting to achieve with their push for delay.

Even if the termination trigger in the Puente Contract were extended until after the CEC process is complete, delay still serves no valid purpose. As one scenario, assume the CEC approves construction of Puente as proposed in the AFC. If this occurs, there would be nothing further for the Commission to consider, and no reason for additional review of the Puente Contract. There would be no valid basis for revisiting the CEC's approval of construction at the Puente site, given the CEC's exclusive authority to make that decision.

As a second scenario, assume the CEC rejects the Puente AFC. If the Commission approves the Puente Contract now to make it fully effective, then the CEC's rejection of the AFC

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would result in termination of the Puente Contract and NECO would owe a termination payment to SCE equal to its development security.⁶¹ If Commission approval were delayed, however, NECO would not owe a termination payment because the Puente Contract would not have become fully effective when CEC rejection occurs.⁶² This shows that delay in Commission approval actually would be to ratepayers' detriment, because it would delay achievement of the condition that causes the Puente Contract to become fully effective and binding on the parties. In either case, however, if the CEC rejects the AFC, there would be nothing further for the Commission to consider, and no reason for additional review of the Puente Contract.

As a third scenario, assume the CEC approves construction of Puente but requires additional mitigation not proposed in the AFC, such as potential requirements for monitoring the dunes. Under the Puente Contract, NECO bears all responsibility and costs associated with constructing, operating and maintaining Puente to supply resource adequacy capacity in accordance with the Puente Contract. NECO therefore will be responsible for paying for and implementing any mitigation required by the CEC. The City is very confused in this regard, because it seems to believe that the fixed price in the Puente Contract somehow limits the CEC's authority.⁶³ This is not correct. The Puente Contract specifies a fixed resource adequacy payment with no mechanism for increasing that price during the contract term. In the third scenario, NECO would pay for any increased costs associated with required mitigation and ratepayers would be insulated from those additional costs. Thus, in the third scenario, there would be nothing further for the Commission to consider, and no reason for additional review of the Puente Contract.

⁶¹ Exhibit NRG-1 (Gleiter), p. 8 lines 14-19.

⁶² Exhibit NRG-1 (Gleiter), p. 8 lines 5-10.

⁶³ City of Oxnard Opening Brief, pp. 16-17.

As a fourth scenario, assume the CEC approves construction of Puente, but finds that another site is environmentally superior. Parties who oppose Puente make much of this possibility, but consideration of the factors supporting reuse of a brownfield site and an existing power plant site with gas and transmission infrastructure already in place shows that this is not a likely outcome of the alternatives analysis. The CEC has explained the purpose of its alternatives analysis as follows:

> The California Environmental Quality Act (CEQA) Guidelines and the Energy Commission's regulations require an evaluation of the comparative merits of a range of feasible site and facility alternatives that achieve the basic objectives of the proposed project but would avoid or substantially lessen potentially significant environmental impacts. (Cal. Code Regs., tit. 14, §§ 15126.6(c) and (e); see also, tit. 20, § 1765.)

> The range of alternatives, including the "No Project" alternative, is governed by the "rule of reason" and need not include those alternatives whose effects cannot be reasonably ascertained and whose implementation is remote and speculative. (Cal. Code Regs., tit. 14, § 15126.6(f).) Rather, the analysis is necessarily limited to alternatives that the "lead agency determines could feasibly attain most of the basic objectives of the project." (Id.)⁶⁴

Under these tests, the CEC considers the "comparative merits" of a reasonable range of feasible alternative sites and technologies that would achieve the basic objectives of the project, but would "avoid or substantially less potentially significant environmental impacts." Puente avoids many impacts that would occur if the plant were built at a greenfield site or a site that lacks existing gas and electric transmission infrastructure. The CEC will conduct the required alternatives analysis, but it seems unlikely that other sites would be environmentally preferable given that the Puente site has been used continuously for power generation since the 1950s.

⁶⁴ California Energy Commission Final Decision on the Carlsbad Energy Center Project, June 2012, CEC-800-2011-004-CMF, p. 3-1.

Nevertheless, even if the CEC were to find that the Puente site cannot be approved due to the existence of feasible environmentally superior alternative sites that would avoid or substantially lessen potentially significant environmental impacts and also achieve the project's objectives, this outcome would not necessarily lead to further consideration of the Puente Contact in the form presented in this proceeding. If NECO does not have the ability to acquire and use the alternative site, then the fourth scenario would lead to termination of the Puente Contract just like a CEC decision rejecting the AFC. On the other hand, if NECO could obtain site control, it would be necessary to make changes to existing transmission interconnection arrangements for Puente and the Puente Contract in order to move Puente to the other site. In that situation, additional Commission review of the Puente Contract in its current form would not be relevant, and a modified contract would be submitted for review if agreed to by the parties. Thus, even under the improbable scenario in which an alternative site were shown to be environmentally superior to the Puente site, there would be no reason for additional review of the executed Puente Contract.

NECO urges the Commission to see through the rhetoric of parties who pretend to want additional "illumination" from the CEC process. In the Puente Contract, NECO agreed to assume the risk of an unfavorable CEC licensing decision. The Commission should approve the Puente Contract without delay, and allow NECO to undertake its obligation to obtain CEC approval for Puente in accordance with its contractual commitment. This outcome would be consistent with the Commission's prior decisions approving contracts for new generation.

E. Approval Of the Puente Contract Will Not Impair The CEC's Environmental Review Or Constrain The CEC's Authority To Evaluate Alternatives.

The City argues that Commission approval of the Puente Contract will "prejudice the CEC's ability to consider a full range of alternatives and potential mitigation for the Puente
Project."⁶⁵ This is not true. The City's relies entirely on the "Alternatives" section of the AFC for Puente, which was prepared by NECO's permitting team and submitted to the CEC. Regardless of what is written in the AFC, it is obvious that an applicant does not have the ability to dictate what the CEC can and cannot consider or require as part of its review of the Puente AFC. The City's argument is contrary to all reason and common sense.

The City also misrepresents NECO's statements in the Puente AFC. The language quoted by the City reflects NECO's position regarding the relative importance of the stated project objectives for Puente. The Alternatives section of the AFC describes a range of reasonable alternatives to Puente as proposed, including: the "No Project" alternative required by CEQA; alternative generation technologies and configurations; alternative sources of water supply; alternative waste handling systems; and alternative emission control technologies.⁶⁶ The Alternatives section lists the project objectives, which include the objective to fulfill NECO's obligations under the Puente Contract, along with seven other project objectives.⁶⁷ The Alternatives section then recites the applicable CEQA requirements for considering a reasonable range of alternatives, noting that "there is no ironclad rule governing the nature or scope of alternatives to be discussed other than the rule of reason."⁶⁸ In the next paragraph, which is the one the City cites, NECO presents its view that the project objective of meeting NECO's obligations under the Puente Contract is particularly important. That paragraph explains that the objective of meeting NECO's contractual commitment to build Puente with the technology and at the location specified in the Puente Contract "must be kept in mind when determining what

⁶⁵ City of Oxnard Opening Brief, p. 15. CEJA makes a similar argument. CEJA Opening Brief, pp. 22-25.

⁶⁶ Exhibit CO-3, p. 5-1.

⁶⁷ Exhibit CO-3, p. 5-1.

⁶⁸ Exhibit CO-3, p. 5-2.

constitutes a range of reasonable alternatives, as well as which alternatives might be considered feasible."⁶⁹

NECO's statements in the Puente Alternatives discussion are entirely consistent with CEQA's requirements for consideration of alternatives. Under CEQA, alternatives must be able to attain most of the basic objectives of the project.⁷⁰ CEQA does not require consideration of alternatives that "cannot achieve the project's underlying fundamental purpose."⁷¹ An agency therefore may structure its alternatives analysis based on a reasonable definition of the project's underlying purpose, and need not study alternatives that cannot achieve that fundamental goal.⁷² There is no rule requiring a CEQA analysis to explore offsite project alternatives in every case.⁷³ An agency may determine that no feasible locations exist either because basic project objectives cannot be achieved at another site, or because there are no sites meeting the criteria for feasible alternative site.⁷⁴ NECO's position is also consistent with California Public Resources Code Section 25540.6(b), which specifies that an evaluation of alternative sites is not required when a natural gas-fired thermal power plant is proposed for development at an existing industrial site such as Mandalay.

Ultimately, CEC Staff and the CEC AFC Committee for Puente will determine what constitutes a range of reasonable alternatives, and which alternatives should be considered in light of the project objectives. It is a legal certainty that NECO does not have the power to dictate or limit the scope of that review. The City's arguments to the contrary are without merit.

⁷⁴ See City of Long Beach v. Los Angeles Unified School District, 176 Cal. App. 4th 889, 921 (2009).

⁶⁹ Exhibit CO-3, p. 5-2.

⁷⁰ Title 14, California Code of Regulations, Section 15126.6(a).

⁷¹ In re Bay-Delta Programmatic Environmental Impact Report Coordinated Proceedings, 43 Cal.4th 1143, 1165 (2008).

⁷² *Id.*, p. 1166.

⁷³ California Native Plant Society v. City of Santa Cruz, 177 Cal. App. 4th 957, 991 (2009).

The City further errs in asserting that Commission approval of the fixed price in the Puente Contract somehow limits the CEC's authority "to require changes in the Puente project that might substantially increase its costs."⁷⁵ This assertion is wrong. As explained above, NECO will be responsible for paying for and implementing any mitigation required by the CEC. Commission approval of the Puente Contract does not, and could not, limit the CEC's authority to consider and require mitigation that is shown to be necessary to mitigate significant environmental impacts or ensure reliability.

F. The City's Argument That The Commission Must Conduct A CEQA Review Of Puente Misrepresents NECO's Testimony And CEQA.

The City argues that the Commission must act as the lead agency under CEQA and conduct an environmental review of Puente.⁷⁶ CBD also argues that CEQA requires environmental review in this proceeding,⁷⁷ and CEJA argues that the Commission is a "responsible agency" and must wait for the CEQA lead agency to complete its environmental review before approving the Puente Contract.⁷⁸ This is wrong. It is well established that Commission approval of a utility power purchase agreement is not a "project" for purposes of CEQA and does not trigger a requirement for environmental review under CEQA. In its recent decision approving a power purchase agreement executed by San Diego Gas and Electric Company for a new gas-fired power plant, the Commission rejected CBD's argument that CEQA review was required, and explained:

To the contrary, CEQA Guidelines, long-standing case law, and Commission precedent all make clear that Commission review of purchase power contracts does not trigger CEQA. A contract for purchase power by a regulated entity is not a "project" pursuant to CEQA. CEQA defines a "project" as "[a]ctivities involving the

⁷⁵ City of Oxnard Opening Brief, pp. 16-17.

⁷⁶ City of Oxnard Opening Brief, p. 17.

⁷⁷ CBD Opening Brief, pp. 16-17.

⁷⁸ CEJA Opening Brief, p. 22.

issuance to a person of a lease, permit, license, certificate, or other entitlement for use by one or more public agencies." (Public Resources Code § 21065.) Commission approval of a purchase power contract does not confer a lease, permit, license, certificate, or any other entitlement on the seller. Rather, it is an assurance that the utility will recover through its rates the costs that it incurs under the contract. It is well-settled that "[s]uch a ratemaking order is not 'project' under CEQA. All Commission orders concluding that CEQA does not apply to a ratemaking proceeding have been upheld. (E.g., Samuel C. Palmer, III v. Public Utilities Commission SF# 23980, writ denied 5/10/79.)" (D.86-10-044 at 16-17, 1986 Cal. PUC LEXIS 642, 16-17 (Cal. PUC 1986).)

Likewise, the Commission is not a "responsible agency" under CEQA when it approves purchase power contracts. A "responsible agency" is defined as a public agency other than the lead agency which has discretionary approval power over the project. (Public Resources Code § 21069.) While the Commission has considerable discretion over whether to approve a purchase power contract, it does not have power to approve or deny the underlying generation project. The project underlying the purchase power contract could proceed regardless of the Commission's decision. (Id. at 16-18.)⁷⁹

In a new twist on an old, wrong argument, the City alleges that the Commission must act as the lead agency under CEQA for Puente because approval of the Puente Contract would foreclose alternatives or mitigation measures that would ordinarily be part of CEQA review of Puente.⁸⁰ This is not true. As explained above, the City distorts the statements in the Alternatives section of the Puente AFC. NECO does not have the power to dictate or constrain the CEC's authority to consider project alternatives or require mitigation.

The City also asserts that NECO's witness, Ms. Gleiter, testified that "contract approval will provide significant financial momentum to the Puente project," and "makes it far more likely that the CEC will approve its project."⁸¹ The City misrepresents Ms. Gleiter's testimony. When asked to confirm that "NRG has determined that PUC approval here makes it more likely

⁷⁹ Decision 15-05-051, pp. 29-30 (footnotes omitted).

⁸⁰ City of Oxnard Opening Brief, pp. 17-18.

⁸¹ City of Oxnard Opening Brief, p. 18.

that it will receive approval of this project from the CEC", Ms. Gleiter responded: "No, that is definitely not true."⁸²

Instead, Ms. Gleiter testified that Commission approval of the Puente Contract allows NECO to "scale expenses at risk."⁸³ As has been made clear in this proceeding, NECO is assuming substantial risk by agreeing to permit and build Puente to supply resource adequacy capacity pursuant to the Puente Contract. Numerous milestones in the project development process must be achieved successfully in order for NECO to meet this contractual commitment. Commission approval of the Puente Contract is one significant milestone because, as Ms. Gleiter explained, the Puente Contract provides the revenue stream that supports the investment. CEC approval of the Puente AFC is another obvious key milestone. Mr. Gleiter's testimony explained how a project developer views these milestones together. As long as both milestones remain unmet, the total risk of success or failure is heightened, making the significant project development and permitting expenditures more "at risk." Meeting one key milestone such as approval of the Puente Contract makes a developer more comfortable about continuing to spend millions of dollars to meet the next key milestone of obtaining CEC approval. There are other milestones in this risk assessment, including project financing and construction hurdles. But the risk assessment described by Ms. Gleiter is a purely internal risk assessment by NECO and its parent company. NECO's assessment of its own financial risk does not, and indeed could not, limit the CEC's authority to decide whether or not to approve the Puente AFC, or constrain the CEC's independent review of the Puente AFC. The City's argument to the contrary is wrong.

In addition, the CEQA case law cited by the City does not apply here. In Save Tara v. City of West Hollywood, the Court addressed "the question of whether and under what circumstances an agency's agreement allowing private development, conditioned on future

⁸² Reporter's Transcript, Volume 2 (NRG/Gleiter), p. 340 lines 16-21.

⁸³ Exhibit NRG-1 (Gleiter), p. 7 lines 23-25.

compliance with CEQA, constitutes approval of the project within the meaning of sections 21100 and 21151" of CEQA.⁸⁴ That case involved an agreement entered into by the City of West Hollywood conveying to a developer an option to purchase certain city-owned real estate for use to construct a housing development, with an additional commitment by the city (not conditioned on CEQA compliance) to contribute toward development costs. The city's obligation to convey the property was conditioned on all applicable requirements of CEQA having been satisfied. The petitioners sought a decision holding that the city was required to prepare an environmental impact report for the housing development project *before* it agreed to convey the property to the developer. The Court held that: "A CEQA compliance condition can be a legitimate ingredient in a preliminary public-private agreement for exploration of a proposed project, but if the agreement, viewed in light of all the surrounding circumstances, commits the public agency as a practical matter to the project, the simple insertion of a CEQA compliance condition will not save the agreement from being considered an approval requiring prior environmental review."⁸⁵

The holding in *Save Tara* does not apply in this proceeding. The Commission is not conveying any property to NECO, or agreeing to explore or move forward with a public-private partnership with NECO. The Commission also is not granting approval for construction of Puente to proceed. Commission approval of the Puente Contract also does not, and could not, commit the CEC to approve the Puente AFC or limit the scope of the CEC's environmental review of the Puente project. Although the City and other parties have insisted on using this proceeding to object to Puente on environmental grounds, the only action that the applicant has requested with respect to Puente is for the Commission to approve the Puente Contract as reasonable and authorize rate recovery. Consistent with the Commission's long-standing and recently affirmed precedent on utility power purchase agreements, approval of the Puente

⁸⁴ Save Tara v. City of West Hollywood, 45 Cal. 4th 116, 121 (2008).

⁸⁵ *Id.*, p. 132.

Contract is not a "project" for purposes of CEQA. NECO's testimony about how it views its financial risks does not change this well settled legal conclusion.

Finally, even if the Commission's approval of the Puente Contract were technically a "project," which it is not for the reasons discussed above, CEQA provides an exemption for actions undertaken by public agencies relating to any thermal power plant that will be licensed by the CEC. Pursuant to California Public Resources Code Section 21080(b)(6), CEQA does not apply to:

Actions undertaken by a public agency relating to any thermal powerplant site or facility, including the expenditure, obligation, or encumbrance of funds by a public agency for planning, engineering, or design purposes, or for the conditional sale or purchase of equipment, fuel, water (except groundwater), steam, or power for a thermal powerplant, if the powerplant site and related facility will be the subject of an environmental impact report, negative declaration, or other document, prepared pursuant to a regulatory program certified pursuant to Section 21080.5, which will be prepared by the State Energy Resources Conservation and Development Commission, by the Public Utilities Commission, or by the city or county in which the powerplant and related facility would be located if the environmental impact report, negative declaration, or document includes the environmental impact, if any, of the action described in this paragraph.⁸⁶

The CEC is the "State Energy Resources Conservation and Development Commission" referenced in the statute, and its thermal power plant siting and environmental review process is a certified regulatory program pursuant to California Public Resources Code Section 21080.5. The CEC's certified regulatory program entails a full environmental review of potential project impacts and imposes requirements necessary to ensure that all potential environmental impacts are mitigated to below significant levels. This further demonstrates that the City's CEQA argument is baseless.

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See also CEQA Guidelines, 14 Cal. Code Regs. Section 15271.

G. The City's Challenge To Puente's Size Is Contrary To The Record.

The City argues that the size of the Puente Contract is "unjustifiable" based on the City's interpretation of the CAISO's studies.⁸⁷ The City's argument is contrary to the testimony of the CAISO's witness, who cautioned that the resources for which SCE seeks approval in this proceeding "are only a portion of those necessary to meet reliability needs in the Moorpark sub-area."⁸⁸ SCE's testimony also explains that in order to meet the minimum procurement level of 215 MW that the Commission required in Decision 13-02-015, it was necessary to select a large gas-fired project, and Puente was the most cost effective gas-fired generation offer.⁸⁹

H. CEJA Misinterprets The Commission's Guidance On Qualitative Considerations In An RFO.

CEJA argues that SCE's evaluation of offers in the RFO failed to comply with Commission decisions requiring consideration of environmental justice impacts.⁹⁰ CEJA's argument misinterprets the Commission's guidance on the use of qualitative considerations in an RFO. CEJA relies on Decision 07-12-052, where the Commission stated that "[t]he evaluation criteria used in competitive solicitations must be clear, transparent, and available to potential bidders early enough in the procurement process to permit potential bidders to tailor their projects to fit the utility's actual needs."⁹¹ The Commission then stated that: "We discuss below certain bid evaluation metrics that we urge the utilities, in conjunction with Independent Evaluators, Procurement Review Groups and Energy Division, to consider when developing the RFO bid documents and process."⁹² The Commission found that utilities should consider

⁸⁷ City of Oxnard Opening Brief, pp. 20-21.

⁸⁸ Exhibit CAISO-1 (Sparks), p. 3 line 22 through p. 4 line 1.

⁸⁹ Exhibit SCE-7 (Cushnie), p. 1 line 12 through p. 2 line 1; Exhibit SCE-1 (Singh), p. 45 line 18 through p. 46 lines 2, 9-10.

⁹⁰ CEJA Opening Brief, pp. 5-10.

⁹¹ Decision 07-12-052, p. 155.

⁹² Id.

capacity and energy benefits, resource diversity, portfolio fit, local reliability/resource adequacy, congestion costs, credit and collateral, debt equivalence, potential treatment under financial accounting rules, and transmission costs/savings, as well as "disproportionate resource sitings in low income and minority communities, and environmental impacts/benefits (including Greenfield vs. Brownfield development)."⁹³

In suggesting that utilities should consider these bid evaluation metrics, the Commission did not specify that utilities must give disproportionate consideration to environmental justice factors over other qualitative considerations such as the preference for using brownfield sites rather than greenfield sites. The Commission also did not specify that qualitative considerations would override the utilities' quantitative analysis of which resources are the lowest cost and best fit for the utility's need. Utilities have flexibility to apply relevant qualitative considerations in their RFO resource evaluations, as long as they demonstrate how resource selections were made and justify their selected contracts.

SCE complied with those requirements in this proceeding. SCE's testimony and the Independent Evaluator's report show that SCE selected the winning contracts for the Moorpark sub-area based primarily on its quantitative analysis of net market value – namely, the valuate of a resource's energy, ancillary services, and capacity benefits, minus fixed and variable offer-related costs.⁹⁴ SCE also assessed non-quantifiable characteristics of each offer. SCE's selection process revealed that the Puente Contact was the most cost-effective gas-fired offer, and it also satisfies the Commission's preference for locating new capacity at brownfield sites instead of greenfield sites.

⁹³ *Id.*, pp. 156-157.

Exhibit SCE-1 (Singh), pp. 30-49; Exhibit SCE-2, Appendix D (Independent Evaluator Report),
 p. 5.

Siting Puente at the existing Mandalay site also provides environmental benefits because it accommodates the potential retirement of almost 2,000 MW of aging OTC capacity with 262 MW of new fast-start peaking capacity. The OTC units in Oxnard require between 12 and 18 hours to start up, which means that they have emissions during the entire lengthy start up period, in addition to the time they operate to meet electricity needs.⁹⁵ In addition to being significantly smaller than the existing OTC capacity, Puente will be able to start and be at its full capacity in only 10 minutes, avoiding the significant start up emissions of the existing OTC units.⁹⁶ Moreover, unlike the existing OTC units, Puente will be able to be shut down at night and restarted the next day, further reducing emissions compared to the existing OTC units. Construction of Puente thus will result in a net environmental benefit to the local community.

CEJA also argues that SCE failed to favor renewable energy projects in environmental justice communities,⁹⁷ but the record shows that SCE selected every renewable offer available in the RFO for the Moorpark sub-area.⁹⁸

I. CEJA Misinterprets The Record, Which Shows That SCE Selected Contracts Based On Its Least Cost Best Fit Quantitative Analysis.

CEJA argues that SCE's selections of the Puente Contract and the Puente Refurbishment Contract were inappropriately based on "qualitative" assessments regarding the risk of resource shortages due to the possible retirement of existing non-OTC peaking resources owned by NRG South.⁹⁹ This claim is contrary to the record. As stated above, SCE's testimony and the Independent Evaluator's report show that SCE selected the winning contracts for the Moorpark sub-area based primarily on its quantitative analysis of net market value – namely, the value of a

⁹⁵ Reporter's Transcript, Volume 2 (NRG/Gleiter), p. 351 lines 3-12.

⁹⁶ Exhibit NRG-1 (Gleiter), p. 2 lines 24-28.

⁹⁷ CEJA Opening Brief, p. 10.

⁹⁸ Exhibit SCE-7 (Bryson), p. 14 lines 2-3.

⁹⁹ CEJA Opening Brief, pp. 11-20.

resource's energy, ancillary services, and capacity benefits, minus fixed and variable offer-related costs.¹⁰⁰ SCE's selection process revealed that the Puente Contact was the most cost-effective gas-fired offer, and it also satisfies the Commission's preference for locating new capacity at brownfield sites instead of greenfield sites. Additional qualitative factors may have supported this selection, but the Puente Contract won due to its net market value.

SCE's testimony also shows that the Ellwood Refurbishment Contract offered a low cost solution to improve reliability in the Goleta service area, and SCE added the 0.5 MW Ellwood Storage Contract and a 1 MW rooftop solar project in Goleta to help address unique reliability concerns in Goleta. SCE's testimony explains that the set of selected contracts were "the best combination of offers" and "allowed SCE to select cost-competitive Preferred Resources offers."¹⁰¹ The Independent Evaluator performed an independent, parallel evaluation of the offers and concluded that all of the selected contracts merit Commission approval "because the contracts' economics and their general terms and conditions represented the best resources available from a competitive solicitation."¹⁰²

J. Parties Have Not Shown That Another RFO Would Produce Materially Greater Amounts Of Preferred Resources.

Sierra Club, the City and WBA unreasonably urge the Commission to reject the RFO results and require SCE to start over by conducting another RFO for preferred resources.¹⁰³ SCE explained that it selected every preferred resources final offer for the Moorpark sub-area other than energy storage, and had to select a large gas-fired generation offer to meet the minimum

¹⁰⁰ Exhibit SCE-1 (Singh), pp. 30-49; Exhibit SCE-2, Appendix D (Independent Evaluator Report), p. 5.

¹⁰¹ Exhibit SCE-1 (Singh), p. 46 lines 7-9.

¹⁰² Exhibit SCE-2, Appendix D (Independent Evaluator Report), p. 39.

¹⁰³ Sierra Club Opening Brief, p. 5; City of Oxnard Opening Brief, pp. 25-26; WBA Opening Brief, p. 3.

procurement authorization of 215 MW.¹⁰⁴ Given that SCE just completed an exhaustive RFO process, it is not reasonable to expect that the results of a second RFO would produce materially greater amounts of preferred resources. Parties have not shown that a second RFO would yield a materially different result that the RFO that SCE just completed.

WBA argues that SCE should select alternative resources to meet local reliability needs in the Moorpark sub-area, but the resources described in WBA's testimony were not even bid into the RFO.¹⁰⁵ WBA's witness also admitted that the resources identified in WBA's testimony are "speculative numbers."¹⁰⁶ It would not be prudent to risk local reliability based on speculation about alternative resources.

III. CONCLUSION

For the reasons explained in NRG's opening brief and reinforced above, the Commission should approve all 11 contracts selected and executed by SCE for the Moorpark sub-area, including the Puente Contract, the Ellwood Refurbishment Contract, and the Ellwood Storage Contract. The Commission should approve all of these contracts without delay or condition.

August 5, 2015

Respectfully submitted,

<u>/s/ Lisa A. Cottle</u> Lisa A. Cottle Winston & Strawn LLP 101 California Street, 35th Floor San Francisco, California 94111-5894 Telephone: (415) 591-1579 Facsimile: (415) 591-1400 Email: lcottle@winston.com

Attorneys for NRG Energy Center Oxnard LLC and NRG California South LP

¹⁰⁴ Exhibit SCE-7 (Cushnie), p. 1 line 20 through p. 2 line 1.

¹⁰⁵ Reporter's Transcript, Volume 1 (WBA/Perry), p. 161 line 18 through p. 163 line 5 and p. 165 lines 16-20.

¹⁰⁶ Reporter's Transcript, Volume 1 (WBA/Perry), p. 166 line 9.

DOCKETED

Docket Number:	15-AFC-01
Project Title:	Puente Power Project
TN #:	205429
Document Title:	Letter Re: Comments on Public Review Draft, California Coastal Commission Sea-Level Rise Policy Guidance, dated July 20, 2015
Description:	N/A
Filer:	Alicia Campos
Organization:	California Energy Commission
Submitter Role:	Commission Staff
Submission Date:	7/20/2015 1:30:15 PM
Docketed Date:	7/20/2015

CALIFORNIA ENERGY COMMISSION 1516 Ninth Street Sacramento, California 95814

Main website: www.energy.ca.gov



July 20, 2015

California Coastal Commission c/o Sea-Level Rise Working Group 45 Fremont Street, Suite 2000 San Francisco, CA 94105

RE: Comments on Public Review Draft, California Coastal Commission Sea-Level Rise Policy Guidance

Dear Sea-Level Rise Working Group,

The California Energy Commission appreciates the opportunity to comment on the Public Review Draft of the revised Sea-Level Rise Policy Guidance, dated May 27, 2015. The Guidance was reviewed by several divisions within the agency, and was of particular interest to staff of the Siting, Transmission, and Environmental Protection Division. During the licensing process of thermal power plants 50 megawatts or greater, Energy Commission staff provide an independent assessment of the proposed energy facility and ancillary facilities. As directed by Governor Executive Order S-13-08 for state agencies to plan for sea-level rise and climate impacts, staff include sea-level rise estimates in their assessment of a proposed project.

We support the Coastal Commission's effort to provide an overview of the best available science on sea level rise for California and recommended methodology for addressing it in Coastal Commission planning and regulatory actions. Our only concern is the document's reference to power plants. The Guidance specifically identifies power plants as critical infrastructure (page 80), therefore warranting special considerations such as applying a 500-year event design standard, assuming the highest sea-level rise projections, and protection from the worst-case future impacts (page 138).

Staff analyzes information specific to each proposed project and site location. We are concerned that by presenting all power plants as critical infrastructure, the public and intervening parties may believe that the Guidance recommends special considerations to all power plants without question. While the Energy Commission has exclusive jurisdiction over thermal power plants of 50 megawatts or greater, preempting the jurisdiction of all other state and local agencies, we do not wish to appear to be acting in conflict with the Guidance.

We recommend that "power plants" be removed from the third bullet on page 80 to avoid a default assumption that all power plants and ancillary facilities are critical. Alternatively, adding a statement or footnote to page 80 or 81, such as the following, may clarify how the Guidance document applies to power plants: Sea-Level Rise Working Group July 20, 2015 Page 2

"The lists of critical infrastructure can vary widely from community to community. For planning purposes, a jurisdiction should determine criticality based on the relative importance of its various assets for the delivery of vital services, the protection of special populations, and other important functions."

Also, Appendix F on page 283, under Public Works Facilities, please make the following edit:

(a) All production, storage, transmission, and recovery facilities for water, sewerage, telephone, and other similar utilities owned or operated by any public agency or by any utility subject to the jurisdiction of the Public Utilities Commission, except for except for energy facilities 50 megawatts or greater [which are regulated by the <u>Public Utilities</u> <u>California Energy</u> Commission].

Thank you again for the opportunity to provide comments. Please note that this letter contains comments from Energy Commission staff as it pertains to their assessment of new and replacement power plants in the coastal zone. If you have any questions, please contact Matthew Layton at <u>matthew.layton@energy.ca.gov</u> or (916) 654-3868.

Sincerely,

<u>Originally Signed By</u> Roger E. Johnson, Deputy Director Siting, Transmission, and Environmental Protection Division

cc: Robert Oglesby Matthew Layton Marylou Taylor

ATTACHMENT C



Maximum Tsunami Wave Amplitude Dissipation

(from earthquakes on the Ventura-Pitas Point fault and adjacent structures, 2015, annual meeting of the Southern California Earthquake Center, Palm Springs. Available online at: http://scecinfo.usc.edu/core/cis/2015am/view_abstract.php.)

LATHAM&WATKINSLLP

September 6, 2016

Mr. Joseph Street California Coastal Commission 45 Fremont Street, Suite 2000 San Francisco, CA 94105 650 Town Center Drive, 20th Floor Costa Mesa, California 92626-1925 Tel: +1.714.540.1235 Fax: +1.714.755.8290 www.lw.com

FIRM / AFFILIATE OFFICES Barcelona Moscow Beijing Munich Boston New Jersev Brussels New York Century City Orange County Chicago Paris Dubai Riyadh Düsseldorf Rome Frankfurt San Diego Hamburg San Francisco Hong Kong Shanghai Houston Silicon Valley Singapore London Los Angeles Tokyo Washington, D.C. Madrid Milan

Re: <u>Puente Power Project – Response to Recommended Specific Provisions in</u> <u>August 26, 2016 Proposed Report</u>

Dear Mr. Street:

On behalf of NRG Energy Center Oxnard LLC ("NRG" or "Applicant"), owner and developer of the Puente Power Project ("Project" or "P3") currently under review by the California Energy Commission ("CEC") (Docket No. 15-AFC-01), we hereby respond to the recommended specific provisions ("Recommendations") contained in the proposed "California Coastal Commission Report to California Energy Commission on Application for Certification 15-AFC-01 – NRG Puente Power Project" prepared by California Coastal Commission ("Coastal Commission") staff and released on August 26, 2016 ("Proposed Report").¹

This letter supplements our earlier correspondence dated September 2, 2016, in which we provided additional information related to the staff's initial determination that a portion of the Project site constitutes a "wetland," and staff's assessment of risk related to flood, sea level rise and tsunami hazards. Based on that additional information, we requested that Coastal Commission staff: i) reverse its initial determination that a portion of the Project site constitutes a wetland; ii) reassess the level of risk to the Project from flooding, sea level rise and tsunami hazards; and iii) delete from the Proposed Report any Recommendations that the Project be relocated to an alternative site. This letter responds to the remainder of the Recommendations. The attached table identifies each of the Recommendations and indicates whether NRG accepts

¹ The Proposed Report indicates that the Coastal Commission is reviewing the Project pursuant to Public Resources Code section 30413(d). We note that the Section 30413(d) process applies only to notice of intention ("NOI") proceedings, and that thermal natural gas-fired power plant facilities such as the Project are statutorily exempt from the NOI process. (Pub. Resources Code, § 25540.6(a)(1).) NRG's commitment to implement the Recommendations as set forth in this letter does not constitute concurrence that Section 30413(d) applies to the Coastal Commission's review of the Project or the Recommendations provided by the Coastal Commission to the CEC.

Mr. Joseph Street September 6, 2016 Page 2

LATHAM&WATKINS

the Recommendation as proposed, accepts the Recommendation with proposed revisions, or rejects the Recommendation.

In the event the Project is approved by the CEC as proposed, NRG is prepared to make significant commitments to implement the Recommendations, some of which will require substantial changes to the Project, including removal of the existing shoreline discharge outfall. NRG's commitment to implement the Recommendations as set forth in the attached table, taken together with the additional information contained in our earlier correspondence to you, further supports a finding that the Project as proposed will conform to the extent feasible with relevant policies of the California Coastal Act and the City of Oxnard's Local Coastal Program, and reinforces that any Recommendation to relocate the Project is unfounded and unnecessary.

NRG urges the Coastal Commission staff to supplement the Proposed Report to reflect the additional information provided in our September 2, 2016 letter, acknowledge NRG's commitment to implement the Recommendations as set forth herein, and eliminate any Recommendation that the Project be relocated. Thank you for your consideration of our input on the Proposed Report. We look forward to continuing discussions with you as this matter proceeds.

Best regards,

Michael J. Carroll Mul Of LATHAM & WATKINS LLP

Attachment cc: Mark Delaplaine

Puente Power Project (15-AFC-01)

Response to Recommended Specific Provisions in California Coastal Commission Staff's Proposed Report

Tonic Area	CCC Staff's Recommended Specific Provision	Applicant's Response Accept/Accept with Revisions/Reject	
Wetlands and ESI	Wetlands and ESHA		
Direct Wetland Impacts - Alternatives	To ensure that the P3 conforms to the policies of Coastal Act Sections 30231 and 30233(a) and LCP Policy 52, we recommend the Energy Commission require that the proposed project be relocated to an alternative site that would not result in direct impacts to or fill of coastal wetlands. Alternative sites could include, but are not limited to, the Ormond Beach Area or on-site reconfiguration alternatives identified in the PSA. (Proposed Report, p. 13)	Reject As set forth in NRG's September 2, 2016 comments, no portion of the proposed Project site meets the definition of a "wetland." Further, no alternative offsite or onsite reconfigurations are feasible or environmentally superior to the proposed site.	
Direct Wetland Impacts - Mitigation	If the CEC determines that relocating the P3 to an alternative site that avoids fill of coastal wetlands is infeasible, consistency with Coastal Act Section 30233(a) would still require that the adverse impacts of wetland fill be minimized by the provision of feasible mitigation measures. In order to ensure that the proposed mitigation fully compensates for temporal losses of wetland habitat and accounts for significant uncertainties in the success of any wetland restoration project, and thus minimizes the adverse effects of the project, the Commission recommends that the CEC modify Condition BIO-9 to require compensatory mitigation for direct impacts to wetlands in the form of wetland restoration at a 4:1 ratio at a nearby location. (Proposed Report, p. 14)	Accept with Revisions As set forth in NRG's September 2, 2016 comments, no portion of the proposed Project site meets the definition of a "wetland," and therefore compensatory mitigation is not required. Nevertheless, Applicant is prepared to accept Condition of Certification BIO-9 as proposed in the PSA at a ratio of 2:1 as a means of mitigating for the loss of hydrophytic plants currently present on the proposed Project site.	
Indirect Impacts to Wetlands and ESHA – Required Buffer	To ensure the project conforms to the extent feasible with LCP Policy 6, we recommend the Energy Commission modify Condition BIO-7 to require that NRG design the P3 such that all project-related development is at least 100 feet, and further, if feasible, from nearby areas that meet the Coastal Commission and LCP definitions of wetlands or ESHA. We also recommend that submittal of revised project plans be required to reflect these changes in the project layout.	Accept As currently proposed, all Project-related development, , including the construction laydown and parking areas, are at least 100 feet from currently identified off-site wetlands and ESHA north of the MGS property. Applicant therefore accepts this recommendation with respect to such wetlands and ESHA, and will implement best management practices (BMPs) to minimize potential impacts to those resources. CEC staff has proposed Condition of Certification	

Topic Area	CCC Stoffe Decommended Specific Provision	Applicant's Response
Торіс Агеа	This recommended modification would also require NRG to submit a revised project plan showing that all project-related development is at least 100 feet from wetlands and ESHA. This requirement could be met through the selection of an off-site alternative location (such as the Ormond Beach Area site), relocating the project to one of the two on-site alternative locations identified in the Alternatives section (PSA pages 211-324), or by moving the proposed project footprint (specifically, the construction and laydown area) a few dozen feet away from the northern boundary of the site, which abuts the wetland/ESHA restoration area. Such an adjustment would appear to be feasible based on the amount of space available within the project site. (Proposed Report, p. 16)	BIO-6, which requires a Biological Resources Implementation and Monitoring Plan (BRIMP) to implement BMPs, monitoring and contingency measures. The BRIMP, together with the other proposed Conditions of Certification, will ensure that Project-related activities will not result in significant adverse effects on ESHA. It should be noted that the existing flood protection berm along the northern MGS property line separates the Project site from the identified off- site wetlands and ESHA areas.
Indirect Impacts to Wetlands and ESHA – Avoiding Effects of Construction Dewatering on Adjacent ESHA/Wetland Areas	To ensure project dewatering is done in a manner consistent with applicable Coastal Act and LCP policies, the Commission recommends that the CEC modify Condition SOIL&WATER-3 to require that groundwater level monitoring measures be included in the required dewatering plan. Specifically, we recommend that the required monitoring include monitoring of groundwater levels at a minimum of two locations along the northern edge of the MGS parcel (between the P3 site and adjacent habitat areas). Additionally, we recommend that Condition SOIL&WATER-3 be modified to require that NRG immediately cease dewatering activities if groundwater monitoring demonstrates a decrease in groundwater levels outside of the previously- projected radius of influence, until such time as NRG has revised the dewatering and/or foundation installation plan to reduce the area of groundwater drawdown such that reduced groundwater levels do not extend beyond the monitoring wells and parcel boundary. (Proposed Report, p. 17)	 Accept Applicant accepts this recommendation with the following clarifications: Applicant agrees to develop a Construction Dewatering Plan and submit to the CEC CPM for review and approval. This plan will be developed during detailed design and will provide details of the dewatering methods, areas to be dewatered, monitoring requirements and criteria for modifying the plan as needed. Although PSA SOIL&WATER-3 is titled Construction Dewatering Plan, the text is incorrect. It does not describe dewatering, but instead incorrectly addresses wastewater discharges during operations, i.e., it is a duplicate to SOIL & WATER-4. It is expected that CEC staff will correct and modify SOIL&WATER-3 as appropriate. Applicant agrees to perform groundwater elevation monitoring during dewatering activities that could affect wetlands and ESHA north of the site. There is one existing monitoring well (MW-2) between the P3 site and the northern boundary that

		Applicant's Response
Topic Area	CCC Staff's Recommended Specific Provision	Accept/Accept with Revisions/Reject
		need for an additional monitoring well would be evaluated in the proposed Construction Dewatering Plan submitted to the CEC CPM.
Indirect Impacts to Wetlands and ESHA – Reducing Effects of Project Noise and Vibration on Adjacent ESHA/Wetland Areas	The Commission generally concurs with the PSA's recommended approach to avoiding and reducing noise-related effects in the nearby ESHA and wetland areas. However, the Commission recommends two modifications to Condition BIO-8 to ensure consistency with Coastal Act and LCP provisions requiring protection of these habitat areas:	
	• Inclusion of noise monitoring and noise thresholds: The sensitive-species monitoring provisions of Condition BIO-8 should be modified to include both monitoring of noise levels and an allowable noise threshold in adjacent sensitive habitat, in order to prevent disturbance of nesting birds during construction and demolition activities. Specifically, Condition BIO-8 should be modified to require that NRG prepare and implement a Noise Monitoring Plan throughout construction and demolition activities taking place during the bird breeding season (February 1 to August 31). The Plan should require continuous noise monitoring at several locations near known or suitable nesting habitat adjacent to the project site, and should require that noise levels at these monitoring locations not exceed 8 dBA above ambient levels or 60 dBA (hourly average Leq), whichever is greater. In addition, sound levels within 100 feet of active nests (as identified during the nesting surveys required pursuant to Condition BIO-8) should not exceed 65 dBA. The Plan should also require that monitoring devices be reviewed daily during any construction occurring within 400 feet of the project's boundary with adjacent wetland, mulefat scrub or dune areas, and during any pile-driving activities. If construction noise exceeds these levels, NRG should be required to implement noise-reduction measures, which may include installing	 Accept with Revisions Applicant agrees to prepare a Noise Monitoring Plan for construction and demolition. Applicant proposes the following revisions to the recommendation: Applicant accepts a 65 dBA hourly Leq construction/demolition noise limit monitored as part of Condition of Certification BIO-8 activities at a distance of 100 feet from an active nest during the breeding/nesting season, based on the understanding that the limit applies to construction/demolition noise from the P3 and MGS site only. With ambient noise level measurements (to assess noise above ambient that would be attributed to construction/demolition noise for P3 and demolition of MGS Units 1 & 2) adopted as part of BIO-8 activities near active nests, Applicant does not agree that continuous monitoring at several additional and as-yet unidentified habitat locations needs to be implemented. Applicant also does not agree with the suggested noise limits of 60dBa and increase of 8 dBa for these unidentified locations, on the basis that page 4.2-28 of the PSA notes "the Energy Commission declined 60 decibels as too low a disturbance threshold to use for avian species (CEC 2014)." Therefore,

Tonia Area	CCC Staffa Decommended Specific Drovision	Applicant's Response
Topic Area	temporary sound barriers, or, as feasible, moving noise- generating activities further from the ESHA/wetland areas, and avoiding pile driving or confining pile driving to project areas furthest from the sensitive habitats. These recommendations are complementary to and more protective of sensitive wildlife than the current requirements of Condition BIO-8 , which would rely on relatively infrequent monitoring of known nests and would not require impact avoidance measures to be enacted until the disturbance or "take" of nesting birds had already occurred. (Proposed Report, pp. 19- 20)	Accept/Accept with Revisions/Reject Applicant recommends that the following sentence be removed from the provision as shown in strikeout below: The Plan should require continuous noise monitoring at several locations near known or suitable nesting habitat adjacent to the project site, and should require that noise levels at these monitoring locations not exceed 8 dBA above ambient levels or 60 dBA (hourly average Leq), whichever is greater.
	 Prohibition on pile driving during nesting season: Second, Condition BIO-8 should be modified to require that NRG schedule and conduct all pile driving activities outside the February 1 through August 31 breeding and nesting season. Condition BIO-8 currently leaves open the possibility that pile driving could occur in close proximity to active nesting areas. As noted above, the PSA already anticipates that noise levels during pile driving would exceed the 60 – 65 dBA threshold deemed by the CDFW and USFWS to be protective of nesting birds at distances of 2,600 to 4,100 feet, which would encompass large areas of known and suitable nesting habitat in the wetlands and dunes surrounding the MGS site. Additionally, pile driving has the potential to cause substantial vibration levels (VdB), in nearby wetlands and ESHA, although the PSA does not identify those expected levels. Given the expected threshold exceedance and the additional unquantified but likely significant vibration-related effects, this modification would further reduce project-related adverse effects on nearby ESHA and wetland areas. (Proposed Report, p. 20) 	Accept with Revisions Applicant's current plan is to avoid pile driving altogether and use alternative methods for construction of P3, such as auger cast, hydraulic or drilled piles, whichminimize noise and vibration. In the event that during detailed design or during construction, pile driving becomes necessary, and it is not feasible to schedule and conduct the pile driving outside the February 1 through August 31 breeding and nesting season, Applicant will work with the biologist and CEC's CPM to develop an appropriate plan to reduce project-related adverse effects on nearby ESHA and wetland areas.
Wastewater Discharge & Impacts of Outfall Structure	To ensure consistency with Coastal Act and LCP Policies requiring the maintenance and protection of marine resources and sensitive species and habitats and the minimization of adverse impact from adjacent development, and LCP Policy 64, requiring the reuse of	Accept Subject to CEC approval of an alternative means of handling process wastewater and stormwater from P3, Applicant will discontinue use of the existing MGS outfall and will include removal of the outfall as

		Applicant's Response
Topic Area	CCC Staff's Recommended Specific Provision	Accept/Accept with Revisions/Reject
Maintenance	wastewater from energy-related facilities, the Commission recommends that the CEC require NRG to develop a Wastewater Reuse and Recycling Plan, including any necessary water treatment, that would maximize reuse of the process wastewater and storm water generated and collected at the MGS following the construction of the P3 and decommissioning of Units 1 and 2 and eliminate the discharge of wastewater to the beach. The Plan could include the possible reclamation, storage and reuse of storm water as described above, the treatment and reinjection of wastewater for purposes of groundwater recharge (to replace infiltration lost as a result of impervious surfaces on the MGS site), treatment and discharge to the Edison Canal (if such use would promote water circulation necessary to prevent stagnation), treatment and recycling for off-site industrial, agricultural or urban use, or other beneficial uses. In the event that full wastewater reuse and recycling is determined to be infeasible, we recommend that the CEC require the Wastewater Plan to include measures that would prevent the recurrence of back-beach ponding, avoid impacts to avian nesting areas, and eliminate the need for repeated excavation of a discharge channel on the beach. (Proposed Report, p. 22)	part of the demolition of MGS Units 1 and 2. P3 will reuse process wastewater and stormwater to the maximum extent feasible.
Flood, Sea Level 1	Rise, and Tsunami Hazards	
Flood, Sea Level Rise, and Tsunami Hazards	To address hazards presented by flooding, sea level rise and tsunamis, and their associated risks to the proposed facility, and to allow consistency with relevant provisions of the Coastal Act and LCP, the Commission recommends the CEC develop a new condition of certification achieving the following: Relocation of Project to Minimize Risk of Flooding: In order to ensure that the proposed project minimizes risks to life and property, assures stability and structural integrity, and remains inland of the 100-year flood zone over the full life of the project, as required by Coastal Act Section 30253 and LCP Policies 40 and 56, the Commission recommends that the CEC require NRG to relocate the proposed project to an alternative site that is (a) outside the current 100-year and 500-year flood zones, and (b) would not be at risk of flooding related to high water levels, storm waves or coastal erosion,	Reject As set forth in NRG's September 2, 2016 comments, the level of risk associated with exposure to flood, sea level rise and tsunami hazards does not warrant relocation of the Project. Further, no alternative offsite or onsite reconfigurations are feasible or environmentally superior to the proposed site.

Tonia Aros	CCC Staff's Pagemended Specific Provision	Applicant's Response
	including the effects of sea level rise, over the full 30-year project term. (Proposed Report, p. 35)	Accept/Accept with Kevisions/Keject
Flood, Sea Level Rise, and Tsunami Hazards	If the CEC determines that there is no feasible site meeting these criteria to which the project could be relocated, the Commission recommends the following new and modified conditions are necessary allow consistency, to the extent feasible, with relevant Coastal Act and LCP policies:	
	• Flood Damage Prevention: In order to minimize risks to life and property from flooding within the confines of the MGS site, the Commission recommends the CEC include the following new condition of approval:	Accept Applicant accepts this recommendation.
	Prior to the start of construction, NRG shall submit for CPM review and approval, certification from a licensed engineer that the proposed facility is elevated above, or protected from, a 500- year flood event at the project site that includes an additional 24 inches of sea level rise. The engineer's determination shall describe the methods and include the calculations used to determine the elevation of the current 500-year flood event at the site and those used to determine the elevation of a future 500-year flood event with the additional 24 inches of sea level	
	rise expected during the facility's thirty year operating life. The elevations and proposed changes to the facility design shall be incorporated into the final project design submitted to the <u>CPM.</u> (Proposed Report, pp. 35-36)	
	• No Shoreline Protective Device: Coastal Act Section 30253(b) requires that new development "neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices" To ensure consistency with this policy, the Commission recommends that the CEC include the following new condition of approval:	Accept Applicant accepts this recommendation.
	In the event that the approved development, including any future improvements, is threatened with damage or destruction from coastal hazards, or is damaged or destroyed by coastal hazards,	

Торіс Агеа	CCC Staff's Recommended Specific Provision	Applicant's Response Accept/Accept with Revisions/Reject
•	protective structures (including but not limited to seawalls, revetments, groins, deep piers/caissons, etc.) shall be prohibited. By acceptance of the CEC approval, the project owner waives any right to construct such protective structures, including any that may exist under Public Resources Code Section 30235. (Proposed Report, p. 36)	
	• Beach and Dune Monitoring: Due to the importance of a wide beach and intact dunes for reducing flood hazards at the project site, the Commission recommends that the CEC require NRG to implement a Beach and Dune Monitoring Program to be carried out over the life of the project. The purpose of this monitoring would be to determine if, and at what rate, the beach and/or dunes are eroding. The Program should include triggers for further action based on the degree of beach narrowing and/or dune loss, and measures should be identified that could halt or slow the observed erosion without construction of shoreline protective devices. One such measure could include financial support for dredging and sand bypassing at Ventura Harbor, particularly if a hiatus in sand bypassing is shown to be contributing to erosion at the project site. (Proposed Report, p. 36)	Accept Applicant accepts this recommendation.
D-bli-A	• Facility Removal. As discussed above, in the second half of the century the MGS is likely to be subject to hazards, including increasingly frequent and severe flooding and shoreline erosion, which will render the facility, including the P3, inoperable. In order to minimize this risk to life and property, and assure that the proposed development does not contribute to the destruction of the site or surrounding area, as required by Coastal Act Section 30253, the Commission recommends that the CEC require NRG to submit a plan, prior to the end of the proposed 30-year life of the P3, for the decommissioning and full removal of the facility. (Proposed Report, p. 36)	Accept Applicant accepts the CEC's standard Condition of Certification regarding facility closure and removal (proposed Condition of Certification COM-15, PSA, p. 6-19).

		Applicant's Response
Topic Area	CCC Staff's Recommended Specific Provision	Accept/Accept with Revisions/Reject
Public Access and Recreation - Wastewater Discharge and Reuse of Outfall Structures	To ensure consistency with Coastal Act Sections 30210 and 30211, and LCP Policies 52 and 54, the Commission recommends that the CEC require NRG to develop a Wastewater Reuse and Recycling Plan, including any necessary water treatment, that would maximize reuse of the process wastewater and storm water generated and collected at the MGS following the construction of the P3, and eliminate the discharge of wastewater to the beach. In the event that full wastewater reuse and recycling is determined to be infeasible, the Commission recommends that the CEC require that the Wastewater Plan include measures that would prevent the recurrence of back-beach ponding, avoid the creation of public hazards and other impacts to public access and recreation, and eliminate the need for repeated excavation of a discharge channel on the beach. (Proposed Report, p. 40)	Accept To address this recommendation, and satisfy the requirements of Public Resources Code section 25529 related to establishment of an area for public use, subject to CEC approval of an alternative means of handling process wastewater and stormwater from P3, Applicant will discontinue use of the existing MGS outfall and will include removal of the outfall as part of the demolition of MGS Units 1 and 2. P3 will reuse process wastewater and stormwater to the maximum extent feasible.
Public Access and Recreation – Public Access Improvements	To address the public access requirements of Section 25529 of the Warren-Alquist Act as well as the relevant provisions of the Coastal Act and LCP, the Commission recommends that Condition LAND-1 be modified to require the full removal, partial removal, or downsizing of the existing outfall structures (including riprap and fence), to eliminate or minimize impacts to public access. (Proposed Report, pp. 41-42)	Accept Subject to CEC approval of an alternative means of handling process wastewater and stormwater from P3, Applicant will discontinue use of the existing MGS outfall and will include removal of the outfall as part of the demolition of MGS Units 1 and 2. P3 will reuse process wastewater and stormwater to the maximum extent feasible.
Public Access and Recreation – Facility Abandonment	In order to avoid foreseeable public access impacts from any future abandonment-in-place of the MGS and/or P3, and to allow consistency with Coastal Act and LCP policies requiring maximum public access and requiring that energy-related development be designed to minimize adverse effects on public access, the Commission recommends that the CEC include a new condition of approval requiring that NRG develop decommissioning plans which include the removal of all MGS and P3 structures and facilities, including below-grade components, at the end of the operating lives of the respective facilities. (Proposed Report, p. 42)	Accept with Revisions Applicant's commitment regarding demolition of MGS Units 1 and 2 is set forth in its "Project Enhancement and Refinement – Demolition of Mandalay Generating Station Units 1 and 2" docketed with the CEC on November 19, 2015 (TN # 206698). With respect to P3, Applicant accepts the CEC's standard Condition of Certification regarding facility closure and removal (proposed Condition of Certification COM-15, PSA, p. 6-19), which requires development and CEC approval of a Final Closure Plan 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."

Topic Area	CCC Staff's Recommended Specific Provision	Applicant's Response Accept/Accept with Revisions/Reject
Public Access and Recreation – Project-Related Traffic	To ensure consistency with Coastal Act and LCP policies protecting public access to the coast, the Commission recommends that Condition TRANS-3 be modified to require NRG to include in its Traffic Control Plan any measures necessary to minimize construction traffic on weekends and holidays, and to avoid delays and degraded LOS during these key recreational periods. (Proposed Report, p. 43)	Accept Applicant accepts this recommendation. Please note that proposed Condition of Certification TRANS-2, as opposed to TRANS-3, addresses the Traffic Control Plan.



September 6, 2016

California Coastal Commission 45 Fremont, Suite 2000 San Francisco, CA 94105-2219

Re: <u>Proposal to Upgrade Mandalay Generation Station (Energy, Ocean</u> <u>Resources and Federal Consistency) (Agenda Item F10a)</u>

Sent via email to alison.dettmer@coastal.ca.gov

Dear Honorable Commissioners:

The undersigned organizations submit this letter to the California Coastal Commission respectfully urging you to adopt staff's proposed Report (prepared pursuant to section 30413(d) of the Coastal Act) to the California Energy Commission ("CEC") for NRG Energy's proposed "Puente Power Project," which would be the *fourth* fossilfuel power plant to be sited on the City of Oxnard's beaches. Our organizations believe that CCC staff has done a commendable and thorough job in preparing the Report, and we support the detailed recommendations identified by staff as necessary to bring the September 6, 2016 California Coastal Commission re Proposal to Upgrade Mandalay Generating Station (Agenda Item F10a) Page 2

project in compliance with the Coastal Act, including the fundamental recommendation "that the CEC require NRG to relocate the project to an off-site alternative location that is free of current and future flood hazards."

Although proposed power plants such as Puente do not require a coastal development permit, your Commission still plays an essential and substantive role in the CEC power plant certification process by providing findings with respect to specific measures necessary to bring the project into compliance with Coastal Act policies. The CEC can only disregard these recommendations if it finds that they are infeasible or would cause greater environmental impacts than the project as proposed.

Here, the Puente Power Project 30413(d) Report concludes that the project as proposed and as analyzed by the CEC in its Preliminary Staff Assessment ("PSA") does not address all environmental impacts, including direct impacts to wetlands; indirect impacts to wetlands and environmentally sensitive habitat areas ("ESHA"); site exposure to present and future hazards from flooding, sea level rise, and tsunamis; and effects on public access to the shoreline. The Report also notes that the Puente project would conflict with several land use policies under the Coastal Act and the City of Oxnard's Local Coastal Program.

CCC staff's clear-eyed review of this project illustrates that the proposed site is counter to basic Coastal Act policies:

Ultimately, in spite of the uncertainty surrounding the exact degree of risk, there is substantial evidence that the project site could be exposed to flooding during its proposed 30-year operating life, and that over the long-term, this possibility would become a certainty. In this situation, Coastal Act Section 30253 requires that risks to life and property be minimized, and the stability and structural integrity of new development be assured, without resorting to the construction of shoreline protective devices. The Commission believes that the requirements of this policy can best be met through risk avoidance, that is, by the selection of an alternative inland site that is free of flooding hazards. (Staff Report, at p. 34).

Accordingly, the 30413(d) Report recommends "that the CEC require NRG to relocate the proposed project to an alternative site that is (a) outside the current 100-year and 500-year flood zones, and (b) would not be at risk of flooding related to high water levels, storm waves, or coastal erosion, including the effects of sea level rise, over the full 30-year project term." Similarly, the 30413(d) Report recommends that "the Energy Commission require that the proposed project be relocated to an alternative site that would not result in direct impacts to or fill of coastal wetlands." (Staff Report, at p. 13).

September 6, 2016 California Coastal Commission re Proposal to Upgrade Mandalay Generating Station (Agenda Item F10a) Page 3

Although the 30413(d) Report makes several additional laudable recommendations in an effort to lessen or mitigate Puente's array of adverse environmental impacts, our undersigned organizations write primarily to support the most basic recommendation asking that the CEC require NRG to locate an alternate site.

The 30413(d) Report does omit one important issue—environmental justice. As stated in the CCC's 2015 Sea Level Rise Policy Guidance, the Coastal Act "recognizes the fundamental importance of the fair distribution of environmental benefits." Accordingly, the Policy directs that "[e]nsuring low-income and underserved communities are included in environmental decisions is a key tenet of environmental justice and will minimize disproportionate environmental and public health impacts."

The environmental justice implications of the Puente project are undeniable. The City of Oxnard is a majority-minority community, with 74% of residents of Hispanic descent and an additional 10% of residents identified as non-white. In addition to the three existing coastal power plants, Oxnard also contains an EPA Superfund site, landfills, and extensive oil and gas development adjacent to residences. State of California data contained within CalEnviro Screen 2.0 characterizes much of the City as disadvantaged, with several census tracts classified within the highest "score" (91%-100%). When all census tracts are considered, the City of Oxnard ranks within the top 10% of California communities in terms of the environmental burden of dangerous and polluting industries. This community should not be saddled with yet another coastal power plant.

The siting of any additional fossil-fueled power plants on California's irreplaceable beaches is shortsighted under any circumstance; NRG's proposal to build the Puente project in an area uniquely vulnerable to sea level rise, beach erosion, and tsunami risk is simply reckless. We respectfully request that the California Coastal Commission fully and responsibly exercise its statutory authority under the Coastal Act and Warren-Alquist Act by adopting staff's 30413(d) Report (and recommendations) for the Puente Power Project.

Thank you for considering our recommendation.

Sincerely,

Strela Cervas, Co-Director California Environmental Justice Alliance

Janis McCormick, President Environmental Coalition September 6, 2016 California Coastal Commission re Proposal to Upgrade Mandalay Generating Station (Agenda Item F10a) Page 4

Brian Segee, Senior Attorney Environmental Defense Center

Matt Vespa, Senior Attorney Sierra Club

Paul Jenkin, Environmental Coordinator Surfrider Foundation, Ventura County Chapter

Bruce Schoppe, President Ventura Audubon Society

Jason Weiner, General Counsel and Water Initiative Director Ventura Coastkeeper

Mati Waiya, Executive Director Wishtoyo Foundation