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STATE OF CALIFORNIA

ENERGY RESOURCES

CONSERVATION AND DEVELOPMENT COMMISSION

In the Matter of: APPLICATION FOR CERTIFICATION FOR THE PUENTE POWER PROJECT	Docket No. 15-AFC-01 APPLICANT'S OPENING BRIEF ON ALL TOPICS EXCEPT THE CAISO SPECIAL STUDY

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I. INTRODUCTION

A. The California Energy Commission has both the obligation and the authority to ensure a reliable supply of electrical energy for the State of California

The California Energy Commission ("CEC") was created based on a recognition of the importance of reliable electrical energy to the State of California. In adopting the legislation that created the CEC, the Warren-Alquist State Energy Resources Conservation and Development Act ("Warren-Alquist Act"), Cal. Pub. Res. Code §§ 25500 *et seq.*, the legislature found and declared ". . . that electrical energy is essential to the health, safety and welfare of the people of this state and to the state economy, and that it is the responsibility of state government to ensure that a reliable supply of electrical energy is maintained at a level consistent with the need for such energy for protection of public health and safety, for promotion of the general welfare, and for environmental quality protection." *Id. at* § 25001.

The legislature also recognized "that that prevention of delays and interruptions in the orderly provision of electrical energy, protection of environmental values, and conservation of energy resources require expanded authority and technical capability within state government." *Id.* § 25005. It therefore created the CEC and mandated that it "certify sufficient sites and related facilities which are required to provide a supply of electric power sufficient to accommodate the demand projected in the most recent forecast." *Id. at* § 25500.5.

To ensure that the CEC could fulfill this mandate, the legislature vested the CEC with "the exclusive power to certify all sites and related facilities in the state," and deemed that the "issuance of a certificate by the commission shall be in lieu of any permit, certificate, or similar document required by any state, local or regional agency, or federal agency to the extent permitted by federal law . . . and shall supersede any applicable statute, ordinance, or regulation of any state, local, or regional agency, or federal agency to the extent permitted by federal law." *Id.* § 25500. Thus, the CEC has both the obligation and the authority to ensure that the state enjoys the benefits of a reliable supply of electrical energy.

The Puente Power Project ("Project") was proposed by NRG Energy Center Oxnard LLC ("NRG" or "Applicant"), and awarded a contract by Southern California Edison ("SCE") that

was then approved by the California Public Utilities Commission ("CPUC"), to address an identified need for additional electrical energy in the Moorpark Sub-Area. The 262-megawatt (MW) Project will also allow for the retirement of aging generating units consistent with requirements adopted by the State Water Resource Control Board for the protection of the environment. See, "Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling," adopted by the State Water Resources Control Board on May 4, 2010 ("OTC Policy"). Thus, certification of the Project by the CEC would fulfill the obligations of the CEC to ensure a reliable supply of electrical energy, and ensure protection of the environment.

B. The Puente Power Project has been the subject of a rigorous review and unprecedented level of scrutiny

Over the nearly two and one half years since NRG submitted the Application for Certification ("AFC") for the Project on April 15, 2015 (TN# 204219-1 through 204219-25), every aspect of the Project has been rigorously analyzed by NRG, CEC Staff, other agency staff at the federal, state and local levels, intervenors, members of the public and the assigned Committee.

Notwithstanding the creation of a robust record on all topics during evidentiary hearings in February of 2017, the Committee took the unusual step of re-opening the record and requesting that the parties provide additional information and analysis on certain key topics, including biological resources and coastal flooding. See, Committee Orders for Additional Evidence and Briefing Following Evidentiary Hearings, March 10, 2017, TN# 216505 ("March 10 Orders"). Additional evidentiary hearings held in July of 2017 resulted in significant additional evidence being added to the record, including the results of extensive biological resources surveys conducted by Applicant and detailed analyses of coastal hazards completed by CEC Staff and the United States Geological Survey ("USGS"). (*See* Sections V.C and V.D, respectively, for discussion of this additional evidence.)

On June 9, 2017, the Committee accepted an offer made by the California Independent System Operator ("CAISO) to conduct a special study of the Moorpark Sub-Area to evaluate whether certain portfolios of preferred resources could meet the same local capacity

requirements that would be met by the Project. *See* Committee Orders Extending ISO Study Time, Denying City Request for Additional Time and Revised Committee Schedule, June 20, 2017, TN# 219815. The results of the CAISO study were submitted on August 16, 2017. *See* Moorpark Sub-Area Local Capacity Alternative Study, TN# 220813 ("CAISO Special Study"). Additional evidentiary hearings on issues pertaining to the CAISO Special Study are scheduled for September 14, 2017.

The examples identified above are only the most recent actions undertaken to ensure that every aspect of the Project is analyzed, and that a robust evidentiary record exists upon which the Committee, and eventually the Commission, can rely in its evaluation of and decision on the Project.

II. REQUIRED FINDINGS AND COMPLIANCE DETERMINATIONS

As directed on August 8, 2017, *see* Hearing Officer Memo to Parties Re: Committee Identified Issues for Briefing, TN# 220614 ("August Memo re Issues for Briefing") this Opening Brief addresses all relevant issues in these proceedings except for those related to the CAISO Special Study. A separate brief on issues related to the CAISO Special Study will be filed by NRG on or before September 29, 2017, as ordered by the Committee.

This Opening Brief is organized according to the three major areas within which the Commission must make findings and/or determinations that the Project complies with applicable requirements: (1) environmental considerations; (2) compliance with applicable laws, ordinances, regulations and standards ("LORS"); and (3) public benefits from the Project. With respect to the issues addressed herein, the evidence in the record of these proceedings demonstrates that the Project as proposed satisfies all applicable requirements, and that the CEC can make all of the findings necessary to certify the Project. The statutory and regulatory underpinnings of each of these findings and requirements are summarized below.

A. Environmental Considerations

For all projects certified by the CEC, the Warren-Alquist Act requires that the certification include "[s]pecific provisions relating to the manner in which the proposed facility is to be designed, sited, and operated in order to protect environmental quality and assure public

health and safety." Cal. Pub. Res. Code § 25523(a). The CEC must also find that the proposed project is in conformity applicable air and water quality standards, including requirements pertaining to emission offsets. *Id.* § 25523(d).

For projects that fall within its exclusive jurisdiction, the CEC is also the lead agency under the California Environmental Quality Act ("CEQA").[1] Cal. Pub. Res. Code § 25519(c). As such, the CEC must find that the Project will not result in any significant adverse effect on the environment, or if one or more significant adverse effects on the environment would occur as a result of the Project, make one or more specified findings with respect to each significant effect. *Id.* § 21081.

In regard to air quality, the CEC may find that the Project conforms with applicable air quality standards only if

> the applicable air pollution control district or air quality management district certifies, prior to the licensing of the project by the commission, that complete emissions offsets for the proposed facility have been identified and will be obtained by the applicant within the time required by the district's rules or unless the applicable air pollution control district or air quality management district certifies that the applicant requires emissions offsets to be obtained prior to the commencement of operation consistent with Section 42314.3 of the Health and Safety Code and prior to commencement of the operation of the proposed facility. The commission shall require as a condition of certification that the applicant obtain any required emission offsets within the time required by the applicable district rules, consistent with any applicable federal and state laws and regulations, and prior to the commencement of the operation of the proposed facility.

Id. § 25523(d)(2); *see also* Section V.I *infra*.

Finally, in the case of a project located in the coastal zone, such as the Project, the CEC certification must include:

> specific provisions to meet the objectives of Division 20 (commencing with Section 30000) [of the Coastal Act] as may be specified in the report submitted by the California Coastal Commission pursuant to subdivision (d) of Section 30413, unless the [CEC] specifically finds that the adoption of the provisions specified in the report would result in greater adverse effect on the environment or that the provisions proposed in the report would not be feasible.

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[1] The CEC's regulatory process, including the evidentiary record and associated analyses, is functionally equivalent to an Environmental Impact Report prepared pursuant to CEQA. Cal. Pub. Res. Code § 21080.5(a); Cal. Code Regs., tit. 14 ("CEQA Guidelines"), § 15251(j).

Id. § 25523(b).

B. LORS Compliance

The CEC must make findings regarding the conformity of the Project with applicable local, regional, state, and federal LORS. *Id.* § 25523(d). An *applicable* LORS is one that would regulate the proposed Project but for the CEC's exclusive jurisdiction. Cal. Code Regs., tit 20, § 1744(b). As part of the CEC's review of compliance with applicable LORS, Section 1744(b) provides that "each agency responsible for enforcing the applicable mandate shall assess the adequacy of the applicant's proposed compliance measures to determine whether the facility will comply with the mandate." Under Section 1744(d), "If the applicant or any responsible agency asserts that an applicable mandate cannot be complied with, the commission staff shall independently verify the non-compliance, and advise the commission of its findings in the hearings."

In determining LORS compliance, the CEC gives "due deference" to, but need not accept, an agency's or local jurisdiction's assessment of whether a proposed project is consistent with applicable LORS. Cal. Code Regs., tit. 20, § 1714.5. The CEC may not certify a project that does not conform with all applicable LORS, unless the CEC finds that the project "is required for public convenience and necessity and that there are not more prudent and feasible means of achieving public convenience and necessity." Cal. Pub. Res. Code § 25525.

C. Public Benefits

The certification also must include a "discussion of any public benefits from the project including, but not limited to, economic benefits, environmental benefits, and electricity reliability benefits." *Id.* § 25523(h). Finally, the CEC must require "that an area be established for public use." *Id.* § 25529. The CEC must also require that the project be "set back from the shoreline to permit reasonable public use and to protect scenic and aesthetic values." *Id.*

III. ISSUES UPON WHICH THE COMMITTEE REQUESTED BRIEFING

The August Memo re Issues for Briefing identified specific issues upon which the Committee requested briefing from the parties. Those specific issues are addressed in this Opening Brief within the discussion of the topic area to which the issues pertain. To assist in

locating the discussion of those specific issues within this Opening Brief, the table below restates the issues and identifies those sections of this Opening Brief in which the discussion is located.

Topic and Issue	Relevant Sections of Opening Brief
Land Use: Identify the City of Oxnard General Plan and other policies, development standards, zoning ordinance provisions, and any other development regulation(s) or standard(s) that the proposed project does not comply with, including references to the evidence and law supporting that conclusion.	**Sections V.E, VI**
Land Use: Identify and apply the City of Oxnard policies and regulations applicable to the height of the proposed project, including any mechanisms such as a variance that could allow those height limits to be exceeded.	**Section VI.C**
Biological Resources: Address whether any Environmentally Sensitive Habitat Areas ("ESHA") exist on or near the proposed project construction, Units 1 and 2 demolition or outfall removal areas. Explain the criteria for determining ESHA existence, the facts that support or refute their existence, and any constraints that the existence of ESHA creates upon the proposed project activities.	**Section V.C.4**
Biological Resources: Address whether any wetlands exist on or near the proposed project construction, Units 1 and 2 demolition or outfall removal areas. Explain the criteria for determining wetlands existence, the facts that support or refute their existence, and any constraints that the existence of wetlands creates upon the proposed project activities.	**Section V.C.5**
Biological Resources: Address any recommended changes to staff-proposed Conditions of Certification BIO-9 and BIO-10 with specific revised condition language.	**Section V.C.6, Attachment A**

Topic and Issue	Relevant Sections of Opening Brief
Socioeconomics: Address the legal requirements of federal and state environmental justice laws, and the application of those laws to this proceeding.	**Section V.G**

IV. PERMISSIBLE BASES OF FINDINGS AND BURDEN OF PROOF

The Presiding Member's Proposed Decision and Final Commission Decision must be based on the evidence contained in the record of the proceedings. Cal. Code Regs., tit. 20, § 1745.5(b)(1). "A finding may be based on any evidence in the hearing record, if the evidence is the sort of information on which responsible persons are accustomed to relying on in the conduct of serious affairs." *Id*. § 1212(c)(2). Hearsay evidence is not sufficient to support a finding "unless it would be admissible over objections in civil actions." *Id*. § 1212(c)(3).

Applicant has the burden of ensuring that the evidentiary record contains evidence produced by Applicant or other parties (*e.g.*, CEC Staff) to support all findings and compliance determinations required for certification of the Project as proposed. Cal. Code Regs., tit. 20, § 1745(c). However, with respect to any additional condition, modification, or other provision relating to the manner in which the Project should be designed, sited, and operated in order to protect environmental quality and ensure public health and safety (*e.g.*, relocating the proposed Project to an alternative site, or replacing the Project with alternative technologies), the burden shifts to the proponent of such condition, modification or provision to make a reasonable showing to support the need for and feasibility of the condition, modification, or provision. *Id.* § 1745(c). Likewise, another party proposing that the CEC approve an alternative site in lieu of Applicant's proposal, "has the burden of presenting evidence to establish the suitability and acceptability of such proposal" and must make the same demonstration that Applicant must make with respect to the proposed site. *Id.* § 1723.5(e).

V. ENVIRONMENTAL CONDITIONS

A. Overview

The evidentiary record supports a finding by the CEC that the Project, with implementation of the Conditions of Certification recommended by CEC Staff in its Final Staff Assessment ("FSA"), Parts 1 and 2, Cal. Energy Comm'n, Ex. Nos. 2000 and 2001, TN# 214712 and TN# 214713, will not result in any significant adverse direct, indirect, or cumulative effects on the environment. As stated in the FSA:

> This Final Staff Assessment (FSA) contains staff's final, independent, objective evaluation and testimony for the proposed Puente Power Project. The FSA examines engineering, environmental, public health and safety, and environmental justice aspects of the proposed Puente project, based on the information provided by the applicant, government agencies, interested parties, independent research, and other sources available at the time the FSA was prepared.

FSA Part 1 at 1-2.

Based on the comprehensive analysis described above, CEC Staff concluded "that the proposed Puente Power Project would have no significant impacts to the environment . . . ." *Id.* at 1-30.

Subsequent to issuing the FSA, CEC Staff prepared and filed supplemental testimony pursuant to the March 10 Orders, on the topics of biological resources, coastal flooding, traffic and transportation, and compliance and closure. See, Staff's Supplemental Testimony Filed In Response To The Committee's March 10, 2017 Order For The Puente Power Project, TN# 218274; see also, Biological Resources Supplemental Testimony of Carol Watson and John Hilliard, TN# 220168. CEC Staff's supplemental testimony, some of which is described in more detail below, affirmed the conclusion in the FSA that the Project would not result in any significant adverse environmental effects. CEC Staff's conclusion that the Project would have no significant adverse effects on the environment, and the evidence in support of that conclusion, is consistent with the testimony and documentary evidence provided by Applicant's expert witnesses and admitted into the evidentiary record. The following table summarizes Applicant's evidence in support of that conclusion:

Topic Area	Evidence Supporting a Finding of No Significant Adverse Effects
Air Quality and Public Health	Expert Declaration of Gary Rubenstein – Air Quality and Public Health, TN# 215441; Expert Declaration of Gary Rubenstein – Response to Opening Testimony of Bill Powers, TN# 215553; Final Determination of Compliance, Ventura Cty. Air Pollution Control Dist., Ex. Nos. 2007-2021, TN# 214005-1 to TN# 215005-15 and all exhibits referenced in the foregoing.
Biological Resources	Expert Declaration of Julie Love – Opening, TN# 215441; Expert Declaration of Julie Love – Wetland Designation, TN# 215553; Expert Declaration of Julie Love – Response to Intervenor Statements, TN# 215553; Applicant's Biological Resources Survey Methodology, TN# 216716; Expert Declaration of Ivan Parr in Response to March 10, 2017 Committee Orders, TN# 219886; Expert Declaration of Julie Love in Response to March 10, 2017 Committee Orders, TN# 219898; Responses to Comments on Proposed Biological Resources Survey Methodology and Final Biological Resources Survey Methodology, TN# 216937; and all exhibits referenced in the foregoing.
Cultural Resources – Archeology	Expert Declaration of Mark Hale, TN# 215441; and all exhibits referenced in the foregoing.
Cultural Resources – Historical Resources	Expert Declaration of Jeremy Hollins, TN# 215441; and all exhibits referenced in the foregoing.
Geologic Hazards & Resources and Soils	Expert Declaration of Anne Connell, TN# 215441; Expert Declaration of Erik Skov, TN# 215441; and all exhibits referenced in the foregoing.

Hazardous Materials and Waste Management	Expert Declaration of Tricia Winterbauer, TN# 215441; and all exhibits referenced in the foregoing.
Land Use and Agriculture	Expert Declaration of Tim Murphy, TN# 215441; and all exhibits referenced in the foregoing.
Noise	Expert Declaration of Mark Storm, TN# 215441; and all exhibits referenced in the foregoing.
Paleontological Resources	Expert Declaration of Joe Stewart, TN# 215441; and all exhibits referenced in the foregoing.
Socioeconomics and Environmental Justice	Expert Declaration of Nik Carlson, TN# 215441; Expert Declaration of Gary Rubenstein – Air Quality and Public Health, TN# 215441; Expert Declaration of Gary Rubenstein – Environmental Justice, TN# 215553; and all exhibits referenced in the foregoing.
Soil & Water Resources (including Coastal Hazards)	Expert Declaration of Anne Connell, TN# 215441; Expert Declaration of Phil Mineart – Opening, TN# 215441; Expert Declaration of Thomas Di Ciolli, TN# 215553; Expert Declaration of Phil Mineart – Response to Dr. Revell, TN# 215553; Non-Substantive Corrections to Expert Declaration of Phil Mineart, TN# 215582; Attachments to Declaration of Thomas Di Ciolli, TN# 215591; Presentation – Coastal Vulnerability in Ventura County Using CoSMoS, TN# 217282; Expert Declaration of Phil Mineart in Response to March 10, 2017 Committee Orders, TN# 218891; Expert Declaration of Phil Mineart in Response to Supplemental Testimony of Dr. Revell, TN# 220215; and all exhibits referenced in the foregoing.

Traffic and Transportation	Expert Declaration of Noel Casil, TN# 215441; Department of the Navy, Naval Base Ventura County, Comments on 15-AFC-01 Puente Power Plant Final Staff Assessment, TN# 215583; Expert Declaration of Gary Rubenstein in Response to March 10, 2017 Committee Orders, TN# 218887; and all exhibits referenced in the foregoing.
Visual Resources	Expert Declaration of Louise Kling, TN# 215441; Expert Declaration of John Qoyawayma, TN# 215441; and all exhibits referenced in the foregoing.
Worker Safety and Fire Protection	Expert Declaration of Zenis Walley, TN# 215441; and all exhibits referenced in the foregoing.

Thus, with respect to all environmental topic areas, evidence introduced by the CEC Staff and Applicant support a conclusion that the Project as proposed will not result in significant adverse direct, indirect, or cumulative environmental effects. Following is a more detailed discussion of those environmental topic areas upon which intervenors expressed differences of opinion with the analysis and conclusions of CEC Staff and Applicant.

B. Air Quality

1. The Project's construction emissions will not result in significant adverse direct, indirect or cumulative effects on air quality

The U.S. EPA Regulatory Model (AERMOD) was used to estimate ambient emissions impacts from Project construction. FSA Part 1 at 4.1-32. Emission sources during construction include exhaust emissions, mechanically generated fugitive dust emissions, wind-blown fugitive dust emissions, and, conservatively, emissions from the Mandalay Generating Station ("MGS") boilers and combustion turbine emissions as point sources because these units could be operating concurrently with Project construction activities. *Id.* at 4.1-32 to 4.1-33. Extensive mitigation measures apply to construction activities, including, but not limited to, dust control measures, road cleaning, and a requirement to use Tier 4 off-road construction equipment or the cleanest

such equipment available. *Id*. at 4.1-34 to 4.1-37. With implementation of mitigation, the Project's construction emissions would be less than significant. *Id*. at 4.1-37.

2. The Project's operational emissions will not result in significant adverse direct, indirect or cumulative effects on air quality

Operation of the Project will have a less than significant impact on air quality, as demonstrated by evidence from the Ventura County Air Pollution Control District ("VCAPCD"), CEC Staff and Applicant. Conservatively, the Project's emissions were calculated using worst-case, maximum emissions estimates, even though the "emissions during plant operation are expected to be much lower than the levels shown in the Applicant's Exhibits, FSA and [VCAPCD's Final Determination of Compliance]." Applicant's Opening Testimony, Ex. No. 1101, TN# 215441, Expert Declaration of Gary Rubenstein Regarding Air Quality and Public Health and Specified Areas in Other Disciplines, at 7 ("Applicant's Opening Test. – Rubenstein Decl."). In estimating the Project's emissions, CEC Staff found that, in order to meet the same needs as the two MGS units it is replacing, the Project would need to operate at an average capacity factor of 8%.[2] FSA Part 1 at 4.1-49. In order to be conservative, the CEC adopted a capacity factor for the Project of 11% for purposes of CEQA mitigation. *Id.* at 4.1-50, n.4. Given the historical usage (actual usage was only 5% capacity factor) of the MGS units that the Project is designed to replace, an 11% capacity factor is a reasonable and conservative estimate of actual future usage. *Id.* at 4.1-49, Air Quality Table 29; Applicant's Rebuttal Testimony, Ex. No. 1121, TN# 215553, Expert Declaration of Gary Rubenstein in Response to Opening Testimony of CBD Witness Bill Powers, at 8 ("Applicant's Rebuttal Test. – Rubenstein Powers Rebuttal Decl.").

Intervenor's expert Bill Powers compares the Project's permitted operating capacity of approximately 24.5% with the retiring MGS units' actual usage of 5%. *See, e.g.* Exhibit – Opening Testimony B. Powers, Ex. No. 7000, TN# 215440-1, at 10 ("Powers Opening Test."); Exhibit: B. Powers Rebuttal Testimony Decl., Ex. No. 7027, TN# 215535-3, at 3 ("Powers

[2] This comparison to the retiring MGS Units 1 and 2 was based on the seven-year period from 2009 through 2015. The FSA found that the actual capacity factor for the Project would have ranged from 3.1 to 13.3% (averaging 8.0%). FSA Part 1 at 4.1-49.

Rebuttal Test."); Applicant-Rubenstein, Tr. Feb. 8, at 64:15 to 64:19. This approach is not appropriate, however, because comparing permitted capacity with actual usage is highly misleading and substantially overestimates the Project emissions that will actually occur. Applicant's Rebuttal Test. – Rubenstein Powers Rebuttal Decl. at 7. The Project's maximum allowed hourly generation is approximately 37% lower than that of the retiring MGS units and the maximum allowed annual output of the Project is approximately 84% lower than that of the retiring MGS units. Applicant's Rebuttal Test. – Rubenstein Powers Rebuttal Decl. at 8.

Mr. Powers also criticizes the Project's use of Emission Reduction Credits ("ERC"). Powers Opening Test. at 12-13; FSA Part 1 at 4.1-98 to 4.1-100. He asserts that ERCs are inappropriate for CEQA mitigation because "CEQA mitigation must be local and contemporaneous," while ERCs can be generated and sold prior to the creation of the emissions for which they are being used as mitigation. Powers Opening Test. at 12-15. However, offsets to address the Project's emissions are specifically allowed by VCAPCD rules. *See, e.g.*, Rule 26.2.B, Ventura Cty. Air Pollution Control Dist. *available at* http://www.vcapcd.org/Rulebook /Reg2/Rule%2026.2.pdf. In addition, "the emission offset program was designed to encourage such early reductions" because "early reductions in emissions are always preferable." Applicant's Rebuttal Test. – Rubenstein Powers Rebuttal Decl. at 10. Regarding Mr. Powers' preference for locally generated offsets, although not required by CEQA, all ERCs will be generated locally within the VCAPCD, as required by the FSA. FSA Part 1 at 4.1-98.

The VCAPCD evaluated the Project's potential impact on local and regional air quality. *See, e.g.*, Final Determination of Compliance, Ex. Nos. 2007-2021, TN# 214005-1 to TN# 215005-15 ("FDOC"). In the FDOC, the VCAPCD analyzed the emissions for the Project as a replacement for MGS Unit 2 (and eventually MGS Unit 1), along with affiliated generators, and found that the "Project is expected to comply with all applicable District, State, and Federal rules and regulations that the VCAPCD implements and enforces." FDOC-Evaluation, Ex. No. 2008, TN# 214005-2, at 19-20, 41. The VCAPCD determined that NO_x emissions would increase by 29.93 tons per year, that SO_x emissions would increase by .93 tons per year, and that reactive organic compounds, PM_{10}, and CO would decrease by 0.77, 10.07, and 277.53 tons per

year, respectively. *Id.* at 20-21. Because the Project qualifies as a federal major modification for NO_x, Applicant was required to perform an alternatives analysis, and the VCAPCD determined the analysis to be compliant with applicable regulations. *Id.* at 28, 30.

The VCAPCD also conducted an analysis of required offsets and determined that offsets will be required pursuant to VCAPCD Rule 26.2.B, and that Applicant's proposed offset strategy meets all applicable requirements. FDOC-Evaluation, Ex. No. 2008, TN# 214005-2, at 25-27; FSA Part 1 at 4.1-69. The VCAPCD determined that NO_x ERC Certificates proposed by the Applicant (*i.e.*, ERC Certificate Nos. 1078, 1079, 1080, 1083, 1085, 1091, 1092, 1094, 1097, 1104, and 1107 owned by SCE) are eligible for use as emission offsets for the Project and that "(p)ursuant to Rule 26.4.D.3, there are no limitations on the use of these emission reduction credits and they may be used as proposed for the Puente Power Project." FDOC-Evaluation, Ex. No. 2008, TN# 214005-2, at 25-27. Furthermore, the VCAPCD demonstrated the suitability of the proposed ERC Certificates; the subject ERC Certificates have all been assigned a quarterly profile of 25%, 25%, 25%, 25% and are expected to meet the quarterly profile check of 80% per Rule 26.2.B.4 and Rule 26.6.F. *Id.* at 25-28. With implementation of mitigation measures, the VCAPCD concluded that the Project will not cause any significant direct, indirect, or cumulative environmental impacts with respect to air quality and public health. FDOC-Appendix G, Ex. No. 2015, TN# 214005-9, at 40 ("[T]he proposed project will not cause or contribute significantly to a violation of the State or National Ambient Air Quality Standards."); *see also* FDOC-Evaluation, Ex. No. 2008, TN# 214005-2, at 41 (the Project "is expected to comply with all applicable District, State, and Federal rules and regulations that the VCAPCD implements and enforces"); Applicant's Opening Test. – Rubenstein Decl. at 9; Applicant-Rubenstein, Tr. Feb. 8, at 62:1 to 62:12 (the Project will "not result in any unmitigated, significant air quality or public health impacts").

After performing a health risk assessment, the VCAPCD found that the hazard indices and cancer risk factor associated with the Project were below relevant standards. FDOC-Appendix G, Ex. No. 2015, TN# 214005-2, at 41; *see also* Applicant's Opening Test. – Rubenstein Decl. at 8 ("[T]here will be no significant incremental public health impacts

associated with the demolition/construction or operation of the Project.").

CEC Staff conducted an independent analysis and modeling of the Project's air quality impacts. *See* FSA Part 1 at 4.1-37 to 4.1-46. Conservatively, in calculating mitigation requirements, CEC Staff assumed MGS Unit 1 would remain operational even though MGS Unit 1 will eventually be shut down. *Id.* at 4.1-50. Based on this assumption, CEC Staff found that the Project would mitigate air quality impacts by limiting emissions to the maximum extent feasible with the Best Available Control Technology and by providing ERCs. *Id.* at 4.1-47. Although the VCAPCD's regulations do not require offset mitigation for volatile organic compounds, SO_x, and PM_{10}, the FSA requires Applicant to provide ERCs for all nonattainment pollutants (NO_x and PM_{10}) and their precursors (reactive organic compounds and SO_x). *Id.* at 4.1-51, Air Quality Table 30. Taking into account this ERC requirement, CEC Staff concluded that the Project's emissions were fully offset under CEQA. *Id.* In addition, CEC Staff recommended that ERCs for PM_{10} and SO_x be generated within the VCAPCD boundaries. *See id.* at 4.1-98.

CEC Staff specifically analyzed the Project's potential cumulative impact on local ambient air quality through air dispersion modeling. The results showed less than significant cumulative impacts. FSA Part 1 at 4.1-59. All pollutant concentrations other than annual PM_{10} were determined to remain below Ambient Air Quality Standards, and the increase in annual PM_{10} concentrations was determined to be negligible. *Id.* CEC Staff concluded that the Project, with the recommended Conditions of Certification, would not have significant cumulative impacts. *Id.*

CEC Staff also analyzed potential air quality impacts on environmental justice communities and concluded that, with mitigation, there would be no "adverse impact to members of the public, off-site nonresidential workers, recreational users or any environmental justice community." FSA Part 1 at 4.1-63. The Project will not cause any disproportionate, significant air quality impacts on environmental justice communities. *Id.* at 4.1-90. "[W]ith implementation of the proposed mitigation measures the project would have no significant environmental impacts in the areas of public health, air quality, or environmental justice."

Applicant-Rubenstein, Tr. Feb. 8, at 197:1 to 197:23. In sum, and as described more fully in Section V.G, "the Project would not result in significant environmental impacts accruing to any population in the study area; therefore, environmental impacts cannot accrue disproportionately to environmental justice populations (minority and/or low income) in the study area." Applicant's Rebuttal Testimony, Ex. No. 1121, TN# 215553, Expert Declaration of Gary Rubenstein Regarding Environmental Justice in Response to Opening Testimony of Intervenors, at 4 ("Applicant's Rebuttal Test. – Rubenstein Environmental Justice Rebuttal Test.").

CEC Staff also evaluated whether the Project would comply with applicable air quality LORS. FSA Part 1 at 4.1-3. CEC Staff concluded that "[w]ith the adoption of the attached conditions of certification, the proposed [Project] would conform to applicable federal, state, and [VCAPCD] air quality laws, ordinances, regulations, and standards, and the proposed Puente Power Project would not result in significant air quality related impacts." *Id.* at 4.1-1.

3. The Project's emissions of greenhouse gases will not result in significant adverse direct, indirect or cumulative effects

The Project is an efficient, dispatchable, natural gas-fired simple-cycle power generation unit with fast-start capability. FSA Part 1 at 4.1-127. Although the Project would produce greenhouse gas ("GHG") emissions while generating electricity, it would reduce overall GHG emissions from the electrical grid by facilitating the retirement of the MGS units and the Ormond Beach Generating Station (both higher GHG-emitting resources within the local capacity area). *Id*. The Project's fast-start capabilities would also provide the flexibility necessary to integrate existing and expected renewable generation and to meet California's renewable energy goals. *Id.*

Because the Project will result in increased fuel efficiency compared to the existing MGS units, it will reduce GHG emissions compared to the existing environmental baseline. Improved fuel efficiency in natural gas power plants corresponds closely with reduced emissions. *See, e.g.*, FSA Part 1 at 4.1-127, n.15. Because the Project's GHG emissions per megawatt-hour would be lower than those of the power plants that the Project would displace, state-wide, the Project "would lead to a net reduction in GHG emissions across the electricity system that provides

energy and capacity to California" and will contribute to a reduction of GHG emissions in California and regionally. *Id.* at 4.1-127, 4.1-165.

The Project would be "subject to California's GHG cap-and-trade program and would be required to obtain allowances or offsets to mitigate its GHG emissions." Applicant's Opening Test. – Rubenstein Decl. at 7; *see also* FSA Part 1 at 4.1-166. The use of offsets to mitigate GHG emission from a project is allowed under CEQA. CEQA Guidelines § 15126.4(c)(3) ("Measures to mitigate the significant effects of greenhouse gas emissions may include . . . [o]ff-site measures, including offsets that are not otherwise required, to mitigate a project's emissions."). Accordingly, the Project will not result in significant impacts as a result of GHG emissions. FSA Part 1 at 4.1-127.

C. Biological Resources

1. Evidence introduced during the February 2017 hearings supports a finding that the Project will not result in significant adverse direct, indirect or cumulative effects on biological resources

The record reflects a comprehensive and robust biological resources review process that has provided substantial evidence that the Project will not result in significant impacts to biological resources. Based on an extensive review of the information available as of the February 2017 hearings, explained in detail in CEC Staff's FSA, CEC Staff concluded:

> California Energy Commission staff concludes that ***with implementation of the proposed conditions of certification, direct, indirect, and cumulative impacts would be avoided, minimized, or mitigated to less than significant levels and the project would comply with all applicable laws, ordinances, regulations, and standards (LORS).***

FSA Part 1 at 4.2-1 (emphasis added).

Evidence presented by Applicant's expert witnesses at the February 2017 hearings supported the same conclusion. As stated by Applicant's expert witness Ms. Julie Love in her Opening Testimony:

> Based on the information and analysis contained herein and in the other Applicant's Exhibits identified herein, it is my expert opinion that with implementation of proposed Conditions of Certification BIO-1 through BIO-10 contained in the Final Staff Assessment (CEC TN# 214712), modified as proposed in Applicant's Exhibit No. 1098, the Project, as proposed, will not result in any significant direct, indirect or cumulative impacts to biological resources, and will comply with all applicable laws, ordinances, regulations and standards

pertaining to biological resources.

Applicant's Opening Testimony, Ex. No. 1101, TN# 215441, Expert Declaration of Julie Love Regarding Biology, at 5 ("Applicant's Opening Test. – Love Decl.").

The primary concern pertaining to biological resources expressed by intervenors during the hearings in February 2017 was whether or not sufficient biological resources surveys had been conducted to fully evaluate the potential presence or absence of special status species on the Project Site (as defined in Section V.C.2.a) and the surrounding areas. *See, e.g.*, EDC-Hunt, Tr. Feb. 10, at 30:20 to 32:5; Applicant-Love, Tr. Feb. 9, at 388:14 to 392:12; CEC Staff –Watson, Tr. Feb. 9, at 462:8 to 465:8.

2. Supplemental biological resources surveys confirm that the Project will not result in significant adverse direct, indirect or cumulative effects on special status species

Applicant conducted extensive biological surveys in 2015, the results of which are reflected in evidence presented by Applicant and CEC Staff at the evidentiary hearings in February 2017. *See, e.g.* Application for Certification ("AFC") Section 4.2, Biological Resources, Ex. No 1008, TN# 204219-9, ("AFC – Biological Resources"); AFC Appendix D, Biological Resources, Ex. No. 1028, TN# 204220-4 ("AFC – Appendix D"); Project Enhancement – Outfall Removal and Beach Restoration, Ex. No 1090, TN# 213802, at 3-3 ("Project Enhancement"). In response to these concerns, following the conclusion of evidentiary hearings in February 2017, on March 10, 2017, the Committee issued Committee Orders for Additional Evidence and Briefing Following Evidentiary Hearings, March 10, 2017, TN# 216505 ("March 10 Orders"). The March 10 Orders directed the Applicant to prepare and submit results from one or more focused biological surveys to determine the likelihood for the presence of five special-status species. *Id.* At the request of intervenors, Applicant agreed to conduct biological surveys of nine additional special-status species. Applicant's Reply to Intervenors' Joint Motion, TN# 216775, at 2 to 3 ("Reply to Intervenors' Joint Motion"). Applicant's agreement to conduct the additional biological resources surveys was incorporated

into the Committee's Order, dated May 19, 2017. *See* Committee Order Partially Granting Intervenors' Joint Motion to Modify Committee's March 10, 2017 Orders, TN# 217649.

The fourteen target special-status species that were the subject of the focused biological surveys are:

- Ventura marsh milkvetch
- Salt marsh bird's-beak
- Orcutt's pincushion
- Globose dune beetle
- Two-striped garter snake
- California legless lizard
- Blainville's horned lizard
- Western snowy plover
- California least tern
- Least Bell's vireo
- Burrowing owl
- White-tailed kite
- Northern harrier
- California black rail

Biological Resources Survey Report, at ES-1.

On March 27, 2017, Applicant submitted a Draft Biological Resources Survey Methodology. Applicant's Biological Resources Survey Methodology, Ex. No. 1141, TN# 216716 ("Draft Biological Resources Survey Methodology"). Revisions were made in response to comments received from agency staff and intervenors, and the final version was released on April 10, 2017. Responses to Comments on Proposed Biological Resources Survey Methodology and Final Biological Survey Methodology, Ex. No. 1144, TN# 216937, at Attachment C ("Final Biological Resources Survey Methodology"). The supplemental surveys were conducted in April, May, and June of 2017. *Id.* at 2. CEC Staff visited the site during the performance of surveys on May 2, 3, 10, and 11, 2017, and California Coastal Commission

("CCC") Staff visited May 3, 2017. Biological Resources Supplemental Testimony of Carol Watson and John Hilliard, Ex. No. 2026, TN# 220168, at 7 ("CEC Bio Supp. Test.").

The results of the supplemental biological resources surveys were provided in Applicant's Biological Resources Survey Report. *See generally* Expert Declaration of Julie Love in Response to March 10, 2017 Committee Orders, Ex. No. 1148, TN# 219898, at Attachment B – Biological Resources Survey Report ("Biological Resources Survey Report"). No target species were observed within the Project Site. *Id.* at ES-2; *see also* Applicant-Love, Tr. Jul. 27, at 95:15 to 95:19. One target species, the globose dune beetle (*Coelus globosus*), was detected within the Biological Survey Area ("BSA"), but only within areas of temporary impact. Biological Resources Survey Report at 2. According to testimony provided by Applicant's expert witness Ms. Love during the evidentiary hearing on July 27, 2017: "The results of our survey are a strong indication that the target species are not present within those portions of the BSA that are to be developed." Applicant-Love, Tr. Jul. 27, at 93:18 to 93:24.

a. Clarification of use of key terms

The following discussion clarifies how certain key terms relevant to the discussion of biological resources are used in this Opening Brief.

(1) "Project Site"

During evidentiary hearings on July 27, 2017, there appeared to be some confusion on the part of intervenors regarding terminology used to refer to various geographic areas potentially affected by construction and operation of the Project and associated demolition of existing infrastructure. Some of the confusion appears to stem from differing uses of the term "Project Site" in various analyses of the Project. In it broadest sense, the term "Project" refers to the "whole of the action" under review by the CEC, which includes not only development of the new combustion turbine and ancillary facilities, but also activities such as demolition of MGS Units 1 and 2 and the existing ocean outfall. In this context "Project Site" might refer to all of the areas directly affected by the whole of the action. Frequently, however, the term "Project Site" has been used to refer to the currently vacant approximately 3-acre parcel upon which the new combustion turbine and ancillary facilities will be constructed. This is the manner in which the

term was used in the Biological Resources Survey Report. Biological Resources Survey Report at 1-3 ("The Project Site includes the approximately 3-acre (1.21-hectare) site on which the proposed Project will be constructed in the northern portion of the MGS property.").

For purposes of this Opening Brief, consistent with the Biological Resources Survey Report, the term "Project Site" is used to refer to the approximately 3-acre parcel. The broader area potentially affected by the whole of the Project is referred to herein as the "Project Area."

(2) "Biological Study Area"

There was also discussion during evidentiary hearings on July 27, 2017 related to the geographic scope of the Biological Study Area, or BSA, for purposes of the Biological Resources Survey Report, and whether or not it encompassed the entirety of the Project Area. The short answer is that it did not. In his supplemental written testimony, Mr. Hunt, the expert witness for the Environmental Defense Center ("EDC"), criticized the supplemental focused biological resources surveys for excluding certain portions of the Project Area. Lawrence Hunt Supplemental Testimony, Ex. No. 4038, TN# 220216, at 2-4 ("Hunt Supp. Test.").

Biological resources surveys conducted by the Applicant to support the AFC and supplemental enhancements thereto, encompassed the entirety of the Project Area. *See, e.g.*, AFC – Biological Resources; AFC – Appendix D; and Project Enhancement. However, the more recent Biological Resources Survey Report was more narrowly tailored to respond to the March 10 Orders. Biological Resources Survey Report at ES-1. The March 10 Orders directed Applicant to perform focused surveys "of the proposed project site." March 10 Orders, at 1. Based on comments received on the Draft Biological Resources Survey Methodology, Applicant expanded the geographic scope of the BSA, to included "areas in and adjacent to the MGS and associated buffer areas: the Project Site, the Laydown Area, the Outfall Area, and the Access Road. Biological Resources Survey Report, at ES-1. The BSA excludes areas covered by impervious surfaces, lands outside the MGS fence line (with the exception of publically accessible lands), and areas of open water." Biological Resources Survey Report, at 1-3.

For purposes of the more recent surveys, the BSA, which was very clearly defined in both the Draft Biological Resources Survey Methodology and the Final Biological Resources

Survey Methodology, was designed specifically to address the 14 special status species that were the subject of the surveys. Final Biological Resources Survey Methodology at 3 to 4. Given the target species and the survey methodologies employed, it did not make sense to conduct surveys in certain portions of the Project Area (*e.g.*, paved areas or open water). *Id.* at 4. As a result, the BSA for purposes of the Biological Resources Survey Report was appropriately more narrow than the BSA surveyed by Applicant to support the AFC and subsequent refinements thereto.

Finally, there also seemed to be some confusion in testimony provided at the July 27, 2017 hearing regarding the 100-foot buffer area that was surveyed in accordance with the Final Biological Resources Survey Methodology. For purposes of conducting the supplemental focused biological surveys, Applicant included within the BSA a 100-foot "buffer area" surrounding certain areas that were to be surveyed, including the Project Site, except where such a buffer area would extend into impervious surfaces, lands outside the MGS property fence line (with the exception of publically accessible lands), and areas of open water. Biological Resources Survey Report at 1 to 3. It is important to note that this "buffer area" was identified solely for purposes of conducting the supplemental focused biological resources surveys. It is not based upon, and does not coincide with City of Oxnard Local Coastal Policy 6.d, which calls for a 100-foot buffer under circumstances, adjacent to *"resource protection areas."* Coastal Land Use Plan, City of Oxnard Planning & Environmental Services (2002), at IV-3 ("Oxnard CLUP"). Local Coastal Policy 6.d is discussed further below.

b. No target species were detected on the Project Site and only one target species was detected within the BSA

A wide variety of survey methods were used to identify the presence and extent of the target special status species in the BSA. These survey methods are documented in the Final Biological Resources Survey Methodology. *See* Final Biological Resources Survey Methodology at 2-1 to 2-18.

Of the 14 target species, only one, the globose dune beetle was observed in the BSA. Globose dune beetles were observed in the northern and western Project Site buffer area, in the Outfall Area, and in the Access Road and buffer area. Biological Resources Survey Report at 2.

No globose dune beetles were observed in the Project Site or Laydown Area. *Id.* None of the other target species were observed in the BSA during focused biological surveys or incidentally during any field investigations. *Id.*

Botanical surveys did detect three non-target special-status plant species: red sand verbena (*Abronia maritima*), woolly seablite (*Suaeda taxifolia*), and potential branching beach aster (*Corethrogyne leucophylla*).[3] Biological Resources Survey Report at 3-3. Red sand verbena and potential branching beach aster were primarily observed in the dune systems of the Project Site buffer area, Access Road and buffer area, and Outfall Area. *Id.* at 3-3 to 3-4. As indicated in previous survey results, woolly seablite was observed within the Project Site. *Id.* at 3-4, Figure 3. None of these species are federally or state-listed, but are listed as California Rare Plant Rank ("CRPR") 4 (red sand verbena, woolly seablite) or CRPR 3 (potential branching beach aster) by the California Native Plant Society. *Id.* at 3-3 to 3-4. One special-status wildlife species, California horned lark, was observed in the BSA. *Id.* at 3-9. This species was observed in the dune habitats along the Access Road portion of the BSA. *Id.* The California horned lark is not federally or state-listed, but is listed as a California Department of Fish and Wildlife ("CDFW") Watch List species. *Id.* Additionally, two active raptor nests, including peregrine falcon and great horned owl, were identified outside but in the vicinity of the BSA. *Id.* at 3-10. These species are not federally or state-listed, but the peregrine falcon is considered Fully Protected by CDFW and by the United States Fish and Wildlife Service ("USFWS") as a Bird of Conservation Concern and the great horned owl is protected under the Migratory Bird Treaty Act. *Id.*

c. The results of the supplemental biological resources surveys confirm prior conclusions of Applicant and CEC Staff that the Project will not result in significant adverse impacts to special status species

Based on the results of the supplemental biological resources surveys, Applicant's expert

[3] The word "potential" is used to describe branching beach aster, because the presence of the species has not been detected as far south as Ventura County. However, specimens keying to this species were observed. This species is not recognized by current taxonomic standards and requires more rigorous genetic or morphological studies to establish whether the species is, in fact, a misnomer. *See* Biological Resources Survey Report at 3-4.

witness concluded:

> After conducting these requested surveys, we remain convinced that with implementation of the proposed conditions of certification, the project as a whole will not significantly impact biological resources. The only areas where the targeted special status species were observed are within areas of temporary impact. Avoidance and minimization measures [outlined] within the conditions of certification limit impacts to special status species. Additionally, the project will result in a cumulative net gain and habitat for special status species where the outfall will be removed.

Applicant-Love, Tr. Jul. 27, at 95:12 to 95:22.

Similarly, CEC Staff reached the following conclusion after consideration of the results of the supplemental biological resources surveys:

> The results of the applicant's focused surveys do not change staff's opinion with respect to the significance of the impacts of the project. Staff concludes that the project site does not constitute an Environmentally Sensitive Habitat Area, as no sensitive species were detected on the project site. With implementation of Conditions of Certification BIO-1 through BIO-10 (as modified herein), staff concludes that all impacts of the project would be mitigated to below the level of significance.

CEC Bio Supp. Test. at 10.

d. Intervenors' criticism of the supplemental biological resources surveys are unfounded and their evidence in support of contrary conclusions is not credible

(1) Opinions offered by intervenors' experts are little more than speculation about conditions on the Project Site based on largely outdated observations of areas surrounding the MGS property that bear little resemblance to the Project Site

EDC's expert Mr. Hunt bases his critique of the supplemental surveys on field work that he conducted in the general vicinity of the MGS property. *See* Lawrence E. Hunt Opening Testimony, Ex. No. 4017, TN# 215434, at 2-3 ("Hunt Opening Test."). The bulk of his observations in the area surrounding the MGS property occurred during his dissertation research in the late 1980s and, most recently (with the exception of a twenty minute visit in 2016) in 2007-2009 and in April 2017. EDC-Hunt, Tr. Feb. 10, at 68:20 to 69:22, 115:22 to 116:1; EDC-Hunt, Tr. Jul. 27, at 150:4 to 150:11. Mr. Hunt's most recent surveys near the MGS property were in 2008. EDC-Hunt, Tr. Feb. 10, at 115:22 to 116:15.

Mr. Hunt assumes that species present in the natural dune habitat found outside of the MGS property fence line are also likely present on the highly degraded Project Site and other areas within the MGS Property. EDC-Hunt, Tr. Feb. 10, at 93:1 to 93:15. However, this assumption does not reflect actual conditions at the Project Site and surrounding MGS property, as observed by Applicant's biologists who have spent hundreds of hours on the MGS property over the past several years and performed approximately 30 passes across each component of the BSA. As stated by Ms. Love, "[t]he majority of the MGS property, including the Project Site itself, is composed of industrial use impervious surfaces like buildings, paved roads, that type of thing. And these areas have little to no value for wildlife." Applicant-Love, Tr. Feb. 9, at 345:21 to 345:24, 346:7 to 347:25; *see also* Applicant's Rebuttal Testimony, Ex. No. 1121, TN# 215553, Expert Declaration of Julie Love Regarding the Presence of Wetlands on the Puente Project Site, at 4 ("Applicant's Rebuttal Test. – Wetlands"). Furthermore, the Project Site "has been subjected to soil compaction and complete vegetation removal in the past" (*i.e.*, during the original construction of the MGS facility) and "has been graded and subjected to various human uses in the past, and the vegetation is significantly disturbed". Applicant's Opening Test. – Love Decl. at 2-3. Due to the previous uses of the Project Site that are summarized in the AFC, the site is degraded and not in a natural state like the conditions of the properties north of the MGS property fence line that Mr. Hunt has visited. AFC Section 2.0, Project Description, Ex. No. 1004, TN# 204219-5, at 2-3 to 2-4 ("AFC – Project Description").

Mr. Hunt's testimony fails to draw any link between the Project and the alleged impacts that the Project would have on either the environment or sensitive species (either onsite or nearby). *See, e.g.*, Hunt Opening Test. Mr. Hunt conceded during his live testimony that he did not know anything about the Project's construction or operational impacts at the Project Site. EDC-Hunt, Tr. Feb. 10, at 95:13 to 98:25. Nor did Mr. Hunt explain how or why these impacts could negatively impact species that have been living successfully in proximity to the larger MGS Units 1 and 2 for decades. EDC-Hunt, Tr. Feb. 10, at 82:22 to 91:18. Applicant's expert Ms. Love concluded, "the project as a whole will not significantly impact biological resources." Applicant-Love, Tr. Jul 27, at 95:12 to 95:22.

(2) Expanding the BSA to include areas outside the fence line of the MGS property, as suggested by Mr. Hunt, would have not yielded any valuable information

One of Mr. Hunt's primary criticisms of the supplemental biological resources surveys is the decision to truncate the 100-foot buffer area north of the Project Site to avoid extending it beyond the MGS property fence line. Mr. Hunt asserts that the "survey area on the north side extended only 70-80 feet from the 3.26-acre portion of the Project [S]ite, instead of encompassing the full 100-foot buffer . . . in order to fully assess Project-related impacts to these and other special-status species both on and off the MGS property, per the [CCC's] recommendations." Hunt Supp. Test. at 2. At the July 27, 2017 hearing, Applicant's expert witness Ms. Love clarified that "the buffer area on the northern border of the Project Site was reduced by approximately 10 feet." Applicant-Love, Tr. Jul. 27, at 88:19 to 88:21. Ms. Love went on to explain that, "the decision not to extend the BSA off the MGS property was based, in part, on practical considerations associated with the time available to conduct the surveys. The area in question is private land which requires permission to access." Applicant-Love, Tr. Jul. 27, at 88:23 to 88:24, 201:19 to 201:13. Applicant requested access to this mitigation area to observe the reference population of Ventura marsh milkvetch (also sometimes referred to as the McGrath Parcel Mitigation Area), it took until June 2017 to gain access. *Id.* at 203:11 to 203:25. There simply was no time to delay commencement of the surveys while permission to access this area was sought.

Applicant did survey a 90-foot buffer area along the northern boundary of the Project Site. The implication of Mr. Hunt's criticism is that if the survey area had been extended an additional ten feet beyond the MGS property fence line, additional target species would have been detected. Even assuming this to be true, it is unlikely that such information would alter any conclusions related to the likely presence of special status species on the Project Site since the location of any special status species in this area would be separated from the Project Site by a 90-foot area that includes a fence, manmade earthen flood control berm and access road. *See, e.g.*, Applicant's Rebuttal Testimony, Ex. No. 1136, TN# 215582, Non-Substantive Corrections to Expert Declaration of Phillip Mineart, at Attachment C, 2 ("Applicant's Rebuttal Test. –

Mineart Corrected Decl."); CCC 30413(d) Report, Ex. No. 3009, TN# 213667, at 25 ("CCC 30413(d) Report"); Applicant-Love, Tr. Jul. 27, at 94:20 to 94:24. If the suggestion is that special status species located beyond the MGS fence line may migrate onto the Project Site, then one would expect them to have been detected within the 90-foot buffer area that was surveyed, but with the exception of the globose dune beetle, they were not. Biological Resources Survey Report at 2.

(3) The testimony provided by EDC witness Brian Trautwein regarding his purported discovery of two silvery legless lizards in the vicinity of the MGS property is not credible

The theory that special status species existing outside the MGS property fence line may migrate onto the Project Site focuses particularly on the silvery legless lizard based, in part, on testimony from Mr. Brian Trautwein of EDC, that he discovered and photographed two legless lizards just outside the boundary of the MGS property on the afternoon of May, 5, 2017. EDC-Trautwein, Tr. Jul. 27, at 106:20 to 107:6. Notwithstanding EDC counsel's statement on the record that "[t]here is no testimony attached to these photographs," *id.* at 117:25, Mr. Hunt relies in part on the discoveries of Mr. Trautwein to support the proposition that silvery legless lizards are present on properties adjacent to the MGS property, and therefore have a high potential to be present on the Project Site. Hunt Supp. Test. at 7. Dr. Jonna Engel of the CCC also relies on the discoveries of Mr. Trautwein to support her observation that portions of the area between the northern boundary of the Project Site and the northern fence line of the MGS property may constitute dune habitat. CCC – Comments on Puente Project New Information, Ex. No. 4043, TN# 220302, at 2 ("CCC – July 2017 Comments"); *see also* Section V.C.4.d.(2) *infra*. Finally, citing Mr. Trautwein's findings, CEC Staff modified proposed Condition of Certification BIO-10 to include a translocation plan for legless lizards. CEC Bio Supp. Test at 8.

Given the significance attached to the discoveries of Mr. Trautwein, by the agencies and intervenors, the circumstances surrounding the discoveries are highly relevant, yet EDC counsel objected vigorously to any line of inquiry pertaining to those circumstances. *See, e.g.*, EDC-Trautwein, Tr. Jul. 27, at 104:15 to 104:19, 105:10 to 105:14, 109:20 to 109:22. Notwithstanding those objections, Mr. Trautwein did provide some information about his

discoveries. Mr. Trautwein arrived in the vicinity of the MGS property between 2:00 and 3:00 p.m. on the afternoon of May 5, 2017. EDC-Trautwein, Tr. Jul. 27, at 106:20 to 106:21. The stated purpose of his visit was to "look generally at the site, the characteristics of the site, and the surrounding area and take photographs of the general area and vicinity." EDC-Trautwein, Tr. Jul. 27, at 107:4 to 107:13; Intervenors EDC, Sierra Club and Environmental Coalition of Ventura County Submission of Additional Evidence of Rare Species, Ex. No. 4039, TN# 217571, at ¶ 3 ("Trautwein Decl."). While not intending to survey for special status species, Mr. Trautwein nevertheless brought a rake. EDC-Trautwein, Tr. Jul. 27, at 107:4 to 107:13. With no apparent prior training or experience, Mr. Trautwein used the rake to gently sift sand about four inches below the ground in various locations outside the boundary of the MGS property. *Id.* at 119:3 to 119:11, 122:4 to 122:5. In two separate locations, Mr. Trautwein sifted sand for anywhere from a few to 30 seconds and found two legless lizards, which he then photographed. *Id.* at 122:13 to 122:16, 125:25 to 126:11; Trautwein Decl. at ¶¶ 4-9.

According to Mr. Trautwein, he arrived in the vicinity of the MGS on the beach from a point south of the MGS property and walked around the south, west, and north sides of the Project Area. EDC-Trautwein, Tr. Jul. 27, at 116:10 to 116:17; Trautwein Decl. at ¶ 3. He walked north on the beach to the location at which he discovered legless lizard number one. EDC-Trautwein, Tr. Jul. 27, at 116:10 to 116:17. He continued north from that point along the beach to the northwest corner of the MGS property line, at which point he turned east, and followed an existing dirt road to the point of discovery of legless lizard number two. *Id.* He then departed the vicinity of the MGS by essentially retracing his steps. *Id.* Mr. Trautwein walked off the location of the first legless lizard to the outfall fence and to the outfall access road as a way of estimating distances and marking the locations of the discoveries. *Id.* at 136:2 to 136:5; Trautwein Decl. at ¶ 6. Further, in addition to sifting sand at the two locations where he discovered legless lizards, Mr. Trautwein also sifted sand at a few locations prior to the discovery of legless lizard number one and a handful of locations between the discovery of legless lizard number one and legless lizard number two. EDC-Trautwein, Tr. Jul. 27, at 119:3 to 119:11.

At 3:20 p.m., which would be anywhere from 20-80 minutes after arriving in the vicinity of the MGS depending on his specific arrival time between 2:00 and 3:00 p.m., Mr. Trautwein sent the two photographs attached to his declaration to Mr. Hunt either by e-mail or text (he does not recall which). *Id.* at 126:2 to 126:3; Trautwein Decl. at ¶ 10. Mr. Trautwein thereafter deleted or otherwise disposed of the communications between himself and Mr. Hunt. EDC-Trautwein, Tr. July 27, at 131:15 to 131:16.

Mr. Trautwein's testimony simply is not credible, and certainly should not be relied upon as the basis for reaching conclusions regarding whether or not the Project Site or surrounding areas within the MGS property boundaries constitute suitable habitat for special status species or meet the definition of ESHA, or for imposing additional Conditions of Certification on the Project. First, there are obvious inconsistencies in the testimony. For example, Mr. Trautwein repeatedly declined to indicate that one of the purposes of his visit was to look for special status species, yet he brought a rake with him. EDC-Trautwein, Tr. Jul. 27, at 107:4 to 107:13. Also, by his account, Mr. Trautwein's visit to the area lasted as little as 20 minutes, and no more than 80 minutes. EDC-Trautwein, Tr. Jul. 27, at 106:20 to 106:21; 126:2 to 126:3. It is inconceivable that Mr. Trautwein could have covered the area and completed the actions described within such a limited period of time. It also strains credibility to accept that Mr. Trautwein does not recall the specific mode of communication between himself and Mr. Hunt, *id.* at 126:2 to 126:3, or that he would have permanently deleted the record of these communications that form the basis of his sworn declaration offered in these proceedings. *Id.* at 131:15 to 131:16.

It is also not credible that Mr. Trautwein discovered two legless lizard specimens in a 20-80 minute period with no apparent previous training on where to look for legless lizards, how to look for legless lizards, or what legless lizards look like. *Id.* at 119:3 to 119:5, 119:21 to 119:22, 122:1 to 122:5, 123:12 to 123:19. Applicant's trained biologists methodically surveyed the BSA for nearly three months and did not detect any legless lizards. Biological Resources Survey Report, at 2-7, 3-8. Applicant's expert Mr. Ivan Parr testified that in six years of experience conducting surveys in the wild for legless lizards, he has only found six. Applicant-Parr, Tr. Jul. 27, at 153:14 to 153:17. He attributed this small number in part to the fact that the lizards tend to

move downward once they detect human presence, which is contrary to Mr. Trautwein's testimony that the lizards "popped out" of the sand. *Id.* at 153:6 to 153:13. Mr. Parr also found it remarkable that Mr. Trautwein found the lizards in the afternoon, when they are most often found in the early morning, as the lizards are averse to the heat. *Id.* at 152:3 to 152:12. EDC's witness Mr. Hunt testified that he has found 6,000 to 7,000 of these animals in the wild—a figure he characterized as "conservative." EDC-Hunt, Tr. Jul. 27, at 153:4 to 153:6.

Alternatively, if we are to accept as credible the testimony of Mr. Trautwein and Mr. Hunt as to the prevalence and ease of detection of legless lizards in the area surrounding the MGS property, then the fact that they were not detected anywhere within the BSA during nearly three months of methodical and intensive surveys is a very strong indication that this species is not present on or in the immediate vicinity of the Project Site.

3. The Project will not adversely affect tidewater goby

CEC Staff determined that, in part because of high salinity levels in the canal adjacent to the MGS property ("Edison Canal"), the potential for occurrence of the tidewater goby is low, and the goby is not expected to be found there. FSA Part 1 at 4.2-15, 4.2-17. There is no evidence that tidewater goby occur in the Edison Canal. Although Ms. Watson of CEC Staff stated there is a "slim chance" that the "[g]oby *could* occur in the Edison Canal," the USFWS does not believe that the tidewater goby occurs in the Edison Canal because it is not suitable habitat. CEC Staff-Watson, Tr. Feb. 9, at 494:17 to 494:19, 505:10 to 505:16 (emphasis added). Applicant agrees with the USFWS on the unsuitability of the habitat in the Edison Canal for the tidewater goby. Applicant's Responses to CEC Data Requests, Set 4 (77-107), Ex. No. 1094, TN# 214336, at 83-1 to 83-2; Applicant's Opening Test. – Love Decl. at 4.

Despite this, intervenor Center for Biological Diversity asserts that tidewater goby may occur on or near the Project Site. This assertion is not based on substantial evidence but instead on unsubstantiated statements from Ms. Ileene Anderson. Ms. Anderson stated that "tidewater goby are known to occur in close proximity to the project site and the Edison Canal," and "salinity levels would not exclude the presence of tidewater goby," and therefore "it is reasonable to conclude that this endangered species may occur in the area." Ileene Anderson

Opening Testimony, Ex. No. 7022, TN# 215431-1, at 3. With respect to Ms. Anderson's claim that the tidewater goby might be negatively impacted by fresh water released into the Edison Canal from the Project's outfall, Ms. Anderson does not present any evidence that tidewater goby have ever been found to be present there, only alleging that it is "possible that gobies may enter the [Edison Canal] itself periodically." CBD-Anderson, Tr. Feb. 9, at 58:4. Moreover, Ms. Anderson conceded that she does not "have a clear understanding of" Project "activities that could potentially impact the Edison Canal," and she fails to quantify the potential impacts of the Project or link them to effects on sensitive species or habitat. CBD-Anderson, Tr. Feb. 9, at 513:10 to 513:16, 518:17 to 518:24. As stated in Applicant's Rebuttal Testimony, Ex. No. 1121, TN# 215553, Expert Declaration of Julie Love in Response to Statements of Lawrence E. Hunt and Ilene Anderson Regarding Biological Resources, at 4:

> [B]ased on water quality and habitat requirements for tidewater goby outlined in U.S. Environmental Protection Agency (USEPA) and [USFWS] documents and conditions observed during on-site surveys, the portion of Edison Canal near the proposed discharge point is not suitable habitat for the tidewater goby. While tidewater gobies may have the ability to tolerate salinities for a period of time as high as 42 parts per thousand (ppt), it is not favorable for long-term survival and reproduction . . . . . The USFWS Tidewater Goby Recovery Plan . . . states that tidewater gobies spend all life stages in lagoons, estuaries, and river mouths. The Edison Canal does not qualify as a lagoon, estuary, or river mouth.

For all these reasons, the CEC should disregard Ms. Anderson's assertions regarding the tidewater goby.

4. Neither the Project Site nor any adjacent areas within the MGS property boundaries constitute environmentally sensitive habitat areas (ESHA)

The August Memo re Issues for Briefing requested briefing from the Parties on the following specific issue pertaining to "environmentally sensitive habitat areas" or "ESHA":

> Address whether any [ESHA] exist on or near the proposed project construction, Units 1 and 2 demolition or outfall removal areas. Explain the criteria for determining ESHA existence, the facts that support or refute their existence, and any constraints that the existence of ESHA creates upon the proposed project activities.

August Memo re Issues for Briefing at 1.

a. Definition of ESHA

The Coastal Act defines ESHA as: "Any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem **and** which could be easily disturbed or degraded by human activities and developments." Cal. Pub. Res. Code § 30107.5 (emphasis added). The City of Oxnard has incorporated this same definition into its approved Local Coastal which includes the City's Coastal Land Use Plan ("CLUP"). *See* Oxnard CLUP at IV-3. Multiple witnesses in the proceedings have expressed opinions as to whether the Project Site, or other portions of the Project Area, meet the definition of ESHA set forth above. However, *ad hoc* determinations that an area meets the definition of ESHA is of little import in a jurisdiction with a certified Local Coastal Program ("LCP"), such as the City of Oxnard. As explained below, the determinative factor is whether or not the certified LCP designates the area as an ESHA.

b. As with all other land use matters, the designation of ESHA is controlled by the certified LCP

The City adopted its LCP pursuant to the Coastal Act, and the CCC has certified it. The LCP is comprised of three items: (i) the Oxnard CLUP, (ii) special coastal zoning regulations (the Coastal Zoning Ordinance) that are codified in Chapter 17 of the City's Municipal Code, and (iii) those portions of the 2030 General Plan that have been certified by the CCC for incorporation in the LCP. Oxnard Mun. Code § 16-1 ("The area within the coastal zone . . . shall be governed by chapter 17 of the code."); 2030 General Plan: Goals & Policies, City of Oxnard, Cal., October 11, 2011, at 1-5, 3-4, 3-39 ("2030 General Plan"); Applicant's Opening Testimony, Ex. No. 1101, TN# 215441, Expert Declaration of Mr. Tim Murphy Regarding Land Use and Agriculture, at 3 ("Applicant's Opening Test. – Murphy Decl."); *see also* FSA Part 1 at 4.7-10.

For properties within the City of Oxnard's coastal zone, such as the MGS property, the LCP governs land use matters. *See, e.g., Douda v. Cal. Coastal Comm'n*, 159 Cal. App. 4th 1181, 1192 (2008), *as modified on denial of reh'g* (Mar. 4, 2008). As determined by the California Attorney General in 1987, a city may neither "authorize a use of land in the coastal zone which is not permitted" by a LCP nor "prohibit a use of land in the coastal zone which is

permitted" by a LCP. 70 Cal. Att'y Gen. Op. No. 220 (Sept. 10, 1987), 1987 WL 247254, at 1. To do otherwise, and allow a permitting authority (either a local jurisdiction or the CCC) to deviate from the requirements of the LCP on an *ad hoc* basis, or make ad hoc determinations that have the effect of prohibiting otherwise acceptable uses, would defeat the purpose of developing and certifying the LCP in the first place – to provide some level of certainty and order regarding the types of uses that are allowed in specified areas.

If a local jurisdiction wishes to alter the requirements of its LCP, the proper mechanism for doing so is a formal amendment of the LCP. Such amendments are only effective upon CCC certification. *See, e.g., Headlands Reserve, LLC v. Ctr. for Nat. Lands Mgmt.*, 523 F. Supp. 2d 1113, 1120 & n.2 (C.D. Cal. 2007) ("In order for a new LCP or an amendment to an existing LCP to take effect, the LCP must be certified by the CCC."); *City of Malibu v. Cal. Coastal Comm'n*, 206 Cal. App. 4th 549, 555 (2012) (noting that a local government may "amend its local coastal program, subject to [CCC] certification"). In the 1987 decision cited above, the California Attorney General confirmed that "the effectiveness of . . . an amendment is made to depend upon certification by the [CCC]. This means that a county or city may adopt such an amendment at any time but such amendment does not become effective until it has been certified by the [CCC]." 70 Cal. Att'y Gen. Op. No. 220 (Sept. 10, 1987), 1987 WL 247254, at 5.

Consistent with the foregoing principles, in jurisdictions with a certified LCP such as the City of Oxnard, ESHA are designated in the LCP and the process for designating additional ESHA is through a formal amendment to the LCP and certification by the CCC. In *Douda v. Cal. Coastal Comm'n*, the court held that the CCC could designate additional ESHA when issuing a permit in an area with no certified LCP, but also noted that once an LCP is certified the permitting authority cannot deviate from the LCP to designate additional ESHA. 159 Cal. App. 4th 1181, 1192 (2008), *as modified on denial of reh'g* (Mar. 4, 2008) ("Once a local coastal program is certified, the issuing agency has no choice but to issue a coastal development permit as long as the proposed development is in conformity with the local coastal program. In other words, an issuing agency cannot deviate from a certified local coastal program and designate an additional environmentally sensitive habitat area."). Similarly, the court in *Sec. Nat'l Guar., Inc.*

v. Cal. Coastal Comm'n determined that the CCC lacked authority to make changes to a certified LCP and designate an ESHA during the review of a coastal development permit, reinforcing the general principle that once an LCP is certified, it is controlling, and changes such as designation of additional ESHA can only be made through an LCP update process. 159 Cal. App. 4th 402, 421-22 (2008).

The CCC has acknowledged this point in this proceeding. In its report for the Project prepared pursuant to California Public Resources Code Section 30413(d), when discussing certain areas outside the fence line of the MGS Property that it deemed worthy of protecting by maintaining a 100-foot buffer from Project related activities, the CCC did not state that the areas constituted ESHA, but that certain areas "surrounding the MGS site meet the . . . definitions of ESHA." CCC 30413(d) Report at 17. The CCC 30413(d) Report states: "Due to their rarity, sensitivity to disturbance, and the presence of special-status species, many of the coastal dune, scrub and riparian habitats surrounding the MGS property **meet the Coastal Act and LCP definitions of ESHA**, and thus require special protection." *Id.* at 17 (emphasis added). The CCC 30413(d) Report goes on to recommend that:

> 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.

Id. at 18 (emphasis added). This wording acknowledges that in the context of a jurisdiction with a certified LCP, the CCC cannot designate new ESHA, although it may identify areas that it believes meet the definition of ESHA, which the local jurisdiction may take into consideration in its next update of the LCP.

The City has also demonstrated that it understands and adheres to the appropriate process for identifying additional ESHA within the coastal zone. In connection with the approval of the Northshore at Mandalay development, which involved designation of two new areas as sensitive habitat, the City undertook an amendment to the LCP, including to the maps identifying those properties designated as sensitive habitat. *See* Oxnard CLUP, at City Council of the City of

Oxnard Resolution No. 12,143, adopted May 14, 2002, LCP Amendment – Northshore at Mandalay ("Oxnard Resolution 12,143").

c. The City's certified LCP does not designate the Project Site or any portion of the MGS property as an ESHA

Because the City's certified LCP controls whether or not the Project Site is designated an ESHA, it is important to understand the various ways in which the LCP categorizes and designates properties within the coastal zone. As stated in the City's CLUP, "[t]he land use maps contain the land use designations for the coastal zone of the city. They have been incorporated into the existing General Plan, and are used as the basis for the zoning maps." Oxnard CLUP at II-1.

(1) The City's coastal zone is divided into four broad areas

At the broadest level, the City's coastal zone is divided into four areas. The area that includes the MGS property, of which the Project Site is a portion, is referred to as the McGrath/Mandalay Beach Coastal Zone Area. Oxnard CLUP at II-3.

(2) The City's CLUP designates properties within the coastal zone into specified "land use categories"

As indicated by the CLUP land use maps, properties within the coastal zone are designated into specified land use categories. Oxnard CLUP at II-4. Most relevant to this discussion are the following land use categories:

- "Energy Facility": This designation will allow development of energy-related facilities including essential and coastal dependent uses, such as electrical generating station [sic], marine fuel loading facilities, pipelines, and fuel processing plants.
- "Resource Protection": Applied only to sensitive habitat areas; this designation will preserve these resources.

Oxnard CLUP at II-4 to II-5.

CLUP Land Use Map No. 2 identifies the land use designations for parcels within the McGrath/Mandalay Beach Coastal Zone Area. Oxnard Resolution 12,143 at Exhibit A – Map 2. The MGS property, including the Project Site, is designated "Energy Facility" (identified on the

map with the designation "EC" for "Energy Coastal"). *Id.* Four parcels within the McGrath/Mandalay Beach Coastal Zone Area are designated as Resource Protection (identified on the map with the designation "RP"), two of which were added as a result of the 2002 amendments to the CLUP adopted in response to the North Shore at Mandalay development. *See generally* Oxnard Resolution 12,143. None of the four parcels that are designated as Resource Protection are adjacent to, or within 100 feet of, the Project Site or any other portion of the MGS property. *See* Oxnard Resolution 12,143 at Exhibit A – Map 2.

(3) The City's CLUP further designates certain properties within the coastal zone as "resource areas"

The City's CLUP further designates certain properties within the coastal zone as one of five major resources areas: i) agriculture; ii) habitat areas; iii) diking, dredging, filling and shoreline structures; iv) commercial fishing; and v) visual resources. Oxnard CLUP at III-1. Relevant to this discussion are those properties designated as "habitat areas" of which there are four types: i) wetlands; ii) sand dunes; iii) riparian areas; and iv) McGrath Lake. Although the LCP does not specifically designate any properties as ESHA, it appears to treat those properties designated as "habitat areas" (also sometimes referred to in the LCP as "sensitive habitat areas" or "environmentally sensitive habitat") as ESHA. *See, e.g.*, Oxnard CLUP at I-2, III-7.

The CLUP describes the locations within the McGrath/Mandalay Beach Coastal Zone Area where each of these sensitive habitats are located, and CLUP Map No. 7 identifies the locations of the sensitive habitats designated in the LCP. Oxnard CLUP at III-7 to III-10. Prior to the 2002 amendments to the CLUP, the only one of the sensitive habitats identified in the vicinity of the Project Site is the chain of dunes that "parallel the beach from the Santa Clara River mouth south to Fifth Street." *Id.* at III-8. The Project Site is not within this habitat, although the area adjacent to the existing outfall, may be within this habitat. According to the CLUP there are no wetlands in the vicinity of the Project Site and "[t]he wetlands occurring in the city are located in the Ormond Beach area and a portion of the Santa Clara River mouth area covering approximately 131 acres." *Id.* at III-7. Nor are there any riparian areas in the vicinity of the Project Area.

The 2002 amendments to the City CLUP adopted in response to the North Shore at Mandalay development designated the property outside the MGS fence line north of the Project Site as "sensitive habitat" because it was designated as off-site mitigation for wetland impacts caused by the Northshore at Mandalay development. Oxnard Resolution 12,143, at [para] 6.d, Exhibit 2.3 – Sensitive Habitats Map Amendment. This area is designated on the CLUP maps as the "McGrath Parcel Mitigation Area." Note that while this parcel was identified as "sensitive habitat" as a result of the 2002 amendments to the CLUP, it was not designated as a Resource Protection area. *See* Oxnard Resolution 12,143 at Exhibit 2.5 Coastal Land Use Map Amendment.

Thus, the McGrath Parcel Mitigation Area north of the Project Site and outside the MGS property, and possibly portions of the area adjacent to the existing ocean outfall, are the only areas in the vicinity of the Project Site that are designated for special protection by the LCP. It is difficult to determine whether or not portions of the area surrounding the existing ocean outfall, some of which could be impacted by demolition and removal of the outfall, are designated in the LCP as sand dunes "habitat areas" because the LCP describes this area only as the chain of dunes that "parallel the beach from the Santa Clara River mouth south to Fifth Street," and the precise scope of the area is not delineated. Oxnard CLUP at III-8. However, even if areas potentially impacted by removal of the existing ocean outfall are within the sand dunes "habitat area" designated in the LCP, removal of existing infrastructure and restoration of the natural conditions would not be subject to the development restrictions in the LCP in any event.

d. The overwhelming majority of the evidence in the record indicates that the Project Site does not meet the definition of ESHA

As discussed above, in jurisdictions with a certified LCP, land use designations in the certified LCP, including ESHA designations, are controlling and the permitting authority does not have discretion to make *ad hoc* ESHA designations that are not reflected in the certified LCP. *See* Section V.C.4.b *supra*. Consequently, testimony and other evidence pertaining to whether or not the Project Site, other portions of the Project Area, or other properties in the vicinity of the Project Area meet the definition of ESHA is largely irrelevant. However, since a

number of parties have introduced evidence on this issue, it is worth pointing out that, as detailed below, the overwhelming majority of that evidence supports a conclusion that none of these areas include ESHA beyond that which is already designated in the LCP (*i.e.*, McGrath Parcel Mitigation Area). In fact, the only expert to conclude that there are additional ESHA that may be impacted by the Project is Mr. Hunt on behalf of the EDC, who has articulated a very broad interpretation of what types of areas meet the definition. *See, generally* Hunt. Supp. Test.

(1) CEC Staff did not identify additional ESHA potentially affected by the Project

Ms. Watson of CEC Staff confirmed during the evidentiary hearing that none of the sources she reviewed showed sensitive habitat types occur on the Project Site. CEC Staff-Watson, Tr. Feb. 9, at 488:1 to 488:11. CEC Staff found that, according to the CCC and the City's CLUP, there is no ESHA on the Project Site. FSA Part 1 at 4.2-8, 4.2-57. Following a review of the Biological Resources Survey Report, CEC Staff confirmed that "the project site does not constitute an Environmentally Sensitive Habitat Area, as no sensitive species were detected on the project site." CEC Bio Supp. Test. at 10.

(2) The CCC 30413(d) Report did not identify additional ESHA potentially affected by the Project

The CCC evaluated whether or not ESHA were present on the MGS property that encompasses the Project Site and concluded that "the project site does not meet the definition of an environmentally sensitive habitat area (ESHA) under Section 30107.5 of the Coastal Act." CCC 30413(d) Report at 13, n.3. Although the CCC concluded that the Project Site includes a 2.03-acre wetland, which Applicant disputes, the CCC nonetheless acknowledged that the wetland does not qualify as an ESHA under Section 30107.5 of the Coastal Act. *Id.* Specifically, the CCC determined that neither hydric soils nor wetland hydrology were present onsite. *Id.* at Attachment C, 1-2. The CCC clarified that "[t]he 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." *Id.* at 13, n.3. The only areas in the vicinity of the Project Site that the CCC identified as meeting the Coastal Act and LCP definitions of ESHA occur outside the fence line of the MGS property. *Id.* at 17.

On July 21, 2017, staff for the CCC submitted comments on, among other things, the results of Applicant's supplemental focused biological resources surveys. CCC – July 2017 Comments at 1 ("Coastal Commission staff believes that the new information and analyses contained in these documents reinforce the previous conclusions and recommendations contained in the [CCC 30413(d) Report]"). Dr. Jonna Engel of the CCC staff also participated in the hearing on July 27, 2017.

As explicitly stated therein, neither the CCC – July 2017 Comments nor comments made by Dr. Jonna Engel during the hearing on July 27, 2017 could or did alter the conclusions contained in the CCC 30413(d) Report. As stated by CCC Deputy Chief Counsel Louise Warren during the pre-hearing conference held on February 1, 2017:

> So, it is the Commission, itself, that adopted the findings in the report. And if anyone from our staff were to be asked a question about the report, they can't opine on what the Commission was considering when it adopted its staff report, or its finding.
>
> So, there's no purpose in having any of our staff members available because they could only refer any questioners to the Commission's findings. At this point, it's the Commission that acted and the Commission has the findings submitted to -- I keep saying Commission, I mean Coastal Commission -- to the Energy Commission.

CCC Staff-Warren, Tr. Feb. 1, at 38:19 to 39:10; *see also* CCC Staff-Street, Tr. Feb. 9, at 331:16 to 332:7, 332:12 to 332:13.

Thus, observations offered by CCC Staff in the July 21, 2017 letter or during the hearing on July 21, 2017 do not alter the conclusions reached in the CCC 30413(d) Report. This includes Dr. Engel's observation that the area between the Project Site and the northern boundary may constitute dune habitat, as well as any speculation as to whether or not the area might also be an ESHA. With respect to whether or not the area constituted dune habitat, Dr. Engel stated: "this was not brought to our Commission, but I made the observation that that area of pink rather than ice plant ma[t]s met the what in my opinion was coastal dune habitat not just ice plant ma[t]s." CCC Staff-Engel, Tr. Jul. 27, at 266:3 to 266:7. As noted in Section V.B.2.e.(3), Dr, Engel relies, in part, on the less than credible discoveries of Mr. Trautwein regarding legless lizards to support her observation that portions of the area

between the northern boundary of the Project Site and the northern fence line of the MGS property may constitute dune habitat. CCC – July 2017 Comments, at 2. With respect to whether or not the area constituted ESHA, Dr. Engel was even more emphatic, stating: "I didn't make any conclusions of an ESHA determination," *id.* at 275:11 to 275:12, and that the area "has not been determined to be ESHA by our commissioners." *Id.* at 267:19. Thus, neither the July 21, 2017 letter nor any testimony offered by Dr. Engel at the July 27, 2017 hearing alters the conclusion in the CCC 30413(d) Report that that no areas within the MGS property meet the definition of ESHA.

Furthermore, Dr. Engel's observation, based on viewing the area on a single occasion, that the area north of the Project Site constituted dune habitat was directly contradicted by testimony from Applicant's expert biologist Ms. Love, who has spent hundreds of hours on the MGS property assessing its potential as habitat for special status species. According to Ms. Love: "We disagree [with the observation that the area may be dune habitat]. This area consists of a manmade flood protection berm, an access road, and a fence line. While there are some open areas between these manmade elements, they are degraded and low quality, and they're also fragmented." Applicant-Love, Tr. Jul. 27, at 94:20 to 94:24. As described in the Biological Resources Survey Report,

> This area is anthropogenic and does not constitute a natural dune. With the exception of a very limited area towards the western edge, neither sandy soils nor native dune vegetation is associated with the [flood control berm]. A narrow strip of land to the north of the dike and to the south of the fence line does support native dune plant species, along with other non-dune plant species, yet the small deposits of sand or hummocks within this area are not established dunes. Sand in this area has been deposited by the wind and sits atop compacted soils typical of the remainder of the Project site.

Biological Resources Survey Report at J-1.

(3) Applicant's expert witnesses did not identify additional ESHA potentially affected by the Project

Finally, Applicant's expert witness, Ms. Love, also testified that there were no ESHA potentially impacted by the Project. Ms. Love testified that potential wildlife habitats that may be affected by the Project are low quality, fragmented and degraded. Applicant-Love, Tr.

Jul. 27, at 95:3 to 95:7. "Forging habitat [for avian predators] is widespread in the area, and the habitats within the BSA are not unique. Furthermore, since MGS Unit 1[where the falcons are nesting] will be demolished as part of the project development, continued use of this nesting site will not occur." *Id.* at 94:8 to 94:11. Regarding dune habitat, the area to the north of the Project Site "consists of a manmade flood protection berm, an access road, and a fence line." *Id.* at 94:20 to 94:24.

(4) Only EDC's expert, applying an overly broad interpretation of what constitutes an ESHA, identified additional ESHA potentially affected by the Project

EDC's expert, Mr. Hunt, expressed the view that essentially the entire Project Area, as well as most of the surrounding properties, constitute ESHA for various reasons.

- Mr. Hunt asserts that the presence of nesting peregrine falcon on the Mandalay Generating Station (MGS) Natural Gas Combustion Turbine No. 1 (MGS Unit 1) supports a conclusion that MGS Unit 1, the Project Site, construction laydown area, access roads that will be used for demolition and construction, and existing ocean outfall, as well as the areas surrounding each, constitute ESHA. EDC-Hunt, Tr. Jul. 27, at 143:20 to 144:6; *see also* Hunt Supp. Test. at 10 ("The presence of peregrine falcon, a California Fully Protected species, and their foraging habitat on-site, meets the criteria for classifying these areas as [ESHA] under the Coastal Act.").
- Mr. Hunt asserts that the presence of pickleweed supports a conclusion that the Project Site, construction laydown area, access roads that will be used for demolition and construction, existing ocean outfall, and the areas surrounding each, constitute ESHA. Hunt Supp. Test. at 14.
- Mr. Hunt asserts that the presence of the globose dune beetle and the legless lizard within 100 feet of the western and northern sides of the Project Site support a conclusion that the Project Site and surrounding area constitutes an ESHA. *Id.*; EDC-Hunt, Tr. Jul. 27, at 143:20 to 144:6.

- Mr. Hunt asserts that the purported presence of the legless lizard within 100 feet of the western and northern sides of the Project Site support a conclusion that the access road that will be used to demolish and remove the existing ocean outfall constitutes ESHA. Hunt Supp. Test. at 14.
- Mr. Hunt asserts that the presence of coastal dunes west and north of the Project Site support a conclusion that the areas surrounding the Project Site and the areas surrounding the access road that will be used to demolish and remove the existing ocean outfall constitute ESHA. *Id.* at 14-15.

Mr. Hunt's threshold for determining that an area constitutes an ESHA is so low that it is meaningless. Among the areas identified by Mr. Hunt as ESHA are paved areas within the MGS property, and the existing MGS Unit 1. *See, e.g., id.* at 14. If Mr. Hunt's assessment is correct, then it is clear that the ongoing operations of a power plant for the past 50 years have done little to impact the surrounding habitat, since he would identify most, if not all, of the existing MGS property as ESHA. Therefore, development and operation of the Project, which is a far less intensive and impactful use than the existing MGS facility, would be expected to have no significant impacts on any ESHA even if it did.

Furthermore, notwithstanding Mr. Hunt's assertion that MGS Unit 1 is an ESHA due to the presence of the peregrine falcon, neither Mr. Hunt nor intervenor EDC has objected to Applicant's proposal to demolish MGS Units 1 and 2 and the associated ocean outfall following their retirement and decommissioning. *See generally* Project Enhancement; Project Enhancement and Refinement, Demolition of Mandalay Generating Station Units 1 and 2, Ex. No. 1064, TN# 206698. Thus, they apparently agree that development activity that occurs within, and directly affects, ESHA is not prohibited by any applicable requirements.

e. Even if areas identified by intervenors as meeting the definition of ESHA were to be designated as such, which they are not, applicable requirements would not necessarily preclude development of the Project as proposed

(1) Coastal Act Section 30240 permits development within and adjacent to ESHA

Among the Coastal Act policies that the LCP identifies as applicable to "habitat areas" is Section 30240 of the California Public Resources Code: (a) ESHA shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed **within those areas**; (b) Development in areas **adjacent to environmentally sensitive habitat areas** and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas." Oxnard CLUP at III-7 (emphasis added). As explained in Section V.C.4.d, the Project does not involve development within an ESHA. The McGrath Parcel Mitigation Area, which is designated as a "sensitive habitat area" in the LCP, is located outside the MGS property fence line, and is separated from the Project Site by a manmade flood control berm and an access road. *See, e.g.*, Applicant's Rebuttal Testimony, Ex. No. 1136, TN# 215582, Non-Substantive Corrections to Expert Declaration of Phillip Mineart, at Attachment C, 2 ("Applicant's Rebuttal Test. – Mineart Corrected Decl."); CCC 30413(d) Report at 25; Applicant-Love, Tr. Jul. 27, at 94:20 to 94:24. The Project has been designed to maintain a 100-foot buffer between development and the McGrath Parcel Mitigation Area. *See* Attachment A, Revised Condition of Certification BIO-7; Section V.C.6 *infra*.

(2) Local Coastal Policy 6.d allows development within an ESHA, and the requirement for a 100-foot buffer applies to "Resource Protection Areas" not "ESHA"

The LCP also includes Local Coastal Policy 6.d, which consists of three subparts. The first subpart applies to development adjacent to "wetlands" or "resource protection areas" and provides as follows:

> New development **adjacent to wetlands or resource protection areas** shall be sited and designed to mitigate any adverse impacts to the wetlands or resource.

Oxnard CLUP at III-11. As explained above, none of the properties adjacent to the Project Site, including the McGrath Parcel Mitigation Area, are designated as "wetlands" or "resource protection areas" in the LCP ("wetlands" are discussed further below). Therefore, this portion of Local Coastal Policy 6.d imposes no constraints on development of the Project; however, even if this portion of the policy was applicable, the only obligation would be that the Project be designed to mitigate adverse impacts.

The second subpart of Local Coastal Policy 6.d applies to development adjacent to "resource protection areas" and provides as follows:

> A buffer of 100 feet in width shall be provided **adjacent to all resource protection areas**. The buffer may be reduced to a minimum of 50 feet only if the applicant can demonstrate the large buffer is unnecessary to protect the resources of the habitat area. All proposed development shall demonstrate that the functional capacity of the resource protection area is maintained. The standards to determine the appropriate width of the buffer area are:
>
> 1) biological significance of the area
> 2) sensitivity of species to disruption
> 3) susceptibility to erosion
> 4) use of natural and topographic features to locate development
> 5) parcel configuration and location of existing development
> 6) type and scale of development proposed
> 7) use of existing cultural features to locate buffer zones . . . .

Oxnard CLUP at III-11.

The above requirement for a 100-foot buffer "adjacent to all *resource protection areas*" was cited in the CCC 30413(d) Report as the basis for the CCC's recommendation that a 100-foot buffer be maintained between Project-related development and ESHA and wetlands. As stated in the CCC 30413(d) Report:

> **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.

CCC 30413(d) Report at 18 (emphasis added). Local Coastal Policy 6.d, and the CCC

recommendation based thereon, are also frequently mentioned in the written and verbal testimony of EDC's witness Mr. Lawrence Hunt, who states that the policy requires a 100-foot buffer around ESHA. For example, in his Supplemental Testimony filed on July 14, 2017, Mr. Hunt includes a figure which purports to illustrate that if a 100-foot buffer were established along what Mr. Hunt asserts is a coastal dune ESHA north of the Project Site, it would encroach into the Project Site.[4] Hunt Supp. Test. at 9. Mr. Hunt made this same assertion during his verbal testimony on July 27, 2017. EDC-Hunt, Tr. Jul. 27, at 148:18 to 149:5. In commenting on CEC staff revisions to proposed Condition of Certification BIO-7, Mr. Hunt states: "This revision ignores buffers associated with any designation of ESHA within the Project area and buffers, including wetlands, and is ***inconsistent with Local Coastal Plan and CCC recommendations*** for 100-foot buffers around all ESHA ***(City of Oxnard, 1982, Map No.7; CCC, 2016, p. 16)***." Hunt Supp. Test. at 16 (emphasis added). Mr. Hunt goes on to state: "As a result of these changes, the newly discovered ESHAs in the Project area 100-foot buffer would not be afforded the standard 100-foot ESHA buffer protections ***recommended by the Coastal Commission and included in the Oxnard LCP as required to comply with the Coastal Act.***" *Id.* (emphasis added).

Both the recommendation of the CCC and the testimony of Mr. Hunt rely on an incorrect reading of Local Coastal Policy 6.d. The policy does not call for a 100-foot buffer around *ESHA*; it calls for a 100-foot buffer, which may be reduced to a 50-foot buffer under appropriate circumstances, adjacent to "*resource protection areas.*" Oxnard CLUP at III-11. As discussed above, these two terms have different meanings in the LCP, and they are not used interchangeably. The City's CLUP designates certain properties within the coastal zone into five resources areas, one of which is "habitat areas," which the LCP also refers to as "sensitive habitat areas" or "environmentally sensitive habitat." Oxnard CLUP at III-1. Separate and apart from these designations, CLUP Land Use Map No. 2 identifies those properties within the McGrath/Mandalay Beach Coastal Zone Area of the City's coastal zone that are designated as

[4] As discussed in Section V.B.4 of this Opening Brief, the evidence in the record does not support a conclusion that this area constitutes an ESHA.

Resource Protection (identified on the map with the designation "RP"). *See* Oxnard Resolution 12,143 at Exhibit 2.5 Coastal Land Use Map Amendment. These are the properties that are covered by the requirement in Local Coastal Policy 6.d to establish a buffer zone. *Id.*; *see also* Oxnard CLUP at III-11.

Proposed Condition of Certification BIO-7 includes a requirement to maintain a 100-foot buffer between construction activities and the specific "habitat areas" identified as ESHA in the LCP. *See* Attachment A, Revised Condition of Certification BIO-7; Section V.C.6 *infra*. As discussed above, those include: i) the chain of dunes that "parallel the beach from the Santa Clara River mouth south to Fifth Street," and ii) McGrath Lake. Oxnard CLUP at III-7 to III-10. This requirement, if adopted by the CEC, would be premised on the authority of the CEC to impose conditions of certification to mitigate potential environmental impacts, not on Local Coastal Policy 6.d, which applies only to "resource protection areas" designated in the LCP. The LCP does not designate the two areas identified above as "resource protection areas." *See* Oxnard Resolution 12,143 at Exhibit 2.5 Coastal Land Use Map Amendment.

As explained above, none of the properties adjacent to the Project Site are designated as "resource protection areas" in the LCP. Therefore, this portion of Local Coastal Policy 6.d imposes no constraints on development of the Project. Nevertheless, the Project has been designed to maintain a 100-foot buffer between development and the McGrath Parcel Mitigation Area, which is designated as a sensitive habitat area by the LCP, although not a "resource protection area." *See* Oxnard Resolution 12,143 at Exhibit 2.3 – Sensitive Habitats Map Amendment, Exhibit 2.4 – Coastal Access Map Amendment.

The third and final subpart of Local Coastal Policy 6.d applies to development within an "environmentally sensitive habitat" or a "resource protection area," or within 100 feet of such areas, and provides as follows:

> When a development is proposed **within an environmentally sensitive habitat or a resource protection area, or within 100 feet of such areas**, a biological report shall be prepared which includes applicable topographic, vegetative and soils information. The information shall include physical and biological features existing in the habitat areas. The report shall be prepared by a qualified biologist, and shall recommend mitigation measures to protect any impacted resources. All recommendations shall be made in cooperation with the State Department of Fish

> and Game. When applicable, restoration of damaged habitats shall be a condition of approval.

Oxnard CLUP at III-11.

As explained above, the Project does not involve development within an "environmentally sensitive habitat" or a "resource protection area." Furthermore, the Project has been designed to maintain a 100-foot buffer between development and the McGrath Parcel Mitigation Area, which is designated as a sensitive habitat area by the LCP. *See* Oxnard Resolution 12,143 at Exhibit 2.3 – Sensitive Habitats Map Amendment. Therefore, this portion of Local Coastal Policy 6.d does not impose any obligations or restrictions on development of the Project, although all of the requirements identified above have been satisfied in connection with the Project. Notably, this portion of Local Coastal Policy 6.d makes clear that even if the Project Site itself were designated an environmentally sensitive habitat, which it is not, the LCP would not preclude development on the Project Site provided the requirements identified above had been satisfied, which they have. Oxnard CLUP at III-11.

(3) Although the above restrictions and requirements do not apply to the Project, the Project complies nevertheless

None of the three subparts of Local Coastal Policy 6.d apply to the Project, because development is not within, adjacent to, or within 100 feet of the biologically sensitive areas protected by the Policy. However, even if one were to assume that Coastal Act Section 30240 *and* all three subparts of Local Coastal Policy 6.d *do apply*, development of the Project would be consistent with these requirements of the LCP, which are summarized below:

- The Project may not result in significant disruption of habitat values, or result in impacts which would significantly degrade or be incompatible with, the McGrath Parcel Mitigation Area, Cal. Pub. Res. Code § 30240;
- The Project shall be sited and designed to mitigate any adverse impacts, Local Coastal Policy 6.d, subpart 1, Oxnard CLUP at III-11;

- The Project shall be designed to maintain a 100-foot buffer between development and biologically sensitive areas identified in the Local Coastal Policy 6.d, subpart 2, Oxnard CLUP at III-11; and
- A biological report shall be prepared by a qualified biologist that includes recommended mitigation measures to protect any impacted resources made in cooperation with the CDFW, Local Coastal Policy 6.d, subpart 3, Oxnard CLUP at III-11.

The record demonstrates that all of the requirements set forth above, if they were applicable to the Project, would be satisfied. With implementation of the proposed Conditions of Certification, the Project will not result in significant disruption of habitat values or in adverse impacts to biological resources. FSA Part 1 at 4.2-8. The Project is designed to maintain a 100-foot buffer between development and the McGrath Parcel Mitigation Area, which is the only LCP-designated biologically sensitive area adjacent to the Project Site. FSA Part 1 at 4.2-34 to 4.2-35, 4.2-72 to 4.2-74. Numerous biological reports have been prepared by multiple qualified biologists that include recommended mitigation measures to protect any potentially impacted resources, and the CDFW has been an active participant in these proceedings. Thus, although the requirements identified in the LCP for the protection of designated biological resources do not apply to the Project because of its location, the Project satisfies those requirements nonetheless.

5. The designation of a 2.03-acre portion of the Project Site as a "wetland" results from a rigid application of the CCC "one-parameter" test that does not consider the conditions of the Project Site

The Committee requested briefing from the Parties on the following specific issue pertaining to "wetlands":

> Address whether any wetlands exist on or near the proposed project construction, Units 1 and 2 demolition or outfall removal areas. Explain the criteria for determining wetlands existence, the facts that support or refute their existence, and any constraints that the existence of wetlands creates upon the proposed project activities.

August Memo re Issues for Briefing at 1.

a. No portion of the Project Site meets the Coastal Act or LCP definition of "wetland"

The City's LCP defines "wetlands" as:

> [L]and where the water is at, near or above the land surface long enough to promote the formation of hydric soils or to support the growth of hydrophytes. In certain types of wetlands, vegetation is lacking and soils are poorly developed or absent as a result of frequent and drastic turbidity or high concentrations of salts or other substances in the water of substrata. Such wetlands can be recognized by the presence of surface water or saturated substrata at some time during each year and their location within, or adjacent to vegetated wetlands or deep-water habitats. (Wetlands as defined here includes land that is identified under other categories in some land use classifications. For example, wetland and farmland are not necessarily exclusive. Many areas that we define as wetland are farmed during dry periods, but if they are not tilled or planted to crops they will support hydrophytes.)

Oxnard CLUP at III-13.

The Coastal Act defines wetland as "lands within the coastal zone which may be covered periodically or permanently with shallow water." Cal. Pub. Res. Code § 30121. The CCC regulations define wetland 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." Cal. Code Regs., tit. 14, § 13577.

No portion of the Project Site qualifies as a "wetland" under any of these definitions because no portion of the Project Site is covered periodically or permanently with shallow water; the Site contains no hydrologic features, receives no hydrologic inputs other than direct rainfall, and is not connected to freshwater or tidal habitats. Applicant's Rebuttal Test. – Wetlands at 3. It is well documented based on long-term quarterly MGS monitoring results from approximately 20 years, that the depth to groundwater ranges from approximately 5 to 9 feet below ground surface and that groundwater at the Project Site is not "at, near, or above the land surface." Applicant's Responses to CEC Data Requests Set 1 (1-47), Ex. No 1043, TN# 205765, at 26-1. Additionally, the Project Site does not support a dominance of hydrophytic vegetation nor hydric soils. *See* Biological Resources Survey Report at 3-11.

b. The CCC applies a "one parameter" test for designating a wetland that is far more conservative than the test applied by the U.S. Army Corps of Engineers

According to the U.S. Army Corps of Engineers ("Corps") methodology, the following three parameters would all need to be met to find that a wetland is present: i) hydrophytic vegetation, ii) hydric soils, and iii) wetland hydrology present onsite.[5] As a matter of policy, the CCC applies what it refers to as its "one parameter" test whereby it will designate an area a wetland based on the presence of any one of the three wetland indicators. *See* CCC 30413(d) Report at Attachment C, 1. In the case of the Project Site, the CCC determined that neither hydric soils nor wetland hydrology were present onsite. *Id.* at Attachment C, 1-2. However, based on the presence of three "relatively common" species of hydrophytic vegetation, the CCC concluded that one of the three parameters was present and on that basis identified a 2.03-acre portion of the Project Site as a wetland. *Id.* at 13, n.3, Attachment C, 1-2. CEC Staff adopted the CCC's determination. FSA Part 1 at 4.2-15. Since this determination, one of these three species of hydrophytic vegetation, slenderleaf ice plant (*Mesembryanthemum nodiflorum*), is no longer classified as a hydrophytic species. *See* Section V.C.5.c *infra*.

c. Regulatory changes occurring after the CCC's determination bring into question whether the portion of the Project Site in question meets even the one-parameter test for wetlands

Subsequent to the CCC wetlands determination, "the wetland indicator status of the slenderleaf ice plant, a dominant plant on the Project Site, was changed from facultative to facultative upland" in the Corps' National Wetland Plant List. Biological Resources Survey Report at 3-11, Appendix K. This update changes the finding of hydrophytic vegetation on the Project Site because "updated data show that a dominance of hydrophytic vegetation is no longer present." Biological Resources Survey Report at 3-11. Although CCC Staff continue to state that the "combined high percent cover of wetland indicator plants resulted in prevalence indices very indicative of hydrophytic vegetation," CCC Staff also acknowledge that "the dominance criterion has changed because of the revised wetland indicator status of the slenderleaf ice plant."

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[5] U.S. Army Corps of Engineers, Wetland Delineation Manual (1987), at 3, *available at* http://www.cpe.rutgers.edu/Wetlands/1987- Army-Corps-Wetlands-Delineation-Manual.pdf.

CCC – July 2017 Comments at 1. Therefore, as Applicant concluded, "the sole indicator of wetland hydrology . . . is no longer applicable [which] further supports the Applicant's determination that wetlands are not present on the Project Site." Biological Resources Survey Report at 3-11.

d. Vegetation at the Project Site has been influenced heavily by human development

Evidence demonstrates that the presence of any hydrophytic vegetation onsite likely resulted from chronic disturbance and human intervention, and is not indicative of wetland conditions. FSA Part 1 at 4.2-4. The Project Site has been graded, and soils are compacted; vegetation has been completely removed in the past, and is now dominated by ice plant mats, Russian thistle, and other invasive species. Applicant-Love, Tr. Feb. 9, at 346:7 to 347:25; Applicant's Rebuttal Testimony, Ex. No. 1121, TN# 215553, Expert Declaration of Julie Love in Response to Statements of Lawrence E. Hunt and Ilene Anderson Regarding Biological Resources, at 3.

The Project Site has been used for a variety of functions over the years, including use as a lay-down area for construction equipment and materials and storage area for construction debris. Applicant's Rebuttal Test. – Wetlands at 4-5. Storage of material dredged from the bottom of the Edison Canal has occurred onsite at the exact location where this hydrophytic vegetation has been found. *Id.* Because the Edison Canal is saline, the dredged spoils placed on the Project Site were saturated with saltwater that infiltrated into the soil, resulting in an accumulation of salt that has made the soil more suitable for salt-tolerant hydrophytic plant species, including the wooly seablite, pickleweed, and slenderleaf ice plant, the presence of which constituted the sole basis for the CCC's wetland finding. CCC 30413(d) Report at 13, 15-16.

This canal dredge spoil zone is the only portion of the entire MGS property that supports these plant species, even though other areas are topographically very similar. *See* CCC 30413(d) Report at Attachment C, 3, Fig. 1. Even EDC's expert, Mr. Hunt acknowledges that the FSA has found that hydrophytic vegetation most likely exists onsite as a result of the dredge spoils from

the canal. EDC-Hunt, Tr. Feb. 10, at 20:15 to 21:2; FSA Part 1 at 4.2-27 ("[T]he project site may be artificially saline, due to the historical storage of ocean-dredged sediment.").

Presence of hydrophytic vegetation on its own is not a reliable wetland indicator at the Project Site because the vegetation at the Site is "anthropogenically influenced and highly disturbed." Applicant-Love, Tr. Feb. 9, at 346:7 to 347:25. In other words, at the Project Site, the CCC's one parameter test results in a designation as wetland of land where "the vegetation is most likely the result of chronic disturbance and human intervention and not indicative of the wetland condition." *Id.* at 357:23 to 358:25.

e. While incorrect, the designation of a one-parameter wetland on the Project Site does not impose constraints on development of the Project as proposed

To the extent that the one parameter test results in a determination that mitigation of the 2.03 acres of degraded habitat identified as wetland is appropriate or necessary, these mitigation measures have already been incorporated into the FSA at BIO-9, which would require 4:1 habitat compensation. FSA Part 1 at 4.2-25. No further mitigation or other action by Applicant is required, and no constraints exist on the ability to develop the Project as proposed.

f. No dune swale wetland exists on the Project Site

Contrary to suggestions from intervenors that in addition to the 2.03-acre "one-parameter wetland" identified by the CCC there is also a "dune swale" wetland on the Project Site, no qualified biologist who has actually been present on the Project Site and made in-person observations has ever identified a dune swale wetland onsite. To the contrary, Applicant's biologists and the CCC staff biologist confirmed that no dune swale wetland exists. *See, e.g.*, CEC Report of Conversation with Dr. Jonna Engel by Carol Watson, TN# 217575, at 1; Applicant-Love, Tr. Feb. 9, at 345:21 to 345:24; *see also* Applicant's Rebuttal Test. – Wetlands at 2.

As expressed in Julie Love's written testimony (Applicant's Opening Test. – Love Decl.) and verbal testimony, the topography of this area is slightly higher in elevation than the surrounding landscape. The area lacks both dune and swale characteristics. The CCC's Dr. Engel also found no evidence of a dune swale wetland during her November 19, 2015 site visit,

despite having "carefully examined the vegetation in the area for the proposed power plant." CCC 30413(d) Report at Attachment C, 2. On May 3, 2017 Dr. Engel again visited the Project Site and confirmed "that the area on the Puente site identified as 'coyote bush scrub' . . . is a raised area that is approximately 2 to 4 feet above the surrounding area, dominated by coyote bush, highway iceplant, and wooly seablite, and does not constitute dune swale habitat." CEC Report of Conversation with Dr. Jonna Engel by Carol Watson, TN# 217575, at 1; *see also* AFC – Biological Resources at Figure 4.2.-2.

6. Recommended changes to proposed Conditions of Certification

The Committee requested that the Parties address in their Opening Briefs any recommended changes to staff-proposed Conditions of Certification BIO-9 and BIO-10 with specific revised condition language. August Memo re Issues for Briefing, at 1. Applicant's proposed changes to these proposed Conditions of Certification are set forth in Attachment A to this Opening Brief. In addition, Applicant previously proposed changes to proposed Condition of Certification BIO-7, with which CEC Staff agreed. For the sake of completeness, Applicant has included those changes in Attachment A as well. A brief summary of the status of these three proposed conditions follows:

- *BIO-7.* CEC Staff agreed with Applicant's proposed changes to BIO-7 regarding the 100-foot buffer from the McGrath Lake ESHA and coastal dune ESHA that supports western snowy plover and California least tern breeding. Applicant's Comments on the Proposed Conditions of Certification in the Final Staff Assessment for the Puente Power Project, Ex. No. 1098, TN# 215352, at 5 ("Applicant Comments on Proposed COCs"); Staff's Rebuttal Testimony and Responses to Hearing Officer's Requests for Information, Ex. No. 2006, TN# 215571, at 3 ("Staff Rebuttal Test.").
- *BIO-9.* Applicant also proposed changes to BIO-9, which included changing the CEC Staff's proposed mitigation ratio from 4:1 to 2:1 due to the degraded quality of the so-called 2.03 acre wetland on the Project site. Applicant Comments on Proposed COCs at 5. While Applicant still does not agree with the

characterization of the so-call wetland, Applicant is willing to agree to the 4:1 mitigation measure, which is consistent with CCC's recommendation. Applicant proposed other changes to BIO-9, some of which were accepted by CEC Staff while others were not. Applicant Comments on Proposed COCs at 5-8; Staff Rebuttal Test. at 6-8. Applicant proposed a $500,000 mitigation cap and does not agree with CEC Staff's rejection of the cap. CEC Staff did adopt the change to allow the use of a mitigation bank. Also there are some changes that need to be incorporated since the Project does not intend to acquire land (*i.e.*, references to "land owner" should be deleted).

- *BIO-10.* CEC Staff revised BIO-10 that was presented in the FSA to include the development of a Translocation Plan for special-status species.

D. Coastal and Riverine Flooding

The Project will not result in a significant impact to coastal or geological resources because it is resistant to coastal and seismic hazards. Such hazards include coastal and riverine flooding, tsunami, and sea level rise ("SLR"). Analyses provided by Applicant and CEC Staff show that the beach in front of the Project has been growing and continues to grow. *See, e.g.*, Expert Declaration of Phillip Mineart in Response to Supplemental Testimony of Dr. Revell, Ex. No 1150, TN# 220215, at 4 ("Mineart Decl. – Response to Revell"); FSA Part 1 at 4.11-41; Staff's Supplemental Testimony Filed in Response to the Committee's March 10, 2017 Order for the Puente Power Project, Ex. No. 2025, TN# 218274, at 8 ("Staff Supp. Test."). CEC Staff further found that regional sediment loads are primarily provided by the Santa Clara River, and that changes in dredging practices in Ventura Harbor would have little effect on sediment loads. FSA Part 1 at 4.11-41. Even assuming worst case scenarios for SLR and storms, the Project will be flood-resistant and will not result in any significant direct, indirect or cumulative environmental impacts related to riverine or coastal flooding (including tsunami), as acknowledged by the FSA and supported by other substantial evidence. *See, e.g.*, AFC Section 4.15, Water Resources, Ex. No. 1021, TN# 204219-22, at 4.15-12; FSA Part 1 at 4.11-2; Applicant's Opening Testimony , Ex. No. 1101, TN# 215441, Expert Declaration of Phillip

Mineart, at 7 ("Applicant's Opening Test. – Mineart Decl."); Staff's Supp. Test. at 15; Expert Declaration of Phillip Mineart in Response to March 10, 2017 Committee Orders, Ex. No. 1145, TN# 218900, Attachment B, Supplemental Coastal Hazards Analysis Summary Report ("Mineart Supp. Test.").

In support of its analysis, Applicant has relied on CoSMoS 3.0, which both the USGS and CEC Staff have found to be state of the art modeling. Mineart Supp. Test. at ES-2. Nevertheless, relying solely on the findings and testimony of Dr. David Revell, intervenors assert that coastal hazards threaten the Project. *See, e.g.*, City of Oxnard's Prehearing Conference Statement, TN# 215613; Expert Declaration of Dr. Revell, Ex. No. 3025, TN# 215427, at 25 ("Revell Opening Test."). Neither Dr. Revell's testimony nor his model reliability is supported by evidence, as has become increasingly clear in recent proceedings. Therefore, intervenors' arguments regarding coastal hazards should be given little or no weight.

The MGS property, including the proposed Project Site, is "not in any 100-year flood zone, either the Riverine flood zone from the Santa Clara River, nor the coastal flood zone, as defined by FEMA." Applicant-Mineart, Tr. Feb. 10, at 171:1 to 171:9. CEC Staff concurs, adding that "the Puente site is located just outside the mapped 100-year floodplain and the 500-year floodplain encroaches into the southwest corner of the Puente site." FSA Part 1 at 4.2-67. As described in detail below, CEC Staff conducted an analysis of the best available science related to flood risk from coastal and riverine sources. CEC Staff-Maurath, Tr. Feb. 10, at 275:21 to 276:6; CEC Staff-Taylor, Tr. Feb. 10, at 279:19 to 280:2; FSA Part 1 at 1-8. Regarding SLR, Staff also considered a combination of variables including the possibility of SLR "occurring during a mean high water condition" and calculated tsunami flood risk "during a sea level rise event near the end of the life of the project." CEC Staff-Marshall, Tr. Feb. 10, at 287:7 to 287:22. Based on this thorough analysis, CEC Staff has determined that all potential coastal hazards at the Project Site could be mitigated to a level of less than significant. FSA Part 1 at 4.11-23 to 4.22-32; CEC Staff-Maurath, Tr. Feb. 10, at 270:14 to 270:16.

Intervenors criticize Staff's use of the CoSMoS 3.0 model to assess coastal hazards. This criticism is unfounded. "Staff reviewed three coastal hazard maps that were developed using

dynamic modeling: Coastal Resilience (by The Nature Conservancy (TNC)), Federal Insurance Rate Maps (FIRM, by FEMA), and the Coastal Storm Modeling System (CoSMoS 3.0, by USGS)." FSA Part 1 at 4.11-128. Staff thoroughly evaluated all three models and chose CoSMoS 3.0 because the "USGS tool focuses on the assessment phase. . . . Staff's position is the CoSMoS 3.0 tool is a reasonable method of analyzing future hazards that also includes potential effects of climate change." *Id*. at 4.11-133. Furthermore, after the subsequent further detailed review of the models in response to the Committee's March 10 Orders, which included a workshop in which the USGS, California Coastal Commission, Coastal Conservancy, and Ocean Protection Council participated, CEC Staff concluded "The best approach to supplement the assessment of coastal flooding risk is utilizing CoSMoS 3.0 Phase 2, which is consistent with the state guidance for sea-level rise (using the most recent and best available science, considering timeframe and risk tolerance, considering storms and other extreme events, and changing shorelines)." Staff Supp. Test. at 15.

1. Coastal flooding hazards do not present significant impacts to the Project

a. CoSMoS 3.0 is the best available modeling tool for coastal hazard assessment

CoSMoS 3.0 is a physics-based numerical modeling system for assessing coastal hazards due to climate change that USGS has been developing for a decade, building on decades old models. Presentation - Coastal Vulnerability in Ventura County using CoSMoS 3.0, Ex No. 1143, TN# 217282, at 2 ("CoSMoS 3.0 Presentation"). The model "predicts coastal hazards for the full range of SLR . . .and storm possibilities . . .using sophisticated global climate and ocean modeling tools." CoSMoS 3.0 Presentation at 2. The model takes into account wind, waves, atmospheric pressure, and shoreline change (including long term shoreline change as well as storm-drive change). CoSMoS 3.0 Presentation at 11, 17.

> In CoSMoS 3.0 Phase 2, a total of 40 scenarios, resulting from the combination of 10 sea levels, 3 storm conditions, and one background condition were simulated. Sea-level rise ranged from 0 m to 2 m, at 0.25 m increments, plus an additional 5 m extreme [scenario]. Future storm conditions represent the 1-year, 20-year, and 100-year return level coastal storm events, as derived and downscaled from

winds, sea-level pressures (SLPs), and sea-surface temperatures (SSTs) of the RCP 4.5, GFDL-ESM2M global climate model (GCM).

Recently published technical document for CoSMoS 3.0 (Coastal Storm Modeling System), Version 3, TN# 216610, at 5 ("CoSMoS 3.0 Report"). According to the USGS, numerous local, state and federal agencies use CoSMoS 3.0. CoSMoS 3.0 Presentation at 7-8. "This includes jurisdictions such as Santa Barbara County, Los Angeles County, City of Santa Barbara and City of Los Angeles. Key state and federal agencies, including the California Coastal Commission, Ocean Protection Council, California Coastal Conservancy, and NOAA for Coastal Management." Mineart Decl. – Response to Revell at 12-13.

(1) CoSMoS 3.0 model validation

The CEC directed CEC Staff to evaluate the relevant validation for the CoSMoS 3.0 model, feedback thereto, how it had been incorporated, and "[h]ow the model currently incorporates sand, beach, and dune erosion/accretion, and beach angle change." March 10 Orders at 2. On March 28, 2017, as required by the order, CEC Staff held a workshop to discuss the utility and applicability of:

- CoSMoS 1.0 instead of, or as a supplement to, the analysis conducted using CoSMoS 3.0
- CoSMoS 3.0 as it was used in the [FSA] or modified in some way, including by utilizing any additional model information that may have become available since the publication of the FSA
- A combination of CoSMoS 1.0, and 3.0
- Dr. Revell's projection of 2050 conditions as the worst case for flood/sea-level rise risk.

Presentation – Committee Orders for Additional Evidence, TN# 217281.

A report summarizing the methodology used for CoSMoS 3.0 was submitted to the CEC on March 20, 2017. *See* CoSMoS 3.0 Report. This report explained: "CoSMoS 3.0 is comprised of one global scale wave model and a suite of regional and local scale models that simulate coastal hazards in response to projections of 21st century waves, storm surge,

anomalous variations in water levels, river discharge, tides, and sea-level rise." *Id.* at 5. "Flooding is determined by the dynamic interaction of the evolving profile and ocean conditions during the storm events, including dune erosion and overtopping for that event, and also the preceding long-term evolution of the coast." USGS-Erikson, Tr. Jul. 27, at 96:20 to 96:24. CoSMos 3.0 accounts for all potential variables that could pose a flood risk to the Project Site and, as recognized by CEC Staff, is a reasonable and appropriate method for analyzing coastal hazards. *See, e.g.*, Staff Supp. Test. at 15.

To assist in CEC Staff's evaluation of CoSMoS 3.0, USGS staff presented to CEC Staff at the March 28, 2017 workshop on Coastal Hazards. *See* Presentation – Committee Orders for Additional Evidence, TN# 217281.

USGS explained that "[a]ll phases of CoSMoS 3.0 results show no significant risk of flooding to project site for 100 year storm event at ~2050 (50 cm SLR) or for decades after." CoSMoS 3.0 Presentation. Having followed the Committee's Orders, CEC Staff conducted further review of coastal flooding risk tools and "determined that the best approach to supplement the assessment of coastal flooding risk is utilizing CoSMoS 3.0 Phase 2, which is consistent with the state guidance for sea-level rise." Staff Supp. Test. at 1. CEC Staff noted that "All model components of CoSMoS 3.0 Phase 2 have been extensively tested, calibrated, and validated with local, historic data on waves, water levels, and coastal change." *Id.* at 2.

b. Dr. Revell's testimony is based on an overly conservative model that predicted flooding when there was no flooding

(1) The TNC Model is overly conservative

Dr. Revell relied heavily on the Ventura County Resilience Study, initially prepared for the Nature Conservancy (the "TNC Model"), which CEC Staff rejected for various reasons including that the projections "assume that the coast would erode based on maximum stormwave events with unlimited duration" and that "eroded sediment is completely removed from the system." CEC Staff-Taylor, Tr. Jul. 27, at 219:21 to 219:25. Based on the TNC Model and his belief that "[a]s sea level rises, we're going to have more storms reaching higher elevations impacting the dunes for longer periods of time," Dr. Revell assumes storms of unlimited

duration, despite his acknowledgement that he does not know how many storms will affect the shore, or at what frequency they will occur. City of Oxnard-Revell, Tr. Jul. 26, at 197:3 to 197:10. According to USGS, "to assume unlimited duration storms is [] a big assumption." USGS-O'Neill, Tr. Jul. 26, at 175:8 to 175:9. Dr. Revell acknowledges that "the assumption in Coastal Resilience that the dune will erode is a conservative one" and that it would be beneficial to his modeling to know "the hours of wave attack necessary to [erode a dune]," but that such information is not currently available. City of Oxnard-Revell, Tr. Jul. 26, at 175:11 to 175:13, 198:19 to 198:21. Applicant's expert Mr. Phil Mineart evaluated the probability of storms occurring at Mandalay Beach that could potentially impact the dunes and concluded that during the 30-year life of the project, the probability of as many as four storms occurring in one year, let alone back-to-back and continuous as assumed by Dr. Revell, would be extremely low (0.36 percent in 30 years). Mineart Supp. Test. at Appendix A - Probability of Multiple Storms Eroding Dunes Fronting Mandalay Generating Station, A-5.

Assuming storms of unlimited duration, Dr. Revell's 2030 Combined Hazard Map predicts that Project Site flooding could occur under certain circumstances. These findings are predicated on the assumption that several events—each rare in its own right—will occur simultaneously. CPUC Evidentiary Hearing Tr., May 29, 2015, at 538:17 to 538:23. Dr. Revell constructed his modeling scenarios by taking the 1983 El Niño storm (the same storm for which his model inaccurately suggested that wave inundation had occurred and flooded the Project Site) and adding predicted SLR, wave momentum, and wave velocity impacts, as well as tidal strength. *Id.* In Dr. Revell's own words: "All of those are then mapped. And then we combine them all into one single sha[p]e file." *Id.* These overly conservative assumptions led CEC Staff to find "[w]hen all these assumptions are combined, the overall result is a scenario that is unreasonable." CEC Staff-Taylor, Tr. Jul. 26, at 220:6 to 220:17. Further, the TNC Model has not been tested, calibrated, and validated to the extent that CoSMoS 3.0 has. *Id.* at 221:1 to 221:4. Lastly, USGS reviewed Dr. Revell's opening testimony (as they did for Ms. Taylor of CEC Staff), and their "response [thereto] was to try and make sure that the important details that [they] include in [CoSMoS 3.0] were accounted for in the statements that were being made" by

Dr. Revell. USGS-Hart, Tr. Jul. 26, at 281:1 to 281:4. USGS does not "think that those clarifications were included" in Dr. Revell's opening testimony. *Id.* at 282:16 to 282:17.

(2) Dr. Revell's model failed to reflect historical circumstances accurately

"[T]he largest storm on record was . . . a storm event that occurred during the strong El Niño winter of 1982/1983 during which wave heights reached 25 feet at 22 seconds." FSA Part 1 at 4.11-130. It is clear from MGS's site records that no part of the MGS property was impacted by this storm. In fact, no significant flooding occurred during this or any subsequent storm. Applicant's Rebuttal Test. – Mineart Corrected Decl. at 19-20. The shortcomings of Dr. Revell's model were identified at the CPUC hearing more than two years ago, where he admitted that two of the four processes inaccurately showed "potential for wave impacts through a couple of flow pathways" during the 1983 storm, concluding that the MGS property would have been inundated during the storm. CPUC Evidentiary Hearing Tr., May 29, 2015, at 524:21 to 525:4. In reality, no flooding whatsoever occurred on the MGS property. Applicant's Rebuttal Test. – Mineart Corrected Decl. at 19-20. Dr. Revell introduced a "depiction based on [his] model of what would occur at the site today . . . under current physical conditions at the site if the 1983 storm event were to occur today." City of Oxnard-Revell, Tr. Feb. 10, at 350:6 to 350:14; *see also* Testimony of Dr. David Revell on Behalf of the City of Oxnard on SLR Submitted to CPUC Case A14-11-016, Ex. No. 3000, TN# 204942, at Figure 8 ("Revell CPUC Test."). Dr. Revell acknowledges that this model shows that the MGS property would flood under conditions modeled on the 1983 storm. City of Oxnard-Revell, Tr. Feb. 10, at 350:16 to 351:1. He also admitted that he has become aware that the MGS did not, in fact, flood. *Id.* at 351:2 to 351:7. Dr. Revell has stated, and Applicant would agree, that "if a model produces a result that doesn't square with what [one knows] about the system, [one] would have some questions about the validity of the model" *Id.* at 347:22 to 348:2. Dr. Revell's "model is inaccurate and flawed as applied to the Project Site." Applicant's Rebuttal Test. – Mineart Corrected Decl. at 19.

(3) FEMA maps, the TNC Model, and CoSMos 3.0 measure and demonstrate different metrics and their outputs cannot be directly compared

For CEC Staff, in evaluating flood risk to Puente, "flood-depth information is needed to determine if the power plant can operate. CoSMoS 3.0 flood projections are based on dynamic wave setup to identify areas of standing water that stay flooded for a minute or longer during a storm. If standing water is deep enough, the flood could trigger shutdown of the operations." CEC Staff-Taylor, Tr. Jul. 27, at 218:13 to 219:4. In contrast, Dr. Revell is concerned with two simple tests for flood modeling, and one of them is "does the beach get wet during an extreme wave event" such that one could capture a photo of it? City of Oxnard-Revell, Tr. Jul. 26, at 163:6 to 163:8.

At first, Dr. Revell appears to misunderstand what CoSMoS 3.0 is measuring, stating that he believes all three models (FEMA, CoSMoS 3.0, and the TNC Model) are measuring whether the beach gets wet. City of Oxnard-Revell, Tr. Jul. 26, at 164:4 to 146:9 ("Right here CoSMoS 3.0 says the beach does not get wet. FEMA says the beach gets wet."). This is what leads him to show side by side photographs of FEMA, CoSMoS 3.0, and TNC Model flood photographs at three sites.[6] However, "CoSMoS 3.0 does not represent the same hazards as the FEMA Maps do." CEC Staff-Taylor, Tr. Jul. 26, at 218:18 to 218:19. CoSMoS 3.0 "[f]lood projections are based on dynamic wave set-up, *i.e.*, any area that is wet for at least 1 minute during a storm scenario." CoSMoS 3.0 Presentation at 3. CoSMoS 3.0 maps wave-run up, but "as single points rather than included in the flood extent. This is because run-up levels are of shorter duration, and depending on the beach slope, may only constitute a couple of centimeters of intermittent standing water." CoSMoS 3.0 Report at 26. In contrast, "FEMA maps are typically used to evaluate coastal hazards, which rely on more than just dynamic water levels." CEC Staff-Taylor, Tr. Jul. 27, at 218:13 to 219:4. One aspect of the TNC Model, on which Dr. Revell relies,

[6] USGS takes issue with many of the photographs relied on by Dr. Revell because, although USGS relies on some photo evidence for groundtruthing of CoSMoS 3.0, USGS rejects many photos that do not meet their rigorous scientific standards, especially those photos taken by citizen scientists. USGS-O'Neill, Tr. Jul. 26, at 176:16 to 176:22.

"shows flood extent but does not show flood depth. Flood depth information is needed to determine if the power plant can operate." CEC Staff-Taylor, Tr. Jul. 27, at 220:8 to 220:11.

As USGS clarified, "run-up is maximum wetted extent through waves. So it's not necessarily flooded." USGS-O'Neill, Tr. Jul. 26, at 121:18 to 121:20. USGS confirmed that CoSMoS 3.0 "does not map what gets wet on the beach. [It] maps the sustained two-minute flood or longer on the beach . . . flooding, no-kidding flooding, not intermittent wetting." USGS-O'Neill, Tr. Jul. 26, at 190:1 to 190:8. USGS also confirmed that Dr. Revell's side-by-side comparison mischaracterizes what CoSMoS 3.0 is showing on its maps. *Id.* at 190:4 to 190:6; *see also* CEC Staff-Taylor, Tr. Jul. 26, at 265:18 to 265:25 ("I wanted to point out again that [Dr. Revell] mischaracterized CoSMoS 3.0.") Dr. Revell acknowledged at the July hearings that his side by side figures are not mapping the same phenomenon and that, at the time the diagrams were due, he did not have what was needed to "do an apples-to-apples comparison." City of Oxnard-Revell, Tr. Jul. 26, at 259:16 to 260:2.

(4) CoSMoS 3.0 factors in dune erosion

Erosion is considered in CoSMoS 3.0 through extensive shoreline modeling based on SLR, waves, and storm surge. "Dune fields are dynamic" in the CoSMoS 3.0 model and are "eroded per event." USGS-Erikson, Tr. Jul. 27, at 113:5 to 113:7. USGS has not undertaken a rigorous site specific analysis of the "probability of dune failure," because to do so one "would really need to look at what conditions would fully erode and cause full failure of those dunes," as well as "whether those conditions are even plausible within the future scenarios." USGS-O'Neill, Tr. Jul. 26, at 116:22 to 117:2. CoSMoS 3.0 simulates shoreline position through a shoreline change model, which, at year 2050 under a 100 year storm conditions, "doesn't project actual erosion up to the infrastructure until we reach the five-meter sea level rise." USGS-Erikson, Tr. Jul. 27, at 106:7 to 106:23, 108:10 to 108:17.

In the CoSMoS 3.0 model, beach "profiles change over time" to handle accretion and erosion and reflect the fact that "[a]s the coast evolves it's going to completely change the way the waves field the beach." USGS-O'Neill, Tr. Jul. 26, at 124:21 to 125:9. CoSMoS 3.0's "assessment of the extent to which the site is exposed to flooding takes into account erosion" in

that "with the simulated storm event it takes into account event-based erosion." USGS-O'Neill, Tr. Jul. 26, at 147:5 to 147:9. If anything, CoSMoS 3.0 may tend to overstate dune erosion, because it does not account for nourishment, as CoSMoS 3.0 "assumes no nourishment" or, in other words, "assume[s] no additions to the dunes in terms of mass." USGS-O'Neill, Tr. Jul. 26, at 148:10 to 150:8.

Despite this, intervenors allege that CoSMoS 3.0 does not factor in dune erosion in its modeling. However, Dr. Revell actually acknowledges that the CoSMoS 3.0 model takes into account dune erosion data. City of Oxnard-Revell, Tr. Jul. 26, at 147:18 to 147:19 ("[T]he volume or the extents of dune erosion. I know it's in the model."); *see also id.* at 159:5 to 159:7 ("[T]hey are including some amount of dune erosion in their coastal flood model."). His real issue seems to be that he has not been able to evaluate the data himself. *Id.* at 147:18 to 147:22 ("[W]e haven't been able to look at the dune erosion extents explicitly yet . . . .").

(5) CoSMoS 3.0 provides site-specific data, while the TNC Model does not

"The individual models that comprise CoSMoS 3.0 are models that can and normally would be used for a site specific analysis; thus, if the appropriate input data are available and used, CoSMoS 3.0 is appropriate for use in a site specific analysis – and that is precisely what the CEC Staff and USGS have done in this case." Mineart Decl. – Response to Revell at 4. CoSMoS 3.0 Phase 2 has improved over Phase 1 of the same project. Enhancements include improved system methodology for flood projections, long term coastal evolution projections, incorporation of discharge from river (including long term sediment supply), and an improved digital elevation model. Staff Supp. Test. at 3. CoSMoS 3.0 incorporates site specific data including "bathymetric topo, the beach transect that has been collected over … the past several years, and that is included into the model, incorporated into the model. And that serves as a calibration and validation of the shoreline change." USGS-Erikson, Tr. Jul. 26, at 143:5 to 143:9. The model uses site-specific National Oceanic and Atmospheric Administration Light Detection and Ranging ("LIDAR") data for shoreline profiles as well as any other relevant coastal data. USGS-O'Neill, Tr. Jul. 26, at 145:2 to 146:7. "The entire property of the [MGS] is

36 acres and the Puente site is three acres. The size of the site is enough that the resolution of the [CoSMoS 3.0] model is appropriate for the site." CEC Staff-Taylor, Tr. Jul. 27, at 218:3 to 218:6.

In contrast, the TNC Model was created primarily as a planning document and does not provide sufficient detail to predict flooding specific to an area as small as the Project Site. The Nature Conservancy, Coastal Resilience Ventura, July 31, 2013, Ex. No 3026, TN# 215428-1, at 8 ("This information is intended to be used for planning purposes only. Site-specific evaluations may be needed to confirm/verify information presented in these data."). The TNC Model's "estimates of coastal hazards . . . isn't detailed enough for site studies." Applicant's Rebuttal Test. – Mineart Corrected Decl. at 19. As discussed in Section V.D.1.b.(2), the TNC Model relied upon by Dr. Revell incorrectly showed the Project as having flooded during the 1983 El Niño storm, and in similar future conditions. *Id.* 19-20. As Mr. Mineart explained, the TNC Model "didn't represent our particular site accurately. So, any analysis based upon that we'd have to conclude isn't very accurate." Applicant-Mineart, Tr. Feb. 10, at 206:11 to 206:14. CEC Staff concurred, stating that the TNC Model "was developed as part of the Coastal Resiliency Study for long-term coastal planning. . . . This is useful for planning purposes over a very long-term timeframe, but not appropriate for a project-level analysis in a 30-year timeframe." FSA Part 1 at 4.11-132 to 4.11-133.

When asked about the failure of his model as it applied to the MGS property, Dr. Revell referred to the fact that he was able to verify his modeling results as to other locations along the Ventura County coast, but not the MGS property itself. City of Oxnard-Revell, Tr. Feb. 10, at 351:2 to 351:13. Ms. Ashley Golden, the City's Development Services Director, affirmed that Dr. Revell's work was not specific to the Project Site. City of Oxnard-Golden, Tr. Feb. 9, at 281:18 to 281:23. Although it is possible that Dr. Revell's model may be accurate for other portions of Ventura County, its failure to accurately reflect a known historical event's impact on this location shows that the model is not accurate as to the specific portion of the coast proximate to the Project Site. Generalized applicability to the wider region is irrelevant to determining whether the Project is adequately protected from flooding.

c. Mr. Campbell's modeling does not accurately address coastal flooding

Mr. Campbell of cbec provided "an update to [cbec's] model as it was reapplied to the site to better map inundation at the generating facility as a result of the combined effect of coastal and river flooding." cbec-Campbell, Tr. Jul. 26, at 222:14 to 222:17. Mr. Mineart is of the opinion that what is being described in Mr. Campbell's model is extremely improbable, on the order of a 5,000 year event, if not a 10,000 year event, because "the chance of a 100 year [flood] event occurring on the same day as a 100-year storm is almost zero" within a 1,600-square mile watershed. Applicant-Mineart, Tr. Jul. 26, at 241:4 to 241:12; *see also* CEC Staff-Taylor, Tr. Jul. 27, at 270:15 to 270:18 (noting that Campbell's model only addresses flooding in relation to both 100-year storms and 100-year river flooding events); USGS-Erikson, Tr. Jul.26, at 291:3 to 291:7, 291:21 to 292:6 (USGS does :not assume that the 100-year coastal event occurs jointly with the 100-year fluvial event," and several studies "show that there is no correlation between" those events). Mr. Mineart's extensive evaluation of riverine flood work is described in Section V.D.2. However, the CEC ruled to let this updated modeling into the record "for the limited purposes of addressing the assumption, the inputs and the interpretation of the results of CoSMoS 3.0." CEC-Kramer, Tr. Jul. 26, at 29:14 to 29:18. CEC Staff evaluated Mr. Campbell's report and found that it did not provide enough information to determine whether the projected flooding would affect the Project. CEC Staff-Taylor, Tr. Jul. 26, at 268:1 to 268:3. They also found that, although it provided the requested information, it did not provide information relevant to addressing coastal flooding, as required by the March 10 Orders. *Id.* at 268:20 to 268:23.

Furthermore, there are many issues with Mr. Campbell's model, in addition to the improbability of the events it depicts actually occurring. The model is a riverine flood model that uses pre-selected coastal boundary conditions based on a mean high water. Technical Memorandum Mandalay Generating Station Modeling Support, Ex. No. 3063, TN# 219169, at 7, Appendix A. This approach for model boundary conditions is extremely simplistic, as noted by Dr. Andrea O'Neill of the USGS. USGS-O'Neill, Tr. July 26, at 153:23 to 154:2 ("[O]ur model

extends far offshore, and those boundar[y] conditions are driven by surge, tides and waves. So it's an all-inclusive storm-physics. So it's discharge, waves, water level. . . . It's far more than just a mean high water."). Mr. Campbell's model did not incorporate the flood protection berm along the northern boundary of the MGS property that was constructed after the 1969 flood event. *See* CEC Staff-Taylor, Tr. Jul. 26, at 139:21 to 140:20; Section V.D.1.d.(4) *infra*. Nor does it account for the outlet to the ocean at McGrath Lake. *See* Applicant-Mineart, Tr. Jul. 26, at 241:13 to 242:14. In light of the foregoing, Mr. Campbell's model cannot be considered credible, and it fails to provide any new or additional information on coastal flooding.

d. The Project Site's unique characteristics are leading to increasing—not decreasing—protections against flooding

(1) A wide and growing beach protects the Project Site from coastal flooding

Currently, the beach at the Project Site is at least 300 feet wide and both the beach and the dunes have generally been accreting and expanding for at least the last 70 years (and possibly longer). Applicant's Rebuttal Test. – Mineart Corrected Decl. at 6, 19-20. CEC Staff has stated that the most conservative estimate of beach accretion is 200 feet. FSA Part 1 at 4.11-51. Assuming a very conservative two feet of SLR, CoSMoS 3.0 shows "the beach accreting for the next 20 or 30 years and then working its way back as the SLR increases and ending up somewhere where we are today at the end of 2050." Applicant-Mineart, Tr. Jul. 26, at 202:19 to 202:24. As in the documented past, "the beach will start to erode when the rate of SLR exceeds the rate at which the beach is accreting." Applicant-Mineart, Tr. Jul. 26, at 206:3 to 206:6.

Mr. Mineart compared the beach width from 20 different aerial photos taken in 18 different years between 1947 and 2014. Applicant-Mineart, Tr. Feb. 10, at 231:19 to 231:24. All of the photos consistently show the continual increase in beach width. *Id.* Intervenors attempt to criticize this photographic evidence by noting that some of the historic photographs do not have a date by which to determine the season in which they were taken. *Id.* at 237:1 to 237:4. However, Mr. Mineart was not seeking to compare one day a year to another, but to show a continual, long-time horizon, trend in beach widening. *Id.* at 237:1 to 237:8. Mr. Mineart explained that, "maybe if you compared two lines that were taken one or two years apart, they

may not be -- they may just be difference in tides or difference in season between those two pictures. But when you go from '47 to 2014, that's not seasonal." *Id.* at 249:20 to 249:24.

Dr. Revell has focused on the oscillation, or variability, of the beach width, asserting that the beach narrows significantly during storms. City of Oxnard-Revell, Tr. Feb. 10, at 355:9 to 355:11. However, the photographs Dr. Revell provides in support of this alleged narrowing are misleading at best. Intervenors rely particularly on a photograph of the MGS that appears in Dr. Revell's Opening Testimony to the CEC. *See* Applicant-Mineart, Tr. Feb. 10, at 221:3 to 221:13; *see also* Revell Opening Test. at Figure 4. Intervenors assert that this photo, taken on December 11, 2015 by Dr. Chris Williamson, at the time an employee of the City of Oxnard, shows that the beach is much narrower than 300 feet. Applicant-Mineart, Tr. Feb. 10, at 223:10 to 223:13; *see also* Declaration of Chris Williamson, Ex. No. 3060, TN# 216733, at ¶ 1 ("Decl. of C. Williamson"). Mr. Mineart reviewed this photograph, and concluded that the photograph may have been taken by someone standing in between the dunes and the southernmost "crescent" or depression created by the outfall. Applicant-Mineart, Tr. Feb. 10, at 223:13 to 223:20. In other words, the water in the photograph, which was especially calm for a photograph taken during a major storm event, may not have been the shoreline at all, but instead water trapped in the southern crescent. *Id.* at 252:17 to 253:17. The declaration of Dr. Chris Williamson, submitted after the CEC hearing, makes clear that Mr. Mineart's analysis was correct. The photograph was taken by Dr. Williamson standing on Beach Road. *See* Decl. of C. Williamson at ¶2, Exhibit B (note that the declaration states "Mandalay Beach Road," which is located in Oxnard Shores). Although Dr. Williamson states that the wave run-up was coming up to Beach Road, it is clear from the position of the photograph that he has the southern crescent, not the shoreline, on his near left. *See id.*

(2) The Project Site is protected by tall, ancient, and stable dunes

As CEC Staff acknowledged, the "dunes surrounding the project are old and stable." FSA Part 1 at 4.11-28. The importance of these dunes was addressed in detail by Mr. Hunt, who assessed dune habitat on behalf of the EDC and several other intervenors. Mr. Hunt testified that

the dunes in and around the Project Site were created by fluctuations dating back to the Pleistocene era, which ended almost 12,000 years ago. Hunt Opening Test. at 5. This suggests that this dune field possesses a high degree of resiliency in the face of changing conditions. Mr. Hunt also testified that the dunes in front of the Project are uniquely well positioned to perpetuate and endure, due to their "west or northwest facing coastline," low beach profile, and "low-elevation plain that makes a receptive topographic feature for accumulation of sand." EDC-Hunt, Tr. Feb. 10, at 109:11 to 109:22. There is substantial evidence in the record that the dunes have likely been accreting for "hundreds of thousands, maybe up to millions of years." EDC-Hunt, Tr. Feb. 10, at 110:3 to 110:8. The dunes have also grown in recent decades. "Since the 1983 event, the beach fronting the MGS property has accreted and is now wider than it was in 1983. In addition, foredunes have formed and stabilized farther out toward the ocean." Mineart Supp. Test. at 14.

In fact, the dunes may even expand further with the cessation of the MGS-related outfall, as the dunes' growth appears to have been limited by the facility's outflow. "This is indicated by the larger width in the dune field farther south from the outfall, where the outfall discharge impacts the beach less." Applicant's Opening Test. – Mineart Decl. at 3-8. The outfalls create crescent shape depressions in the beach where high tide water pools 100 or 200 feet inland. Applicant-Mineart, Tr. Feb. 10, at 255:23 to 256:16. As CEC Staff stated, "[t]he dunes surrounding the project site are old and stable. . . . Natural processes, such as wave action and weather, will continue to influence the dune system, but activities from Puente operation would not cause a direct or indirect adverse physical change to any sand dunes." FSA Part 1 at 4.11-28.

"Staff evaluated the likelihood of substantial erosion of the 30-year timeframe" using extreme levels of SLR up to 6.6 feet and, even under "these extreme conditions, the project could still generate power, therefore mitigation is not warranted." CEC Staff-Taylor, Tr. Jul. 26, at 214:17 to 215:3. Dr. Revell's beach erosion and SLR scenarios are highly unlikely because, for Dr. Revell's modeled scenario to occur, there would need to be substantial beach and dune erosion by 2030. City of Oxnard-Revell, Tr. Feb. 10, at 354:14 to 354:24. For significant erosion to occur at the Project Site, SLR by 2030 would have to increase substantially in coming

years, following only three inches of SLR in the last 60 years—and, critically, this rise would need to significantly outpace the natural rate of beach and dune accretion. *Id.* at 355:2 to 355:13; Applicant's Rebuttal Test. – Mineart Corrected Decl. at 19-20. This would require a major historical reversal, as the unique conditions that have conspired to create and perpetuate the dune system in front of the Project have been going on for "hundreds of thousands, maybe up to millions of years." EDC-Hunt, Tr. Feb. 10, at 110:3 to 110:8. Dr. Revell acknowledges that the only way for a storm equal to the storm of record to result in Project Site inundation today would be for the dunes that front the Project Site to have eroded. City of Oxnard-Revell, Tr. Feb. 10, at 354:14 to 354:24. Dr. Revell suggests that there will be material changes to the beach in front of the Project during the life of the Project and has maintained that the dunes have eroded. *See, e.g.*, Revell Opening Test. at 13. However, Dr. Revell's opinion is inconsistent with his own statement that the beach is now "wider than it was." City of Oxnard-Revell, Tr. Feb. 10, at 355:9 to 355:11.

Dr. Revell's model projects a scenario under which the dunes have completely disappeared, which Dr. Revell ran because he believes that the 1983 El Niño storm knocked out the dunes completely, and that consequently such an event could happen during future storms. *See, e.g.*, City of Oxnard-Revell, Tr. Jul. 26, at 169:13 to 169:21. Dr. Revell believes that the water overtopped the dunes in front of the Project Site during that storm, although he has "no photos or anything from the site during that event." City of Oxnard-Revell, Tr. Jul. 26, at 264:18 to 265:15. Instead, he bases this belief on a perceived lack of vegetation shown in color infrared photographs from 1984 which show "there is no vegetation fronting those dunes in front of the site because they were eroded." City of Oxnard-Revell, Tr. Jul. 26, at 169:18 to 169:19. Dr. Revell acknowledges that the TNC Model "says as long as [a wave] is over that toe elevation [of the dune], there's a chance that dune could erode and flood." *Id.* at 161:5 to 161:7. CEC Staff believes this is an overly conservative assumption. CEC Staff-Taylor, Tr. Jul. 26, at 220:6 to 220:8. USGS also believes Dr. Revell's assumption that "run-up will go all the way through the dune for a complete dune blowout is . . . an extreme assumption." USGS – O'Neill, Tr. Jul. 26, at 174:11 to 174:13. Dr. Revell's conclusions are flawed in part because he

"underestimated the stability of the dunes" protecting the Project Site. Applicant-Mineart, Tr. Feb. 10, at 204:11 to 204:21.

(3) The Project Site's location in relation to the Santa Clara River ensures continued sediment deposition

The beach in front of the Project has been growing in part because of continuous sediment accumulation. "The annual average volume of sand supplied by both rivers and dredged from each harbor . . . shows the increasing sand supply and changes of sediment movement near the Puente site." FSA Part 1 at 4.11-41. This sand accumulation has continued despite a historic rate of SLR:

> [W]e've had four inches of SLR since the plant was constructed and the beach is about 300 feet wider than it was. . . . . What that indicates is the source of sand coming down to this beach exceeds the rate at which the sea is rising. So, we're accumulating sand on the beach at a faster rate than seas are rising.

Applicant-Mineart, Tr. Feb. 10, at 206:24 to 207:8.

CEC Staff has stated that the beach is not at risk of erosion, and 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." FSA Part 1 at 4.11-51. Mr. Mineart also testified to an overabundance of sediment that contributes to the formation of the dunes. Applicant-Mineart, Tr. Feb. 10, at 187:14 to 187:19. Mr. Hunt also emphasized the angle and positioning of the beach which "makes a receptive topographic feature for accumulation of sand [if the beach is] oriented in the proper way." EDC-Hunt, Tr. Feb. 10, at 109:20 to 109:23. Thus, the weight of the evidence in the record supports a finding that no beach erosion is occurring, or will occur from the Project.

With respect to the coastal dunes, sediment discharge from the Santa Clara River comprises the majority of the shoreline sediment supply, with sand bypassing from Ventura Harbor providing a secondary source. FSA Part 1 at 4.11-41. Dr. Revell expressed concerns about the potential for decreasing sediment loads if sand bypass from Ventura Harbor were to cease. Revell Opening Test. at 12. But both Mr. Mineart and CEC Staff have found that such a cessation is highly unlikely (as it would result in the destruction of a valuable harbor), that it would result in only a temporary decrease if it did occur (until the entrance of the harbor had

silted over), and that, in any event, the Santa Clara River is the primary source of the beach sediment. FSA Part 1 at 4.11-41 ("Although beach width could narrow if dredging of Ventura Harbor ceases, sediment loads would continue from the Santa Clara River, which comprises the majority of overall sediment supply to the littoral cell.").

In the future, storm activity might affect the beach. However, the TNC Model, relied upon by Dr. Revell, found that "the sediment yield from the Santa Clara and Ventura Rivers should remain about the same as the historical yield until about 2050." Applicant's Rebuttal Test. – Mineart Corrected Decl. at 20; *see also* TNC Model at Figure 16. Thus, even if climate change results in SLR, beach accretion is still projected to increase even more rapidly than sea levels, which means that beach expansion—rather than erosion—should occur.

(4) A berm serving as a levee protects the Project Site from riverine flooding

The Project Site is protected by an artificial berm along its northern boundary. Applicant's Rebuttal Test. – Mineart Corrected Decl. at Attachment C, 2. The top of this berm reaches elevations of 17 to 20 feet above sea level. CCC 30413(d) Report at 25. In 1969, "a series of major storms produced devastating floods in Ventura County. During this event, floodwaters from the Santa Clara River entered the MGS property, which prompted the construction of the earthen dikes on the northern and eastern sides of the property to prevent any flooding in the future." FSA Part 1 at 4.11-13 (internal citations omitted). This berm was engineered and constructed in the early 1970s, and "it's a sort of manmade structure with riprap and it's wide enough for the dirt road to be on the top." Applicant-Mineart, Tr. Jul. 26, at 141:4 to 141:20. Since then, the Project Site has not experienced any significant flooding despite the occurrence of a handful of storms equaling or approaching the magnitude of the 1969 event. *Id*.

e. 30 years (until 2050) is the appropriate evaluation timeframe for evaluating coastal hazards, including SLR

All of the models that have evaluated SLR near the Project Site have assumed fairly aggressive increases in SLR. Because the Project's lifespan is anticipated to be 30 years, it is appropriate to limit an evaluation of coastal hazards associated with the Project to the same time frame. "A 20-year contract for gas-fired generation purchase agreement between the applicant

and SCE was approved by the CPUC on May 25, 2016," and "a lifespan of 30 years for a 'typical' natural gas power plant is generally accepted within the power industry." FSA Part 1 at 4.11-47.

According to CEC Staff, "[t]he project proposes licensing and operation for 30 years, therefore this is the appropriate time frame for analysis. If the project operated past a licensed time frame then the license would have to be amended and any new or additional impacts would be evaluated at that time." Staff Rebuttal Test. at 13. Because of this, the Committee ordered parties to evaluate coastal hazard risk through 2050. March 10 Orders.

In addition, beyond 30 years, SLR projections are highly speculative. CEC Staff-Marshall, Tr. Feb. 10, at 286:3 to 286:5. CEC Staff relied on the 2012 National Research Council Report, because it is recommended by various accepted statewide guidance documents and is considered the best available science, and applied the information in that report in a very conservative fashion, utilizing the upper end estimate for SLR of approximately two feet. CEC Staff also "considered [the possibility of such SLR] occurring during a mean high water condition, and used that for calculating the flood level or inundation level that we might expect from a tsunami that would occur during a SLR event near the end of the life of the project." *Id.* at 287:7 to 287:22. Taking into account this conservative estimate of SLR and high water, "Staff conclude[d] the potential for major flooding and structural impact from tsunami is insignificant." FSA Part 1 at 1-8.

The recent studies by the Ocean Protection Council look at probabilities of SLR predictions and indicate that the SLR prediction of two feet by 2050 is considered unlikely (less than 0.5 percent of occurrence); therefore, the CEC's assumption of two feet of sea-level rise (SLR) over the 30-year life of the proposed Project is conservative. Mineart Supp. Test. at 4. CEC Staff also reviewed the Ocean Protection Council report Rising Seas in California: An Update to Sea-Level Rise Science which incorporates the recent advances in ice loss science and projections of SLR and concluded "the most conservative value for 2050 is still at 2.0 ft and the most likely projection is at about one foot (plus-or-minus about three inches)." Staff Supp. Test. at 7.

2. Risk of riverine flooding does not significantly impact the Project

Riverine flooding does not pose a significant risk to the Puente Site. "If the Santa Clara River were to overtop its banks, flood waters would need to flow overland 2 to 3 miles before reaching the MGS property, and would be expected to be shallow." Applicant's Opening Test. – Mineart Decl. at 4. Applicant's riverine flood modeling, along with FEMA modeling, showed that the outlet from McGrath Lake to the ocean works in conjunction with the large berm that protects the Project Site to further reduce the chance of riverine flooding. Applicant-Mineart, Tr. Jul. 26, at 241:20 to 242:7. This berm is described in greater detail in Section V.D.1.d.(4). The Project Site is about 9,000 feet from the mouth of the Santa Clara River and 1,000 feet from the overflow to the Pacific Ocean of the Santa Clara River breakout (which lies at the southern end of McGrath Lake). Applicant's Rebuttal Test. – Mineart Corrected Decl. at Attachment C, 1. "A small levee separates the site from the McGrath Lake area, dunes separate the site from the ocean, and no levee separates the site from Edison Canal." *Id.* The Edison Canal would convey a large amount of water away from the Project Site in the event that the Santa Clara River were to flood. Applicant-Mineart, Tr. Jul. 26, at 242:15 to 242:23. For the MGS property, including the Project 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." Applicant's Opening Test. – Mineart Decl. at 4. "No significant flooding has occurred at MGS since 1969, when a series of major storms produced devastating floods in Ventura County. During this event, floodwaters from the Santa Clara River entered the MGS property, which prompted the construction of the earthen dikes on the northern and eastern sides of the property to prevent any flooding in the future (PPP 2015a Section 4.15.1.5)." FSA Part 1 at 4.11-12. To date, those dikes have achieved their objective, and future projections conclude they will continue to protect the Project Site from flooding.

3. Tsunami risk does not significantly impact the Project

Inundation of the Project by tsunami would be highly unlikely, based on recent studies on potential tsunami hazards. Mineart Supp. Test. at 20. Reviewing several relevant tsunami

hazard analyses, Applicant's expert, Mr. Mineart, found that return periods for tsunamis potentially caused by a variety of scenarios are between 800 and 10,000 years. Applicant's Rebuttal Test. – Mineart Corrected Decl. at 20. Even if these tsunamis, with expected return periods of—at most—800 years, occurred, "the maximum projected wave height is well below the top of the existing dunes that protect the Project Site." *Id.*; *see* Section V.D.1.d (discussing the unique features that protect the Project Site). "Even for the 2,500-year return period (2 percent probability of exceedance in 50 years or 1.2 percent probability in 30 years), the predicted inundation for a potential tsunami does not reach the Project Site." Mineart Supp. Test. at 20. Applicant found that the current tsunami elevation at the Project Site is approximately 14-15 feet, based on the Tsunami Inundation Maps for Emergency Planning developed by the California Emergency Management Agency (2009) and confirmed with LIDAR data. AFC Section 4.4, Geological Hazards, Ex. No 1010, TN# 204219-11, at 4.4-5 to 4.4-6. Even with SLR of up to two feet, which would effectively change the Project Site's tsunami elevation to 16-17 feet, the Project Site would still be protected because of the height of the dunes and berm that protect the Project Site. *Id.*

CEC Staff considered the latest scientific evidence to evaluate the worst case tsunami potential at the Project, relying primarily on the 2012 National Research Council Report, as required by "sea-level rise guidance in documents from the California Coastal Commission, the Coastal and Ocean Working Group of the California Climate Action Team." CEC Staff-Maurath, Tr. Feb. 10, at 275:21 to 276:18, 279:19 to 280:2; Staff Supp. Test. at 1. CEC Staff reviewed potential tsunami risk at the Project Site, reviewing publicly available data as well as party submissions. Based on this site-specific data, CEC Staff "performed [an] independent evaluation of conditions at the site, past conditions, present conditions, future conditions [and] collaborated with other members, engineers and scientists at the Energy Commission, to evaluate what that data meant." CEC Staff-Maurath, Tr. Feb. 10, at 270:8 to 270:13. Ultimately, CEC Staff determined that all potential coastal hazards at the Project Site could be mitigated to a level of less than significant. *Id.* at 270:14 to 270:16.

Intervenors have not provided evidence of a significant coastal impact from tsunamis. Dr. Revell references a recent tsunami model by K.J. Ryan et al. as showing that tsunamis prove a greater risk to the Project than contemplated by CEC Staff. Revell Opening Test. at 25. However, CEC Staff note "that the scale of the Ryan model is such that it is very difficult, if not impossible, to make detailed site-specific observations." CEC Staff-Maurath, Tr. Feb. 10, at 274:9 to 274:12. Applicant's expert, Mr. Mineart, notes that the Ryan model is "not consistent with the seismic hazard models in current use by the USGS or the State of California." Applicant's Rebuttal Test. – Mineart Corrected Decl. at 21. The Ryan model authors themselves specifically stated in their conclusion that their "simple model is not complete enough to provide a true quantitative measure of tsunami hazard or the precise spatial extent of the inundation zone in the Ventura and Oxnard region." CEC Staff-Maurath, Tr. Feb. 10, at 274:12 to 274:19; Applicant's Rebuttal Test. – Mineart Corrected Decl. at 21. Accordingly, the Ryan model should not be used to estimate potential tsunami hazards at the Project Site.

4. There is no link between hypothetical flooding and impacts to the Project

Puente's storm water system, which will incorporate site drainage, retention basins, sumps and other features of the existing MGS property, will be designed to manage more than a 500-year storm without impact to operations. Applicant's March 28, 2017 CEC Workshop Presentation, Ex. No. 1142, TN# 216784, at 2 ("Applicant's March 2017 Presentation"). Puente could continue to operate with an inundation of 1.5 feet, or a water level of 15 feet (*i.e.*, 1.5 feet above finished grade of approximately 13.5 feet) if standing water were to accumulate because water management systems were temporarily unable to manage that water. *Id.* CEC Staff "determined that mitigation for maintaining reliability against flooding is not warranted because the water elevation projected for 2050 is less than 15 feet." CEC Staff-Taylor, Tr. Jul. 27, at 214:9 to 214:12. Moreover, the Project will be designed to move all water away from critical infrastructure, which will be elevated above 14 feet, through engineering and grading of the Project Site. Applicant's March 2017 Presentation at 4. To give a few examples, the power distribution will be at approximately 19 to 22 feet (which is 5 to 8 feet above grade), and the

lowest critical component, an electronic instrument cabinet for gas valve control, will be 1.5 feet above grade. *Id.* at 5. CEC Staff found that even when evaluating extremely conservative SLR of 4.9 and 6.6 feet, projected water elevations would not cause Puente to cease operations. Staff Supp. Test. at 1; *see also* CEC Staff-Taylor, Tr. Jul. 27, at 214:19 to 214:25. Although CEC Staff concluded mitigation is not warranted, CEC Staff recommended a beach and dune monitoring plan requested by the CCC and willingly accepted by Applicant as a Condition of Certification to "acknowledge the Coastal Commission's position and the applicant's willingness to address their concern." CEC Staff-Taylor, Tr. Jul. 27, at 215:7 to 215:15.

Dr. Revell has stated that the purpose of his testimony has been to "assess[] the vulnerability of the Proposed Mandalay Generating Station . . . to existing and future coastal hazards and climate change impacts." Revell CPUC Test. at 1. Dr. Revell, however, is not an engineer; he has no experience operating or designing a power plant. *See, e.g.*, *id.* at Exhibit CO-3 (Dr. Revell's CV). Dr. Revell is not equipped to assess the reliability of the existing MGS or future Puente Power Project when exposed to flooding. City of Oxnard-Revell, Tr. Feb. 10, at 359:25 to 360:1 (Ms. Folk stated regarding Dr. Revell: "he's not an expert on reliability"). Indeed, Dr. Revell admitted that he had not even reviewed the Project design. City of Oxnard-Revell, Tr. Feb. 10, at 358:10 to 358:11.

Ms. Golden from the City of Oxnard also spoke to the Project's vulnerability in her written testimony, which referred to "the risk to the facility itself," when discussing Dr. Revell's work. Testimony of Ashley Golden, Ex. No. 3019, TN# 215421, at 6 ("Golden Opening Test."). However, Ms. Golden has since clarified that she does not believe Dr. Revell has assessed risk to the Project specifically; instead she now understands that the risk evaluated by Dr. Revell was "a risk in general, sea level rise of our entire coast. It wasn't directed specifically at [the Puente] project." City of Oxnard-Golden, Tr. Feb. 9, at 281:18 to 281:23. Dr. Revell himself confirmed that he has "not attempted to make any linkage between any particular level of inundation or flooding of the site and the consequences of that inundation or flooding with respect to the operation of the plant or the reliability of the plant." City of Oxnard-Revell, Tr. Feb. 10, at 360:17 to 360:24. Therefore, intervenors have produced no evidence that the operational

capacity of the Project would be impacted by any of the concerns Dr. Revell has raised.

Hazardous materials at the Project Site pose no significant risk to the public, including in the event of a flood. As the CEC Staff found, should a flood event occur best management practices "would reduce or limit the impact of a release to travel offsite and affect the public or surrounding biological resources." FSA Part 1 at 4.11-32. Further, "the proposed project with proposed mitigation measures indicates that hazardous material use would pose no significant impact to the public." *Id.* at 1-9. Despite this, Ms. Golden claimed that flooding or tsunami activity could inundate the Project Site, resulting in a release of hazardous materials to the environment. Golden Opening Test. at 6. Ms. Golden's written testimony referred to policies to avoid environmental damage that might result from flooding or other disruption of the facility, which she believes could result in the spread of contaminated materials or soils. *Id.* Ms. Golden provided no analysis that suggests flooding or other disruption of the facility could result in the spread of contaminated materials or soils and has since clarified that she and her colleagues "don't have the specifics on, if [Applicant has] hazards on site or contaminated materials and soils." City of Oxnard-Golden, Tr. Feb. 9, at 283:13 to 283:16. Ms. Golden later clarified that her statement on environmental damage was hypothetical and she meant that "if there were such materials on site that were not properly contained, they could be spread" and confirmed that she "[did not] know whether there are such materials or whether they're properly contained." *Id.* at 283:17 to 283:22. Contrary to Ms. Golden's hypothesizing, the Project will manage hazardous wastes in compliance with all applicable LORS. FSA Part 1 at 1-5.

E. Land Use

1. The Project complies with the requirements of the Warren-Alquist Act regarding public access to coastal resources

Under the Warren-Alquist Act, the CEC must require public access to coastal resources as a condition of certification of a facility proposed in the coastal zone. Cal. Pub. Res. Code § 25529; FSA Part 1 at 4.7-25.

The Project includes demolition and removal of the existing ocean outfall structure, which will greatly improve access and recreation along the beach fronting the Project Site.

Applicant's Opening Test. – Murphy Decl. at 3; Project Enhancement at 3-19 to 3-20. CEC Staff similarly concluded that the removal of the outfall structure as proposed in the project enhancement will satisfy this requirement under the Warren-Alquist Act. CEC Staff-Knight, Tr. Feb. 9, at 219:14 to 219:20, 239:6 to 239:11; CEC Staff-Gutierrez, Tr. Feb. 9, at 231:24 to 232:13, 239:24 to 240:2, 250:3 to 250:5; FSA Part 1 at 4.7-15, 4.7-25. Thus, the Project is consistent with the coastal public access provisions of the Warren-Alquist Act.

2. The Project complies with the Coastal Act and the City's LCP

Chapter 3 of the Coastal Act and the City's LCP contain the policies by which all new development projects in the coastal zone are assessed. A component of the City's LCP, the Coastal Zoning Ordinance, provides standards for development in the coastal zone. As discussed in more detail below, evidence in the record demonstrates that the Project is in accordance with the applicable policies contained in Chapter 3 of the Coastal Act and the City's LCP, as well as the development standards from the Coastal Zoning Ordinance. FSA Part 1 at 4.7-15 to 4.7-17.

a. The Project is consistent with public access policies

Two Coastal Act and two LCP public access policies apply to the Project. Together, California Public Resources Code Sections 30211 and 30212(a) require that development not interfere with public access to the shoreline "except where: (1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources; (2) adequate access exists nearby; or (3) agriculture would be adversely affected." *See also* Cal. Pub. Res. Code § 30210. Policies 54 and 72 of the City's CLUP similarly state that all new energy-related development must be located and designed to minimize adverse effects upon public access to the beach and that public access to and along the shoreline and inland waterway shall be required as a condition of permit approval for all new developments between the shoreline and the first public roadway inland from the shore. Oxnard CLUP at III-42, III-53; FSA Part 1 at 4.7-19.

The CCC initially concluded that the Project could conflict with public access policies because continued use of the outfall to discharge wastewater could disrupt beach access. CCC 30413(d) Report at 42. The CCC recommended that the outfall be removed. *Id.* at 43.

As discussed above, with the incorporation of the enhancement to demolish and remove the existing ocean outfall structure, the Project will not interfere with the public right of access to the beach and will provide for public access consistent with Coastal Act and LCP policies. Project Enhancement at 3-19 to 3-20; FSA Part 1 at 4.7-16. In fact, removal of the outfall structure will significantly ***improve*** coastal access and recreational opportunities on the nearby beach, as it will open access to this portion of the beach. *See* CEC Staff-Knight, Tr. Feb. 9, at 219:14 to 219:20, 239:6 to 239:11; CEC Staff-Gutierrez, Tr. Feb. 9, at 231:24 to 232:13, 239:21 to 240:2, 250:3 to 250:5; FSA Part 1 at 4.7-18, 4.7-25. Thus, the Project complies with applicable public access policies contained in Chapter 3 of the Coastal Act and the City's LCP.

b. The Project complies with those policies designed to prevent the degradation of environmental resources

The Project is consistent with the policies designed to prevent the degradation of environmental resources on or near the Project Site. Several sections of the Coastal Act set forth policies intended to ensure that development does not disrupt ESHA or wetlands. Cal. Pub. Res. Code §§ 30231, 30240. And another section provides for new energy facilities in wetlands, but only when no feasible, less environmentally damaging, alternatives exist. *Id.* § 30233(a). CLUP Policy 52, likewise, prohibits industrial and energy-related development in "coastal resource areas, including sensitive habitats, recreational areas and archaeological sites," and in wetlands. Oxnard CLUP at III-42.

As discussed in detail in Sections V.C.4 and V.C.5, however, no portion of the Project Site constitutes ESHA or wetlands, and additionally, the Project Site will not be located in a recreational area or an archaeological site. *See* FSA Part 1 at 4.7-13, 4-7.18. Rather, evidence demonstrates that the Project is designed to mitigate any impacts to ESHA, wetlands, recreational areas, archaeological sites, and agricultural areas. FSA Part 1 at 4.7-18. The Project will be located entirely within the existing MGS property, none of which constitutes ESHA or a wetland. CEC Staff-Knight, Tr. Feb. 9, at 239:6 to 239:8. The removal of the outfall structure, which is currently located in the RC, Coastal Recreation Zone, sub-zone, will promote recreational areas on the beach near the Project and prevent impacts to ESHA located within the

RC sub-zone. FSA Part 1 at 4.7-1, 4.7-16 to 4.7-17, 4.7-25. And the Project "is not immediately adjacent to any agricultural areas and will not harm existing agricultural uses within the immediate vicinity" of the MGS property. CEC Staff-Gutierrez, Tr. Feb. 9, at 232:7 to 232:13; FSA Part 1 at 4-7.18.

For those same reasons, the Project also complies with several other policies that protect environmental resources located near or adjacent to the Project. Together, California Public Resources Code Section 30240(b) and CLUP Policy 52 provide that development adjacent to ESHA, parks and recreation areas, archaeological sites, or agricultural areas "shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas." CLUP Policy 6 also requires a 100-foot (or in some circumstances, 50 foot) buffer between new development and resource protection areas, including wetlands. Oxnard CLUP at III-10 to III-12. The Project will meet these requirements. *See* Sections V.C.4, V.C.5 *supra*.

Finally, CLUP Policy 64 mandates that wastewater from an energy facility be treated and put to reuse. The CCC initially found that the Project would fail to satisfy Policy 64. CCC 30413(d) Report at 8-9, 22-24. To ensure the Project's compliance with the policy and other policies intended to protect marine resources, the CCC recommended that NRG adopt a wastewater reuse and recycling plan, which could involve the treatment and discharge of wastewater to the Edison Canal, and that the Project not use the ocean outfall. *Id.* at 8-9, 24.

Applicant has accepted the CCC's recommendation. The Project now includes the removal of the outfall structure, thereby eliminating all discharges of wastewater onto the beach near the Project. FSA Part 1 at 4.7-15, 4.7-22; Project Enhancement, at 1-2 to 1-3. Instead, wastewater and surplus stormwater will be recycled and reused when feasible and otherwise discharged into the Edison Canal. FSA Part 1 at 4.7-15, 4.7-22. The Project also will involve the decommissioning of MGS Units 1 and 2, thereby discontinuing the use of once-through cooling technology at the MGS facility and further reducing impacts to the surrounding environment. Applicant-Piantka, Tr. Feb. 9, at 40:5 to 40:23; FSA Part 1 at 4.7-18. The Project

therefore complies with Policy 64. Project Enhancement at 1-2. Accordingly, the Project will not violate Coastal Act or LCP policies designed to protect valuable environmental resources.

c. The Project is consistent with the LCP policy prohibiting energy development within the 100-year flood/wave run-up area

CLUP Policy 56 prohibits industrial and energy development within the 100-year flood/wave run-up area. Oxnard CLUP at III-42; FSA Part 1 at 4.7-19. The Project will not be constructed within the designated 100-year flood/wave run-up line. Applicant-Mineart, Tr. Feb. 10, at 171:7 to 171:15, 172:19 to 172:23, 174:6 to 174:12, 181:3 to 181:13; FSA Part 1 at 4.7-19. So the Project complies with Policy 56.[7] *See* Section V.D *supra* (demonstrating that coastal and flooding hazards are not significant risks to the Project).

d. The Project is compatible with policies that encourage development in existing industrial areas

To avoid impacts on coastal resources, the Coastal Act states that "[n]ew . . . industrial development . . . shall be located within, contiguous with, or in close proximity to, existing developed areas able to accommodate it." Cal. Pub. Res. Code § 30250; *see also id.* § 30260 (encouraging coastal dependent energy facilities to expand within existing sites). The Project will be located within an existing developed industrial area (the MGS property) with adequate resources to accommodate it. FSA Part 1 at 4.7-17. The MGS property has been used for energy generation purposes since the 1950s. CEC Staff-Knight, Tr. Feb. 9, at 239:6 to 239:8. No off-site expansion or use of additional property beyond the MGS property is necessary for either the construction or operation of the Project. FSA Part 1 at 4.7-17. Due to the previous operation of the MGS facility, adequate public services are available to accommodate the Project (*e.g.*, potable water, natural gas, sanitary pipelines, electrical transmission facilities, etc.). FSA Part 1 at 3-8 to 3-9, 4.7-9, 4.7-17; *see* CEC Staff-Gutierrez, Tr. Feb. 9, at 231:20 to 231:23. The Project, therefore, will be consistent with Section 30250.

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[7] The CCC also recommended other modifications to the Project due to its conclusion that the Project was subject to flooding risks associated with SLR and other issues. CCC 30413(d) Report at 24-39. Although Applicant and CEC Staff disagreed with the CCC's position, Applicant has chosen voluntarily to implement many of the CCC's recommendations. *See* FSA Part 1 at 4.11-71.

The City also claims that Policy 62 "sets forth the City's opposition to building new power plants along the City's coast." Golden Opening Test. at 1; Oxnard CLUP at III-44. But the Project is not subject to Policy 62, because the policy "is not an applicable [LORS]" and does not place an obligation on Applicant, or any power plant developer for that matter. CEC Staff-Gutierrez, Tr. Feb. 9, at 231:17 to 231:20, 232:17 to 232:19; FSA Part 1 at 4.7-18 (listing several policies as applicable to the Project, but not Policy 62). Rather, Policy 62 is merely an expression of the City's intention to encourage power plant siting adjacent to the existing Ormond Beach station, "if a new plant is to be sited in the Ormond Beach area." Oxnard CLUP at III-44.

e. The Project complies with the LCP policy concerning conformity with air quality regulations

Policy 51 of the City's CLUP requires that all new industrial energy related development conform to the air quality regulations set forth by the VCAPCD, the air quality management plan, and New Source Review Rule 26. Oxnard CLUP at III-42; FSA Part 1 at 4.7-18. As discussed in Section V.B, the Project is in accordance with Policy 51: the VCAPCD has issued a FDOC documenting the Project's compliance with all applicable air quality regulations. *See* FDOC-Cover Letter, Ex. No. 2007, TN# 214005-1, at 1; FDOC-Evaluation, Ex. No. 2008, TN# 214005-2, at 35, 41; *see* CEC Staff-Villegas, Tr. Feb. 7, at 76:4 to 78:9; FSA Part 1 at 4.1-52 to 4.1-53.

f. The Project is consistent with the City's Coastal Zoning Ordinance

The design standards from the Coastal Zoning Ordinance constitute LORS that projects located within the coastal zone must satisfy. The Project will be consistent with the applicable design standards, and removal of the outfall and restoration of the beach parcel also will be consistent with the Coastal Zoning Ordinance by providing additional lateral public access along the coast. FSA Part 1 at 4.7-21; *see also* Section VI.B *infra*. Accordingly, the Project complies with the applicable design standards in the Coastal Zoning Ordinance.

3. The Project complies with all applicable air transportation regulations and policies

The Project is compatible with all applicable regulations and policies relating to air transportation. CEC Staff-Fong, Tr. Feb. 9, at 182:25 to 183:2, 186:4 to 186:7. The Project is located within the Oxnard Airport Study Area, as defined by the Ventura County Airport Comprehensive Land Use Plan ("ACLUP"), and within the Title 14 of the Code of Federal Regulations, Part 77, navigable airspace around the Oxnard Airport. FSA Part 1 at 4.7-17. The Project, consequently, must comply with applicable ACLUP and Federal Aviation Administration ("FAA") requirements. None of the ACLUP's policies, many of which concern airport noise concerns, apply to the Project. FSA Part 1 at 4.12-17. The Project is not located within a runway protection zone, outer safety zone, traffic pattern zone, or an extended traffic pattern zone, as those zones are identified in the ACLUP, and the Project's "land use [will] be consistent and compatible with the ACLUP." *Id.* at 4.7-17. All of the evidence on this topic, likewise, demonstrates that the Project complies with applicable FAA development requirements. *See* CEC Staff-Fong, Tr. Feb. 9, at 186:4 to 186:7. The FAA, in fact, issued a Determination of No Hazard, concluding that, in regard to the height of the proposed stack for the Project, no hazard to air navigation will result. Federal Aviation Administration Determination of No Hazard to Air Navigation, Ex. No. 1058, TN# 206297, at 1-2; *see also* City of Oxnard-McNamee, Tr. Feb. 7, at 200:13 to 200:18; FSA Part 1 at 4.7-17, 4.12-19; CEC Staff-Fong, Tr. Feb. 9, at 211:1 to 211:3. And while the City contends that the Project's thermal plume may pose a hazard to air traffic in the Project's vicinity, it has not identified any LORS relating to thermal plumes that apply to the Project. As indicated in Section V.F, moreover, the Project's thermal plume will not have a significant impact on air traffic. *See* CEC Staff-Fong, Tr. Feb. 9, at 184:17 to 184:20; FSA Part 1 at 4.12-19 to 4.12-21. The CEC, therefore, has sufficient evidence to conclude that the Project complies with all applicable air traffic policies and regulations.

F. Traffic and Transportation

The record demonstrates that the Project will not result in a significant impact to traffic and transportation resources. The parties do not dispute the Project's insignificant impact on ground transportation. Both Applicant's expert, Mr. Noel Casil, and CEC Staff concluded that the Project will not significantly impact air traffic; nothing in the record compellingly contradicts this conclusion.

None of the parties dispute whether the Project will result in a significant impact to ground transportation resources in the area. The record shows that, with implementation of specified mitigation measures, the Project will comply with all applicable LORS and will not significantly impact ground transportation. FSA Part 1 at 4.12-12 to 4.12-16, 4.12-23, 4.12-27; Applicant's Opening Testimony, Ex. No. 1101, TN# 215441, Expert Declaration of Noel Casil, at 3-4 ("Applicant' Opening Test. – Casil Decl."); CEC Staff-Fong, Tr. Feb. 9, at 185:3 to 185:10, 206:22 to 207:1.

The record, similarly, shows that the Project will not significantly impact local air traffic conditions. CEC Staff found that, although aircraft occasionally overfly the MGS property, aircraft have little reason to do so. Aircraft "are not required to fly over" the MGS property and the local pilot guide instructs smaller aircraft to fly in a route that is "not close to the Puente site." CEC Staff-Fong, Tr. Jul. 27, at 64:21 to 65:12; CEC Staff-Fong, Tr. Feb. 9, at 183:11 to 183:25. Additionally, there are no Visual Flight Rules ("VFR") corridors directly above the Project Site, and aircraft can enter and exit the two nearby VFR corridors and the Oxnard Airport traffic pattern without overflying the MGS property. CEC Staff-Fong, Tr. Jul. 27, at 64:21 to 65:12; FSA Part 1 at 4.12-17, 4.12-20. Pilots also avoid overflight of the Project Site due to the plumes generated by the existing MGS facility. CEC Staff-Fong, Tr. Feb. 9, at 184:5 to 184:9; FSA Part 1 at 4.12-20 to 4.12-21. No reported air safety incidents, moreover, have occurred at or near the MGS facility during its seven decades of operations. FSA Part 1 at 4.12-20 to 4.12-21.

Condition of Certification TRANS-7 will further reduce the number of aircraft that overfly the Project. Although testimony established that no document or notice currently discloses to pilots the existence of the plumes associated with the MGS facility, CEC Staff-Fong,

Tr. Feb. 9, at 185:24 to 186:3, 194:17 to 195:9, 199:6 to 199:22, 200:12 to 200:22, TRANS-7 mandates that Applicant work with aviation agencies and local officials "to notify all pilots using the Oxnard Airport and airspace above the project site of potential plume hazards." FSA Part 1 at 4.12-1. To comply with TRANS-7, Applicant must coordinate with aviation officials to post notices to pilots in several locations, including in (1) a notice to airmen, (2) the Air Traffic Information System, (3) the airport facility directory, (4) the sectional chart, and (5) the Oxnard Airport Pilot Guide. CEC Staff-Fong, Tr. Feb. 9, at 185:11 to 185:24. With implementation of TRANS-7 and TRANS-6, which requires obstruction marking and lighting of the combustion turbine generator stack, in compliance with FAA requirements, CEC Staff concluded that the Project will not cause a significant adverse impact to local air traffic and complies with all LORS. *Id.* at 185:3 to 185:10, 186:4 to 186:12; FSA Part 1 at 4.12-26; *see* Applicant's Opening Test. – Casil Decl. at 4.

This evidence contradicts the City's contention that the Project will significantly impact the Oxnard Airport's aviation activities. The City points to the testimony of Mr. Todd McNamee, who stated that the Project "lies under a frequent departure path" and that aircraft will overfly the Project's thermal plume. Testimony of Todd McNamee, Ex. No. 3048, TN# 215442, at 2 ("McNamee Test."). Mr. McNamee also said that the combined plume from the new Puente plant, MGS Unit 3, and the McGrath Peaker will "interfere with the safe operation of the Oxnard Airport." *Id.* at 1. But the record does not support Mr. McNamee's opinions. As stated, aircraft have little reason to fly over the Project, and TRANS-7 requires Applicant to work with aviation officials to inform pilots to avoid overflying the MGS property. CEC Staff-Fong, Tr. Jul. 27, at 64:21 to 65:12; CEC Staff-Fong, Tr. Feb. 9, at 185:11 to 185:24. And although CEC Staff concluded that the Project would involve a larger thermal plume, the increase in size would not be significant. CEC Staff-Fong, Tr. Feb. 9, at 183:6 to 183:10, 184:17 to 184:20. Likewise, CEC Staff modeled the combined plume from the Puente plant, MGS Unit 3, and the McGrath Peaker and concluded that the combined plume will not significantly impact air traffic. *Id.* at 184:21 to 185:10; FSA Part 1 at 4.12-17, 4.12-20 to 4.12-21, 4.12-26.

Mr. McNamee claims that TRANS-7 will not prevent pilots from accessing airspace over the Project and restricts access to the Oxnard airport. McNamee Test. at 1-2. As Mr. McNamee testified, however, pilots, particularly non-transient pilots (*i.e.*, those who are not from Oxnard), should make themselves aware of local air traffic notices like the ones TRANS-7 requires. City of Oxnard-McNamee, Tr. Feb. 7, at 202:17 to 203:2. According to CEC Staff, TRANS-7 is "consistent with the best available information provided by the FAA to note airmen to avoid direct overflight . . . over thermal plume sources." CEC Staff-Fong, Tr. Feb. 9, at 186:12 to 186:15, 189:12 to 189:16. While TRANS-7 may not prevent *all* pilots from overflying the Project, CEC Staff determined that implementation of the mitigation measure ensures that the amount of aircraft that will overfly the Project will be insignificant. CEC Staff-Fong, Tr. Jul. 27, at 65:7 to 75:12 ("So, yes, in our PSA and FSA we identify an occasional overflight at Puente. Those flights were not required to fly over that Site. So CEC Staff concluded in conjunction with our mitigation to notify pilots that they can reasonably see and avoid Puente."); CEC Staff-Fong, Feb. 9, at 184:25 to 185:14; Applicant's Opening Test. – Casil Decl. at 4. Furthermore, because aircraft need not overfly the MGS property to enter or exit the Oxnard Airport traffic pattern, access to the Airport is not restricted. FSA Part 1 at 4.12-17, 4.12-20. Thus, the Project will not have a significant impact on local air traffic and transportation, and complies with all applicable LORS.

G. Environmental Justice

The Project will not significantly impact environmental justice communities. The record establishes that the Project will not cause any significant environmental impacts; therefore, environmental justice communities cannot be disproportionately affected by such impacts. Moreover, even for those topics that are in dispute, evidence shows that no disproportionate impact will result to environmental justice communities.

California law defines "environmental justice" as "the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and

enforcement of environmental laws, regulations, and policies." Cal. Gov't Code § 65040.12(e).[8] Although no statutory or regulatory directives concerning environmental justice affect the CEC, the California Natural Resources Agency has adopted a policy requiring all of its departments and commissions to consider environmental justice issues in their decision-making process if their actions have an impact on the environment.[9] Since 1995, the CEC has conducted environmental justice analyses as a component of its power plant siting process.[10]

The CEC employs a two-step environmental justice analysis. The CEC first determines whether an environmental justice community is located in the area potentially affected by a proposed power plant (*i.e.*, within a six-mile radius of the plant). Huntington Beach Energy Project (12-AFC-02), Final Decision, 6.3-3 to 6.3-4 (November 4, 2014); *see also* FSA Part 1 at 4.5-1 to 4.5-2. If such communities exist in that area, then the CEC decides whether the plant will cause a significant adverse effect to those communities. A significant adverse effect occurs when: (1) the Project results in a significant environmental impact, and (2) an environmental justice community bears a disproportionate amount of the harm associated with that impact compared to other non-environmental justice communities. Huntington Beach Energy Project (12-AFC-02), Final Decision, 4.2-22, 4.3-14 (November 4, 2014) (concluding that because

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[8] *See also* Envt'l Prot. Agency, *Environmental Justice* , http://www.epa.gov /environmentaljustice (last updated Aug. 8, 2017) (defining the term similarly).

[9] Cal. Nat. Res. Agency, *Environmental Justice Policy*, http://baydeltaconservationplan.com /Libraries/Dynamic_Document_Library/Environmental_Justice_Policy_-_California_Natural _Resources_Agency.sflb.ashx (last visited Aug. 30, 2017). Federal law does not mandate regulatory obligations on state agencies. Executive Order 12898, instead, mandates, among other things, that federal agencies identify and address "disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority . . . and low-income populations." Exec. Order No. 12898, 59 Fed. Reg. 7629 (Feb. 11, 1994). The White House Council on Environmental Quality, which has oversight of the federal government's compliance with the Order, issued guidance on implementing the Order in conjunction with the National Environmental Policy Act, the federal analog to CEQA. Council on Evnt'l Quality, *Environmental Justice: Guidance Under the National Environmental Policy Act*, (1997), *available at* https://www.epa.gov/sites/production/ files/2015-02/documents/ej_guidance_nepa_ceq1297.pdf. Accordingly, federal agencies should identify whether low-income, minority, or tribal populations are present in the area affected by a project, and if so, determine whether those populations will be disproportionately affected, while taking into account relevant public health and industry data and encouraging community and tribal representation in the project-approval process. *Id.* at 8-9.

[10] Cal. Energy Comm'n, *Environmental Justice*, , http://www.energy.ca.gov/public_ adviser/ environmental_justice_faq.html (last visited Aug. 30, 2017).

certain impacts were not significant, there could be no environmental justice issues related to those impacts); Los Esteros Critical Energy Facility II Phase 2 (03-AFC-2), Final Decision, 333 (Oct. 19, 2006) (ruling that since "all potential adverse impacts will be mitigated," no significant environmental justice issues were associated with the proposed project).

Because the Project will not result in a significant environmental impact, the first part of the significant adverse effect test is not met. Applicant's Rebuttal Test. – Rubenstein Environmental Justice Rebuttal Test. at 2. The parties agree that environmental justice communities, based on the population's race, ethnicity and poverty level, are located within a six-mile radius of the proposed Project. *See, e.g.*, Applicant-Carlson, Tr. Feb. 8, at 169:15 to 169:20; FSA Part 1 at 4.5-8 to 4.5-10. However, the Project cannot disproportionately affect environmental justice communities, because the Project will not result in any significant adverse environmental impacts to those or any other communities. Applicant-Rubenstein, Tr. Feb. 8, at 158:21 to 159:6; Applicant-Carlson, Tr. Feb. 8, at 169:21 to 170:14; Applicant's Opening Testimony, Ex. No. 1101, TN# 215441, Expert Declaration of Mr. Nik Carlson, at 6-7; Applicant's Rebuttal Test. – Rubenstein Environmental Justice Rebuttal Test. at 2-8; FSA Part 1 at 4.5-1, 4.5-12 to 4.5-17.

The intervenors argue that the Project will cause significant environmental justice impacts. Many of the intervenors' contentions concerning the Project's alleged environmental effects are addressed elsewhere in this brief. *See* Sections V.B, V.E *supra*; Section V.H.5 *infra*. However, intervenors' environmental justice experts raise several additional arguments, primarily disputing the conclusion in the FSA that the Project will not disproportionately impact environmental justice communities, but these arguments lack merit.

Intervenors' allegations that the Project will significantly impact the environment are not well-founded and are largely made without specific reference to the FSA or record evidence. CEJA-Cervas, Tr. Feb. 7, at 167:19 to 169:3; FFIERCE-Taruc, Tr. Feb. 8, at 143:24 to 144:4; *see* Testimony of Strela Cervas, Ex. No. 6000, TN# 215443, at 9-13 ("Cervas Expert Test."); Mari Rose Taruc Expert Testimony Opposing PPP, Ex. No. 8003, TN# 215450, at 1, 5 ("Taruc Expert Test."); David Pellow Expert Testimony Opposing PPP, Ex. No. 8002, TN# 215448, at 1-4

("Pellow Expert Test."). For example, intervenors allege without evidentiary support that children and agricultural workers in close proximity to the Project will be exposed to air pollutants and that their health will suffer as a result. Taruc Expert Test. at 1, 5; *see also* Cervas Expert Test. at 6-13; Pellow Expert Test. at 2-3. In contrast, record evidence shows that the Project will not pose a significant public health risk during construction or operation. CEC Staff-Chu, Tr. Feb. 7, at 102:6 to 102:10; Applicant-Rubenstein, Tr. Feb. 8, at 158:25 to 159:3; Applicant's Opening Test. – Rubenstein Decl. at 7-8; Applicant's Rebuttal Test. – Rubenstein Environmental Justice Rebuttal Test. at 2-3. In fact, an individual standing continuously at the MGS property's eastern boundary for 70 years would not be exposed to a significant health risk. Applicant-Rubenstein, Tr. Feb. 8, at 163:12 to 165:6; CEC Staff-Chu, Tr. Feb. 7, at 100:25 to 102:13; s*ee also* CEC Staff-Chu, Tr. Feb. 7, at 102:14 to 110:22. The Project will pose even less of a risk to the health of children and farm workers situated farther away from the MGS property. Applicant-Rubenstein, Tr. Feb. 8, at 163:1 to 164:15.

Intervenors' experts allege that the Project will "burn huge amounts of fossil fuel . . . accelerate climate change and steer us off course in achieving California's climate targets." Taruc Expert Test. at 1, 5; *see also* Cervas Expert Test. at 6-13; Pellow Expert Test. at 2-3. They also claim that preferred resources could be used instead of a natural gas-fired generation facility, and that the CEC did not adequately analyze the use of preferred resources. Cervas Expert Test. at 6-13; Pellow Expert Test. at 2-3. But the Project is more efficient than the current units at the MGS facility and, as a result, will burn less natural gas, thereby reducing the amount of greenhouse gases in the region compared to existing conditions. CEC Staff-Vidaver, Tr. Feb. 7, at 98:4 to 98:23; CEC Staff-Bemis, Tr. Feb. 7, at 132:9 to 133:3. As discussed in Section V.B.3, the Project will not result in significant GHG emissions. Therefore, the Project's impacts on climate change are less than significant. In addition, several state agencies have considered the use of preferred resources to meet local reliability needs instead of the Project and concluded that such resources are neither available in sufficient quantities nor technically capable of satisfying those needs. *See* Section V.H.5 *infra*.

Finally, intervenors' experts argue that the Project will endanger public access to the

coast. Cervas Expert Test. at 9-10. Because the Project will result in the removal of the ocean outfall structure, however, coastal access to the beach near the Project will be improved. *See* Section V.E.1 *supra*. In sum, evidence in the record supports a finding that the Project will not cause significant adverse effects to environmental justice communities located near the Project.

H. Alternatives

California Public Resources Code Sections 21001(g), 21002.1(a), and 21061 require that an Environmental Impact Report ("EIR") identify alternatives to a proposed project.[11] CEQA Guidelines Section 15126.6(a) expands on the statute by stating that an EIR must include a "reasonable range" of alternatives to the project "which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the ***significant effects*** of the project." (emphasis added.) Likewise, CEQA Guidelines Section 15126.6(f) further clarifies that an EIR is not required to analyze alternatives that would not eliminate or substantially reduce significant adverse effects, or alternatives whose implementation is speculative or effects are not reasonably ascertained. In addition, an agency need not consider "every conceivable alternative" and may determine what is a reasonable range. *Id.* § 15126.6(a); *Citizens of Goleta Valley v. Bd. of Supervisors*, 52 Cal.3d 553, 566 (1990). Sometimes, no feasible alternative locations exist. CEQA Guidelines § 15126.6(f)(2)(B).

Here, Applicant and CEC Staff analyzed a reasonable range of alternatives. Applicant evaluated eight alternative sites, six of which were suggested by the City, while the FSA analyzed five alternatives in detail, including a No-Project Alternative, two alternative sites, and two conceptual site reconfigurations. *See* Applicant's Alternative Sites Summary, Ex. No. 1068, TN# 207096, at 1 ("Applicant's Alternative Sites Summary"); FSA Part 1 at 1-4, 4.2-1 to 4.2-163. In addition to the detailed analyses of five alternatives, CEC Staff also considered other potential brownfield sites, other alternative sites suggested by the City of Oxnard, retrofit alternatives that could allow continued operation of MGS Units 1 and 2 without using ocean water as a source for power plant cooling, and the use of preferred resources in lieu of the

[11] These requirements also apply to an EIR-equivalent document prepared by the CEC. *See* Cal. Code Regs., tit. 14, §§ 15251, 15252.

Project. FSA Part 1 at 4.2-11 to 4.2-15, 4.2-21 to 4.2-33. None of the alternatives analyzed by Applicant and CEC Staff would meet the project objectives to the same extent as the Project, and others would fail to reduce or avoid any potentially significant impacts of the proposed Project. *See* Applicant's Alternative Sites Summary at 8-14, Table 2, 43-44; FSA Part 1 at 4.2-3, 4.2-148 to 4.2-157. Therefore, the CEC has ample evidence to support a finding that the Project represents the environmentally superior alternative.

1. The Project's objectives allowed CEC Staff to analyze a "reasonable range" of alternatives

The stated Project objectives are consistent with CEQA. Project objectives must inform the public of a project's goals and be sufficiently broad to enable the lead agency to consider a reasonable range of alternatives to the project as proposed. CEQA Guidelines § 15124(b); *Bay Area Citizens v. Ass'n of Bay Area Gov'ts*, 248 Cal. App. 4th 966, 1014 (2016).

In this case, Applicant's objectives for the Project notified the public of Applicant's proposal to construct and operate a new power plant project and gave the CEC sufficient flexibility to analyze a reasonable range of potential alternatives to the proposed Project, including alternative sites, alternative designs, alternative generation technologies, and a No-Project Alternative. Applicant's objectives for the Project include, among other things, "[m]inimiz[ing] environmental impacts and development costs by developing on an existing brownfield site and reusing existing transmission, water, wastewater, and natural gas infrastructure," "[s]upport[ing] the local capacity requirements of the [CAISO] Big Creek/Ventura Capacity Reliability (LCR) area," and "[s]afely produc[ing] electricity without creating significant environmental impacts." FSA Part 1 at 3-4. As discussed above, CEC Staff analyzed numerous alternative sites and generation technologies, and "broadly interpret[ed] the project objectives . . . to foster a robust analysis of potential [a]lternatives." CEC Staff-Hinde, Tr. Feb. 7, at 214:7 to 215:21, 221:2 to 221:18; FSA Part 1 at 4.2-8 to 4.2-9.

The Project objectives, moreover, did not cause CEC Staff to abstain from analyzing otherwise feasible alternatives in the FSA. CEC Staff-Hinde, Tr. Feb. 7, at 214:25 to 215:3. Rather, the objectives permitted CEC Staff to consider a "reasonable range" of alternatives in

accordance with CEQA. CEC Staff appropriately considered Applicant's stated objectives when developing and analyzing alternatives. *Cal. Oak Found. v. Regents of Univ. of Cal.*, 188 Cal. App. 4th 227, 276-277 (2010); *see also Sierra Club v. Cty. of Napa*, 121 Cal. App. 4th 1490, 1499-1502 (2004) (adopting applicant's objective of constructing a new winery facility that consolidates operations, minimizes costs and reduces highway usage). Indeed, the expansive suite of alternatives considered in this case (over a dozen total considered, five analyzed in detail by CEC Staff and eight by Applicant) confirm that the Project Objectives were sufficient to allow CEC Staff to consider a broad range of alternatives, certainly satisfying the requirements of CEQA to evaluate a "reasonable range."

2. None of the alternative sites are environmentally superior to the proposed Project location

The City argues that other alternative sites may be environmentally superior to the MGS property. *See* City of Oxnard's Statement of Issues to be Briefed, TN# 216036, at 1; Golden Opening Test. at 8-9. However, the City has failed to advance any alternative sites that would feasibly obtain the Project's important generation and reliability objectives while reducing environmental effects. In addition, the two off-site alternatives analyzed in the FSA—the Ormond Beach Area Off-Site Alternative ("Ormond Beach Site") and the Del Norte/Fifth Street Off-Site Alternative ("Del Norte Site")—each have environmental issues that make them environmentally inferior to the proposed Project location.

a. Ormond Beach Site

The Ormond Beach Site, located at 5980 and 6000 Arcturus Avenue, is an approximately 13.5 to 14.5-acre undeveloped industrial site in the southeast portion of Oxnard at the intersection of Arcturus Avenue and E. McWane Boulevard. Applicant's Rebuttal Testimony, Ex. No. 1121, TN# 215553, Expert Declaration of Tim Murphy Regarding Alternative Sites – Land Use, at 2 ("Applicant's Rebuttal Test. – Murphy Rebuttal Decl."). The Ormond Beach Site is located approximately one-half mile inland from Ormond Beach and just east of (outside) the coastal zone boundary. *Id*. The existing Ormond Beach Generating Station is located approximately three-quarter mile southwest of the Ormond Beach Site. *Id*.

As described in the FSA and expert testimony, construction of a power plant at the Ormond Beach Site would result in additional impacts as compared to the proposed Project:

Land Use Impacts: The Ormond Beach Site would result in new land use impacts that would not occur with the Project. As described in the Expert Declaration of Mr. Tim Murphy Regarding Alternative Sites – Land Use, the Ormond Beach Site is designated "Light Industrial." Applicant's Rebuttal Test. – Murphy Rebuttal Decl. at 2. This designation is defined to include:

> Manufacturing uses where the principal activity occurs within a building, but also permits outdoor assembly, fabrication, work/live, public services, and storage. Uses must follow high development and performance standards. Wholesale and retail sales and services related to the principal uses permitted.

2030 General Plan at 3-16. This Light Industrial land use designation does not allow electrical generating facilities by right. Rather, this land use designation applies to uses that are predominantly indoors, such as indoor manufacturing. Applicant's Rebuttal Test. – Murphy Rebuttal Decl. at 3. In addition, there is a separate land use category that specifically permits power plants: "Public Utility/Energy Facility." 2030 General Plan at 3-16. Because there is a separate category that specifically allows electrical generating facilities and because a power plant is not normally considered a "light industrial" use, an electrical generating facility would not be an appropriate use in the Light Industrial designation. Applicant's Rebuttal Test. – Murphy Rebuttal Decl. at 3. An electrical generating facility would be a much more intensive use than the uses contemplated for the Light Industrial designation. Accordingly, the siting of an electrical generating facility on the Ormond Beach Site would be inconsistent with the General Plan. *Id*.

Wetland Impacts: The CEC considered alternative sites to avoid impacts to the 2.03-acre area of the proposed Project Site that the CCC identified as a "wetland" based on its one-parameter definition. Based on a limited review of the Ormond Beach Site, CEC Staff concluded that the Ormond Beach Site would be environmentally superior to the proposed Puente Site, based in part on the Ormond Beach Site's alleged avoidance of impacts to wetlands. FSA Part 1 at 4.2-6. However, Ms. Love's analysis of the Ormond Site indicates otherwise. Ms. Love's desktop analysis of the Ormond Beach Site determined that partially hydric soils are

mapped within the boundaries of the site, and that wetland soils are more likely to be present in soils of this type. *See* Applicant's Rebuttal Testimony, Ex. No. 1121, TN# 215553, Expert Declaration of Julie Love Regarding Alternative Sites, at 2 ("Applicant's Rebuttal Test. – Love Alternatives"). Moreover, Ms. Love's analysis of the hydric ratings of the soil at the Ormond Beach Site further solidified her conclusion that wetland soils are likely to be present at the Ormond Beach Site, although the current use of the Ormond Beach Site may impede the soils' presence or persistence. *Id*.

Given the presence of hydric soils, Ms. Love noted that if the CCC's one-parameter wetland definition were applied to the Ormond Beach Site, the conclusion would be the same as for the proposed site: one-parameter wetlands may be present due to the potential for wetland soils. *See* Applicant's Rebuttal Test. – Love Alternatives at 2. Finally, Ms. Love found that the Ormond Beach Site is adjacent to over 500 acres of land proposed for inclusion in the Ormond Beach Wetlands Restoration Project. *See id*. at 3. The Ormond Beach wetlands are "considered by many wetland experts to be the most important wetland restoration opportunity in southern California." Comments on CCC Report to CEC on NRG Puente Power Project, Ex. No. 1087, TN# 213625, at 13; City of Oxnard-Ramirez, Tr. Feb. 9, at 10:4 to 10:8. The Ormond Beach Site's close proximity to those wetlands further indicates that land on the Site likely constitutes wetland, and that construction and operation of the Project at the Ormond Beach Site could endanger sensitive resources on and adjacent to the Site, unlike the proposed Project location. Evidence shows that the Ormond Beach Site is not environmentally superior to the proposed site with respect to biological resources. Applicant-Love, Tr. Feb. 9, at 101:16 to 101:25.

Site Contamination: CEC Staff concluded that there is existing soil and groundwater contamination at the Ormond Beach Site. FSA Part 1 at 4.2-92. Applicant's expert, Tricia Winterbauer, agreed with this conclusion, noting that the Ormond Beach Site was previously the subject of a voluntary cleanup under the oversight of the California Department of Toxic Substances Control ("DTSC") as a result of contamination from chemical manufacturing operations at the Ormond Beach Site. *See* Applicant's Rebuttal Testimony, Ex. No. 1121, TN# 215553, Expert Declaration of Tricia Winterbauer Regarding Alternative Sites – Site

Contamination Issues, at 2 ("Applicant's Rebuttal Test. – Winterbauer Rebuttal Decl."). Following the cleanup, the DTSC imposed a Land Use Covenant on the site which restricts, in part, any subsurface earthwork on the property until a Soil and Groundwater Management Plan for the activity is approved by the DTSC. *Id*. at 2-3. Ms. Winterbauer concluded that because of the soil and groundwater contamination at the Ormond Beach Site, development of a power plant at the site would also require the development of a Soil and Groundwater Management Plan that would need to be approved by the DTSC prior to any subsurface work. *Id*. at 3. Moreover, with regards to construction risks resulting from the Project, Ms. Winterbauer noted that while development on the Ormond Beach Site would not involve demolition activities, construction activities at the Ormond Beach Site would pose risks similar to demolition and construction activities at the proposed location. *Id*. Given the above analysis, the Ormond Beach Site is not a superior alternative to the proposed location as it also carries contamination risks. Development of a power plant at the Ormond Beach Site poses similar risks to the development of the Project at the proposed site with regards to site contamination and construction risks and would also require oversight by the DTSC. Therefore, the Ormond Beach Site does not offer environmental benefits as compared to the proposed location.

Archaeological Resources: CEC Staff concluded that the potential for impacts to surficial and buried archaeological resources or ethnographic resources at the Ormond Beach Site would be similar to the potential for impacts at the proposed Project location. FSA Part 1 at 4.2-103. However, Applicant expert Mr. Mark Hale's analysis of the Ormond Beach Site resulted in a different conclusion. After evaluating the CEC's work, Mr. Hale found that the relevant records search completed by CEC Staff for the Ormond Beach Site did not include the routes of the necessary linear facilities. Applicant's Rebuttal Testimony, Ex. No. 1121, TN# 215553, Expert Declaration of Mark Hale regarding Alternative Sites – Archeological Resources, at 3 ("Applicant's Rebuttal Test. – Hale Rebuttal Decl."). Mr. Hale noted that development of the Project at the proposed site, however, avoids the need to construct any new linear facilities, which would result in no adverse impact to archaeological resources. *Id*. Given the above analysis, the Ormond Beach Site is not a superior alternative to the proposed location

due to the uncertainty associated with the location of the required linear facilities, which presents a greater likelihood of adverse impacts to archaeological resources than development of the Project at the proposed site, where no impact is identified.

Historic Resources: Applicant expert Mr. Jeremy Hollins evaluated potential impacts to historic architectural resources at the Ormond Beach Site. Mr. Hollins's evaluation determined that the Ormond Beach Site contains portions of a railroad spur line connected to the Ventura County Railway north of the site, a railway that is listed as a landmark on the Ventura County Historical Landmarks and Points of Interest. Applicant's Rebuttal Testimony, Ex. No. 1121, TN# 215553, Expert Declaration of Jeremy Hollins Regarding Alternative Sites – Historic Architectural Resources, at 2 ("Applicant's Rebuttal Test. – Hollins Rebuttal Decl."). Mr. Hollins also determined that the Ventura County Railway is listed on the California Register of Historical Resources, and also eligible for listing on the National Register of Historic Places. *See id.* Mr. Hollins concluded that, as a result of the location of the rail spur, construction of a power plant at the Ormond Beach Site has the potential to significantly impact a built environment historic architectural resource. *Id.* Given these findings, developing a power plant on the Ormond Beach Site presents a significantly greater likelihood of adverse impacts to historic architectural resources than the development of the Project at its proposed location.

Aviation Hazards: As discussed in expert testimony from Mr. Gary Rubenstein and written comments submitted by Ms. Amanda Fagan, Community Planning Liaison Office, Naval Base Ventura County, the Ormond Beach Site would have the potential to result in aviation hazards and adversely affect pilot safety. *See, e.g.*, Applicant's Rebuttal Testimony, Ex. No. 1121, TN# 215553, Expert Declaration of Gary Rubenstein Regarding Alternative Sites – Aviation Hazards, at 3 ("Applicant's Rebuttal Test. – Rubenstein Alternatives Rebuttal Decl."). Specifically, Ms. Fagan explained:

> The Ormond Beach Alternative site is located within the Approach-Departure Clearance Surface area for Runway 09/27 and within the Conical Surface area for Runway 03/21 at NBVC Point Mugu. Depending on the specific location and height of the stack, the alternative may impact the Imaginary Surfaces of the NBVC Point Mugu airfield. In addition, the Ormond Beach Alternative location raises potential concerns related to lighting, dust, smoke and steam, and potential ***impacts to special-status species*** at NBVC Point Mugu. Bright lights and lighting

> that is not downward directed in the vicinity of the airfield can impair pilot vision, especially at night. Land uses that generate sources of dust, smoke and steam in the airfield vicinity ***could obstruct pilot vision during takeoff***, landing or other periods of low-altitude flight.

See Naval Base Ventura County Comments re: Preliminary Staff Assessment, TN# 213650 (emphasis added). In contrast, development on the MGS property would not result in the same level of aviation impacts. *See* Section V.G *supra*. Accordingly, the Ormond Beach Site would have a greater potential impact on aviation hazards than the proposed location.

Additional information on aviation hazards was developed in CEC Staff's Traffic and Transportation Supplemental Testimony contained in the June 13, 2017 Staff's Supplemental Testimony in response to March 10 Orders. CEC Staff concluded that alternative combustion turbine generator designs at the Ormond Beach Site would not reduce the site's potentially significant aviation impacts. *See* Staff Supp. Test. at 33-35. CEC Staff's conclusion is consistent with those of Applicant, as set forth in Expert Declaration of Gary Rubenstein in Response to March 10, 2017 Committee Orders, Ex. No. 1147, TN# 218887, at 6 ("Rubenstein March 10, 2017 Resp. Decl."), in which Mr. Rubenstein concludes that the "use of multiple, smaller turbines" would not reduce aviation impacts at the Ormond Beach Site. *Id*. at 6. Further, in supplemental testimony, CEC Staff later "upgraded" the Ormond Beach Site's risk of aviation impacts to significant and unmitigable, based on potential endangerment of military aircraft and disruption of military operations from the nearby naval base. *See* CEC Staff-Fong, Tr. Jul. 27, at 26:5 to 26:18. Therefore, the Ormond Beach Site would result in greater aviation impacts than the proposed Project.

In the Supplemental Testimony of Dr. H. Andrew Gray, Ex. No. 4037, TN# 220217, Dr. Gray, on behalf of intervenor EDC, contends that the "Spillane Approach" utilized by CEC Staff to analyze thermal plumes is overly conservative and results in over-stating of the potential impacts to aviation. However, use of less conservative methodologies or assumptions to analyze thermal plumes would result in reduced estimated impacts across all of the analyzed technologies at all of the analyzed sites, including the proposed GE7HA turbine proposed for the Project at the proposed location within the MGS. Thus, the analysis does not alter the conclusions of CEC

Staff and Applicant with respect to the relative impacts of the Project as proposed and the analyzed alternatives.

Environmental Justice: The Ormond Beach Site is adjacent to census tracts with the highest density of minority populations in the City. *See* Applicant's Rebuttal Test. – Rubenstein Environmental Justice Rebuttal Test. at 4. The minority population densities in census tracts adjacent to the Ormond Beach Site are much greater than those adjacent to the MGS property. *Id*. In addition, the Ormond Beach Site is located within a census tract that is burdened by public health related indicators, and the nearest sensitive receptor "could be very near the project (at the facility fence line) if [a power plant] were located at this site." FSA Part 1 at 4.2-88; *see also* Applicant's Rebuttal Test. – Rubenstein Environmental Justice Rebuttal Test. at 5. There are more minority and disadvantaged communities in the area surrounding the Ormond Beach Site than in the area surrounding the proposed Project. *Id*. at 6.

b. Del Norte Site

The Del Norte Site is an approximately 12.5-acre site in an industrial area in the eastern portion of Oxnard at the intersection of S. Del Norte Boulevard and E. Fifth Street (State Highway 34). FSA Part 1 at 4.4-4. The Del Norte Site is located approximately seven miles east of the coastline and five miles inland from the Coastal Zone boundary. *Id*.

As described in the FSA and expert testimony, construction of a power plant at the Del Norte Site would result in additional impacts as compared to the proposed Project:

Wetland Impacts: Ms. Love's analysis of the Del Norte Site showed that partially hydric soils are mapped within the boundaries of the Del Norte Site, and thus determined that wetland soils are more likely to be present at the Site. Applicant's Rebuttal Test. – Love Alternatives at 3-4. The hydric ratings of the soil at the Del Norte Site further solidified her conclusion that wetland soils are likely to be present at the Del Norte Site, although the current use of the site may impede the soils' presence or persistence. *Id*. In addition, Ms. Love's analysis revealed that there may be potential for hydrophytic wetland vegetation in the southern portion of the Del Norte Site. *Id*. Given her analysis, Ms. Love concluded that if the CCC's one-parameter wetlands definition were applied to the Del Norte Site in the same manner it has

been applied to the Project Site, wetlands may be present due to the potential for wetland soils and hydrophytic vegetation. Accordingly, the Del Norte Site is not environmentally superior to the proposed location with respect to biological wetland resources.

Archaeological Resources: With regards to the Del Norte Site, CEC Staff concluded, based on its limited review, that it is "indeterminate" if any surficial or buried archaeological resources or ethnographic resources could be impacted at the Del Norte Site and how such an impact (if it occurred) would compare to the proposed location where no impact is identified. FSA Part 1 at 4.2-62. However, Mr. Hale completed a more detailed records search of the Del Norte Site through the South Central Coastal Information Center ("SCCIC") of the California Historical Resource Information System. Applicant's Rebuttal Test. – Hale Rebuttal Decl. at 2. The records search area was based on CEC guidelines and addressed the Del Norte Site and estimated routes for necessary linear features based on proximity to the nearest available utility connections. *Id.*

Mr. Hale found that 15 previously-recorded archaeological resources occur within the records search area. Applicant's Rebuttal Test. – Hale Rebuttal Decl. at 2. All of the recorded resources were prehistoric in nature, with eight representing archaeological sites and the remaining being isolated finds. *Id.* None of the archaeological resources have been formally evaluated for inclusion to the National Register of Historic Places. *Id.* Six of the identified archaeological sites were located within, or immediately adjacent to, the estimated footprint inclusive of the necessary linear features. *Id.* The remaining two archaeological sites, and all of the isolated finds, occur within approximately 500 feet of the centerline of the estimated linear alignments. *Id.*

After taking into consideration that a CEC-mandated buffer of 50 feet must be added to each side of a right-of way in order to define the requisite Project Area of Analysis, Mr. Hale concluded that these additional archaeological resources may fall within locales considered to be potential impact areas by the CEC. Applicant's Rebuttal Test. – Hale Rebuttal Decl. at 2-3. As such, Mr. Hale concluded that a power plant on the Del Norte Site presents a greater likelihood of adverse impacts to archaeological resources than development of the Project at its proposed

location, where no significant impact is identified. *See* FSA Part 1 at 4.4-1 (confirming that impacts to archaeological resources would be less than significant).

Historic Resources: Mr. Hollins evaluated the Del Norte Site and completed a records search based on CEC guidelines that addressed the alternative site and estimated routes for necessary linear features based on proximity to the nearest available utility connections. Applicant's Rebuttal Test. – Hollins Rebuttal Decl. at 3. Mr. Hollins determined that the base maps of the SCCIC indicated 10 previously-recorded built environment resources occurring within the records search area, two of which are listed in the National Register of Historic Places (the Oxnard Chamber of Commerce-Art Club of Oxnard/Oxnard Public Library and the Henry T. Oxnard Historic District). *Id.* Mr. Hollins also found an additional 151 built environment resources within the records search area in the Historic Architectural Resources Inventory listings, 33 of which were within close proximity (within or abutting) to the estimated linear routes. *Id*. Of these 33 resources of the built environment, 27 are listed in, have been determined eligible for listing in, or appear eligible (through survey evaluation or other evaluation) for listing the in National Register of Historic Places or California Register of Historical Resources, or are recognized as historically significant by local government. *Id.* at 3-4. Mr. Hollins concluded that the development of a power plant on the Del Norte Site presents a significantly greater likelihood of adverse impacts to historic architectural resources than the development of the Project at its proposed location. *See* FSA Part 1 at 4.4-1 (confirming absence of historic resources are present at the proposed location).

Aviation Hazards: Construction of a power plant at the Del Norte Site, which is located approximately one and a half miles from the western end of the Camarillo Airport runway, would cause significant and unavoidable impacts on aircraft and pilot safety, which are impacts that would not occur under the Project as proposed. *See* Section V.F *supra*. Therefore, CEC Staff appropriately concluded that the Del Norte Site is not environmentally superior to the Project. FSA Part 1 at 4.2-2.

Additional information on aviation hazards was developed by CEC Staff in response to the March 10 Orders. Staff Supp. Test. At 29-38. CEC Staff concluded that the use of

alternative combustion turbine generator designs at the Del Norte Site would not reduce the site's significant and unmitigable aviation impacts. *See* FSA Part 1 at 38. CEC Staff's conclusion is consistent with those of Applicant's expert that the "use of multiple, smaller turbines" would not reduce aviation impacts at the Del Norte Site. *See* Rubenstein March 10, 2017 Resp. Decl. at 6; *see also* CEC Staff-Fong, Tr. Jul. 27, at 31:19 to 31:25 ("Incorporating the turbine designs at the alternative sites in any configuration would still result in significant and unavoidable impacts to aviation. While it is true that the critical velocity of the thermal plume would occur on a lower height during operation of a smaller turbine, the plumes would be still high enough to pose a significant and unmitigable impact.").

As with the Ormond Beach Site, the EDC's contention that the "Spillane Approach" utilized by CEC Staff to analyze thermal plumes is overly conservative and results in over-stating of the potential impacts to aviation does not alter the conclusions of CEC Staff and Applicant with respect to the relative impacts of the Project as proposed and the analyzed alternatives. *See* Section V.F *supra*.

3. The No-Project Alternative is not environmentally superior and would not meet Project objectives

In compliance with CEQA Guidelines Section 15126.6(e), the CEC analyzed a "No-Project Alternative" to the proposed Project. The No-Project Alternative assumes that MGS Units 1 and 2 would cease to operate on or before December 31, 2020, and MGS Unit 3 would continue operating. FSA Part 1 at 4.2-3 to 4.2-4. While the No-Project Alternative would avoid some potential impacts relating to Project operation, the No-Project Alternative would result in new significant and unavoidable impacts to nesting special-status birds. *Id*. at 4.2-4, 4.2-7 to 4.2-8, 4.2-34 to 4-2-46, 4.2-148 to 4.2-150, 4.2-156. Specifically, due to the potential for the existing MGS Units 1 and 2 to present nesting and perching opportunities for raptors and other predatory birds, the No-Project Alternative could impact special-status birds nesting near the Project as long as MGS Units 1 and 2 remained nonoperational. *See, e.g.*, *id*. at 4.2-4. The No-Project Alternative fails to attain any of the Project's basic objectives, including objectives to

provide more flexible and efficient natural gas generation and to support the CAISO's local capacity requirements. *Id*. at 4.2-4, 4.2-7 to 4.2-8, 4.2-34 to 4-2-46, 4.2-148 to 4.2-150, 4.2-156.

4. The conceptual site reconfiguration alternatives would not reduce environmental impacts

The CEC analyzed two potential reconfigurations of the Project, but both involve substantial constructability issues. Comments on CCC Report to CEC on NRG Puente Power Project, Ex. No. 1087, TN# 213625, at 15-16. For example, under Conceptual Site Reconfiguration 2, the power block would be constructed in the approximate center of the MGS property, which would require relocating the existing warehouse on the site. *Id*. While these reconfigurations would eventually meet the Project objectives of developing a 262-MW simple-cycle, natural gas-fired combustion turbine at the existing MGS facility that would use existing infrastructure and other MGS maintenance facilities, both would severely impact the Project schedule, significantly delaying the Project's important reliability and efficiency benefits. FSA Part 1 at 4.2-116 to 4.2-117.

CEC Staff concluded in the FSA that Conceptual Site Reconfigurations 1 and 2 would be "environmentally superior" to the Project because they would "avoid filled 2.03 of Coastal Commission defined wetlands." FSA Part 1 at 4.2-6, 4.2-157. These alternatives do not avoid a significant impact for two reasons. First, as described in Section V.C.5, there are no wetlands on the Project Site. Accordingly, the Project will not result in any significant impacts to wetlands. Second, as discussed in Section V.D, CEC Staff has determined that, under the proposed configuration, all potential coastal hazards can be mitigated to a level of less than significant. FSA Part 1 at 4.11-23 to 4.22-32; CEC Staff-Maurath, Tr. Feb. 10, at 270:14 to 270:16. Therefore, the Conceptual Site Reconfigurations do not result in any environmental benefits as compared to the proposed Project.

5. Preferred resources would not satisfy Project objectives

While a detailed analysis of preferred resources will be contained in Applicant's subsequent brief responding to the August 16, 2017 CAISO Local Capacity Study for the

Moorpark Sub-Area, a truncated discussion of preferred resources as an alternative to the Project is provided here.

CEC Staff considered preferred resources in its analysis of possible alternatives to the Project in the FSA. *See* FSA Part 1 at 4.2-9, 4.2-11 to 4.2-15. As discussed therein, CEC Staff concluded that preferred resources can provide many of the services provided by dispatchable, natural gas-fired generation. *Id*. at 4.2-11. However, where preferred resources cannot ensure reliability because they lack necessary operating characteristics or are not available in sufficient quantities, the procurement of clean, efficient natural gas-fired generation is necessary and consistent with the state's loading order. *Id*. Accordingly, preferred resources alone could not "feasibly and reliably be counted on to cost-effectively meet local reliability needs." *Id*. at 4.2-14 to 4.2-15. Therefore, preferred resources would not meet the Project objectives, including "[s]upport[ing] the local capacity requirements of the [CAISO] Big Creek/Ventura Capacity Reliability (LCR) area." *Id.* at 3-4.

I. Public Resources Code Sections 25523 and 25527

California Public Resources Code Sections 25523 and 25527 set forth additional findings that the CEC must make in order to certify the Project. The parties do not dispute the conclusions in the FSA concerning the findings prescribed by Section 25523 and 25527, and a review of the FSA establishes that there is substantial evidence in support of the findings, or that the findings are unnecessary in this case.

Substantial evidence exists in the record for the CEC to make the findings contained in Section 25523(d)(1) and (2) regarding air quality. Section 25523(d)(1) mandates that the CEC, in its written decision, consider whether the Project conforms with applicable LORS. *See* Section VI *infra*. Section 25523(d)(2) further requires that the CEC take additional steps when considering the Project's compliance with air quality standards. In conducting its air quality analysis, the CEC must review a determination of compliance submitted by the local air pollution control district. Cal. Pub. Res. Code § 25523(d)(2). Only where the local district's determination of compliance certifies that the applicant will obtain complete emissions offsets for the proposed facility within the time required by the district's rules may the CEC find that a

proposed project complies with all applicable air quality standards. *Id.* The CEC also must include a condition of certification in its written decision demanding that the applicant "obtain any emission offsets within the time required by the applicable district rules, consistent with any applicable federal and state laws and regulations, and prior to the commencement of the operation of the proposed facility." *Id.*

In this case, the CEC can conclude that the Project satisfies all applicable air quality standards. Substantial evidence in the record shows that the Project complies with all air quality LORS and will not result in a significant impact to local air resources. Section V.B *supra*. And the local district, the VCAPCD, has issued a FDOC certifying that Applicant possesses emissions offsets for the Project. *See* FDOC-Cover Letter, Ex. No. 2007, TN# 214005-1, at 1; FDOC-Evaluation, Ex. No. 2008, TN# 214005-2, at 26-27; *see* CEC Staff-Villegas, Tr. Feb. 7, at 76:4 to 78:9; FSA Part 1 at 4.1-52 to 4.1-53; Section V.B *supra*.

The record also assists the CEC in complying with Section 25523(h), as discussed in Section VII.A. Likewise, evidence supports the finding required by Section 25523(g). Cal. Pub. Res. Code § 25523(g) (mandating that a condition be imposed "requiring the facility to be monitored to ensure compliance with toxic air contaminant control measures adopted by an air pollution control district . . . pursuant to subdivision (d) of Section 39666"); *see id.* § 39666(d) (requiring air pollution control districts to implement and enforce "airborne toxic control measures on non-vehicular sources" following the State Air Resources Board's adoption of such measures). Both the VCAPCD and CEC Staff have adopted conditions obligating Applicant to comply with the VCAPCD's applicable airborne toxic control measure. FDOC-Evaluation, Ex. No. 2008, TN# 214005-2, at 34-35; FDOC-Appendix K, Ex. No. 2019, TN# 214005-13, at K-16 to K-17 (adopting 12 conditions that apply to the Project's emergency diesel engine to ensure that the mandates of the airborne toxic control measure for stationary compression ignition engines are satisfied); FSA Part 1 at 4.1-68, 4.1-119 to 4.1-121 (listing 12 verification measures to ensure that the Project's emergency engine complies with the 12 conditions described in the VCAPCD's Final Determination of Compliance).

It is unnecessary for the CEC to make the remaining findings prescribed by California Public Resources Code Sections 25523 and 25527. Section 25523(d)(1) obligates the CEC to determine whether the Project conforms with all standards it has promulgated under Section 25402 concerning efficient energy consumption. As CEC Staff have stated, however, the Project is not subject to energy efficiency standards, and it will not cause a significant impact on energy resources. FSA Part 2 at 5.3-1, 5.3-7 to 5.3-8. The remaining subsections of Section 25523 have been discussed elsewhere or are irrelevant to this proceeding. *See* Sections V.J, VI, VII.A *infra*; Cal. Pub. Res. Code § 25523(c) (applying only to sites in the Suisun Marsh or within the jurisdiction of the San Francisco Bay Conservation and Development Commission); *id.* § 25523(e) (applying only when the CEC denies approval of the application); *id.* § 25523(f) (applying only to facilities using waste-to-energy technology).

The CEC, similarly, may bypass the findings mandated by Section 25527. That Section orders the CEC to make additional findings when a proposed project will encroach on certain environmental areas or "areas of critical environmental concern." Cal. Pub. Res. Code § 25527. But no portion of the Project will be located in one of the environmental areas listed in the statute or in an area of critical environmental concern. *Id.* § 25527(a)-(b) (requiring additional findings when a proposed project will be in: an estuary essentially in its natural and undeveloped state; a state, regional, county, or city park; wilderness, scenic, or natural reserves; areas for wildlife protection, recreation, historic preservation; or natural preservation areas); *id* § 25527 (describing "areas of critical environmental concern" as "including, but not limited to, unique and irreplaceable scientific, scenic, and educational wildlife habitats; unique historical, archeological, and cultural sites; lands of hazardous concern; and areas under consideration by the state or the United States for wilderness, or wildlife and game reserves"); *see also* Sections V.C.4, V.C.5 *supra*. The Project, instead, will be located "within the boundaries of the existing MGS power generating facility that has been in operation since the 1950s." FSA Part 1 at 4.7-18.

J. Public Resources Code Section 25523(b)

California Public Resources Code Section 25523(b) requires the CEC to incorporate

recommendations in the report submitted by the CCC for projects located in the coastal zone, unless the CEC specifically finds that the adoption of the provisions specified in the report would result in greater adverse effect on the environment or that the provisions proposed in the report would not be feasible.

Here, many of the CCC's recommendations are acceptable to Applicant and should be incorporated into the CEC's approval of the Project. Indeed, Applicant has already incorporated into its Project proposal the CCC's recommendation that the existing ocean outfall be removed. *See* CCC 30413(d) Report at 44. However, certain recommendations have been rendered moot in light of additional evidence presented during the course of these proceedings. Specifically, Applicant requests that the CEC reject the following recommendations from the CCC 30413(d) Report:

- Relocation of Project To Avoid Wetlands: The CCC recommended relocating the Project to an alternative site that would not result in direct impacts to or fill of wetlands. CCC 30413(d) Report at 14. However, as described in Section V.C.5, there are no wetlands located on the Project Site. Therefore, this recommendation is not necessary and should not be incorporated into the CEC's approval of the Project. Nevertheless, Applicant is willing to accept the CCC recommended compensatory mitigation for direct impacts to wetlands at a 4:1 ratio if the CEC determines that wetlands are present on the Project Site. *Id.* at 16.
- Relocation of Project To Avoid Flood Zones: The CCC recommended relocating the Project to an alternative site, or reconfiguring the proposed Project layout, to avoid 100-year and 500-year flood zones. CCC 301413(d) Report at 37. However, as described in Section V.D, the Project as proposed is already located outside of the 100-year flood zone, and the 500-year flood zone only reaches a small corner of the Project Site. In addition, CEC Staff has determined that all potential coastal hazards at the MGS property can be mitigated to a level of less than significant. FSA Part 1 at 4.11-23 – 4.22-32; CEC Staff-Maurath, Tr. Feb. 10, at 270:14 to 270:16. Therefore, this recommendation is not necessary and

should not be incorporated into the CEC's approval of the Project.

VI. LORS COMPLIANCE

A. Overview

Substantial evidence in the record supports a finding by the CEC that the Project as proposed, with implementation of the Conditions of Certification recommended by CEC Staff in its FSA, will comply with all applicable LORS. As stated in the FSA:

> Energy Commission staff provides an independent assessment of the project's engineering design, evaluates its potential effects on the environment and on public health and safety, considers environmental justice populations, and determines whether the project is in conformance with all applicable local, state, and federal laws, ordinances, regulations and standards (LORS).
>
> LORS compliance and determinations of key federal Clean Air Act and Clean Water Act requirements are made by staff's active coordination with, and incorporation of, other regulatory agencies and their findings (such as the [VCAPCD] and its [FDOC]).

FSA Part 1 at 1-1.

CEC Staff concludes that the Project as proposed would comply with all applicable LORS, with one possible exception, which is the recently adopted City of Oxnard's Chapter 6, Safety and Hazards Policy 3.5 of the 2030 General Plan:

> Staff has concluded that the proposed Puente Power Project would have no significant impacts to the environment after the implementation of all feasible mitigation, but that the project does not comply with all applicable LORS, specifically city of Oxnard's Chapter 6, Safety and Hazards Policy 3.5 of the 2030 General Plan. If the Committee agrees that this is an applicable LORS, and the project would not comply with Policy 3.5, the committee must decide whether to recommend that the Commission make specific findings that "the facility is required for public convenience and necessity and that there are not more prudent and feasible means of achieving public convenience and necessity" (Pub. Resources Code, Section 25525).

FSA Part 1 at 1-30.

As explained below, the one potential LORS compliance issue identified in the FSA, is not in fact a compliance issue, and the Project as proposed complies with *all* applicable LORS.

For properties within the coastal zone, such as the Project, the City's LCP governs land use matters. The City adopted its LCP pursuant to the Coastal Act, and the CCC has certified it. As described in further detail in Section V.D.4, the LCP is comprised of three items—including the CLUP, Coastal Zoning Ordinance, and certified portions of the General Plan—and, in the

case of conflict, the CLUP and Coastal Zoning Ordinance supersede the General Plan. Oxnard CLUP at III-1; Oxnard Mun. Code § 17-5(M).

The Project complies with the General Plan and LCP, including the CLUP and Coastal Zoning Ordinance. The Project is consistent with all applicable land use LORS. The evidence demonstrates that General Plan Policy SH-3.5 does not apply to the Project and is not an applicable LORS. Moreover, the Height Overlay District is not applicable to the Project, but even if it were to be applied (which it should not be), the Project complies with the Height Overlay District.

B. The Project is consistent with the General Plan and LCP

Evidence establishes that the Project is consistent with all applicable land use and zoning requirements. The MGS property is designated in the 2030 General Plan as Public Utility/Energy Facility. FSA Part 1 at 4.7-6. Large electrical generating and transmission facilities are consistent with this land use designation. *Id.*; *see* Applicant-Murphy, Tr. Feb. 9, at 117:21 to 118:4, 122:12 to 122:18.

For purposes of the LCP, the MGS property is within the EC (Coastal Energy Facilities) sub-zone. The sub-zone "allow[s] for siting, construction, modification and maintenance of power generating facilities." Oxnard Mun. Code § 17-20(A); Oxnard CLUP at II-4; Applicant's Opening Test. – Murphy Decl. at 2; FSA Part 1 at 4.7-5, 4.7-33 to 4.7-34. Electrical power generating plants and accessory uses are permitted uses in the EC sub-zone. Oxnard Mun. Code § 17-20(B)(2); Oxnard CLUP at II-4. The Project is an electrical power generating plant and, therefore, is consistent with the foregoing zoning classifications. Applicant's Opening Test. – Murphy Decl. at 2-4.

The Project will comply with all applicable development standards of the EC sub-zone. FSA Part 1 at 4.7-20 to 4.7-24; *see also* CEC Staff-Gutierrez, Tr. Feb. 9, at 231:17 to 232:19; CCC 30413(d) Report at 8.[12] In addition, the Project meets the design standards from the

[12] Although the CCC ruled that the Project was in compliance with all EC sub-zone development standards, it concluded that the Project violated several of the City's land use policies. These policies, as well as evidence demonstrating that the Project does not, in fact, violate them, are discussed in greater detail in Sections V.E.2, VI.

Coastal Zoning Ordinance for projects located within the coastal zone (Chapter 17-20(C)(3), Article IV 17-46 (B)(1-12) "Design Standards"). FSA Part 1 at 4.7-26; *see* Applicant's Opening Test. – Murphy Decl. at 2-4. Accordingly, the Project is consistent with the foregoing designations and is a conditionally-permitted use of the EC sub-zone. CCC 30413(d) Report at 8.

The Project satisfies all applicable findings that would be required for the issuance of a Coastal Development Permit but for the CEC's exclusive jurisdiction. FSA Part 1 at 4.7-21 to 4.7-24; Oxnard Mun. Code § 17-57(C)(5)(b). Specifically, CEC Staff determined that the Project will be compatible with land uses presently on the MGS property and existing and future land uses within the sub-zone and the area in which the MGS property is located. FSA Part 1 at 4.7-1, 4.7-23; Applicant's Opening Test. – Murphy Decl. at 3-4; *see also* Section V.E *supra*. Since the Project will rely on existing infrastructure and available resources, there are adequate public services to ensure that the Project will not be detrimental to public health and safety. FSA Part 1 at 4.7-23 to 4.7-24; *see also* SectionV.E *supra*. And the Project complies with all CLUP policies. Section V.E.2 *supra*; FSA Part 1 at 4.7-23 to 4.7-24; *see* CEC Staff-Gutierrez, Tr. Feb. 9, at 231:15 to 231:17.

No dispute exists over the Project's consistency with the overarching land use designations in the General Plan and LCP. The City, however, claims that the Project does not comply with the General Plan's Policy SH-3.5 and the Height Overlay District. As explained below, the City's arguments lack merit.

C. The Committee need not consider Policy SH-3.5 or the Height Overlay District as part of its LORS analysis

1. Policy SH-3.5 is not an applicable LORS to the Project; therefore, it does not fall within the CEC's LORS review

The City contends that Policy SH-3.5 is applicable to the Project. The City adopted Policy SH-3.5, also known as General Plan Amendment PZ 16-620-01, on June 7, 2016. The policy updates SLR information in the 2030 General Plan and prohibits the development of electric generating facilities with a capacity of 50 megawatts or more in all areas that the City

has determined are subject to coastal and other environmental hazards as a result of SLR. *See* Oxnard City Council Resolution 14.925, Ex. No. 3002, TN# 211847, at 1, Ex. A, 2, 6.

The Coastal Act, other legal authorities, and record establish that Policy SH-3.5 is not an applicable LORS to the Project, because it has not been certified by the CCC and therefore has no binding legal effect on the Project. Relying on a letter from CCC counsel, the City argues to the contrary, claiming that the Policy applies and the Project violates it.[13] *See* FSA Part 1 at 4.7-6 to 4.7-8, 4.7-11. The letter, however, contradicts the clear legal requirements of the Coastal Act, as well as the CCC 30413(d) Report and CCC testimony. Therefore, under California Public Resources Code Section 25523(a), Policy SH-3.5 is not an applicable LORS.

a. The CCC must certify Policy SH-3.5 before it becomes effective in the coastal zone

The City's adoption of Policy SH-3.5 in the General Plan constitutes an amendment to the LCP.[14] The Coastal Act, California Public Resources Code Section 30514(e), provides that an "'amendment of a certified local coastal program' includes, but is not limited to, any action by a local government that authorizes the use of a parcel of land other than a use that is designated in the certified local coastal program as a permitted use of the parcel." The California Attorney General confirmed that an "amendment" to an LCP also includes any action that prohibits the use of a parcel of land that is designated in the LCP as a permitted use of the parcel. 70 Cal. Att'y Gen. Op. No. 220 (Sept. 10, 1987), 1987 WL 247254, at 6.

Section 30514 unambiguously provides that an amendment to a local jurisdiction's LCP does not become effective until the amendment is certified by the CCC. *See* Cal. Pub. Res. Code § 30514(a) ("A certified local coastal program and all local implementing ordinances, regulations, and other actions may be amended by the appropriate local government, ***but no such amendment shall take effect until it has been certified by the [CCC].")*** (emphasis added). In

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[13] CEC staff also reached this conclusion, but staff merely deferred to the legal opinions in the CCC counsel's letter. CEC staff did not make an independent determination as to whether Policy SH-3.5 applied immediately in the coastal zone. CEC Staff-Gutierrez, Tr. Feb. 9, at 229:15 to 229:21, 233:4 to 233:9.

[14] Although the law concerning the fact that the CCC must certify an amendment to the City's LCP for it to become effective in the coastal zone was discussed in Section V.B above, it is set forth here as well for readability purposes.

assessing whether to certify a proposed amendment, the CCC must adhere to specific procedures set forth in Sections 30512 and 30513. *Id*. § 30514(b). Those provisions require that the CCC, after public hearing, decide whether a proposed amendment conforms with specified Coastal Act policies. *Id.* §§ 30512, 30513.

Case law confirms that amendments to land use restrictions within the coastal zone, like Policy SH-3.5, do not apply in the coastal zone without CCC certification. *See, e.g.*, *Headlands Reserve, LLC v. Ctr. for Nat. Lands Mgmt.*, 523 F. Supp. 2d 1113, 1120 & n.2 (C.D. Cal. 2007) ("In order for a new LCP or an amendment to an existing LCP to take effect, the LCP must be certified by the CCC"); *City of Malibu v. Cal. Coastal Comm'n*, 206 Cal. App. 4th 549, 555 (2012) (noting that a local government may "amend its local coastal program, subject to [CCC] certification.").

In 1987, the California Attorney General determined that a city may neither "authorize a use of land in the coastal zone which is not permitted" by a LCP nor "prohibit a use of land in the coastal zone which is permitted" by a LCP. 70 Cal. Att'y Gen. Op. No. 220 (Sept. 10, 1987), 1987 WL 247254, at 1. The Attorney General confirmed that "the effectiveness of . . . an amendment is made to depend upon certification by the [CCC]. This means that a county or city may adopt such an amendment at any time but such amendment does not become effective until it has been certified by the [CCC]." *Id.* at 5. Although California Public Resources Code Section 30005 permits cities or counties to impose further restrictions in the coastal zone than those mandated by the Coastal Act, such restrictions are subject to the requirements of state law, including Section 30514, and must be approved by the CCC to become effective in the coastal zone. *Id.* at 5-6.

Indeed, the City's 2030 General Plan recognizes that CCC certification is necessary for changes to the City's LCP to become effective. *See* 2030 General Plan at 1-5 (declaring that land use designations and policies in the General Plan will not be effective in the coastal zone until certified by the CCC "and are included to indicate the City's intent and direction leading to future CLUP amendments"); *id.* at 3-14 (noting that "land use changes in the coastal zone indicate legislative intent but are not effective until and unless certified by the [CCC]"); *id.* at 3-

39 (stating that a suggested update to Oxnard's LCP should be initiated and implemented only "[a]fter adoption and Coastal Commission certification of an updated Local Coastal Plan").

In light of the clear statutory text and foregoing legal authorities, the CCC 30413(d) Report stated that in July 2016, Policy SH-3.5 became effective only outside of the coastal zone. *See* CCC 30413(d) Report at 8. Because "no proposed LCP amendment has yet been submitted or approved" by the CCC, the CCC found that the Project "remains a conditionally-permitted use of the Coastal Energy Facilities (EC) sub-zone." *Id.* Based on the foregoing, the CEC should rule similarly and disregard Policy SH-3.5 since it is not applicable to the Project.

b. The CCC's counsel letter is inconsistent with the CCC 30413(d) Report and the clear statutory text of the Coastal Act

Despite the clear legal standard described above, the City claims that Policy SH-3.5 applied immediately. *See* Letter from Louise Warren, Deputy Chief Counsel, CCC, to Shawn Pittard, Project Manager, CEC re: City of Oxnard General Plan Amendment PZ 16-620-01 (Nov. 28, 2016), Ex. No. 2005, TN# 214574 ("CCC Counsel Letter"). In making this unsupported argument, the City relies entirely on a letter from CCC counsel.

The CCC Counsel Letter states:

> Although in most circumstances land use changes that affect the coastal zone must be incorporated into LCPs and certified by the Coastal Commission before they may take effect, new Policy SH-3.5 affects development that does not require a coastal development permit because it is under the exclusive permitting jurisdiction of the California Energy Commission. Thus, this portion of the General Plan only affects development that by statute is outside of the permitting jurisdiction of the City and the Coastal Commission, so it need not be incorporated into the LCP to take effect.

CCC Counsel Letter at 2.

Thus, the letter concludes that Policy SH.3-5 takes effect immediately for CEC-jurisdictional projects within the coastal zone, even before certification by the CCC of the policy. The letter, however, contradicts the Coastal Act and CCC 30413(d) Report, while incorrectly describing the legal status of Policy SH-3.5. The CCC Counsel Letter does not transform Policy SH-3.5 into an applicable LORS for at least five reasons, each of which provides an independent and satisfactory basis for the CEC to conclude that Policy SH-3.5 is not an applicable LORS.

First, the CCC Counsel Letter is inconsistent with the Coastal Act and the legal authorities discussed in Section VI.C.1.a. Nothing in the text of the California Public Resources Code identifies the exception mentioned in the letter concerning LCP amendments related to development within the CEC's exclusive jurisdiction. Such an exception would run contrary to the Coastal Act's requirements that LCPs and amendments thereto be subject to public participation and comment. *See* Cal. Pub. Res. Code § 30006 (noting "that the public has the right to fully participate in decisions affecting coastal planning, conservation and development"); *San Mateo Cty. Coastal Landowners Ass'n v. Cty. of San Mateo*, 38 Cal. App. 4th 523 (1995) (stressing the Coastal Act's requirements of "public participation" and "full consultation" with the CCC). Likewise, the exception undercuts the very purpose of Section 30413(d) reports: to ensure that the CCC—the State's expert agency on matters within the coastal zone—provides the CEC with an opinion about the development of energy facilities in the coastal zone. *See* Cal. Pub. Res. Code § 30413(d).

Second, the CCC Counsel Letter does not represent the CCC's formal position on the Project, and in fact, directly contradicts that position. The CCC 30413(d) Report explained that Policy SH-3.5 does not apply to the Project, because the CCC has not certified it. CCC 30413(d) Report at 8. The CCC 30413(d) Report concluded that the Project is consistent with the LCP, subject to certain modifications. Although the CCC Counsel Letter is dated after the CCC 30413(d) Report, the letter does not purport to amend the CCC 30413(d) Report, and the CCC's witness, Joseph Street, confirmed that the letter did not modify the CCC's conclusions. *See* CCC Staff-Street, Tr. Feb. 9, at 331:16 to 332:7, 332:12 to 332:13; *see also* CCC Staff-Warren, Tr. Feb. 1, at 38:19 to 39:10.

In contrast to the CCC Counsel Letter, the CCC 30413(d) Report was unanimously approved by the CCC and constitutes the formal position of the CCC on the Project. The Memorandum of Agreement between the CEC and CCC makes clear that 30413(d) reports are the mechanism by which the CCC reviews a CEC-jurisdictional project and provides relevant

evidence to the CEC.[15] Nothing in the Memorandum of Agreement refers to additional input from the CCC counsel or any CCC Staff member or suggests that such input would supersede the full findings of the CCC. If there is an inconsistency with the CCC 30413(d) Report and other related evidence such as the CCC Counsel Letter, the CCC 30413(d) Report should control, as confirmed by Mr. Street's testimony.

Here, in accordance with the California Public Resources Code, case law, the Attorney General's formal opinion, and the City's statements in its 2030 General Plan summarized above, the CCC 30413(d) Report concludes that Policy SH-3.5 is not part of the certified LCP. The CEC should defer to the CCC 30413(d) Report's conclusion regarding the Project's consistency with the Coastal Act and LCP.

Third, even putting aside the lack of consistency with the Coastal Act and the CCC 30413(d) Report, the CCC Counsel Letter is inconsistent with the Warren-Alquist Act's requirement for the CEC to consider LORS that would apply but for the CEC's preemptive jurisdiction. The purpose of California Public Resources Code Section 25523(d) is to avoid allowing a CEC-jurisdictional project to circumvent compliance with otherwise *applicable* LORS unless the CEC makes specific findings about the basis for the project's *noncompliance*, if any. Related regulations confirm that an *applicable* LORS is one that would regulate a power plant project but for the CEC's exclusive jurisdiction. Specifically, as part of the review of compliance with applicable laws, "each agency ***responsible for enforcing the applicable mandate*** shall assess the adequacy of the applicant's proposed compliance measures to determine whether the facility will comply with ***the mandate***." Cal. Code Regs., tit. 20, § 1744(b) (emphasis added). Indeed, "[i]f the applicant or any responsible agency asserts that ***an applicable mandate cannot be complied with***, the commission staff shall independently verify the non-compliance, and advise the commission of its findings in the hearings." *Id.* § 1744(d). Thus, to be *applicable* within the ambit of the CEC's review, the LORS must be a mandatory

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[15] *Memorandum of Agreement Between the Energy Commission and the Coastal Commission*, Apr. 14, 2005, at 2-6, *available at* http://docketpublic.energy.ca.gov/ PublicDocuments/12-AFC-02C/TN215430_20170118T144855_Memorandum_ of_Agreement_Between_ CA_Energy_ Commission_and_CA_Coa.pdf.

regulation where non-compliance could be enforced by the relevant agency but for the CEC's exclusive jurisdiction.

Here, there is no dispute that the City cannot enforce Policy SH-3.5 within the coastal zone until the CCC certifies it. In other words, Policy SH-3.5 is a *proposed policy* within the coastal zone, and has no legal force and effect until such approval is obtained. Until such time, it is inconsistent with California Public Resources Code Section 25523(d) and its enabling regulations to treat Policy SH-3.5 as an applicable LORS.

Fourth, the CCC Counsel Letter is inconsistent with sound public policy. Section 25523(d) is intended to ensure the CEC does not approve projects inconsistent with LORS that would otherwise apply to the project. It was not intended to force the CEC to engage in a hypothetical review of a proposed policy that is neither mandatory nor enforceable by the local agency.

Here, Policy SH-3.5 is essentially a proposed policy within the coastal zone. At some point, the CCC will accept, reject or possibly modify Policy SH-3.5. If Policy SH-3.5 is rejected or modified before being included in the LCP, such an outcome necessarily will be inconsistent with the current form of Policy SH-3.5. It is not sound public policy for the CEC to speculate about the ultimate form of Policy SH-3.5 in a final decision affecting a wide range of stakeholders.

Fifth, even assuming that a "CEC exclusive jurisdiction" exception to the general rule requiring CCC certification of LCP amendments exists, Policy SH-3.5 would not satisfy it. The CCC Counsel Letter indicates that the policy can "take effect" immediately because "new Policy SH-3.5 affects development that does not require a coastal development permit, because it is under the exclusive permitting jurisdiction of the California Energy Commission." CCC Counsel Letter at 2. In essence, the CCC Counsel Letter suggests that local policies that would only apply to CEC-jurisdictional projects may "take effect" immediately as to the CEC's review. This reading of the Coastal Act and Warren-Alquist Act is not correct for the reasons outlined above, but, in any instance, Policy SH-3.5 would not fit this test because it covers projects outside of the CEC's jurisdiction.

Policy SH-3.5 prohibits three different categories of development in specified parts of the coastal zone:

> (1) the construction of new electricity generation facilities of 50 megawatts or more, (2) modifications, including alteration, replacement, or improvement of equipment that result in a 50 megawatt or more increase in the electric generation capacity of an existing generating facility, and (3) construction of any facility subject to the California Energy Commission's jurisdiction under Public Resources Code 25500.

Oxnard City Council Resolution 14.925, Ex. No. 3002, TN# 211847, at Ex. A, 6.

The first two categories apply to ***all*** electricity generation facilities of 50 megawatts or more, regardless of whether the facilities constitute a thermal power plant under the CEC's exclusive jurisdiction. Cal. Pub. Res. Code § 21120; *see id.* §§ 25110, 25500. There are various other generation sources that could affect coastal resources and land use that would fall under Policy SH-3.5, such as tidal, wind and solar facilities, which are outside of the CEC's exclusive jurisdiction. *Id.* § 21120. Therefore, contrary to the CCC Counsel Letter and the City's position, Policy SH-3.5 ***would require*** coastal development permits for a number of project categories if it were to "take effect" prior to CCC certification. *See* City of Oxnard-Golden, Tr. Feb. 9, at 319:15 to 319:19 (saying that Policy SH-3.5 applies exclusively to projects within the CEC's jurisdiction). Therefore, Policy SH-3.5 fails to satisfy the purported exception in the CCC Counsel Letter.

In sum, until certified by the CCC, Policy SH-3.5 is inapplicable to the Project. No such certification has occurred. Thus, Policy SH-3.5 is not an applicable LORS.

2. The General Plan and LCP do not include height limitations applicable to the Project

Neither the City's 2030 General Plan nor the LCP impose a height limitation on the Project. The City attempts to craft an *ex post* interpretation of the General Plan to assert that the 2030 General Plan's Height Overlay District (HOD) applies to the Project and that the Project will not comply with the HOD, but this argument is incorrect. Evidence demonstrates that the HOD does not apply to the Project. Moreover, even if the HOD applied to the MGS property, an exception to the HOD would apply.

a. The LCP does not restrict the Project's height, and the HOD does not apply to the MGS property

A plain reading of the City's LCP and 2030 General Plan establish that the Project is not subject to any express height limitation, including the HOD. *See* CEC Staff-Gutierrez, Tr. Feb. 9, at 236:3 to 236:21 (concluding that the Project is not subject to the HOD); FSA Part 1 at 4.7-10. The LCP—the controlling land use document for projects in the coastal zone—does not restrict the Project's height. The LCP provides that the Project is zoned in the "EC, Coastal Energy Facilities, sub-zone." *See* Oxnard Mun. Code § 17-20; Oxnard CLUP, Map No. 2, at II-7. Unlike ordinances pertaining to other sub-zones located in the coastal zone, the EC sub-zone ordinance, Section 17-20, has no height limitation. Oxnard Mun. Code § 17-20; *see* FSA Part 1 at 4.7-10. *Compare* Oxnard Mun. Code § 17-20, *with id*, §§ 17-10(D), 17-11(C), 17-12(D), 17-13(D), 17-14(D), 17-17(D), 17-18(D), 17-19(C). And although development in the EC sub-zone is subject to standards contained in other portions of the Coastal Zoning Ordinance, including Section 17-5, Article III, Article IV, and Article V, those sections, similarly, do not cap the Project's height. Oxnard Mun. Code § 17-20(C). Only Section 17-5 discusses building height restrictions, doing so generally and mandating that "No building shall be erected . . . to exceed in height the limit established by [the Coastal Zoning Ordinance] for the sub-zone in which such building is located." *Id.* § 17-5(A). But, as stated, the EC sub-zone ordinance does not contain a height limitation, so the Project does not "exceed in height the limit established" for it in the Coastal Zoning Ordinance. Oxnard Mun. Code § 17-5(A); FSA Part 1 at 4.7-10.

The LCP establishes that the HOD does not apply in the coastal zone or to the MGS property for several reasons. *See* CEC Staff-Gutierrez, Tr. Feb. 9, at 236:4 to 236:10; Applicant's Opening Test. – Murphy Decl. at 3. *First*, the HOD is a General Plan policy, but the CCC has not certified the HOD for inclusion in the City's LCP. Oxnard Mun. Code § 16-1; Applicant's Opening Test. – Murphy Decl. at 2; 2030 General Plan at 1-5, 3-14, 3-39; *see* CEC Staff-Gutierrez, Tr. Feb. 9, at 236:11 to 236:16; FSA Part 1 at 4.7-10; Section VI.C.1.a *supra*. *Second*, the HOD runs counter to the City's intentional decision not to provide a universal height restriction, or any height restriction for that matter, in Section 17-20 governing the EC sub-zone.

Oxnard Mun. Code § 17-5(A); FSA Part 1 at 4.7-10. *Finally*, the City chose to use the coastal development permit process to evaluate development in the EC sub-zone on a case-by-case basis, attaching conditions such as height limitations, when necessary to guarantee that the proposed development satisfies coastal zone policies. *See* Oxnard Mun. Code § 17-57(B)(5), (C)(5). The HOD is inconsistent with this case-by-case approach. And as evidenced by the express height restrictions applicable in other subzones within the Coastal Zoning Ordinance, the City understood how to place height limitations on development in a given subzone. *Compare* Oxnard Mun. Code § 17-20, *with id.* §§ 17-10(D), 17-11(C), 17-12(D), 17-13(D), 17-14(D), 17-17(D), 17-18(D), 17-19(C). The City chose *not* to impose a height limit on the EC sub-zone, and it may not now, *ex post*, manufacture a restriction where none exists in the plain text of the LCP or General Plan.

The City's conclusion that the HOD applies to the coastal zone is untenable. City of Oxnard-Golden, Tr. Feb. 9, at 271:8 to 271:18; Golden Opening Test. at 6-7; City of Oxnard Memo for the P3 AFC, TN# 214071, at 1-2 ("Chris Williamson Letter"). The City argues that, although the HOD is not mentioned in the LCP, the HOD nonetheless applies in the coastal zone because it does not conflict with the LCP and is a policy of "general applicability." *See* City of Oxnard-Golden, Tr. Feb. 9, at 269:19 to 270:2, 271:8 to 271:18; Chris Williamson Letter at 1-2. This argument is flawed because the HOD conflicts with the City's LCP and is not a policy of general applicability.

First, the HOD conflicts with the LCP, and in such circumstances, the LCP controls. Section 17-5(M) of the Coastal Zoning Ordinance addresses conflicts between the City's CLUP, which is part of the City's LCP, and General Plan. That Section is unequivocal:

> An application approved by any reviewing body must be found to be consistent with the objectives, policies, general land uses and programs of the city general plan and the coastal plan. ***If there are any conflicts*** between the provisions or land use designations of the [CLUP] and the general plan, ***the [CLUP] shall prevail***.

Oxnard Mun. Code § 17-5(M) (emphasis added). The City defines a conflict as a situation where it cannot apply two competing policies concurrently. City of Oxnard-Golden, Tr. Feb. 9, at 271:25 to 272:2. Relying on that definition here, it is impossible to apply the General Plan's

six-story height limitation of the HOD simultaneously with the City's policy from the CLUP and Section 17-20 of the Coastal Zoning Ordinance that no universal height limitation applies in the EC sub-zone. CEC Staff-Gutierrez, Tr. Feb. 9, at 236:11 to 236:16 (calling the HOD a "general plan height restriction"). Applying Section 17-5(M), therefore, the LCP policy from the CLUP and Coastal Zoning Ordinance Section 17-20 applies, not the HOD.

Both Ms. Golden and Dr. Williamson acknowledge Section 17-5(M). Golden Opening Test. at 6-7; Chris Williamson Letter at 1-2. Yet Ms. Golden's testimony contradicts Section 17-5(M), stating that "[t]he City interprets a conflict in policies to mean that it is not possible to apply both policies, in which case it applies the stricter of the two policies." Golden Opening Test. at 6-7; *see also* City of Oxnard-Golden, Tr. Feb. 9, at 271:19 to 271:24. This is not correct and is not supported by the Oxnard Municipal Code. Per the text of Section 17-5(M), the LCP governs when such a conflict arises, not "the stricter of the two policies." Again, the City's witnesses may not circumvent the plain text of the General Plan through an *ex post* interpretation that attempts to create ambiguity where none exists.

At the February 2017 hearing, Ms. Golden attempted to bypass Section 17-5(M), claiming that the HOD applied to the Project due to the operation of Section 17-5(K)(1). City of Oxnard-Golden, Tr. Feb. 9, at 285:19 to 285:25. That provision cannot apply here, however, because it governs when there is a conflict between the LCP and Chapter 16 of the Oxnard Municipal Code. Oxnard Mun. Code § 17-5(K)(1) ("Where conflicts occur between the [Coastal Zoning Ordinance], [CLUP], the coastal act," and Chapter 16 of the City's Municipal Code, then the more restrictive provision shall apply.") Here, there is no conflict between the LCP on the one hand, and Chapter 16 on the other, because the HOD is part of the General Plan, not Chapter 16. This argument is a non-starter.

Likewise, the City's reliance on Table 3.2 in the 2030 General Plan as evidence that the HOD applies to the Project lacks merit and would amount to a circumvention of the plain text of the General Plan. Table 3.2, entitled "General Plan/Zoning Consistency," lists whether the HOD applies to "General Plan Land Use Designation[s] (***non-Coastal Zone***)." 2030 General Plan at 3-18 to 3-19 (emphasis added). The reference to "non-Coastal Zone" is unambiguous. CEC

Staff-Gutierrez, Tr. Feb. 9, at 236:14 to 236:16; 2030 General Plan at 3-18 to 3-19; FSA Part 1 at 4.7-10. Yet, Ms. Golden disregards the "non-Coastal Zone" parenthetical, claiming that it was an "error." City of Oxnard-Golden, Tr. Feb. 9, at 295:9 to 296:6. No support or basis for this alleged error is provided, and neither Table 3.2 nor the surrounding text indicate that the HOD applies in the coastal zone. CEC Staff-Gutierrez, Tr. Feb. 9, at 236:3 to 236:21; FSA Part 1 at 4.7-10. Ms. Golden's interpretation contradicts basic axioms of statutory interpretation which require giving meaning and import to the plain text of the statute. Further, the subheading above Table 3.2 discusses Chapter 16 of the Oxnard Municipal Code, the non-coastal zone ordinance, not Chapter 17, the Coastal Zoning Ordinance.

In sum, a plain reading of the General Plan confirms that the HOD does not apply to the coastal zone or the MGS property. *See, e.g., DiCampli-Mintz v. Cty. of Santa Clara*, 55 Cal. 4th 983, 992 (2012) (when a statute is "clear and unambiguous," its plain text interpretation must be applied).

Second, the HOD is not a policy of "general applicability." The HOD is not universally applicable to all development but instead applies only to development in specified land use designations. *See, e.g.*, 2030 General Plan at 3-4, 3-17 to 3-18 (the HOD "may modify the underlying designation," not all designations); Oxnard Mun. Code Sections 16-125, 16-137, 16-196, 16-231, 17-10(D), 17-14(D), 17-17(D), 17-18(D), 17-19(C).

That none of the City's height restrictions, including those in the Coastal Zoning Ordinance, apply universally to all development offers further support for the conclusion that the HOD is not a policy of general applicability. Coastal Zoning Ordinance Section 17-51, entitled "General Standards," states that the Section's purpose "is to provide general standards relating to fencing, building heights, zone walls, on-site lighting, architectural features and similar provisions which generally apply to all development within the coastal zone." Oxnard Mun. Code § 17-51(A). Section 17-51 then says that "[e]xcept as otherwise provided in this chapter, the general standards of chapter 16[, the City's Zoning Code for non-coastal zone development,] shall apply to development in the coastal zone." *Id.* § 17-51(B). The HOD is *not* in Chapter 16; rather, it is in the General Plan. The generally applicable standard for building height in

Chapter 16, Section 16-303, does not contain height limitations that apply to all zones. Instead, Section 16-303 merely states the general rule that no building shall exceed prescribed height limits and sets forth several exceptions to that rule. Height restrictions applicable to specific land use designations are located in the corresponding ordinances pertaining to each designation, not in a general provision. *See, e.g., id.* § 16-247, 17-19(C). The HOD is not a policy of general applicability. *See* CEC Staff-Gutierrez, Tr. Feb. 9, at 236:3 to 236: 21. Thus, the HOD does not apply to the Project, and the Project may exceed six stories without the City's approval, since the LCP and General Plan do not contain height restrictions for the EC sub-zone. FSA Part 1 at 4.7-10.

b. Even if the HOD applied to the MGS property, the Project complies with the HOD

Even if the HOD applied to the MGS property—which it does not—the Project complies with the HOD. Section 16-10(21) of the Oxnard Municipal Code defines "Building Height" as the "[t]otal height of a building measured from the average finished grade at the base of the building to the highest point of the building." According to the City, the HOD's six-story height limit equals 72 feet in the case of the Project, and the Project's "Building Height" of 188 feet (from the ground to the top of the Project's stack) exceeds that threshold. City of Oxnard-Golden, Tr. Feb. 9, at 271:17 to 271:18; Chris Williamson Letter at 2. Because of the height of the stack, Dr. Williamson claims that NRG must obtain permission from the Oxnard City Council to continue with the Project. Chris Williamson Letter at 2; 2030 General Plan at 3-18.

The City and Dr. Williamson ignore that the Oxnard Municipal Code provides several exceptions to prescribed height limitations, and the Project satisfies one such exception. Article IV of Chapter 16 of the Code contains "Standards for All Zones." Section 16-303 of Article IV provides:

> Top Structures and freestanding structures – Penthouses or roof structures for the housing of elevators, stairways, tanks, ventilating fans, or similar equipment required to operate and maintain the building, and fire or parapet walls, skylights, *towers, flagpoles, chimneys, smokestacks, or similar structures* related to buildings and uses in commercial and industrial zones may be erected above the height limits prescribed in this code, but no . . . roof structure, or any space above the height limit shall be allowed for the purpose of providing additional floor space (emphasis added).

Project components in excess of 72 feet are the stack, selective catalytic reduction enclosure, and combustion turbine generator enclosure. AFC – Project Description at 2-52, Table 2.8-1. But because these structures (i) constitute "roof structures for the housing of . . . equipment required to operate and maintain [the Project]" or "towers, flagpoles, chimneys, smokestacks, or similar structures related to buildings and uses in . . . industrial zones," (ii) are necessary to the Project's industrial uses, and (iii) are not being used "for the purpose of providing additional floor space," the Project satisfies the exception quoted above. Oxnard Mun. Code § 16-303. Thus, even if the HOD is found to apply, the CEC can determine that the Project does not violate the HOD and complies with applicable height limitations based on the exception in Section 16-303.

D. The Project Complies with all other Applicable Land Use LORS

The evidence demonstrates that the Project does not violate any other applicable LORS. In the FSA, CEC Staff identified the land use LORS applicable to the Project, which include: General Plan policies, California Public Resources Code Section 25529 (the "Warren-Alquist Act"); Chapter 3 of the Coastal Act; policies in the City's LCP; and the Ventura County ACLUP. FSA Part 1 at 4.7-2 to 4.7-3. Most of these LORS were addressed in V.E above, and as discussed below, the Project is consistent with other relevant General Plan policies, including policies related to community development, infrastructure and community services, and environmental resources. *See id.* at 4.7-9 to 4.7-11.

1. The Project is consistent with community development General Plan policies

The Project is consistent with all applicable community development General Plan policies identified in the FSA: CD-16.5, CD-5.1, CD-5.2, and CD-5.3.

Policy CD-16.5 requires "high quality development standards that increase the efficient use of existing industrial and commercial development areas so as to preserve agricultural land and minimize adverse environmental impacts." FSA Part 1 at 4.7-9; 2030 General Plan at 3-35. Here, the Project will be located within the boundaries of the existing MGS facility and will rely on already available services (*e.g.*, potable water, natural gas, sanitary system, electrical

transmission facilities, etc.) to provide energy to support existing and future residents and businesses. FSA Part 1 at 3-8 to 3-9, 4.7-9; *see* CEC Staff-Gutierrez, Tr. Feb. 9, at 231:20 to 231:23. Therefore, the Project will increase the efficient use of the existing industrial development area and will not impact agricultural land. CEC Staff-Gutierrez, Tr. Feb. 9, at 232:7 to 232:13. Further, the Project will not require the use of ocean water for cooling like MGS Units 1 and 2, allowing the Project to minimize environmental impacts. Accordingly, the Project complies with Policy CD-16.5.

The FSA also considered Policies CD-5.1, CD-5.2, and CD-5.3. Policy CD-5.1 "[e]ncourage[s] the clustering of industrial uses into areas that have common needs and are compatible in order to maximize their efficiency." 2030 General Plan at 3-24. Policy CD-5.2 "[e]nsure[s] adequate separation between sensitive land uses (residential, educational, open space, healthcare) to minimize land use incompatibility associated with noise, odors, and air pollutant emissions." *Id.* Policy CD-5.3 "[e]ncourage[s] industrial activities to locate where municipal services are available including adequate storm drainage and water facilities, as well as easy access to multiple modes of transportation." *Id.* at 3-25; FSA Part 1 at 4.7-9. The Project will be consistent with these policies, because the Project is located on an existing industrial site that will not require new offsite linear facilities and will not adversely impact adjacent land uses. *See* FSA Part 1 at 4.7-9; Applicant's Opening Test. – Love Decl. at 3.

2. The Project is consistent with General Plan policies related to infrastructure and community services and environmental resources

The Oxnard General Plan includes two policies related to infrastructure, community services, and environmental resources. The Project is consistent with each of them.

Policy ICS-17.1 directs the City to ensure that "electric generation and/or transmission facilities are built in accordance with the California Coastal Commission Sea Level Rise Policy Guidance, California Public Utilities Commission and/or [CEC] policies and regulations and incorporate feasible solar, wind, and other renewable sources of energy." FSA Part 1 at 4.7-10; 2030 General Plan at 4-20. This goal is intended to ensure that the City provides adequate and efficient public utilities (including electric facilities) that meet the needs of the residents of

Oxnard. *See, e.g.*, FSA Part 1 at 4.2-77. The Project will provide a new, more efficient source of energy generation within the City, and will enhance electrical reliability. *See* Section VII.A *infra*. Therefore, the Project advances the goals of Policy ICS-17.1.

Policy ER-2.3 directs the City to preserve public access to "areas particularly suited for open space/recreational uses." FSA Part 1 at 4.7-11; 2030 General Plan at 5-4. Following the CCC's recommendation, NRG revised the Project and agreed to remove the existing MGS ocean outfall structure, restore the beach parcel fronting the facility, and reconfigure wastewater and storm water systems. *See* Project Enhancement at 1-1 to 1-2. By implementing this project enhancement, the Project will "restore, enhance, and provide additional public access in an area suited for open space/recreational uses consistent with this policy." FSA Part 1 at 4.7-11; CEC Staff-Knight, Tr. Feb. 9, at 219:14 to 219:20, 239:6 to 239:11; CEC Staff-Gutierrez, Tr. Feb. 9, at 231:24 to 232:13, 239:24 to 240:2, 250:3 to 250:5; Applicant's Opening Test. – Murphy Decl. at 3. Therefore, the Project complies with all applicable General Plan policies concerning infrastructure and community services and environmental resources.

VII. PUBLIC BENEFITS

A. Public Resources Code Section 25523(h)

The California Public Resources Code mandates that the CEC's decision include a "discussion of any public benefits from the project, including, but not limited to, economic benefits, environmental benefits, and electricity reliability benefits." Cal. Pub. Res. Code § 25523(h). The record shows that the Project offers several substantial economic, environmental, and electricity reliability benefits.

The Project will have tangible and quantifiable positive impacts on the local and regional economy. Over its 21-month construction timeframe, the Project will create jobs for an average and peak workforce of 48 and 90 individuals, respectively, with a $16 million payroll. FSA Part 1 at 4.10-25; AFC Section 4.10, Socioeconomics, Ex. No. 1016, TN# 204219-17, at 4.10-7 to 4.10-8 ("AFC – Socioeconomics"). Many of these funds will be spent regionally because most of the construction workforce will reside in Ventura and Los Angeles counties and because approximately $64.6 million in local expenditures (needed to acquire construction materials and

supplies) will be spent within the region. FSA Part 1 at 4.10-25; AFC – Socioeconomics at 4.10-8. The Project, moreover, will increase area tax revenues substantially. It is estimated that the City of Oxnard and Ventura County will receive over $1 million, while Los Angeles County will receive over $3 million, in sales taxes from local construction expenditures, and annual property taxes for the MGS property are expected to increase approximately $2.8 million. FSA Part 1 at 4.10-25 to 4.10-26.

The Project will rely on existing infrastructure and available services, Section V.E *supra*; "[s]ubstantially reduce" visual contrast, FSA Part 1, 4.7-11; and restore and enhance the beach fronting the MGS property, resulting in increased public access to an area suited for open space and recreational uses and improved visual conditions on the beach. Section V.E *supra*; FSA Part 1 at 4.10. Unlike the existing MGS Units 1 and 2, the Project will not discharge wastewater or excess storm water directly into the ocean; rather, it will dispose of these waters via the Edison Canal, Applicant's Opening Test. – Connell Decl. at 30; FSA Part 1 at 4.11-19 to 4.11-20, 4.11-29, and therefore permanently remove the ocean outfall structure, thereby eliminating wastewater discharge across the beach. Project Enhancement at 1-2 to 1-3. MGS Units 1 and 2 will be completely demolished to grade, and upon retirement of Puente, Puente's infrastructure and existing infrastructure that Puente will rely upon will also be removed. Applicant-Piantka, Tr. Jul. 26, at 323:22 to 324:3; *see* Project Enhancement and Refinement, Demolition of Mandalay Generating Station Units 1 and 2, Ex. No. 1064, TN# 206698, at 1-1 to 1-2. And since the Project is more efficient than the current units at the MGS facility, it will emit less carbon dioxide per megawatt hour and decrease "overall electricity system [GHG] emissions and fuel use." FSA Part 1 at 3-3, 4.1-2, 4.1-26, 4.1-148; Section V.B *supra*.

Lastly, the Project offers many distinct benefits in regard to electricity reliability. The Project will be used to provide electricity when it is most needed, during peak demand periods. *See* FSA Part 1 at 4.1-142. The Project helps prevent voltage collapse by maintaining reliable electric service and meeting the Moorpark sub-area's Local Capacity Requirements (LCR) need. Applicant-Beatty/Theaker, Tr. Feb. 8, at 9:23 to 13:2; Applicant's Rebuttal Testimony, Ex. No. 1121, TN# 215553, Joint Expert Declaration of Mr. Brian Theaker and Sean Beatty, at 3-5 &

n.14 ("Applicant's Rebuttal Test. – Theaker & Beatty Rebuttal Decl."). Without the Project, the Moorpark sub-area has inadequate quantities of in-area generation to avoid possible blackouts stemming from the loss of the Moorpark-Pardee 230 kV lines. Applicant-Beatty/Theaker, Tr. Feb. 8, at 18:2 to 18:10, 19:11 to 19:19; Applicant's Rebuttal Test. – Theaker & Beatty Rebuttal Decl. at 6-7, 9-10. In addition to satisfying the Moorpark sub-area's LCR need, the Project facilitate[s] the integration of variable renewable energy resources" because "[n]atural gas-fired generation is one of the few technologies that can provide significant quantities of new, cost-effective dispatchable capacity to meet ramping needs caused by high penetration of variable energy resources." FSA Part 1 at 4.1-143, 4.1-156.

B. Public Resources Code Section 25529

California Public Resources Code Section 25529 requires that the CEC establish an area of public use for projects located in the coastal zone. Section 22529 also requires that the CEC require that any facility to be located along the coast or shoreline of any major body of water be set back from the shoreline to permit reasonable public use and to protect scenic and aesthetic values. The Project complies with these requirements. As discussed in Sections V.D and V.E.1, the Project will be set back a considerable distance from the shoreline, and will restore and enhance the beach fronting the MGS property, resulting in increased public access to an area suited for open space and recreational uses and improved visual conditions on the beach.

VIII. AN OVERRIDE IS UNNECESSARY BECAUSE THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT ENVIRONMENTAL IMPACTS AND COMPLIES WITH ALL APPLICABLE LORS

An override is unnecessary in this case, because the Project complies with all LORS and will not result in a significant environmental impact after mitigation. In the event the CEC finds to the contrary, however, the record establishes that an override may be granted in this case as the Project is required for public convenience and necessity and is the only prudent and feasible means of achieving such public convenience and necessity. *See* Cal. Pub. Res. Code § 25525. To the extent necessary, Applicant reserves briefing on this topic until the September 29 brief regarding the CAISO Special Study.

IX. CONCLUSION

With respect to the issues addressed herein, the evidence in the record of these proceedings demonstrates that the Project as proposed satisfies all applicable requirements, and that the CEC can make all of the findings necessary to certify the Project. The Project will not result in significant adverse environmental impacts, and will comply with all applicable LORS, including those specific to projects located in the coastal zone. Applicant looks forward to addressing the issues that remain open in these proceedings pertaining to the recently completed CAISO study and related matters

DATED: September 1, 2017

Respectfully submitted,

/s/ Michael J. Carroll

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Attachment A

Puente Power Project (15-AFC-01)
Applicant's Proposed Changes to BIO Conditions of Certification

Note: proposed changes are shown as **bold double underlined text**, deletions are shown as ~~strikeout~~.

Applicant previously proposed a change to proposed Condition of Certification BIO-7, with which CEC Staff agreed. For the sake of completeness, Applicant has included those changes herein.

BIO-7 The project owner shall implement the following measures during site mobilization, construction, operation, and closure to manage their project site and related facilities in a manner to avoid or minimize impacts to special status biological resources, including offsite environmentally sensitive habitat areas (**McGrath Lake ESHA and coastal dune ESHA that supports western snowy plover and California least tern breeding** ~~ESHA as defined by the City of Oxnard local coastal plan~~):

1. The boundaries of all areas to be temporarily or permanently disturbed (including staging areas, access roads, and sites for temporary placement of spoils) shall be delineated with stakes and flagging prior to construction activities in consultation with the Designated Biologist. Spoils shall be stockpiled in disturbed areas, which do not provide habitat for special-status species. Parking areas, staging and disposal site locations shall similarly be located in areas without native vegetation or special-status species habitat.

All disturbances, vehicles, and equipment shall be confined to the flagged areas.

2. At the end of each work day, the Designated Biologist, Biological Monitor, and/or site personnel shall ensure that all potential wildlife pitfalls (trenches, bores, and other excavations) have been backfilled. If site personnel are inspecting trenches, bores, and other excavations and wildlife is trapped, they will immediately notify the Designated Biologist and/or Biological Monitor. If backfilling is not feasible, all trenches, bores, and other excavations shall be sloped at a 3:1 ratio at the ends to provide wildlife escape ramps, or covered completely to prevent wildlife access.

Should wildlife become trapped, the Designated Biologist or Biological Monitor shall remove and relocate the individual to a safe location. Any wildlife encountered during the course of construction shall be allowed to leave the construction area unharmed.

3. Transmission lines and all electrical components shall be designed, installed, and maintained in accordance with the Avian Power Line Interaction Committee's (APLIC) Suggested Practices for Avian Protection on Power Lines (APLIC 2006) and

Reducing Avian Collisions with Power Lines (APLIC 2012) to reduce the likelihood of large bird electrocutions and collisions.

4. Soil bonding and weighting agents used on unpaved surfaces shall be nontoxic to wildlife and plants.

5. Water applied to dirt roads and construction areas (trenches or spoil piles) for dust abatement shall use the minimal amount needed to meet safety and air quality standards in an effort to prevent the formation of puddles, which could attract California least tern predators to construction sites. During construction, site personnel shall patrol these areas to ensure water does not puddle and attract crows and other wildlife to the site, and shall take appropriate action to reduce water application rates where necessary.

6. Report all inadvertent deaths of special-status species to the appropriate project representative, including road kill. Species name, physical characteristics of the animal (sex, age class, length, weight), and other pertinent information shall be noted and reported in the MCRs. For special-status species, the Designated Biologist or Biological Monitor shall contact CDFW and USFWS within 1 working day of receipt of the carcass for guidance on disposal or storage of the carcass. Injured animals shall be reported to CDFW and/or USFWS and the CPM, and the project owner shall follow instructions that are provided by CDFW or USFWS. During construction, injured or dead animals detected by personnel in the project area shall be reported immediately to a Biological Monitor or Designated Biologist, who shall remove the carcass or injured animal promptly. During operations, the Project Environmental Compliance Monitor shall be notified.

7. All vehicles and equipment shall be maintained in proper working condition to minimize the potential for spills of motor oil, antifreeze, hydraulic fluid, grease, or other hazardous materials or wastes. The Designated Biologist shall be informed immediately of any spills of hazardous materials or wastes. Servicing of construction equipment shall take place only at a designated area. During construction all trash and food-related waste shall be placed in containers with lids and removed weekly or more frequently from the site. Workers shall not feed wildlife, or bring pets to the project site.

8. Except for law enforcement personnel, no workers or visitors to the site shall bring firearms or weapons.

9. Standard best management practices (BMPs) from the project Storm Water Pollution Prevention Plan shall be implemented during all phases of the project (construction, demolition, operation, and decommissioning) where storm water run-off from the site could enter adjacent marshes or channels. Sediment and other flow-

restricting materials shall be moved to a location where they shall not be washed back into the jurisdictional waters. All disturbed soils within the project site shall be stabilized to reduce erosion potential, both during and following construction.

10. The project owner shall implement the following measures during construction and operation to prevent the spread and propagation of nonnative, invasive weeds:

Limit the size of any vegetation and/or ground disturbance to the absolute minimum and limit ingress and egress to defined routes; Use only weed-free straw, hay bales, and seed for erosion control and sediment barrier installations. Invasive non-native species shall not be used in landscaping plans and erosion control. Monitor and rapidly implement control measures to ensure early detection and eradication of weed invasions.

The project owner shall ensure that the northern boundary of the project site remains free of ice plant mats and other invasive weed species. The remainder of the site shall be kept weed-free to the extent possible.

11. During construction and operation, the project owner shall conduct pesticide management in accordance with standard BMPs. The BMPs shall include non-point source pollution control measures. The project owner shall use a licensed herbicide applicator and obtain recommendations for herbicide use from a licensed Pest Control Advisor.

Herbicide applications must follow EPA label instructions. Minimize use of rodenticides and herbicides in the project area and prohibit the use of chemicals and pesticides known to cause harm to non-target plants and wildlife. The project owner shall only use pesticides for which a “no effect” determination has been issued by the EPA’s Endangered Species Protection Program for any species likely to occur within the project area or adjacent wetlands. If rodent control must be conducted, zinc phosphide or an equivalent product shall be used.

12. The project owner shall install silt fencing along the northern and southern perimeter of the project site. Silt fencing shall be inspected weekly or after significant rain events by the Designated Biologist or Biological Monitor, and shall be maintained in good condition, with no holes or gaps. If sedimentation occurs along the fence due to normal sand movement processes, the silt fencing may be removed, with permission from the CPM.

13. Construction activities will maintain a 100-feet buffer from **the McGrath Lake ESHA and coastal dune ESHA that supports western snowy plover and California least tern breeding** ~~all ESHA~~.

Verification: All general impact avoidance and minimization measures shall be included in the BRMIMP and implemented. Implementation of the measures shall be reported by the Designated Biologist in the MCRs. Within 30 days after completion of project construction, the project owner shall provide to the CPM, for review and approval, a written construction termination report identifying how measures have been completed.

Applicant proposed changes to BIO-9, which included changing the CEC Staff's proposed mitigation ratio from 4:1 to 2:1 due to the degraded quality of the so-called 2.03 acre wetlands on the P3 site. TN # 215352, at page 5. While Applicant still does not agree with the characterization of the so-call wetland, Applicant is willing to agree to the 4:1 mitigation measure, which is consistent with the recommendation by CCC.

Applicant proposed other changes to BIO-9, some of which were accepted by CEC Staff while others were not. TN # 215352, at pages 5-8. TN #215571 at pages 6-8. Applicant does not agree with CEC Staff's rejection of a financial cap on the mitigation; applicant proposed a $500,000 mitigation cap. CEC Staff did adopt the change to allow the use of a mitigation bank. Also there are some changes that need to be incorporated since the Project does not intend to acquire land (i.e., references to "land owner" should be deleted). Applicant's proposed edits to BIO-9 are shown below.

WETLAND IMPACT MITIGATION PLAN

BIO-9 The project owner shall fully mitigate for permanent impacts to on-site wetlands at a 4:1 ratio **which is intended to be accomplished by the** ~~The~~ project owner ~~shall provide~~ **providing** funds **up to $500,000** to acquire mitigation land at an existing, or soon to be established, salt marsh, palustrine or estuary habitat restoration project or mitigation bank, or help fund an established, **or soon to be established salt marsh,** palustrine or estuary habitat restoration project or mitigation bank as close to the site of impact as possible to fully mitigate impacts to Coastal Commission wetlands.

Mitigation shall occur using an established wetland restoration program or mitigation bank, with preference given to programs within the same watershed as the project (Santa Clara-Calleguas), or any other wetland restoration program approved by the CPM. The project owner shall provide the CPM a Wetland Compensation Plan (Plan). The Plan shall include:

a) Available information from ~~the land owner or~~ wetland program restoration ~~program~~ manager pertaining to existing physical, biological and hydrological conditions at the mitigation sites(s), including vegetation present, hydrologic

regime of the site(s), known or expected fauna at the site(s), including any known or expected listed sensitive species, known or suspected contaminants that may be present at the site(s), and an analysis of existing ecological functions and values at the sites(s). The **wetland program restoration manager** ~~review~~ shall also identify any known site constraints that may limit successful creation or restoration efforts.

~~b) A description of legal interests at the mitigation sites(s), and any landowner approval that the project owner may need to use the proposed site(s) for wetland creation or restoration.~~

c) Proposed goals **and** objectives ~~and performance criteria~~ for the proposed mitigation site(s) that identify specific creation or restoration measures to be implemented, including proposed habitat types to be created or restored, grading and planting plans, the timing of the mitigation measures, and monitoring that will be implemented to establish baseline conditions and to determine whether the sites are **successfully established** ~~meeting performance criteria~~. ~~Monitoring shall be for at least 5 years and final monitoring for success shall take place after at least 3 years with no remediation or maintenance other than weeding.~~ The plan shall also identify contingency measures that the ~~project owner~~ **restoration program manager** will implement should any of the mitigation sites not ~~meet~~ **become successfully established** ~~performance criteria~~.

~~These goals, objectives, and performance criteria shall include:~~

~~I. Creation or restoration of habitat types that will support wetland dependent species.~~

~~II. Created or restored areas shall be provided a buffer of a size adequate to ensure protection of wetland functions and values, and at least 100 feet wide, as measured from the nearest upland edge of the transition area.~~

~~The plan may propose a lesser buffer width if the mitigation area is sited within existing wetland areas that are protected by a buffer meeting these criteria.~~

~~III. Measures to be implemented if soil or groundwater contamination is found at the site(s).~~

~~IV. A planting program that includes initial and ongoing removal of invasive or non-native species and identifies the vegetation species to be planted, local sources of those plants or seeds, measures needed to protect any existing native wetland vegetation species, timing of planting, plans for irrigation if needed to establish plants, and locations of plants. The plan shall also identify soil sources and amendments to be used.~~

~~V. Formal sampling design to assess performance criteria and shall identify the means by which success will be assessed. Where statistical tests are used, the plan shall include a requirement for a statistical power analysis to demonstrate that there will be sufficient replication to enable a robust test with beta equal to alpha.~~

~~VI. Topographic drawings for the final mitigation site(s) and construction drawings, schedules, and a description of equipment to be used in the project.~~

~~VII. "As-built" plans and annual monitoring reports for no less than five years or until the sites meet performance criteria.~~

~~VIII. Identify legal mechanism(s) proposed to ensure permanent protection of the mitigation site(s) – e.g., conservation easements, deed restrictions, or other methods.~~

Verification: At least 90 days prior to the start of project construction, the project owner shall submit to the CPM for approval the wetland restoration program or mitigation bank the project owner wishes to participate in. At least 60 days prior to the start of project construction, the project owner shall provide funding to support an existing, or soon to be established, salt marsh palustrine or estuary habitat restoration project or mitigation bank. At least 90 days prior to the start of project construction, the project owner shall submit to the CPM a Restoration Management Plan or similar plan (used by ~~the land manager,~~ or to be used by the ~~land manager or~~ restoration program manager) that discusses the details of the wetland restoration program or mitigation bank.

No less than 30 days prior to the start of project construction, the project owner shall provide a written verification to the CPM that the funding has been paid in full to the **restoration program manager** ~~land manager~~ or mitigation bank approved by the CPM. The project owner shall provide evidence that payment from the funding can be used only to assist in coastal wetland restoration to mitigate the project's effects for the loss of Coastal Commission wetlands.

Thereafter, within 30 days after each anniversary date of the commencement of project operation, the project owner shall **request** ~~obtain~~ an annual report from the ~~land manager or restoration~~ program manager administering the restoration program(s) or mitigation bank. The annual reports will document how payments from the endowment required hereunder were used and applied to provide wetland habitat restoration/enhancement at approved ~~locations and shall describe how implementation of the mitigation conformed to the above goals, objectives, and performance criteria~~. The project owner shall provide copies of such reports to the CPM within 30 days of receipt. This verification shall be provided annually **for a period of 10 years** following implementation ~~for the operating life~~ of the restoration program ~~or the project, whichever is sooner~~.

~~If after five years, the restoration has not achieved the success criteria, the project owner shall submit within 90 days (of the fifth year anniversary) a revised or supplemental plan to~~

~~compensate for those portions of the original plan which did not meet the approved success criteria.~~

CEC Staff revised BIO-10 that was presented in the FSA to include the development of a Translocation Plan for special-status species. Applicant's proposed changes to BIO-10 as proposed in TN # 220168 are provided below.

OUTFALL REMOVAL IMPACTS AVOIDANCE PLAN

BIO-10 Prior to initiation of outfall removal activities or any associated ground-disturbing activities, the project owner shall prepare an Outfall Removal Impacts Avoidance Plan. The Plan shall be developed in consultation with the Designated Biologist; and at a minimum, the plan shall detail the following avoidance and minimization measures, and contain a Special-Status Species Translocation Plan:

1. Pre-construction surveys for special-status plants shall be conducted in all impact areas and within 500 feet of said areas. If special-status species are found onsite or within 500 feet of the site, all individuals of these species shall be avoided **or relocated**.

2. Pre-construction surveys for special-status wildlife shall be conducted in all impact areas and within 500 feet of said areas. If special-status species are found onsite or within **publically accessible** areas within 500 feet of the site, all individuals of these species shall be avoided or relocated (BIO-10 #8A and #8B).

3. Vegetation in the construction area shall be removed prior to March 1 (the beginning of the bird-nesting season) to avoid conflicts with nesting birds during the nesting season. Pre-construction surveys for nesting birds that are listed (including California least tern and western snowy plover) and all non-listed bird species shall be conducted in all **publically accessible** areas within 500 feet of the perimeter of the project site. ~~Construction during~~ **During** the breeding season (generally March 1 – August 30), **demolition activities associated with the ocean outfall removal will not be conducted** ~~is not allowed~~.

4. During demolition activities, exclusionary fencing shall be installed around the outfall structure demolition area and access road to prevent marine mammals from using the area.

5. Prior to each day, pre-construction/demolition surveys for marine mammals shall be conducted within 500 feet of the outfall structure. If a marine mammal is

sighted within or is about to enter the demolition area, work shall be halted until the animal leaves the area. Alternately, an approved biologist may immediately notify the Channel Islands Marine Resource Institute (the local approved National Marine Fisheries Service) to make every reasonable effort to rescue such an animal.

6. Protective silt fencing shall be erected around patches of sand dune mats, and inspected daily by the Designated Biologist or Biological Monitor, to ensure that no animals are entrapped, and that the fencing is in good repair. Fencing repairs shall occur within 1 business day of detection of damage.

7. Heavy equipment used during the demolition of the outfall structure shall use a soft-start (i.e. ramp-up) technique at the beginning of activities each day, or following an equipment shut-down, to allow any marine mammal that may be in the immediate area to leave before the sound source reaches full energy.

8. Special Status Species Translocation Plan (Translocation Plan)

   The Translocation Plan shall describe in detail the monitoring and detection, animal husbandry techniques, and proposed translocation sites for silvery legless lizard and globose dune beetle and its larvae. Proposed translocation sites shall be subject to a habitat assessment by the Designated Biologist, and described in the Translocation Plan. The Translocation Plan shall require approval by the CPM, in consultation with CDFW.

   A. For the silvery legless lizard, the Translocation Plan shall describe the undertaking of medium-intensity raking surveys, to occur no more than seven days before the onset of any ground disturbing activity at the outfall structure. All suitable habitat within the ocean outfall and associated access road shall be raked **(by hand or by excavator or other method approved by the CPM)** to a depth of **up to** 18 inches. Biological Monitors/Designated Biologist shall accompany each piece of vegetation clearing equipment and will inspect disturbed soils and spoils piles for silvery legless lizards. Captured legless lizards shall be held in sterile containers filled with sand and leaf litter, and held in the shade. Translocation should only take place during suitable weather, as determined in consultation with CDFW, the Designated Biologist, and any other biological experts deemed necessary by the CPM. Captured legless lizards shall be spritzed with fresh water prior to translocation to suitable dune habitat to the immediate north or south of the ocean outfall. The Translocation Plan should include photographs and description of the proposed translocation site.

   GPS coordinates and photographs of the translocation sites shall be recorded, and a Final Report prepared by the Designated Biologist at the conclusion of the

removal of the ocean outfall. The Final Report shall be submitted to the CPM, and at a minimum shall detail detection methodologies used, weather conditions, the number and location of silvery legless lizards removed, data at the translocation site such as GPS coordinates and photographs, any modifications made to the Translocation Plan, and any proposed new methodology or lessons learned during the course of the translocation efforts.

B. For the globose dune beetle, the Translocation Plan shall describe the undertaking of a combination of pitfall traps and pedestrian transect surveys, to occur no more than seven days before the onset of any ground disturbing activity at the outfall structure. Surveys for the globose dune beetle shall be timed to occur before raking for the silvery legless lizard, which would significantly disrupt any potential dune beetle habitat. All suitable habitat at the outfall and associated access road shall be subject to surveys and capture of globose dune beetles. The Translocation Plan shall outline husbandry methods, such as keeping beetles in sterile containers with sand and leaf litter, during identification and translocation efforts. The project owner shall translocate globose dune beetles and unidentified beetles of the Coelus genera to suitable dune habitat immediately north or south of the ocean outfall. A Final Report, including GPS-recorded locations of translocated specimens, will be prepared as per #8A, above.

Verification: The project owner shall submit the Outfall Removal Impacts Avoidance Plan to the CPM for approval at least 30 days prior to the start of ground disturbing activities associated with the outfall removal. All impact avoidance and minimization measures related to the outfall removal and Special-Status Species Translocation Plan shall be included in the BRMIMP and implemented. Implementation of the measures shall be reported on the MCRs by the Designated Biologist. At the conclusion of the demolition of the outfall, the Designated Biologist shall prepare a final report detailing observations of any special status plants or wildlife, a table of common species observed, a description of any adaptive management or mitigation strategies implemented, and a discussion of the efficacy of said measures. The Designated Biologist will also prepare a final report on the Translocation Plan.