

## DOCKETED

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STATE OF CALIFORNIA  
State Energy Resources  
Conservation and Development Commission

In the Matter of:	)	Docket No. 15-AFC-01
	)	
APPLICATION FOR CERTIFICATION	)	
OF THE PUENTE POWER PROJECT	)	

**REBUTTAL TESTIMONY OF LAWRENCE E. HUNT**  
**Exhibit No. 4027**

I, Lawrence E. Hunt, submit the following rebuttal testimony in the above-captioned proceeding. My rebuttal testimony is based on my qualifications and review of the sources identified in my opening testimony, as well the additional sources identified in the footnotes and bibliography of this rebuttal.<sup>1</sup> In addition, I have reviewed the Expert Declaration of Julie Love Regarding Biology<sup>2</sup> in preparing this testimony.

**A. The Project Site Contains Two Wetland Areas: A 2.03-Acre Wetland, and an Approximately 0.52-Acre Dune Swale Wetland**

Ms. Love states on p. 5, Section 6d of her Declaration that she “disagree[s] with the determination made by staff of the California Coastal Commission (CCC), which has been incorporated into the CEC FSA, that a portion of the Project site constitutes a "wetland." Ms. Love does not identify any reasons for her disagreement. I disagree with Ms. Love’s characterization of the Project site as not containing a wetland. As I explained in my opening testimony, the site itself consists of two wetland features: a 2.03-acre on-site wetland, and an approximately 0.52-acre on-site dune swale wetland.<sup>3</sup> These wetland features comprise nearly the entire acreage of the three-acre site.

*(1) A 2.03 Acre Wetland is Located on the Project Site*

Regarding the 2.03-acre wetland feature located on the Project site, the California Coastal Commission (CCC) has stated that, “[t]he [Puente Power Project] would be constructed in an area supporting hydrophytic plant species and thus meeting the definition of a wetland under the Coastal Act and Oxnard LCP. The project as proposed would result in the fill of approximately

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<sup>1</sup>Ex. No. 4017 (TN # 215434), Opening Testimony of Lawrence E. Hunt, [hereinafter, Hunt Testimony].

<sup>2</sup>Tn (# 215441) (hereinafter, “Love Decl.”).

<sup>3</sup>Hunt Testimony, Ex. 4017 at 11-15.

two acres of wetland habitat.”<sup>4</sup> A formal wetland delineation of the project site conducted by the applicant’s consultant concluded that the site did not support wetlands, as defined by the U.S. Army Corps of Engineers because all three wetland indicators (hydric soils, hydrology, and vegetation) are not present.<sup>5</sup> However, the CCC states that, under the definition of a wetland contained in the Coastal Commission’s regulations and the City of Oxnard’s certified LCP, only one of these three indicators need be present for the site to be classified as coastal wetland.<sup>6</sup> The Applicant’s consultant documented the presence of three hydrophytic plant species on the Project site in this wetland feature: pickleweed (*Salicornia pacifica*), woolly seablite (*Suaeda taxifolia*), and slenderleaf iceplant (*Mesembryanthemum nodiflorum*). Because hydrophytic vegetation is undisputedly located on a 2.03-acre feature of the Project site, the 2.03-acre feature constitutes a wetland.

Further, I understand that a wetland may include land that is “covered periodically or permanently by shallow water.”<sup>7</sup> The applicant’s consultant concluded that the wetland feature received hydrologic inputs only from rainfall and states that soils in this feature are compacted due to previous anthropogenic activities. They do not state that the feature pools water during storm events, but the fact that the soils in this feature are compacted and support hydrophytic vegetation, strongly infers that water may cover this feature periodically during and after rain events. Therefore, contrary to Ms. Love’s declaration, the 2.03-acre on-site area that supports these species is a wetland.

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<sup>4</sup> Letter from Allison Dettmer, Deputy Director, California Coastal Commission, to Coastal Commissioners & Interested Persons, re: Addendum for 15-AFC-01 – Commission’s 30413(d) review and report on the NRG Puente Power Project (“P3”) (Sept. 7, 2016) at 2.

<sup>5</sup> Ex. 1008, Puente Power Project Application for Certification, (TN# 204219-9) at 4.2-8.

<sup>6</sup> Ex. 4026, CCC Report at 13.

<sup>7</sup> Cal. Pub Resources Code § 30121.

*(2) The Approximately 0.52-Acre Patch of Dune Swale Located on the Project Site is a Wetland*

My opening testimony explains that the CDFW has determined that the approximately 0.52-acre patch of coyote bush scrub and other areas mapped in the FSA as mule fat scrub is a dune swale wetland.<sup>8</sup> As stated in my opening testimony, I agree with this conclusion by the CDFW that the dune swale present on-site is also a wetland. I reach this conclusion because the CDFW letter references wetland experts who have extensively studied the classification of dune swale wetlands (Ferren, Fiedler, and Leidy, 1995), and because this statement is consistent with my own observations while conducting research in coastal dune environments that the presence of coyote bush scrub and mule-fat scrub in dune environments is strongly associated with either shallow water tables, swales that collect rainwater, or both. Moreover, the FSA for the Project states that depth to groundwater on the Project site is 5-9 feet below ground surface.<sup>9</sup> Deep-rooted phreatophytes, such as coyote bush and mule-fat may be able to tap into the upper portions of the water table at this location. Thus, contrary to Ms. Love's Declaration, the approximately 0.52-acre dune swale located on the Project site is also a wetland.

**B. Rare and Environmentally Sensitive Species Are Likely to Be Present on the Project Site**

Ms. Love's Declaration does not disclose the expected presence of special-status species on the Project site.<sup>10</sup> The Final Staff Assessment (FSA) concludes that "[n]o special-status wildlife are expected to occur on-site[.]"<sup>11</sup> The California Coastal Commission concluded that although the 2.03-acre area of hydrophytic vegetation constitutes a coastal wetland, "...the area is not known to support listed, rare or sensitive wildlife species. Thus, the project site does not

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<sup>8</sup> Ex. 4017, Hunt Testimony at 13.

<sup>9</sup> Final Staff Assessment (FSA) (TN #214712) at 4.11-13.

<sup>10</sup> Love Decl. at 1-5.

<sup>11</sup> FSA at 4.2-1.

meet the definition of an environmentally sensitive habitat area (ESHA) under Section 30107.5 of the Coastal Act.”<sup>12</sup>

I do not agree with these statements or conclusions. In my opening testimony, I summarize and discuss in detail the rare and environmentally sensitive species that have a moderate to high potential to be present on the Project site and thus impacted by the Project because of the presence of suitable habitat on-site and their known occurrence in similar habitats immediately adjacent to the Project site.<sup>13</sup> As discussed in my opening testimony, I have conducted focused surveys for and found populations of several special-status wildlife species, including globose dune beetle (*Coelus globosus*), California legless lizard (genus *Anniella*), and two-striped garter snake (*Thamnophis hammondi*) in coastal dune habitat immediately surrounding the project site in habitats similar to those that occur on the project site, meaning that the Project site contains suitable habitat for these species.<sup>14</sup> Further, there are no barriers that would prevent one or more of these species to disperse from off-site to on-site habitats.<sup>15</sup>

Adequate field surveys are essential to making any determination that a rare or environmentally sensitive species is not present on the Project site.<sup>16</sup> However, neither the CCC, the Staff, nor the Applicant has conducted focused surveys that can provide a sufficient basis to conclude that special-status species are absent from the Project site.

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<sup>12</sup> Ex. 4026, CCC Report at 5.

<sup>13</sup> Ex. 4017, Hunt Testimony at 7-15.

<sup>14</sup> *Id.*

<sup>15</sup> *Id.* at 7.

<sup>16</sup> For example, the California Department of Fish and Wildlife state in their letter review of the project that, “[t]he proposed Project environmental analyses should be based upon sound field assessments for sensitive plants, animals and natural communities in order to adequately characterize the environmental setting.” Ex. 4025, Letter from Edmund Pert, California Dept. of Fish and Wildlife, to Carol Watson, California Energy Commission (Oct. 13, 2016) (TN # 214009) at 2.

The CCC based its conclusion that the Project site does not support ESHA on the fact that the applicant's consultant did not find any listed, rare, or sensitive wildlife species on-site during their reconnaissance or literature review during preparation of the Biological Assessment.<sup>17</sup> However, the applicant's consultant did not conduct focused field surveys for any of the special-status wildlife species that are known to inhabit the dune field surrounding the project site, only reconnaissance-level surveys of the project site. Reconnaissance-level wildlife surveys are designed to broadly evaluate land use, habitat, and soil conditions at a site in order to draw conclusions as to the potential for a site to support special-status surveys. Focused wildlife surveys are specific to particular species, taking into account their habitat and microhabitat requirements and daily and seasonal activity periods and that employ techniques and equipment that maximize the likelihood of detecting the species in question. A reconnaissance-level survey is inadequate to detect the presence of many of the rare and environmentally sensitive species discussed in my Opening Testimony, such as globose dune beetles (*Coelus globosus*), legless lizards (genus *Anniella*), or two-striped garter snakes (*Thamnophis hammondi*). These species are numerically uncommon, highly secretive, and highly seasonal in their activity patterns, characteristics that, in combination, make it problematic to conclude absence unless appropriate surveys are conducted.

Moreover, the Applicant's consultant relied on the California Natural Diversity Database (CNDDB) to inform them of the likelihood of occurrence of particular species. In my opinion, it is methodologically inappropriate to determine that a particular species is not present on the Project site based on CNDDB records because it is only a positive detection database, i.e.,

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<sup>17</sup> Letter from Allison Dettmer, Deputy Director, California Coastal Commission, to Coastal Commissioners & Interested Persons, re: Addendum for 15-AFC-01 – Commission's 30413(d) review and report on the NRG Puente Power Project ("P3") (Sept. 7, 2016).

records exist only where species were detected rather than where their actual or potential presence was conclusively ruled out. Places that are empty or have limited information in the database often signify that little survey work has been done there. Additionally, the CNDDDB is often years behind in archiving occurrence records submitted by individuals. Indeed, the CNDDDB contains the following disclaimer:

**Disclaimer:**

THE CALIFORNIA NATURAL DIVERSITY DATABASE (CNDDDB) IS AN ONGOING AND CONTINUOUSLY UPDATED DATABASE. WHILE THE INFORMATION IS COMPLETE AND ACCURATE TO THE BEST OF OUR KNOWLEDGE AND ABILITY, IT DOES NOT CONSTITUTE AN OFFICIAL RESPONSE FROM ANY STATE AGENCY AND WILL NOT IN ITSELF MEET THE REQUIREMENTS OF THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA). INFORMATION SUPPLIED IS BASED ON THE MATERIAL AVAILABLE AT THE TIME OF THE REQUEST AND SHOULD NOT BE REGARDED AS COMPLETE DATA ON THE ELEMENTS OR AREAS BEING CONSIDERED. THE INFORMATION MUST BE USED IN CONSULTATION WITH THE APPROPRIATE LOCAL, STATE AND FEDERAL OFFICIALS. ABSENCE OF DATA DOES NOT CONSTITUTE THE BASIS FOR A NEGATIVE DECLARATION.<sup>18</sup>

**C. Rare and Environmentally Sensitive Habitats are Located on the Project Site**

In addition to failing to disclose the expected presence of special-status wildlife on the Project site, both the Declaration submitted by Ms. Love and supporting exhibits and the FSA fail to disclose the presence of rare and environmentally sensitive habitats on the Project site. In the Puente Power Plant Application for Certification, which Ms. Love incorporates as Exhibit 1008 to her Declaration, the Applicant asserts that the Project site consists of “approximately 3 acres” where the vegetation has been “significantly disturbed.”<sup>19</sup> As my opening testimony

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<sup>18</sup> Exhibit 4028, State of California, Department of Fish & Wildlife, Biogeographic Data Branch, California Natural Diversity Database, *CNDDDB Overlay or Text Report Request Form*, available at <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=112582&inline=1> (last accessed January 23, 2017).

<sup>19</sup> Ex. 1008, Application for Certification at 4.2-5.



explains,<sup>20</sup> the wetlands located on the Project site meet the definition of ESHA as defined in the California Coastal Act for several reasons. First, the habitats themselves resemble the coastal dune swale wetlands that originally occurred in this area pre-development. Second, these habitats occur in the dune environment immediately surrounding the project site and are occupied by several animal species that are regulated by State and/or Federal resource protection agencies as special-status species. Third, suitable habitat for several of these species located in the adjacent environments is located on the Project site.<sup>21</sup> Finally, there are no barriers for one or more of these species to disperse from off-site to on-site habitats.

Ms. Love states on p. 3 of her Declaration, lines 17-19, that, "...coyote bush scrub is a common, native plant community." While this is generally true, it is the occurrence of this habitat in the context of coastal dunes and subsurface hydrology that allows experts to classify it as a dune swale wetland variant (see reference to Ferren, Fiedler, and Leidy, 1995, in Section 4, p. 3 of CDFW, 2016). Both the Staff's and Applicant's failure to evaluate the occurrence of coyote bush scrub in the context of the dune swale present on the Project site is a significant flaw in their assessment of the on-site habitat.

The California Department of Fish and Wildlife, in their review of the Project, goes on to state that, "Coyote brush (*Baccharis pilularis*) and mule fat (*Baccharis salicifolia*), for example, are species of plants that function as phreatophytes in these unique dune swale wetland systems, and pull water from the capillary layer above the perched aquifer. A variety of plant and animal species are sustained by the interaction of phreatophytes and this shallow water table."<sup>22</sup> For example, in my field experience, dune swales that support coyote bush and mule-fat scrub retain

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<sup>20</sup> *Id.*

<sup>21</sup> *Id.* at 7-10

<sup>22</sup> Ex. 4025, CDFW Letter at 3.

higher soil moistures and lower soil temperatures relative to dune ridges or other exposed areas. These microhabitats provide physiological refugia for common, widespread amphibians, such as western toads (*Anaxyrus boreas*) and Pacific treefrogs (*Pseudacris regilla*), which are food items for two-striped garter snakes, a special-status species. The FSA concedes that two-striped garter snakes, "...may occasionally disperse through the site."<sup>23</sup> For all of these reasons, coyote bush scrub, mule-fat scrub, and the 2.03-acre wetland feature on-site not only meet the criteria of, "...habitats [that are] either rare or especially valuable because of their special nature or role in an ecosystem..." (California Public Resources Code 30107.5), but also have a moderate to high likelihood of supporting special-status species that are known to occur immediately off-site, and therefore, meet the definition of ESHA.

**D. The Project May Affect the Federally Endangered Tidewater Goby**

Tidewater gobies are known to occur in brackish water habitats north and south of the project site: in the Santa Clara River estuary and the estuary associated with the J Street Drain/Ormond Beach wetlands (USFWS, 2005). Sampling has shown that suitable habitat near occupied sites may be colonized by individual gobies (Ambrose, et al. 1993). These colonists may form ephemeral populations that experience cycles of local extinction and re-colonization (Swift, et al. 1989; Ambrose, et al. 1993; USFWS, 2005). The Edison Canal is one such site that may occasionally be colonized by tidewater gobies. The proposed project may affect tidewater gobies because it will increase freshwater inputs to the Canal in the vicinity of the power plant.

On page 4 of her Declaration, lines 24-25, Ms. Love acknowledges that the Edison Canal "may also support sensitive species such as the tidewater goby."<sup>24</sup> She appears to distinguish waters in the Canal that are "near the discharge point for the Project" from waters that are further

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<sup>23</sup> FSA at 4.2-23.

<sup>24</sup> Love Decl. at 4.

down the Canal, and opines that the “portion of Edison Canal near the proposed discharge point is not suitable habitat for the tidewater goby.”<sup>25</sup> However, regardless of whether goby habitat is present near the proposed discharge point, the discharges will likely change the salinity of the water in the Canal at points located farther from the discharge point, and therefore the discharges into Edison Canal may affect tidewater gobies that may have colonized portions of the Canal located farther from the discharge point.

**E. The Project’s Environmental Impacts Will Remain Significant Even if the Proposed BIO Mitigation Measures Are Adopted**

On p. 5 of Ms. Love’s Declaration, she opines that project mitigation measures BIO-1 through BIO-10 will be sufficient to mitigate project-related impacts to biological resources, specifically special-status species, to less than significant levels. I do not agree with this statement. None of the proposed BIO mitigation measures address mitigating impacts to on-site ESHA because neither Applicant nor the FSA has disclosed the presence of ESHA on-site. Therefore, the impacts to on-site ESHA will remain significant with the proposed mitigation measures, as described in my opening testimony.<sup>26</sup> Moreover, direct impacts to the on-site wetlands are not sufficiently mitigated by condition BIO-9 because: (a) it relies on off-site mitigation, which inherently diminishes the functional capacity of local wetlands and degrades habitat diversity in the vicinity of the project site, resulting in a net loss of local habitat diversity, and; (b) BIO-9 does not require restoration for loss of on-site mule-fat and coyote bush scrub habitat that comprises the smaller wetland feature located on the Project site.<sup>27</sup> Further, the indirect impacts to rare and sensitive species will likely remain significant even with the adoption of the proposed BIO mitigation measures due to the noise, lighting and increased

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<sup>25</sup> *Id.*

<sup>26</sup> Ex. 4017, Hunt Testimony at 15-16.

<sup>27</sup> *Id.*

human presence that will be ongoing throughout the life of the Project. Thus, the proposed mitigation measures do not fully mitigate for loss of habitat that may be used by special-status wildlife, direct impacts to individuals of special-status wildlife, or loss of wetland habitats. The following significance thresholds will still remain significant after implementing measures BIO-1 through BIO-10:

- a substantial adverse effect to wildlife species that are federally-listed or state-listed or proposed to be listed; a substantial adverse effect to wildlife species of special concern to CDFW, candidates for state listing, or animals fully protected in California;
- a substantial impact to a sensitive natural community (i.e., a community that is especially diverse; regionally uncommon; or of special concern to local, state, and federal agencies);
- substantial adverse effects on habitats that serve as breeding, foraging, nesting, or migrating grounds and are limited in availability or that serve as core habitats for regional plant and wildlife populations.

Adopting the weakened conditions BIO 7 and 9 that the Applicant has proposed will only exacerbate the Project's significant impacts.<sup>28</sup> Reducing the wetland mitigation ratio downward from 4:1 to 2:1 does not recognize the magnitude of local and regional loss of wetlands in general and coastal dune wetlands in particular.

### **Literature Cited.**

Ambrose, R.F., et al. 1993. Inventory of coastal wetlands in Santa Barbara County: Interim report. Prep. for the County of Santa Barbara Planning and Development Dept., Santa Barbara, CA. 22 pp.

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<sup>28</sup> Exhibit 1098, Applicant's Comments on the Proposed Conditions of Certification, at 5-8.

- CCC (California Coastal Commission). 2016. Addendum for 15-AFC-01 – Commission’s 30413(d) revisions and report on the NRG Puente Power Project (“P3”). 7 September. 45 pp, plus attachments.
- CDFW (California Department of Fish and Wildlife). 2016. Comments on the Preliminary Staff Assessment for the Puente Power Plant Project, Ventura County, CA. 13 October. 7 pp.
- Ferren, Wayne R., Jr, Peggy L. Fielder and Robert A. Leidy. 1995. Wetlands of the central and southern California coast and coastal watersheds: A methodology for their classification and description. Final Report prepared for the United States Environmental Protection Agency. Region IX. San Francisco, CA.
- Swift, C.C. et al. 1993. The status and distribution of freshwater fishes of Southern California. Bull. So. Calif. Acad. Sci., 92(3): 101-172.
- USFWS. 2005. Recovery plan for the tidewater goby (*Eucyclogobius newberryi*). U.S. Fish and Wildlife Service, Portland, OR. vi + 199 pp.

## DECLARATION OF

Lawrence E. Hunt

I, **Lawrence E. Hunt**, declare as follows:

1. I am a consulting wildlife biologist with over 30 years of field experience in central and southern California. I hold advanced degrees in vertebrate zoology and evolutionary ecology, with an emphasis in herpetology and have conducted extensive field work in the coastal dune systems between the Ventura River and Port Hueneme during research and consulting activities.
2. I prepared the rebuttal testimony of Lawrence E. Hunt submitted by intervenors the Los Padres Chapter of the Sierra Club, the Environmental Coalition of Ventura County, and the Environmental Defense Center. The basis for my testimony is set forth in the testimony itself and is incorporated by reference.
3. It is my professional opinion that the prepared testimony is valid and accurate with respect to the issues addressed therein.
4. I am personally familiar with the facts and conclusions related in the testimony and, if called as a witness, could testify competently thereto.
5. I obtained a copy of State of California, Department of Fish & Wildlife, Biogeographic Data Branch, California Natural Diversity Database, CNDDDB Overlay or Text Report Request Form by downloading it from the California Department of Fish and Wildlife website on January 23, 2017, located at <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=112582&inline=1>. Exhibit 4028 is a true and accurate reproduction.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Dated: 24 January 2017

At: Sacramento, California

Signed: Lawrence E. Hunt