DOCKETED

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Project Title:	Puente Power Project
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Document Title:	Exhibit - on Behalf of Intervenors SC, ECVC, and EDC
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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	)	

Exhibit No. 4025

DOCKETED

Docket Number:	15-AFC-01
Project Title:	Puente Power Project
TN #:	214009
Document Title:	California Dept. of Fish & Wildlife Comments on Preliminary Staff Analysis
Description:	Comments on the Preliminary Staff Analyses for the Puente Power Plant Project
Filer:	Raquel Rodriguez
Organization:	California Department of Fish and Wildlife
Submitter Role:	Public Agency
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State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
South Coast Region
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www.wildlife.ca.gov

EDMUND G. BROWN JR., Governor
CHARLTON H. BONHAM, Director

October 13, 2016

Carol Watson
California Energy Commission
1516 Ninth Street
Sacramento, California 95814
carol.watson@energy.ca.gov

Subject: Comments on the Preliminary Staff Analyses for the Puente Power Plant Project, Ventura County

Dear Ms. Watson:

The California Department of Fish and Wildlife (Department) appreciates the opportunity to comment on the California Energy Commission's (CEC) Preliminary Staff Analyses (PSA) for the proposed Puente Power Plant (Project). The Department is still in the process of reviewing various reports and plans related to the proposed Project, so these are preliminary comments. The comments provided herein are based on sections 2.0-Project Description and 4.2-Biological Resources, dated April 2015, submitted by the Applicant (NRG) as part of NRG's Application for Certification to CEC for the Project.

The proposed Project would replace two aging gas-fired steam generating units at the existing Mandalay Generating Station located between Mandalay State Beach and McGrath State Beach in the Oxnard area west of Harbor Boulevard. A new generating unit called P3 would be constructed on three acres that lies within the current facility at an elevation of about 13 feet mean sea level (msl). Cooling water would no longer be pumped from the existing, tidal Edison Canal, and heated water would no longer be released into the Pacific Ocean. The general area is located within coastal dune and coastal strand habitats; the local and regional area is known to support a variety of sensitive plant and animal species reliant upon beach, coastal dune and coastal wetland habitats.

The following statements and comments have been prepared in an advisory capacity to CEC; and pursuant to the Department's authority as Trustee Agency for fish and wildlife resources, and holds those resources in trust by statute for all the people of the State (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code § 21070; and CEQA Guidelines § 15386, subd. (a).).

The Department offers the following comments and recommendations to assist the CEC in avoiding, minimizing, and adequately mitigating Project-related impacts to biological resources.

1. **Subsurface Aquifer and Hydrological Pre/Post Flows to Adjacent Sensitive Habitats**
   CDFW is concerned that aspects of the proposed Project could result in significant adverse impacts or alterations in the hydrogeologic processes within this general area, which adjoins environmentally sensitive coastal dunes and wetlands located on Mandalay State Beach, McGrath State Beach and the adjacent North Shore at Mandalay Bay 28 acre mitigation area due north of the proposed P3. Project activities during construction could include dewatering the onsite perched aquifer which sustains nearby wetlands. Activities such as grading, soil

compaction, pile driving into substrates to support the building, installing concrete foundations, and other related activities could impact the underground near–surface perched aquifer which provides the hydrology necessary to sustain wetland plant species. We are concerned there could be temporary and/or permanent changes in this aquifer in the local area from construction and operations. Another concern is we need to understand what geologic feature is confining this perched aquifer, and ensure it is not punctured or damaged in a manner that results in the water table dropping lower.

Department Recommendation
Additional analysis of the perched aquifer, potential effects on subsurface flows into adjoining habitat areas, and how the aquifer may be altered by the proposed Project, both during and after construction, should be included in the Final Staff Analysis (FSA).

2. **Fully-Protected, State Threatened/Endangered, California Species of Special Concern**
State- and federally-listed threatened and /or endangered plants and animals are known to utilize the habitats on the adjoining state parks lands and North Shore 28 acre parcel, including the Ventura marsh milkvetch (*Astragalas pycnostachyus* var. *lanosissimus*) and least Bell's vireo (*Vireo bellii pusillus*). The general area may be utilized by fully protected species such as white tailed kite (*Elanus leucurus*).

There is potential for these species to experience indirect effects which require further evaluation, including but not limited to noise and vibration during construction, night-lighting, fugitive dust and associated impacts. Cumulatively, this existing facility interferes with natural sand movement processes and dune stabilization reduces or eliminates native dune species.

Department Recommendation
The 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. Department staff are available to review proposed animal survey protocols and biologist qualifications. Plant assessments should generally follow the Department's current Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (California Department of Fish and Game, 2009).

3. **Buffers to Protect North Shore 28 acre Wetland Mitigation and McGrath State Beach**
The PSA does not adequately evaluate indirect impacts; there is a narrow buffer proposed north of P3 which may not be adequate to protect adjacent coastal dunes, wetlands and species residing there. Figure 2.8-1 (NRG, 2015) shows a new paved access roadway, storm drains, and other project features within 100 feet of the northern property boundary. Removal of rainwater and diversion to storm drains may be detrimental in the local area as it would divert waters previously directed into the northern wetlands.

Department Recommendation
An effective site-specific buffer is necessary which neutralizes adverse edge effects (Hansen& Clevenger, 2005; Conservation Biology Institute, 2000) between the proposed Project area and the offsite core protected habitats on the North Shore 28 acre mitigation area and McGrath State Beach. The current setback does not appear to be adequate. Additional analysis of indirect effects is necessary to better determine an appropriate buffer which can provide a high level of effectiveness in minimizing specific edge effects.

It could prove beneficial to include a bioswale along this northern boundary to allow more infiltration to benefit wetlands to the north, but this will require further evaluation.

4. Analyses of Coyote Brush Scrub, Dune Swale Wetlands, and Subsurface Perched Aquifer

Areas mapped as coyote brush scrub onsite are also considered a type of dune swale wetland; this habitat type is described in Ferren, Fiedler and Leidy (1995), which use a hydrogeomorphic system to identify and classify wetlands in the Ventura/Oxnard area. 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.

Department Recommended Mitigation Measures

The Department's assessment of the Mandalay Generating Station area where new project features would be installed and operated suggests it is located in a historic dune system which supports a variety of types of wetlands. The current discussion is focused on mitigation for two hydrophytes which are sometimes found in salt marshes and which dominate a portion of the P3 area. A focus on salt marsh restoration may not offset all the Project-related direct and indirect impacts, which are cumulatively considerable. Coastal dunes and the unique wetlands which occur in these systems continue to be lost, degraded or fragmented in this general area.

The 12 acres of mitigation proposed by the California Coastal Commission may serve to offset impacts to wetlands where they cannot be avoided. To meet the state requirements of no-net-loss of wetlands, the Department typically recommends creation of wetlands of comparable or greater value, on an acre-for-acre basis. Additional mitigation could be undertaken in the form of habitat preservation, enhancement, and providing funding necessary for long-term management. The Department suggests habitat acquisition could help offset unavoidable permanent impacts, including cumulative impacts from Project-related activities. The Department has identified a number of areas near the project vicinity which support dune systems with remnant wetlands which currently have no protection or invasive species management. Remnant dune areas continue to be proposed for development. Acquisition of nearby parcels, or permanent conservation using conservation easements, could be utilized to ensure mitigation is permanently protected and managed.

5. On-site Weeds

Weeds are present and often dominate coastal habitats on the Project site, and presumably weeds are not controlled. These weeds are chronically present, and degrade adjacent areas, including areas where public agencies have undertaken weed management using limited financial resources from grants and public agency staff.

Department Recommendation Mitigation Measure

Weed management could be funded as an enhancement activity in local areas on-site and near offsite Project areas that would benefit many plant and animal species. (e.g., control of non-native species such as: iceplant (*Aizoaceae* spp.), European beach grass (*Ammophila* sp.), annual grasses (*Poaceae* spp. and/ or *Gramineae* spp.), Russian thistle (*Salsola*

tragus), myoporum (*Myoporum* sp.), poison hemlock (*Conium maculatum*), mustard (*Brassica* sp), and melilotus (*Melilotus* sp., see also *Kumoniga* sp.).

6. Sea Level Rise

The new facility would be located at an elevation of about 13 feet msl and is on the immediate coast behind a narrow taller foredune. The Department is concerned with how the facility will operate in the future with foreseeable rising sea levels. Will this facility require armoring or other hardscape protection as sea levels rise over time? Will this generate additional adverse impacts to biological resources on adjacent marine, beach and dune areas? Could the facility become damaged in storms?

Department Recommendation

Additional analyses are needed of rising sea levels and the potential environmental consequences should the proposed Project (P3) require armoring or become damaged, and/or inoperable. The suggested Best Management Practices, developed to address potential damage to the Project (P3), should a catastrophic disaster occur after the Project has been constructed, should be included in the FSA.

7. Edison Canal

CDFW is concerned that the upper reaches of the existing tidal Edison Canal could experience more stagnant conditions when pumping water to cool the existing Unit 3 facility, ceases. The Department has investigated this concern and has determined that a potentially significant change to existing habitat conditions might result. Stagnant waters create a nuisance for nearby residents, and are detrimental to aquatic organisms that can be found in this particular canal. The Department contacted our Marine Division staff to gain a better understanding of the likely impacts. The Department has determined pumping large quantities of water for cooling the existing plant has likely kept the canal water circulating and cooler in temperature.

Department Recommendation

The canal provides a variety of foraging and nesting resources for wildlife. A feasible alternative and methods to reduce potential negative Project-related impacts to the Edison Canal may be needed.

Department Recommendation for Circulation of the Final Staff Analyses

If feasible, the Department would request that the FSA when circulated to regulatory and other agencies by CEC, be afforded a 60 to 90-day comment period. The Project has many complex features and adjacent sensitive resources that warrant careful review and consideration. Allowing an extended comment period would provide the regulatory agencies sufficient time to make more detailed and meaningful comments and recommendations to CEC.

The Department wishes to thank CEC for the opportunity to provide comments on the PSA, already closed for comments, so that they may be considered part of the docketed record and considered and included in the FSA.

If you have any question, comments, or concerns please do not hesitate to contact Jamie Jackson, Senior Environmental Scientist (Specialist) at jamie.jackson@wildlife.ca.gov or (805) 382-6906.

Sincerely,

Edmund Pert
Regional Manager
South Coast Region

ec: Betty Courtney, CDFW, Santa Clarita
Christine Found-Jackson, CDFW, Westlake Village
Jeff Humble, CDFW, Ventura
Mary Meyer, CDFW, Ojai
Loni Adams, CDFW, San Diego

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