<b>Docket Number:</b>	15-AFC-01
Project Title:	Puente Power Project
TN #:	213968
<b>Document Title:</b>	Puente Power Project 15-AFC-01 Data Requests Nos. 77-107
<b>Description:</b>	Data Request Nos. 77-107
Filer:	Mineka Foggie
Organization:	California Energy Commission
Submitter Role:	Commission Staff
Submission Date:	10/11/2016 2:57:17 PM
<b>Docketed Date:</b>	10/11/2016

### CALIFORNIA ENERGY COMMISSION

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October 11, 2016

John Chillemi, President NRG Oxnard Energy Center, LLC 100 California Street, Suite 650 San Francisco, CA 94111

# PUENTE POWER PROJECT (15-AFC-01), DATA REQUESTS Nos. 77-107

Dear Mr. Chillemi:

Pursuant to Title 20, California Code of Regulations, section 1716, the California Energy Commission staff requests the information specified in the enclosed data requests. The information requested is necessary to: 1) more fully understand the project, 2) assess whether the facility will be constructed and operated in compliance with applicable regulations, 3) assess whether the project will result in significant environmental impacts, 4) assess whether the facilities will be constructed and operated in a safe, efficient and reliable manner, and 5) assess potential mitigation measures.

These data requests are being made in regards to two recently filed project design changes, the "Refinement to Transmission Interconnection" and "Project Enhancement – Outfall Removal and Beach Restoration." In this set, data requests are being made in the technical areas of: Biological Resources (Nos. 77-86), Cultural Resources (Nos. 87-90), Soil and Water Resources (Nos. 91-98), Traffic and Transportation (Nos. 99-101) and Transmission System Engineering (Nos. 102-107). Written responses to the enclosed data requests are due to the Energy Commission staff on or before November 10, 2016. At the September 27, 2016 Committee Conference, applicant's representatives committed to a 15-day turnaround of these data responses.

If you are unable to provide the information requested, need additional time, or object to providing the requested information, please send a written notice to the Committee and me within 20 days of receipt of this notice. The notification must contain the reasons for the inability to provide the information or the grounds for any objections (see Title 20, California Code of Regulations, section 1716 (f)).

If you have any questions regarding the enclosed data requests, please call me at (916) 654-4026.

Sincerely,

Shawn Pittard, Project Manager Siting, Transmission and Environmental Protection Division

Enclosure (Data Request Packet)
cc: Docket (15-AFC-01)
George Piantka -- NRG
Dawn Gleiter - NRG

Technical Area: Biological Resources

Author: Carol Watson

# **BACKGROUND**

The Project Enhancement: Outfall Removal and Beach Restoration (TN213802) contains unclear information regarding the jurisdictional status and nature of the potential waters (Edison Canal and the outfall structure) on the project site. As part of the project reconfiguration, process wastewater and stormwater would be comingled and conveyed to the Edison Canal via an 18 inch pipe, or transfer pipe. The transfer pipe would discharge into a small sump near the Edison Canal, before discharging into the Edison Canal. The applicant further states that additional riprap may be necessary along the banks of the Edison Canal, to prevent the discharge from eroding the bank; yet Section 3.2.2.1 (page 3.7) states that no impacts to the canal are expected because work activities would be confined to upland, developed areas. Section 3.2.1.1 (page 3.4) states that the Edison Canal may be a non-wetland water of the U.S., Waters of the State, and/or a Califonia Department of Fish and Wildlife (CDFW)-jurisdictional channel. Discharge of dredge and fill material to waters of the U.S. are regulated by the U.S. Army Corps of Engineers (ACOE) via the Clean Water Act, Section 404, and require a permit. Impacts to CDFW-jurisdictional channels may require a Section 1600 Lake and Streambed Alteration Agreement permit. The Energy Commission staff needs more information regarding these issues to complete its analysis.

- 77. Please further describe the amount of riprap to be placed in the Edison Canal, and describe potential impacts to wildlife and habitat.
- 78. Please contact CDFW and complete a Notification of Lake or Streambed Alteration, if appropriate.
- 79. Please provide the contact information and reports of conversation for your contacts with CDFW.
- 80. Please contact ACOE to determine if the project requires a Section 404 permit. Provide the contact information and reports of conversation.
- 81. Please contact the Regional Water Quality Control Board to determine if the project requires a Section 401 water quality certification. Provide the contact information and reports of conversation.

#### **BACKGROUND**

The Edison Canal provides habitat for fish and wildlife, and may support the federally endangered tidewater goby. As part of the project, the project would discharge into the Edison Canal, instead of to the Pacific Ocean. Water discharges may adversely impact the Edison Canal and any species inhabiting it by affecting the temperature, quality, or salinity of the water. Tidewater gobies have been documented in waters with salinity levels from 0 to 42 parts per thousand (ppt) or higher (as a comparison, sea water is about 34 ppt), temperature levels from 8 to 25 degrees Celsius (46 to 77 degrees Fahrenheit), and water depths from 25 to 200 centimeters (10 to 79 inches) (USFWS 2016).

### **DATA REQUESTS**

- 82. Please describe how storm and wastewater discharges would be treated to control release of sediments and to reduce its temperature to that of the Edison Canal.
- 83. Please describe how discharge of storm and wastewater would impact the Edison Canal in terms of turbidity, salinity, temperature, pH, or other relevant chemical constituents, and discuss how wildlife in the canal, particularly tidewater goby, may be affected by such discharges.

#### **BACKGROUND**

Dune mats at the site of the outfall structure are a sensitive natural community, and may contain special status species such as globose dune beetle, silvery legless lizard, dundelion or South Coast saltscale, among others. Section 3.2.2.2 (page 3-7) states that outfall demolition and removal activities would occur on the beach adjacent to the dunes. Section 3.2.2.2 (page 3-8) further states that demolition would result in the temporary disturbance of sandy beach and dune vegetation, with overall impacts stated as being 0.4 acres (Section 2.1.2, page 2-2). The acres of temporary impact to vegetation communities and developed portions of the site is unclear. Furthermore, without specific data on which species inhabit the outfall and access road, staff is unable to complete its analysis of impacts to special status plants and wildlife.

- 84. Please provide impact acres for land cover types, including sandy beach, dune vegetation, and developed (outfall structure, wing walls and riprap).
- 85. Please perform focused surveys for special status plants and wildlife on dune habitat to be impacted by outfall removal and use of the access road.

86. Following completion of surveys and only if special status plants or wildlife are detected, please describe how impact avoidance and minimization practices such as use of protective barrier fencing, or salvage and relocation of special status wildlife, may reduce impacts to below significance.

# REFERENCES

USFWS—U.S. Fish and Wildlife Service 2016. Accessed October 5, 2016. Available at: <a href="https://www.fws.gov/arcata/es/fish/goby/goby.html">https://www.fws.gov/arcata/es/fish/goby/goby.html</a>

**Technical Area: Cultural Resources** 

Author: Matthew Braun and Melissa Mourkas

### **BACKGROUND**

Staff finds that the applicant's documentation of cultural resources fieldwork regarding the Refinement to Transmission Interconnection (AECOM 2016c) and the Project Enhancement Outfall Removal and Beach Restoration (AECOM 2016d) is incomplete. These two documents change the Puente Power Project project description and necessitate changes to the archaeological and built-environment Project Areas of Analysis (PAA), and require additional fieldwork and documentation efforts that allow staff to fully assess impacts to cultural resources.

- 87. Please adjust the archaeological and built-environment PAAs based on the changes in project description in the Refinement to Transmission Interconnection (AECOM 2016c) and the Project Enhancement Outfall Removal and Beach Restoration (AECOM 2016d) in accordance with the Energy Commission siting regulations (Cal. Code Regs., tit. 20, App. B[g][2]).
- 88. Please compare the original archaeological PAA (AECOM 2016b: Figure 4.3-1) to the new archaeological PAA and conduct pedestrian archaeological survey for those portions that were not surveyed during the previous effort.
- 89. Please compare the original built-environment PAA (AECOM 2016b: Figure 4.3-2) to the new built-environment PAA and conduct windshield survey for those parcels that were not surveyed during the previous effort.
- 90. Please submit to the Energy Commission, under confidential cover, a supplemental technical report meeting California Office of Historic Preservation Archaeological Resource Management Report (ARMR) requirements (OHP 1995) that provides the items listed below:
  - a. Methods used to identify cultural resources
  - b. Results of the pedestrian survey.
  - c. Descriptions of newly recorded cultural resources.
  - d. A comprehensive California Register of Historical Resources (CRHR) evaluation of any cultural resources considering all four criteria and all seven aspects of integrity, and using data from fieldwork, laboratory analysis, and historical research to support all recommendations.

- e. An assessment of impacts to all potential historical resources.
- f. Proposed mitigation measures for identified impacts.
- g. Complete Department of Parks and Recreation (DPR) 523 forms for all cultural resources identified during the survey as being 45 years or older or of exceptional importance. The appropriate DPR 523 detail forms 523 B (Building, Structure, and Object), E (Linear Feature), J (Location), and K (Sketch Map) should also be included.
- h. Each 523J form should only depict one resource at a time; not multiple resources. The USGS map name and publication date should be provided, along with a north arrow and scale, and the name of the resource being identified. The map should be provided in 7.5-minute, 1:24,000 scale format.
- i. Figures depicting survey coverage and results. The figures should also depict ground surface visibility in the survey areas, expressed as a percentage. Figures shall be on a 1:24,000-scale USGS topographic quadrangle map. Previously and newly recorded cultural resources shall be mapped on the figures. Each resource shall be clearly labeled with trinomials, or temporary numbers if trinomials have not been assigned.
- j. As part of this survey effort, please update either the Edison Canal or the Mandalay Generating station (MGS) DPR forms to include photograph(s) of the outfall structure, a description of the outfall structure, its relationship to either the Edison Canal or the MGS and evaluation of the structure's potential eligibility as a historical resource under CEQA.
  - a. The resource is to be recorded following the California Office of Historic Preservation's (OHP) Instructions for Recording Historical Resources (OHP 1995), and included on the DPR Primary and Building, Structure, Object (BSO) record for the resource. The architectural survey is to be performed by a cultural resource professional who meets the Secretary of the Interior's Professional Qualification Standards for Architectural Historian;
  - b. Evaluate CRHR eligibility (CRHR Criteria 1-4) of the resource indicated above; and
  - c. If the resource is found to be eligible for the CRHR, provide a revised project impacts assessment.

# **REFERENCES**

**AECOM 2015b—AECOM**. Application for Certification for Puente Power Project (15-AFC-01). Volume 2, Appendix E2. TN # 204220-5. Prepared for: NRG Energy Center Oxnard LLC. April 2015.

**AECOM 2016c—AECOM**. Puente Power Project (15-AFC-01). Refinement to Transmission Interconnection. TN# 213000. August 26, 2016.

**AECOM 2016d—AECOM.** Puente Power Project (15-AFC-01). Project Enhancement Outfall Removal and Beach Restoration. TN# 213802. September 26, 201

**OHP 1995** - Office of Historic Preservation. *Instructions for Recording Historical Resources*. March. Sacramento, CA. Electronic document, <a href="http://ohp.parks.ca.gov/pages/1054/files/manual95.pdf">http://ohp.parks.ca.gov/pages/1054/files/manual95.pdf</a>, accessed November 16, 2015.

Technical Area: Soil and Water Resources

Author: Marylou Taylor

## **BACKGROUND**

Section 2.1.1 of the Project Enhancement states that a new pump vault would be constructed west of the existing South basin to transfer storm water and wastewater from the basins to the Edison Canal. Figure 2-1 shows this new vault located at the outside edge of the existing access road. Staff is concerned that construction activities underneath the dunes at this location would result in damage that could take years to recover. Special effort should be made to protect the integrity of the natural dune ecology and structure.

## **DATA REQUESTS**

- 91. Please discuss the measures and practices that will be used to install the proposed pump vault in its proposed location, that protect the natural dune ecology and structure.
- 92. Please discuss the feasibility of constructing this new vault and associated pipes at a location away from the dunes (e.g. underneath the existing access road).

#### **BACKGROUND**

Section 3.15.2.2 of the Project Enhancement discusses estimated wastewater flows to the Edison Canal due to the proposed modifications. Staff notes that the existing Mandalay Generating Station (MGS) storm water collection system includes a bypass that could discharge storm water directly to the ocean outfall during periods of prolonged high runoff. The Project Enhancement does not include information regarding site drainage for large storm events (e.g. greater than a 2-year event or duration of a day or more).

#### **DATA REQUEST**

93. Please discuss how onsite storm water would be managed when runoff exceeds the basins' combined storage capacity.

#### BACKGROUND

Section 2.1.2 of the Project Enhancement states that circulating water pipes that connect to the outfall would be plugged with concrete. Section 3.11.2 and Figure 2-2 indicate that an underground portion of the outfall (e.g. area between the MGS chainlink perimeter fencing and the outfall wing walls) would be abandoned instead of removed. Staff assumes that the applicant's intention is to preserve the dunes near the outfall by allowing the underground structure to support this section of the dunes. Staff acknowledges the importance of maintaining the dunes, but large voids must be prevented.

Staff is concerned that any subsurface pipelines or vaults that allow water to flow into and away from the site after demolition could result in water quality impacts. It is unclear from the figures in the Project Enhancement how many connections there are to the outfall and their purpose. Staff anticipates there are connections for the once through cooling water discharge and storm water discharge, and the possibility of pipelines used to convey fuel oil. In addition, staff understands there could be several underground pipes and vaults that are connected at the inlet. Staff is concerned that flows into and out of these conduits could also result in water quality impacts. Staff needs information showing the number, location, and dimensions of conduits that could allow for flow of water into and out of the site.

#### **DATA REQUESTS**

- 94. Please provide a site plan showing the locations and dimensions of all underground conduits including circulating water pipes, vaults, and tunnels associated with the existing MGS once-through cooling system. Indicate which underground elements would be plugged (and what materials would be used (e.g., concrete, riprap or rubble)), abandoned, removed, or repurposed.
- 95. Discuss the methods that are under consideration to prevent large underground voids.
- 96. Also identify locations of oil storage and underground and above ground piping runs used (currently or historically) to convey fuel oil, and discuss methods to prevent releases of fuel oil during and after MGS demolition.

# **BACKGROUND**

Section 3.15.2.2 of the Project Enhancement discusses the volume of wastewater discharges to the Edison Canal during storm events and the number of days estimated for dilution from daily tide cycles. Although the water in the Edison Canal is technically ocean water, its characteristics are very different from the water at the shoreline (e.g. water temperature, mixing rates). The project's discharges could affect the Edison Canal and the ocean shoreline very differently. The applicant would be required to comply with the Los Angeles Regional Water Quality Control Board (LARWQCB) National Pollution Discharge Elimination System (NPDES) regulatory program for the proposed discharges of storm water and industrial wastewater to the Edison Canal. Staff is concerned that there has not been adequate coordination with the LARWQCB to determine whether the proposed design for discharge is feasible.

- 97. Please discuss what, if any, coordination has been conducted with the LARWQCB regarding the proposed Project Enhancement.
- 98. Please discuss what, if any, comments LARWQCB has had on the Project Enhancement and any information they have requested.

Technical Area: Traffic and Transportation

Author: Jonathan Fong and Scott Polaske

## **BACKGROUND**

In the supplemental submission "Refinement to Transmission Interconnection" the applicant states: "The existing transmission line from the SCE's Mandalay Switchyard to an existing transmission structure across and east of Harbor Boulevard will be rerouted/reconfigured from the new take-off structure to the transmission system, thereby bypassing the Mandalay Switchyard." (Page 1)

Staff has concluded that the true point of grid interconnection would be located at the transmission structure east of Harbor Boulevard (not the new take-off structure) and therefore must analyze the impacts accordingly.

- 99. Please indicate the location of necessary staging and parking areas.
- 100. Please indicate the number of workers and additional associated truck trips generated by the rerouting/reconfiguring activities.
- 101. Please detail any necessary road closures or encroachments for the rerouting/reconfiguring activities.

Technical Area: Transmission System Engineering Authors: Laiping Ng and Mark Hesters

#### **BACKGROUND**

Staff needs to determine the transmission system impacts of the project and to identify the interconnection facilities, including downstream facilities, needed to support the reliable interconnection of the proposed Puente Power Project in the Southern California Edison (SCE) service area. The proposed interconnection facilities must comply with the utility (SCE) rules for new interconnection, California Public Utilities Commission (CPUC) General Order (GO) 95 and the CPUC GO 128. The interconnection must also comply with the Western Reliability and Planning Criteria, North American Electric Reliability Corporation (NERC) Reliability Standards, Western Electricity Coordinating Council (WECC) Regional System Performance Criteria, and the California Independent System Operator (California ISO) Planning Standards for impacts in the California ISO system. In addition, the California Environmental Quality Act (CEQA) requires the identification and description of the "Direct and indirect significant effects of the project on the environment."

# **DATA REQUESTS**

Provide a detailed description of the change in design, construction, and operation of any electric transmission facilities, such as interconnection power lines, substations, switchyards, or other transmission equipment, which will be constructed or modified to transmit electrical power from the Puente project site to the SCE Santa Clara Substation.

- 102. Provide a simulation map showing the entire generator tie-line route from the Puente project site to the existing 230 kV transmission structure across and east of Harbor Boulevard.
- 103. Provide a one-line diagram showing the entire generator tie-line route from the Puente project site to the SCE transmission structure across and east of Harbor Boulevard. Please indicate where the generator tie-line would end.
- 104. Provide the length, conductor type, size, and current carrying capacity of the generator tie-line and any additional transmission line that would be used for the generator tie-line modification.
- 105. Provide the details for and modifications to the substation or tower equipment necessary for the project interconnection. Provide proposed ratings for this equipment.
- 106. Since the existing double circuit line from the SCE transmission structure across and east of the Harbor Boulevard would be rerouted to the new Puente

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- "take-off" structure, describe the process which would be used for the re-routing of the existing transmission lines.
- 107. Since the Puente Power Project would not be connected to the Mandalay 230 kV switchyard, please provide evidence showing that the refinement to the generation interconnection is approved/coordinated with the California ISO.