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Application for Certification
(15-AFC-01)

Puente Power Project (P3)
Oxnard, CA

Project Enhancement – Outfall Removal and Beach Restoration

September 2016

Submitted to:
The California Energy Commission

Prepared by:

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LIST OF ACRONYMS AND ABBREVIATIONS

AFC	Application for Certification
AFY	acre-feet per year
APN	Assessor's Parcel Number
BMP	best management practice
BRMIMP	Biological Resources Mitigation Implementation and Monitoring Plan
CCC	California Coastal Commission
CCH	Consortium of California Herbaria
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CNPS	California Native Plant Society
CUPA	Certified Unified Program Agency
ESA	Environmental Site Assessment
gpm	gallons per minute
HDPE	high-density polyethylene
HMBP	Hazardous Materials Business Plan
KOP	key observation point
LARWQCB	Los Angeles Regional Water Quality Control Board
LCP	Local Coastal Program
LORS	laws, ordinances, regulations, and standards
LUP	Land Use Plan
MGS	Mandalay Generating Station
MHTL	mean high tide line
NPDES	National Pollutant Discharge Elimination System
OSRP	Oil Spill Response Plan
P3	Puente Power Project
PSA	Preliminary Staff Assessment
RCRA	Resource Conservation and Recovery Act of 1976
SCE	Southern California Edison
SWPPP	Stormwater Pollution Prevention Plan
TAC	toxic air contaminant
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
VSOI	Visual Sphere of Influence

PUENTE POWER PROJECT
APPLICATION FOR CERTIFICATION 15-AFC-01
PROJECT ENHANCEMENT –
OUTFALL REMOVAL AND BEACH RESTORATION

1.0 EXECUTIVE SUMMARY

1.1 INTRODUCTION

The Puente Power Project (P3 or Project) Application for Certification (AFC) was filed on April 15, 2015, and was accepted as "data adequate" in June 2015. In November 2015, NRG Energy Center Oxnard LLC (Applicant or NRG) submitted a Project Enhancement and Refinement to include in the Project the demolition of the two gas-fired steam-generating units (Mandalay Generating Station [MGS] Units 1 and 2) at the existing MGS facility, a portion of which is the P3 site (TN #206698, referred to herein as "Project Enhancement and Refinement – MGS Units 1 and 2 Demolition"). California Energy Commission (CEC) Staff issued the Preliminary Staff Assessment (PSA) in June 2016, which concludes that the Project as proposed, with implementation of the proposed Conditions of Certification, would comply with all applicable laws, ordinances, regulations and standards (LORS), and would not result in any unmitigated significant environmental impacts.

On September 9, 2016, the California Coastal Commission (CCC) approved a report (TN #213667, referred to herein as the "Coastal Commission Report") for consideration by the CEC in assessing the Project's conformity with the Chapter 3 policies of the California Coastal Act and the policies of the City of Oxnard's certified Local Coastal Program (LCP). The Coastal Commission Report provides findings and recommended conditions that, in the view of the Coastal Commission, will allow the Project to be built and operated in a manner consistent, to the extent feasible, with those policies. Among the recommendations in the Coastal Commission Report are two related to the proposed use of the existing ocean outfall for discharge of P3 wastewater and stormwater, that are intended to enhance protection of biological resources and improve public access and recreation on the wide beach fronting the MGS facility and P3 site. Relevant portions of these two recommendations are as follows:

> *To ensure consistency with Coastal Act and LCP Policies requiring the maintenance and protection of marine resources and sensitive species and habitats and the minimization of adverse impact from adjacent development, and LCP Policy 64, requiring the reuse of wastewater from energy-related facilities, the Commission recommends that the CEC require NRG to develop a Wastewater Reuse and Recycling Plan, including any necessary water treatment, that would maximize reuse of the process wastewater and stormwater generated and collected at the MGS following the construction of the P3 and decommissioning of Units 1 and 2 and eliminate the discharge of wastewater to the beach. In the event that full wastewater reuse and recycling is determined to be infeasible, we recommend that the CEC require the Wastewater Plan to include measures that would prevent the recurrence of back-beach ponding, avoid impacts to avian nesting areas, and eliminate the need for repeated excavation of a discharge channel on the beach. (Coastal Commission Report, p. 24).*
>
> *To ensure consistency with Coastal Act Sections 30210 and 30211, and LCP Policies 52 and 54, the Commission recommends that the CEC require NRG to develop a Wastewater Reuse and Recycling Plan, including any necessary water treatment, that would maximize reuse of the process wastewater and stormwater generated and collected at the MGS following the construction of the P3, and eliminate the discharge of wastewater to the beach. In the event that full wastewater reuse and recycling is determined to be infeasible, the Commission recommends that the CEC require that the Wastewater Plan include measures that would prevent the*

> *recurrence of back-beach ponding, avoid the creation of public hazards and other impacts to public access and recreation, and eliminate the need for repeated excavation of a discharge channel on the beach (Coastal Commission Report, p. 42).*

By letter dated August 18, 2016, the U.S. Fish and Wildlife Service (USFWS) submitted comments on the PSA in which it expressed concerns about the proposed use of the existing ocean outfall for the Project (TN #212915). Other comments on the PSA express similar concerns. For example, comments from intervener City of Oxnard express concerns related to biological resources and public access to the beach (TN #213681, p. 3-4). Similarly, comments from interveners Environmental Coalition, Sierra Club, and Environmental Defense Center express concerns about impacts of the existing outfall on biological resources (TN #213685, p. 18).

To address the recommendations and concerns of the Coastal Commission, the USFWS, the City of Oxnard, and others, Applicant will reconfigure the proposed wastewater and stormwater systems for P3 and the remainder of the MGS facility to eliminate use of the existing outfall structure that currently serves MGS Units 1, 2, and 3, and which had been proposed for reuse by P3. Once P3 becomes operational and MGS Units 1 and 2 are decommissioned, the beach discharge will be eliminated and the outfall structure will be demolished and removed. The reconfigured systems will direct discharge of wastewater and surplus stormwater that cannot be reused to the Edison Canal.

1.2 LOCATION

Activities associated with the construction of the reconfigured wastewater and stormwater discharge to the Edison Canal will take place within the existing boundaries of the MGS site on Assessor's Parcel Number (APN) 183-0-022-025. Demolition of the outfall structure will be within the boundaries of APN 183-0-023-015, on land that is generally landward of the mean high tide line (MHTL). Contractor parking and laydown areas for the construction and demolition work will be the same as those used for construction of P3 and demolition of MGS Units 1 and 2, and are within the existing boundaries of the MGS site in APN 183-0-022-025.

1.3 OVERVIEW

MGS Units 1 and 2 were constructed in the 1950s, and are cooled by water conveyed via the 2.5-mile-long Edison Canal from the Channel Islands Harbor (also referred to as the Mandalay Canal). The MGS intake is in the Edison Canal. MGS Unit 3 is a jet-engine–powered unit that was commissioned in 1970 and uses much smaller amounts of water intake from the Edison Canal for bearing cooling purposes. MGS Units 1, 2, and 3 discharge wastewater (consisting of once-through cooling water and other process wastewaters) and stormwater into the Pacific Ocean via a concrete-and-rock revetted structure immediately offshore of the facility, in compliance with the facility's National Pollutant Discharge Elimination System (NPDES) permit for withdrawal and discharge.

As described in the AFC and PSA, the initial proposal for P3 was to continue use of the existing outfall structure to discharge process wastewater and excess stormwater that cannot be reused. The Project will use dry-cooling technology, which will eliminate the large water supply and discharge required by wet-cooled power generating projects. Project wastewater is composed primarily of reverse osmosis reject water and evaporative cooler blowdown water. The estimated process wastewater discharge is approximately 6.5 acre-feet per year (AFY) (see AFC Table 2.7-5). The Project will store process wastewater in the existing MGS East wastewater retention basin.

Stormwater from the P3 site will be directed to the existing North and South wastewater retention basins, where the water will be reused on site for industrial purposes (i.e., evaporative cooling for the P3 unit) and/or irrigation purposes, to the extent feasible and practical. The amount of stormwater to be collected from the P3 site for reuse on an annual basis will depend on the timing, the amount of rainfall, and the

operation of the basins. The preliminary estimate, based on historical annual rainfall, suggests that up to 80,000 gallons could be collected for reuse annually.

With this Project Enhancement, wastewater and surplus stormwater from P3 will now be discharged to the Edison Canal instead of to the ocean via the existing outfall. MGS Unit 3 wastewater and stormwater from the MGS property beyond the P3 site will also be discharged to the Edison Canal. Applicant also proposes to demolish and remove the outfall, including wing walls, riprap, and the fencing around the outfall. Figure 1-1 shows a visual simulation of the area several years after construction of P3 and demolition of MGS Units 1 and 2, including removal of the outfall.

Sanitary wastewater would continue to be discharged to the existing MGS septic system. Therefore, there would be no physical changes related to the handling of sanitary wastewater as a result of this Project Enhancement. As previously planned, an application to update the Waste Discharge Requirements permit for the sanitary septic system will be submitted to the Regional Water Quality Control Board.

1.4 SCHEDULE

Subject to obtaining any necessary permits and approvals beyond the CEC license, construction of the reconfigured wastewater and stormwater systems would occur during the 21-month P3 construction period (from October 2018 through June 2020). Subject to obtaining any necessary permits and approvals beyond the CEC license, removal of the outfall structure would occur during the demolition of MGS Units 1 and 2 (between June 2021 and December 2022) and would be scheduled to occur outside of the snowy plover nesting season, which is February 1 through August 31.

Primary schedule milestones are as follows:

- Complete construction of P3, including reconfigured wastewater and stormwater systems: May 2020
- P3 commercial online date: June 2020
- Complete decommissioning of MGS Units 1 and 2: June 2021
- Complete demolition, including demolition of outfall: late 2022

1.5 REFERENCES

The following references in addition to those presented in Section 1.0 of the AFC were used for this Project Enhancement.

Latham & Watkins, LLP, 2016. Puente Power Project – Response to Recommended Specific Provisions in August 26, 2016, Proposed Report. Addressed to Mr. Joseph Street, California Coastal Commission. September 6, 2016. Docketed for the Puente Power Project (Docket #15-AFC-01, TN #213624).

USFWS (U.S. Fish and Wildlife Services), 2016. Comments on Preliminary Staff Assessment, August 18, 2016. Docketed for the Puente Power Project (Docket #15-AFC-01, TN #212915).

2.0 PROJECT ENHANCEMENT DESCRIPTION

2.1 SCOPE OF WORK OVERVIEW

The proposed Project Enhancement consists of 1) routing Project and MGS Unit 3 wastewater, and excess stormwater from the P3 site and remainder of the MGS site, to the Edison Canal; and 2) demolition and removal of the outfall structure.

2.1.1 Modifications to the Wastewater and Stormwater Systems

The following elements of the proposed wastewater and stormwater systems will be the same as those described in the AFC and PSA:

- A 12-foot-wide, by 18-foot-long, by 12-foot-deep pump vault will be constructed north of the North basin to collect P3 stormwater.
- Stormwater would be directed to one of the existing MGS retention basins (North or South basins).
- Stormwater that can be reused feasibly and practically for industrial purposes (i.e., evaporative cooling for the P3 unit) and/or onsite irrigation purposes will be conveyed to the Service Water Tank via a 6-inch-diameter line.
- A 10-inch-diameter high-density polyethylene (HDPE) underground pipe will convey P3 stormwater runoff from the vault to either the existing North or South basins.

The proposed modifications to the wastewater and stormwater systems, relative to what is described in the AFC and PSA, are described below and shown on Figure 2-1:

- A new 12-foot-wide, by 18-foot-long, by 12-foot-deep pump vault will be constructed west of the South basin to transfer stormwater and wastewater from the basins to the canal. The vault's main chamber will contain four 600-gallon-per-minute (gpm) horizontal, electric, self-priming transfer pumps.
- A new 10-inch-diameter HDPE underground pipe will convey P3 stormwater runoff from the vault to either the existing North or South basins.
- The North and South basins will hold stormwater run-off from the P3 site exclusively and be segregated from the East basin holding process wastewater. The original plan described in the AFC was to send both stormwater and process wastewater to the North and South basins.
- Stormwater from the North and South basins will flow to a new discharge vault and be pumped to the Edison Canal.
- Process wastewater collected from P3 will pass through a new oil/water separator and be pumped to the East basin.
- The process wastewater and stormwater will be commingled and conveyed to the Edison Canal in a new 18-inch-diameter HDPE pipeline. Between the basins and a point near the Service Water Tank, this new pipe will be installed in the same trench as the P3 6-inch recycle pipeline. Starting near the Service Water Tank, approximately 118 feet of additional buried pipeline will be installed to convey the combined wastewater and stormwater to the Edison Canal (see Figure 2-1).

- The transfer pipe would discharge into a small sump near the Edison Canal to facilitate monitoring or sampling, if required, before the water enters the Edison Canal.

- At the Edison Canal discharge point, additional riprap may be placed on the canal bank to prevent erosion.

2.1.2 Removal of Outfall Structure

The demolition and removal of the outfall structure will generally occur west of the MGS fence line. Figure 2-2 shows the demolition areas associated with the demolition of MGS Units 1 and 2 and removal of the outfall. The demolition area associated with the outfall is approximately 0.4 acre. As shown on Figure 2-2, all laydown and parking areas will be within the existing MGS site, and are the same areas that are to be used during construction of P3 and demolition of MGS Units 1 and 2. Removal of the outfall will be conducted using personnel and equipment planned for MGS Units 1 and 2 demolition, and within the same overall demolition schedule.

Removal of the outfall will be conducted in a manner intended to minimize impacts to the surrounding area, beach dunes, and habitat. The outfall wing walls, riprap, and fencing that surround the outfall will be removed. The circulating water pipes that connect to the outfall will be plugged with concrete. Riprap and earthen materials will be stored on MGS property until reused on site, as needed, or otherwise disposed of off site. Sand bars accumulated on either side of the outfall riprap and structure will be redistributed between the riprap, consistent with guidance in the existing MGS sand management program, to facilitate continuous public access across the area currently occupied by the outfall.

Approximately 500,000 to 1 million cubic yards of sediment are transported along Mandalay Beach annually (based on dredging records from Ventura and Channel Island Harbors and estimates of Santa Clara River discharges). Within a few years, wind and waves will move this sand to remold the beach at the outfall location and fill in the scalloped shapes north and south of the present outfall location, making it similar to the beach north and south of the outfall.

To minimize impacts to the dunes and vegetation during demolition activities, demolition personnel will exit the MGS property through the gate at the northwestern corner of the MGS property and drive to the outfall demolition area along the beach side of the fence. The proposed access route is shown on Figure 2-2.

Wastes generated during the demolition of the outfall structure will include concrete, riprap, and fencing. Concrete and riprap will be recycled and reused on site to the maximum extent feasible. The metal fencing will be recycled and/or disposed in a Class II or III landfill with other scrap metal removed as part of the demolition of MGS Units 1 and 2. Applicant will prepare a Demolition and Construction Waste Management Plan for the Project as part of the implementation of WASTE Conditions of Certification proposed in the PSA; the plan will describe demolition and construction waste streams and management methods.

2.2 CONSTRUCTION AND DEMOLITION CONTROL MEASURES

2.2.1 Modifications to Wastewater System

The construction activities for the wastewater and stormwater systems modifications will be similar to those described in the AFC for the installation of the P3 water pipelines. Fugitive dust control measures during construction would be implemented to minimize the formation of fugitive dust as described in the AFC, Chapter 2, Project Description, Section 2.9.4, Construction Land Disturbance Control Measures. A construction Stormwater Pollution Prevention Plan (SWPPP) will be prepared and implemented, and will include best management practices (BMPs) that may be used to minimize erosion. The SWPPP and

associated BMPs will be prepared as part of the implementation of SOIL&WATER Resources Conditions of Certification proposed in the PSA.

2.2.2 Demolition of Outfall

The Project Enhancement and Refinement – MGS Units 1 and 2 Demolition described demolition control measures to be implemented during demolition of MGS Units 1 and 2 that would also be implemented during demolition of the outfall structure. Listed below are additional measures to be implemented to minimize impacts to the beach dunes, nesting birds, public safety, and air quality during demolition activities associated with removal of the outfall structure.

- Demolition of the outfall will be conducted outside of the nesting season (February 1 through August 31).
- Prior to the start of outfall demolition activities, a biologist will survey the area for nesting birds. In the event that nests are found in the demolition footprint, demolition activities will not be allowed to commence until birds have left the nest.
- Required notifications will be made to the City of Oxnard, USFWS, U.S. Army Corps of Engineers (USACE), California Department of Fish and Wildlife (CDFW), State Lands Commission, Los Angeles Regional Water Quality Control Board (LARWQCB), and the City of Oxnard Fire Department's Marine Safety Division prior to starting work.
- The demolition area will be delineated to protect the public.
- Temporary fencing and wildlife escape ramps will be installed for construction areas that contain steep walled holes or trenches, if situated outside an approved permanent exclusionary fence. Any temporary fencing shall be hardware cloth or similar material approved by USFWS and CDFW.
- Unpaved surface travel and disturbed areas in the demolition area will be watered as frequently as necessary to prevent fugitive dust. The frequency of watering may be reduced or eliminated during periods of precipitation.
- Debris shall not remain on the beach and shall be prevented from being washed into the Pacific Ocean.
- Workers shall take all reasonable care to avoid crushing dune grass and other habitat when traveling to and from the demolition area.
- The worksite entrances will be posted with visible speed limit signs.
- Demolition vehicles will enter the worksite through the designated entrance unless an alternative route has been submitted to and approved by the Compliance Project Manager.
- No mobile construction/demolition equipment will be stored in offsite areas overnight.
- Dust management and suppression will be controlled by engineered dust control methods. Water is the primary control for dust suppression during demolition.
- BMPs will be implemented for all heavy equipment working in beach areas.

- A Marine Wildlife Contingency Plan will be incorporated into the Biological Resources Mitigation Implementation and Monitoring Plan (BRMIMP) and will be implemented to mitigate any potential interaction with marine mammals that may be encountered on the beach and dune areas, and avoid any potential impact to grunion spawning.

2.3 MANPOWER AND EQUIPMENT

2.3.1 Modifications to Wastewater and Stormwater Systems

The reconfigured wastewater and stormwater systems will be installed during the P3 construction period. Activities will be similar to the installation of the other P3 pipelines described in the AFC that require trenching. Therefore, no equipment or manpower requirements in addition to those already described for P3 construction activities are anticipated. Estimated manpower requirements for the construction of P3 are provided in AFC Table 2.9-1. Major equipment for construction is summarized in AFC Table 2.9-3.

2.3.2 Demolition of Outfall

The demolition of the outfall will be completed during the demolition of MGS Units 1 and 2. The type of activities and equipment will be the same, and no additional equipment will be required. No manpower requirements in addition to those already described for the demolition activities associated with MGS Units 1 and 2 are anticipated. Estimated equipment and manpower requirements for the demolition of MGS Units 1 and 2 are provided in Table 2-4 and Table 2-2 of the Project Enhancement and Refinement – MGS Units 1 and 2 Demolition, respectively. These manpower and equipment estimates will also cover the outfall demolition activities.

2.4 WATER USAGE

Activities during installation of the reconfigured wastewater and stormwater systems and the demolition and removal of the outfall will require water for dust control, equipment washdown, and concrete preparation, and will be similar to those activities already described for construction of P3 and demolition of MGS Units 1 and 2. No substantial increase in water use is expected as a result of the modifications of the wastewater and stormwater systems or removal of the outfall. Water use during construction of P3 is summarized in Table 2.9-4 of the AFC. Water use during the 15-month demolition period is summarized in Table 2.5 of the Project Enhancement and Refinement – MGS Units 1 and 2 Demolition.

2.5 APPLICABLE LAWS, ORDINANCES, REGULATIONS, AND STANDARDS

Construction and operation of the Project, including the associated enhancements discussed herein, will comply with applicable LORS described in Section 2.13 of the AFC.

2.6 INVOLVED AGENCIES AND AGENCY CONTACTS

In addition to the agencies identified in Section 2.14 of the AFC, agencies that may be involved in the Project enhancements discussed herein include the CCC, State Lands Commission, LARWQCB, CDFW, USACE, and USFWS.

2.7 REFERENCES

References in addition to those presented in Section 2.15 of the AFC were used for this Project Enhancement include:

Puente Power Project, 2015. Project Enhancement and Refinement, Demolition of Mandalay Generating Station Units 1 and 2. TN# 206698. November 19.

Puente Power Project, 2016. Application for Certification, Puente Power Project, Oxnard, CA - Refinement to Ammonia Tank Design. TN #210502. February 22.

Puente Power Project, 2016. Final Draft AECOM Mandalay Fire Protection System Study. TN #212358. July 19.

Puente Power Project, 2016. Refinement to Transmission Interconnection. TN #213002. August 26.

3.0 ENVIRONMENTAL ANALYSIS

3.1 AIR QUALITY

This section presents a discussion of the potential impacts related to air quality from the construction of the reconfigured wastewater and stormwater systems and demolition and removal of the outfall structure, as described in Section 2.0.

3.1.1 Affected Environment

The construction of the reconfigured wastewater and stormwater systems will be concurrent with the construction of the P3. The air quality impacts associated with P3 construction activities are discussed and analyzed in Appendix C-6 of the AFC. Demolition and removal of the outfall structure will occur during demolition of MGS Units 1 and 2. The air quality impacts associated with the demolition of MGS Units 1 and 2 are discussed and analyzed in Section 4.1.3 of the Project Enhancement and Refinement – MGS Units 1 and 2 Demolition.

3.1.2 Environmental Consequences

The construction of the reconfigured wastewater and stormwater systems is not expected to substantially change the type of construction activity, numbers or types of construction equipment, and/or size of the construction workforce analyzed in the AFC and the PSA. Therefore, the construction of the reconfigured wastewater and stormwater systems is not expected to change the emission levels and/or ambient impacts already analyzed in the PSA for P3 construction activities. The demolition of the outfall structure is not expected to substantially change the type of demolition activity, numbers or types of demolition equipment, and/or the demolition workforce analyzed in the Project Enhancement and Refinement – MGS Units 1 and 2 Demolition. Consequently, the demolition of the outfall structure is not expected to change the emission levels and/or ambient impacts already analyzed in the PSA for demolition activities. The PSA concluded that with implementation of the proposed Conditions of Certification, air quality impacts associated with construction and demolition activities would be less than significant.

3.1.3 Air Quality Impacts Analyses

As discussed above, neither the construction of the reconfigured wastewater and stormwater systems nor the demolition of the outfall structure are expected to change the ambient air quality modeling results discussed in Appendix C-6 of the AFC (for construction activities) and/or Section 4.1.3 of the Project Enhancement and Refinement – MGS Units 1 and 2 Demolition (for demolition activities).

3.1.4 Cumulative Impacts Analyses

As discussed above, neither the construction of the reconfigured wastewater and stormwater systems nor the demolition of the outfall structure are expected to change the ambient air quality modeling discussed in the AFC (for construction activities) and/or the Project Enhancement and Refinement – MGS Units 1 and 2 Demolition (for demolition activities). Therefore, these activities are not expected to change the Project's contribution to cumulative impacts from construction and/or demolition activities, and the impacts will continue to be below significance levels.

3.1.5 Laws, Ordinances, Regulations, and Standards

Construction and operation of the Project, including associated enhancements discussed herein, will comply with applicable LORS described in Section 4.1.2 of the AFC.

3.1.6 Involved Agencies and Agency Contacts

Project enhancements discussed herein would not require changes to the agencies identified in Section 4.1.6 of the AFC.

3.1.7 Permits Required and Permit Schedule

Project enhancements discussed herein would not require changes to the permits required and permit schedule described in Section 4.1.7 of the AFC.

3.1.8 References

No references in addition to those presented in Section 4.1.8 of the AFC were used in preparation of this Project Enhancement.

3.2 BIOLOGY

This section presents a discussion of the potential impacts related to biological resources from the construction of the reconfigured wastewater and stormwater systems and demolition and removal of the outfall structure. It also addresses briefly the positive consequences, from a biological resources perspective, associated with elimination of the existing ocean discharge and demolition and removal of the outfall structure, as described in Section 2.0.

3.2.1 Affected Environment

3.2.1.1 Modifications to Wastewater and Stormwater Systems

The construction of the reconfigured wastewater and stormwater systems will occur entirely within the MGS property and within the biological study area presented in the AFC. The majority of the construction activities will occur in areas of the MGS property that are currently paved. The new wastewater pipeline will be installed in the same trench as the P3 6-inch stormwater recycle pipeline. Approximately 120 feet of additional pipeline will be placed in a new trench in previously disturbed soils, using the same techniques described in the AFC. The banks of the Edison Canal already have riprap in place. At the discharge point into the canal, additional riprap may be placed to prevent erosion. The transfer pipe would discharge into a small sump near the canal to facilitate monitoring or sampling, if required, before the water enters the canal. Work activities associated with the new discharge to the Edison Canal will not be conducted within the open water habitat of the canal. The following sections describe the habitats, special-status species, and potential jurisdictional waters in the vicinity of the new discharge to the canal.

Habitats

The route of the modified wastewater system pipeline will pass through MGS property that is mostly paved. As described in the AFC, the developed area immediately surrounding the Edison Canal discharge point contains hardscape surfaces associated with MGS, while the bank of Edison Canal is lined with riprap. Nonnative invasive iceplant (*Carpobrotus edulis*) has colonized the bank at this location, which provides very limited habitat. Open water habitat occurs within the Edison Canal.

Special-Status Plant Species

Only a small portion of habitat available to the colonization of plants is present along the bank of Edison Canal between pieces of riprap, and these areas have been colonized by iceplant. Special-status plant species are not expected to occur here.

Special-Status Wildlife Species

As described above, very limited habitat occurs along the bank of the Edison Canal. Special-status wildlife species are not expected to occur along the bank. As described in the AFC, the open water of Edison Canal may provide potential habitat for special-status wildlife species, such as the tidewater goby (*Eucyclogobius newberryi*) and California least tern (*Sterna antillarum browni*). Freshwater aquatic species, such as the northern western pond turtle (*Actinemys marmorata*), are not expected to occur in the canal due to elevated salinity levels. A brief description of the documented occurrences within the Project area, and how these species potentially use or are known to use the area surrounding the proposed discharge, is provided below.

Tidewater goby is a federally listed endangered species and a California Species of Special Concern. It occurs in lagoons, estuaries, and freshwater tributaries to estuaries. It has been documented in the Santa

Clara River estuary and the Oxnard Drain ("J Street Canal"), the Ormond Beach Area, and southeast of Port Hueneme (CDFW, 2015a). This species may occur in Edison Canal.

California least tern is a federally listed endangered and state-listed endangered species. It nests in the immediate vicinity of the Project; however, nesting habitat is not available adjacent to the proposed discharge point. The Edison Canal may also provide foraging habitat for this species.

Jurisdictional Waters

The Edison Canal contains surface water year-round and provides habitat for wildlife. Based on currently available information, the canal may be a nonwetland water of the U.S., Waters of the State, and/or a CDFW-jurisdictional streambed.

3.2.1.2 Demolition of Outfall

The removal of the outfall structure will be on the beach adjacent to and west of the MGS property. The outfall structure is within the biological study area presented in the AFC. The following sections describe the habitats, special-status species, and potential jurisdictional waters in the vicinity of the outfall structure.

Habitats

As described in the AFC, the habitats contained in, and immediately adjacent to, the outfall structure include open water, sandy beach, and dune mats. Open water is found at the mouth of the outfall structure, and continues as a dynamic channel to the Pacific Ocean. Sandy beach is situated between the ocean and the dunes. Dune mats (*Abronia latifolia-Ambrosia chamissonis* Herbaceous Alliance) are located along the dunes between the outfall structure and MGS. Dune mats are identified in CDFW (2010) as a sensitive natural community. Please see AFC Section 4.2.1.2.2 for further descriptions of these vegetation communities and land covers.

Special-Status Plant Species

As described in the AFC, a few plant species have the potential to occur along the beach near the outfall structure. These species include:

- Ventura Marsh Milk-Vetch (*Astragalus pycnostachyus* var. *lanosissimus*, federally and state-listed, and California Native Plant Society [CNPS] Rank 1B.1);
- Coulter's Saltbush (*Atriplex coulteri*, CNPS Rank 1B.2);
- South Coast Saltscale (*Atriplex pacifica*, CNPS Rank 1B.2);
- Salt Marsh Bird's Beak (*Chloropyron maritimum*, CNPS Rank 1B.2);
- Mexican Malacothrix (*Malacothrix similis*, CNPS Rank 1A); and
- Dunedelion (*Malacothrix incana*, CNPS Rank 4.3).

Please see AFC Section 4.2.1.5.1 for further descriptions of these species.

In addition, Red (Sticky) Sand Verbena (*Abronia maritima*, CNPS Rank 4.2) is known to occur on Mandalay Beach, McGrath State Beach, and other nearby locations (CCH, 2015). This species was observed off site on Mandalay State Beach property.

Special-Status Wildlife Species

As described in the AFC, wildlife species with the potential to occur along the beach near the outfall structure include the California least tern (*Sterna antillarum browni*) and western snowy plover

(*Charadrius alexandrinus nivosus*). In addition, California sea lions (*Zalophus californianus*) and harbor seals (*Phoca vitulina*), which are protected by the Marine Mammal Protection Act and the California Fish and Game Code, are known to occur in the vicinity of the outfall. A brief description of the documented occurrences within the Project area, and how these species potentially use or are known to use the area surrounding the outfall structure, is provided below.

California least tern is a federally listed endangered and state-listed endangered species. It nests in the immediate vicinity of the MGS site between the Santa Clara River Mouth and McGrath Lake; and on Ormond Beach between Ormond Beach Generating Station and Perkins Road (CDFW, 2015a). This species is known to nest on the beach in the immediate vicinity of the MGS site.

Western snowy plover is a federally listed threatened species and a California Species of Special Concern. Critical habitat for western snowy plover is designated on the beaches and dunes west, northwest, and southwest of the MGS site (USFWS, 2012 and Figure 4.2-3). The beaches and sand dunes in Mandalay State Beach and McGrath State Beach in the immediate vicinity of the MGS site support both wintering populations and breeding populations of this species (California State Parks, 2013). The nesting areas are delineated with semi-permanent or seasonal symbolic fencing. The northwestern corner of the Project site is approximately 500 feet from the closest potential nesting area.

Harbor seal and California sea lion are protected by the Marine Mammal Protection Act and the California Fish and Game Code. They are known to occasionally use the outfall structure and associated channel.

Jurisdictional Waters

The channel associated with the outfall structure contains intermittent surface water year-round due to MGS operational activities. Based on currently available information, the channel may be a nonwetland water of the U.S., Waters of the State, and/or a CDFW-jurisdictional streambed. Although a formal wetland determination was not conducted adjacent to the outfall structure, wetland waters of the U.S. are not expected to be present due to the limited flat topography, which is the landscape position needed to collect or concentrate water; lack of stable substrate where wetlands would have the time to form; abundance of riprap; and lack of hydrophytic vegetation.

3.2.2 Environmental Consequences

Any environmental impacts to biological resources associated with construction of the reconfigured wastewater and stormwater systems and demolition of the outfall structure will be similar in nature and intensity to those identified in the AFC and the Project Enhancement and Refinement – MGS Units 1 and 2 Demolition, and analyzed in the PSA. The PSA concluded that with implementation of the proposed Conditions of Certification, these impacts would be less than significant.

3.2.2.1 Modifications to Wastewater and Stormwater Systems

Construction of the reconfigured wastewater and stormwater systems will take place within the MGS property that is currently covered by pavement and disturbed ground. Similar construction activities in these areas have already been analyzed in the AFC and PSA and determined not to result in significant unmitigated impacts. Most of the new wastewater pipeline from the basins to the canal will be installed in the same trench as the P3 6-inch stormwater recycle pipeline. Approximately 120 feet of additional pipeline will be placed in a new trench in previously disturbed soils, using the same techniques described in the AFC. The banks of the Edison Canal already have riprap in place. At the discharge point into the canal, additional riprap may be placed to prevent erosion.

The developed areas and riprap-lined bank of the Edison Canal provide very limited habitat; therefore, special-status species are not expected to occur there. The open water of Edison Canal may provide habitat for special-status wildlife species, but no construction will occur in this area.

Impacts to Special-Status Plant Species

Limited vegetation exists adjacent to the proposed discharge point into the Edison Canal. Although not expected, the possibility exists for special-status plant species to occur within the disturbance footprint. If present, these individuals could be damaged or removed during construction. Pre-construction surveys and biological monitoring during construction will limit impacts. With implementation of the proposed avoidance and minimization measures identified in Section 3.2.4, impacts are expected to be less than significant.

Impacts to Migratory and Resident Birds

Migratory and resident bird species could be impacted during construction by the temporary disturbance to habitat at the proposed discharge point; however, there is abundant high-quality habitat nearby, and any temporary disturbance in the limited area of the discharge point will be insignificant. Although the area does not support suitable nesting habitat, nesting birds may be impacted by construction activities. Any construction-related impacts would be similar in nature and intensity to those already analyzed in the PSA. Pre-construction surveys and biological monitoring during construction will limit impacts. With implementation of the proposed avoidance and minimization measures identified in Section 3.2.4, impacts are expected to be less than significant.

Noise generated by equipment might negatively impact the behavior of those birds within 500 feet of the construction area. The extent of these impacts will be similar to that already analyzed in the PSA, and is expected to be minor due to the relatively low noise levels; the temporary nature of the disturbance; and the site's immediate coastal location, where strong wind patterns tend to diffuse sound. With implementation of the proposed avoidance and minimization measures identified in Section 3.2.4, impacts are expected to be less than significant.

Impacts to Special-Status Wildlife Species

Construction of the reconfigured wastewater and stormwater systems will result in the temporary disturbance of degraded habitat. For the most part, construction will occur in the same areas already analyzed in the PSA, although some construction will occur in areas of the MGS site closer to the Edison Canal. As discussed in the PSA, although unexpected, terrestrial wildlife occurring on site would be exposed to potential injury or mortality caused by contact with equipment. In most cases, adult animals would be flushed at the onset of work and would leave the site to avoid being killed or injured. However, it would be likely that species of low mobility such as fossorial small mammals, reptiles, and young birds would be unable to escape mortality. Although the area does not support suitable nesting habitat, nesting birds may be impacted. Any construction-related impacts would be similar in nature and intensity to those already analyzed in the PSA. With implementation of pre-construction surveys and biological monitoring during construction of the wastewater and stormwater systems, impacts are expected to be less than significant.

Impacts to aquatic wildlife are not expected, because work activities will not take place in the open water habitat of the Edison Canal. However, if not properly conducted and controlled, construction activities could impact special-status wildlife species in the open water habitat of the canal. Control measures described in Section 2.2 will be implemented to avoid impacts to habitat, and will therefore reduce any impacts to insignificant levels.

Construction of the reconfigured wastewater and stormwater systems would require the use of typical heavy machinery, such as front-end loaders, excavators, graders, scrapers, miscellaneous rubber-tired trucks, generators, dewatering equipment, and compressors. As explained above, the type of construction activity, numbers and types of construction equipment, and/or size of the construction workforce will not be materially different than that already analyzed in the AFC and PSA. Therefore, any construction noise impacts will be similar in nature and intensity to those analyzed in the AFC and PSA. As described in the AFC and PSA, predicted sound levels during construction, 1 foot above the ground surface, would range between 46 and 69 A-weighted decibels, depending on wind conditions (calm conditions, east winds, or west winds) and the month of construction. For some wildlife species, elevated noise levels would trigger avoidance behaviors, wherein wildlife would temporarily alter behavior patterns to avoid use of areas proximate to the site during construction hours. The level of behavioral alteration would differ from species to species, and would be dependent on noise levels in conjunction with other factors, such as visibility and the noise levels to which the wildlife are currently accustomed. With implementation of the proposed avoidance and minimization measures identified in Section 3.2.4, impacts will be less than significant.

A BRMIMP will be prepared for the Project to cover both construction and demolition phases. This plan will include construction measures described in Section 2.2 that would be implemented to avoid impacts to sensitive habitat during construction.

With implementation of pre-construction surveys, biological monitoring, and other measures in the BRMIMP, impacts to special-status wildlife species will be less than significant.

Impacts to Natural Communities

Natural communities in the immediate vicinity of the work area are nonexistent.

Impacts to Jurisdictional Waters

Based on currently available information, the Edison Canal may be a nonwetland water of the U.S., Waters of the State, and/or a CDFW-jurisdictional streambed. Impacts to the canal are not expected, because work activities will be confined to upland developed areas.

Impacts to Wildlife Movement and Habitat Connectivity

Construction of the reconfigured wastewater and stormwater systems would result in the temporary disturbance of degraded habitat. For the most part, construction will occur in same areas already analyzed in the PSA, although some construction will occur in areas of the MGS site closer to the Edison Canal. Wildlife movement is very limited in this area due to the surrounding development. Therefore, as concluded in the AFC and PSA, impacts to terrestrial wildlife movement and habitat connectivity will be nonexistent to very limited.

3.2.2.2 Demolition of Outfall

Outfall demolition and removal activities will occur on the beach adjacent to the dunes. The beach is a sloped sandy beach with a width greater than 300 feet in most areas. The beach supports colonies of nesting birds and is used by harbor seals and California sea lions. Additionally, there is the potential for special-status species to occur in the area. Biological impacts resulting from the demolition could include direct and indirect impacts, as described below.

Impacts to Special-Status Plant Species

Limited vegetation exists in the immediate area around the outfall structure. Vegetation is established along the dunes in the vicinity of the outfall through which demolition personnel and equipment will pass on existing access pathways. Although not expected, the possibility exists for special-status plant species to occur within the disturbance footprint. If present, these individuals could be damaged or removed during demolition. Pre-construction surveys and biological monitoring during demolition will limit impacts. With implementation of the proposed avoidance and minimization measures identified in Section 3.2.4, impacts are expected to be less than significant.

Although existing access pathways will be used to access the demolition site, there is the potential for nonnative plants to be introduced and colonize the edges of the access pathways as a result of use by demolition personnel and equipment. With implementation of the proposed avoidance and minimization measures identified in Section 3.2.4, impacts are expected to be less than significant.

Impacts to Migratory and Resident Birds

Migratory and resident bird species could be impacted during demolition as a result of temporary disturbance to habitat; however, there is abundant high-quality habitat nearby. Nesting birds would not be impacted, because the demolition of the outfall structure will be conducted outside the nesting season (February 1 through August 31). With implementation of the proposed avoidance and minimization measures identified in Section 3.2.4, impacts are expected to be less than significant.

As explained above, the type of demolition activity, numbers and types of demolition equipment, and/or size of the demolition workforce will not be materially different than that already analyzed in the Project Enhancement and Refinement – MGS Units 1 and 2 Demolition and the PSA. Therefore, any demolition noise impacts will be similar in nature and intensity to those previously analyzed. Noise generated by demolition equipment might negatively impact the behavior of those birds within 500 feet of the demolition activity. The extent of these impacts is expected to be minor due to the relatively low noise levels; the temporary nature of the disturbance; and the site's immediate coastal location, where strong wind patterns tend to diffuse sound. With implementation of the proposed avoidance and minimization measures identified in Section 3.2.4, impacts are expected to be less than significant.

Impacts to Special-Status Wildlife Species

Demolition would result in the temporary disturbance of sandy beach and dune vegetation, and the removal of the open water habit created by the installation and operation of the existing outfall. During demolition, wildlife occurring in the area would be exposed to potential injury or mortality caused by contact with demolition equipment during initial clearing and site preparation activities. In most cases, adult animals would be flushed at the onset of demolition and would leave the site to avoid being killed or injured. However, it would be likely that species of low mobility such as fossorial small mammals, reptiles, and young birds would be unable to escape mortality. Nesting birds would not be impacted, because the demolition of the outfall structure will be conducted outside the nesting season (February 1 through August 31). With implementation of pre-construction surveys and biological monitoring during demolition, impacts are expected to be less than significant.

Demolition of the outfall structure would require the use of typical heavy machinery. As explained above, the type of demolition activity, numbers and types of equipment, and/or size of the demolition workforce will not be materially different than that already analyzed in the Project Enhancement and Refinement – MGS Units 1 and 2 Demolition and the PSA. Therefore, any demolition noise impacts will be similar in nature and intensity to those analyzed in those documents. As described therein, predicted sound levels during demolition, 1 foot above the ground surface, would range between 46 and 69 A-weighted decibels, depending on wind conditions (calm conditions, east winds, or west winds) and

the month of demolition. The effects of noise would be greatest in areas immediately abutting the area of demolition, such as the beach situated to the west, the sand dunes to the northwest, and marsh vegetation along the southern edges of McGrath Lake. For some wildlife species, elevated noise levels would trigger avoidance behaviors, wherein wildlife would temporarily alter behavior patterns to avoid use of areas proximate to the site during construction hours. The level of behavioral alteration would differ from species to species, and would be dependent on noise levels in conjunction with other factors, such as visibility and the noise levels to which the wildlife are currently accustomed. In particular, noise is a concern during the nesting season because of the potential to disrupt nesting behavior and potentially cause abandonment of eggs and/or young of the year. Because demolition will not occur during the nesting season, noise impacts will be less than significant.

A BRMIMP will be prepared for the Project to cover both construction and demolition phases. This plan will include construction and demolition control measures described in Section 2.2 that would be implemented to avoid impacts to sensitive habitat during demolition activities on the beach and near the dunes.

With demolition of the outfall to be completed outside of the nesting season, and with implementation of pre-construction surveys, biological monitoring during demolition, and other measures in the BRMIMP, impacts to special-status wildlife species will be less than significant.

Impacts to Natural Communities

Natural communities in the immediate vicinity of the outfall include a variety of vegetative associations. Of the associations present, only one (dune mats) is designated as a sensitive natural community by CDFW (2010). Access from the MGS site to the outfall structure will be limited to the existing pathways through the dune mats; however, these sensitive dune mats may be inadvertently damaged during construction. Additionally, the limited vegetation surrounding the outfall structure will be removed. With implementation of pre-construction surveys and biological monitoring during demolition, impacts are expected to be less than significant.

Although existing access pathways will be used to access the demolition site, there is the potential for nonnative plants to be introduced and colonize the edges of the access pathways as a result of use by demolition personnel and equipment. With implementation of the proposed avoidance and minimization measures identified in Section 3.2.4, impacts are expected to be less than significant.

Impacts to Jurisdictional Waters

The channel associated with the outfall structure contains intermittent surface water year-round due to MGS operational activities. Based on currently available information, the channel may be a nonwetland water of the U.S., Waters of the State, and/or a CDFW-jurisdictional streambed. Although a formal wetland determination was not conducted adjacent to the outfall structure, wetland waters of the U.S. are not expected to be present due to the limited flat topography, which is the landscape position needed to collect or concentrate water; lack of stable substrate where wetlands would have the time to form; abundance of riprap; and lack of hydrophytic vegetation. The channel is wholly dependent on the outfall structure as a source of water, and would cease to exist without it. Additionally, once the outfall structure is removed, natural sand accumulation will be expected to restore the area to sandy beach habitat conforming to the surrounding lands. Impacts are expected to be less than significant because the channel is a result of anthropogenic activity and will be naturally restored to the original function of the area as sandy beach habitat.

Impacts to Wildlife Movement and Habitat Connectivity

The dunes and beach near the outfall structure and associated channel provide habitat to wildlife; however, the structure and channel may limit or hinder movement for smaller and less mobile wildlife species. Once the outfall is removed, natural sand accumulation will be expected to restore the area to sandy beach habitat conforming to the surrounding lands. In its restored state, the area will be contiguous with the surrounding lands. Therefore, removal of the outfall structure would be considered a benefit to wildlife movement and habitat connectivity.

Positive Environmental Consequences

The cessation of the existing ocean discharge and demolition and removal of the outfall structure will significantly improve environmental conditions relative to the current baseline and result in positive consequences for biological resources. As a result of the actions described herein, and naturally occurring phenomena, the beach and dune area currently occupied by the outfall and affected by the discharge will revert to conditions that currently exist just to the north and south of the area. This will result in an expansion of beach and dune in this area, and the elimination of potentially adverse consequences associated with the existing discharge and outfall that have been identified in some of the comments on the PSA.

3.2.3 Cumulative Impacts Analyses

The AFC and the PSA conclude that the Project's contribution to cumulative impacts on biological resources would be less than significant. Any incremental environmental impacts to biological resources associated with construction of the reconfigured wastewater and stormwater systems and demolition and removal of the outfall structure will be similar in nature and intensity to those identified in the AFC and the Project Enhancement and Refinement – MGS Units 1 and 2 Demolition. By avoiding demolition during the nesting season and implementing BMPs, cumulative impacts would continue to be less than significant, as described in the PSA.

3.2.4 Mitigation Measures

The following avoidance and mitigation measures described in AFC Section 4.2.4 and the Biological Resources Section of the PSA will be implemented before and during the construction of the reconfigured wastewater and stormwater systems and demolition and removal of the outfall structure, to avoid and/or further reduce Project-related impacts to biological resources.

Pre-Construction/Demolition

- AFC BIO-3 Pre-Construction Surveys for Special-Status Plants
- AFC BIO-4 Pre-Construction Surveys for Nesting Birds
- AFC BIO-6 Biological Resources Monitoring and Mitigation Plan
- AFC BIO-9 Worker Environmental Awareness Program
- PSA BIO-1 Designated Biologist Selection
- PSA BIO-2 Designated Biologist Duties
- PSA BIO-3 Biological Monitor Selection
- PSA BIO-4 Designated Biologist and Biological Monitor Authority
- PSA BIO-5 Worker Environmental Awareness Program
- PSA BIO-6 Biological Resources Mitigation Implementation and Monitoring Plan
- PSA BIO-7 General Impact Avoidance and Minimization Measures
- PSA BIO-8 Pre-Construction Nest Surveys and Impact Avoidance and Minimization Measures for Breeding Birds

During Construction/Demolition

- AFC BIO-7 Snowy Plover and Least Tern Monitoring During Construction
- AFC BIO-11 Biological Monitoring of Nesting Birds During Construction
- AFC BIO-15 Avoid Attracting Predators
- PSA BIO-8 Pre-Construction Nest Surveys and Impact Avoidance and Minimization Measures for Breeding Birds

In addition to the avoidance and mitigation measures described above, the following avoidance and mitigation measures will be implemented for work associated with construction of the reconfigured wastewater and stormwater systems and demolition and removal of the outfall structure:

- To the extent feasible, construction in close proximity to the Edison Canal will take place outside the nesting season (February 1 through August 31).

- Demolition of the outfall structure will take place outside the nesting season (February 1 through August 31).

- The BRMIMP will be modified to address construction of the reconfigured wastewater and stormwater systems and demolition and removal of the outfall structure.

- During demolition activities, exclusionary fencing will be installed around the outfall structure demolition area to prevent marine mammals from using the area.

- Prior to each day, pre-construction/demolition surveys for marine mammals will 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 will be halted. An approved biologist will immediately notify the Channel Islands Marine Resource Institute, which is the local approved National Marine Fisheries Service, to make every reasonable effort to rescue such an animal.

- The Worker Environmental Awareness Program will include information on marine mammals that could be observed near the project area and training the workers in the protection of marine mammals.

- Heavy equipment used during the demolition of the outfall structure will 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.

3.2.5 Laws, Ordinances, Regulations, and Standards

Construction and operation of the Project, including associated enhancements discussed herein, will comply with applicable LORS described in Section 4.2.5 of the AFC.

3.2.6 Involved Agencies and Agency Contacts

In addition to the agencies identified in Section 4.2.6 of the AFC, the CCC would be involved with the removal of the outfall.

3.2.7 Permits Required and Permit Schedule

Project enhancements discussed herein would not require changes to the permits required and permit schedule described in Section 4.2.7 of the AFC.

3.2.8 References

No references in addition to those presented in Section 4.2.8 of the AFC were used for this Project Enhancement. The following references, which were used for the AFC, were specifically reviewed for this document.

California State Parks, 2013. Western Snowy Plover Annual Report 2013, Channel Coast District. By Nat Cox, Senior Environmental Scientist, and Alexis Frangis, Environmental Scientist. Federal Fish and Wildlife Permit TE-31406A-0, State Scientific Collecting Permit SC-010923.

CCH (Consortium of California Herbaria), 2015. Collection data for vascular plant specimens. Data provided by the participants of the Consortium of California Herbaria. Available online at: ucjeps.berkeley.edu/consortium/.

CDFW (California Department of Fish and Wildlife), 2010. Natural Communities List Arranged Alphabetically by Life Form. September. California Department of Fish and Game. Available online at: http://www.dfg.ca.gov/biogeodata/vegcamp/pdfs/natcomlist.pdf. Accessed through February 2015.

CDFW (California Department of Fish and Wildlife), 2015a. California Natural Diversity Database (CNDDB). The CNDDB GIS data in shapefile format. Available online at: https://nrm.dfg.ca.gov/cnddb/view/updates.aspx. Accessed January 2015.

3.3 CULTURAL RESOURCES

This section presents a discussion of the potential impacts related to cultural resources from the construction of the reconfigured wastewater and stormwater systems and demolition and removal of the outfall, as described in Section 2.0.

3.3.1 Affected Environment

The affected environment for archaeological resources consists of previously disturbed soils within the MGS site and in the area of the ocean outfall structure. As presented in the AFC, MGS Units 1 and 2, including the outfall structure, do not meet the criteria for listing in the National Register of Historical Places or the California Register of Historical Resources; no historical architectural resources are present in the study area.

3.3.2 Environmental Consequences

The PSA concludes that the Project as proposed, with implementation of the proposed Conditions of Certification, would not result in any significant unmitigated impacts to cultural resources. The construction of the reconfigured wastewater and stormwater systems and demolition of the outfall would have impacts similar in nature and intensity to those analyzed in the PSA.

The construction of the reconfigured wastewater and stormwater systems includes installation of buried pipeline in previously disturbed areas within the MGS property. The pipelines are similar to other pipelines that will be installed as part of the Project and that have been analyzed in the AFC and PSA. The locations and depth below ground surface of the newly proposed pipelines are the same as, or similar to, the locations and depths of other Project pipelines analyzed in the AFC and PSA. The construction techniques that will be used to install the newly proposed pipelines will also be the same as those previously analyzed. No below-grade ground disturbance would occur in previously undisturbed areas; therefore, it is unlikely that in situ archaeological remains occur within the horizontal and vertical limits of the construction and demolition activities. In the unlikely event that buried archaeological resources are inadvertently exposed during construction activities, mitigation measures identified in both the AFC and PSA would reduce impacts to less than significant levels.

The outfall was constructed in the 1950s during the construction of the MGS facility. The features to be demolished are not considered significant historic properties under Section 106 of the National Historic Preservation Act, nor are they historical resources for the purposes of the California Environmental Quality Act. No historical architectural resources are present in the study area. Neither demolition of the outfall, nor construction of the reconfigured wastewater and stormwater systems would physically alter any historical structures or introduce intrusive elements or other features that could adversely affect the physical setting of historical resources. Therefore, demolition of the outfall and construction of the reconfigured wastewater and stormwater systems would not result in impacts to historic architectural resources.

3.3.3 Cumulative Impacts Analyses

The analysis presented in Section 4.3.3 of the AFC and in the Cultural Resources Section of the PSA concluded that the Project's contribution to cumulative impacts would be less than significant. The Project would not result in additional impacts to cultural resources as a result of the enhancements described herein. Therefore, the Project, including the construction of the reconfigured wastewater and stormwater systems and demolition of the outfall, will not result in any significant cumulative impacts to cultural resources.

3.3.4 Mitigation Measures

No mitigation measures are proposed beyond those contained in Section 4.3.4 of the AFC and the PSA (including proposed changes to proposed Conditions of Certification contained in Applicant's comments on the PSA).

3.3.5 Laws, Ordinances, Regulations, and Standards

Construction and operation of the Project, including associated enhancements discussed herein, will comply with applicable LORS described in Section 4.3.5 of the AFC.

3.3.6 Involved Agencies and Agency Contacts

Project enhancements discussed herein would not require changes to the agencies identified in Section 4.3.6 of the AFC.

3.3.7 Permits Required and Permit Schedule

Project enhancements discussed herein would not require changes to the permits required and permit schedule described in Section 4.3.7 of the AFC.

3.3.8 References

No references in addition to those presented in Section 4.3.8 of the AFC were used for this Project Enhancement.

3.4 GEOLOGIC HAZARDS AND RESOURCES

This section presents a discussion of the potential impacts related to geologic hazards and resources from the construction of the reconfigured wastewater and stormwater systems and demolition and removal of the outfall, as described in Section 2.0.

3.4.1 Affected Environment

The construction of the reconfigured wastewater and stormwater systems and demolition and removal of the outfall will be within the geological study area presented in the AFC and analyzed in the PSA.

3.4.2 Environmental Consequences

The PSA concluded that the Project as proposed, with implementation of the proposed Conditions of Certification, would not result in any significant unmitigated impacts related to geologic hazards and resources. Construction and demolition activities described herein will be similar to those proposed in the AFC and the Project Enhancement and Refinement – MGS Units 1 and 2 Demolition, and will comply with appropriate geologic hazard and resource protection measures. Therefore, construction of the reconfigured wastewater and stormwater systems and demolition of the outfall will not result in potential geologic hazards or impacts to geologic resources greater than those presented in Section 4.4 of the AFC and analyzed in the PSA.

3.4.3 Cumulative Impacts Analyses

The analysis presented in Section 4.4.3 of the AFC and the PSA concluded that the Project's contribution to cumulative impacts would be less than significant. The construction and demolition activities described herein will not result in any new significant cumulative impacts to geologic resources or hazards.

3.4.4 Mitigation Measures

No new or additional measures beyond those identified in Section 4.4.4 of the AFC and in the PSA (including any proposed changes to Conditions of Certification included in Applicant's comments on the PSA) are required for the Project.

3.4.5 Laws, Ordinances, Regulations, and Standards

Construction and operation of the Project, including associated enhancements discussed herein, will comply with applicable LORS described in Section 4.3.5 of the AFC.

3.4.6 Involved Agencies and Agency Contacts

Project enhancements discussed herein would not require changes to the agencies identified in Section 4.4.6 of the AFC.

3.4.7 Permits Required and Permit Schedule

Project enhancements discussed herein would not require changes to the permits required and permit schedule described in Section 4.4.7 of the AFC.

3.4.8 References

No references in addition to those presented in Section 4.4.8 of the AFC were used for this Project Enhancement.

3.5 HAZARDOUS MATERIALS

This section presents a discussion of the potential impacts related to hazardous materials handling from the construction of the reconfigured wastewater and stormwater systems and demolition and removal of the outfall, as described in Section 2.0.

3.5.1 Affected Environment

The construction of the reconfigured wastewater and stormwater systems and demolition and removal of the outfall will be within the study area for hazardous materials presented in the AFC and Project Enhancement and Refinement – MGS Units 1 and 2 Demolition, and analyzed in the PSA.

The MGS facility maintains a Hazardous Materials Business Plan (HMBP) with the City of Oxnard Fire Department, Certified Unified Program Agency (CUPA). The HMBP includes a chemical inventory and emergency response procedures. Procedures for oil storage and receiving, and for oil spill prevention and response, are outlined in the facility's Spill Prevention, Control and Countermeasure Plan. MGS has implemented a Risk Management Plan for the storage and use of aqueous ammonia. Hazardous wastes are currently generated at the facility, and the facility maintains a U.S. Environmental Protection Agency Identification Number for the generation of hazardous wastes. Hazardous wastes are accumulated in satellite accumulation areas throughout the MGS facility.

3.5.2 Environmental Consequences

The PSA concluded that the Project as proposed, with implementation of the proposed Conditions of Certification, would not result in any significant unmitigated impacts related to hazardous materials handling.

Hazardous materials that would be used during the construction of the reconfigured wastewater and stormwater systems and demolition of the outfall include unleaded gasoline, diesel fuel, oil, lubricants, and solvents, similar to materials used during construction and demolition activities described in the AFC and Project Enhancement and Refinement – MGS Units 1 and 2 Demolition. These hazardous materials are expected to be stored in the construction/demolition laydown area, or in equipment/vehicle fuel tanks.

The construction/demolition contractor would be responsible for ensuring that the use, storage, and handling of these materials is in compliance with applicable federal, state, and local LORS, including licensing, personnel training, accumulation limits, reporting requirements, and recordkeeping. A HMBP would be developed (or the MGS HMBP would be updated) prior to construction and demolition activities, to include hazardous materials to be used and stored at the facility for construction and demolition purposes. The HMBP would outline hazardous materials handling, storage spill response, and reporting procedures for all hazardous substances used on site during construction and demolition.

There would be minimal potential for significant environmental impact from hazardous material incidents during construction and demolition, because relatively small volumes of hazardous materials would be on site during construction and demolition, and the increased volumes associated with the construction and demolition described herein are immaterial. When in use, these materials would be handled by trained personnel. The most likely incidents involving these materials would be dripping of gasoline, diesel fuel, oil, and lubricants from vehicles or equipment. The worst-case scenario would be an accident involving the release of one of these materials from a vehicle during equipment maintenance or fueling. The risk of such an occurrence would be minimized by the emergency response training program and procedures that would be implemented by the contractor during construction and demolition.

Additionally, CEC-proposed Conditions of Certification and the mitigation measures presented in Section 4.5.4 of the AFC (see Mitigation Measure HM-1) would be implemented for construction and

demolition activities, further ensuring that impacts from fueling and maintenance of construction/ demolition vehicles and equipment would be less than significant.

The hazardous materials that would be used during construction and demolition have low acute toxicity. If a spill or leak into the environment were to involve hazardous materials equal to or greater than the specific reportable quantities, federal, state, and local reporting requirements would be followed. In particular, the Ventura County CUPA, City of Oxnard Fire Department, would be notified if the spill or leak leads to fire or injury. Contractors would be expected to implement BMPs with regard to hazardous materials storage, handling, emergency spill response, and reporting procedures. Mitigation Measures HM-2 through HM-4, described in Section 4.5.4 of the AFC, along with Conditions of Certification HAZ-1, HAZ-2 and HAZ-7 of the PSA, will ensure that proper procedures are followed in the event of a hazardous materials spill. The Spill Prevention Control and Countermeasure Plan would include provisions specific to work on the beach associated with the outfall removal. With implementation of the standard conditions and the procedures identified in Section 4.5.4 of the AFC and the Hazardous Materials Section of the PSA, impacts from hazardous materials handling during construction and demolition are expected to be less than significant.

As discussed in Section 4.5 of the AFC, the MGS site is on a list of hazardous materials sites compiled pursuant to California Government Code § 65962.5. As discussed in Section 4.14, Waste Management, of the AFC, a Phase I Environmental Site Assessment (ESA) was prepared for the MGS site. According to the Phase I ESA (Appendix L-1 of the AFC), the MGS site was identified on several agency databases related to impacts to soil and groundwater associated with historical MGS activities. Impacts to soil and groundwater are currently being assessed and remediated. Closure activities associated with prior operations of retention basins and associated appurtenances on the MGS property are not part of the Project. These activities are Southern California Edison's (SCE's) obligations as the previous owner of the property; they include ongoing groundwater monitoring related to cleanup of the three retention basins north of MGS Unit 2. There is the potential for subsurface impacts to areas on the MGS site that were not previously assessed and remediated. These areas include, but are not limited to, the power block area around Units 1, 2, and 3; transformer areas; pipeline areas; oil-pumping areas; historical dredge-spoil-pile areas; oil/water separator and sump; and aboveground storage tanks and chemical storage areas. The MGS property will be investigated and evaluated under corrective action of the Department of Toxic Substances Control. Construction of the reconfigured wastewater and stormwater systems and demolition of the outfall would not expose subsurface contamination that was not analyzed in the AFC and PSA.

3.5.3 Cumulative Impacts Analyses

The analysis presented in Section 4.5.3 of the AFC and in the PSA concluded that the Project's contribution to cumulative impacts would be less than significant. The Project would not result in new significant impacts from hazardous materials handling as a result of the enhancements described herein. Compliance with existing LORS that address the handling of hazardous materials will ensure that the construction of the reconfigured wastewater and stormwater systems and demolition of the outfall will not create a significant hazard to the public or the environment related to the handling or accidental release of hazardous materials. Past, present, and reasonably foreseeable future projects are also subject to existing LORS that address the handling and accidental release of hazardous materials. Therefore, existing LORS will ensure that the incremental effects of the construction and demolition described herein—when considered together with the effects of past, present, and reasonably foreseeable projects—will not create a cumulatively considerable hazard to the public or environment related to the handling or accidental release of hazardous materials beyond those addressed in Section 4.5.3 of the AFC and the Hazardous Materials Section of the PSA.

3.5.4 Mitigation Measures

CEC standard conditions, the mitigation measures presented in Section 4.5.4 of the AFC, and the Conditions of Certification presented in the Hazardous Materials Section of the PSA (including Applicant's comments thereon) would be implemented for the construction and demolition described herein, and would further ensure that impacts from hazardous materials handling would be less than significant.

3.5.5 Laws, Ordinances, Regulations, and Standards

Construction and operation of the Project, including associated enhancements discussed herein, will comply with applicable LORS described in Section 4.5.5 of the AFC.

3.5.6 Involved Agencies and Agency Contacts

Project enhancements discussed herein would not require changes to the agencies identified in Section 4.5.6 of the AFC.

3.5.7 Permits Required and Permit Schedule

Project enhancements discussed herein would not require changes to the permits required and permit schedule described in Section 4.5.7 of the AFC.

3.5.8 References

No references in addition to those presented in Section 4.5.8 of the AFC were used for this Project Enhancement.

3.6 LAND USE

This section presents a discussion of the potential impacts related to land use from the construction of the reconfigured wastewater and stormwater systems and demolition and removal of the outfall, as described in Section 2.0.

3.6.1 Affected Environment

The construction of the reconfigured wastewater and stormwater systems and demolition and removal of the outfall will occur within the land use study area presented in the AFC and analyzed in the PSA.

3.6.2 Environmental Consequences

The PSA concluded that the Project as proposed, with implementation of proposed Conditions of Certification, would have no unmitigated significant impacts related to land use. Construction of the reconfigured wastewater and stormwater systems will be within the MGS property. The wastewater and stormwater systems consist primarily of below-ground features that are similar to other below-grade features already analyzed in the PSA. Therefore, these enhancements to the Project would not have any effect on land uses.

The beach parcel on which the existing outfall is located is identified in the Oxnard Coastal Zoning Ordinance as within the Coastal Recreation (RC) sub-zone. The outfall is considered by the City of Oxnard, under the Oxnard LCP and Chapter 17 Coastal Zoning Code, to be a legal nonconforming structure that currently serves MGS Units 1, 2, and 3, and would be permitted to continue to serve MGS Unit 3 even after decommissioning of MGS Units 1 and 2. Removal of the outfall will eliminate this legal nonconforming use and result in greater conformance with local zoning requirements.

Cessation of the current discharge onto the beach and removal of the outfall structure will significantly improve public access to, and recreational opportunities on, the beach fronting the MGS site. Therefore, elimination of discharges and removal of the outfall will address the requirements of Section 25529 of the Warren-Alquist Act which states, in relevant part:

> *When a facility is proposed to be located in the Coastal Zone or any other area with recreational, scenic, or historic value, the [Energy] Commission shall require, as a condition of certification of any facility contained in the application, that an area be established for public use, as determined by the Commission.*

Elimination of discharges and removal of the outfall will also be consistent with the following:

- California Coastal Act Sections 30210 and 30211, which require maximum public access to be provided, and interference with the public's right of access to the sea to be avoided.

- City of Oxnard coastal Land Use Plan (LUP) Policy 54, which requires all new industrial and energy-related development to be located and designed to minimize adverse effects upon public access to the beach.

- City of Oxnard LUP Policy 52, which requires that energy-related development should not be located in coastal recreation areas.

3.6.3 Cumulative Impacts Analyses

The analysis presented in Section 4.6.3 of the AFC and in the PSA concludes that the Project's contribution to cumulative impacts would be less than significant. The Project would not result in additional impacts to land use as a result of the Project enhancements described herein. Therefore, the

Project, including the construction of the reconfigured wastewater and stormwater systems and demolition and removal of the outfall, will not result in any significant cumulative impacts to land use beyond those addressed in Section 4.6.3 of the AFC, Section 4.6.3 of the Project Enhancement and Refinement – MGS Units 1 and 2 Demolition, and the Land Use Section of the PSA. Furthermore, as discussed above, demolition and removal of the outfall will be consistent with and further the purposes of a number of local land use plans and policies.

3.6.4 Mitigation Measures

No significant adverse land use impacts associated with the enhancements described herein were identified; therefore, no mitigation measures are proposed. Implementation of these Project enhancements will satisfy proposed Condition of Certification LAND-1 in the PSA.

3.6.5 Laws, Ordinances, Regulations, and Standards

Construction and operation of the Project, including associated enhancements discussed herein, will comply with applicable LORS described in Section 4.6.5 of the AFC and the Land Use Section of the PSA.

3.6.6 Involved Agencies and Agency Contacts

Project enhancements discussed herein would not require changes to the agencies identified in Section 4.6.6 of the AFC.

3.6.7 Permits Required and Permit Schedule

Project enhancements described herein would not require changes to the permits required and permit schedule described in Section 4.6.7 of the AFC.

3.6.8 References

No references in addition to those presented in Section 4.6.8 of the AFC were used for this Project Enhancement.

3.7 NOISE AND VIBRATION

This section presents a discussion of the potential impacts related to noise and vibration from the construction of the reconfigured wastewater and stormwater systems and demolition and removal of the outfall, as described in Section 2.0.

3.7.1 Affected Environment

The construction and demolition activities will occur in the study area previously evaluated in the AFC, Project Enhancement and Refinement – MGS Units 1 and 2 Demolition, and the PSA, and are subject to the same geographic, topographic, and noise conditions. Therefore, the affected environment is unchanged from that presented in Section 4.7.1 of the AFC and in Section 4.7.1 of the Project Enhancement and Refinement – MGS Units 1 and 2 Demolition.

3.7.2 Environmental Consequences

Overall noise level from construction and demolition activity described herein will vary depending on the phasing and concurrence of different tasks and their general locations or zones within the MGS and P3 sites and vicinity. Detailed analysis of potential noise impacts from construction and demolition activities are summarized in Section 4.7.2 of the AFC and in Section 4.7.2 of the Project Enhancement and Refinement – MGS Units 1 and 2 Demolition. Construction of the reconfigured wastewater and stormwater systems will occur within the MGS property and will use the same equipment described in the AFC for construction of other elements of the Project. The majority of the new wastewater pipeline will be placed in the same underground trench with the P3 6-inch stormwater recycle pipeline. Removal of the outfall structure will use some of the same equipment to be used for demolition of MGS Units 1 and 2. In addition, the demolition of the outfall will occur outside the nesting season.

The Applicant and its contractors will implement reasonable and feasible measures to reduce the level of noise associated with construction and demolition activities. In addition to establishing a complaint resolution process and notification procedures, noise mitigation measures will be developed by the construction contractor.

Construction and demolition occupational noise exposure and noise from activity staging, laydown, and parking areas would not be expected to be substantially different from what was described in the AFC and the Project Enhancement and Refinement – MGS Units 1 and 2 Demolition, and analyzed in the Noise Section of the PSA.

There would be no increases in manpower or traffic due to the construction of the wastewater and stormwater systems and demolition of the outfall; therefore, there would be no changes to construction-related or demolition-related traffic noise analyzed in the AFC, the Project Enhancement and Refinement – MGS Units 1 and 2 Demolition, and the Noise Section of the PSA.

The construction and demolition discussed herein would have no effect on operation noise from the Project.

Therefore, noise impacts associated with the construction of the reconfigured wastewater and stormwater systems and demolition and removal of the outfall would be considered less than significant.

3.7.3 Cumulative Impacts Analyses

The analysis presented in Section 4.7.3 of the AFC and the Noise Section of the PSA concludes that the Project's contribution to cumulative impacts would be less than significant. The noise and vibration impacts associated with the Project enhancements described herein would be of short duration.

Therefore, the Project, including the construction of the reconfigured wastewater and stormwater systems and demolition and removal of the outfall, will not result in any significant cumulative impacts to noise beyond those addressed in Section 4.7.3 of the AFC and the Noise Section of the PSA.

3.7.4 Mitigation Measures

Although construction and demolition activities are not anticipated to generate noise that would be considered a significant impact, Applicant and its contractor would implement the noise complaint reporting, investigation, and resolution mechanisms that are described as Mitigation Measures/Conditions of Certification NOISE-1 and NOISE-2 in the AFC and the PSA. Additionally, the AFC includes Mitigation Measure NOISE-3, and the PSA includes Condition of Certification NOISE-6, which reflect County of Ventura guidance with respect to controlling and mitigating construction noise. Implementation of Mitigation Measure NOISE-3 and Condition of Certification NOISE-6 will help ensure that actual construction and demolition-generated noise levels will not result in significant impacts on the sound environment.

The implementation of AFC BIO-4 (PSA BIO-8) Pre-Construction Surveys for Nesting Birds will ensure that any potential for disturbance of wildlife due to noise and vibration is mitigated prior to outfall demolition activities. Furthermore, demolition of the outfall will take place outside of the nesting season; therefore, impacts to nesting birds due to noise and vibration will be less than significant.

3.7.5 Laws, Ordinances, Regulations, and Standards

Construction and operation of the Project, including associated enhancements discussed herein, will comply with applicable LORS described in Section 4.7.5 of the AFC.

3.7.6 Involved Agencies and Agency Contacts

Project enhancements discussed herein would not require changes to the agencies identified in Section 4.7.6 of the AFC.

3.7.7 Permits Required and Permit Schedule

Project enhancements discussed herein would not require changes to the permits required with respect to noise and permit schedule described in Section 4.7.7 of the AFC.

3.7.8 References

No references in addition to those presented in Section 4.7.8 of the AFC or Section 4.7.8 of the Project Enhancement and Refinement – MGS Units 1 and 2 Demolition were used for this Project Enhancement.

3.8 PALEONTOLOGICAL RESOURCES

This section presents a discussion of the potential impacts related to paleontological resources from the construction of the reconfigured wastewater and stormwater systems modification and demolition and removal of the outfall, as described in Section 2.0.

3.8.1 Affected Environment

The construction of the reconfigured wastewater and stormwater systems and demolition and removal of the outfall will be within the paleontological resources study area presented in the AFC and Project Enhancement and Refinement – MGS Units 1 and 2 Demolition, and analyzed in the PSA.

3.8.2 Environmental Consequences

The construction of the reconfigured wastewater and stormwater systems and demolition and removal of the outfall will not result in new impacts to paleontological resources beyond those identified in the AFC and Project Enhancement and Refinement – MGS Units 1 and 2 Demolition, and analyzed in the PSA. No significant below-grade ground disturbance would occur in previously undisturbed areas as a result of the proposed changes discussed herein; therefore, impacts to paleontological resources associated with these changes are not expected.

3.8.3 Cumulative Impacts Analyses

The analysis presented in Section 4.8.3 of the AFC and in the Paleontological Resources Section of the PSA concluded that the Project's contribution to cumulative impacts would be less than significant. The Project would not result in additional impacts to paleontological resources as a result of the enhancements described herein. Therefore, the Project, including the construction of the reconfigured wastewater and stormwater systems and demolition and removal of the outfall, will not result in any significant cumulative impacts to paleontological resources.

3.8.4 Mitigation Measures

No mitigation measures are proposed beyond those addressed in Section 4.8.4 of the AFC and in the proposed Conditions of Certification in the PSA.

3.8.5 Laws, Ordinances, Regulations, and Standards

Construction and operation of the Project, including associated enhancements discussed herein, will comply with applicable LORS described in Section 4.8.5 of the AFC.

3.8.6 Involved Agencies and Agency Contacts

Project enhancements discussed herein will not require changes to the agencies identified in Section 4.8.7 of the AFC.

3.8.7 Permits Required and Permit Schedule

Project enhancements discussed herein will not require changes to the permits required and permit schedule described in Section 4.8.8 of the AFC.

3.8.8 References

No references in addition to those presented in Section 4.8.9 of the AFC were used for this Project Enhancement.

3.9 PUBLIC HEALTH

This section presents a discussion of the potential impacts related to public health from the construction of the reconfigured wastewater and stormwater systems and demolition and removal of the outfall, as described in Section 2.0.

3.9.1 Affected Environment

The construction of the reconfigured wastewater and stormwater systems and demolition and removal of the outfall will occur within the public health study area presented in the AFC and Project Enhancement and Refinement – MGS Units 1 and 2 Demolition, and analyzed in the PSA.

3.9.2 Environmental Consequences

The construction of the reconfigured wastewater and stormwater systems is not expected to substantially change the type of construction activity, numbers or types of construction equipment, and/or size of the construction workforce analyzed in AFC and the PSA. Therefore, the construction of the reconfigured wastewater and stormwater systems is not expected to change the emission levels and/or ambient impacts already presented in the AFC and analyzed in the PSA for P3 construction activities. The demolition of the outfall structure is not expected to substantially change the type of demolition activity, numbers or types of demolition equipment, and/or the demolition workforce presented in the Project Enhancement and Refinement – MGS Units 1 and 2 Demolition, and analyzed in the PSA. Consequently, the demolition of the outfall structure is not expected to change the emission levels and/or ambient impacts already analyzed in the PSA for demolition activities.

Based on the forgoing, the construction of the reconfigured wastewater and stormwater systems and demolition and removal of the outfall would not change the environmental consequences analysis for public health presented in the AFC and the Project Enhancement and Refinement – MGS Units 1 and 2 Demolition, and analyzed in the PSA, which shows a maximum off-property cancer risk of approximately 1.2 in 1 million. As determined in the Public Health Section of the PSA, this impact is below the significance threshold of 10 in 1 million.

3.9.3 Cumulative Impacts Analyses

The analysis presented in Section 4.9.3 of the AFC and in the Public Health Section of the PSA concludes that the Project's contribution to cumulative impacts would be less than significant. The construction of the reconfigured wastewater and stormwater systems and demolition and removal of the outfall would not change the environmental consequences analysis for public health presented in the AFC and the Project Enhancement and Refinement – MGS Units 1 and 2 Demolition, and analyzed in the PSA. Therefore, the Project enhancements discussed herein will not result in a significant cumulative impact to public health.

3.9.4 Mitigation Measures

The Project construction and demolition, including the enhancements discussed herein, have been designed to minimize toxic air contaminant (TAC) emissions and impacts. The PSA contains proposed Conditions of Certification to limit air emissions associated with construction and demolition activities. No additional mitigation measures are needed for the Project TAC emissions, because the potential public health impacts are less than significant.

3.9.5 Laws, Ordinances, Regulations, and Standards

Construction and operation of the Project, including associated enhancements discussed herein, will comply with applicable LORS described in Section 4.9.5 of the AFC.

3.9.6 Involved Agencies and Agency Contacts

Project enhancements discussed herein will not require changes to the agencies identified in Section 4.9.6 of the AFC.

3.9.7 Permits Required and Permit Schedule

Project enhancements discussed herein will not require changes to the permits required and permit schedule described in Section 4.9.7 of the AFC.

3.9.8 References

No references in addition to those presented in Section 4.9.8 of the AFC were used for this Project Enhancement.

3.10 SOCIOECONOMICS

This section presents a discussion of the potential impacts related to socioeconomics from the construction of the reconfigured wastewater and stormwater systems and demolition and removal of the outfall, as described in Section 2.0.

3.10.1 Affected Environment

The proposed construction and demolition activities would not change the study area and affected environment for socioeconomic resources presented in Section 4.10 of the Project AFC and Section 4.10 of the Project Enhancement and Refinement – MGS Units 1 and 2 Demolition, and analyzed in the PSA.

3.10.2 Environmental Consequences

The PSA concluded that the Project as proposed, with implementation of the proposed Conditions of Certification, would not result in any significant unmitigated impacts, and therefore would not result in any significant unmitigated impacts that would disproportionately affect identified environmental justice populations. The construction of the reconfigured wastewater and stormwater systems and demolition and removal of the outfall will not change the manpower requirements for construction or demolition. Construction of the reconfigured wastewater and stormwater systems will be completed during the 21-month P3 construction period. Demolition of the outfall will be completed during the 15-month demolition period for MGS Units 1 and 2. Therefore, the proposed Project enhancements will not adversely change impacts on population, public services and utilities, or environmental justice that were described in the AFC or Project Enhancement and Refinement – MGS Units 1 and 2 Demolition, and analyzed in the PSA.

In comments submitted to the CEC and the Coastal Commission, the City of Oxnard and other parties have commented that the existing outfall and the channel that is formed by wastewater discharge interfere with access along the beach and coastal recreational opportunities in this area, and that these impacts disproportionately affect low-income minority residents. For example, in its comments on the PSA, the City states that "the existing outfall and associated structures impair horizontal public beach access along Oxnard's coast" in a manner that is "inconsistent with the City's coastal Land Use Plan" (TN #21368, p. 3). In comments to the Coastal Commission, the City indicates that the impaired access affects "low-cost, low-intensity recreational opportunities afforded by the adjacent McGrath State Beach to the north, Mandalay Beach Park to the south, and public trust lands to the west-all of which serve a local, primarily minority low-income community, and the greater Central Coast region" (TN #213558, p. 3). Elimination of the ocean discharge and removal of the outfall structure will specifically address these environmental justice concerns raised by the City and others by improving coastal access and recreational opportunities in the area.

3.10.3 Cumulative Impacts Analyses

The analysis presented in Section 4.10.3 of the AFC and in the PSA concludes that the Project's contribution to cumulative impacts would be less than significant. The Project would not result in additional adverse impacts to socioeconomic resources as a result of the Project enhancements described herein. Therefore, the Project, including the construction of the reconfigured wastewater and stormwater systems and demolition and removal of the outfall, will not result in any significant cumulative impacts to socioeconomics. Furthermore, elimination of the ocean discharge and removal of the outfall structure will eliminate existing impediments to coastal access and recreation that the City of Oxnard and others believe fall disproportionately on low-income and minority residents. Thus, the proposed enhancements will have a positive impact from an environmental justice perspective by improving coastal access and recreational opportunities.

3.10.4 Mitigation Measures

Because the PSA concludes that the Project as proposed, with implementation of the proposed Conditions of Certification, will not result in any significant unmitigated impacts, no additional mitigation measures are necessary to address socioeconomic or environmental justice concerns.

3.10.5 Laws, Ordinances, Regulations, and Standards

Construction and operation of the Project, including associated enhancements discussed herein, will comply with applicable LORS described in Section 4.10.5 of the AFC.

3.10.6 Involved Agencies and Agency Contacts

Project enhancements discussed herein will not require changes to the agencies identified in Section 4.10.6 of the AFC.

3.10.7 Permits Required and Permit Schedule

Project enhancements discussed herein will not require changes to the permits required and permit schedule described in Section 4.10.7 of the AFC.

3.10.8 References

No references in addition to those presented in Section 4.10.8 of the AFC were used for this Project Enhancement.

3.11 SOILS

This section presents a discussion of the potential impacts related to soils from the construction of the reconfigured wastewater and stormwater systems and demolition and removal of the outfall, as described in Section 2.0.

3.11.1 Affected Environment

The construction of the reconfigured wastewater and stormwater systems will be within the MGS property in areas previously analyzed in the AFC and the PSA. The demolition of the outfall will occur on the beach immediately west of the MGS property.

3.11.2 Environmental Consequences

The PSA concluded that development of the Project as proposed, with implementation of the proposed Conditions of Certification, would not result in any significant unmitigated impacts related to soils. The construction of the reconfigured wastewater and stormwater systems includes installation of buried pipeline in previously disturbed areas within the MGS property. The majority of the new wastewater pipeline will be placed in the same underground trench as the P3 6-inch stormwater recycle pipeline. Construction activity near the Edison Canal will be limited to placing the pipe discharge into a small sump to facilitate monitoring or sampling, if required, before the water enters the canal. Riprap already exists on the canal banks, and additional riprap will be provided only if needed to prevent erosion. Thus, construction of the reconfigured wastewater and stormwater systems involves a relatively small incremental increase in the installation of structures similar to those areas already analyzed in the AFC and PSA, and using construction techniques that are the same as those already analyzed in the AFC and PSA. As a result, impacts related to soils associated with these Project enhancements will be similar in nature and intensity to the impacts evaluated in the AFC and PSA and determined to be less than significant.

The footprint of the outfall demolition will be approximately 0.4 acre, as shown on Figure 2-2. Demolition of the outfall will include demolishing the wing walls and removing the riprap and fencing. Staging areas that were previously used during construction of P3 and demolition of MGS Units 1 and 2 will be available for use during the demolition of the outfall. In addition, about 1 acre of beach will be disturbed by equipment movement to and from the outfall structure along the access road shown on Figure 2-2. Areas immediately adjacent to the structure will be disturbed during removal of the fencing and riprap, and areas within the outfall may be disturbed during abandonment of the underground portion of the outfall. Most of the affected area is bare sand with limited vegetation. All of the work area is above mean higher high water, so there will be little to no contact between ocean water and debris from, or equipment used for, the demolition.

Applicant will develop a SWPPP and implement BMPs during all construction and demolition activities, including those described herein. With preparation of a final SWPPP prior to construction and implementation of BMPs, direct and indirect impacts to soils resources from construction and demolition of the outfall would be less than significant.

Since initial development of the MGS facility, including the outfall structure, the beach fronting the MGS facility has widened significantly as a result of the natural deposition of sand, so that the beach is now approximately 300 feet wide and separates the outfall structure from the ocean. Consequently, discharged water now creates a channel across the beach as it makes its way to the ocean. Furthermore, when the discharge is not sufficient to create a channel to the ocean on its own, ponding occurs and the effectiveness of the outfall structure to discharge wastewater is adversely affected. As a result, to maintain a channel for wastewater flow between the existing outfall and the ocean, it is sometimes necessary to bulldoze this section of the beach. Thus, the normal operation of the existing outfall, as well

as periodic maintenance necessary for normal operation, result in the creation of artificial structures in the soils of the beach fronting the MGS facility. Cessation of ocean discharge and removal of the outfall will eliminate this situation, resulting in a positive environmental impact related to soils.

3.11.3 Cumulative Impacts Analyses

The analysis presented in Section 4.11.3 of the AFC and in the Soil and Water Section of the PSA concludes that the Project's contribution to cumulative impacts would be less than significant. The Project enhancements described herein would not result in additional adverse impacts to soils. Therefore, the Project, including the construction of the reconfigured wastewater and stormwater systems and demolition and removal of the outfall, will not result in any significant adverse cumulative impacts to soils. Furthermore, by eliminating existing impacts to the beach fronting the MGS facility, removal of the outfall will result in a positive cumulative impact to soils.

3.11.4 Mitigation Measures

No mitigation measures are proposed beyond those addressed in Section 4.11.5 of the AFC and the proposed Conditions of Certification contained in the PSA (including proposed changes to the Conditions of Certification contained in Applicant's comments on the PSA). As discussed in Section 3.15.4 of this Project Enhancement, Applicant proposes Condition of Certification SOIL&WATER-6, Outfall Removal Plan, to further reduce Project-related impacts to soils due to removal of the outfall structure.

3.11.5 Laws, Ordinances, Regulations, and Standards

Construction and operation of the Project, including associated enhancements discussed herein, will comply with applicable LORS described in Section 4.11.6 of the AFC.

3.11.6 Involved Agencies and Agency Contacts

Applicant is currently evaluating whether the Project enhancements discussed herein will require changes to the agencies identified in Section 4.11.7 of the AFC. As noted in this Project Enhancement, Applicant will conduct agency notifications that, in addition to the CEC, will include USACE, LARWQCB, CCC, State Lands Commission, and City of Oxnard for reconfiguration of wastewater and stormwater systems and outfall demolition and removal.

3.11.7 Permits Required and Permit Schedule

Applicant is currently evaluating whether the Project enhancements discussed herein will require changes to the permits required and permit schedule described in Section 4.11.8 of the AFC. As noted in this Project Enhancement, Applicant will conduct agency notifications that, in addition to the CEC, will include USACE, LARWQCB, CCC, State Lands Commission, and City of Oxnard for reconfiguration of wastewater and stormwater systems and outfall demolition and removal.

3.11.8 References

No references in addition to those presented in Section 4.11.9 of the AFC were used for this Project Enhancement.

3.12 TRAFFIC

This section presents a discussion of the potential impacts related to traffic and transportation from the construction of the reconfigured wastewater and stormwater systems and demolition and removal of the outfall, as described in Section 2.0.

3.12.1 Affected Environment

The affected environment is the same as the traffic study area presented in Section 4.12 of the AFC and Section 4.12 of the Project Enhancement and Refinement – MGS Units 1 and 2 Demolition, and analyzed in the PSA.

3.12.2 Environmental Consequences

The PSA concluded that the Project as proposed, with implementation of the proposed Conditions of Certification, would not result in any significant unmitigated impacts related to traffic. The construction of the reconfigured wastewater and stormwater systems and demolition and removal of the outfall would not change the construction-related or demolition-related traffic presented in the AFC, the Project Enhancement and Refinement – MGS Units 1 and 2 Demolition, or the PSA. Construction of the wastewater modifications would be completed during the 21-month P3 construction period. Demolition of the outfall would be completed during the 15-month demolition period for MGS Units 1 and 2. Therefore, the proposed Project enhancements would not change impacts on traffic and transportation relative to those that were described in the AFC and Project Enhancement and Refinement – MGS Units 1 and 2 Demolition, and analyzed in the PSA.

3.12.3 Cumulative Impacts Analyses

The analysis presented in Section 4.12.3 of the AFC and the Traffic and Transportation Section of the PSA concludes that the Project's contribution to cumulative impacts would be less than significant. The Project enhancements discussed herein would not result in greater level of service impacts to traffic and transportation. Therefore, the Project, including the construction of the reconfigured wastewater and stormwater systems and demolition and removal of the outfall, will not result in any significant cumulative impacts to traffic and transportation.

3.12.4 Mitigation Measures

No mitigation measures are proposed beyond those addressed in Section 4.12.4 of the AFC and in the proposed Conditions of Certification in the PSA.

3.12.5 Laws, Ordinances, Regulations, and Standards

Construction and operation of the Project, including associated enhancements discussed herein, will comply with applicable LORS described in Section 4.12.5 of the AFC.

3.12.6 Involved Agencies and Agency Contacts

Project enhancements discussed herein will not require changes to the agencies identified in Section 4.12.6 of the AFC.

3.12.7 Permits Required and Permit Schedule

Project enhancements discussed herein will not require changes to the permits required and permit schedule described in Section 4.12.7 of the AFC.

3.12.8 References

No references in addition to those presented in Section 4.12.8 of the AFC and the responses to Data Requests 45 and 73 were used for this Project Enhancement.

3.13 VISUAL RESOURCES

This section discusses the potential impacts to visual resources from the construction of the reconfigured wastewater and stormwater systems and demolition and removal of the outfall, as described in Section 2.0.

3.13.1 Affected Environment

The proposed construction of the reconfigured wastewater and stormwater systems and demolition and removal of the outfall would not change the baseline description of existing visual character or quality assigned to individual key observation points (KOPs) in the Project Visual Sphere of Influence (VSOI).

3.13.2 Environmental Consequences

The wastewater system modifications consist of below-ground features that would not have any effect on visual resources. Accordingly, this section focuses on the potential short-term and long-term, direct and indirect, impacts to visual resources in the VSOI associated with demolition of the outfall.

3.13.2.1 Methodology

The PSA concludes that development of the Project as proposed in the AFC and the Project Enhancement and Refinement – MGS Units 1 and 2 Demolition, without demolition and removal of the outfall, and with implementation of the proposed Conditions of Certification, would not result in any significant unmitigated impacts to visual resources. This Project Enhancement analyzes the additional potential visual impact in the VSOI that could result from demolition of the outfall. This was determined by comparing the baseline conditions prior to construction of P3 with the proposed visual conditions after P3 is constructed and operational and demolition of existing MGS Units 1 and 2 is complete, with and without demolition of the outfall. Demolition impacts to visual resources are considered temporary, and are therefore less than significant.

3.13.2.2 Visual Simulations

Visual simulations of the Project with and without demolition of the outfall were used to evaluate potential impacts to aesthetic quality that may result from the demolition of the outfall. For consistency, potential impacts were initially evaluated from the same KOPs as those used in the AFC and Project Enhancement and Refinement – MGS Units 1 and 2 Demolition (see Figure 4-13-1). Simulations from KOPs 1, 4, and 5 were determined to be unnecessary, because changes resulting from demolition of the outfall would not be visible at all from these locations.

Views of P3, including demolition of MGS Units 1 and 2 and the outfall, were simulated from KOPs 2 and 3, as shown on Figures 4.13-3B and 4.13-4B. The revised simulations for KOPs 2 and 3 provide an illustration of how P3 may appear to viewers once P3 is in operation and MGS Units 1 and 2 and the outfall are demolished. Simulations from KOPs 2 and 3 are the same viewing locations that were used to analyze visual impacts in the AFC, Project Enhancement and Refinement – MGS Units 1 and 2 Demolition, and the PSA.

From KOPs 2 and 3, views of the outfall and the surrounding area are limited, because these KOPs were selected primarily for evaluating potential impacts associated with the construction and demolition of taller structures, including the P3 stack and the MGS Units 1 and 2 stack and generating units. Therefore, to better evaluate the potential impacts associated with demolition of the outfall, an additional viewpoint was selected (see Figure 4.13-7A). Views from this location after construction of P3 and demolition of MGS Units 1 and 2 and the outfall were simulated, as shown on Figures 4.13-7B and 4.13-7C.

Figures 1-1A and 1-1B in Section 2.0 of this Project Enhancement provide oblique aerial views of the additional changes in the Project area that would result from demolition of the outfall.

3.13.2.3 Demolition-Period Visual Impacts

Demolition of the outfall would occur concurrently with demolition of MGS Units 1 and 2. The demolition work associated with the outfall will take place within the 15-month demolition period and outside the nesting season (February 1 through August 31), and be completed by late 2022. The demolition of the outfall will generally occur in the beach area adjacent to the western portion of the MGS property. The demolition area is approximately 0.4 acre. All construction laydown and parking areas will be within the existing MGS site, and are the same areas that will be used during construction of P3 and demolition of MGS Units 1 and 2.

The demolition schedule and manpower requirements assume up to 10-hour days, 5 days a week, Monday through Friday. Demolition work hours will be limited to 7:00 a.m. to 6:00 p.m., Monday through Friday. During demolition of the outfall, construction activities, materials, equipment, trucks, temporary structures, and vehicles would be highly visible from residential and beach areas south, east, and west of the Project site. Specifically, views from Mandalay State Beach are likely to have the most unobstructed views of the demolition activities, because the outfall structure is on this beach. Although visual change associated with demolition activities would introduce movement and equipment not currently occurring in the area, these impacts would be temporary. Therefore, direct impacts associated with demolition would be less than significant.

Indirect impacts associated with demolition of the outfall may include impacts associated with fugitive dust, night lighting, and the presence of construction equipment. Demolition activities would be conducted in stages, and in a manner that minimizes visible dust. Hours of demolition activities are not anticipated to last beyond 6:00 p.m., and any nighttime lighting that is required will be positioned to face downward and away from beach, residential, and agricultural uses, consistent with safety considerations. Therefore, potential indirect impacts to visual resources from demolition activities at the outfall are also temporary, and less than significant.

3.13.2.4 Direct and Indirect Visual Impacts Related to Operations

Figures 4.13-3B and 4.13-4B depict simulated views from KOPs 2 and 3, respectively. Figures 4.13-7B and 4.13-7C depict simulated close-up views from the beach for the short term and long term, respectively.

Key Observation Point No. 2

KOP 2 is on Mandalay State Beach and situated just west of Mandalay County Park (Figure 4.13-1). The existing Landscape View Inventory from KOP 2 was ranked Moderate. Due to its proximity to KOP 1, KOP 2 shares the same basic existing and proposed visual character as KOP 1.

Figure 4.13-3B indicates that once P3 is constructed and MGS Units 1 and 2 are demolished, the demolition of the outfall will result in minor improvements to existing visual character by decreasing the amount of water visible along the upland area of the beach where the outfall joins the high tide line. This would lead to increased sand area and eventually to buildup of the natural dunes that form behind the high tide line of the beach. Demolition of the outfall would increase the natural character of the landscape (see Appendix A, rankings for KOP 2). From KOP 2, the improvement is considered minor because at this distance views of the immediate area surrounding the outfall are limited.

Therefore, from the vantage point of KOP 2, demolition of the outfall would have minor positive impacts to the visual character and quality of the site and its surroundings, and would ultimately improve the visual quality of views from KOP 2.

Key Observation Point No. 3

KOP 3 is approximately 0.22 mile northwest of the proposed P3 stack, and is just west of McGrath Lake and south of the Santa Clara Estuary (Figure 4.13-1). The existing Landscape View Inventory was ranked Low to Moderate.

Figure 4.13-4B indicates that once P3 is constructed and MGS Units 1 and 2 are demolished, the demolition of the outfall will result in minor improvements to existing visual character by decreasing the amount of water visible along the upland area of the beach where the outfall joins the high tideline. This would lead to increased sand area in the short term, and eventually to buildup of the natural dunes that form behind the high tide line of the beach. This increase in the undulating form of the dunes that are visible in the foreground of this image would add to the natural appearance and character of the beach in the long term. This would improve the visual quality of the beach landscape in front of P3 in the long term (see Appendix A, rankings for KOP 3). From KOP 3, the improvement is considered minor because at this distance from the Project views of the immediate area surrounding the outfall are limited.

Therefore, from the vantage point of KOP 3, demolition of the outfall would have minor positive impacts to the visual character and quality of the site and its surroundings, and would ultimately improve the visual quality of views from KOP 3.

Viewpoint from Beach

The viewpoint from the beach is approximately 400 feet west of the existing outfall structure (Figure 4.13-7A). This would be the vantage point of the MGS site, including the existing outfall, of members of the public on the beach that fronts the MGS site.

The additional simulation depicted in Figure 4.13-7B indicates that once P3 is constructed and MGS Units 1 and 2 are demolished, the demolition of the outfall will result in significant and immediate improvements to existing visual character, by eliminating the manmade outfall structure and the beach erosion and ponding that occurs as a result of the discharge. This would lead to increased sand area and eventually to buildup of the natural dunes that form behind the high tide line of the beach, which would add to the natural appearance and character of the beach in the long term, as shown on Figure 4.13-7C. The long-term simulation is intended to represent several years after the outfall structure has been removed (i.e., after approximately 5 to 10 years). The visual quality of the beach landscape in front of P3 would be improved in both the short term and the long term. From this viewpoint, the improvement is considered significant because of the prominence of the existing outfall and the beach erosion and ponding from this vantage point.

Therefore, from the beach view, demolition of the outfall would have significant positive impacts to the visual character and quality of the site and its surroundings, and would dramatically improve the visual quality of views from this viewpoint.

Light and Glare

Demolition of the outfall would not result in any additional night-time lighting in the VSOI nor result in the construction of any structural elements that might increase glare. Therefore, impacts from light and glare would be less than significant.

Water Vapor Plume

No visible steam plumes will be created as a result of the proposed enhancements.

3.13.3 Cumulative Impacts Analyses

The analysis presented in Section 4.13.3 of the AFC and in the Visual Resources Section of the PSA concluded that the Project's contribution to cumulative impacts would be less than significant. As a result of the Project enhancements described herein, the Project would result in a significant positive cumulative impact due to the dramatic improvement in the visual quality of views from the beach fronting the MGS site. Therefore, the Project, including the construction of the reconfigured wastewater and stormwater systems and demolition and removal of the outfall, will not result in any significant adverse cumulative impacts to visual resources beyond those addressed in Section 4.13.3 of the AFC and the Visual Resources Section of the PSA, and will result in a significant positive cumulative impact.

3.13.4 Mitigation Measures

No mitigation measures are proposed beyond those addressed in Section 4.13.4 of the AFC and in the proposed Conditions of Certification in the PSA.

3.13.5 Laws, Ordinances, Regulations, and Standards

Construction and operation of the Project, including associated enhancements discussed herein, will comply with applicable LORS described in Section 4.13.5 of the AFC.

3.13.6 Involved Agencies and Agency Contacts

Project enhancements discussed herein would not require changes to the agencies identified in Section 4.13.6 of the AFC.

3.13.7 Permits Required and Permit Schedule

Project enhancements discussed herein would not require changes to the permits required and permit schedule described in Section 4.13.7 of the AFC.

3.13.8 References

No references in addition to those presented in Section 4.13.8 of the AFC were used for this Project Enhancement.

3.14 WASTE MANAGEMENT

This section presents a discussion of the potential impacts related to waste management from the construction of the reconfigured wastewater and stormwater systems and demolition and removal of the outfall, as described in Section 2.0.

3.14.1 Affected Environment

As discussed in Section 4.14, Waste Management, of the AFC, a Phase I ESA was prepared for the MGS site, including the location of MGS Units 1 and 2. The objective of the Phase I ESA was to identify recognized environmental conditions that may exist on the MGS site or the surrounding area. Previous environmental investigations, including a 1997 Phase II ESA of the MGS site, identified known and potential subsurface impacts on the property and adjacent properties. Impacts to soil and groundwater are currently being remediated. Closure activities associated with prior operations on the MGS site are not part of the proposed Project. As described in the AFC, these activities are SCE's obligation, and include ongoing groundwater monitoring related to cleanup and closure of the three retention ponds.

3.14.1.1 Nonhazardous Solid Waste Disposal

Existing nonhazardous solid waste disposal facilities are listed in Table 4.14-1 of the Project Enhancement and Refinement – MGS Units 1 and 2 Demolition. Several available Class III landfills accept nonhazardous wastes and inert solid wastes, including construction/demolition wastes. Liquid wastes are not accepted by these landfills. Industrial process solid waste is accepted on a case-by-case basis.

3.14.1.2 Hazardous Solid Waste Disposal

There are several Class I landfills in California, including Clean Harbors Buttonwillow Landfill in Kern County, and Chemical Waste Management's Kettleman Hills Landfill in Kings County. These landfills are listed in Table 4.14-1 of the Project Enhancement and Refinement – MGS Units 1 and 2 Demolition.

3.14.1.3 Hazardous and Nonhazardous Wastewater (Noneffluent Waste Streams)

There are several California wastewater treatment and recycling facilities that accept Resource Conservation and Recovery Act of 1976 (RCRA) hazardous, non-RCRA hazardous, and nonhazardous wastewater. These facilities are described in Table 4.14-1 of the Project Enhancement and Refinement – MGS Units 1 and 2 Demolition.

3.14.2 Environmental Consequences

The PSA concludes that the Project as proposed, with implementation of the proposed Conditions of Certification, will not result in any significant unmitigated impacts related to waste management.

Wastes anticipated to be generated during construction of P3 are summarized in Table 2.7-7 of the AFC and analyzed in the Waste Management Section of the PSA. Wastes generated during construction of the reconfigured wastewater and stormwater systems would be similar to those identified in the AFC, but would be expected to be of limited quantity and type.

Wastes generated during demolition of MGS Units 1 and 2 are listed in Table 2-1 of the Project Enhancement and Refinement – MGS Units 1 and 2 Demolition. Wastes generated during demolition of the outfall structure will be similar, and will include concrete, fencing, and riprap. No hazardous wastes are expected as part of the outfall removal. The concrete and riprap would be reused and recycled to the extent feasible. Fencing would be considered scrap metal; the estimated quantity of fencing would not

substantially increase the quantity of scrap metal listed in Table 2-1 of the Project Enhancement and Refinement – MGS Units 1 and 2 Demolition.

The Project contractor will comply with federal, state, and local statutes and regulations related to solid waste. Given the relatively small incremental increase in wastes generated as a result of the Project enhancements and refinements described herein, relative to that analyzed in the PSA and determined not to result in any significant unmitigated impacts, the total impacts associated with the nonhazardous waste management during construction and demolition would be less than significant.

3.14.3 Cumulative Impacts Analyses

The analysis presented in Section 4.14.3 of the AFC and the Waste Management Section of the PSA concludes that the Project's contribution to cumulative impacts would be less than significant. The Project enhancements discussed herein would not result in new significant impacts from waste management. Therefore, the Project, including the construction of the reconfigured wastewater and stormwater systems and demolition and removal of the outfall, will not result in any significant cumulative impacts from waste management beyond those addressed in Section 4.14.3 of the AFC, Section 4.14.3 of the Project Enhancement and Refinement – MGS Units 1 and 2 Demolition, and the Waste Management Section of the PSA.

3.14.4 Mitigation Measures

In the AFC, the Applicant proposed Conditions of Certification WM-1 through WM-9 to minimize potential impacts, and to ensure that P3 conforms to all LORS. In the Project Enhancement and Refinement – MGS Units 1 and 2 Demolition, Applicant proposed Condition of Certification WM-12, Demolition Waste Management Plan, to minimize potential impacts associated with demolition of MGS Units 1 and 2.

The proposed Conditions of Certification and the mitigation measures presented in the AFC, the Project Enhancement and Refinement – MGS Units 1 and 2 Demolition, and the PSA would be implemented for all construction and demolition activities, including those described herein, and would ensure that impacts from waste management would be less than significant.

3.14.5 Laws, Ordinances, Regulations, and Standards

Construction and operation of the Project, including associated enhancements discussed herein, will comply with applicable LORS described in Section 4.14.5 of the AFC.

3.14.6 Involved Agencies and Agency Contacts

Project enhancements discussed herein will not require changes to the agencies identified in Section 4.14.6 of the AFC.

3.14.7 Permits Required and Permit Schedule

Project enhancements discussed herein will not require changes to the permits required and permit schedule described in Section 4.14.7 of the AFC.

3.14.8 References

No references in addition to those presented in Section 4.14.8 of the AFC were used for this Project Enhancement.

3.15 WATER RESOURCES

This section presents a discussion of the potential impacts related to water resources from the construction of the reconfigured wastewater and stormwater systems and demolition and removal of the outfall, as described in Section 2.0.

3.15.1 Affected Environment

The construction of the reconfigured wastewater and stormwater systems and demolition and removal of the outfall will occur entirely within the water resources study area presented in the AFC and Project Enhancement and Refinement – MGS Units 1 and 2 Demolition.

3.15.2 Environmental Consequences

3.15.2.1 Construction and Demolition

The PSA concludes that the Project as proposed, with implementation of the proposed Conditions of Certification, will not result in any significant unmitigated impacts to water resources.

The construction of the reconfigured wastewater and stormwater systems includes installation of buried pipeline in previously disturbed areas within the MGS property. The majority of the extended wastewater pipeline will be placed in the same underground trench as the P3 6-inch stormwater recycle pipeline. The modified wastewater and stormwater systems would not increase the amount of impervious surface area, because the modifications will be constructed in areas that are currently covered by pavement. Construction activity near the Edison Canal will be limited to placing the pipe discharge on the banks of the canal. Riprap already exists on the canal banks, and additional riprap will only be installed if needed to prevent erosion.

The footprint of the outfall demolition will be approximately 0.4 acre, as shown on Figure 2-2. Demolition of the outfall would include demolishing the wing walls, and removing the riprap and fencing. Demolition of the outfall will occur concurrently with demolition of MGS Units 1 and 2, and staging areas identified for demolition of MGS Units 1 and 2 will be used for demolition of the outfall.

During construction and demolition, potable water will be provided by the City of Oxnard. During construction and demolition activities, the Project contractor will use water for dust suppression, equipment washdown, and preparation of concrete. Table 2.9-4 in the AFC and Table 2-4 in the Project Enhancement and Refinement – MGS Units 1 and 2 Demolition summarize the estimated amounts of water to be used during the 21-month construction period and the 15-month demolition period, respectively. There would be no increase in the workforce during construction or demolition due to the enhancements discussed herein. Therefore, domestic water use for construction and demolition workers would not change from that described in the AFC and Project Enhancement and Refinement – MGS Units 1 and 2 Demolition, and analyzed in the PSA.

Applicant will develop a SWPPP and implement BMPs (PSA Condition of Certification SOIL&WATER-1) and use the Construction and Demolition (C & D) Environmental Resources Management and Recycling Plan (PSA Condition of Certification WASTE-4) during the construction and demolition activities described herein. With preparation of a final SWPPP prior to construction and implementation of BMPs and implementation of the Environmental Resources Management and Recycling Plan, direct and indirect impacts to water resources from construction and demolition will be less than significant.

3.15.2.2 Operations

The wastewater system modification would change the point of discharge from the ocean to the Edison Canal. The estimated peak daily wastewater discharge for P3 is approximately 25 gpm, as shown in Table 2.7.5 in the AFC. The estimated total annual discharge is 6.5 AFY.

Once the proposed wastewater system is in place and the outfall is removed, MGS Unit 3 bearing cooling water intake from Edison Canal at a peak rate of approximately 3,200 gpm will also be discharged to the Edison Canal via the new wastewater system. MGS Unit 3 is limited to 200 hours of annual operation and is typically operated for short durations (several hours at a time); therefore, withdrawal and discharge to the canal will be infrequent and intermittent – on the order of <0.2 million gallons per day, averaged over the year.

To the extent capacity is available, the stormwater from the P3 site will be diverted to North and South basins for later reuse. Excess stormwater from the P3 site that is not recycled or reused, and stormwater from the remainder of the MGS site, will be discharged to the Edison Canal instead of the ocean. During average storm events (smaller than a 2-year event), the volume of stormwater discharged to the canal is expected to be small relative to the tidal prism[1] in the Edison Canal. For example, the volume of stormwater discharged to the canal from a 2-year, 24-hour storm event is about 3.5 acre-feet from the entire MGS property, including the 3-acre P3 site. The volume of stormwater from a 2-year, 24-hour storm event is about 0.7 acre-feet from the 3-acre P3 site. This compares to an average tidal prism in the canal between the Harbor Boulevard Bridge and the head of the canal of about 8 acre-feet per tide, or 16 acre-feet per day.

There will be no further withdrawals from the canal for MGS Units 1 and 2 following MGS' Once Through Cooling Policy compliance date of December 31, 2020. During storm events, there will be a net flow of water toward Channel Island Harbor due to the inflow of stormwater from the P3 and MGS sites, process wastewater from P3 and MGS Unit 3, and agricultural and urban runoff into the canal. For small storm events of short duration (less than 1 day), the stormwater could take several days to weeks to reach the ocean and leave the canal, but will continue to be diluted by the tides every tide cycle (e.g., a 2-year event by a factor of about 5 every day). For large storm events (e.g., greater than a 2-year event or a duration of a day or more), the stormwater should reach Channel Island Harbor and then the ocean within a day or so. The Project will obtain a waste discharge permit from the LARWQCB in compliance with the NPDES Permit requirements for discharge into the canal.

Water use reporting, as proposed in PSA Condition of Certification SOIL&WATER-4, would provide information on the operational daily industrial wastewater discharge and an estimate of reclaimed stormwater used to offset potable water use.

Impacts from operations of the Project, including associated enhancements discussed herein, are unchanged from those presented in Section 4.15.2 of the AFC and analyzed in the Soil and Water Section of the PSA. The Project enhancements discussed herein would not result in any changes to operational water use and would not change the Project's vulnerability to flooding. Currently, a large volume of sand is transported across Mandalay Beach each year. In fact, because MGS Units 1 and 2 have operated intermittently, the outfall channel and the beach immediately seaward of the outfall need to be cleared of accumulated sand on a regular basis for the outfall to be operational. With removal of the outfall, sand will be allowed to accumulate in the outfall channel. It is anticipated that the accumulation of sand will quickly fill in the existing outfall channel. Eventually, wind and waves should move sand into the outfall channel, filling in and increasing the elevation of the surrounding beach and dunes. Similarly, the

[1] Tidal Prism is the volume of water in an estuary between mean high and mean low tides. In the upper end of the Edison Canal next to MGS, it is equal to the average volume of water that moves into and out of the canal every tide cycle.

scalloped areas to the north and especially the south will accumulate sand, and the beach elevation at those locations will also increase.

3.15.3 Cumulative Impacts Analyses

The analysis presented in Section 4.15.3 of the AFC and the Soil and Water Section of the PSA concludes that the Project's contribution to cumulative impacts would be less than significant. The Project enhancements discussed herein would not result in additional impacts to water resources. Therefore, the Project, including the construction of the reconfigured wastewater and stormwater systems and demolition and removal of the outfall, will not result in any significant cumulative impacts to water resources beyond those addressed in Section 4.15.3 of the AFC and the PSA.

3.15.4 Mitigation Measures

The modifications to the wastewater and stormwater systems and removal of the outfall will have no significant effect on water resources, and no mitigation measures beyond those included in Section 4.15.4 of the AFC and the proposed Conditions of Certification in the PSA are required. Nevertheless, Applicant proposes the following additional Condition of Certification to further minimize potential impacts associated with the removal of the outfall.

SOIL&WATER-6: Outfall Removal Plan

Applicant shall prepare an Outfall Removal Plan for the demolition of the existing MGS outfall structure. The plan shall contain, at a minimum, the following:

- Details of the outfall removal, including drawings showing the facilities to be removed, methods for removal, and equipment to be used.
- Copies of other agency approvals, if any.
- Updated Air Quality Construction/Demolition Mitigation Plan (AQCMP) (PSA Condition of Certification AQ-SC1), BRMIMP (PSA Condition of Certification BIO-6), Construction and Demolition (C & D) Environmental Resources Management and Recycling Plan (PSA Condition of Certification WASTE-4), and BRMIMP and SWPPP (PSA Condition of Certification SOIL&WATER-1) to incorporate the outfall removal.
- An Oil Spill Response Plan (OSRP) prepared as part of SOIL&WATER-1, WASTE-4, and HAZ-2 would provide an overview of the BMPs to be deployed during the outfall removal, and the protocols that would be used in the event of an onshore oil spill resulting from outfall removal activities.
- The OSRP would include a description of all demolition waste streams, including projections of frequency, amounts generated, and hazard classifications.
- Management methods to be used for each waste stream, including waste container and label requirements; accumulation, handling, transport, treatment and disposal procedures for each waste; waste minimization and recycling procedures, housekeeping and BMPs to be employed; and preparedness, prevention, contingency, and emergency procedures.
- City of Oxnard Construction and Demolition Material Environmental Resources Management and Recycling Plan that meets or exceeds the waste diversion goals established by the Integrated Waste Management Compliance Act (Pub. Resources Code, § 41780 et seq.) and Ventura County Ordinance requirements to divert from disposal at least 50 percent of materials generated at the

Project through reuse and recycling methods. After completion of demolition, the Applicant will complete the Environmental Resources Management and Recycling Construction and Demolition Report, and provide legible copies of weight tickets, receipts, or invoices for materials sent to disposal or reuse/recycling facilities.

Verification: At least 90 days prior to the start of outfall removal, the Project owner shall submit the draft Outfall Removal Plan to the CCC and City of Oxnard for review and comments, and to the Compliance Project Manager for approval. The CCC and City of Oxnard shall provide comments within 30 days of receipt of the Outfall Removal Plan. CPM will notify the Project owner of any necessary modifications to the plan within 45 days of the receipt of the plan, and shall provide approval of the final Outfall Removal Plan prior to the start of the demolition activities.

3.15.5 Laws, Ordinances, Regulations, and Standards

Construction and operation of the Project, including associated enhancements discussed herein, will comply with applicable LORS described in Section 4.15.5 of the AFC.

3.15.6 Involved Agencies and Agency Contacts

Project enhancements discussed herein will not require changes to the agencies identified in Section 4.15.6 of the AFC.

3.15.7 Permits Required and Permit Schedule

The Applicant will file a Report of Waste Discharge with the LARWQCB for a new NPDES discharge permit for the combined process wastewater and stormwater discharges to the Edison Canal. The Applicant is in the process of determining what, if any, additional permits may be required to implement Project enhancements discussed herein, and will apply for any additional permits determined to be necessary.

3.15.8 References

No references in addition to those presented in Section 4.15.8 of the AFC were used for this Project Enhancement.

3.16 WORKER SAFETY

This section presents a discussion of the potential impacts related to worker safety from the construction of the reconfigured wastewater and stormwater systems and demolition and removal of the outfall, as described in Section 2.0.

3.16.1 Affected Environment

The affected environment (exposure to hazards and worker safety procedures) resulting from the construction of the reconfigured wastewater and stormwater systems and demolition and removal of the outfall will be similar to that presented for the construction of P3 in Section 4.16.1 of the AFC and for the demolition of MGS Units 1 and 2 in Section 4.16.1 of the Project Enhancement and Refinement – MGS Units 1 and 2 Demolition, and analyzed in the PSA.

3.16.2 Environmental Consequences

The PSA concluded that development of the Project as proposed, with implementation of the proposed Conditions of Certification, will not result in any significant unmitigated impacts related to worker safety.

Construction of the reconfigured wastewater and stormwater systems would be similar to the installation of other pipelines to be constructed as part of the Project. Demolition of the outfall would include demolishing the wing walls, removing the riprap and fencing. Outfall removal work will be avoided during extreme storm events or extreme high tides. No hazardous materials, such as asbestos or lead-based paint, are expected to be encountered during removal of the outfall. Potential impacts due to worker exposure to hazardous materials, noise, and accidental injury are similar to those for the construction of P3 and demolition of MGS Units 1 and 2, and can be mitigated to insignificant levels by compliance with California Occupational Safety and Health Administration regulations and the proposed Conditions of Certification in the PSA.

3.16.3 Cumulative Impacts Analyses

The analysis presented in Section 4.16.3 of the AFC, Section 4.16.3 of the Project Enhancement and Refinement – MGS Units 1 and 2 Demolition, and the Worker Safety and Fire Protection Section of the PSA concluded that the Project's contribution to cumulative impacts would be less than significant. Project enhancements discussed herein will not result in additional impacts to worker safety. Therefore, the Project, including the construction of the reconfigured wastewater and stormwater systems and demolition and removal of the outfall, will not result in any significant cumulative impacts to worker safety.

3.16.4 Mitigation Measures

No significant adverse impacts were identified. Therefore, no mitigation measures beyond those contained in the proposed Conditions of Certification in the PSA are necessary.

3.16.5 Laws, Ordinances, Regulations, and Standards

Construction and operation of the Project, including associated enhancements discussed herein, will comply with applicable LORS described in Section 4.16.8 of the AFC.

3.16.6 Involved Agencies and Agency Contacts

Project enhancements discussed herein will not require changes to the agencies identified in Section 4.16.9 of the AFC.

3.16.7 Permits Required and Permit Schedule

Project enhancements discussed herein will not require changes to the permits required and permit schedule described in Section 4.16.10 of the AFC.

3.16.8 References

No references in addition to those presented in Section 4.16.11 of the AFC were used for this Project Enhancement.

4.0 COMPARISON TO ALTERNATIVES

The Project enhancements described and analyzed in this document will result in significant environmental improvements and public benefits relative to currently existing conditions, including the following:

- Elimination of potentially adverse consequences to biological resources associated with the existing beach discharge (see Section 3.2).
- Restoration of the beach and dune area currently occupied by the outfall to natural conditions for additional ecological benefit (see Section 3.2).
- Elimination of a legal nonconforming use resulting in greater conformance with local zoning requirements (see Section 3.6).
- Improved public access to, and recreational opportunities on, the beach fronting the MGS site (see Sections 3.6 and 3.10).
- Elimination of the need for sand management, as currently permitted by the City of Oxnard on an emergency basis, which entails the bulldozing accumulated sand near outfall to maintain a channel for wastewater flow to the ocean (see Section 3.11).
- Improved views and aesthetics from the beach and surrounding recreational areas (see Section 3.13).

These environmental improvements and public benefits can only be achieved in the relative near-term by developing P3 at the proposed site, which will allow integration of wastewater management for MGS Unit 3 and stormwater management for the entirety of the MGS site into the reconfigured P3 wastewater and stormwater systems. In the absence of P3 (i.e., No Project Alternative) or the Alternative sites analyzed by CEC staff in the PSA and by the Applicant as a supplement to the AFC, discharge of wastewater and stormwater through the existing ocean outfall to support MGS Unit 3 and the entire MGS site will remain necessary and permitted for the foreseeable future. Therefore, the ability to eliminate the existing ocean discharge and outfall structure represents a significant advantage of the proposed Project site relative to any of the alternative sites that have been evaluated.

FIGURES

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Note: Short-term simulation is intended to represent conditions approximately two years following removal of outfall structure.

VISUAL SIMULATION OF PUENTE POWER PROJECT INCLUDING REMOVAL OF MGS UNITS 1 AND 2 AND THE OUTFALL STRUCTURE (SHORT-TERM)

NRG
Puente Power Project
September 2016 Oxnard, California

FIGURE 1-1A

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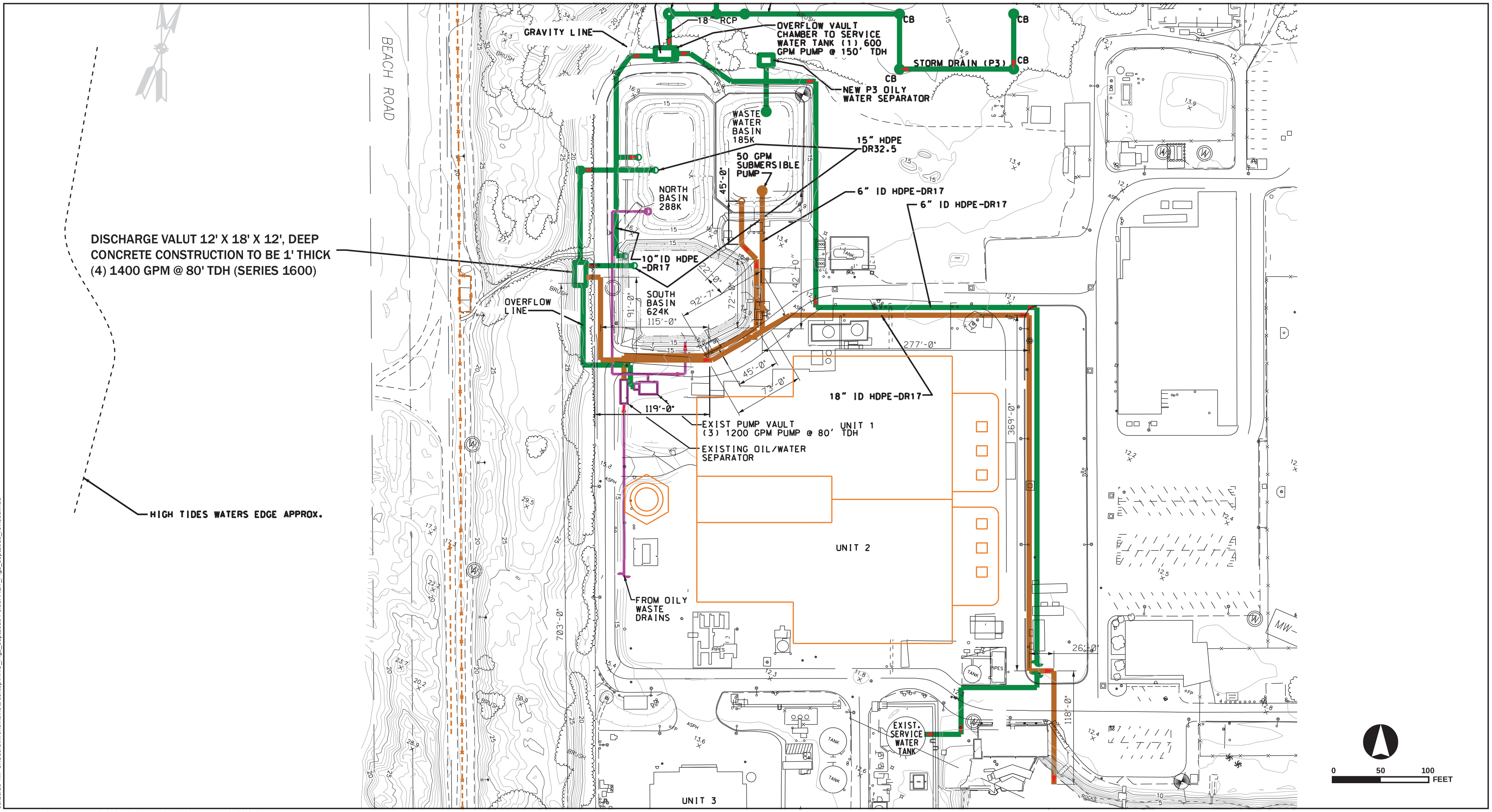
Note: Long-term simulation is intended to represent several years (5 to 10) following removal of the outfall structure.

VISUAL SIMULATION OF PUENTE POWER PROJECT INCLUDING REMOVAL OF MGS UNITS 1 AND 2 AND THE OUTFALL STRUCTURE (LONG-TERM)

NRG
Puente Power Project
September 2016 Oxnard, California

FIGURE 1-1B



Source: AECOM DW. No. 31380-P029-MAN-SKETCH 14 REV. C, 9/8/16.

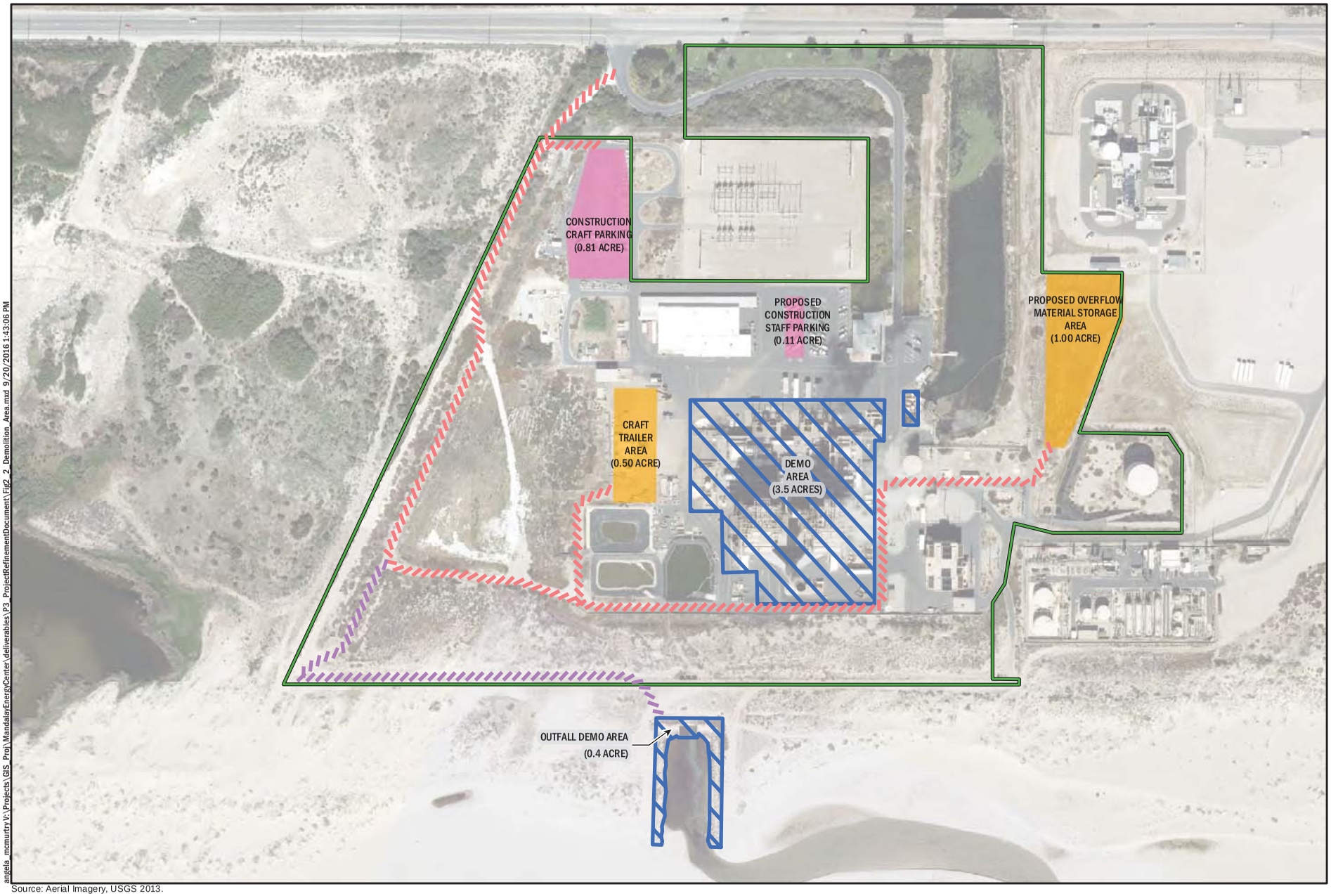
Existing Stormwater/Wastewater
P3 Stormwater/Wastewater
Discharge to Canal

PLOT PLAN

NRG
Puente Power Project
Oxnard, California

September 2016

FIGURE 2-1



Source: Aerial Imagery, USGS 2013.

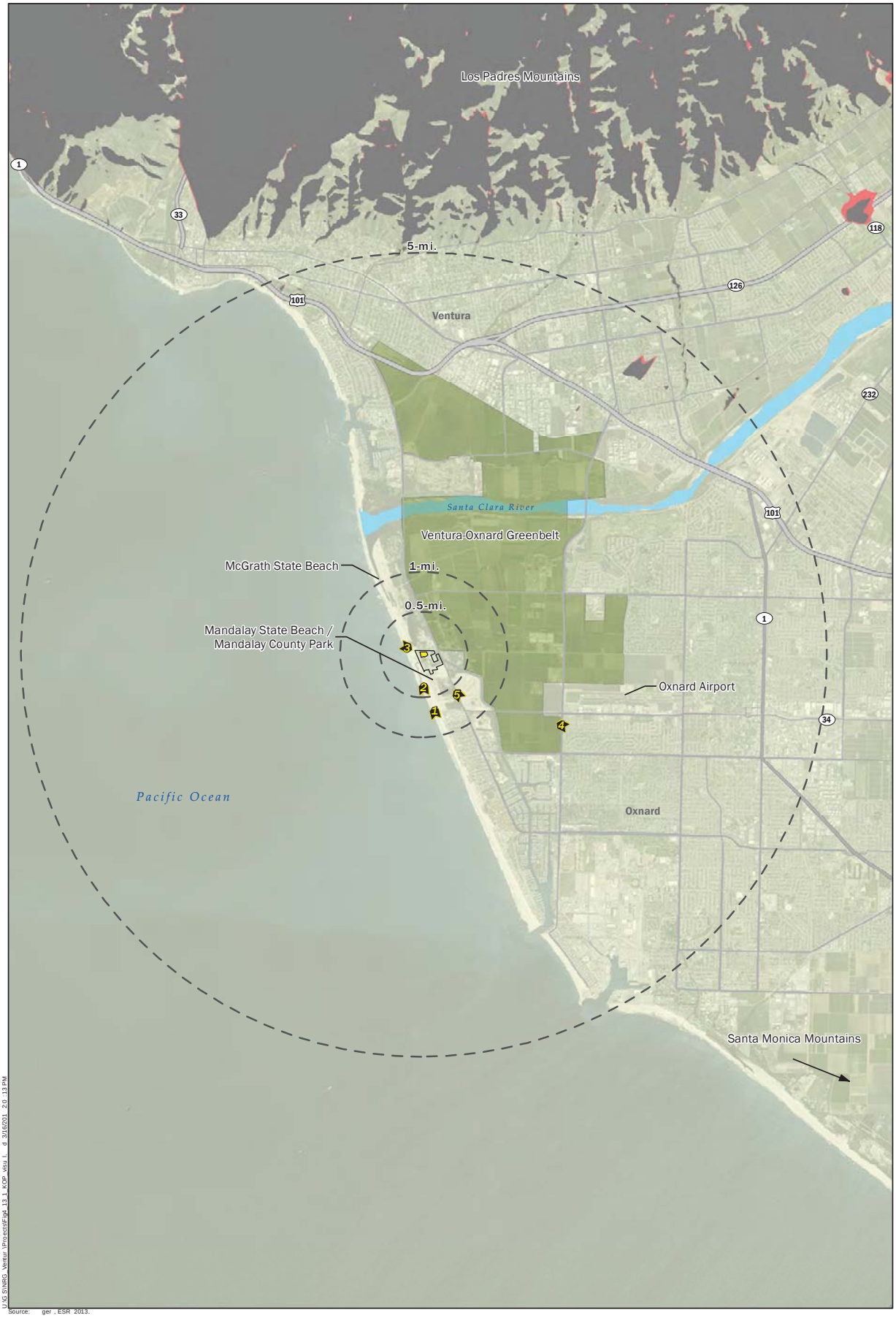
Access to Outfall
Demolition Access on Existing Roads
Aboveground Demolition
Mandalay Generating Station Property
Staging Area
Existing Parking Used During Demolition

0 125 250 Feet

DEMOLITION AREAS

NRG
Puente Power Project
September 2016 Oxnard, California

FIGURE 2-2



U:\G S\NRG_Ventur\Projects\Figs_13_1_KOP_visu l_ d 3/16/201 2:0 :13 PM

Source: ger , ESR 2013.

- Key Observation Point and Photo Direction
- Puente Power Project Site
- Mandalay Generating Station Property
- Greenbelt

Stack Visibility

- Neither Stack Visible
- Only Existing Stack Visible
- Both Stacks Visible

0 3,000 6,000 FEET

KEY OBSERVATION POINTS
VISUAL SPHERE OF INFLUENCE

NRG
Puente Power Project
November 2015 Oxnard, California

FIGURE 4.13-1

Photogr ph ove is intended to e vie ed 12 ro vie er s e es hen printed on 11 1 p per. The photogr ph elo s cropped, top nd otto , to sho ide- ngle vie o the re the re in ello depicts the loc tion o the ove i ger .

Sourse ger , Esri 2013

Key Observation Point and Photo Direction

Puente Power Project Site

Mandalay Generating Station Property

Photograph Information

Ti e o photogr ph:	1:02 PM
D te o photogr ph:	2-6-1
We ther condition:	Cloud
e ring:	North
titude:	34 12 6. 2 N
ongitude:	119 1 .03 W
Dist nce to st ck:	N/A
C er :	Nikon D 00
ens:	Nikon 0 /1.4D AF
Foc l length:	0
Aperture:	F/11

EXISTING CONDITIONS FROM KEY OBSERVATION POINT 2

NRG
Puente Power Project
Oxnard, California

November 2015

FIGURE 4.13-3A

Photogr ph ove is intended to e vie ed 12 ro vie er s e es hen printed on 11 1 p per. The photogr ph elo s cropped, top nd otto , to sho ide- ngle vie o the re the re in ello depicts the loc tion o the ove i ger .

Sourse ger , Esri 2013

Key Observation Point and Photo Direction

Puente Power Project Site

Mandalay Generating Station Property

Photograph Information

Ti e o photogr ph:	1:02 PM
D te o photogr ph:	2-6-1
We ther condition:	Cloud
e ring:	North
titude:	34 12 6. 2 N
ongitude:	119 1 .03 W
Dist nce to st ck:	2,216 eet
C er :	Nikon D 00
ens:	Nikon 0 /1.4D AF
Foc l length:	0
Aperture:	F/11

PHOTOGRAPHIC SIMULATION INCLUDING REMOVAL OF MGS UNITS 1 AND 2 AND THE OUTFALL STRUCTURE FROM KEY OBSERVATION POINT 2

September 2016

NRG
Puente Power Project
Oxnard, California

REVISED FIGURE 4.13-3B

Photogr ph ove is intended to e vie ed 12 ro vie er s e es hen printed on 11 1 p per. The photogr ph elo s cropped, top nd otto , to sho ide- ngle vie o the re the re in ello depicts the loc tion o the ove i ger .

Sourse ger , Esri 2013

Key Observation Point and Photo Direction

Puente Power Project Site

Mandalay Generating Station Property

Photograph Information

Ti e o photogr ph:	1: 0 PM
D te o photogr ph:	2-6-1
We ther condition:	Cloud
e ring:	South
titude:	34 12 33.42 N
ongitude:	119 1 18.96 W
Dist nce to st ck:	N/A
C er :	Nikon D 00
ens:	Nikon 0 /1.4D AF
Foc l length:	0
Aperture:	F/13

EXISTING CONDITIONS FROM KEY OBSERVATION POINT 3

NRG
Puente Power Project
Oxnard, California

November 2015

FIGURE 4.13-4A

Sourse ger , Esri 2013

Key Observation Point and Photo Direction

Puente Power Project Site

Mandalay Generating Station Property

Photograph Information

Ti e o photogr ph:	1: 0 PM
D te o photogr ph:	2-6-1
We ther condition:	Cloud
e ring:	South
titude:	34 12 33.42 N
ongitude:	119 1 18.96 W
Dist nce to st ck:	1,1 0 eet
C er :	Nikon D 00
ens:	Nikon 0 /1.4D AF
Foc l length:	0
Aperture:	F/13

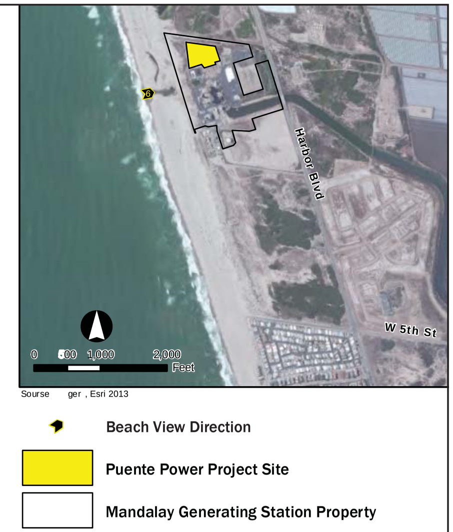
Photogr ph ove is intended to e vie ed 12 ro vie er s e es hen printed on 11 1 p per. The photogr ph elo s cropped, top nd otto , to sho ide- ngle vie o the re the re in ello depicts the loc tion o the ove i ger .

PHOTOGRAPHIC SIMULATION INCLUDING REMOVAL OF MGS UNITS 1 AND 2 AND THE OUTFALL STRUCTURE FROM KEY OBSERVATION POINT 3

NRG
Puente Power Project
Oxnard, California

September 2016

REVISED FIGURE 4.13-4B



CLOSE-UP EXISTING CONDITIONS FROM BEACH

NRG
Puente Power Project
Oxnard, California

September 2016

FIGURE 4.13-7A

Sourse ger , Esri 2013

Beach View Direction
Puente Power Project Site
Mandalay Generating Station Property

Note: Short-term simulation is intended to represent conditions approximately two years following removal of outfall structure.

CLOSE-UP PHOTOGRAPHIC SIMULATION INCLUDING REMOVAL OF MGS UNITS 1 AND 2 AND THE OUTFALL STRUCTURE FROM BEACH (SHORT-TERM)

NRG
Puente Power Project
Oxnard, California

September 2016

FIGURE 4.13-7B

Sourse ger , Esri 2013

Beach View Direction

Puente Power Project Site

Mandalay Generating Station Property

Note: Long-term simulation is intended to represent several years (5 to 10) following removal of the outfall structure.

CLOSE-UP PHOTOGRAPHIC SIMULATION INCLUDING REMOVAL OF MGS UNITS 1 AND 2 AND THE OUTFALL STRUCTURE FROM BEACH (LONG-TERM)

NRG
Puente Power Project
Oxnard, California

September 2016

FIGURE 4.13-7C

APPENDIX A

KOP 2: Mandalay State Beach

Landscape Inventory

Landscape View Inventory	
Outstanding	
High	
Moderate to High	
Moderate	**P3 is a moderately dominant feature within proposed views from KOP 2. The height and width of P3 creates some repetition with other vertical infrastructure to the east of the stack. The stack is a prominent feature within the proposed view from KOP 2. The existing view inventory is rated Moderate due to the high recreational value of the beach location and the reduced degree of contrast that results from the presence of P3 instead of MGS Units 1 and 2.**
Low to Moderate	
Low	

Public View	
High	
Moderate	**The coastal dunes in Mandalay State Beach are a designated scenic resource in the Oxnard Local Coastal Plan. This, combined with the recreational value of the beach location, serves to elevate the rating.**
Low	

Visibility	
Dominant	
High	**The existing view from KOP 2 is rated high because P3 draws viewer attention from this location, but does not command it. The existing stack is a focal feature of the view due to its height, but does not strongly draw attention.**
Moderate to High	
Moderate	
Low to Moderate	
Low	

Project Prominence

Contrast Rating			
Contrast	**Rating**	**Weighting**	**Score**
Form	High = 3	x 2	0
	Medium = 2		
	Low = 1		
	None = 0		
Line	High = 3	x 1	0
	Medium = 2		
	Low = 1		
	None = 0		
Color	High = 3	x 3	0
	Medium = 2		
	Low = 1		
	None = 0		
Texture	High = 3	x 1	0
	Medium = 2		
	Low = 1		
	None = 0		
Scale	High = 3	x 2	0
	Medium = 2		
	Low = 1		
	None = 0		
Contrast Rating Score			**0**

Scale Dominance Evaluation	
Rating	**Score**
Dominant	12
Co-Dominant	8
Subordinate	4
Insignificant	**0**
Score	0

Spatial Dominance Evaluation				
	Rating		**Rating**	
Composition of Landscape	Prominent			
	Significant			
	Inconspicuous	X		
Spatial Position of the Project	Prominent			
	Significant			
	Inconspicuous	X		
Backdrop to the Project	Prominent			
	Inconspicuous	X		
Score			**0**	**Insignificant**

Ratings Explanation and Definitions:

Dominant: If 2-3 ratings are prominent = 6
Co-dominant: If 1 rating is prominent or 2 highest ratings significant = 4
Subordinate: If 1 highest rating significant = 2
Insignificant: If all ratings are inconspicuous = 0
(Maximum highest score is 6 points)

Project Prominence				
KOP	**Contrast**	**Scale Dominance**	**Spatial Dominance**	**Score**
#2	0	0	0	**0**

36-45 = severe
27-35 = strong
18-26 = moderate
9-17 = weak
0-8 = negligible

Visual Impact Significance						
Landscape View Inventory		**Project Prominence**		**Visual Absorption Capability**		**Level of Significance**
High		Severe		High Absorption		**Significant**
Moderate to High		Strong		Moderate to High Absorption		
Moderate	X	Moderate		Moderate Absorption		
Low to Moderate	X	Weak		**Low to Moderate Absorption**	**X**	**Less Than Significant**
Low	**X**	**Negligible**	**X**	Low Absorption		

KOP 3: McGrath State Beach

Landscape Inventory

Landscape View Inventory	
Outstanding	
High	
Moderate to High	
Moderate	**P3 is a dominant feature within proposed views from KOP 3. The height and width of P3 creates some repetition with other vertical infrastructure to the east of the stack. The stack and generator are prominent angular features within the proposed view from KOP 3. The existing view inventory is rated Moderate due to the high recreational value of the beach location and the reduced degree of contrast that results from the presence of P3 instead of MGS Units 1 and 2.**
Low to Moderate	
Low	

Public View	
High	
Moderate	**The coastal dunes in Mandalay State Beach are a designated scenic resource in the Oxnard Local Coastal Plan. This, combined with the recreational value of the beach location, serves to elevate the rating.**
Low	

Visibility	
Dominant	
High	**The existing view from KOP 3 is rated high because P3 draws viewer attention from this location, but does not command it due to the undulating form of dunes in the foreground, which compete for attention.**
Moderate to High	
Moderate	
Low to Moderate	
Low	

Project Prominence

Contrast Rating			
Contrast	**Rating**	**Weighting**	**Score**
Form	High = 3	x 2	0
	Medium = 2		
	Low = 1		
	None = 0		
Line	High = 3	x 1	0
	Medium = 2		
	Low = 1		
	None = 0		
Color	High = 3	x 3	0
	Medium = 2		
	Low = 1		
	None = 0		
Texture	High = 3	x 1	0
	Medium = 2		
	Low = 1		
	None = 0		
Scale	High = 3	x 2	0
	Medium = 2		
	Low = 1		
	None = 0		
Contrast Rating Score			**0**

Scale Dominance Evaluation	
Rating	**Score**
Dominant	12
Co-Dominant	8
Subordinate	4
Insignificant	**0**
Score	0

Spatial Dominance Evaluation				
	Rating		**Rating**	
Composition of Landscape	Prominent			
	Significant			
	Inconspicuous	X		
Spatial Position of the Project	Prominent			
	Significant			
	Inconspicuous	X		
Backdrop to the Project	Prominent			
	Inconspicuous	X		
Score			**0**	**Insignificant**

Ratings Explanation and Definitions:

Dominant: If 2-3 ratings are prominent = 6
Co-dominant: If 1 rating is prominent or 2 highest ratings significant = 4
Subordinate: If 1 highest rating significant = 2
Insignificant: If all ratings are inconspicuous = 0
(Maximum highest score is 6 points)

Project Prominence				
KOP	**Contrast**	**Scale Dominance**	**Spatial Dominance**	**Score**
#2	0	0	0	**0**

36-45 = severe
27-35 = strong
18-26 = moderate
9-17 = weak
0-8 = negligible

Visual Impact Significance						
Landscape View Inventory		**Project Prominence**		**Visual Absorption Capability**		**Level of Significance**
High		Severe		High Absorption		**Significant**
Moderate to High		Strong		Moderate to High Absorption		
Moderate	X	Moderate		Moderate Absorption		
Low to Moderate	X	Weak		**Low to Moderate Absorption**	**X**	**Less Than Significant**
Low	**X**	**Negligible**	**X**	Low Absorption		