

Th 10a

ADDENDUM TO COMMISSION PACKET

FOR

ENERGY, OCEAN RESOURCES, and

FEDERAL CONSISTENCY

For Thursday, August 13, 2009

Item No. Th 10a A-4-OXN-07-096

Southern California Edison

- Correspondence
- Ex Parte Communication



**BOARD OF SUPERVISORS
COUNTY OF VENTURA**

GOVERNMENT CENTER, HALL OF ADMINISTRATION
800 SOUTH VICTORIA AVENUE, VENTURA, CALIFORNIA 93009

Members of the Board
Steve Bennett, Chair
Linda Parks
Kathy Long
Peter C. Foy

John C. Zaragoza
Supervisor, Fifth District
Phone: 805.654.2613
FAX: 805.289.3215
E-mail:
john.zaragoza@ventura.org

August 13, 2009

Ms. Bonnie Neely, Chair
California Coastal Commissioner
45 Fremont Street, Suite 2000
San Francisco, CA 94105

RE: Appeal No. A-4-OXN-07-096, Proposed Coastal Development Permit (CDP) to Develop a 45-MW Peaker Plant, Located at 251 North Harbor Boulevard

Dear Chair Neely and Commissioners:

On August 13, 2009, the Coastal Commission will consider Item 10(a), a Coastal Development Permit (CDP) allowing Southern California Edison to construct a peaker power plant at 251 Harbor Boulevard in Oxnard. As the elected County representative for residents and businesses in the Oxnard area, I remain very concerned and opposed to the construction of the peaker power at this location.

Please note that the City of Oxnard also continues to oppose this project. Both our office and the City are very disappointed that this project was approved despite the availability of a feasible alternative site that would meet Edison's objectives.

It is understood that the August 13 Coastal Commission meeting is not an opportunity to re-argue issues that were previously brought to the Commission's attention at the April 9, 2009 meeting. I would like, however, to emphasize three very serious issues recently brought forward by the City of Oxnard that merit your close attention.

1. Water Availability

Before issuing the Coastal Development Permit, the Commission should consider if there will be sufficient water available for the peaker plant. The Commission is relying on a water availability letter provided by the Calleguas Municipal Water District. Calleguas has begun withdrawing water from its aquifer storage and recovery facility to provide sufficient water supply in response to the continued drought and reduction in water deliveries from the Metropolitan Water District. The City of Oxnard may soon impose water conservation restrictions on existing customers. Oxnard has said that they will not issue a water connection permit for the peaker plant unless the application is net water neutral. The Coastal Commission should not issue a permit until such time as there is a new and permanent water supply available for the peaker plants' maximum usage.

Edison Peaker Plant
August 13, 2009
Page 2

2. California Climate Adaptation Issues

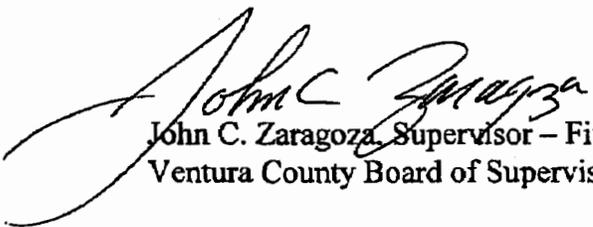
The recently distributed 2009 California Climate Adaptation Strategy Discussion draft document includes a preliminary recommendation for State and local agencies that emphasizes avoiding projects in coastal areas where sea level rise is anticipated. The Edison peaker plant may have a short enough life span to not be endangered by sea level rise, however, there is a concern that the adjacent Reliant Mandalay power plant may be put back into operation, possibly by Edison. It is our understanding that the City of Oxnard intends to propose designating the Ormond Beach and Mandalay Reliant power plant sites to a resource protection land use classification. We also understand City would like to eventually remediate these sites to native dune habitat. We fully support the City of Oxnard in this effort, and ask the Commission to fully support this approach as a reasonable and appropriate measure to address projected sea level rise.

3. Environmental Justice and the Coastal Act

At the April Coastal Commission hearing, several Commissioners supported the idea of amending the Coastal Act to allow consideration of environmental justice issues. Has an environmental justice proposal been brought forward for discussion and consideration by the Commission? If not, when can we expect the Commission to discuss this issue? Our office strongly supports adding environmental justice as a factor in considering future Coastal Commission permits. We fully expect the Commission to follow through with an amendment after members publically expressed regret that the Coastal Act prohibited environmental justice from being considered when the Edison peaker plant permit was considered.

Thank you for the opportunity to provide my comments and recommendations. Please feel free to call me, or my chief of Staff Stan Hakes, at (805) 654- 2613, if you have any questions regarding this letter.

Very truly yours,

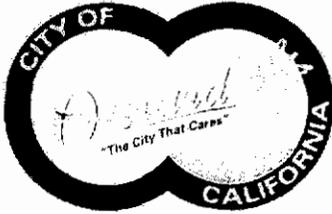


John C. Zaragoza, Supervisor – Fifth District
Ventura County Board of Supervisors

cc: Members of the Ventura County Board of Supervisors
Fran Pavley, California State Senator, 23rd District
Julia Brownley, California Assembly Member, 41st District
Pedro Nava, California Assembly Member, 35th District
Marty Robinson, Ventura County Chief Executive Officer

ITEM 10.a

EDMUND F. SOTELO
City Manager



CITY MANAGER'S OFFICE

305 West Third Street • Oxnard, CA 93030 • (805) 385-7430 • Fax (805) 385-7595

August 11, 2009

Ms. Bonnie Neely, Chair
California Coastal Commissioner
45 Fremont Street, Suite 2000
San Francisco, CA 94105

RE: Appeal No. A-4-OXN-07-096, Southern California Edison (SCE) Coastal Development Permit (CDP) to Develop a 45-MW Peaker Plant, Located at 251 North Harbor Boulevard

Dear Chair Neely and Commissioners:

On April 9, 2009, the Coastal Commission (Commission) approved SCE's appeal to overturn the City of Oxnard's denial of a CDP application to construct a 45-MW peaker plant at 251 North Harbor Boulevard. On August 13, 2009, the Commission will consider Item 10(a) and likely adopt the revised findings that approve the CDP for the SCE project.

The residents of the City of Oxnard continue to express dismay that this project was approved despite the availability of a feasible alternative site that would meet SCE's objectives. We know this is not the forum to re-argue the merits of the project. We do, however, want to bring to your attention three recent developments of which the Commission should be aware when considering project approvals.

1. Water Availability Determined by Direct Providers

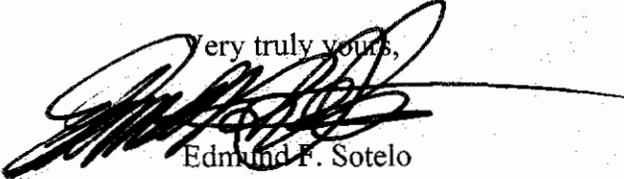
The Commission should only rely on the agency or utility actually providing water to a project site when evaluating water supply. The Commission relied on a water availability letter from the Callaguas Municipal Water District (CMWP) in approving the SCE project. As of July 1, 2009, the CMWP began withdrawing water from its aquifer storage and recovery facility (ASR), co-owned with the Metropolitan Water District (MWD), to augment supplies in response to the continued drought and reduction in water deliveries from MWD to Southern California, including Oxnard. CMWP-supplied cities are starting to impose Level 1 water conservation measures, and Oxnard may soon impose restrictions on existing customers. At this time and for the foreseeable future, Oxnard will not issue a water connection permit for the SCE peaker plant unless the application is net water neutral, meaning SCE brings a new, verifiable, permanent water supply to the City based on the peaker plants maximum usage.

2. California's 2009 Climate Adaptation Strategy

The Commission's role in deciding whether to place new critical public facilities in areas subject to sea level rise will only become more important in the future. The just-released 2009 California Climate Adaptation Strategy Discussion Draft includes a preliminary recommendation for State and local agencies that emphasizes avoiding projects in coastal areas where sea level rise is anticipated. Recommendation 3 reads, "...State agencies should generally not plan, develop, or build any new significant structure in a place where that structure will require significant protection from sea level rise, storm surges, or coastal erosion during the expected life of the structure." While the SCE peaker plant supposedly has a short enough life span to not be endangered by sea level rise, the City's concern is the potential redevelopment of the adjacent Reliant Mandalay power plant, possibly by SCE. In line with comments made by several of the Commissioners at the April hearing and consistent with Climate Adaptation Strategy 3 above, the City of Oxnard intends to propose the redesignation of the Ormond Beach and Mandalay Reliant power plant sites to a resource protection land use classification and seek the eventual remediation of the sites to native dune habitat. The City expects the Commission to fully support this approach as a logical response to projected sea level rise.

3. Environmental Justice and the Coastal Act

At the April hearing, several Commissioners proposed that the Coastal Act be amended to allow consideration of Environmental Justice. Has a proposal to this effect been formally considered by the Commission? What steps has the Commission taken to correct this omission in the Coastal Act? The City expects the Commission to follow through with an amendment after members publically expressed regret that the Coastal Act prohibited consideration of Environmental Justice in the case of the SCE peaker plant.

Very truly yours,

Edmund F. Sotelo
City Manager

EFS/CW

cc: Oxnard City Council
Dianne Feinstein, United States Senator
Barbara Boxer, United States Senator
Lois Capps, Member of Congress, 23rd District
Fran Panley, California State Senator, 23rd District
Julia Brownley, California Assembly Member, 41st District
Pedro Nava, California Assembly Member, 35th District
Members of the Ventura County Board of Supervisors
Marty Robinson, Ventura County Executive Director
Karen R. Burnham, Assistant City Manager
Matthew Winegar, Development Services



August 10, 2009

Chairperson Neely and Honorable Commissioners
California Coastal Commission
45 Fremont Street, Suite 2000
San Francisco, CA 94105-2219

Agenda Item Th10a

Re: Appeal No. A-4-OXN-07-096 (Southern California Edison Company,
McGrath "Peaker" Power Plant)

Dear Chairperson Neely and Honorable Commissioners:

Southern California Edison ("SCE") requests that the Commission approve the Revised Findings for SCE's construction and operation of the McGrath Peaker Power Plant (the "Project"). At its April 9, 2009 meeting, the Commission approved SCE's Coastal Development Permit for the peaker power plant. Subsequently, Commission staff prepared the Revised Findings, based upon the staff's review of the record and the hearing transcript, to accurately reflect the basis for the Commission's Permit approval.

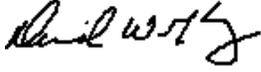
The Revised Findings reflect differences between the April 2009 staff report and the Commission's decision to approve the Project; specifically, the Revised Findings reflect the basis for the Commission's finding that the Project is in conformity with the City of Oxnard's Local Coastal Program ("LCP") policies related to coastal hazards and visual impacts. During the Commission's deliberations, two Special Conditions were modified and a new Special Condition was added. Specifically:

- Special Condition 10 was modified to require SCE to place \$500,000 in an escrow account to be used for access and recreation improvements on one of SCE's parcels east of Harbor Boulevard;
- Special Condition 9, which requires that no future bluff or shoreline protective device be constructed, was modified so that sea level rise would be included in the list of potential natural hazards; and
- Special Condition 11 was added, requiring SCE to submit, in 20 years, a report assessing the type, probability and magnitude of risks to the Project site posed by coastal hazards.

**THESE MATERIALS HAVE BEEN PROVIDED TO
COASTAL COMMISSION STAFF**

The Revised Findings accurately demonstrate the Commission's determination that the Permit is consistent with the Coastal Act and the City of Oxnard LCP. We therefore request that the Commission adopt the Revised Findings.

Sincerely,

A handwritten signature in black ink, appearing to read "David W. Kay". The signature is written in a cursive style with a large, stylized initial 'D'.

David W. Kay
Manager, Environmental Projects

Aug. 4,2009

#10 Appeal No.A-4-OXN-07-096
Patricia Munro Against

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AUG 10 2009

CALIFORNIA
COASTAL COMMISSION

Dear Commissioners,

Please protect our coast by denying Edison's Peaker plant.
Take a fresh look at my reasons and others for requesting
preservation over development.

- Local Coastal Policy 52 states that "industrial and energy related development shall not be located in coastal resource areas including sensitive habitats.
- Dept. of Fish and Game calls the southern dune scrub habitat type "a rare natural community of highly limited distribution due to its scarcity and declining status in southern California"
- SCE's biologists themselves point out in the documents they have submitted to the CCC that the undeveloped property is "potential high quality coastal dune habitat".
- SCE attempts to characterize the area that they propose to develop as degraded southern scrub dune habitat and not ESHA. By this reasoning, SCE could propose development for every barren patch of sand within this dune complex.
- *Anniella pulchra pulchra*, a California Species of Special Concern, is on the site and was brought up by a commissioner at the first hearing as something that was not analyzed properly. I attended the site visit during the first hearing and noted tracks of the reptile. In addition, I worked on the restoration of the Edison site and encountered two legless lizards while planting.

The peaker site is within ESHA, and is surrounded by ESHA land. I can state from experience that restoration of this area would not be difficult .

The peaker plant will be a blight on our community and is only needed by Edison as a place holder to further their future plans for a new and bigger facility.

Please protect our fragile coast from more unnecessary development.

Thank you

A handwritten signature in black ink that reads "Patricia Munro". The signature is written in a cursive style with a large, prominent initial "P".

Patricia Munro
221 Juneau Place
Oxnard, Ca. 93036

ORE

OCTAVIO R. ELIAS

1080 MANDALAY BEACH ROAD • OXNARD SHORES • CALIFORNIA 93035

July 30, 2009

California Coastal Commission
45 Fremont, Suite 2000
San Francisco, CA 94105-2219

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AUG 04 2009
CALIFORNIA
COASTAL COMMISSION

Re: Appeal # A-4-OXN-07-096 CA Edison, Oxnard

Gentlemen:

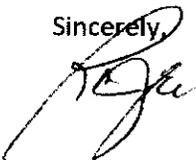
My main argument has been that the shoreline is no place for an industrial, electric plant. The old existing Reliant plant is an obsolete facility that required water for cooling. It will most likely be abandoned in the near future.. To install a new plant that will further deteriorate and desecrate the beach for another fifty years is almost criminal. Many years ago with a nominal population, it might have been feasible but Not Today. Our beaches are overcrowded . We should expand recreational usage.

Secondly, what Edison has in mind can be built anywhere. Oxnard is cool and should not have to shoulder the burden so that Edison can supply power to the hot inland Santa Clarita area. Have Edison find a spot nearer the areas that are lacking.

I am enclosing an article on the technological advances that have been made to supply power via a wireless electrical system. We've seen the computerization of every aspect of our world. Let's give the new technology a chance. Approving this installation will mortgage our beach for the next 50 years.

Thanking you in advance.

Sincerely,



Octavio R. and RoseMarie 'Bodine' Elias

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JUL 30 2009

CALIFORNIA
COASTAL COMMISSION
SOUTH CENTRAL COAST DISTRICT

SHERMAN N. MULLIN
665 MANDALAY BEACH ROAD
OXNARD, CALIFORNIA 93035-1051

TEL. 805-985-1413
EMAIL: MOON1@ROADRUNNER.COM

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JUL 29 2009

CALIFORNIA
COASTAL COMMISSION

July 26, 2009

California Coastal Commission
45 Fremont, Suite 2000
San Francisco, CA 94105-2219

Reference: Coastal Commission Meeting, August 13, 2009
Agenda Item 10a, Appeal No.A-4-OXN-07-096

Dear Commissioners:

I recommend, as part of your review of the latest staff findings, that you reverse your previous decision the permit Southern California Edison contract a 45 megawatt "peaker" power plant at 251 North Harbor Boulevard, Oxnard, California, for the following reasons:

1. Your staff accepted Edison's biased consideration of alternate sites.
2. Indirectly your staff reached the conclusion that there were no acceptable alternate sites in Ventura County. This is obviously preposterous.
3. You did not insist that alternate sites be identified and considered.

This letter contains my own conclusions as a Life Senior Member of the Institute of Electrical and Electronics Engineers, without consultation with other individuals or organizations opposed to the peaker plant. I consider the methodology used by your staff in addressing this issue to be seriously lacking in relevant professional civil and electrical engineering content.

Do your duty as Coastal Commissioners: reopen this matter, and insist that your staff address optional locations for this proposed power plant. It is unacceptable that your staff only considered optional locations proposed by Southern California Edison. It is amazing that you, the Commission, accepted this unprofessional effort.

CC: Thomas Holden
Mayor
City of Oxnard

Yours truly,

Sherman N. Mullin

THURSDAY, ITEM 10A

DISCLOSURE OF EX PARTE COMMUNICATIONS

Name or description of project:

Appeal No. A-4-OXN-07-096 (Southern California Edison, Oxnard) Review and possible adoption of revised findings for permit with conditions to construct and operate a 45 megawatt "peaker" power plant, at 251 N. Harbor Blvd., Oxnard, Ventura County.

Date and time of receipt of communication:

August 5, 2009 at 10:30 am

Location of communication:

Phone

Type of communication:

Teleconference

Person(s) in attendance at time of communication:

Susan McCabe, David Kay, Anne Blemker

Person(s) receiving communication:

Bonnie Neely

Detailed substantive description of the content of communication:

(Attach a copy of the complete text of any written material received.)

I received a briefing from the project representatives in which they informed me that the applicant is in agreement with the Revised Findings prepared by staff. According to the representatives, the Findings accurately reflect the changes made at the hearing, including the requirement for SCE to place \$500,000 in an escrow account to be used for access and recreation improvements to one of SCE's parcels across the street from the peaker plant site. They noted that although environmental justice is not explicitly mentioned in the Coastal Act, the staff report had included a thorough analysis of environmental justice issues.

Date:

Signature of Commissioner:

Bonnie Neely

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AUG 11 2009
CALIFORNIA
COASTAL COMMISSION

THURSDAY, ITEM 10A

DISCLOSURE OF EX PARTE COMMUNICATIONS

Name or description of project:

Appeal No. A-4-OXN-07-096 (Southern California Edison, Oxnard) Review and possible adoption of revised findings for permit with conditions to construct and operate a 45 megawatt "peaker" power plant, at 251 N. Harbor Blvd., Oxnard, Ventura County.

Date and time of receipt of communication:

August 9, 2009 at 6:30 pm

Location of communication:

Phone

Type of communication:

Teleconference

Person(s) in attendance at time of communication:

Susan McCabe

Person(s) receiving communication:

Dan Secord

Detailed substantive description of the content of communication:

(Attach a copy of the complete text of any written material received.)

I received a briefing from the project representative in which she informed me that the applicant is in agreement with the Revised Findings prepared by staff. According to the representative, the Findings accurately reflect the changes made at the hearing, including the requirement for SCE to place \$500,000 in an escrow account to be used for access and recreation improvements to one of SCE's parcels across the street from the peaker plant site. She noted that although environmental justice is not explicitly mentioned in the Coastal Act, the staff report had included a thorough analysis of environmental justice issues.

Date:

Signature of Commissioner:

[Handwritten Signature]

RECEIVED

AUG 11 2009

CALIFORNIA COASTAL COMMISSION

EX PARTE COMMUNICATIONS

Name or description of project: Appeal No. A-4-OXN-07-096 (Southern California Edison, Oxnard)
Date and time of communication: August 7, 2009 at 10:50 am
Location of communication: Menlo Park, CA
Type of communication: Teleconference
Persons in attendance: Susan McCabe, Anne Blemker, David Kay

Detailed substantive description of the content of communication:

The applicant said they are in agreement with the Revised Findings prepared by staff.

Date: August 7, 2009

Signature of Commissioner:

A handwritten signature in black ink, appearing to be "Susan McCabe", written over a light gray rectangular background.

CALIFORNIA COASTAL COMMISSION

45 FREMONT, SUITE 2000
SAN FRANCISCO, CA 94105-2219
VOICE AND TDD (415) 904-5200
FAX (415) 904-5400



Th10a

Filed: August 10, 2007
49th Day: September 28, 2007
Staff: C. Teufel-SF
Staff Report: March 20, 2009
Hearing Date: April 9, 2009
Vote: 7-4 Approved
Revised Findings: July 22, 2009
Hearing Date: August 13, 2009

RECOMMENDED REVISED FINDINGS ON APPEAL **DE NOVO REVIEW**

COMMISSION APPEAL NO.: **A-4-OXN-07-096**

LOCAL GOVERNMENT: City of Oxnard

LOCAL DECISION: Denied

APPLICANT: **Southern California Edison Company**

SUBSTANTIVE ISSUE: On September 6, 2007, the Commission found that the appeal of the local government action on this project raised a substantial issue.

PROJECT DESCRIPTION: Construction and operation of a 45-megawatt “peaker” power plant and ancillary facilities.

PROJECT LOCATION: 251 North Harbor Boulevard, Oxnard, Ventura County.

APPELLANT: Southern California Edison Company

COMMISSIONERS ON PREVAILING SIDE: Commissioners Achadjian, Blank, Burke, Clark, Secord, Potter, Chair Neely

LIST OF EXHIBITS AND SUBSTANTIVE FILE DOCUMENTS: See Appendix A

STAFF NOTE

Staff prepared these recommended Revised Findings to reflect the Commission's April 9, 2009 decision to conditionally approve the proposed Southern California Edison Company (SCE) peaker plant in Oxnard, Ventura County (CDP# A-4-OXN-07-096). These recommended Findings show the changes made to the original staff report to reflect the action of the Commission and are based on staff's review of the Hearing Transcript and the record before the Commission. Changes from the original April 9, 2009 staff recommendation are shown in ~~striketrough~~ and underline.

Summary of Key Issues: These Revised Findings reflect several significant differences between the initial staff report from April 2009 and the Commission's decision to approve the project. The main differences and changes include:

- **Conformity to LCP policies related to coastal hazards:** Through the Commission's modification of **Special Condition 9**, imposition of **Special Condition 11** and other **Special Conditions** relevant to coastal hazards, the Commission finds the project consistent with LCP Policies 39 and 56.
- **Conformity to LCP policies related to visual impacts:** Through the Commission's modification of **Special Condition 10** and imposition other **Special Conditions** relevant to visual impacts, the Commission finds the project consistent with LCP Policy 37.

Standard and Special Conditions: These Recommended Revised Findings include conditions the Commission adopted at its April 9, 2009 hearing. As shown in the attached Hearing Transcript, during the Commission's deliberations two Special Conditions recommended by staff were modified and a new Special Condition was added.

At the hearing, the Commission modified staff's recommended **Special Condition 10** to require SCE to place \$500,000 in an escrow account to be used for access and recreation improvements to one of SCE's parcels to the east of Harbor Boulevard, across the street from the peaker plant site.

Additionally, during the Commission's deliberations about the requirement of **Special Condition 9** that SCE shall not construct a bluff or shoreline protective device to protect the development approved in this permit, the Commission requested that the term "sea level rise" be specifically included in the list of potential natural hazards.

Finally, during the Commission's deliberations, a new special condition was added, **Special Condition 11**. This special condition requires SCE to submit, in 20 years, a written report that assesses the type, probability and magnitude of risks to the project site and facilities posed by coastal hazards such as flooding, erosion, sea level rise, and tsunami. The written report shall also discuss and evaluate the environmental conditions at the site which contribute to these hazards and risks. Upon approval of the report, the Executive Director shall determine whether or not a permit amendment shall be required to address these risks.

Conclusion: Staff recommends the Commission **approve** these Recommended Revised Findings.

EXECUTIVE SUMMARY

Project Summary. In this application, Southern California Edison (SCE) proposes to construct and operate a 45-megawatt natural gas fired “peaker” power plant in the City of Oxnard, Ventura County. The project includes additional electrical transmission lines and poles, an 1,800-foot long by six-inch diameter natural gas pipeline along the eastern edge of Harbor Boulevard, transformers, an electrical substation, a natural gas metering station, storage tanks, access roads, security gates and fences. The project would be primarily developed within a brownfield site that has previously supported energy-related infrastructure and neighbors the existing Mandalay Generating Station to the north, several functioning oil wells and production facilities to the west, and a protected backdune portion of Mandalay State Beach to the south. Additional project elements such as the natural gas pipeline and ten new and replacement transmission poles would be installed across the street from the brownfield site within two partially developed parcels owned by SCE.

Jurisdiction. The proposed project is located within the City of Oxnard’s (City) certified Local Coastal Program (LCP) jurisdiction and therefore requires a coastal development permit from the City. In July 2007, the City of Oxnard denied SCE’s request for a coastal development permit to construct and operate the peaker plant at the proposed location on the basis that the project is inconsistent with the zoning designation. At the same hearing in July of 2007, the City of Oxnard Planning Commission also decided not to certify a Mitigated Negative Declaration prepared for the proposed project. Denial of a major energy facility by a local government is appealable to the Coastal Commission (Commission). On August 10, 2007, SCE filed a timely appeal to the Commission. On September 6, 2007, the Commission found that SCE had raised a substantial issue regarding the conformance of the City of Oxnard’s permit denial with the LCP.

Standard of Review. This report constitutes the Commission’s de novo review of SCE’s application to obtain a coastal development permit for the peaker plant and ancillary facilities. The standard of review is the City of Oxnard’s LCP and the public access and recreation policies of the Coastal Act.

Zoning Designation. The project site is located within an area identified in the City of Oxnard’s LCP as a Coastal Energy Facility Sub-zone. The City’s denial of the proposed project was based on its determination that the proposal did not conform to the designated zoning for the parcel on which the project was to be located. The City’s rationale for denying the proposal is that the zoning designation requires any energy facility on the site to be coastal dependent.¹ SCE contends that this zoning designation allows non-coastal dependent facilities and that the City therefore erred when it determined the proposed project would have to be coastal-dependent to be sited at this location. SCE appealed the City’s permit denial to the Coastal Commission. On September 6, 2007, the Commission determined that SCE’s appeal

¹ Both the City’s LCP at Section 17-3(12) and Section 30101 of the Coastal Act define a “coastal-dependent development or use” as “any development or use which requires a site on, or adjacent to, the sea to be able to function at all.”

raised a substantial issue regarding the conformance of the City of Oxnard's denial of a coastal development permit with applicable LCP policies.

The Commission ~~staff recommends that the Commission~~ finds the proposed project to be in conformance with the LCP's Coastal Energy Facility Sub-zone for the following reasons:

- The key subsection of the Coastal Energy Facility Sub-zone (Coastal Zoning Ordinance Section 17-20), states that "coastal dependent energy facilities shall be encouraged to locate or expand within existing sites and shall be permitted reasonable long-term growth, where consistent with this article." This subsection is the only one that specifically refers to "coastal-dependent" facilities, and it only "encourages" such facilities to locate within this zoning designation and does not prohibit non-coastal dependent facilities;
- Other subsections of Coastal Zoning Ordinance Section 17-20 apply generally to "energy related developments," not exclusively to "coastal-dependent" developments. Additionally, these subsections are all subject to the overarching provision of Section 17-20(A), which states that this zoning designation allows "power generating facilities and electrical substations" and is therefore not limited to "coastal-dependent" facilities²; and
- One of the four types of developments that can be conditionally permitted within the Coastal Energy Facility Sub-zone is an "Electrical power generating plant and accessory uses normally associated with said power generating facility," such as the project proposed by SCE.

Key LCP Issues. Key LCP issues of concern for this project are potential impacts to biological resources and adverse visual effects.

Biological Resources.

The peaker plant, electrical substation, natural gas metering station and associated infrastructure are to be located to the west of Harbor Boulevard on the former tank field site of the Mandalay Generating Station. As a brownfield site that was graded and heavily disturbed during the demolition and removal of three fuel oil storage tanks several years ago, biological resources and intact habitat areas are very limited. Some dune adapted plant species (native and invasive) are becoming established but the occurrence of these plants is very low. Nevertheless, during a biological survey of this site during the burrowing owl breeding season in 2006, this California Species of Special Concern was observed at the site. Although no occupied or suitable burrows were noted during this survey, due to the strong site fidelity of burrowing owls and the fact that an owl was observed at the project site during the breeding season, the Commission staff recommends the adoption of is requiring **Special Condition**

² Further, the LCP's definition of "energy facility" does not specify that such facilities must be coastal-dependent. LCP Section 17-3(25) defines an "energy facility" as "any public or private processing, producing, generating, storing, transmitting or recovering facility for electricity, natural gas, petroleum, coal or other sources of energy."

3(c). This condition requires SCE to conduct a pre-construction survey for burrowing owls throughout all portions of the project area no more than 30 days prior to the initiation of ground disturbance activities. If any burrowing owls are observed during this survey, or if burrows are found to be actively used within the project area, prior to the initiation of construction or ground disturbing activities, SCE must submit an Impact Avoidance Plan for the Executive Director's review and approval.

During local review of this project, the US Fish and Wildlife Service (FWS) raised concerns about the use of large trees for landscaping at the peaker plant site and the potential for these trees to attract nesting predatory birds such as crows and ravens, which could adversely affect nearby western snowy plover and California least tern nesting areas. In response, SCE developed a landscape plan (included as Exhibit 4) that avoids the use of large branching trees and includes only small native trees approved by FWS, native groundcover, bush and shrub species that are not known to provide nesting or roosting habitat for corvid and/or raptor species.

To the east of Harbor Boulevard, both to the north and south of the Mandalay Canal, SCE proposes to install and bury a six-inch diameter by 1,800-foot long natural gas pipeline parallel to Harbor Boulevard as well as to install three new transmission poles and remove and replace seven additional poles. This 37-acre area currently supports seven separate transmission line corridors with numerous wooden and steel poles, a transmission substation located within a fenced and graded site, several dirt access and maintenance roads and a variety of buried infrastructure and pipelines. A photomap of this site is included in Exhibit 1. SCE carries out routine operation and maintenance activities within this area including the use of high clearance vehicles within each of the seven transmission line corridors to facilitate washing and inspection of the lines.

This site is a sandy area with low to moderate vegetation density dominated primarily by invasive ice plant (*Carpobrotus edulis*) but also supports sand dune adapted native plants such as native mock heather, also known as California goldenbush (*Ericameria ericoides*). Other native shrubs and herbaceous dune plant species representative of rare southern dune scrub are also found in lesser abundance throughout this site. However, the southern dune scrub habitat present within the project's disturbance limits is substantially degraded and none of the numerous biological and botanical surveys of the site revealed the presence of any rare plant species within the proposed disturbance areas or their immediate vicinity. Sources of disturbance and degradation in the proposed project area include high numbers of invasive plants (iceplant, myoporum, tree tobacco and castor bean), frequent vegetation and soil disturbance due to the accumulation of litter, automotive debris and road runoff, the occasional use of the road shoulder and adjoining habitat by parked and broken-down vehicles, and the periodic and ongoing transmission line operation and maintenance activities carried out by SCE.

Proposed site activities would result in the permanent loss of 93 square feet of habitat area and 57,548 square feet of temporary habitat disturbance (36,000 for the pipeline and 21,548 for pole installation and replacement).

SCE has committed to preserve, restore and enhance the ecological integrity of the 37-acre site by implementing a comprehensive invasive species eradication program to remove iceplant and other non-native plant species (**Special Condition 3(b)**). In addition, SCE will carry out a restoration program, concentrated on the project's disturbance footprint, which includes planting native dune scrub species collected from locally collected seeds and annual monitoring to ensure that native species become re-established and invasive plants do not reoccur in these areas (**Special Condition 3(b)**).

As conditioned, the Commission staff believes the project will be carried out consistent with the LCP policies that provide for the protection of biological resources and sensitive habitat areas.

Although this site includes plant species representative of rare southern dune scrub habitat, the Commission ~~staff recommends~~ finds that because of its current use as an active transmission and pipeline corridor and the degraded state of the habitat within the project footprint, this site does not represent environmentally sensitive habitat area (ESHA). However, upon successful completion of the site-wide invasive species eradication program and restoration of disturbed areas as required by the Commission, the Commission staff believes the site will meet the definition of ESHA.

Visual Resources

The peaker would be located on the former tank farm site at a maximum distance from the state beach, and, as demonstrated by the photographs in Exhibit 3, many of the existing views in the immediate vicinity of the project site are industrial and energy related in nature. Nevertheless, the City of Oxnard 2020 General Plan's Open Space/Conservation Element designates several miles of Harbor Boulevard, including the stretch that passes along the eastern edge of the project site, as a scenic highway and also notes that "the lower dunes in the Mandalay Beach State Park north of Fifth Street" are one of the City's Scenic Resources. This portion of the park includes the dunes adjacent to the southern edge of the project site.

While the project site is adjacent to both visual resources identified in the General Plan and existing large-scale industrial facilities, the peaker plant itself would be located on the project site in closer proximity to the industrial facilities. This proposed location for the peaker plant would consolidate it both spatially and visually with existing compatible elements such as the Reliant Generating Station. The proposed plant's stack would be slightly visible to beach users from some areas along Mandalay State Beach, however. While the majority of the facility would not be visible from the beach and shoreline in this area because of the 15 to 20 foot high foredunes which follow the inland edge of the beach, as shown in the photo simulations included in Exhibit 3, the top several feet of the peaker plant's exhaust stack would be visible from some locations. However, considering the visual profile of the existing Mandalay Generating Station, and oil wells and oil processing equipment that are adjacent to the proposed peaker location, the plant would be visually compatible with existing uses and would not result in adverse impacts to any of the significant visual resources identified in the Oxnard LCP.

In addition, SCE has proposed a landscaping plan for the project site that would provide the maximum level of visual screening from Harbor Boulevard and adjacent areas given the constraints regarding the use of large trees in this area. The Commission staff believes that implementing the proposed landscaping plan will minimize the plant's adverse visual effects and that those elements of the project that would not be blocked by proposed landscaping are compatible with the existing character and use of adjacent areas. The project would be sited such that it would not adversely affect any of the visual or aesthetic resources specifically identified and protected in the Oxnard LCP.

~~Staff Recommendation. Staff recommends the Commission **approve, with conditions,** coastal development permit application A-4-OXN-07-096.~~

Vote. For the reasons expressed above, and based on the findings included below, the Commission, on April 9, 2009, by a vote of 7-4, **approved, with conditions,** coastal development permit application A-4-OXN-07-096.

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I. MOTION, STAFF RECOMMENDATION DE NOVO, AND RESOLUTION

Motion:

I move that the Commission approve Coastal Development Permit No. A-4-OXN-07-096 pursuant to the staff recommendation.

Staff Recommendation of Approval:

Staff recommends a **YES** vote. Passage of this motion will result in approval of the permit as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

Resolution to Approve Permit:

The Commission hereby approves a coastal development permit for the proposed development and adopts the findings set forth below on grounds that the development, as conditioned, will be in conformity with the certified City of Oxnard LCP and the public access and recreation policies of the Coastal Act. Approval of the permit complies with the California Environmental Quality Act because there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

I. RECOMMENDED MOTION AND RESOLUTION

Motion

Staff recommends the Commission adopt the following findings in support of its actions on April 9, 2009 to approve Coastal Development Permit A-4-OXN-07-096.

I move that the Commission adopt the Revised Findings in support of the Commission's actions on April 9, 2009 concerning the Commission's Coastal Development Permit A-4-OXN-07-096.

Resolution

The Commission hereby adopts the Findings set forth below regarding Coastal Development Permit A-4-OXN-07-096.

II. STANDARD CONDITIONS:

1. **Notice of Receipt and Acknowledgment.** The permit is not valid and development shall not commence until a copy of the permit, signed by SCE or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
2. **Expiration.** If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
3. **Interpretation.** Any questions of intent of interpretation of any condition will be resolved by the Executive Director or the Commission.
4. **Assignment.** The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.
5. **Terms and Conditions Run with the Land.** These terms and conditions shall be perpetual, and it is the intention of the Commission and SCE to bind all future owners and possessors of the subject property to the terms and conditions.

III. SPECIAL CONDITIONS:

1. **Liability for Costs and Attorneys Fees:** SCE shall reimburse the Coastal Commission in full for all Coastal Commission costs and attorneys fees -- including (1) those charged by the Office of the Attorney General, and (2) any court costs and attorneys fees that the Coastal Commission may be required by a court to pay -- that the Coastal Commission incurs in connection with the defense of any action brought by a party other than the applicant against the Coastal Commission, its officers, employees, agents, successors and assigns challenging the approval or issuance of this permit, the interpretation and/or enforcement of permit conditions, or any other matter related to this permit. The Coastal Commission retains complete authority to conduct and direct the defense of any such action against the Coastal Commission.
2. **Mitigated Negative Declaration Mitigation Measures:** This permit incorporates those mitigation measures identified in the uncertified May 11, 2007, Mandalay Peaker Project Mitigated Negative Declaration concerning air quality, biological resources, cultural resources, hazards and hazardous materials, transportation and traffic that are attached to this report as Exhibit 8.
3. **Biological Resources:**
 - (a) All "indirect impact" minimization measures described within the Mandalay Peaker Project Biological Resources Assessment, dated February 2007, prepared

- by Keane Biological Consulting, shall be strictly adhered to and incorporated into all final project design plans, construction methodologies and management practices.
- (b) Prior to the start of construction activities to the east of Harbor Boulevard, SCE shall submit a revised McGrath Beach Peaker Landscaping and Restoration Plan for Executive Director approval that (1) adds myoporum, tree tobacco and castor bean to the list of invasive plant species to be removed from SCE owned property to the east of Harbor Boulevard; (2) clarifies that revegetation of those areas disturbed during placement/removal of transmission poles, installation of the natural gas pipeline and associated staging, construction and access activities shall be accomplished with native plant species representative of the southern dune scrub habitat community and grown from locally collected seed; (3) establishes performance criteria for restoration sites which ensures that disturbed areas are restored to replicate existing percent cover of high quality southern dune scrub vegetation in these areas; and (4) includes provisions for the maintenance of seeded and planted native plants in restoration areas.
 - (c) No more than 30 days prior to the initiation of ground disturbing activities, SCE shall conduct a pre-construction survey for burrowing owls throughout all portions of the project area (including the peaker plant site, construction staging areas, landscaping areas and transmission line and pipeline corridor to the east of Harbor Boulevard). If any burrowing owls are observed or burrows are found to be actively used within the project area, prior to the initiation of construction or ground disturbing activities, SCE shall submit an Impact Avoidance and Mitigation Plan for the Executive Director's approval. Approval of this plan shall be obtained prior to the initiation of ground disturbing activities. The plan shall include implementation of specific disturbance avoidance measures based on current CDFG guidelines, including, but not limited to, the avoidance of project activity within a minimum of 160 feet of occupied burrows during the non-breeding season of September 1 through January 31 or within a minimum 250 feet during the breeding season of February 1 through August 31 and the maintenance of a 300 foot foraging radius around each occupied burrow. If destruction of occupied burrows and/or disturbance within the 160-250 foot buffer distance is unavoidable, SCE shall adhere to the mitigation guidelines described within the California Burrowing Owl Consortium's April 1993, "Burrowing Owl Survey Protocol and Mitigation Guidelines" (Exhibit 9).
 - (d) The only activities allowed within 50 feet of the southern border of the peaker plant property shall be the removal of the existing chain link fence and the following landscape activities: (1) eradication of the existing exotic weed species; and (2) planting of native plant species from locally collected seed that are compatible with the revegetation project completed on the adjacent Mandalay State Beach in 2002. All landscaping and construction activities within 50 feet of Mandalay Canal shall be avoided with the exception of dewatering wastewater discharge, natural gas pipeline installation on Harbor Boulevard over Mandalay Canal, and use of existing roads for equipment access.
 - (e) SCE shall install two groundwater monitoring wells at the southern edge of its property line (but outside of the buffer area described within **Special Condition**

- 3(d).** Wells shall be installed and begin recording ground water levels at least 2 months prior to initiation of the ground water/dewatering pumps. If either well shows during dewatering activities a decrease in groundwater level of 24-inches or more from the 2-month average monitored level, SCE shall immediately cease dewatering activities and, within 60 days, submit a permit amendment to revise the dewatering and/or foundation installation plan to reduce the area of groundwater drawdown so that the groundwater level at the monitoring wells does not fall more than 24-inches, as shown by the monitoring wells. Groundwater monitoring shall continue to determine the length of time for ground water levels to recover once pumping has ceased.
- 4. Geologic Hazards:** SCE shall incorporate all recommendations contained in the Geotechnical Investigation, dated December 13, 2006, prepared by Kleinfelder, Inc. into all final design and construction plans. Prior to issuance of this coastal development permit, SCE shall submit evidence of Kleinfelder, Inc.'s review and approval that all of its design criteria were incorporated into all final design and construction plans for the project. If implementation of Kleinfelder's recommendations results in project modifications, SCE shall apply for an amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.
- 5. Assumption of Risk, Waiver of Liability and Indemnity:** By acceptance of this permit, SCE acknowledges and agrees (i) that the site may be subject to hazards from liquefaction and lateral spreading; (ii) to assume the risks to the applicant and the property that is the subject of this permit of injury and damage from such hazards in connection with this permitted development; (iii) to unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards; and (iv) to indemnify and hold harmless the Commission, its officers, agents, and employees with respect to the Commission's approval of the project against any and all liability, claims, demands, damages, costs (including costs and fees incurred in defense of such claims), expenses, and amounts paid in settlement arising from any injury or damage due to such hazards.
- 6. Generic Deed Restriction:** Prior to issuance of this coastal development permit, SCE shall submit to the Executive Director for review and approval documentation demonstrating that SCE has executed and recorded against the parcel(s) governed by this permit a deed restriction, in a form and content acceptable to the Executive Director: (1) indicating that, pursuant to this permit, the Coastal Commission has authorized development on the subject property, subject to terms and conditions that restrict the use and enjoyment of that property; and (2) imposing the Special Conditions of this permit as covenants, conditions and restrictions on the use and enjoyment of the Property. The deed restriction shall include a legal description of the entire parcel or parcels governed by this permit. The deed restriction shall also indicate that, in the event of an extinguishment or termination of the deed restriction for any reason, the terms and conditions of this permit shall continue to restrict the use and enjoyment of the subject property so long as either this permit or the development it authorizes, or any part,

modification, or amendment thereof, remains in existence on or with respect to the subject property.

7. **Flood Protection:** If the final approved FEMA Flood Insurance Rate Map for the project area that is currently in draft status shows the peaker plant site within the 500-year flood zone, SCE shall submit, within 60-days of FEMA's determination, a permit amendment to either construct an engineered a flood control berm or levee of sufficient height that a 500-year flood event would not result in flooding of the peaker plant or implement other design changes to the site's topography or foundation that would ensure that a 500-year flood event would not result in flooding of the peaker plant, the substation or the natural gas metering station.
8. **Performance Bond:** Prior to issuance of this coastal development permit, SCE shall provide a surety bond or other security device guaranteed by SCE acceptable to the Executive Director for \$100,000, and naming the Coastal Commission as the assured, to guarantee the faithful observance and performance by SCE of conditions (c), (d), (e) and (g) of Oxnard Local Coastal Program Policy 57 (as described in Appendix B to these Revised Findings~~this Staff Report~~). The surety bond or other security device shall be maintained in full force and effect at all times until conditions (c), (d), (e) and (g) of Oxnard Local Coastal Program Policy 57 have been met.
9. **No Future Bluff or Shoreline Protective Device:**
 - (a) By acceptance of this permit, SCE agrees, on behalf of itself and all successors and assigns, that no bluff or shoreline protective device(s) shall ever be constructed to protect the development approved pursuant to Coastal Development Permit No. A-4-OXN-07-096 including, but not limited to, the peaker plant, substation, natural gas metering station or associated infrastructure in the event that the development is threatened with damage or destruction from waves, erosion, storm conditions, bluff retreat, landslides, sea level rise or other natural hazards in the future. By acceptance of this permit, SCE hereby waives, on behalf of itself and all successors and assigns, any rights to construct such devices that may exist under Public Resources Code Section 30235 and corresponding provisions of the City of Oxnard's certified Local Coastal Program.
 - (b) By acceptance of this permit, SCE further agrees, on behalf of itself and all successors and assigns, that the landowner shall remove the development authorized by this permit, including the peaker plant, substation, natural gas metering station or associated infrastructure, if any government agency has ordered that the structures are not to be occupied due to any of the hazards identified above. In the event that portions of the development fall to the beach before they are removed, the landowner shall remove all recoverable debris associated with the development from the beach and ocean and lawfully dispose of the material in an approved disposal site. Such removal shall require a coastal development permit.
10. **Conservation Easement:**
 - (a) Within 12 months of permit issuance, or if a challenge is made, within 3 months of the successful defense of such challenge, whichever is later, SCE shall prepare for

Executive Director review and approval as part of the McGrath (Oxnard) Peaker Project a conservation easement suitable for recording over approximately 10 acres to be located on a substantial majority of a parcel of land owned by SCE, APN# 183002103, east of Harbor Boulevard and south of the Mandalay Canal. The conservation easement would be restricted to use for open space and development consistent with passive recreational uses. Public access would be allowed. A small portion of the parcel will be excluded from the easement to allow for operation, maintenance, repair and upgrades of existing and proposed utilities and transmission uses. Therefore, the easement would exclude the utility and transmission corridor plus 50 feet from the eastern boundary of the corridor, and would be subject and subordinate to existing easements. The Executive Director may extend this time period upon SCE's request and showing of good cause.

The conservation easement shall be of form and content approved by the Executive Director and shall include documentation showing (1) the easement location and dimensions; (2) planned or necessary improvements, along with a description showing that these improvements are consistent with the City's LCP; (3) a description of permitted and prohibited methods of access given that the primary purpose of the easement is to prohibit development that would detract from public access. The conservation easement shall run with the land binding successors and assigns of SCE.

- (b) Within 6 months of approval by the Executive Director of the form of the easement set forth in part (a) above, or if a challenge is made, within 3 months of the successful defense of such challenge, whichever is later, SCE shall provide documentation to the Executive Director showing that it has recorded a conservation easement over approximately 10 acres of land owned by SCE, east of Harbor Boulevard and south of the Mandalay canal, identified as parcel APN# 183002103, excluding the existing utility and transmission corridor plus 50 feet from the eastern boundary of the corridor, and subject and subordinate to existing easements, in favor of a public agency or private association approved by the Executive Director and reasonably acceptable to SCE. The Executive Director may extend this time period upon SCE's request and a showing of good cause.
- (c) Within 180 days of permit issuance, SCE shall deposit five hundred thousand dollars (\$500,000) into an interest bearing escrow, or similar account, to be established and managed by one of the following entities approved by the Executive Director: the City of Oxnard, the County of Ventura, the California Department of Parks and Recreation, or a private, non-profit organization. The entity receiving these funds shall enter into a Memorandum of Understanding with the Executive Director, on behalf of the Commission, specifying that the funds deposited in this account, and any accrued interest, shall only be used for passive public recreation facilities and/or improvements on the adjacent parcel (APN #183002103), consistent with the protection of habitat values on that parcel.

Prior to expenditure of any funds contained in this account, the Executive Director must review and approve the proposed use of the funds as being consistent with the intent and purpose of this condition. All development funded by this account will require coastal development permit review and approval. If any portion of the funds has not been expended five years after the account is established, the Executive Director may require such funds to be redirected to a different project or projects that create public coastal recreational facilities or improvements elsewhere in the City of Oxnard.

- 11. Future Coastal Hazards:** In April 2029, SCE shall submit for Executive Director approval a written report that assesses the type, probability and magnitude of risks to the project site and facilities posed by coastal hazards such as flooding, erosion, sea level rise, and tsunami. The written report shall also discuss and evaluate the environmental conditions at the site which contribute to these hazards and risks. Upon approval of the report, the Executive Director shall determine whether or not a permit amendment shall be required to address these risks.

IV. FINDINGS AND DECLARATIONS

The Commission finds and declares as follows:

A. Project Description and Background

Southern California Edison (SCE) proposes to build and operate a 45-megawatt natural gas fired "peaker" plant in the coastal zone within the City of Oxnard. The project would require the use of two sites, one to the west of Harbor Boulevard for the peaker plant itself, as well as a substation, natural gas metering station and associated infrastructure. On the other site, to the east of Harbor Boulevard, SCE proposes an 1,800-foot long gas pipeline and ten new and replacement transmission poles. SCE historically used the western site as a tank farm to store fuel oil before the nearby Mandalay Generating Station was converted to be powered by natural gas. The eastern site currently supports seven transmission lines, an electrical substation, and a variety of underground pipelines and infrastructure. Both sites, owned by SCE, are in close proximity to the Mandalay Generating Station, the Mandalay Canal, an existing offshore oil processing facility and two operating oil wells on the west, and the undeveloped sand dune habitat of Mandalay State Beach on the south (as shown in Exhibit 1).

SCE initially proposed this project following an Assigned Commissioner's Ruling by Commissioner Michael Peevey of the California Public Utilities Commission (CPUC) (attached as Exhibit 2) which directed SCE to expand one of its energy conservation programs and to "...pursue the development and installation of up to 250 megawatts of black-start, dispatchable generation capacity within its service territory for summer 2007 operation." In this context, the term "black-start" refers to the ability of a generating unit to turn on and power-up without the need for external power input, for example during a power outage in the area, and the term "dispatchable" refers to a unit's ability to start and ramp up power output quickly, for example in response to a rapid demand increase or a sudden loss of other generation or transmission resources. In response to this Assigned Commissioner's Ruling, SCE constructed and brought on line four 45 megawatt peaker plants outside of the coastal zone in southern California for an estimated 180 megawatts of generating capacity and began the permitting process for a fifth 45 megawatt peaker within the coastal zone in Oxnard. The four inland peaker plants were installed and operating by August 2007, and during 2008 they operated between 104 and 127 total hours each.

SCE currently has an application pending before the CPUC for recovery in its electricity rates of the costs that SCE incurred on the four completed peakers. In January 2009, other parties to that proceeding raised the issue at the CPUC of whether there is continued need for the fifth peaker and accordingly whether further SCE spending on the fifth peaker should be eligible for recovery, citing factors such as the passage of the Summer 2007 period which was the focus of concern in the Assigned Commissioner's Ruling, the four completed peakers, and the recent downturn in the economy and electricity demand forecasts. SCE stated that the fifth peaker remains needed, especially because of power transmission constraints affecting the Ventura County-Santa Barbara County area and the resultant need for a black-start capable generator within that area, which does not currently have any black-start capable generation. The CPUC has not yet taken any action on this issue.

The California Independent System Operator (ISO) has submitted a letter to the Coastal Commission on March 10, 2009 stating that the ISO supports the peaker project. The ISO is a not-for-profit, public-benefit corporation statutorily charged with operating most of California's transmission system and maintaining the system's reliability in compliance with applicable standards. The ISO letter states that "Southern California has a continuing strong need for additional quick start peakers. In addition to providing peak power during times of high electricity demand, plants such as the Oxnard peaker provide the quick-start and power-ramping capabilities that are needed to maintain transmission system stability while integrating additional renewable resources into the transmission system."

SCE states that the proposed peaker plant, besides providing emergency black-start capability in the case of transmission outages to the Ventura County-Santa Barbara County area, "will be operated primarily during periods of peak power demand when the electrical grid system needs additional usable electric power capacity or when local voltage support is required" and that "the unit can be started on short notice to respond to demand peaks." Use of the peaker plant would be limited to a maximum of 2,000 hours per year (as specified in the air pollution emission limits established by the Ventura County Air Pollution Control District) and anticipated use would be around 200 hours per year.

The proposed peaker plant would require the construction of numerous components and infrastructure, including both a natural gas-fired emergency start-up generator (also known as a black-start generator because of its ability to startup without an external power source) and a natural gas-fired turbine generator with pollution control equipment, an 80 foot tall exhaust stack, a 10,500 gallon aqueous ammonia storage tank, a water demineralization system and 50,000 gallon de-ionized water storage tank, a 180,000 gallon fire water storage tank, natural gas and water supply lines and storage tanks, transformers, access roads, security gates, fences and transmission lines and poles. Additionally, the construction of an approximately 4,900 square foot electrical substation and a 3,000 square foot natural gas metering station would be required to facilitate electricity generation and transmission.

Site Preparation: Site preparation activities at the peaker plant site include establishing temporary staging areas and excavating, grading, and de-watering construction areas. Proposed temporary staging areas would encompass approximately 4.6 acres of the project site and would be used for the storage of material and equipment during construction. In addition, much of the remainder of the project site would be used for construction office trailers and temporary parking facilities. Proposed grading and excavation activities include the placement of a 1,000 foot long, 50 foot wide and six foot tall earthen berm along the entire eastern edge of the project site (adjacent to Harbor Boulevard), the temporary removal of roughly 45,333³ cubic yards of soil to facilitate de-watering activities and the installation of the peaker plant's foundation, as well as additional smaller scale earth moving activities necessary to install the foundations for the natural gas metering station and transmission substation. The majority of this excavated material would be used as backfill at the site of

³ Based on information provided by SCE that estimates the size of the excavation area at 240 feet by 340 feet and the depth of the excavation at 15 feet. Upon completion of dewatering activities and the installation of foundation supports, the majority of this material would be used onsite to backfill this excavation or construct the six-foot high earthen berm along the eastern edge of the site.

excavation once the de-watering and foundation construction activities are completed. Excess material would be used to construct the earthen berm. Any remaining material would be disposed of at an appropriate offsite receiving facility. To enable excavation and foundation construction to proceed, SCE proposes to lower the water table at the construction site by between 8 and 10 feet.

Proposed de-watering activities would withdraw approximately 25 million gallons of groundwater from the project site within the first ten days and would then proceed at an estimated withdrawal rate of 2.5 million gallons per day for an estimated additional 172 days. These de-watering activities would require between 11 and 30 separate twenty-four inch diameter by 40 foot deep wells around the perimeter of the approximately two acre peaker plant foundation footprint. Groundwater withdrawn by the proposed well system would be directed to a 21,000 gallon Baker style de-sanding tank to allow suspended solid materials within the water to settle out before the water is discharged through an existing storm drain pipe into the Mandalay Canal. Material collected within the proposed de-sanding tank would be chemically analyzed and then either used in the proposed landscape berms or hauled away to an approved disposal site, based on the results of chemical analysis. During the proposed ten day initial de-watering period, operation of the pump system would be continuous for 24 hours per day and would then proceed at the frequency necessary to maintain the target water depth, based on the rate of ground water intrusion and return. The total estimated amount of groundwater proposed to be withdrawn and discharged into the Mandalay Canal is 455 million gallons. Upon completion of foundation construction, de-watering would cease.

SCE has provided Commission staff with the results of chemical analyses conducted on groundwater samples from the project site. All pollutant levels appear to be well within applicable limits established by the California Regional Water Quality Control Board. Groundwater is brackish due to seawater intrusion and proximity to the ocean. SCE has also provided the water sample lab results to the California Regional Water Quality Control Board and has submitted a Notice of Intent to comply with general waste discharge requirements and obtain a National Pollutant Discharge Elimination System (NPDES) Permit.

Transmission Lines and Poles: As shown in Exhibit 1, SCE also proposes to install approximately 1,350 circuit feet of transmission line, seven new 55-80 foot tall transmission poles (four within the peaker plant parcel to the west of Harbor Boulevard and three to the east of Harbor Boulevard) and replace seven existing transmission poles located east of Harbor Boulevard with new poles that are slightly larger and taller (ranging in size from 65-85 feet tall).

The routing of the transmission line would require placement of two 55-60 foot tall wood power poles within the project site to connect the peaker plant to the transmission substation and two additional 55-65 foot wood power poles also within the project site but south of the proposed substation to route the powerline to the point where it will cross Harbor Boulevard. After the line crosses Harbor Boulevard, it will be routed along an existing transmission line within an existing transmission corridor through SCE's property on the east side of the street. In order to accommodate the weight of the new transmission line, provide sufficient ground clearance for safety purposes, and route the line to the appropriate junction with the existing

transmission line east of the existing Mandalay Substation, approximately seven wood power poles from the current transmission corridor will be replaced by new wood power poles in the same or adjacent locations, and approximately two additional wood power poles and one additional steel power pole will be installed in new locations. The proposed steel pole would require a seven foot diameter reinforced concrete support foundation to be installed above ground at its proposed footing site adjacent to the Mandalay substation's existing unpaved service road (this pole location is referred to as number 4533721E on Exhibit 1). A steel pole is required at this location to resist the stresses of a "corner" location along the line.

Apart from the proposed steel pole, the new and replacement poles will be similar in appearance but approximately five to ten feet taller than the existing poles within the same transmission corridor along Harbor Boulevard, which range from 60 to 75 feet in height. Placement of these poles and their anchoring systems require the excavation of 32 augured holes, each between six and ten feet in depth with a diameter of two feet, and one concrete foundation (25 feet deep and seven feet in diameter). The total amount of ground proposed to be permanently occupied by these poles, footings and foundations would be approximately 87 square feet. SCE also proposes to temporarily disturb approximately 21,548 square feet of undeveloped land to the east of Harbor Boulevard for transmission line construction staging activities and to facilitate truck and equipment access to the proposed pole installation and removal sites. In regard to poles and transmission line installation activities, SCE notes:

For transmission line installation, access for vehicles will not require temporary or permanent roads, as the terrain is a fairly flat, dune type of terrain that can be accessed with all wheel drive line trucks... High ground clearance trucks that can drive over the existing vegetation and ground mats to stabilize the sand will be used to access and install the new poles to avoid the need to establish or pave new roads. Trucks will be driven on the shortest route to and from their destinations in the narrowest path possible.

Additionally, SCE has committed to using existing paved and unpaved access roads whenever feasible.

Natural Gas Pipeline and Tie-in: As previously noted, the proposed peaker plant would be powered by natural gas and would require the construction of both a gas metering station on an approximately 40 foot by 75 foot foundation and an 1,800 foot long by six inch diameter natural gas pipeline. This pipeline would require a six square foot maintenance hatch at its tie-in location to the larger natural gas supply line that services the Mandalay Generating Station. While the metering station would be constructed adjacent to the proposed peaker plant within the peaker plant site to the west of Harbor Boulevard, the Southern California Gas Company (the entity that would construct and install this pipeline) has determined that the most feasible and preferred location for the proposed natural gas pipeline would be along the east side of Harbor Boulevard. Potential pipeline routes on the west side of Harbor Boulevard were rejected by SCE and the Southern California Gas Company due to the presence of telephone and electrical lines, associated concrete vaults and a ten-inch gas pipeline on this side of the road as well as the need to obtain a voluntary easement from Reliant in order to install the proposed pipeline on Reliant's property north of the Mandalay

Canal. SCE has therefore proposed to concentrate the trenching and pipeline installation activities within a 30 foot wide area stretching inland from Harbor Boulevard (at the pipeline's northern terminus this construction corridor would increase to 54 feet wide).

The proposed pipeline would cross the Mandalay Canal in a cell within an existing vehicle bridge and run approximately 1,000 feet north along the edge of the roadway before tying-in to an existing 20 inch diameter natural gas pipeline near the northern edge of the Reliant Generating Station property. The proposed project site and approximate transmission line and natural gas pipeline routes and footprints are shown in Exhibit 1. The pipeline would be installed at a minimum depth of 36 inches and a planned depth of 42 inches and would be trenched using a backhoe within approximately 30 feet of the shoulder area along the eastern edge of Harbor Boulevard. Approximately 1,200 cubic yards of material would be excavated during trench construction and would be side-cast within the proposed 30 foot wide pipeline corridor. Any material remaining after backfill operations would be taken off site and disposed of at an approved facility.

The total anticipated footprint required for pipeline trenching and installation activities (not including the potential use of a portion of Harbor Boulevard) would be approximately 36,000 square feet. Pipeline construction is expected to be carried out concurrent with peaker plant construction and would take approximately 7 weeks to complete. Construction equipment required for pipeline installation would include pipe trucks, dump trucks, welding equipment, and backhoes as well as boring and lifting equipment. The proposed staging area for pipeline trenching and construction would be located within the project site in the same location as the peaker plant construction staging area. Temporary closure of the northbound traffic lane on Harbor Boulevard may periodically be required during pipeline installation to allow the safe access and operation of equipment. As described within the mitigation measures included within Exhibit 8, which SCE has committed to implement, traffic control shall be provided during these activities.

Operation and Maintenance Access Requirements: SCE also would undertake routine repair and maintenance activities. Routine operation and maintenance of a typical SCE 66 kilovolt line is limited to a pole inspection every 10 years for rot and insect damage, and a yearly insulator wash. During inspections, other problems may be noted that require action. However, the existing 66 kilovolt lines in the project area are required to be inspected 4 to 5 times a year due to more corrosive climatic conditions on the coast (moisture and salt). Similarly, due to increased salt deposition, SCE would wash the insulators every four weeks from May to October (this may vary sometimes depending on rainfall).⁴

For the one 230 kilovolt transmission line that crosses the northern of the two SCE parcels, operation and maintenance work requires periodic inspection and insulator washing (same frequency as 66 kilovolt lines).

⁴ A wash entails the use of a 3 axle truck with an 80-foot boom that drives along the line, stops at every pole, extends outriggers, elevates a boom and washes the insulators with high-pressure deionized water.

Permit History: On June 28, 2007, the City of Oxnard Planning Commission denied SCE's application for a coastal development permit to construct and operate the peaker plant. The Planning Commission also declined to adopt the Mitigated Negative Declaration (MND) prepared by the City pursuant to requirements of the California Environmental Quality Act. During the Planning Commission hearing of June 28, 2007, City of Oxnard Planning Commission staff explained their rationale for recommending that the MND not be adopted by citing an insufficient opportunity to respond to a letter submitted by the director of the Ventura County Department of Airports on June 26, 2007, directly prior to the Planning Commission hearing. This letter raised concerns regarding the proposed 80-foot peaker plant exhaust stack and the potential for this stack to alter departing aircraft flight patterns slightly and cause additional overflight of the Oxnard Shores neighborhoods, thus increasing noise impacts to those areas⁵. This issue was not addressed or analyzed in the MND and the City of Oxnard Planning Commission staff noted during the hearing that

It does give us concern as to whether the MND is adequate since we don't know whether the changing flight pattern could generate noise in those neighborhoods. Because we don't have that analysis in hand, we really can't say whether [this potential impact is] mitigated or less than significant and for that reason we are changing our recommendation to not adopt the MND at this time.

The Planning Commission declined to adopt the MND based on this recommendation by Planning Commission staff as well as additional concerns raised during public testimony and Commission deliberations regarding the need for a more comprehensive Environmental Impact Report, the inadequacy of the MND's discussion of potential biological, aesthetic and cumulative impacts and the fact that the Planning Commission would not be required to certify the MND if they did not approve the project.

On July 10, 2007, SCE filed a timely appeal of the Planning Commission's decision with the Oxnard City Council. Despite the results of additional analysis of the airport and flight pattern issues which established several mitigation measures to reduce potential significant impacts, on July 24, 2007, in a single action, the City Council denied the appeal and also declined to adopt the MND. On July 27, 2007, the Coastal Commission received the City's Notice of Final Action and associated records to start the 10-working-day appeal period, which ended August 10, 2007. SCE filed its appeal on August 10, 2007, and on September 6, 2007, the Commission found that the appellant had raised a substantial issue regarding the conformance of the City of Oxnard's coastal development permit denial with the LCP. At this time, the MND remains an uncertified draft document.

⁵ Subsequent to the Planning Commission hearing at which the concerns about the impact of the project's stack on the Oxnard Airport were first raised, SCE provided additional information to the Ventura County Department of Airports (VCDOA) regarding the proposed project. In response to questions raised by Commission staff regarding this issue, SCE has noted that based on this information, the VCDOA determined that the stack would have no adverse impact on air traffic from the Oxnard Airport. During its discussions with the VCDOA, SCE agreed to (1) grant the County of Ventura an aviation easement over the parcel that is consistent with the FAA's model aviation easement for airport operations; (2) file FAA form 7460, "Notice of Proposed Construction" for the peaker plant and any associated construction equipment such as cranes; and (3) mount an obstruction light consistent with FAA Advisory Circular 150/5345-433 on the top of the exhaust stack.

Permit Jurisdiction: The proposed project would be located within the Coastal Zone in the City of Oxnard and is subject to the City's certified Local Coastal Plan (LCP). The proposed project is a "major energy facility" as defined in the Commission's regulations⁶, and is therefore subject to appeal to the Coastal Commission, pursuant to Coastal Act Section 30603(a)(5).⁷

Standard of Review: As a "de novo" application and pursuant to Section 30604(b) of the Coastal Act, the standard of review for the proposed development is, in part, the policies, standards, and provisions of the City of Oxnard Local Coastal Program (LCP). In addition, pursuant to Section 30604(c) of the Coastal Act, all proposed development located between the first public road and the sea, including those areas where a certified LCP has been prepared, such as the project site, must also be reviewed for consistency with the Chapter 3 policies of the Coastal Act regarding public access and public recreation.

Appeal Issues Found to Raise a Substantial Issue: In its appeal, SCE contended that the City's denial of its CDP application was based on an erroneous interpretation of its LCP. SCE specifically contended that the City erred in determining that the City's Coastal Zoning Ordinance allows only "coastal-dependent" energy facilities to be located at the proposed project site. SCE argued that the proposed project could be permitted under the zoning designation's allowable conditional use as an "electrical power generating plant and accessory uses normally associated with said power generating facility." The question of whether or not the zoning designation of the proposed project site requires facilities developed on that site to be "coastal dependent" was found to raise a substantial issue by the Commission.

City of Oxnard Local Coastal Program Structure: The coastal development policies and standards that apply to the subject project site are found in the two documents that make up the City's LCP, namely the Coastal Land Use Plan and Coastal Zoning Ordinance. The Commission certified with suggested modifications the City of Oxnard's Coastal Land Use Plan (LUP) in July 1981. In May 1982, the City accepted modifications and the Land Use Plan was effectively certified.

The City's implementation program (Coastal Zoning Ordinance) was approved with Suggested Modifications in January 1985. In March 1985, the City accepted the suggested modifications, the Coastal Zoning Ordinance was effectively certified, and the City assumed permit authority over that portion of its Coastal Zone landward of the mean high tide line.

As described above, the coastal zoning map (Exhibit 7) shows one zone designation for all

⁶ Coastal Act Section 30107 defines "energy facility" as "any public or private processing, producing, generating, storing, transmitting, or recovering facility for electricity, natural gas, petroleum, coal, or other source of energy. 14 Cal. Admin. Code Section 13012(a) defines, in relevant part, "major energy facilities" as those "that cost more than one hundred thousand dollars (\$100,000)..." Edison states that the project would cost approximately \$50 million to build.

⁷ Coastal Act Section 30603(a) states, in relevant part: "After certification of its local coastal program, an action taken by a local government on a coastal development permit application may be appealed to the commission for only the following types of developments: ... (5) Any development which constitutes a major public works project or a major energy facility."

areas in which development associated with the proposed project would occur. The designation is “Coastal Energy Facilities” Sub-Zone (EC). As detailed further in the section below titled “Zoning Designation,” this zoning allows only energy related uses on the property.

Expansion of Existing Power Plants: In 1978, 1984, and 1985, pursuant to Section 30413(b) of the Coastal Act, the Coastal Commission adopted, revised and re-adopted a report titled “Designation of Coastal Zone Areas Where Construction of an Electric Power Plant Would Prevent Achievement of the Objectives of the California Coastal Act of 1976.” That report identified sensitive resource areas along the California coast and designated them as areas *not* suitable for power plant siting. All designated protected areas (which include state and federal parks, sensitive plant and wildlife habitat areas, and special agricultural lands that were known to exist at the time) are displayed on 162 maps of the coastal zone. The designations do not preclude “reasonable expansion” of the then 19 existing coastal power plants, including the Mandalay Power Plant.

As part of a parallel process that occurred in conjunction with the CCC and San Francisco Bay Conservation and Development Commission (BCDC), the California Energy Commission (CEC) released a report in June of 1980 titled, “Opportunities to Expand Coastal Power Plants in California.” This report was also produced in response to the mandates of Coastal Act Section 30413 and is based on a study conducted by the CEC, CCC and BCDC that specifically examined opportunities for the “reasonable expansion” of existing coastal zone power plants in California. The study also considered the effects of the CCC and BCDC designation of areas not suitable for coastal power plant siting and specified the location and extent of those areas within the coastal zone that supported coastal power plants in 1980. As noted in the CEC report:

An important aspect of this study involves the concept of “reasonable” expansion opportunities. The legislative mandates of the CCC and the BCDC require that their designations to protect coastal resources not be applied to specific areas necessary for the “reasonable” expansion of existing coastal zone power plants of 50 MW or more. This broad declaration is sufficient to convey the Legislature’s intent with respect to provision of expansion opportunities on a general level, but it results in ambiguity when application is attempted at site-specific levels. A practical definition of “reasonable,” more applicable to the site-specific situations involved in the study, is required to maintain the study’s validity.

In the interests of these requirements, the staff has defined “reasonable” with respect to expansion opportunities as meaning the provision, or maintenance, of land area adequate to satisfy a specific site’s share of the state’s need for increased electrical power generating capacity over the CEC planning intervals of 12 and 20 years. The area provided should be sufficient to meet the site’s share of the demand for sites on a statewide basis within or adjacent to the existing plant boundaries, or lying within a distance which would permit a cost-effective use by the new power units of the support facilities of the existing power units, where necessary, or advisable. The determination of the effects of CCC and BCDC designations on expansion

opportunities at each site is also based on the effects of other conventional siting factors on these same opportunities, since the designations are not expected to exist in a land use planning vacuum. To the extent that the CCC and BCDC designations provide for this type of expansion opportunities, they are determined to be “reasonable.”

The CEC report built on this definition of “reasonable expansion” and included maps designating the location and extent of coastal power plants and the adjacent areas determined to be suitable for reasonable expansion of these facilities. The map provided of the Mandalay Generating Station in Oxnard (shown in Exhibit 11) clearly includes the location of the proposed peaker facility within that area designated as a “power plant area.”

B. Zoning Designation

The project site is located within an area identified in the City of Oxnard’s LCP as a Coastal Energy Facility Sub-zone. The LCP’s Coastal Zoning Ordinance Section 17-20(A), describes the Coastal Energy Facilities Sub-Zone designation as follows:

Purpose - The purpose of the [Coastal Energy Facilities] sub-zone is to provide areas that allow for siting, construction, modification and maintenance of power generating facilities and electrical substations consistent with Policies 51, 52, 54, 55 and 56 of the Oxnard coastal land use plan. Additionally, the EC sub-zone is designed to provide a framework for coordinating the requirements and responsibilities of applicable city, State and federal regulatory agencies vested with the authority for reviewing energy facility development. To assure consistency with the Oxnard coastal land use plan, the following coastal act provisions and land use plan policies shall apply:

- (1) Coastal dependent energy facilities shall be encouraged to locate or expand within existing sites and shall be permitted reasonable long-term growth, where consistent with this article. (Coastal Act, Section 30260)*
- (2) All new energy related development shall conform to the air quality regulations set forth by the Ventura County Air Pollution Control District, the air quality management plan and new source review rule 26. (Policy 29)*
- (3) Energy related development shall not be located in coastal resource areas including sensitive habitats, recreational areas and archeological sites. All development adjacent to these resource areas or agricultural areas shall be designed to mitigate any adverse impacts. (Policy 30)*
- (4) All new energy related development shall be located and designed to minimize adverse effects upon public access to the beach. (Policy 54)*
- (5) No energy related development shall be located seaward of the 100 year flood/wave run-up line as designated by the U.S. Department of Housing Insurance Program Administration and the land use map of the Oxnard coastal land use plan. (Policy 56)*
- (6) Wastewater from any energy related facilities shall be treated as necessary and put to reuse including, but not limited to the following:*
 - (a) Re-injection into the aquifer or ground water recharge system; and*

(b) Recycling for industrial, agricultural or urban use. (Policy 64)

The LCP's Coastal Zoning Ordinance Section 17-20(B) describes the types of development that can be considered for approval within the Coastal Energy Facility Sub-zone as follows:

Conditionally permitted uses - The following uses are permitted subject to the approval of a coastal development permit pursuant to the provisions of article V:

- (1) Off-street public parking facility;*
- (2) Electrical power generating plant and accessory uses normally associated with said power generating facility;*
- (3) Electrical substation; and*
- (4) Natural gas pump and extraction facilities.*

As noted in Exhibit 5, the City's denial of the proposed project was based on its determination that the proposal did not conform to the designated zoning for the parcel on which the project is to be located. Pursuant to the City of Oxnard LCP's Coastal Zoning Ordinance at Section 17-20, the parcel is designated as Coastal Energy Facility Sub-Zone. The City's rationale for denying the proposal is that the zoning designation requires any energy facility on the site to be coastal dependent.⁸ SCE, the City and the Commission agree that the proposed peaker plant is not a coastal-dependent industrial facility because it does not rely on a site "on, or adjacent to, the sea" to function. SCE contends that this zoning designation allows non-coastal dependent facilities and that the City therefore erred when it determined the proposed project would have to be coastal-dependent to be sited at this location.

For this issue, the key subsection of this provision is Section 17-20(A)(1), which states that "coastal dependent energy facilities shall be encouraged to locate or expand within existing sites and shall be permitted reasonable long-term growth, where consistent with this article." The City's interpretation of this subsection is that the proposed project could not be sited at this location because it is not a coastal dependent energy facility. This subsection, however, is the only one that refers to "coastal-dependent" facilities, and it only "encourages" such facilities to locate within "existing sites." The other subsections apply generally to "energy related developments," not exclusively to "coastal-dependent" developments. Additionally, these subsections are all subject to the overarching provision of Section 17-20(A), which states that this zoning designation allows "power generating facilities and electrical substations" and is therefore not limited to "coastal-dependent" facilities.⁹ The Commission therefore finds that the City's Coastal Energy Facilities sub-zone designation is not exclusive

⁸ Both the City's LCP at Section 17-3(12) and Section 30101 of the Coastal Act define a "coastal-dependent development or use" as "any development or use which requires a site on, or adjacent to, the sea to be able to function at all."

⁹ Further, the LCP's definition of "energy facility" does not specify that such facilities must be coastal-dependent. LCP Section 17-3(25) defines an "energy facility" as "any public or private processing, producing, generating, storing, transmitting or recovering facility for electricity, natural gas, petroleum, coal or other sources of energy."

to “coastal-dependent” energy developments and that as an “electrical power generating plant” the proposed project is a conditionally permitted use of the proposed project site.

The City continues to disagree with this interpretation of its Coastal Energy Facilities Sub-Zone zoning ordinance and has recently taken steps to further clarify its interpretation of the intent of this zoning ordinance. On February 19, 2009, the Planning Commission passed a resolution which inserted several references to coastal dependent energy facilities in the language of the Coastal Energy Facilities Sub-Zone zoning ordinance. This amendment was subsequently forwarded to the Oxnard City Council but has yet to be considered. If the proposed resolution were to be approved by the Oxnard City Council it would then be submitted to the Commission for its consideration. Specifically, the amended sections of the coastal zoning ordinance would read as follows – proposed insertions are in bold and underlined:

SEC. 17-20. EC, COASTAL ENERGY FACILITIES, SUB-ZONE

*Purpose - The purpose of the EC sub-zone is to provide areas that allow for siting, construction, modification and maintenance of **COASTAL DEPENDENT** power generating facilities and electrical substations consistent with Policies 51, 52, 54, 55 and 56 of the Oxnard coastal land use plan....*

...

(B) Conditionally permitted uses - The following uses are permitted subject to the approval of a coastal development permit pursuant to the provisions of article V:

(1) Off-street public parking facility;

*(2) **COASTAL DEPENDENT** electrical power generating plant and accessory uses normally associated with said power generating facility;*

...

In its review and consideration of this change to the Coastal Energy Facilities Sub-Zone zoning ordinance, the Planning Commission stated that “the proposed text amendment clarifies the existing meaning of an established allowed use” by removing all potential ambiguity as to the intent of this zoning designation and making it clear that only coastal dependent electrical power generating facilities would be conditionally permitted uses of the Coastal Energy Facilities Sub-Zone. Because these proposed amendments are pending consideration by both the City Council and the Commission, the Commission finds that the proposed peaker plant is still a conditionally permitted use of the Coastal Energy Facilities Sub-Zone.

C. Biological Resources and Water Quality

Local Coastal Policy 6 states, in relevant part: As a part of the Phase III Implementation portion of the LCP process, a resource protection ordinance was created, defining the only uses permitted in areas designated on the land use map with the Resource Protection Zone. The ordinance incorporated the following policies which the City will implement to the extent of its legal and financial ability:

- a. *All nonauthorized motor vehicles shall be banned from sensitive areas.*
- b. *Scientific, educational and light recreational uses shall be conditionally permitted uses in all sensitive resource areas. Development shall be designed and sited to minimize impacts to the area. Permitted uses shall not be allowed to significantly disrupt habitat values.*
- c. *In sand dune areas, foot traffic shall be minimized, and allowed only on established paths or boardwalks. Disturbance or destruction of any dune vegetation shall be prohibited unless no feasible alternative exists and then only when revegetation with native California plants is a condition of approval.*
- d. *New development adjacent to wetlands or resource protection areas shall be sited and designed to mitigate any adverse impacts to the wetlands or resource.*

A buffer of 100 feet in width shall be provided adjacent to all resource protection areas. The buffer may be reduced to a minimum of 50 feet only if the applicant can demonstrate the large buffer is unnecessary to protect the resources of the habitat area. All proposed development shall demonstrate that the functional capacity of the resource protection area is maintained. The standards to determine the appropriate width of the buffer area are:

- 1) biological significance of the area*
- 2) sensitivity of the species to disruption*
- 3) susceptibility to erosion*
- 4) use of natural and topographical features to locate development*
- 5) parcel configuration and location of existing development*
- 6) type and scale of development proposed*
- 7) use of existing cultural features to locate buffer zones*

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

- e. *When a development is proposed within or near an environmentally sensitive habitat area, applicable topographic, vegetative and soils information shall be provided. The information shall include physical and biological features existing in the habitat areas.*
- f. *...*

Local Coastal Policy 52 states, in relevant part: *Industrial and energy-related development shall not be located in coastal resource areas, including sensitive habitats,*

recreational areas, and archaeological sites. All development adjacent to these resource areas or agricultural areas shall be designed to mitigate any adverse impacts...

The LCP contains several policies that provide for the protection of biological resources and sensitive habitat areas and that establish buffer distances around wetlands and other resource protection areas. The LCP also includes policies that provide for the maintenance and restoration of the quality of coastal waters. Applicable LCP policies include Local Coastal Policy 6 which requires development adjacent to wetlands or resource protection areas to include a 50-100 foot buffer between any development and the wetlands or resource protection areas; Local Coastal Policy 10 which requires runoff into coastal waters to be minimized and riparian vegetation to be protected; Local Coastal Policy 52 which limits development within sensitive habitats and requires development adjacent to resource protection areas to mitigate any adverse impacts to these resource areas; and Local Coastal Policy 57 which establishes a variety of routing and design considerations for the placement of pipelines within habitat and coastal resource areas. The full text of these policies is included in Appendix B.

Biological Features of Project Area: The project consists of development in two distinct areas of SCE's property. The peaker plant site is proposed to be located in an area that was once a tank farm that provided fuel oil storage for the Mandalay Generating Station. This former tank farm site was graded flat, covered by sandy fill material and vacated of structures and above ground utilities several years ago. SCE is also proposing development on its property east of Harbor Boulevard, to install a natural gas pipeline and ten new and replacement transmission poles.

Reports from biological surveys of the peaker plant site (former tank farm) conducted by Keane Biological Consulting on the mornings of September 20, 2006, and February 15, 2007, have noted that "no amphibian or fish species are expected to occur on the project site, which supports no aquatic or marine habitat" and "no reptile species were observed during the survey, although several species including the side-blotched lizard, western fence lizard, southern alligator lizard, San Diego coast horned lizard [a federal species of concern], western rattlesnake, and gopher snake are expected to occur in the project vicinity." Furthermore, the biological survey notes that "very few bird species were present on the site during the survey" with the most abundant species being the non-native European starling and additional observed species including American kestrel, black phoebe, American crow, house finch and belted kingfisher (heard offsite in the adjacent Mandalay Canal). Additional wildlife was observed indirectly, with tracks of coyote or grey fox, Botta's pocket gopher and Audubon's desert cottontail present.

Despite the apparently sparse biological resources noted during the biological surveys of the peaker site, it borders areas containing significant biological resources. The southern border of the proposed project site¹⁰ is adjacent to a segment of Mandalay State Beach that supports one of the two remaining stretches of undisturbed coastal sand dunes that exist within Ventura County. This inland portion of Mandalay State Beach has been identified in the City of

¹⁰ Please note discussion on the following page regarding the Commission staff's delineation of the project site.

Oxnard's certified LCP as an environmentally sensitive habitat area and designated as a Resource Protection sub-zone in the City of Oxnard's Coastal Zoning Ordinance. As noted in the LCP, this "26-acre area of dunes at the intersection of Fifth Street and Harbor Boulevard is an excellent example of this increasingly rare habitat" and has thus been provided with protected status due to the rarity and diversity of plant and animal life it supports.

In addition, the northern border of the proposed project site is adjacent to the Mandalay Canal, a five mile long engineered coastal waterway that is linked to Channel Islands Harbor and provides the Reliant Mandalay Generating Station with ocean water for its cooling system. Although the Mandalay Canal has not been specifically identified by the certified LCP as a wetland area,¹¹ it does contain brackish marine waters and is known to provide habitat and forage for a number of marine, estuarine and riparian species, including many that have been recognized with state and/or federal protection.

On its west side, the proposed project site is approximately 750 feet from the Pacific Ocean, a lesser distance from the dunes of Mandalay State Beach and approximately 1,000 feet from McGrath State Beach. Mandalay and McGrath State Beaches contain wetland, dune, backdune and riparian habitats. These state parks also support significant breeding populations of both the state and federally endangered California least tern and the federally threatened western snowy plover.

As described above, in addition to the proposed peaker plant site to the west of Harbor Boulevard, SCE also proposes development activities east of Harbor Boulevard. On a 37-acre area to the east of Harbor Boulevard, both to the north and south of the Mandalay Canal, which currently includes five 66 kilovolt transmission lines, two 220 kilovolt transmission lines, and an electrical transmission substation, SCE proposes to install seven new or replacement transmission poles and an 1,800 foot-long six-inch diameter natural gas line and tie-in.

Habitat on SCE's property east of Harbor Boulevard is comprised of a degraded southern dune scrub community dominated by invasive ice plant (*Carpobrotus edulis*) and native mock heather, also known as California goldenbush (*Ericameria ericoides*). Other native shrubs and herbaceous dune plant species supported on the site in lesser abundance include California buckwheat (*Eriogonum fasciculatum* ssp. *fasciculatum*), hairy false goldenaster (*Heterotheca villosa*), California encelia (*Encelia californica*), lemonade berry (*Rhus integrifolia*), California sagebrush (*Artemisia californica*), California croton (*Croton californicus*), deerweed (*Lotus salsuginosus*), lance-leaved dudleya (*Dudleya lanceolata*), prickly-pear (*Opuntia littoralis*), California cudweed aster (*Lessingia filaginifolia filaginifolia*), beach bur (*Ambrosia chamissonis*), beach sand verbena (*Abronia umbellata umbellata*), beach saltbush (*Atriplex leucophylla*), beach evening primrose (*Camissonia cheiranthifolia*). The common non-native dune plant sea rocket (*Cakile maritima*) is also present. Although the state and federally endangered Ventura marsh milkvetch (*Astragalus*

¹¹ The LCP notes that "The wetlands occurring in the city are located in the Ormond Beach area and a portion of the Santa Clara River mouth area covering approximately 131 acres." This list of wetland areas is not comprehensive, however, and, as explained below, the LCP includes a definition of "wetlands" that would include the Mandalay Canal.

pycnostachyus var. *lanosissimus*) and other listed and rare plant species have been observed on neighboring and nearby parcels, biological surveys carried out by SCE's biological consultants in February and September of 2007 and more recently with the participation of the Commission's staff ecologist in May, June, August and October of 2008 have not revealed the presence of any special status species within the proposed disturbance areas or their immediate vicinity.

As described by Commission staff ecologist Dr. Engel in Exhibit 6, this portion of the project area nevertheless contains native plant species characteristic of southern dune scrub, a habitat type that is recognized by the California Department of Fish and Game in the California Natural Diversity Database's List of California Terrestrial Natural Communities as a rare natural community of highly limited distribution due to its scarcity and declining status in southern California. The remnant dunes adjacent to the southern edge of the project area, both to the west and east of Harbor Boulevard, have been characterized in the Ventura County General Plan as remnants of the once-extensive Mandalay coastal dune complex.

Portions of this dune complex outside the project area are designated as environmentally sensitive habitat areas by the Coastal Area Plan of the Ventura County General Plan, however, the portion at the project site is not so designated. The City of Oxnard has also designated portions of the Mandalay dune complex, specifically those areas within Mandalay State Beach, as sensitive habitat. Southern dune scrub habitat is ranked by the California Department of Fish and Game as S1.1, which is described as "very threatened," and is of high priority for conservation. It is estimated that less than 2,000 total acres of this habitat remain in California. In its February 5, 2009 letter to Commission staff, provided as Exhibit 15, SCE asserts that the area East of Harbor Boulevard should not be considered to be an Environmentally Sensitive Habitat Area (ESHA) because it is not specifically identified as ESHA in the certified LCP. The City's LCP, however, incorporates the Coastal Act definition of ESHA,¹² and while it gives examples of the types of sensitive habitats that might qualify as ESHA, and it describes the location of some of those areas, there is no indication in the LCP that these described areas represent the only areas within the City's Coastal Zone that meet the criteria to be considered ESHA.¹³ The Commission must therefore examine whether the facts show that the area east of Harbor Boulevard qualifies as ESHA.

In the Commission's May 22, 2002, approval of the LCP amendment that allowed development of the Northshore at Mandalay Bay residential project (major LCP amendment number OXN-MAJ-1-00) on the adjoining parcel to the south, a parcel which supports a very similar suite of plant species and physical habitat characteristics along its northern edge, the Commission found that the dune scrub in this area was best described as a disturbed sensitive

¹² LCP Policies 6, 52, and 57 refer to ESHA and the definition section of the City of Oxnard Coastal Land Use Plan includes the following definition of ESHA: "Environmentally sensitive habitat area means any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments."

¹³ Edison claims that the recent case of *Security National Guaranty, Inc. v. California Coastal Commission*, 159 Cal.App.4th 402 (2008) ("SNG") compels the Commission to find that there is no ESHA on the project site. The subject LCP in SNG, however, explicitly stated that there was no ESHA on the project site, whereas here, there is no such provision.

resource of greatly diminished biological and ecological value. The Commission did not consider this dune scrub habitat to qualify as ESHA in part due to its “disturbed and dispersed nature” on the site, the substantial soil and groundwater contamination of the site, as well as the fact that the dominant vegetation existing onsite was invasive iceplant. Specifically, the Commission adopted revised findings for major LCP amendment number OXN-MAJ-1-00 on May 22, 2002, which find that:

The existing habitat onsite [and adjacent to the SCE parcel] would not likely sustain healthy, viable vegetation communities on a long term basis if left to the course of nature. The dominant vegetation existing onsite is iceplant, a non-native, invasive plant species, which is encroaching upon the native vegetation onsite. Iceplant has been observed within the willow vegetation, dune scrub vegetation, and the milk-vetch community. Myoporum, a non-native, invasive tree species also occurs in various areas throughout the site, particularly in association with willow vegetation. Both iceplant & myoporum are fast growing species, are characterized by aggressive growth patterns, and can grow in a variety of habitat and soil conditions. Due to the adaptive abilities of non-native plants, such species tend to outcompete native plant species for available water, nutrients, sun and habitat.

...

These plant communities are in a degraded, disturbed state and thus, have reduced biological value. However, these vegetation types are typically considered to be ESHA due to their limited extent and high biological value within an ecosystem. Notably, the southern dune scrub is normally considered a sensitive biological resource because it has been severely depleted in Southern California and because of its value in supporting several special-status plant and wildlife species. In this case, however, because of the degraded and dispersed nature of these plant communities on the site in conjunction with the highly contaminated soil and groundwater environment, the biological and ecological value of these communities is greatly diminished. Therefore they do not fully qualify as ESHA in this situation.

Additionally, in regard to the subject SCE property to the east of Harbor Boulevard, the Commission found that this parcel is also a “sensitive disturbed dune area” due to the presence of dune scrub species and predominance of some of the same sources of habitat disturbance and degradation which were found to exist within the Northshore at Mandalay Bay area.

The Commission staff’s recent visits to the SCE property supports the Commission’s previous findings that the southern dune scrub habitat present within the project area remains substantially degraded and disturbed. Chronic disturbance from public utility infrastructure installation and maintenance activities over the years has been substantial – an electricity transmission substation, gravel staging and storage area, several dirt roads, two underground natural gas pipelines and several dozen transmission poles and overhead power lines exist on the site and transmission line cleaning and maintenance activities involving the use of high clearance trucks along each of the seven transmission line corridors occur once every four weeks. Additionally, the proximity of the site to Harbor Boulevard contributes to the chronic disturbances listed above, in altering the topography, availability and movement of sand, as

well as to reduce the abundance of native species from the area and facilitate the introduction and spread of non-native vegetation such as ice plant.

To maintain the safety and proper functioning of the power lines, every four weeks SCE carries out cleaning and testing activities within the project area which require the use of high clearance service vehicles capable of driving across the vegetated and sandy dune areas to access the seven transmission line corridors and each of the dozens of existing transmission poles. Much of the project area lying along Harbor Boulevard has also been subject to frequent vegetation and soil disturbance over the years due to the accumulation of litter, automotive debris and road runoff and the occasional use of the road shoulder and adjoining habitat by parked and broken-down vehicles. Further, although comprehensive soil testing of the SCE site has not been conducted, the significant hydrocarbon and industrial materials contamination of the soil and groundwater on the adjoining Northshore at Mandalay site may have affected adjacent portions of the project area and contributed to the degradation of native species and dune habitats. Most notably however, the predominance of invasive plant species has contributed substantially to the disturbed and dispersed nature of southern dune scrub vegetation throughout the project area. The Commission's staff ecologist, Dr. Engel, found that iceplant comprises up to 40% of the ground cover in some locations and as described in the February 5, 2009 letter from SCE (attached as Exhibit 15), percent coverage of invasive vegetation combined with bare or disturbed ground accounts for between 84% and 89% of the area along transects that include the proposed project's disturbance footprints. When considered cumulatively, the many sources of habitat disturbance on the SCE property east of Harbor Boulevard have diminished the biological and ecological value of these plant communities such that the Commission believes it is appropriate to characterize the area as degraded southern dune scrub habitat but not ESHA.

Nevertheless, in spite of these impacts and potentially due to the proximity of this area to more intact southern dune scrub habitat across Harbor Boulevard at Mandalay State Beach (an area that has undergone comprehensive and successful invasive plant species removal efforts), characteristic native dune scrub species continue to colonize and exist within the proposed project area to the east of Harbor Boulevard. This is representative of many remaining dune communities which, despite experiencing degradation, continue to support an array of native plants and animals uniquely adapted to this sandy substrate transition zone between land and sea.

Proposed Habitat Disturbance: As described above, SCE has proposed to carry out construction activities on both a 4.6 acre portion of its graded brownfield site to the west of Harbor Boulevard as well as a roughly one acre portion of its partially developed parcels to the east of Harbor Boulevard. Although some limited re-colonization of the graded brownfield site by native and invasive plant species has occurred subsequent to the removal of SCE's oil storage tanks and associated equipment several years ago, this site provides very limited habitat value in its existing condition and SCE's proposed use of this site for the peaker facility, substation and metering station would not result in the disturbance or loss of sensitive or high quality habitat. Because the habitat areas to the east of Harbor Boulevard are more intact, a detailed discussion of the proposed use of these areas is included below.

Natural Gas Pipeline. To provide the peaker facility with the natural gas needed to power its turbines and generators, SCE has proposed to install, connect and bury a natural gas supply pipeline parallel to Harbor Boulevard on the inland side. These activities would require (a) excavation of an 1,800 foot-long by a minimum depth of 36 inches and a planned depth of 42 inches deep pipeline trench within a pipeline corridor located to the east of the inland lane of Harbor Boulevard; (b) temporary use of 36,000 square feet for trenching, soil sidecasting, vehicle and equipment access, storage and staging; and (c) permanent use of roughly six total square feet of habitat area for installation of a pipeline tie-in point access hatch. An aerial photograph detailing these proposed permanent and temporary use areas is provided as Exhibit 1.

As described in the biological characterization section above, although the habitat along the proposed pipeline corridor supports native dune scrub species, the area is also highly degraded, has undergone a variety of historic and chronic disturbances and is largely dominated by invasive plant species. The level of disturbance increases with proximity to Harbor Boulevard and the area within six feet of the road contains an existing pipeline right-of-way that has been previously trenched to allow the installation of an existing natural gas pipeline. Although vegetation has returned subsequent to this activity, native plant cover in this area is limited. Exhibit 15 includes the results of a biological evaluation carried out by SCE's consultant biologist that included a transect survey of the habitat directly adjacent to Harbor Boulevard:

Native plant cover along the transect comprises only approximately 10.7 percent of the total cover. The remainder is comprised of 48.4 percent non-native cover, 29.3 percent unvegetated sand dune, 7.3 percent disturbed bare areas, and 4.3 percent asphalt. Furthermore, when just the vegetated areas are considered, the level of disturbance is very high, with approximately 82 percent of all vegetation consisting of non-native species.

Additionally, in the area directly adjacent to the northbound lane of Harbor Boulevard, disturbances, debris and litter from vehicle traffic have also accumulated over the years and contributed to the degradation of the viability and quality of the habitat located here. Although most of its discussion is focused on the biological value of the larger site, a March 10, 2009 letter to Commission staff from David Magney Environmental Consulting on behalf of the Los Padres Chapter of the Sierra Club (included within the correspondence attached to this report) provides a brief description of the area adjacent to Harbor Boulevard and some of the types of disturbance present within it:

Debris is found at scattered locations of the site and some areas have been graded and filled, primarily in the western portion adjacent to Harbor Boulevard. Debris observed onsite includes concrete rubble, rusted pipes, steel cables, strands of barbed wire, and other trash. Regardless, much of the site is in relatively pristine condition.

*The previously disturbed areas either are dominated by invasive exotic plant species or represent a large component of the vegetation. The dominant invasive exotic plant on the parcel is Hottentot Fig (*Carpobrotus edulis*), a common mat-forming shrub in*

the Ice Plant family (Aizoaceae). This invasive exotic plant has also invaded surrounding habitat, often competing with native plants. Tree Tobacco (Nicotiana glauca) is another invasive exotic plant onsite, but of only limited quantities and not highly competitive.

Much of the most substantial and prevalent disturbance on the SCE parcel to the east of Harbor Boulevard is concentrated within the area in closest proximity to Harbor Boulevard. LCP Policy 57 includes conditions that must be met if pipelines cannot be routed around coastal resource areas, including habitat.

The Commission evaluated two potential pipeline re-route options that would avoid or reduce habitat disturbance: (1) installing the pipeline on the west side of Harbor Boulevard and (2) installing the pipeline directly adjacent to the east side of Harbor Boulevard and limiting construction and trenching activities to within six feet of the paved road. Moving the pipeline to the west side of Harbor Boulevard is not feasible because of spatial constraints.

Specifically, because the area adjacent to the western edge of Harbor Boulevard currently supports underground telephone and electrical lines, associated concrete vaults and a ten-inch gas pipeline, there is not sufficient space in which to install the proposed pipeline.

Additionally, in order to carry out pipeline installation along this western route, SCE would need to obtain a voluntary easement from Reliant in order to install the proposed pipeline on Reliant's property north of the Mandalay Canal. Re-locating the pipeline directly adjacent to the east side of Harbor Boulevard would, according to the Southern California Gas Company (the entity that would install this pipeline), require closure of both lanes of Harbor Boulevard for approximately seven weeks. Given the substantial traffic and access impacts such a road closure would cause, SCE concluded, and the Commission agrees, that this option is not preferable to the proposed route.

As required by LCP Policy 57, pipelines within coastal resource areas (including habitat areas) shall only be permitted if seven conditions are met (the text of LCP Policy 57 is included in Appendix B to these Revised Findings~~the Staff Report~~). The first two conditions apply specifically to pipelines designed to carry liquids and are not relevant in this case. The remaining five conditions have been met or exceeded by SCE as described in an April 3, 2009 letter to Commission staff:

- *Condition 3* [which requires a survey to be conducted along the route of any proposed new pipeline in the coastal zone to determine what, if any, coastal resources may be impacted] *has been met with the many biological surveys conducted by the Coastal Commission Staff and SCE's biologists. These surveys have confirmed that [the proposed pipeline] will not affect any sensitive resources or habitats. In any case, the biological composition of the degraded area present has been accurately characterized in detail for the record, and any disturbed ground will be restored per the Applicant's McGrath Beach Peaker Landscaping and Restoration Plan dated February 20, 2009.*
- *Condition 4 of Policy 57* [which requires the applicant to submit a re-vegetation plan that includes provisions for the restoration of any habitats disturbed by construction or operation of the proposed pipeline] *has been met with Special*

Condition 3.b of the Coastal Development Permit, which “(2) clarifies that revegetation of those areas disturbed during . . . installation of the natural gas pipeline . . . shall be accomplished with native plant species representative of the southern dune habitat community and grown from locally collected seeds.” Again, this will be accomplished via the aforementioned Applicant's McGrath Beach Peaker Landscaping and Restoration Plan.

- *Condition 5 [which requires the area crossed by the pipeline to be re-surveyed one year after completion of construction to determine the effectiveness of the restoration plan] has also been met with the McGrath Beach Peaker Landscaping and Restoration Plan, which calls for performance monitoring for years one through 5 after the completion of planting, with reporting to the Executive Director.*
- *Condition 6 [which requires the posting of a performance bond by the applicant to ensure compliance with these provisions] will be met prior to ~~construction of the gas pipeline~~ issuance of the CDP by posting of a performance bond to ensure the ~~pipeline installation work and~~ post-construction restoration is completed. SCE estimates the total cost of pipeline ~~installation and~~ restoration work to be ~~\$3 million~~ 100,000.*
- *Condition 7 [which prohibits the use of herbicides during pipeline construction] will be met by avoiding use of any herbicides during gas pipeline construction and restoration of areas disturbed during pipeline construction.*

To implement SCE's offer to post a performance bond, as specified by condition six of LCP Policy 57, the Commission is requiring **Special Condition 8** to ensure that successful restoration and revegetation of the pipeline disturbance corridor is accomplished.

As discussed below in the section on public access and recreation, proposed pipeline construction activities to the east of Harbor Boulevard may periodically result in temporary closures to the northbound lane. The use of traffic control measures to mitigate for this closure is provided through **Special Condition 2**. The measures specified in **Special Condition 2** require that a registered traffic control engineer prepare a Traffic Control Plan for City approval, follow the standards set forth by Caltrans, designate required traffic patterns or temporary road closures for construction, provide construction work road signs and provide safety measures to separate motorists from the construction workers and the work zone. SCE has committed to implement these measures.

Although SCE believes that the possible addition of an access lane for the Northshore at Mandalay Bay residential site or expansion of Harbor Boulevard with additional lanes would require the first several dozen feet of SCE's parcels to be graded and paved, thus resulting in the destruction of the habitat located within this area, the Commission has not seen evidence to suggest that such plans are currently being developed. The Northshore at Mandalay Bay residential development site has entered foreclosure and the City of Oxnard's General Plan does not include the expansion of Harbor Boulevard in this area.

Transmission Pole Installation/Replacement. In addition to the proposed natural gas pipeline, SCE has also proposed to install and replace several transmission poles on its parcel to the east of Harbor Boulevard. As shown on Exhibit 1, three new transmission poles would be installed and seven poles would be removed and replaced with larger and taller versions. Overall these activities would require the temporary use of approximately 21,548 square feet for vehicle and equipment access, storage and staging and the permanent use of roughly 87 total square feet of habitat area for installation of power pole footings and above ground foundations. Combined with the activities described above for the natural gas pipeline trenching and installation, SCE proposes to temporarily disturb between three quarters of an acre and one and a third acres and permanently occupy approximately 93 square feet.

As described by SCE in Exhibit 15,

The new transmission lines will be added to the existing Channel Islands-Mandalay pole line to avoid the need for a second set of poles... To the extent possible, new or replacement wood poles will be placed in the same location as the existing poles to be replaced to reduce ground disturbance. New pole placements will be located on bare ground or in stands of iceplant and non-native vegetation. The permanent ground disturbance impact of the new poles will be 87 square feet. The current design of the pole replacement program offers the best trade off between minimizing the number of poles, minimizing their height, minimizing the size of the pole bases, and replacing poles in the same location to minimize any incremental disturbance.

SCE's consultant biologist established a survey transect along the proposed transmission line to determine the dominant vegetation type and coverage. As described in the results of this survey, native plant cover comprised approximately 14.9 percent of the transect line while 40.9 percent was non-native cover and 44.1 percent was un-vegetated. The survey report also notes that "when just the vegetated areas are considered, the level of disturbance is very high with approximately 73 percent of all vegetation consisting of non-native species, with fig marigold accounting for all but approximately 0.5 percent of the non-native cover."

These survey results of the proposed temporary and permanent disturbance areas associated with the transmission pole installation and replacement activities are not inconsistent with the observations of the Commission staff ecologist and the vegetation community map results provided by David Magney Environmental Consulting in its March 10, 2009 letter to Commission staff (included in the correspondence packet attached to this report). The prevalence of invasive plants within this proposed transmission pole installation and replacement area may be explained by the historic and chronic disturbance that this area has undergone over the years. As noted previously, several existing transmission line corridors cross through this area, and SCE's operation and maintenance activities require the frequent use of high clearance vehicles within the sand dune habitat. It is likely that the initial installation of these transmission line corridors as well as the ongoing disturbance from operation and maintenance activities and invasive species competition has resulted in a substantial degradation of the habitat quality within this particular area. Although not as degraded and disturbed as the area adjacent to Harbor Boulevard, SCE's proposed

transmission pole installation and replacement sites nevertheless provide only marginally intact habitat and do not meet the definition of ESHA.

SCE has agreed as part of the project to implement a comprehensive invasive species eradication program to remove iceplant from throughout its 37-acre property to the east of Harbor Boulevard. SCE submitted a draft invasive species removal plan on February 20, 2009 (included as Exhibit 4), and has subsequently been working with Commission staff to refine and revise this draft plan to increase its effectiveness and potential for success. As such, **Special Condition 3(b)** specifies that the plan shall be amended to include a commitment to carry out the removal of other non-native invasive species such as myoporum, tree tobacco and castor bean from SCE's 37 acre parcel.

In addition, SCE has committed to restore the areas proposed to be temporarily used to trench and install the gas pipeline and provide vehicle and equipment access, staging and storage needed to carry out the pipeline and transmission line and pole installation activities. **Special Condition 3(b)** specifies that revegetation of those areas disturbed during placement/removal of transmission poles, installation of the natural gas pipeline and associated staging, construction and access activities shall be accomplished with native plant species representative of the southern dune scrub habitat community and grown from locally collected seed. In addition, **Special Condition 3(b)** also establishes performance criteria for restoration sites which ensures that disturbed areas are restored to replicate existing percent cover of high quality southern dune scrub vegetation in these areas and includes provisions for the maintenance of seeded and planted native plants in restoration areas. As detailed in SCE's draft plan, the *McGrath Beach Peaker Landscaping and Restoration Plan*, this restoration work would include quarterly monitoring during the first year after planting followed by twice yearly field checks for the following four years to ensure that native species become re-established and invasive plants do not reoccur in these areas. The draft plan is attached as Exhibit 4.

Further, SCE proposes to establish an open space conservation easement on its 10.7 acre parcel to the east of Harbor Boulevard and between Harbor Boulevard and the Mandalay Canal, as shown on Exhibit 1. This parcel is one of two SCE owned parcels to the east of Harbor Boulevard and is located adjacent to the Northshore development site. To implement SCE's offer, the Commission is requiring **Special Condition 10**. SCE's proposed open space easement would specify that the site is to be maintained as open space to further assure the protection of southern dune scrub habitat. While SCE would not be prohibited from carrying out routine operation, maintenance and repair activities on the existing transmission line and pipeline infrastructure that exists on site, additional development activities on this parcel would be prohibited.

The limited development activities SCE proposes for this area would not limit the potential for success of SCE's invasive plant species removal and southern dune scrub restoration plans. Furthermore, upon completion of the activities to remove the primary source of habitat degradation from the site – namely, the invasive plant species – and increase the abundance of native southern dune scrub plant species, the project site and greater SCE parcel will support an area of restored southern dune scrub adjacent to the wetlands of the Mandalay Canal area

and contiguous with the restored dune scrub, coyote brush/willow cluster, buckwheat and coastal sagebrush ESHA habitats on the Northshore at Mandalay site. This restored and continuous habitat area will result in habitats with higher ecological function and value. Therefore, the Commission believes that after implementation of SCE's restoration and enhancement measures the habitat on this parcel will qualify as ESHA.

Additional Potential Project-Related Biological Impacts: As noted above, several sensitive habitat areas are known to exist adjacent to or nearby the proposed project site, and a variety of special status species are known to occupy these habitats either seasonally or year-round. Among those special status species with habitats in the vicinity of the proposed project site, those with the highest likelihood of being negatively affected by the proposed project include the western snowy plover, California least tern, and burrowing owl as well as rare dune plant species such as Ventura marsh milk vetch, salt marsh bird's-beak, red sand-verbena, dunedelion, estuary seablite, and woolly seablite. LCP Policy 6 requires new development, such as this, that is located adjacent to wetlands or resource protection areas, to be sited and designed to mitigate any adverse impacts to the wetlands or resource. Potential adverse effects on these sensitive species and their habitats will be discussed below.

Western Snowy Plover. Western snowy plovers nest in the foredune and forage along the shoreline at Mandalay State Beach. The western snowy plover is a small shorebird that uses sandy beaches for nesting and roosting from southern Washington to Baja California. At most, approximately 2,000 snowy plovers may breed along the U.S. Pacific Coast with a similar number breeding along the Baja California coast (USFWS 2001 citing Page et al. 1995a). Research has indicated that there has been a general decline in the West Coast population of snowy plover, including a substantial decrease between 1962 and 1984 in the abundance of wintering snowy plovers in southern California (Lafferty 2000 citing Page et al. 1986). Information provided by Page et al. (1991) indicated that between 1981 and 1991, snowy plovers experienced at least an 11 percent decline in abundance. Lafferty (2000) further reports that more recently, there has been a population decline of about 30% throughout the region (in the late 1990s). Among the factors linked to the regional decline in snowy plovers includes predation, beach erosion, encroachment of exotic vegetation and disturbance from recreation (Lafferty 2000 citing Page et al. 1995).

During local review of this project, the US Fish and Wildlife Service (FWS) raised concerns about the effect of SCE's proposed landscape plan on western snowy plovers and California least terns and the sensitive nesting habitat for these species located in close proximity to the project site (approximately 1000 feet to the west and northwest). In a June 18, 2007, letter to the City of Oxnard the FWS states:

*Our concerns lie with the proposed row of trees. It is likely that this row of trees will provide habitat for American crows (*Corvus brachyrhynchos*) and ravens (*Corvus corax*) that prey on the California least tern and western snowy plover chicks and eggs located on the adjacent beaches. Specifically, we are concerned that these species are known to take up residence in areas with suitable breeding habitat and that are adjacent to food sources (e.g. California least tern colonies).*

Predation by corvids (the family of birds that includes American crows and ravens) is noted in U.S. Fish and Wildlife Service's August 2007, Recovery Plan for the Pacific Coast Population of the Western Snowy Plover (Recovery Plan), as a substantial threat to snowy plovers and is identified as a primary impediment to the recovery of this species. The Recovery Plan cites numerous examples of snowy plover nesting sites within California that have experienced nest failure rates of up to 69% as a result of corvid predation (Hickey et al. 1995). The Recovery Plan further notes that "Raven populations in coastal California have significantly increased in recent decades (Leibezet and George 2002), and as their range expands they are becoming increasingly significant as a nest predator on western snowy plovers" often counting as "the single most limiting factor on western snowy plover reproduction (Colwell et al. 2006)."

While the 2007 Recovery Plan and earlier 2001 Draft Recovery Plan for the Pacific Coast Population of the Western Snowy Plover both note that a limited amount of predation on snowy plovers from native corvid species is natural, this amount of predation can often be augmented to unnatural levels through human induced landform and land use alteration that allows predator species to exist at locally elevated abundances. The Recovery Plan notes that "Elevated predation pressures result from landscape-level alterations in coastal dune habitats which, in turn, now support increased predator populations within the immediate vicinity of nesting habitat for snowy plovers." Paramount among the "landscape-level alterations" identified in the Recovery Plan as key to an area's support of increased predator populations are "Unnatural habitat features such as landscaped vegetation (e.g., palm trees), telephone poles, fences, buildings, and landfills near snowy plover nesting areas...". The Recovery Plan concludes with a consideration of predator management as a means for controlling such factors as corvid populations and notes that

In heavily-developed areas in particular, habitat protected for sensitive species may be a "magnet" to native predators that have lost foraging habitat elsewhere. Continuing to remove predators from these areas effectively creates a "sink," such that the need for ongoing predator removal never ends and negative ecological consequences occur over large areas beyond the boundaries of snowy plover nesting areas.

There appears to be a strong positive correlation between the number of trees which provide potential roosting and nesting habitat for corvids in coastal dune areas and the population of corvids in those areas (i.e. an increase in the number of trees is met with a corresponding increase in the number of corvids) as well as a negative correlation between local corvid numbers and snowy plover abundance (i.e. as the number of corvids increases, the abundance of snowy plovers declines).

Due to the abundance of dune scrub habitat and lack of landscaping in the area (the only landscaped parcel within the area, the Mandalay Generating Station, is sparsely landscaped with predominantly large shrub species such as juniper and myoporum), implementation of a landscaping plan that includes large vegetation such as trees would significantly augment the current number of potential nesting and roosting sites for corvids and raptors in the area. As discussed in Section D – Visual Resources - of this report, implementation of a landscaping plan is important to minimize the adverse visual effects of this industrial project. The

vegetation used to screen the project, however, should not interfere with measures to protect sensitive species, such as the western snowy plover.

SCE's initially proposed landscape plan would have increased the number of large trees in the immediate project area from less than 10 currently to more than 140 – an increase of approximately 1400%. Such a substantial increase in available nesting habitat for corvids, owls and raptors – all of which are known to prey on least tern and snowy plover adults, chicks and eggs – has the potential to increase predation in the vicinity of the project site and could therefore reduce the habitat value of the existing nesting sites for California least terns and snowy plovers in the vicinity of the proposed project. To address the potential impact to sensitive species and habitats, SCE has revised its landscape plan to the currently proposed plan described and detailed in Exhibit 4. This revised landscaping plan has substituted proposed large non-native tree species with small native trees as well as native bush, shrub and groundcover species that are not known to support nesting corvids, owls or raptors. The list of species included in this landscape plan was reviewed and approved by Commission staff as well as the local U.S. Fish and Wildlife biologist who manages snowy plover and least tern conservation efforts in the area. Biologists with the California Department of Fish and Game and State Parks were also consulted. The revised landscaping plan also includes performance standards, ongoing monitoring and measures to minimize the use of water, fertilizer and herbicides. With the inclusion of the revised landscaping plan, as described above, the Commission believes the western snowy plover will be adequately protected from project-related activities, and the project will therefore ensure the protection of the resources of the two state beaches located adjacent to the peaker plant site, as required by LCP Policy 6.

Special Status Animals. The burrowing owl (*Athene cunicularia*) is listed by the California Department of Fish and Game as a Bird Species of Special Concern. Although present throughout much of the western United States and Florida, the burrowing owl has been listed as a species of special concern in the majority of states that comprise its range. In addition, this species has been listed as endangered in Canada and threatened in Mexico. The primary threats to the conservation of this species in California are associated with habitat destruction from land development and predation from feral cats and domestic pets. As noted by SCE's biological consultant:

*This species is found in open areas of usually sparse vegetation. It occupies rodent burrows, most often of California ground squirrels (*Spermophilus beechyi*). There are historic records of the owl occurring in the project area, however only marginal habitat is present for this species in the project area. SCE has conducted surveys for the burrowing owl around the Mandalay Substation just to the northeast of the peaker unit location and near the transmission line portion of the project, but the results of these surveys were negative for the owl. No burrowing owls or burrows were observed during the [biological] survey for this project; however, one burrowing owl was observed on the project site during soil testing for the project on February 8, 2007. It is likely the owl was a winter visitor, since no burrows were located on the project site during the survey. However, a focused survey for burrowing owls will occur prior to project construction.*

SCE's biological consultant has concluded that the project area provides only marginal habitat for burrowing owls and no burrows that could feasibly support burrowing owls were observed during the various biological surveys of the project area that SCE has conducted.

Nevertheless, due to the strong site fidelity of burrowing owls and the fact that an owl was observed at the project site during the breeding season, to ensure that this special status species and its habitat is not adversely affected by the proposed project, the Commission is requiring in **Special Condition 3(c)** that SCE conduct a pre-construction survey for burrowing owls throughout all portions of the project area no more than 30 days prior to the initiation of ground disturbance activities.

This condition also requires that if any burrowing owls are observed during this survey, or if burrows are found to be actively used within the project area, prior to the initiation of construction or ground disturbing activities, SCE shall submit an Impact Avoidance Plan for the Executive Director's review and approval. This plan shall include the implementation of specific measures to minimize disturbance including the avoidance of project activity within a minimum of 160 feet of occupied burrows during the non-breeding season of September 1 through January 31 or within a minimum 250 feet during the breeding season of February 1 through August 31. In addition, the plan shall include a measure for SCE to maintain a 300 foot foraging radius around each occupied burrow. The 300 foot foraging radius should contain sufficient intact habitat areas to allow burrowing owls to continue feeding and hunting. If destruction of occupied burrows and/or disturbance within these 160-250 foot buffer distances is unavoidable, mitigation guidelines described within the California Burrowing Owl Consortium's April 1993, "Burrowing Owl Survey Protocol and Mitigation Guidelines" (detailed in Exhibit 9). Mitigation measures described in the California Burrowing Owl Consortium document include protocols for the establishment of alternate burrows as well as both on-site and offsite mitigation strategies.

Adjacent Sensitive Habitat Areas. LCP Policy 6 requires that "New development adjacent to wetlands or resource protection areas shall be sited and designed to mitigate any adverse impacts to the wetlands or resource." LCP Policy 6 also requires that "A buffer of 100 feet in width shall be provided adjacent to all resource protection areas" and "The buffer may be reduced to a minimum of 50 feet only if the applicant can demonstrate the large buffer is unnecessary to protect the resources of the habitat area."

The project site borders Mandalay State Beach, a portion of which is designated in the LCP as a Resource Protection Area. Although the peaker plant would be sited 700 feet from the border of Mandalay State Beach, the placement of landscaping plants and berms as well as the construction of the main access and entry road for the proposed facility would be located closer to Mandalay State Beach. As required by **Special Condition 3(d)**, these project related activities will occur at least 50 feet from the southern border of the project site and approximately 72 feet from the designated Mandalay State Beach resource protection area described in the LCP. Although a 100 foot buffer area is preferred, this 50 foot separation distance satisfies the minimum distance required by LCP Policy 6. LCP Policy 6 states that the preferred 100 foot buffer width "may be reduced to a minimum of 50 feet only if the applicant can demonstrate the large buffer is unnecessary to protect the resources of the habitat area." In support of the establishment of this minimum buffer area, SCE states:

SCE believes that a 50-foot buffer is appropriate to protect resources within the state parcel south of our site. The southern boundary of the SCE development is currently designed closer than this requirement allows, with landscaping, driveway and access road encroaching into the 50-100' buffer. I've attached a real estate parcel map that shows that the State resource protection area starts 22 feet south of SCE's fence line, to the south of the road parcel. Since this is a permanent road, the state partitioned their land to separate the right of way from the rest of the parcel. The map also [sic] clearly shows the oil drilling equipment that's half way down the road and all the dirt tracks that the oil trucks use to drive across the parcel. Because of the existing use of the land immediately south of the SCE parcel for oil drilling and access for large truck traffic, SCE believes that the 50' buffer should be adequate to protect resources on the state owned land south of SCE's land.

SCE describes the fact that existing development with the potential to disturb adjacent resources is already located much closer to these resources than any of SCE's proposed new development. The backdune portion of Mandalay State Beach designated as a Resource Protection area and adjacent to the project site is not known to support nesting western snowy plovers. Although snowy plovers do nest within the vicinity of the project site, as discussed previously, all known nesting sites are to the west and northwest of the project area and well over 1,000 feet distant from any proposed development. Nevertheless, the dune scrub habitat of Mandalay State Beach located adjacent to the project site is known to support a variety of other sensitive plant and animal species and is specifically designated as ESHA by the LCP. However, there is an existing 22 foot wide paved access road that currently separates the proposed peaker site from this ESHA area, and this paved access road and the frequent ingress and egress of large trucks used to service the oil production facility to the west of the peaker site serve as a physical barrier and impediment to the biological connectivity of the peaker site and the state beach. SCE has committed to locate all proposed development and construction activities an additional 50 feet to the north of this road. The Commission finds that the establishment of what is functionally a 72 foot buffer (22 feet to an existing road and 50 feet beyond the road) in this area, where the existing road already constitutes an interruption of the "buffer" area, provides an appropriate level of protection for the sensitive resources located within the inland portion of Mandalay State Beach.

SCE has committed to apply this 50 foot wide buffer to the entire southern boundary of the project site that is adjacent to the inland parcel of Mandalay State Beach that has been identified in the LCP as a resource protection area. To further protect this resource protection area, several activities would be allowed within the proposed buffer area. These activities would be limited to the removal of existing invasive species, including iceplant and myoporum, which currently exist within this buffer area and the removal of an existing chain link fence to facilitate invasive species removal. The Commission therefore finds that with the establishment of the 50 foot buffer along the southern border of SCE's proposed project site, as committed to by SCE and further required under **Special Condition 3(d)**, the proposed project activities in this area conform to the provisions and buffer distance requirements of LCP Policy 6.

The provisions of LCP Policy 6 also require the establishment of a 50 to 100 foot wide buffer area between new development and wetland areas. Although not specifically identified by the LCP as a wetland area, the Mandalay Canal meets the LCP definition of wetland contained within LCP Policy 9. Specifically, LCP Policy 9 defines a wetland as “Land where the water table is at, near, or above the land surface long enough to promote the formation of hydric soils or to support the growth of hydrophytes.” The Mandalay Canal in this area contains coastal waters during all times of the year and supports a variety of hydrophytic plant species. As such, LCP Policy 6 requires that a 100 foot buffer is maintained between proposed development and this wetland area, unless the applicant can demonstrate that a smaller buffer will still be adequately protect the wetland resources.

As demonstrated in Exhibit 1, the northern border of the proposed peaker location is located approximately 100 feet from the Mandalay Canal. Additionally, in an effort to ensure that the use of this location does not adversely affect the resources of the Mandalay Canal, SCE has proposed to install a raised bioswale/biofilter along the northern and northwestern borders of the proposed peaker plant site. According to SCE’s proposed landscaping plan, this bioswale would be vegetated with native salt grass (*Distichlis spicata*) as well as other native grass and groundcover species. The Commission therefore finds that considering the distance of the SCE property line from the Mandalay Canal and the inclusion of a vegetated bioswale along the northern edge of the proposed project site, project activities proposed for this area are not likely to adversely affect the wetland habitat and open coastal waters provided by the Mandalay Canal.

Because SCE’s property to the east of Harbor Boulevard is within 100 feet of the Mandalay Canal, to further protect the resources of this canal to the east of Harbor Boulevard, **Special Condition 3(d)** requires that all project development (with the exception of dewatering wastewater discharge and installation of the proposed natural gas pipeline on Harbor Boulevard over Mandalay Canal) remain more than 50 feet from the Mandalay Canal. The Commission believes the minimum buffer distance is sufficient in this area due to the existing buffer provided by the access road between proposed work and the Mandalay Canal (as described above). An exception to **Special Condition 3(d)** is specified for the discharge of dewatering wastewater because this discharge would occur through an existing storm drain and is anticipated to be drawn into the Reliant Mandalay Generating Station’s cooling system with minimal potential to adversely impact the resources of the Mandalay Canal. An additional exemption is provided for the natural gas pipeline installation on Harbor Boulevard over the Mandalay Canal because this installation activity would make use of an existing bridge and roadway to remain outside and above the Mandalay Canal and therefore has very low potential to result in adverse impacts to the canal.

Although the proposed replacement of transmission poles shown in Exhibit 1 appears to be within 50 feet of the Mandalay Canal to the east of Harbor Boulevard, SCE has committed to maximize the transmission line span distance over the canal to ensure that new and replacement poles are installed at least 50 feet from the edge of the Mandalay Canal and all associated construction and removal activities occur outside of the buffer area required under **Special Condition 3(d)**. While a larger buffer distance in this area may provide a greater level of protection for the wetland vegetation and resources of the canal, SCE notes that an

additional increase in the transmission line span across the Mandalay Canal to accommodate a larger buffer area would necessitate the installation of taller and larger engineered steel transmission poles on either side of the canal in this location. These poles would require a larger disturbance footprint during installation and would be 5 to 10 feet taller than the wood transmission poles that are currently proposed. Considering this larger disturbance footprint as well as the current buffer provided by the existence of a dirt access and maintenance road between the proposed southern pole location and the canal (shown on page 1 of Exhibit 1), the Commission finds that the establishment of a 50 foot buffer, as specified in **Special Condition 3(d)** is sufficient to minimize the potential adverse impacts to the wetland resources of the Mandalay Canal that may result from the proposed installation of transmission poles. With the inclusion of this condition, the Commission finds that the proposed project is in conformance with the provisions and buffer distance requirements of LCP Policy 6.

Dewatering and Wetlands. During public review of the staff report, concerns were raised regarding the potential for the proposed site preparation dewatering activities to adversely affect wetlands at the southern end of McGrath State Beach and/or the central and southern portion of Mandalay State Beach. The proposed dewatering activities are designed to lower the water table at the project site for approximately seven weeks while the peaker plant foundation is constructed and installed. Concerns raised are that if the water table beneath nearby wetlands at Mandalay State Beach, McGrath Lake and/or the habitat restoration area adjacent to the north side of the Reliant Mandalay Generating Station property is also lowered, wetland adapted species that occur in these areas due to the high water table may be adversely affected. Theoretically, there are two ways in which proposed dewatering activities could affect the water table at the McGrath State Beach and/or Mandalay State Beach: (1) by decreasing the amount of groundwater flowing into the areas and/or (2) increasing the amount of groundwater flowing away from the areas.

McGrath State Beach Wetlands: Based on the results of a comprehensive hydrological, hydrogeological and watershed study of the McGrath Lake wetlands prepared for the U.S. Army Corps of Engineers in 2005, titled *McGrath Lake Watershed Management Study*, it would be unlikely for the proposed project to adversely affect wetland areas north of the Mandalay Canal by reducing the amount of groundwater flowing into these areas. As described in the *McGrath Lake Watershed Management Study*, the Mandalay Canal serves as the southern border of the watershed which includes McGrath Lake and all adjacent wetland areas. Groundwater from the project site and all areas south of the canal does not contribute to the replenishment of ground or surface water at the southern end of McGrath State Beach. Further, according to the McGrath Lake study, the Mandalay Canal acts as a groundwater “sink” for McGrath State Beach and the flow of groundwater beneath the state beach is towards the canal. In this way, the canal effectively severs the hydraulic connection between the project site and McGrath State Beach. This idea is demonstrated in the study which notes that:

Patrick Hamilton, a consultant for the Reliant Energy facility located to the south of McGrath Lake, provided groundwater monitoring data from wells at the facility. Patrick confirmed that the monitoring well data showed very little influence from tidal

variations of the nearby ocean, and that the general trend of water levels was toward the Edison Canal east of the facility that acts as a groundwater sink.

And:

Groundwater levels in [monitoring well number three] at the southern end of the lake appear to respond relatively quickly to lake level changes, indicating there is a strong hydraulic connection between the lake and groundwater in the vicinity of the monitoring well. Additionally, lake levels are higher than groundwater levels, indicating that the gradient is away from the lake and toward the SCE canal located to the southeast that serves as a groundwater “sink”.

Therefore, because the groundwater beneath the proposed project site is not a source of water for the wetland areas at the southern end of McGrath State Beach, it would be unlikely for the proposed dewatering activities to have an effect on the availability of groundwater north of the Mandalay Canal or decrease the amount of groundwater flowing into the wetlands area.

It would also be unlikely for the proposed dewatering activities to lower the water table at McGrath State Beach by increasing the flow of groundwater away from the wetlands area. The Mandalay Canal serves as a “sink” for the groundwater at the southern end of the state beach. Lowering the water level at the canal has the potential to increase the steepness of the water table gradient between the southern end of McGrath State Beach and the canal, thus increasing the flow rate away for the state beach. However, the proposed dewatering wells on the project site would discharge their contents into the Mandalay Canal and if the dewatering project were to have any influence on the water level in the canal it would be more likely to raise the water level than to lower it. The constant discharge of groundwater into the canal during dewatering would likely more than offset whatever water loss would occur in the canal as a result of the drawdown of groundwater on the adjacent project site. In addition, any potential drawdown in the level of water in the canal as a result of the proposed project would also likely be offset by an increase in the flow of water into the canal from the Channel Islands Harbor. Due to the Mandalay Canal’s connection to Channel Islands Harbor and the ocean, the water level in the canal remains equalized close to sea level. If the water level in one area were to decrease, additional water would flow into the canal to replace this lost water. Therefore, while the proposed dewatering wells would lower the water table within a localized area of the project site, due to the presence of the canal and the increased discharge of water into it, the effects of proposed dewatering activities would not be expected to extend to the north of the Mandalay Canal.

Specifically, SCE proposes to install eleven subsurface wells to a depth of roughly 35 feet at equally spaced locations surrounding the outside edge of the 325 foot by 225 foot peaker plant’s foundation site. These wells would drawdown the groundwater table by eight feet, from the current elevation of approximately six feet below the soil surface to a new elevation of 14 feet below the soil surface. The eight foot drawdown would allow SCE to excavate the foundation footprint to a depth of 11 feet below the current soil surface without encountering groundwater. When the site preparation is completed and the excavation is backfilled with native soil and engineered fill, dewatering activities would cease and the groundwater would

return to its current level. Based on the de-watering plan submitted by SCE, the radius of influence of the dewatering wells would be approximately 555 feet, measured from the edge of the peaker plant foundation site. The nearest wetlands at McGrath State Beach are approximately 1,200 feet north of this site and McGrath Lake is an additional 1,000 feet north. As such, these wetland areas are well outside the radius of influence of the dewatering wells.

Mandalay State Beach Wetlands: The backdune portion of Mandalay State Beach located north of Fifth Street and between Harbor Boulevard and the coastal dunes along the seashore contains several areas that support wetland vegetation. These wetland areas predominantly exist in two locations: at the southern end of the state beach parcel adjacent to Fifth Street; and near the center of the parcel. The northernmost wetland area extends to within approximately 100 - 300 feet of the border of the SCE parcel and to within approximately 800 – 1,000 feet of the area proposed to be dewatered and excavated to facilitate installation of the peaker plant foundation. The dewatering plan and design specifications provided by SCE suggest that proposed dewatering activities would not lower the groundwater level beyond about 555 feet of the edge of the proposed foundation site (a distance that corresponds roughly with the southern edge of SCE's southern property line). This would suggest that the wetlands of Mandalay State Beach, located between 800 and 1,000 feet south of the foundation site, would not be adversely affected by the proposed dewatering activities because the groundwater level at these wetlands would not be lowered.

However, unlike the McGrath Lake area, detailed information regarding the watershed which supports these wetlands and the source, flow direction and sink for groundwater beneath Mandalay State Beach was not obtained by Commission staff. In addition, the wetlands on Mandalay State Beach are located in closer proximity to the proposed dewatering wells than the wetlands on McGrath State Beach. Although it appears unlikely that the wetlands on either state beach would be affected by the proposed dewatering activities, insufficient information exists to support a definitive conclusion. Given this uncertainty and the closer proximity of the Mandalay State Beach wetlands, the Commission is requiring in **Special Condition 3(e)** that SCE install two groundwater monitoring wells at the southern edge of its property line (but not within the 50-foot buffer area required by **Special Condition 3(d)**). These monitoring wells would ensure the wetland resources of Mandalay State Beach are not adversely affected by the proposed dewatering activities because if the groundwater level monitoring wells demonstrate a decrease in the groundwater level of more than 24-inches, **Special Condition 3(e)** also requires SCE to immediately cease dewatering activities and, within 60 days, submit a permit amendment to revise the dewatering and/or foundation installation plan to reduce the area of groundwater drawdown so that the groundwater level at the monitoring wells does not fall more than 24-inches.

With the inclusion of **Special Condition 3(e)** and for the reasons described above as well as the relatively small volume of water to be removed during proposed dewatering activities, the temporary nature of these activities and the large distance (800 - 2,000 feet) that separates the project site and the wetland areas on McGrath State Beach and Mandalay State Beach, the Commission finds the proposed project in conformance with the wetland protection policies of the Oxnard LCP.

Additional Mitigation Measures. In addition to those measures described above and required through **Special Condition 3**, SCE has committed to implement several additional measures identified in the uncertified Mitigated Negative Declaration to further minimize the project's potential to adversely affect the biological resources and water quality of the project area. These measures are included in Exhibit 8 as biological resource and hazardous materials mitigation measures. SCE will hire a qualified biologist to conduct a pre-construction survey of each construction area to identify occupied nests of native birds prior to grubbing or grading activity. This measure requires a minimum buffer distance of 100 feet to be established between occupied nests and the limits of construction and would prohibit construction activities within this buffer area until a subsequent biological survey revealed the nest(s) to no longer be occupied. If work within the established buffer cannot be avoided, SCE shall consult with CDFG and FWS to determine if there are appropriate measures that may be taken to continue work in these areas. To further protect water quality and sensitive biological resource areas through avoidance of potential hazardous materials spills, the hazardous materials mitigation measure described in Exhibit 8 requires hazardous materials stored on-site to be limited to small quantities of paint, coatings, and adhesive materials, and emergency refueling containers. These materials would be stored in their original containers inside a flammable materials cabinet and shall be transported to the construction site on an as-needed basis by equipment service trucks.

Conclusion: With implementation of the Special Conditions, the proposed project is not expected to cause significant adverse impacts to sensitive biological resources. The Commission therefore finds that the project, as conditioned, is consistent with the applicable provisions of LCP Policies 6, 9, 10, 52 and 57.

D. Visual Resources

Local Coastal Policy 37 states: All new development in the coastal zone shall be designed to minimize impacts on the visual resources of the area. Particular care should be taken in areas of special quality, such as those identified in the LCP.

The proposed project would be primarily developed within a brownfield site that has previously supported energy related infrastructure and is in close proximity to the existing Mandalay Generating Station, an oil extraction and production facility, McGrath and Mandalay State Beaches and Harbor Boulevard. As described below, while design changes to reduce the visibility of the peaker plant, its associated transmission poles and exhaust stack are not feasible, SCE's proposal to construct a vegetated berm on the eastern border of the project site would minimize the project's impacts on the visual resources of the project area, as required by LCP Policy 37. In addition, **Special Condition 10(c)** would further mitigate the project's impacts on the visual resources of the project area by enhancing the visual character and providing for the establishment of access and recreation improvements in the land to the east of the peaker plant site.

Visual Character of Project Area: As demonstrated by the photographs in Exhibit 3, many of the existing views of and around the project site are industrial and energy related in nature. The project site is bordered on three sides by energy, industrial or transportation infrastructure (specifically, an oil extraction and processing facility, a power plant cooling water supply

canal and Harbor Boulevard) and on the fourth side by Mandalay State Beach. The portion of the state beach that is immediately adjacent to the project site has been designated as a resource protection area (as shown in Exhibit 7) and it therefore does not currently provide public access or recreational opportunities for park visitors. Access to this area from Harbor Boulevard and Fifth Street is currently restricted with chain link fences and the California Department of Parks and Recreation (State Parks) plans to install additional fencing on the western border of the resource protection area as well.

State Parks also plans to eventually develop both lateral and vertical access trails in the adjacent western portion of the state beach, inside the currently undeveloped portion of the property that has been designated as a coastal recreation area. One proposed trail would provide access along the inland side of the coastal dunes from the Oxnard Shores residential area and would connect with up to three additional proposed trails which would provide access across the dunes from the inland to the shoreline portion of the state beach. State Parks is currently developing environmental impact analyses for both the fencing and access trail projects and final permits and approvals from relevant agencies, including a coastal development permit, have yet to be obtained. Nevertheless, increased public access and use of the inland coastal recreation portion of Mandalay State Beach is likely to occur in the future and although the specific alignment of the proposed trails has yet to be determined, the proposed peaker plant would likely be visible to the right of the existing Mandalay Generating Station in views to the north from all four state beach access trails.

While the Open Space/Conservation Element of the City of Oxnard's 2020 General Plan designates several miles of Harbor Boulevard, including the stretch adjacent to the project site, as a scenic highway and lists the "lower dunes in the Mandalay Beach State Park north of Fifth Street" as one of the City's visual resources, no significant visual or aesthetic resources have been identified or are apparent on the proposed project site itself and currently, the most dominant aspects of the proposed site are the adjacent dunes of the state beach, the nearby Mandalay Generating Station and the approximately eight foot high screened chain-link and barbed-wire fence that surrounds the vacant and graded site.

The LCP notes that the project area lacks significant or notable visual resources and states that "the ocean is generally not visible from Harbor Boulevard, limiting the visual resources north of Fifth Street." (The project site is located approximately $\frac{3}{4}$ of a mile north of Fifth Street). The LCP does, however, reference the tall sand dunes south of Fifth Street and south of Wooley Road, the lower dunes in the Mandalay Beach County Park (now referred to as Mandalay State Beach) north of Fifth Street, and the wetlands in the Ormond Beach area. Of these three designated visual resource areas, "the lower dunes" of Mandalay State Beach are the closest to the project site. These dunes extend from south of the project site to the intersection of Harbor Boulevard and Fifth Street. The proposed project would not alter views of and to this dune area from Harbor Boulevard, the proposed site of the Northshore at Mandalay residential area or Mandalay State Beach.

Directly across Harbor Boulevard from Mandalay State Beach and its dune area, an LCP amendment which provides for the development of a 292 home residential community was approved by the Commission in 2002 and has been undergoing soil and groundwater

remediation and site preparation prior to construction. The topography of the site has been somewhat altered and potential future home sites along Harbor Boulevard would be approximately eight feet above the level of the road, providing an elevated view of the proposed project site. Homes on this site have yet to be constructed, however, and according to a December 13, 2008 article in the Pacific Coast Business Times, the property was recently subject to foreclosure and the status of future development remains uncertain.

SCE has provided visual simulations of the peaker plant from the street level adjacent to the nearest potential residences at this site. These simulations are provided in Exhibit 3. While views shown in these simulations are from the street level and therefore do not accurately represent the increased visibility of the proposed peaker facility from the elevated height of potential residential development in this area, the simulations nevertheless demonstrate the ability of proposed landscaping to partially screen the site. These simulations also show that while views towards the proposed project area would include the proposed project as a separate facility to the right of the existing energy structures, the peaker facility would be viewed within the context of the existing Mandalay Generating Station, its associated facilities and infrastructure and the adjacent oil production plant. Overall, these simulations demonstrate that the proposed project would be screened to the extent feasible and would add another industrial feature to this already visually impacted area.

Visual Impact Minimization and Mitigation Measures: Specifically, SCE's efforts to screen the proposed facility and reduce its visual profile include both the implementation of a landscaping plan as well as the construction of an earthen berm to augment landscaping efforts and increase the height of proposed vegetation. Initially, SCE's proposed landscaping plan included construction of a 1,000 foot long, six foot tall earthen berm within the project site along the west side of Harbor Boulevard and the placement of various indigenous and non-native plant species around and atop this berm to provide visual screening. Proposed plant species included native tree and shrub species such as Monterey cypress, Torrey pine, California wax myrtle, California bay, lemonade berry, toyon, qualibush and California brittlebush as well as extensive use of two faster growing non-native tree species, the New Zealand Christmas Tree and Australian red flowering gum. As described in the Biological Resources section above, due to the potential for the placement of substantial numbers of large trees on the project site to significantly degrade the viability of nearby sensitive habitat areas, including snowy plover and least tern nesting sites, SCE has revised its proposed landscape plan to eliminate the use of large native and non-native tree species. As demonstrated in the revised landscape plan included as Exhibit 4, all large tree species have been replaced by small native tree, bush, shrub, grass and groundcover species that will provide a maximum level of visual screening while remaining unsuitable as nesting habitat for corvid, owl and raptor species that may prey on local tern and plover populations. The use of trees would be limited to those that have been approved by the Commission ecologist as well as staff of both the California Department of Parks and Recreation and the U.S. Fish and Wildlife Service as unlikely to attract corvid, owl and raptor species due to their limited height (typically less than 20 feet), dense foliage, and lack of large branches suitable for nesting. While these species would not be likely to attain heights in excess of approximately 20 feet, the density of their branches and their use on the six foot high earthen berm in conjunction with other large bushes would still enable them to provide a high degree of visual

screening of the peaker plant from both Harbor Boulevard and the potential Northshore residential development site.

Considering the biological constraints outlined above and to ensure the successful implementation of the maximum amount of vegetative screening, as specified in **Special Condition 3(b)**, SCE's revised landscaping plan would be subject to approval by the Executive Director and would be required to include periodic monitoring, success criteria, contingency plans and maintenance standards. Additionally, if after five years, the Executive Director determines that SCE has not fully met the success criteria of the approved plan, SCE would be required to submit to the Commission in the form of a permit amendment a revised landscaping plan to address those elements of the original approved plan that did not satisfy the success criteria.

Despite SCE's visual screening commitments, some elements of the project – primarily the 80-foot tall exhaust stack and its associated plume, the three new power poles and seven larger replacement transmission poles – would be visible from Harbor Boulevard, the proposed Northshore residential community, and both the resource protection and publicly accessible portions of Mandalay State Beach, the only nearby “area of special [visual] quality” specified in the LCP and included by reference in LCP policy 37. Some elements of the peaker facility would also be visible from areas farther away, including the Oxnard Shores neighborhood and potentially, coastal Ventura. However, constructing the peaker plant at this site will add another industrial facility to an area that already supports other substantial industrial development, thus the peaker plant would present less of a visual intrusion at this location than it would in an area in which industrial uses were not consolidated. The Mandalay Generating Station, which is sited directly landward of the northern extent of Mandalay State Beach, dominates the visual profile of this stretch of coastline. The peaker plant, however, would be sited further inland and south of the existing power plant. The uncertified Mitigated Negative Declaration (MND) produced by the City of Oxnard for this project states that:

Views of the proposed project site from the beach and shoreline would be essentially blocked by the intervening topography and the existing oil processing structures. Recreational users at the Mandalay State Beach Park located approximately 1,000 feet southwest of the proposed project site would be able to view the tallest project structure (i.e. the 80-foot exhaust stack). However, the intervening land between the Mandalay State Beach Park and the proposed project site is dotted with existing oil processing structures, which are approximately 70 feet high, and the stack at the Mandalay Power Generating facility which is 203 feet high. The existing oil derricks would be the main visual element of the view looking north from the Park and would overshadow the more distant, and therefore smaller and less intrusive, view of the proposed project elements.

The conclusions and assertions of the MND included above are supported by Commission staff's review of the project site and knowledge of the project area gained through numerous visits to both the project site and to those portions of the Mandalay State Beach shoreline directly west of the proposed peaker plant. Nevertheless, the proposed exhaust stack would

still be visible from the shoreline and from surrounding areas. To minimize the adverse visual effects of those project elements that can not be effectively screened, SCE considered reducing the height of the exhaust stack and poles and using alternate paint colors. However, the proposed color was considered to have the least visual impact when accounting for all lighting conditions and vantage points and, as noted by SCE, reducing the height of the stack would cause other undesirable results:

Reducing the height of the stack is not feasible, and could result in additional undesirable impacts such as change in emission characteristics. The height of the stack has already been minimized to the maximum extent feasible and cannot be reduced further.

A visible condensation plume would draw additional attention to the stack and effectively increase its height by up to several dozen feet at times. The peaker plant's operation would be limited to a maximum of 2,000 hours annually, however, and therefore a visible condensation plume would not be a permanent visual feature of the project. The plume would only be visible upon the occurrence of certain meteorological events (cold temperatures and high humidity). It should be noted, however, that the condensation plume associated with this proposed facility would not be the same as the steam plume visible from the Mandalay Generating Station and other power plants with similar steam turbine generators. Because the proposed peaker would rely on a different turbine system which would make use of an adapted jet engine, exhaust vapors and gas released from the stack are much hotter and would disperse significantly before the water vapor in the stack exhaust cooled sufficiently to condense, and would only be visible when atmospheric conditions would result in condensation. Although the condensation plume would undoubtedly increase the visual presence of the peaker plant during these times, SCE has stated that elimination or minimization of the condensation plume would not be possible due to technical limitations and air quality requirements. Even without effective minimization of this visual feature, the Commission does not anticipate adverse affects to the aesthetics of the surrounding area to result from the condensation plume, primarily due to its temporary and impermanent nature.

A reduction in the height of the proposed transmission poles is also not feasible due to the size and weight of the proposed transmission lines and the safety, design requirements and standards that transmission infrastructure must adhere to. The Commission therefore finds that the required height of the proposed peaker plant's exhaust stack and transmission poles preclude efforts to completely screen these features from all nearby vantage points. As specified under the LCP's visual resource policy (policy 37), however, "all new development in the coastal zone shall be designed to minimize impacts on the visual resources of the area" and "particular care shall be taken in areas of special quality." While direct design changes which would reduce the visibility of the peaker plant facility or its associated transmission poles and exhaust stack are not feasible, SCE's commitment to construct vegetated berms on the eastern border of the project site would serve to minimize the proposed project's impacts on the visual resources of the project area.

In addition, the Commission is requiring in **Special Condition 10** that SCE dedicate a conservation easement on a portion of its property to the east of Harbor Boulevard and

provide \$500,000 for the implementation of visual enhancements and access and recreation improvements to this property as a means of mitigating the adverse visual impacts to the project area that would result from project construction and operation.

With implementation of the landscaping plan, as noted above and described within Exhibit 4, as well as the adoption of **Special Condition 10(c)**, the Commission finds that the project's adverse visual effects will be minimized to the extent feasible and therefore will be consistent with LCP Policy 37.

E. Hazards

The certified LCP contains policies that provide for the consideration and minimization of potential threats posed by natural hazards. Applicable LCP policies include:

***Local Coastal Policy 39 states:** All applications for grading and building permits and subdivisions shall be reviewed for threats from hazards such as seismic activity, liquefaction, tsunami run-up, seiche, beach erosion, flood, storm wave run-up, and expansive soils. Geologic reports may be required in known hazard areas. Appropriate mitigation measures shall be applied to minimize threat from any hazards.*

***Local Coastal Policy 56 states:** No industrial or energy-related development shall be located seaward of the 100-year flood/wave run-up line as designated by the U.S. Department of Housing Insurance Program Insurance Program Administration and the Land Use Map.*

Regarding potential hazards posed by natural events and geologic features at the site, the uncertified Mitigated Negative Declaration produced by the City of Oxnard for this project states:

The proposed project will be constructed in an area of known seismic activity. Approximately 38 active faults are known to exist within a 60-mile radius of the project site. Of primary concern is the Oak Ridge Fault (Blind Thrust Offshore), approximately 3.9 miles southwest of the project site which represents the most significant potential source of strong seismic ground shaking at the project site. The fault trends in an east-west direction and extends from offshore in the Pacific Ocean toward the Ventura-Oxnard coastline. This fault is considered capable of generating a 6.9 magnitude earthquake. Based on the California Geological Survey's Probabilistic Seismic Hazards Mapping Ground Motion Page (2006), there is a 10 percent probability of earthquake ground motion exceeding 0.582 times the acceleration of gravity (g) at the project site over a 50-year period.

...

Because the proposed project is located in a seismically active region, there is the potential for damage to the new project structures in the event of an earthquake. According to the latest geotechnical report for the proposed site, (Kleinfelder, 2006), differential seismic settlements at the site could be on the order of 1/4 inch. New structures must be designed to comply with the recommendation presented in the geotechnical report (Kleinfelder, 2006), the California Building Code (CBC)(2001

edition) and the Uniform Building Code (UBC) Zone 4 requirements because the project is located in a seismically active area. The CBC and UBC are considered to be standard safeguards against major structural failures and loss of life. The goal of the codes is to provide structures that will: (1) resist minor earthquakes without damage; (2) resist moderate earthquakes without structural damage, but with some non-structural damage; and (3) resist major earthquakes without collapse, but with some structural and non-structural damage. The UBC bases seismic design on minimum lateral seismic forces (“ground shaking”). The UBC requirements operate on the principle that providing appropriate foundations, among other aspects, helps to protect buildings from failure during earthquakes. SCE will design all structures to meet the latest UBC codes. With adherence to proper design and construction practices, no significant impacts from seismic ground shaking would be expected.

...
There is the potential for liquefaction induced impacts at the project site. The appropriate parameters for liquefaction exist at the project site, including unconsolidated granular soils and a high water table. In addition, Seismic Hazard Zone maps prepared by the State of California (Division of Mines and Geology 2002) indicate that the site is in an area with the potential for liquefaction. In addition, the site has a high potential for liquefaction to occur during seismic event based on subsurface soil conditions observed during the most recent geotechnical study (Kleinfelder, 2006). If liquefaction should occur at the site, there is the potential for up to approximately two to three inches of lateral displacements to occur towards the adjacent channel (Kleinfelder, 2006). The CBC and UBC requirements consider liquefaction potential and establish more stringent requirements for building foundations in areas potentially subject to liquefaction. Therefore, compliance with the CBC and UBC requirements is expected to minimize the potential impacts associated with liquefaction. Thus, liquefaction impacts are expected to be less than significant.

...
The uppermost 10 feet of soil at the project site is generally composed of loose, fine to medium-grained sand with gravel. The USDA Soil Conservation Service (1970) classifies these soils as having a low potential for expansion and are not considered an expansive soil as defined in Table 18-1-B of the UBC (1994), and thus, the proposed project would not be expected to create substantial risks to life or property due to expansive soils.

Because SCE proposes to site the peaker plant near the northwestern edge of the project site, within approximately 150 feet of the southern bank of the Mandalay Canal, one of the potential consequences of seismically induced liquefaction at this site is the lateral movement of soil towards this un-reinforced canal. This type of soil movement is referred to as lateral spreading and has a potential to occur up to two to three inches. While this level of lateral spreading has the potential to substantially affect the structural integrity of the proposed facility, it is within the range that can be addressed and mitigated by engineering and design modifications.

SCE prepared a geotechnical report addressing the high potential for seismic activity, liquefaction and lateral spreading at this site. The report recommends a number of design changes to ensure the structural integrity of the facility. If the structural design of the facility cannot tolerate the potential 2 to 3 inches of lateral spreading that may occur at the site due to liquefaction, the report recommends pile foundations, a soil-mixing wall to cut off the lateral spreading and stone columns to mitigate the liquefaction. The report also recommends that the plant be supported on shallow mat foundations underlain by engineered fill and that the upper native soil materials and any existing artificial fill below the foundations be over-excavated and replaced with reinforced engineered fill with three layers of geogrid sheets.

The Commission's staff geologist reviewed the geotechnical report and agrees with the recommendations it contains. **Special Condition 4** requires that SCE implement the recommendations detailed in the project's geotechnical report (Kleinfelder, 2006) as well as the relevant policies of the Uniform Building Code and California Building Code. Although Kleinfelder Inc. has no longer been retained as SCE's geotechnical consultant, because this firm developed the hazard risk minimization recommendations proposed to be used for this project, **Special Condition 4** requires that Kleinfelder Inc. provide review and approval of all final project design and construction plans to ensure that its design criteria have been appropriately incorporated. As conditioned, the Commission finds the proposed project consistent with LCP Policy 39 as it relates to seismic hazards.

Although the Commission finds that through compliance with the recommendations provided by Kleinfelder Inc., the proposed project is consistent with the LCP policy relating to seismic hazards, development along the coast, particularly in seismically active areas, inherently involves risk. The risks of the proposed development include that the proposed structures will not be adequately protected against damage from seismic activity, liquefaction and lateral spreading. Although the Commission has sought to minimize these risks, the risks cannot be eliminated entirely. Given that SCE has chosen to construct the development despite these risks, SCE must assume the risks. **Special Condition 5** therefore requires SCE to waive liability and indemnify the Commission against damages that may occur as a result of its approval of this permit. **Special Condition 6** requires the applicant to record a deed restriction imposing the conditions of this permit as covenants, conditions and restrictions on the use and enjoyment of the property.

Because the project site is located in close proximity to both the ocean and one of the region's major river systems, the Santa Clara River, potential hazards resulting from flood, sea level rise and tsunami inundation must also be closely considered. With regard to the potential for tsunami inundation of the project site, the uncertified MND describes the tsunami risk at the project site as low but evaluates the potential risk to personnel and damage to project equipment and infrastructure resulting from a tsunami that was able to reach the project site:

Because the facility will normally be manned by only one or two employees during the normal work week (Mon-Fri) and when the peaker is operating, a tsunami would not significantly increase the risk of exposure of people to the inundation. Damage to the facility as a result of a tsunami may potentially include damage to the ammonia storage tank resulting in a release. However, ammonia is highly soluble in water. If

damage to the aqueous ammonia storage tank were caused by a tsunami, and aqueous ammonia were released, the released aqueous ammonia would mix with seawater. Mixing with seawater would substantially reduce the rate of evaporation of gaseous ammonia from the mixture in two ways. First, the seawater would dilute the aqueous ammonia, which would reduce the ammonia concentration. The ammonia evaporation rate would be lower in a more dilute solution than in the 19 percent solution contained in the storage tank.

The evaporation rate of ammonia from an aqueous solution is affected by the pH of the solution. At a pH of about 9.8 or higher, the ammonia is essentially all present as dissolved ammonia gas, which can evaporate from the solution. At a lower pH, the ammonia dissociates into ammonium and hydroxyl ions, which do not evaporate from the solution. The pH of the 19 percent solution in the storage tank is above 12, so the ammonia could evaporate from the solution if it were released without dilution with seawater. However, the pH of seawater is between about 7.5 and 8.5, and substances dissolved in seawater "buffer" it, so that it is resistant to changes in pH when other solutions are mixed with it. As a result, mixing the aqueous ammonia from the storage tank with seawater would lower its pH below 9.8, so most of the ammonia would be dissociated and not able to evaporate.

As a result of the effects of mixing the aqueous ammonia with seawater on the ammonia evaporation rate, a release of aqueous ammonia from the storage tank caused by a tsunami is not anticipated to cause significant adverse impacts.

Ventura County has developed tsunami evacuation maps that are based upon a rough estimate that tsunami inundation could extend up to about the 10 meter contour. These evacuation maps indicate that the proposed site would be seaward of the evacuation area and provides appropriate evacuation routes to egress the area. At the present time, the California Emergency Management Agency is working on a new set of state-wide tsunami inundation maps for evacuation planning. The maps for Ventura County are presently under review. Though not intended for making land-use decisions, the results from these maps could help in evaluating the tsunami hazard for the project. The sand dunes seaward of the proposed project are approximately 20 feet high and would be expected to offer some barrier from inundation. In addition, the project site is located at an elevation of between 10 and 15 feet above sea level and several hundred feet landward of the coastal dunes. While detailed information on the tsunami inundation potential for the proposed site should be available soon, inclusion of this site in local plans for tsunami preparedness and evacuation planning would likely be components of responsible operation and contingency planning if the site is determined to be within the tsunami inundation or evacuation area.

For these reasons, the Commission finds the proposed project to be consistent with LCP Policy 39 as it relates to tsunami hazard.

Flooding is often a hazard along the coast and both LCP Policies 39 and 56 address flood risk. The U.S. Department of Housing Insurance Program Administration, specified in LCP Policy 56, no longer exists and the federal program for flood insurance and development of flood

insurance rate maps is now housed in the Federal Emergency Management Administration (FEMA) in the Department of Homeland Security. Both the Land Use Map included in the Oxnard LCP as well as the currently effective Flood Insurance Rate Map produced by FEMA indicate that the zone of inundation associated with a 100-year flood event would remain to the west of the project site and seaward of the coastal dunes along Mandalay State Beach. However, these maps were developed approximately 20 years ago and FEMA is presently in the process of updating its Flood Insurance Rate Map for the project area. The draft map has been circulated for public review and a new Flood Insurance Rate Map for this area is scheduled for completion in September 2009. The City has provided a copy of the draft map which shows that the proposed location of the peaker plant would be outside of the Special Flood Hazard Areas Inundated by 100-year Flood but within a zone that includes “areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 100-year flood.”

This latest draft FEMA map is refuted by an evaluation produced on September 17, 2008 by SCE’s engineering consultant, Dr. Howard Chang. Dr. Chang modeled the Santa Clara River conditions and concluded that neither a 100-year flood event nor a 500-year flood event at the Santa Clara River would reach the project site. This evaluation relies on a variety of site specific hydrologic and topographic features around the project site as well as the results of flood modeling simulations. On March 12, 2009, Dr. Chang submitted an appeal of the draft flood delineation to FEMA on behalf of SCE that draws on the findings of his analysis to conclude that “the Peaker Plant site is not subject to flooding during the 100-yr flood, nor the 500-yr flood.” Specifically, Dr. Chang’s analysis and conclusion are based on three primary factors: (1) the large distance between the Santa Clara River channel and the peaker plant site; (2) the presence of the Mandalay Canal between the Santa Clara River and the peaker plant site; and (3) the likely occurrence of river bed scour in the Santa Clara River during a flood event which would serve to deepen the river and decrease the volume of water available to flood its banks. As noted by Dr. Chang in his appeal of the draft FEMA flood map:

(1) The Peaker plant site is separated from the current south river bank by about 2 miles. Based on the assumptions used by FEMA, the floodwater would overtop the south channel bank by as much as 5 feet. When the water spreads out to a width of 2 miles, the average water depth would be in inches. In other words, the overbank flow, if any, reaching the plant site would spread out in a very large width to become very shallow in depth. The plant site has the minimum ground elevation of 12 feet, which is at least two feet above the adjacent areas. Flooding in adjacent areas, if any, cannot be deeper than 2 feet; therefore floodwater could not cause flooding of the plant site.

(2) The water surface in the canal is tidal; it is therefore much lower than the Peaker plant site. The canal would intercept floodwater before it reaches the plant site; it then transfers floodwater toward the south and then the ocean via the Channel Islands Harbor.

(3) In reality, the river channel near the mouth will undergo substantial channel bed scour to result in lowering of the flood level. Coastal rivers in southern California may be blocked by beach sand during the dry season, but the sand bar blocking the river

mouth would be removed during floods by the floodwaters themselves. Fig. 5 shows measured cross-sectional changes of the San Dieguito River by Coastal Environment (1993) at a river station 680 feet inside the river mouth during the 1993 flood, which was an 18-year flood. The cross-sectional profile of December 22, 1992 represents the measurement before the flood, the March 15, 1993 profile was measured just after the flood, and remaining profiles after the flood depict gradual refill of the channel bed by littoral sand from the beach. The figure shows that the 18-yr flood lowered the channel bed by about 7 feet. One should expect the 100-yr flood to cause even greater channel bed scour. This same effect will occur at the Santa Clara River mouth as predicted by [the computer model] FLUVIAL-12.

Dr. Chang's report provides a well-reasoned evaluation to support his conclusion that this site will not be at risk from the 100-year or 500-year flood. However, FEMA has not yet responded to Dr. Chang's letter. FEMA has a formal process to make changes or revisions to the Flood Insurance Rate Maps and it is not now possible to anticipate whether the new finalized Flood Insurance Rate Map for this area will include or exclude the proposed project site from the 500-year flood risk area. If it is shown to be at risk from flooding, there are options for on-site mitigation. FEMA has historically accepted engineered levees and berms as flood protection. As part of the proposed landscaping plan (Exhibit 4), SCE will construct a six-foot high berm along the eastern edge and northeastern corner of the proposed facility and would transition this berm along the northern edge of the peaker plant to a vegetated bioswale which would surround the remaining sides of the peaker plant. This berm would facilitate the discharge of surface water flows away from the facility and reduce the visual impact of the plant. SCE could expand and engineer this berm and swale to also mitigate for flooding.

Mapping for flood hazards is based on the current sea level conditions and a 1% probability storm or flood event. Most climate models show that sea level will rise in the future, with some researchers showing up to 3.5 to 4.6 feet of sea level rise from 1990 to 2100. There is a great deal of debate about what is an appropriate amount of sea level change for planning purposes, and what amount of increase should be used for engineering design. It is agreed that sea level rise will worsen the flood risk at areas which are now subject to flooding and will expand the flood risk to areas which now do not experience flooding. A recent report on the coastal impacts of sea level rise has shown that this site could be inundated with a combination of a 1% probability flood and a 4.6 foot rise in sea level.¹⁴ These draft inundation maps provide some general evidence for concern about flood risk at the site and reinforce the possible need for flood protective berms now, or in the future. The draft maps that show the area near the proposed project to be in an area of future inundation are based on a possible rise in sea level of 4.6 feet by the year 2100, rely primarily on broad scale elevation data, do not take any site specific topographic features, existing development or flood protection structures into account and do not provide a site-specific analysis to determine if there is a direct connection between low-lying areas that could be flooded and a water body that would be the source of the flooding. These draft maps also do not consider the flood

¹⁴ See for example, draft maps prepared in conjunction with the Pacific Institute's March 2009 Draft Report, "The Impacts of Sea-Level Rise on the California Coast", CEC-500-2009-024-D

protection that could be provided by either the existing dunes seaward of the plant or the visual berm and drainage features at the site. In addition, the draft maps include a caveat which states that they “shall not be used to assess actual coastal hazards, insurance requirements or property values, and specifically shall not be used in lieu of Flood Insurance Studies and Flood Insurance Rate Maps issued by the Federal Emergency Management Agency (FEMA).”¹⁵ Further, the estimate of the “current coastal base flood (approximate 100-year flood extent)” used on the draft maps does not accurately represent the delineation of the 100-year flood area included on the current FEMA Flood Insurance Rate Maps for the area. Specifically, the draft maps produced by the Pacific Institute include the project site within the approximate 100-year flood zone while the current FEMA Flood Insurance Rate Map for the area does not. The report correctly raises concern that this site could be subject to flooding under certain sea level rise conditions. If sea level rise were to put the proposed project at risk from flooding sometime in the future, SCE may need to increase the on-site berms to maintain flood protection of the site. The berms should be engineered to allow adaptation for future flood risks.

Given the inherent uncertainty regarding the timing and magnitude of coastal hazards as well as the changing nature of coastal areas, the Commission recognizes the need to provide opportunities for addressing future threats to coastal development through adaptive management. Although not conclusive, as described above, information currently exists regarding the potential susceptibility of the project area to sea level rise and inundation in the future. This information suggests that these threats may need to be addressed prior to the end of the project’s 25 year anticipated operating life. As such, **Special Condition 11** requires SCE to provide the Executive Director with a written evaluation of coastal hazards and risks posed to the peaker plant and associated facilities twenty years after the Commission’s approval of the project. Based on the findings of this report, the Executive Director shall determine whether a permit amendment shall be required for SCE to address the threat posed by these coastal hazards.

In addition, **Special Condition 7** requires that if the final approved Flood Insurance Rate Map shows the project site to be at risk from a 500-year flood event, SCE shall submit, within 60-days of FEMA’s determination, a permit amendment for either an engineered berm or levee around the peaker plant, its substation and natural gas metering station that is adequate to provide flood protection without encroaching into ESHA or other sensitive coast resource areas or an alternate design change to the site’s topography or foundation which would also ensure that a 500-year flood event would not result in flooding of the peaker plant.

For the reasons described above, the Commission finds that the project site would not be subject to flood hazard and, as conditioned, would conform to LCP Policy 39.

This section of coast has historically had high rates of erosion, ranging from 8 to 10 feet per year for the Oxnard region.¹⁶ The proposed peaker plant site is approximately 1,000 feet from

¹⁵ Ibid.

¹⁶ Hapke, S.J., D. Reid, B.M. Rishmond, P. Ruggiero and J. List 2006. “National Assessment of Shoreline Change Part 3: Historical Shoreline Change and Associated Coastal Land Loss along Sandy Shorelines of the California Coast,” USGS Open File Report 2006 – 1219.

the current shoreline; however, with ongoing or accelerated coastal erosion, the peaker plant site may be threatened by erosion in the future. Seawalls, coastal armoring and other structures to protect from coastal erosion are known to cause scour, encroachment on the beach, passive erosion, denial of inland sand to the littoral cell and other adverse impacts to sensitive beach and dune areas and public recreational resources. In addition, the Mandalay State Beach seaward of the proposed peaker plant site supports sensitive dune habitat and recreation resources that are protected by the habitat and resource policies of the LCP. The proposed peaker plant has a sufficient setback that it should be safe from erosion for the life of the structure and not require the construction of any shore protection devices. In the event that the setback is not adequate long-term erosion protection and to ensure the proposed project is consistent with LCP policies for habitat and resource protection, the Commission is requiring **Special Condition 9** to prevent the installation of seawalls or shoreline armoring devices in the future.

With respect to LCP Policy 56, the 100-year flood and wave run-up line designated in the LCP's Land Use Map is located approximately 500 feet to the west of the proposed project site, on the seaward side of the coastal dunes along Mandalay State Beach. Although the U.S. Department of Housing Insurance Program Administration referred to in this policy no longer appears to be in existence under that title, FEMA, the federal agency which creates flood hazard maps and regulates flood insurance, appears to fill a similar role. As discussed above, the proposed project site is also outside of the 100-year flood zone displayed by the existing version of FEMA's flood map of the project area.¹⁷ While a recently released draft FEMA flood map appears to offer revisions of the flood projections for the project area, this draft FEMA map does not include the peaker site within the delineation of Special Flood Areas Inundated by 100-year Flood. Based on the low flooding risk of this area, as determined by FEMA and the City of Oxnard in its Land Use Map, the Commission finds the proposed project consistent with LCP Policy 56.

F. Water Conservation and Municipal Services

The certified LCP contains policies that require water conservation measures to be included in new development and require a consideration of municipal service capacity. Applicable LCP policies include:

***Local Coastal Policy 41 states:** All new development in the coastal zone shall employ the most recent water conservation methods, including (but not limited to):*

- a. low-flow pipes and toilets;*
- b. flow restrictions on all shower heads;*
- c. underground drip irrigation systems; and*
- d. use of low-water use vegetation for landscaping.*

***Local Coastal Policy 42 states:** Consideration of all proposed projects in the coastal zone shall include consideration of the remaining water and sewer capacities. This shall*

¹⁷ The Commission notes, however, that the 100-year flood/wave run-up line designated by the City of Oxnard Land Use Map does not appear to factor in continued sea level rise.

include a calculation of the proposed project's use of remaining capacity in percent. Projects shall be approved only when sufficient water and sewer services are available.

Local Coastal Policy 64 states: *It shall be a condition of approval that, wherever possible, wastewater from any industrial or energy-related facility be treated as necessary and put to reuse including, but not limited to, the following: the re-injection into the aquifer or groundwater recharge system, recycling for industrial use, agricultural use, or urban services.*

The applicable provisions of the LCP's policies directed towards water conservation and municipal services relate to three separate aspects of the proposed project, landscaping water use and low-water use vegetation for landscaping (LCP Policy 41), municipal service supply capacity (LCP Policy 42) and wastewater reuse (LCP Policy 64).

To satisfy the provisions of LCP Policy 41 regarding the use of low-water use vegetation for landscaping, SCE's landscape plan exclusively relies on locally adapted native bush, shrub and small tree species. Given the tolerance of most native California species for low water conditions, the use of these species would ensure that the potentially elevated water requirements of non-native species and large trees would be avoided. In addition, SCE's landscape plan also includes the use of an irrigation system that minimizes water use (through the use of evapotranspiration sensors and climate based irrigation scheduling) and is appropriate for native plant species. Although LCP Policy 41 specifies that water conservation methods include underground drip irrigation systems, such systems may not be appropriate for the native shrub, bush and grass species that would be used within the project's landscaping. Some native species do not do well with drip irrigation as this type of system may provide too much water to plant roots which discourages root growth and promotes root rot due to over-saturation. In addition, because the project would make use of low-water use vegetation for landscaping, within several years landscaping plants should be sustained with little or no water beyond what is provided through natural precipitation. The installation of a permanent underground irrigation system may therefore not be needed or appropriate in this case. As proposed and described in Exhibit 4, the Commission finds the project's landscaping conforms to the requirements of LCP Policy 41.

With regard to Local Coastal Policy 42, SCE states that,

There are adequate public services for the proposed use including, but not limited to, fire and police protection, water, sanitation, and public utilities and services to ensure that the proposed use would not be detrimental to public health and safety. The MND concluded that the project will not impact any public services.

The proposed project's sewer and municipal water requirements are discussed in detail in the uncertified Mitigated Negative Declaration produced by the City of Oxnard for this project, which states that:

For at least the first year of operation, the wastewater will be collected in a tank, and hauled offsite for disposal because there is no sewer system in the site vicinity. SCE

expects that a sewer connection will be installed sometime in the future, at which time the wastewater, will be discharged to the City's sewer system and will meet the City's pretreatment standards. There will be no effect on the City's physical or biological treatment processes.

...

The Oxnard Wastewater Treatment Plant (OWTP) has an average dry weather flow (ADWF) design capacity of 31.7 million gallons per day with provisions for an ultimate ADWF design capacity of 39.7 million gallons per day... The wastewater flow from the project of eight gallons per minute is insignificant compared to the capacity of OWTP.

..

Overall, the volume of water required to operate this type of facility [the peaker plant] is very low, the main water uses are for direct injection into the turbine to control NOx emissions (50 gpm) and spraying a mist into the inlet of the combustion turbine to lower air temperature to improve efficiency (12 gpm). Daily water use during the operational phase is estimated to average 62 gpm during unit operation... The City's potable water supply is sufficient to meet the unit's water requirements.

...

The project's demand for water during construction and operation is not significant compared to the water supply available in the City of Oxnard.

In addition to the anticipated operational water use described above, proposed landscaping activities would require an additional three acre-feet of municipal water per year in each of the first two years of landscaping and maintenance and roughly one acre-foot of water per year in years three and four. No water is anticipated to be needed for landscaping use during year five and beyond as the landscaping plants should have established root systems capable of capturing rainwater and existing soil moisture. In total, the proposed project would require nearly 27 acre feet of water per year for the first two years of operation and approximately 25 acre feet in years three and four and 24 acre feet in each subsequent year of operation. These estimates are made assuming the peaker would operate at the maximum level of 2,000 hours per year as specified in the proposed plant's air emission permit issued by the Ventura County Air Pollution Control District. Under anticipated use of approximately 200 hours per year, annual water requirements would be reduced to between 2 and 4 acre-feet of water per year.

Calculated as a percentage of remaining capacity in the City of Oxnard, as required under LCP Policy 42, the proposed project would comprise less than one-tenth of one percent of the City's total water demand (based on the average demand of the past five years of 29,087 acre feet per year¹⁸) and would require less than approximately one percent of the projected excess supply in 2010.¹⁹ The proposed project's municipal water requirements would therefore not be expected to substantially affect remaining or projected water supply capacity in the City of Oxnard. However, in communications with Commission staff, representatives of the City of Oxnard have repeatedly stated that due to existing drought conditions, recent court decisions,

¹⁸ Based on the Final Water Supply Assessment and Verification dated April 2008 by Kennedy/Jenks Consultants for the proposed Wagon Wheel Development project.

¹⁹ As noted in Table 42 of Appendix A of the 2005 City of Oxnard Urban Water Management Plan, supply in 2010 is projected to be exceed demand by approximately 3,189 acre feet.

and the fact that long range municipal water supply assessments did not include an allocation of water for this project, SCE would be required to participate in a newly created mitigation program designed to address projects requiring substantial use of municipal water. This program is detailed in a report which was provided to the Oxnard City Council by the Municipal Services Director on January 15, 2008. The program specifies that all users of large volumes of municipal water not discussed and evaluated in the City of Oxnard's 2005 Urban Water Management Plan would be presented with two options: (1) "large water users could participate in program(s) developed by the Water Department that offset existing water demand (permanent, verifiable, and quantifiable) and then be entitled to the amount of the offset, or" (2) "suspend project approval contingent on confirmed availability of reliable water supplies." The report goes on to describe the implementation of this mitigation program by specifying that "Initially, this program would be included in EIRs and MND, including the General Plan Update EIR, and then added into the next update of the [Urban Water Management Plan]."

At the current time, the City of Oxnard's General Plan Update EIR is still being developed and the next update of the Urban Water Management Plan is scheduled for 2010. In addition, it is the understanding of Commission staff that the Water Department offset program described within the first option included above has yet to be developed and implemented. Although the municipal water use mitigation program has not yet been implemented by the City of Oxnard and the offset program has yet to be developed, SCE confirmed the availability of reliable water supplies for the proposed project. As described in a letter from the General Manager of the Calleguas Municipal Water District (one of the primary suppliers of water to the City of Oxnard) to SCE dated January 15, 2009:

Calleguas warrants that it can provide additional water to the City of Oxnard to service Edison's proposed facility. From Calleguas' perspective, the incremental increase of 1 to 2 acre-feet of annual water consumption for this important peaker facility is quite small, and supplies are available. This is also true of the estimated maximum annual use by the peaker in a prolonged emergency.

Commission staff has repeatedly requested confirmation from the City regarding whether or not this letter from the Calleguas Municipal Water District qualifies as "confirmed availability of reliable water supplies," as specified in the City's water management program. As of March 20, 2009, this request is still being considered by the City. In the absence of this confirmation by the City, Commission staff has evaluated existing information regarding municipal water supplies, including the 2005 Urban Water Management Plan as well as the letter from the Calleguas Municipal Water District. Given the small amount of municipal water required by the proposed project – relative to the total excess capacity of 3,189 acre-feet projected to be available in 2010 by the 2005 City of Oxnard Urban Water Management Plan, the proposed project would require less than 1% - as well as the guarantee of reliable supply by the Calleguas Municipal Water District, the Commission finds that "sufficient water and sewer services are available" for the proposed project and that is therefore in conformance with LCP Policy 42.

As stated in SCE's appeal to the Commission in regard to Local Coastal Policy 64,

Wastewater produced by the Project [during operation] will be minimal. Eight gallons per minute of wastewater from the evaporative cooler would be produced during the limited hours that the unit will operate. This water will have elevated levels of total dissolved solids but no other added pollutants and will be collected and disposed of at a facility that complies with the above requirement [Local Coastal Policy 64].

The limited amount of wastewater generated by the proposed project during operation (just over 1 million gallons per year based on a maximum anticipated use of the peaker plant – 2,121 hours per year) and the discharge proposal outlined above appears to satisfy the requirements of LCP policy 64. With regard to the substantially greater levels of wastewater proposed to be generated during preparation of the peaker plant site, SCE has proposed to discharge approximately 455 million gallons of wastewater associated with these activities into the Mandalay Canal during de-watering. SCE proposes such extensive de-watering to lower the groundwater level at the peaker plant site so that installation of a foundation and support pad for the facility may be achieved. The discharge of this wastewater into the Mandalay Canal also appears to be in conformance with policy 64 because the proposed wastewater discharge site in the Mandalay Canal is directly adjacent to the cooling water intake site for the Mandalay Generating Station. The proximity of these discharge and intake locations would allow the vast majority of wastewater discharged from the proposed de-watering activities to be taken-up by the Mandalay Generating Station for use as cooling water. This would allow de-watering wastewater to be recycled for an industrial type use, as specified under LCP policy 64, while offsetting the amount of coastal water extracted from the Mandalay Canal by the Mandalay Generating Station.

The Commission finds that with the inclusion of SCE's revised landscaping plan, the proposed project is consistent with the water conservation and municipal service provisions of LCP Policies 41, 42 and 64.

G. Air Quality

The certified LCP contains policies that provide for the protection and management of local and regional air quality. Applicable LCP policies include:

***Local Coastal Policy 47 states:** The Ventura County Air Quality Management Plan (AQMP) is incorporated into the LCP by reference. All new development located within the coastal zone shall occur in a manner consistent with the AQMP.*

***Local Coastal Policy 51 states:** All new industrial and energy-related development shall conform to the air quality regulations set by the Ventura County Air Quality Management Plan and New Source Review Rule 26.*

The City's LCP requires that the peaker plant project conform to the air quality regulations of the Ventura County Air Quality Management Plan. Specifically, this project must meet the requirements of New Source Review Rule 26. Rule 26 requires an applicant to provide Best Available Control Technology ("BACT") and, if certain emission thresholds are exceeded, provide emission offsets. As part of its review of this project, Coastal Commission staff

consulted with staff of the Ventura County Air Pollution Control District (VCAPCD). VCAPCD is requiring an Authority to Construct Permit for the project and has issued a Draft Authority to Construct Permit. The VCAPCD has concluded that the project meets Rule 26's BACT requirements and that no emission offsets are required.

Construction Emissions: The project will generate construction and operational air emissions. Construction emissions principally consist of equipment exhaust emissions (CO, ROC, NO_x, sulfur dioxides (SO_x) and particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀), fugitive dust from grading and excavation, and ROC from painting and asphaltic paving). Emissions during construction also include exhaust emissions from worker commute trips and trucks, and emissions associated with natural gas pipeline construction (trenching, welding and paving). VCAPCD recommends a CEQA mitigation threshold of 25 pounds per day for construction-related emissions of ozone precursors NO_x and ROC to avoid a significant adverse impact to ozone air quality during project construction. The uncertified Mitigated Negative Declaration (MND) estimates that during construction the project's NO_x and ROC emissions will exceed 25 pounds per day. The MND estimates 157.1 pounds per day of NO_x and 32.3 pounds per day of ROCs will be emitted during construction. The MND recommends measures to reduce these construction-related emissions. These measures include:

- Controlling fugitive dust on all graded, excavated and exposed soil areas. Treatment will include periodic watering, application of "environmentally safe" soil stabilization materials and/or roll compaction. Reclaimed water is to be used, if feasible;
- Minimizing equipment idling time;
- Limiting on-site traffic to 15 miles per hour or less;
- Curtailing all grading, clearing, earth-moving and excavation operations during periods of high wind (i.e., wind speed sufficient to cause fugitive dust to impact adjacent properties; and
- Use of alternative fueled construction equipment, such as compressed natural gas (CNG), liquefied natural gas (LNG), electric, or equipment meeting Tier 2 standards, if feasible.

As part of its project, SCE proposes to implement all these recommended mitigation measures. Implementation of these mitigation measures will reduce these potential adverse air impacts to less than significant levels.

Operational Emissions: Operation of the peaker plant due to the combustion of natural gas fuel will also result in emissions of NO_x, CO, PM₁₀, ROC and SO₂. Of most concern here is the release of NO_x and ROC that produce ozone. Ozone is a criteria pollutant that is formed when NO_x and ROCs – both byproducts of combustion – undergo slow photochemical reactions in the presence of sunlight.

The proposed project's operational emissions were presented in the MND, but there was an error in the methodology and so the calculations are not accurate. In accordance with VCAPCD CEQA guidelines, equipment that receives a VCAPCD air permit is not included in the CEQA significance calculation. For this project, the combustion turbine generator will

receive a VCAPCD permit. Mistakenly, the combustion turbine generator was included in the MND's operational emissions significance evaluation. Applying the proper methodology, the project's operations will result in 5.62 lbs/day NO_x and 0.66 lbs/day ROCs. The total peak daily emissions for ROC and NO_x are therefore much less than VCAPCD's significance threshold of 25 lbs/day. VCAPCD's CEQA guidelines do not require mitigation or offsets in cases where project emissions fall below significance thresholds.

As stated above, SCE must obtain from VCAPCD an air permit for the combustion turbine generator and satisfy the district's Rule 26 requirements. Rule 26 requires an applicant to provide emission offsets only if a project emits 5.0 tons per year or more of NO_x and ROC. Because this facility will operate only a limited number of hours per year (up to 2,000 hours), the annual potential to emit from permitted equipment (the combustion turbine generator) is less than 5.0 tons per year of NO_x (4.9 tons per year) and less than 5.0 tons per year of ROC (1.3 tons per year). Therefore, the VCAPCD will not require emission offsets for NO_x and ROC emissions from the combustion turbine generator.

As part of its application to the City, SCE also performed emissions and hazards modeling to assess if any health-based exposure thresholds will be exceeded. SCE assumed a "worst case" exposure level and assumed multiple operating scenarios that exceed the plant's permitted operating hours. To ensure that potential impacts from peaker operations were evaluated under all meteorological conditions, SCE conducted the modeling every hour of a 3-year period using VCAPCD-approved meteorological data. The results of the modeling showed that the maximum predicted air quality concentrations and carcinogenic and non-carcinogenic risks associated with human exposure both at the proposed peaker plant fence line and in receptor areas located within 1 kilometer of the plant do not pose any risk to human health. VCAPCD staff reviewed SCE's modeling and air toxics health risk assessment and concluded that both long-term (cancer and chronic non-cancer) and short-term (acute non-cancer) impacts were assessed using reasonable worst-case assumptions and that the project does not pose any significant risk to human health for both residents and off-site workers.²⁰

As described above, through issuance of an Authority to Construction Permit, the VCAPCD will require that the project be carried out consistent with VCAPCD's air quality regulations. The Commission thus finds the project consistent with LCP Policies 47 and 51.

H. Public Access and Recreation

The certified LCP contains policies that provide for the protection of public access to the beach. Applicable LCP policies include:

Local Coastal Policy 54 states: All new industrial and energy-related development shall be located and designed to minimize adverse effects upon public access to the beach. Where appropriate, an access dedication shall be a condition of approval.

²⁰ See SCE's *Maximum Potential Air Quality Impacts from McGrath Peaker Project Operations*, September 8, 2008 and VCAPCD health risk assessments included as Exhibit 14.

Local Coastal Policy 72 states: *Public access to and along the shoreline and the Inland Waterway shall be required as a condition of permit approval for all new developments between the shoreline and the first public roadway inland from the shore, except as provided below:*

1. *Exceptions may be made when access would be inconsistent with public safety, military security, the protection of fragile coastal resources, or when agriculture would be adversely affected.*

...

In addition, due to the proposed project location between the first public road and the sea, pursuant to Section 30604(c) of the Coastal Act, the proposed project must also be reviewed for consistency with the Chapter 3 policies of the Coastal Act regarding public access and public recreation. Relevant Coastal Act public access and public recreation policies include:

Coastal Act Section 30210 states that:

In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.

Coastal Act Section 30211 states:

Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.

Coastal Act Section 30212(a) *provides that in new shoreline development projects, access to the shoreline and along the coast shall be provided except in specified circumstances, where:*

- (1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources.*
- (2) adequate access exists nearby, or,*
- (3) agriculture would be adversely affected. Dedicated access shall not be required to be opened to public use until a public agency or private association agrees to accept responsibility for maintenance and liability of the accessway.*

Coastal Act Section 30220 states that:

Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such use.

The project site is not located adjacent to the shoreline and is separated from the beach by an existing oil extraction and treatment facility which abuts the project site on the west side. Currently, no public beach access exists within the immediate vicinity of the project site. The closest recreational facility and beach access point is located near the entrance to Mandalay Beach State Park, at the intersection of Harbor Boulevard and Fifth Street, approximately one mile south of the project site. An additional coastal access point is located several miles to the north of the project site, at the entrance to McGrath State Beach. Lateral access from McGrath State Beach to Mandalay State Beach west of the project site is currently restricted due to the presence of the cooling water discharge canal for the Mandalay Generating Station which transects the beach and restricts passage.

During project construction, all workers shall park on-site and impacts to existing beach access parking lots (at the entrances to Mandalay and McGrath State Beaches) are not anticipated to occur. Construction of the proposed natural gas pipeline would occur within the public right-of-way on the east side of Harbor Boulevard for a distance of approximately 1,800 feet and it may necessitate the temporary closure of the northbound lane. Pipeline installation and trenching is anticipated to require approximately seven weeks to complete. Harbor Boulevard in this area does not have bicycle lanes, pedestrian walkways or on-road parking that would be affected by this lane closure. Potential impacts to traffic flows along the pipeline route would be minimized by limiting the construction period to those periods specified by the City in the approved encroachment permit and through implementation of the mitigation measures identified in the uncertified Mitigated Negative Declaration (MND), as required by **Special Condition 2**. The MND mitigation measures require that a registered traffic control engineer prepare a Traffic Control Plan for City approval, follow the standards set forth by Caltrans, designate required traffic patterns or temporary road closures for construction, provide construction work road signs and provide safety measures to separate motorists from the construction workers and the work zone. SCE has committed to implement these measures.

The Commission therefore finds that the proposed project will not interfere with the public's access to and recreational use of the beach along this stretch of coast and therefore is consistent with the public access policies of the LCP and Coastal Act.

I. Climate Change

The City of Oxnard Coastal Land Use Plan specifically protects many of the resources that would be directly affected by global climate change resulting from increases in greenhouse gases. LUP sections and policies specific to these resources include section 3.2.2 (Habitat Areas) which contains Local Coastal Policy 6 (protection of sensitive habitat, wetlands and resources) and Local Coastal Policy 10 (protection and restoration of coastal waters); section 3.2.3 (shoreline structures, diking and dredging) which contains Local Coastal Policy 13 (prohibition on shoreline protective devices and protection of existing beaches); section 3.3 (Hazards) which includes Local Coastal Policy 39 (minimization of threat from storm wave runup) and Local Coastal Policy 40 (development within flood and wave runup zones); section 3.6 (industrial and energy development) which contains Local Coastal Policy 52 (minimization of impacts from energy development); and section 3.8 (acquisitions), which contains Local Coastal Policy 91 (continuous protection of coastal resources).

Climate Change: The Coastal Commission also considered the potential effects of this project on climate change. The construction and operation of major water, energy, telecommunication, and transportation projects can significantly increase greenhouse gases (GHG)²¹ and global warming, which in turn can cause significant adverse impacts to coastal resources of California. The Coastal Act has a number of provisions that provide direct authority to take steps to reduce climate change and to adapt to the effects of global warming. These include the Coastal Act's public access and recreation policies (Sections 30220 and 30211), marine resource and water quality policies (Sections 30230 and 30231), the environmentally sensitive habitat area protection policy (Section 30240), and the coastal hazards policy (Section 30253(1) and (2)). Further, Section 30253(4) requires development to minimize energy consumption and vehicle miles traveled.

In September 2006, Governor Arnold Schwarzenegger signed AB 32, the California Global Warming Solutions Act of 2006. In passing the bill, the California Legislature found that *“Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems”* (California Health & Safety Code, Division 25.5, Part 1).

AB 32 requires the California Air Resources Board (CARB) to adopt a statewide GHG emissions limit equivalent to the statewide GHG emissions levels in 1990 to be achieved by 2020. It requires CARB to adopt rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emission reductions. Strategies that the state will pursue for managing GHG emissions focus on generally reducing consumption of petroleum across all areas of the California economy. Improvements in transportation energy efficiency (fuel economy) and alternatives to petroleum-based fuels are to provide substantial reductions by 2020.

Climate change covers a broad range of impacts that can occur due to GHG emissions, such as increased sea level rise, changes in the frequency, intensity or occurrence of heavy precipitation and droughts, changes in the frequency and intensity of extreme temperature events, and changes in ocean water chemistry. California's 2006 Climate Change Impacts Assessment, reports by the Intergovernmental Panel on Climate Change (IPCC Reports in 1990, 1995, 2001 and 2007) and various climate research centers (such as the Pew Center on Global Climate Change and the Heinz Center) recognize that within the coming century

²¹ Greenhouse gases are any gas, both natural and anthropogenic, that absorbs infrared radiation in the atmosphere and include water vapor, carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O). These greenhouse gases lead to the trapping and buildup of heat in the atmosphere near the earth's surface, commonly known as the “Greenhouse Effect.” Carbon dioxide is the major anthropogenic greenhouse gas. All greenhouse gases are quantified collectively by the carbon dioxide equivalent, or the amount of CO₂ that would have the same global warming potential, when measured over a specific time period.

potentially severe impacts could occur in the areas of sea level, water resources, agriculture, forests and landscapes, and public health. Many of these effects will impact the coastal zone and resources specifically protected by the Coastal Act, including impacts to air quality, species distribution and diversity, agriculture, expansion of invasive species, increase in plant pathogens, alteration of sensitive habitat, wildfires, rising sea level, coastal flooding, and coastal erosion. In addition, absorption of carbon dioxide by the ocean leads to a reduction in ocean pH with concomitant consumption of dissolved carbonate ions, which adversely impacts calcite-secreting marine organisms (including many phytoplankton, zooplankton, clams, snails, sea stars, sea urchins, crabs, shrimp, and many others). The most direct impacts of global warming focused on the coastal zone are sea level rise and its associated impacts, ocean warming, and ocean acidification.

Sea Level Rise. Sea level rise is one of the most direct consequences resulting from climate change and a general warming of the atmosphere. In turn, a change in sea level is one of the main factors causing changes in coastal processes. An increase in sea level can:

- Increase coastal wave energy
- Increase beach and bluff erosion
- Increase coastal flooding and inundation
- Increase scour around foundations
- Reduce the effectiveness of existing coastal protection efforts
- Reduce the expected effective life of development setbacks
- Reduce dry beach area and threaten beach-level access and recreational use
- Reduce access time for beaches that are only accessible now at low tide
- Shift the intertidal location inland; possibly reduce intertidal area

Due to the many ways that rising sea level can influence development on the coast, the Commission has, for many years, considered future sea level in the planning and design of many coastal projects. Consequences of an increase in sea level such as increased erosion and scour, increased nearshore wave energy and reduced beach area are all detrimental to the coast and damaging to coastal resources. The greater the rise in sea level, the greater the possible detrimental consequences to the coastal resources directly effected by sea level rise. There are no models that can attribute specific changes in sea level to specify amounts of GHG emissions; nevertheless, there are clear indications that increases in GHG emissions contribute to the overall increase in climate change, rising sea level and resultant impacts to coastal resources.²²

Ocean Warming. One of the well-recognized connections between the atmosphere and the ocean is heat exchange. Global warming of the atmosphere is expected to cause an increase in ocean warming as the ocean absorbs greater amounts of thermal energy from the atmosphere. One of the consequences of ocean warming is a shift in the geographic

²² Recent discussions of atmospheric temperature, ocean temperature and sea level rise from combustion of fossil fuels and other anthropogenic sources of greenhouse gases and their effects can be found in the reports from the IPCC (1990, 1992, 1995, 2001, 2007; www.ipcc.ch/index.html).

ranges of species. With continued warming, species can be expected to continue to migrate northward as long as suitable habitat is available. An indirect consequence of ocean warming is a decline in ocean productivity due to habitat shifts. Ocean warming can cause a direct loss of primary productivity as well. Warming of the surface of the ocean results in increased ocean stratification, limiting the upwelling of deep, nutrient-rich waters that are responsible for California's rich coastal productivity.

Ocean Acidification. Just as there is an exchange of thermal energy between the atmosphere and the oceans, there is an ongoing exchange of gases between the atmosphere and the ocean. Each year some 92 billion metric tonnes of CO₂ are directly absorbed by the ocean from the atmosphere. At the same time, approximately 90 billion metric tonnes are released back to the atmosphere²³. The net increase in dissolved CO₂ in the ocean is a direct result of increases in the atmosphere related to changes humans are making to the carbon cycle—most notably fossil fuel burning and land use changes (deforestation, mostly in the tropics). One of the consequences of this increase in dissolved CO₂ is a reduction in the pH of the ocean. This decrease in ocean pH (commonly called “ocean acidification”) can cause physiologic stresses in some species. In addition to physiologic effects, calcite-secreting organisms (including many phytoplankton, zooplankton, clams, snails, sea stars, sea urchins, crabs, shrimp, and many others) have more difficulty secreting their shells and plates under reduced carbonate ion concentrations. Deep-sea species will be particularly affected because increasing CO₂ levels in seawater decreases the saturation state of seawater with respect to calcium carbonate (CaCO₃) and raises the saturation horizon closer to the surface. Increasing surface CO₂ levels could have serious consequences for organisms that make external CaCO₃ shells and plates.²⁴ The effect on food webs is unclear, but it is very likely that these effects will result in a loss of biodiversity and complexity in California's coastal marine ecosystems.

Reducing Greenhouse Gas Emissions from Electrical Generation. The State of California and the California Public Utility Commission (CPUC) have adopted numerous greenhouse gas laws, regulations and policies in order to address greenhouse gas emissions from electricity generation sources. One of the key requirements is AB32 – The California Global Warming Solutions Act of 2006 – that requires the California Air Resources Board (CARB) to promulgate regulations to reach the 2020 goal of reducing greenhouse gas emissions to 1990 levels. The regulations are to go into effect in 2012. In order to achieve AB32's stated goal of reducing greenhouse emissions to 1990 levels by 2020, CARB is in the process of developing regulations for all major contributing source categories, including the electricity industry. CARB will determine the quantity of emission reductions that will be allocated to each contributing emission segment (transportation, electricity, manufacturing, etc.) and individual emission company or source, as well as setting forth the regulatory mechanisms by which these reductions will be implemented. For the electricity sector, CARB is developing a program that will reduce CO₂ emissions on a systemwide basis in order to ensure that all emissions created to serve California's load are captured and that all generating sources, regardless of ownership or location, are being treated uniformly and equitably. CARB is

²³ Schlesinger, W.H. (1997).

²⁴ The Royal Society (2005).

currently developing a Scoping Plan that will provide a blueprint on how AB32 will be implemented (i.e., command and control measures and market-based programs). In a recent decision (D.08-03-018), the CPUC recommended to CARB that a cap-and-trade system be used to reduce greenhouse gas emissions from the electricity sector, with sources being required to purchase at least a certain portion of the credits. The net effect is that greenhouse gas emissions from SCE's generation portfolio would be capped and would be required to be reduced as directed by CARB to meet the State's greenhouse gas reduction goals.

Peaker Plant Emissions. As part of its review of this project, Commission staff requested SCE submit the annual quantity and sources of all greenhouse gases and that would be emitted as a result of the project. On April 9, 2008, SCE submitted to the Coastal Commission its estimate of peak annual emissions of greenhouse gases from the proposed peaker plant (included as Exhibit 10). The peaker plant will emit greenhouse gases from the combustion of natural gases in its turbine and emergency generator. The principal greenhouse gases emitted from fossil fuel combustion are carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (NO). According to SCE, the Ventura County Air Pollution Control District (VCAPCD) will limit combustion turbine operation to 2,121 hours per year (1,881 operating hours plus 240 hours of start up and shut down periods). The emergency generator will only operate during routine testing and maintenance activities and if there is a system blackout on the local electric grid. Reliability testing is a maximum of 50 operating hours per year. Based on these limits, SCE estimates the maximum potential to emit from the proposed peaker plant is 51,032.7 Metric Tonnes CO₂E per year. If a 30-year life is assumed, then the maximum potential to emit over the life of the project is 1,530,981 Metric Tonnes CO₂E. Under the economic dispatch scenario, the scenario which most closely estimates the anticipated operation of the unit by assuming that the peaker would only be operated when it would be most cost effective, the peaker plant would operate for an average of approximately 93 hours per year. Under this scenario potential emissions from the proposed project are 2,496 Metric Tonnes CO₂E²⁵ per year, or 74,881 Metric Tonnes CO₂E over a 30-year operating period.

Construction of the peaker plant will also generate greenhouse gases. Greenhouse gas emissions from construction activities are primarily due to CO₂ emissions from on-site construction equipment and motor vehicle trips to and from the site. SCE estimates emissions from construction activities to be 618.00 Metric Tonnes CO₂E.

Preparation of the local distribution system in anticipation of the peaker plant's operation would also result in greenhouse gas emissions. These emissions would come from the installation of a new SF₆-insulated circuit breaker, which contains 52 pounds of sulfur hexafluoride (SF₆). SF₆ has a relatively high global warming potential (approximately 23,900 times that of CO₂), so even small emissions of SF₆ can contribute to climate change. The leak rate for this equipment is guaranteed by the manufacturer to not to exceed one percent per

²⁵ When quantifying GHG emissions, the different global warming potentials (GWP) of the various greenhouse gases are usually taken into account by normalizing their rates into an equivalent CO₂ emission rate. Carbon dioxide equivalent emissions (CO₂ Eq, CO₂E or CO₂e) represents the amount of CO₂ emissions that it would take to create a climate impact equivalent to the emissions of the specific gas or source of interest. This standardization is useful for comparison purposes, since the emissions impact of different source types and gases can then be directly compared.

year. Therefore, the maximum potential to emit of this circuit breaker will be 0.52 pounds of SF₆ per year, which is equivalent to 5.6 Metric Tonnes CO₂E per year. Assuming an operational life of 30 years, the maximum potential to emit over the life of the project is 168 Metric Tonnes CO₂E.

In addition to emission calculations, SCE submitted an emission analysis which concludes that operation of the peaker plant will be nearly neutral and will result in only a slight increase (approximately 726 Metric Tonnes CO₂E) in CO₂E emissions across SCE's generation portfolio. This conclusion is based on SCE's use of the Ventyx Market Analytics and the Ventyx Planning and Risk models to simulate the operation of its electric system and the net change in CO₂ emissions that would occur both with and without the proposed peaker unit. These models calculate the CO₂ emissions from SCE's system as a whole based on its projected annual load profile and are currently used to comply with CPUC directives to evaluate the net CO₂ emissions from new energy projects and other reporting requirements. The use of this modeling approach allowed SCE to incorporate factors such as power plant loading order²⁶ and generating efficiency into its analysis. As SCE states in its analysis,

Because the marginal cost of natural gas fired peakers is high compared to other resources, they dispatch last in the loading order after all other available resources have been brought on line. Therefore, when the proposed peaker project is dispatched, it will almost always replace a higher emitting natural gas fired unit. Because all natural gas fired peakers are reasonably efficient, the relative difference in CO₂ emissions between the proposed peaker and the less efficient units would be expected to be small. This means that the net decrease in annual CO₂ emissions would also expected to be small.

In other words, during operation, SCE anticipates that direct emission increases from the peaker (which would be approximately 2,496 Metric Tonnes of CO₂E per year for 93 hours of operation) would be completely offset by emission decreases at other power plants on the system, resulting in a slight net emissions decrease.

SCE's analysis also suggests that further emission reductions would be achieved through increases in transmission efficiency and decreases in line loss resulting from the peaker plant's ability to tie in directly to the local 66 kv transmission system that provides the local Oxnard area with electricity. Whereas power currently generated at the Mandalay and Ormond Beach Generating Stations must first travel to the Santa Clara substation on 230 kv transmission lines before it can return to Oxnard over the 66 kv system (a situation that results in the loss of power during travel in both directions), the placement of a peaker plant in Oxnard would allow locally produced power to be transmitted directly to the local 66 kv system first without traveling to Santa Clara. This would reduce the amount of electricity lost during transit over the transmission lines which would decrease the amount of energy that needs to be produced and therefore reduce production related emissions.

²⁶ Loading order is determined through an evaluation of the marginal cost of the generation resource – generating stations with the lowest marginal cost are dispatched first and those with the highest cost are dispatched last.

SCE agreed to provide funding for the Commission to hire an independent consultant to review its emission calculations and analysis. The independent review of SCE's analysis performed by Marine Research Specialists substantiates SCE's analysis and also indicates that only a slight increase in CO₂E emissions across SCE's generation portfolio would result from the proposed project. Specifically, Marine Research Specialists found that CO₂E emissions would increase by approximately 726 Metric Tonnes of CO₂E over the anticipated 30 year project life (as demonstrated in Exhibit 12). This figure matches the conclusion reached by SCE considering the economic dispatch scenario. Over a 30 year project life, this is a relatively small number. To provide perspective on this level of CO₂E emissions, the U.S. Environmental Protection Agency has estimated that eight Toyota Prius cars operated for 15,000 miles (45% highway driving and 55% city driving) per year would produce 744 Metric Tonnes of CO₂E over 30 years.

Based on these relatively low levels of greenhouse gas emissions over the life of the project, the Commission agrees with SCE that no mitigation or offset is required.

J. Alternatives

Overview: CEQA Guidelines Section 15126.6 provides direction for the discussion of alternatives to the proposed project. This section requires:

(1) a description of "...a range of reasonable alternatives to the project, or to the location of a project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." [15126.6(a)]

(2) a setting forth of alternatives that "...shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the [CEQA document] need examine in detail only the ones that the lead agency determined could feasibly attain most of the basic objectives of the project." [15126.6(f)]

(3) a discussion of the "no project" alternative, and "...if the environmentally superior alternative is the "no project" alternative, the [CEQA document] shall also identify an environmentally superior alternative among the other alternatives." [15126.6(e)(2)]

(4) a discussion and analysis of alternative locations "...that would substantially lessen any of the significant effects of the project need to be considered in the [CEQA document]." [15126.6(f)(2)(A)]

In defining feasibility, the Coastal Act, Section 30108, states that:

"Feasible" means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors.

In addition, the CEQA Guidelines, Section 15126.6 also defines the feasibility of alternatives and states:

Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site.

Project Purpose: Based on information provided in SCE's *Supplemental Analyses for the Southern California Edison Mandalay Peaker Project* (the relevant section of which has been included as Exhibit 13), SCE selected the Ventura/Santa Barbara County area specifically for development of a peaker plant because it identified two local reliability project needs: (1) providing black-start service for the Mandalay Generating Station and (2) providing additional emergency generation to the Goleta subsystem that may be required in the future but would possibly no longer be needed if a peaker plant were constructed in this area.

Alternative Substation Sites: Once the Ventura/Santa Barbara region was selected, SCE established additional screening criteria to facilitate the selection and comparison of potential project sites within this region. The three criteria that were developed are based primarily on financial and regulatory considerations associated with expedited construction and include: (1) SCE ownership of the property; (2) the presence of 2-3 acres of available land within or adjacent to a 66 or 115kV substation; and (3) the absence of a school or hospital within 1,000 feet of the project site.

Using the three criteria described above, SCE reviewed 56 SCE and customer owned substation sites and SCE properties other than the proposed project site within the cities of Camarillo, Goleta, Carpinteria, Ventura, Oxnard, Isla Vista, Calabasas, Santa Barbara, Fillmore, Gaviota, Malibu, Port Hueneme, Agoura Hills, Moorpark, Thousand Oaks, Ojai, Summerland, Newbury Park, Simi Valley, Saticoy, Somis and Santa Paula. Of these sites, thirty-nine were rejected as infeasible due to a lack of sufficient space, one was rejected as infeasible due to its proximity to an elementary school, and thirteen were rejected as infeasible because SCE did not own the property.

However, three sites were determined to satisfy the criteria and qualify for further review. These sites are the Goleta substation in Santa Barbara County, the Moorpark substation in Moorpark and the Santa Clara substation in Ventura.

Goleta Substation: The City of Oxnard requested that the Commission evaluate SCE's Goleta substation site, located at 1425 Glenn Annie Road in Santa Barbara County, as a feasible environmentally preferable site. This request was due to limited preliminary evaluations by SCE and Commission staff which suggested that the Goleta site met SCE's site selection criteria and that construction of a plant at this location would achieve one of SCE's two priority goals for the project – the enhancement of local reliability by providing additional emergency generation to the Goleta subsystem. However, SCE rejected the Goleta substation site as an alternative site for a peaker plant due to a combination of factors detailed in SCE's June 17, 2008, *Supplemental Analyses for the Southern California Edison Mandalay Peaker*

Project (Exhibit 13) and its June 24, 2008, letter to Commission staff. Many of these factors concerned the need for extensive site preparation activities including grading, vegetation clearance, substation upgrades, several miles of trenching for natural gas supply lines and the redesign of access roads that would have required considerable time, financial commitments and potentially adverse impacts to riparian and chaparral/oak woodland habitats. Specifically, as described in Exhibit 13, SCE notes that construction of a peaker facility at this site would require:

...clearing vegetation from previously undeveloped land, grading hillsides and redesigning the main access road. The gas connection would require trenching through several miles of undeveloped land and include one railroad and one highway crossing. Road redesign would require road realignment near the substation and road widening in several locations. This would require coordination with Santa Barbara County, which may require additional concurrent work along the full three mile length of the road. A minimum of four 66kv lines would require relocation to improve site accessibility.

In addition, SCE further notes in its June 24, 2008, letter to Commission staff:

This site was screened out as a primary site because: 1) the substation site is partially within [U.S. Forest Service] property, and federal licensing would have presented an additional delay; 2) access to the site on Glen Annie Road would have required extensive road improvements; and 3) the required natural gas pipeline was of greater length and had potential for greater environmental concerns than other sites requiring shorter gas line extensions.

Additional issues identified by SCE include the potential need to prepare an EIR due to the possibility that an ammonia leak could result in the release of toxic ammonia gas outside of the facility's fenced limits as well as the potentially lengthy permitting process by the Santa Barbara County Air Pollution Control District, City of Goleta and Santa Barbara County. Furthermore, the Goleta substation site would not meet the project purpose and goals specified above as essential to the proposed project. Specifically, although the installation of a peaker plant at this site would meet the criteria described in the CPUC's Assigned Commissioner's Ruling and provide the Goleta area with emergency generation capacity, black-start support for the Mandalay Generating Station could not be provided at this site. SCE therefore rejected the Goleta substation site for its project.

On October 8, 2008, Commission staff, including staff ecologist Dr. Jonna Engel, visited the Goleta substation site. Based on staff's field observations and review of the activities and development that would be required to build a peaker plant at this site, staff concluded that constructing a peaker at this site would result in adverse environmental impacts more substantial than those associated with development of the Oxnard site. Specifically, use of the Goleta site would require installation of a 2.2 mile long natural gas pipeline along Glen Annie Road and passage through three separate drainages which feed into Glen Annie Creek. Pipeline installation over or under these drainages could increase sedimentation and erosion into Glen Annie Creek and would likely result in loss and disturbance of riparian vegetation and habitat. In addition, construction of a peaker plant at the Goleta substation site would

require extensive modification and expansion of Glen Annie Road to facilitate the ingress and egress of materials and construction equipment. During a recent winter storm, Glen Annie Road was reduced to one lane for approximately 100 feet due to a landslide collapse and in its present condition would not be able to accommodate the 15 foot wide semi truck trailer needed to transport the peaker generator to the site. To allow construction of a peaker plant at the Goleta substation site Glen Annie Road would therefore need to be repaired and widened to its original two lane configuration. At this time, the Commission is not aware of plans by the County of Santa Barbara to carry out this work. Similarly, due to the transport trailer's approximately 15 foot height, numerous oak trees and overhead transmission lines that pass directly over Glen Annie Road at heights of less than 15 feet would also need to be removed, trimmed or temporarily relocated to allow the transport of the peaker generator to the substation site.

Preparation of the construction site itself would also require substantial native vegetation clearing, grading and fill. SCE investigated two potential peaker plant installation locations at the substation site and both would require the removal of native chaparral/oak woodland habitat and extensive landform alteration. This work would result in the removal of some of the few remaining stands of native vegetation that remain in the area following the devastation incurred by the recent Gap Fire which burned nearly 100% of the vegetation in the portion of Los Padres National Forest that borders the substation site. Raptors roost, and likely nest, in the native and non-native trees that would need to be removed to accommodate construction of the peaker plant at this site. The extensive grading and cut and fill work that would be required to accommodate the peaker plant's footprint would also affect several additional drainages and tributaries that flow into Glen Annie Creek, potentially resulting in increased sediment loads and alteration of this creek. For these reasons, the Commission agrees with SCE that the Goleta substation alternative site is not environmentally preferable to the proposed project site.

Moorpark Substation: SCE's documents of June 17 and 24 also detail the factors supporting its rejection of the Moorpark substation. Although this site clearly met the Assigned Commissioner's Ruling criteria described above, provided sufficient space for development of the peaker plant and would likely have presented fewer potential environmental impacts when compared to the proposed project site (due to its location in a suburban area with no known sensitive species, habitats or resource protection areas within the immediate vicinity), after additional review SCE determined that this site did not meet the project purpose. Specifically, the construction of a peaker plant at the Moorpark substation site would not provide the same local reliability as the proposed project site (i.e. both black-start support of Mandalay Generating Station and emergency generation for the Goleta subsystem would not be possible from this location). This alternative site was therefore rejected as a feasible alternative.

Santa Clara Substation: The Santa Clara substation site was also rejected by SCE based on additional site specific review. As noted by SCE in its June 17, 2008, *Supplemental Analyses for the Southern California Edison Mandalay Peaker Project* (Exhibit 13),

This site possesses significant engineering challenges that may make it non-constructible. This site was rejected in 2007 because it could not be constructed on the required schedule and more favorable sites existed. Greater environmental impacts and fewer reliability benefits, coupled with identified construction issues continue to weigh against this site.

The Santa Clara substation site presented a number of engineering and construction challenges due to the topography of the site and its location within hilly terrain. As noted by SCE

The property is located in fairly steep terrain and is basically a small canyon which was graded to allow for the installation of the [existing] Santa Clara substation. The west side of the property located outside of the fenced area of the existing substation is on a steep slope covered primarily by native vegetation. The excess property in this location is also crisscrossed by the many existing 66 kv and 230 kv transmission lines making this area unavailable for development. Another area exists on the southeast corner of the property which appeared initially to be large enough for a peaker installation. However, this area would require extensive grading due to the steep slope, encroach on the existing substation and access road and require large retaining walls to be installed in order to try and squeeze the peaker onto the site.

SCE has estimated that approximately 75,000 cubic yards of material would need to be imported to the site to facilitate construction.

Due to the extensive engineering and construction challenges that it presents, the Santa Clara substation site does not provide a feasible alternative site for the proposed project.

Ormond Beach and Tayshell Substations: Based on Commission staff's review of the information submitted by SCE regarding its site selection process, namely the June 17, 2008, *Supplemental Analyses for the Southern California Edison Mandalay Peaker Project* and SCE's June 24, 2008, letter to Commission staff, two sites in addition to Moorpark, Goleta and Santa Clara also appear to satisfy the selection criteria and project purpose detailed above. These sites include the Ormond Beach substation in Oxnard, and the Tayshell substation in Ventura. SCE's rejection of these sites appears to have been based on the assumption that 2-3 acres of available land is not available at either site. However, Commission staff's review of the aerial photographs that were used to formulate this conclusion suggests that two to three acres of undeveloped land may indeed exist in these locations. In response to Commission staff's request for additional information regarding the rejection of these sites, SCE has suggested that much of its property at the Ormond Beach site is comprised of transmission line right-of-ways and that the presence of existing transmission lines that are not readily visible from aerial photographs would preclude the construction of the peaker facility here. Regarding the Tayshell site, SCE has provided subsequent information to Commission staff which suggests that SCE's property at this site comprises less than the 2-3 requisite acres needed for peaker plant construction.

Customer Substations: Although SCE has specified that only property it currently owns would be acceptable as a site for the proposed project, its June 17, 2008, *Supplemental Analyses for the Southern California Edison Mandalay Peaker Project*, nevertheless includes an assessment of 20 customer owned substations. Initial review by SCE and Commission staff has suggested that 13 of these sites would potentially provide enough open land in close proximity to a 66 or 115kV substation and sufficiently far from a school or hospital to serve as acceptable location for a peaker unit. However, as described in the June 17, 2008, *Supplemental Analyses for the Southern California Edison Mandalay Peaker Project*, SCE rejected five of these sites because they are not located within the Santa Clara transmission subsystem and “the Mandalay Generating Station can only be black-started from within the Santa Clara subsystem when the peaker is connected to a non-bulk power 66 kv substation.” In other words, SCE rejected three sites within the Goleta subsystem and two sites within the Moorpark subsystem because construction of a peaker unit at these sites would not meet the project purpose by simultaneously eliminating the need for an additional future project that would provide the Mandalay Generating Station with black-start support. As noted previously, providing the Mandalay Generating Station with black-start support was one of the two principle local reliability projects that resulted in SCE’s selection of the Ventura/Santa Barbara region for a peaker facility.

However, the other principle local reliability project that drove the selection of the Ventura/Santa Barbara region, providing additional emergency generation to the Goleta subsystem, would potentially be resolved by locating the peaker unit within the Goleta subsystem. As SCE notes, a peaker facility located within the Goleta transmission subsystem would still provide “important local reliability benefits to the Goleta subsystem that would otherwise require the construction of a new generation project in the Santa Barbara area.” SCE also states that if a Goleta site were chosen, “a second generation project would need to be proposed and constructed in the Oxnard area [at a future date] in order to provide black-start capability [for the Mandalay Generating Station²⁷].” In other words, each of the three customer owned substation sites within the Goleta area appears to meet most of SCE’s site selection criteria (with the exception of the criteria which specifies that SCE should already own the proposed peaker unit site). Nevertheless, SCE has rejected these sites and appears to have prioritized the sites with the potential to eliminate the necessity for a future project which would provide the Mandalay Generating Station with black-start support (i.e. sites which would allow the peaker unit itself to provide this black-start support). In its letter of June 25, 2008, to Commission staff, SCE explained this prioritization as follows,

The Santa Clara substation has three emergency tie-lines that can be used to route emergency power into the Goleta 66kv subsystem network. When the Santa Clara subsystem is used to provide power simultaneously to both the Santa Clara and Goleta subsystems, local generation must be turned on inside the Santa Clara 66kv subsystem to provide additional energy, voltage and frequency support to this area to anchor it while bypass power is being routed to the north. Existing cogenerators and the Mandalay [Generation Station] peaker can be used to provide a portion of this anchor. The

²⁷ It is important to note that because a peaker unit currently exists at the Mandalay Generating Station, a small black start generator could be added to this peaker unit which would then be able to provide black start support for the generating station.

[proposed] new McGrath Beach peaker would be used to provide the remaining power needed to anchor the system.

According to SCE, a peaker unit within the Santa Clara subsystem could potentially provide both additional emergency generation to the Goleta subsystem as well as black-start support for the Mandalay Generating Station.

SCE therefore rejected those sites outside of the Santa Clara subsystem and seriously considered only those sites that would allow the peaker unit to provide the Mandalay Generating Station with black-start support. With this additional selection criteria, SCE evaluated the remaining eight customer owned substation sites that had already met all the other selection criteria. Of these eight sites, all but one were rejected after a review of the transmission circuit distances between the site and the Mandalay Generating Station revealed that they were located beyond a 17 circuit mile radius. As noted by SCE, “in the Oxnard area, a black-start generator must be located within 10-12 circuit miles to allow a successful black-start [of the Mandalay Generating Station].” As demonstrated in SCE’s June 17, 2008, *Supplemental Analyses for the Southern California Edison Mandalay Peaker Project*, only the Unioil substation site is located within this distance. As SCE notes in reference to this site, “The Unioil 66kv substation is located within the DCOR oil processing facility located adjacent and to the west of the [proposed] project site and between it and the ocean. Therefore, connecting the peaker to this location would not move its proposed footprint. As such, the existing site remains the preferred alternative.” Essentially, because the Unioil substation is located directly to the west of the proposed site, the use of this substation would require a project that would be essentially the same as the one currently proposed.

EF Oxnard Alternative: Another site considered by SCE was the property owned by EF Oxnard Inc. As noted by SCE

EF Oxnard contacted SCE in March 2007 suggesting that its site would be suitable for the Proposed Project. At that time, SCE conducted a preliminary screening investigation of the site and concluded that the site did not meet its initial screening criteria. SCE has reviewed this site again as part of its current review and has reached the same conclusion.

The primary reason the site is not suitable is that it does not possess the required amount of unoccupied land to house the project’s 2-3 acre footprint. The land that was identified by EF Oxnard as available for SCE’s use contains less than 0.5 acres of available space. Even assuming that existing structures could be removed, only 1 acre of space is available in which to construct both the project and a new substation.

The existing substation and transmission lines at this location were not designed to accommodate more than a single generating unit. The existing underground 66 kV transmission line is located in a vault that would need to be expanded to house a second line. In addition, a new loop substation would need to be constructed to accommodate the additional SCE peaking unit. This new substation would require an additional 0.25 acres of contiguous fenced space.

Because there is insufficient space at this location to construct the Proposed Project, this alternative does not meet the purpose and need of the Proposed Project.

Mandalay Generating Station Alternatives: In addition to those alternative locations and projects detailed above, SCE also considered several project alternatives associated with the Mandalay Generating Station and the peaker unit that currently exists on the Mandalay Generating Station site. SCE's rejection of these options is based on a variety of factors and is excerpted from SCE's June 17, 2008, *Supplemental Analyses for the Southern California Edison Mandalay Peaker Project* and included below.

Use the Existing Mandalay Generating Station Peaker

Using the existing Reliant Energy peaker does not meet the purpose and need of the Proposed Project. The output of this peaker was taken into account when the need for additional generation was identified by the CAISO and the CPUC. Therefore, the CPUC order to construct 250 MW of new generation would not be satisfied by assuming that the existing unit is providing the needed electricity.

Further, this unit is not capable of meeting the grid reliability requirements needed in the area. The Reliant peaker has been in operation since 1970 and is capable of producing up to 140 MW of energy on peak, although its operation is limited to approximately 85 hours per year due to air quality permit emission limits. The equipment is over 30 years old and has been discontinued, such that parts are no longer readily available in the event of a breakdown. This unit is not configured to either black-start or to provide auxiliary power to the main Mandalay generators; therefore, it cannot provide black-start services. Due to its limited hours of operation, it cannot provide energy to the Goleta subsystem during extended outages. For these reasons, the existing unit does not have the desired reliability characteristics for an emergency function.

Because it was concluded that unit does not conform to the requirements of the CPUC directive, and neither provides additional energy or capacity benefits nor the required local reliability benefits, this alternative does not satisfy the purpose and need of the Proposed Project.

Replace the Existing Mandalay Generating Station Peaker

The existing Mandalay Generating Station peaker is operated by Reliant Energy. SCE neither owns property nor makes business decisions on behalf of Reliant Energy. SCE is not aware of any plans for Reliant Energy to retire this unit, which currently supplies power to the SCE system and produces revenue for Reliant's shareholders. Construction on the Reliant site was originally rejected in 2007 because SCE-owned land was needed to meet the required schedule. Although the Summer 2007 deadline has passed, timing is still an issue.

As noted above, the CPUC directive requires [up to] 250 MW of new SCE-owned generation. Therefore replacing the existing 140 MW peaker with the proposed 45 MW peaker would not meet the purpose and need of the Proposed Project. A project capable of supplying a net total of 185 MW of power would be needed to ensure that an additional 45 MW of power would be available. This would require designing and permitting a significantly larger and completely different project than what has been proposed. The Proposed Project does not include removal and replacement of existing equipment, only the construction of a project on clear and available land. Such a project would trigger lengthy CEC review, which is inconsistent with project objectives.

Finally, any new project would be SCE-owned. This would require independent support equipment in order to provide mechanical and electrical separation from the Reliant facility. Even assuming the original 45 MW project, this requirement would result in a larger footprint (2-3 acres) than is being utilized by the existing equipment, which would require siting the unit at a different location on the property.

For all these reasons, replacing the existing unit with the Proposed Project is not viable, and would not meet the purpose and need of the Proposed Project.

SCE also examined the feasibility of constructing the peaker plant on the Reliant Mandalay Generating Station site. As noted by SCE in a letter provided to Commission staff on February 25, 2009:

Siting the proposed peaker plant on the Reliant Mandalay Generating Station (“RMGS”) site to replace the existing Reliant peaker does not meet the purpose and need of the Peaker project. While Reliant maintains an active permit on its existing peaker, its black start equipment is not functional. Moreover, if the new unit were sited within the Reliant Plant, the entire Reliant Plant would have to upgrade to meet the new National Electric Reliability Council Critical Infrastructure Protection guidelines and reopen its California Energy Commission and Ventura County Air Pollution Control District permits. Also, the requisite 2-3 acres of open land needed to construct the Peaker Project does not exist at the Reliant Mandalay property, except in the northwest corner, and this site has additional limitations that make it more environmentally impacting [specifically, this area is in close proximity to least tern and snowy plover nesting sites]. Finally, SCE has spoken to Reliant and they are not interested in this type of arrangement.

Renewable Energy/Demand Side Management/Energy Efficiency Alternative: SCE considered a variety of alternative energy projects in its June 17, 2008, *Supplemental Analyses for the Southern California Edison Mandalay Peaker Project*, including wind and solar power projects and energy efficiency systems. Due to the specific criteria within the Assigned Commissioner’s Ruling which requires the development of new sources of black start capable dispatchable energy, these alternatives were rejected as incapable of meeting the project goals. As noted by SCE,

Renewable energy, demand side management and energy efficiency projects are valuable to help reduce demand on SCE's system; however, they do not fulfill the purpose and need for the Proposed Project. Projects in these three categories are neither black start capable or dispatchable as required by the CPUC directive. More importantly, none of these project categories have the physical characteristics required to provide black start capability to the Mandalay Generating Station, nor to provide the voltage support inside the Santa Clara system that is required to allow additional emergency generation to be routed into the Goleta system via the 66 kV network.

SCE additionally notes that

Wind and solar project cannot be counted on to start at all times and provide stable, continuous power over an extended period of time (i.e., 12-24 hours) as is required during emergency situations. The wind is not always blowing and the sun is not always shining. Although demand side management and energy efficiency projects are effective in reducing the demand for electricity, they do not generate additional electricity, and therefore cannot provide reliability benefits.

Existing Local Cogeneration Alternative: As noted by SCE in its June 17, 2008, *Supplemental Analyses for the Southern California Edison Mandalay Peaker Project*, local cogeneration facilities were considered as a project alternative, however,

The output of all existing generation resources, including cogenerators, was taken into account by the CAISO and the CPUC prior to their determination that more peak generation was necessary. Therefore, the CPUC order to construct 250 MW of new generation would not be satisfied by assuming that existing cogeneration units can provide the needed electricity.

Further, because the output of cogenerations are designed to remain stable to support industrial processes, they are not dispatchable on peak, nor can they provide the other system reliability benefits that would be provided by a peaker. Finally, these units are not configured for black start capability and have already been taken into consideration when determining the amount of generation needed within the Santa Clara Subsystem to allow emergency power to be routed into the Goleta subsystem.

Consequently, these units do not meet the purpose and need of the Proposed Project.

No Project Alternative: SCE's June 17, 2008, *Supplemental Analyses for the Southern California Edison Mandalay Peaker Project*, also included an analysis of the "no project alternative." As stated by SCE, this alternative was rejected because

The Ventura/Santa Barbara system west of the Pardee Substation area has been identified as the area on the SCE system most in need of the proposed project. In this area, local reliability needs include: 1) providing black start service for the Mandalay Generating Station, and 2) providing additional emergency generation to the Goleta

subsystem through the 66 kv system. No other projects have been proposed that will provide the reliability benefits of the proposed project. If the proposed project is not constructed, one or more future generation or transmission projects will need to be constructed in this same area to address these issues.

This alternative does not satisfy the fundamental purpose and need for the project.

The Commission agrees that no other projects have been proposed that will provide the reliability benefits of the proposed project and that the “no project alternative” does not satisfy the fundamental purpose and need for the project as specified by SCE.

Conclusion: As detailed in the findings above, the Commission finds that, within the meaning of the Coastal Act and California Environmental Quality Act of 1970, there are no feasible alternatives which would substantially lessen any significant adverse effect which the proposed project may have on the environment.

K. Cumulative Impacts

As noted by SCE in its June 17, 2008, *Supplemental Analyses for the Southern California Edison Mandalay Peaker Project*,

According to CEQA Guidelines Section 15065(a)(3), “cumulatively considerable” means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects. Given its size and proximity to the proposed project site, the environmental impacts from the Northshore at Mandalay Bay residential development, a 292-unit low-density development approximately 750 feet southeast of the proposed project site, were evaluated as part of the proposed project’s cumulative impacts analysis.

The [uncertified] MND concluded that the proposed project would not have an impact on agricultural resources, geology/soils, hydrology/water quality, land use/planning, mineral resources, population/housing, or recreation. As such no mitigation was required for these areas. Since the proposed project itself will not cause adverse impacts in these areas, it will not, in conjunction with the Northshore development, cause cumulatively considerable impacts.

While the proposed project will have some less than significant impacts with respect to aesthetics, air quality, biological resources, cultural resources, hazards and hazardous materials, noise, public services, transportation/traffic, and utilities and service systems, the incremental effects of the proposed project are not significant cumulative impacts when combined with the impacts of the Northshore development.

The Commission supports this analysis, especially given the current uncertainty about whether or not the Northshore development project will proceed. In addition, based on comments submitted by the City of Oxnard regarding the potential role that the proposed project would have on extending the use and presence of the Mandalay Generating Station,

SCE examined the likelihood that this facility would be removed within the near future and reviewed the potential effect that the proposed project would have on allowing this generating station to continue to operate beyond when it may be otherwise required to cease operation. In a June 30, 2008 letter SCE states:

SCE is not aware of any plans for Reliant Energy's Mandalay Generating Station to shut down. Mandalay's two steam boilers (2-215 MW) and one peaker (140 MW) currently provide 560 MW of peak power to the SCE system under existing contracts. SCE has not identified any California Independent System Operator (CAISO), California Energy Commission (CEC), California Public Utility Commission (CPUC), Western Electricity Coordinating Council (WECC), California Ocean Protection Council (OPC), State Water Resources Control Board (SWRCB), or other federal, state, or local agency study or report that concludes that the plant is not needed, cannot be repowered, cannot meet Section 316(b) of the federal Clean Water Act related to once-through cooling (OTC), or is otherwise scheduled to shut down. On the contrary, recent reports have concluded that the existing coastal power plant fleet continues to provide important peak reliability services to the California grid²⁸, there are benefits to modernizing the current fleet at existing locations²⁹, repowering existing facilities is favored in both state law and state policy³⁰, and that the Mandalay plant can be converted to comply with recent OTC requirements.³¹

The conclusion that the facility will be shut down because it does not have a Reliability Must Run (RMR) contract is not correct. RMR contracts identify plants that must run to provide energy or capacity to meet peak electric load under normal operating conditions because insufficient generation currently exists inside of a transmission constrained area. Plants that provide other important location-specific grid reliability or emergency functions are not covered under the RMR process. The fact that an RMR contract does not exist does not mean that a plant is not needed at a particular location.

It is difficult to predict the future of any particular plant. Each owner must assess the economics, pros and cons of restricting operations, retrofitting, repowering, or shutting down a plant as it ages. In the Ventura/Santa Barbara County area, where (i) electricity demand levels are similar to existing local generating capacity, (ii) topography and other factors prevent major new transmission lines from easily being sited to bring additional power into the area, and (iii) the configuration of the system results in a considerable potential for islanding during grid emergencies, SCE expects

²⁸ "Electric Grid Reliability Impacts from Regulation of Once-Through Cooling in California," April 2008, prepared for the OPC and SWRCB by Jones & Stokes. pp. 17-19

²⁹ Ibid pp. 19-29. Also, "Scenario Analyses Of California's Electricity System: Preliminary Results For The 2007 Integrated Energy Policy Report. Appendix A. Analysis Of Transmission Implication Of Aged Power Plant Retirement And Replacement," August 2007, prepared for the CEC by Navigant Consulting, Inc. (CEC-200-2007-010-AD2-AP)

³⁰ "Electric Grid Reliability Impacts from Regulation of Once-Through Cooling in California," April 2008, prepared for the OPC and SWRCB by Jones & Stokes. p. 55

³¹ "California Coastal Power Plants: Alternative Cooling System Analysis," February 2008, prepared for the OPC by Tetra Tech, Inc.

that it will continue to be important for the foreseeable future to maintain the current level of generation at or near its present location.

The City of Oxnard Planning Department staff and several members of the public also raised concerns regarding the potential for the proposed project to facilitate the potential development of offshore liquefied natural gas (LNG) marine terminals in the Southern California Bight by providing a site for the natural gas pipelines associated with these marine facilities to come ashore. Although it is important to note that future development of LNG marine terminals within the Southern California Bight would require additional environmental review and action by a wide variety of state and federal agencies, including the Coastal Commission, and that none of these types of facilities have been approved within state or federal waters off the coast of California,³² it is the understanding of the Commission that the consideration of the McGrath/Mandalay Beach area as a potential landfall site for natural gas pipelines is based primarily on the proximity of this area to existing coastal and inland SoCal Gas natural gas infrastructure (including the Center Road Valve Station and Line 324 which connects the Center Road Station to the Saugus Station in Santa Clarita) and the current industrial use and zoning designation of this area. Because the proposed project would influence neither the zoning designation nor the existing large diameter gas transport pipeline infrastructure of the area, it would not facilitate the potential development of an LNG marine terminal in the Southern California Bight. Further support for this conclusion comes from the fact that the final environmental impact statement/environmental impact report (EIS/EIR) for the BHP Billiton LNG marine terminal project considered the same pipeline landing site at McGrath/ Mandalay Beach as a potential project alternative several years prior to SCE's proposed use of its land within this area as site of a peaker plant project – in other words, the area has been and may continue to be considered as a landing site for an LNG pipeline irregardless of the proposed peaker plant.

Based on the information and findings included above, the Commission finds that the proposed project would not result in adverse cumulative impacts.

L. Environmental Justice³³

The purpose of Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low income Populations," is to identify and address whether high and adverse human health or environmental effects are likely to fall disproportionately on minority and/or low income populations of the community. In guidelines developed by the U.S. EPA to assist federal agencies in evaluating environmental justice impacts, a minority and/or low income population is said to exist if the minority and/or low income population percentage of the affected area is 50 percent or more of the area's general population. Further,

³² The only LNG marine terminal proposal within the project area, Clearwater Port, has been delayed indefinitely due to recent changes in growth forecasts in California and natural gas market conditions.

³³ The issue area of environmental justice is not one that is addressed by the policies of Chapter 3 of the Coastal Act or the City of Oxnard LCP. Accordingly, the avoidance and mitigation of any adverse effects on the environment that are significant only because of their disproportionate impacts on minority or low-income populations are outside the scope of the Commission's authority under both the Coastal Act and the City's LCP. Environmental justice concerns have been raised by the City and members of the public, however, so this section constitutes the Commission's response to these comments.

the Council on Environmental Quality guidance on this issue suggests that impacts may be felt when minority and/or low income populations in potentially affected areas are present in proportions meaningfully greater than those of the general population of the area. The thresholds for poverty level for an individual and a family of four in 2000 were income levels of \$8,501 and \$17,029, respectively³⁴. The Council on Environmental Quality defines the term “minority” as persons from any of the following groups: Black/African American; Asian; Native Hawaiian or Other Pacific Islander; American Indian or Alaska Native; and Hispanic, regardless of race. Additionally, for the purposes of this analysis, “minority” also includes all other nonwhite racial categories such as “some other race” and “two or more races.”

In evaluating this issue, it is important to first examine the type, likelihood and magnitude of potential adverse human health or environmental effects that could result from the proposed project and then examine whether or not these effects would be felt disproportionately by minority and/or low income populations within the project area. As detailed above, potential issues raised by the proposed project that could adversely affect the health or environmental quality of the local community include the air emissions, noise levels, water discharges and visual blight associated with the peaker facility. Water discharges and visual blight associated with the proposed project are discussed in previous sections above and with the adoption of the recommended special conditions; the Commission finds that these would not have significant adverse effects on the health or environmental quality of the local community.

Regarding the proposed project’s air emissions and potential adverse health impacts associated with these emissions, the Ventura County Air Pollution Control District (VCAPCD) provided Commission staff with two memoranda, dated November 27, 2006 and June 6, 2007, that provide the results of the VCAPCD’s health risk assessment of the proposed project. This assessment is based on computer modeling of anticipated emissions which factors in local weather conditions and the pollution control equipment which would be in use at the proposed facility. Measurements were made at 25 meter and 100 meter intervals to a distance of two kilometers and as detailed in Exhibit 14, the VCAPCD concluded that the calculated health risks associated with the proposed project were below the permit issuance threshold levels established by VCAPCD. These conclusions are supported by an assessment carried out by SCE on September 8, 2008, titled *Maximum Potential Air Quality Impacts From McGrath Peaker Project Operations*, also provided in Exhibit 14.

Noise impacts associated with the proposed project were also assessed during both the City of Oxnard’s MND process and the Commission’s review. Although no sensitive noise receptors (i.e. recreation areas, residences, schools, etc.) are located near the proposed project site, noise models were developed and reviewed. The results of these models show that noise levels associated with the proposed project would not exceed ambient levels at the property line of the project site. Therefore, because the proposed project, as conditioned, will not have significant adverse effects, the project could not disproportionately impact any segment of the local community, including low-income and minority populations.

³⁴ U.S. Census Bureau, American Fact Finder Database. <http://factfinder.census.gov>.

Nevertheless, assuming a worst-case scenario in which the proposed project were to adversely affect the health or environmental quality of the community in closest proximity to the project area, the Commission examined the demographic and socioeconomic composition of this community to determine whether or not low-income and/or minority populations would be disproportionately affected. Given the proposed infrequent use, relatively small size and specific design of the project being considered, even under a worst-case scenario the likelihood is very low that the proposed project would adversely affect human health or environmental resources at a distance greater than a half-mile from the project site. Therefore, although nearly 80% of the population within the greater City of Oxnard is made up of minority groups (based on U.S. Census Bureau survey data from 2000), it is more appropriate to consider the specific composition of the communities and populations within the immediate project area.

Spatial representation of the 2000 census data provided in SCE's report titled *Supplemental Analyses for the Southern California Edison Mandalay Peaker Project* show that in contrast to the minority composition of the rest of the City of Oxnard, the closest residential area to the project site, Oxnard Shores, is home to a population that is at least 80% white. Minority representation in Oxnard's population increases to the east and southeast of the proposed project site as one travels further inland. Based on the spatial representations of year 2000 U.S. Census Bureau survey data provided to Commission staff by SCE, the nearest residential areas with a minority population of greater than 40% are over 1.5 miles southeast of the project site and at least twice as far away as the nearest part of the Oxnard Shores community. Therefore, although the proposed project would not result in adverse impacts to human health or the environment, even under a worst case scenario in which the closest residential community to the project site were to experience some adverse impact, this impact would not be disproportionately felt by a minority community. Specifically, the less than 20% minority representation in Oxnard Shores is less than half of the average minority percentages in Ventura County (43.3 percent) and in the State of California (53.3 percent), and well below the 50-percent threshold considered when evaluating disproportionate impacts on minority populations.

In addition, the spatial data of U.S. Census Bureau survey data provided by SCE to the Commission show that there are substantially fewer residential areas within a three mile radius of the proposed project that are below the poverty level than there are in Ventura County and the greater State of California. These communities within three miles of the project site are below the 50-percent threshold considered when evaluating disproportionate impacts on low-income populations. Other than the proposed Northshore at Mandalay Bay residential development (which may no longer be built due to foreclosure and is not proposed to contain affordable housing), none of the adjacent land uses in the project area include residential. The only existing residential areas in the vicinity of the proposed project are to the south of Fifth Street in the Oxnard Shores area previously described. According to information provided to the Commission by SCE, less than 6.5 percent of the population in this area was below the poverty level in 2000. This percentage is substantially lower than the percentages of the population below the poverty level in Ventura County (9.2%) and in the State of California (14.2%). This percentage does not meet the 50-percent threshold established by the U.S. EPA in guidelines developed to assist federal agencies in evaluating

environmental justice impacts. The 6.5% figure also does not meet the Council on Environmental Quality guidance on this issue which suggests that impacts may be felt when minority and/or low income populations in potentially affected areas are present in proportions meaningfully greater than those of the general population of the area.

Overall, the Commission finds that the proposed project would not adversely affect human health or environmental resources within the project area and local community, that the residential area and community within the immediate vicinity of the proposed project is not comprised of a predominantly minority and/or low income population, and that these populations would not be disproportionately impacted in an adverse way by the proposed project.

M. CEQA

Section 13096(a) of the Commission's administrative regulations requires Commission approval of coastal development permit applications to be supported by a finding showing the application, as conditioned by any conditions of approval, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity may have on the environment.

Because the proposed project has the potential to result in significant adverse environmental impacts, the Commission has identified and adopted ~~six~~ eleven special conditions necessary to avoid, minimize, or mitigate these impacts. With the inclusion of these ~~six~~ eleven special conditions, the Commission finds that, within the meaning of the California Environmental Quality Act of 1970, there are no further feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect which the proposed project may have on the environment. Therefore, the proposed project, as conditioned, has been adequately mitigated and is determined to be consistent with CEQA.

Click on the link below to go to the exhibits.

Appendix A: List of Exhibits and Substantive File Documents

List of Exhibits:

1. Project Site Plan, Transmission Line Route and Natural Gas Pipeline Route
2. California Public Utilities Commission Rulemaking No. 06-02-013
3. Photographs of Existing Visual Condition of Site
4. SCE's Draft Landscaping, Restoration and Invasive Plant Species Removal Plan
5. City of Oxnard Planning Commission and City Council Resolutions
6. Memo from California Coastal Commission Staff Ecologist Dr. Jonna Engel
7. LCP Land Use and Zoning Map No. 2 (Project Area)
8. Relevant Mitigation Measures from project Mitigated Negative Declaration
9. Relevant Mitigation Guidelines from California Burrowing Owl Consortium's April 1993, "Burrowing Owl Survey Protocol and Mitigation Guidelines"
10. SCE's McGrath Beach Peaker Project Greenhouse Gas Emission Discussion and Construction Emission Calculations
11. California Energy Commission, Coastal Power Plant Siting and Zoning Map
12. Marine Research Specialists, "SCE McGrath Beach Peaker Project Greenhouse Gas Emissions," July 1, 2008
13. Excerpt from SCE's *Supplemental Analyses for the Southern California Edison Mandalay Peaker Project*, June 17, 2008
14. SCE's March 19, 2009 Letter to Commission Staff regarding Air Quality Impacts with attached memoranda from Ventura County Air Pollution Control District
15. SCE's February 5, 2009 Letter to Commission Staff regarding Environmentally Sensitive Habitat Areas with attached memorandum from Glenn Lukos Associates

Substantive File Documents:

City of Oxnard Coastal Land Use Plan, last updated May 2002

City of Oxnard Coastal Zoning Ordinance, last updated February 2004

City of Oxnard Mitigated Negative Declaration No. 07-02 for Coastal Development Permit No. PZ-06-400-5, SCE Peaker Plant, May 11, 2007.

City of Oxnard Planning Commission Staff Report for Coastal Development Permit No. PZ-06-400-5, SCE Peaker Plant, June 28, 2007.

City of Oxnard Planning Commission Staff Report for Appeal of the Planning Commission's Denial of Planning and Zoning Permit No. 06-400-5 (Coastal Development Permit), July 12, 2007.

City of Oxnard Planning Commission Resolution No. 2007-19, June 28, 2007.

City of Oxnard City Council Resolution No. 13,340, July 24, 2007.

- City of Oxnard, Development Services Director report to City Council re: Report and Direction to Staff on Water Supply Management and Traffic Level of Service Policies Related to the 2020 General Plan Update, November 30, 2007.
- City of Oxnard, Letter to Southern California Edison Company re: Coastal Development Permit PZ 06-400-5, Proposed SCE Peaker Plant, Request for Additional Environmental Analysis for the Mitigated Negative Declaration, March 15, 2007.
- City of Oxnard, Letter to California Coastal Commission re: Notice of Final Decision on Coastal Development Permit No. 06-400-5, July 25, 2007.
- City of Oxnard, Letter to California Coastal Commission re: Appeal of the City of Oxnard's Denial of the Edison Peaker Plant Proposal; Appeal No. A-4-OXN-07-096, May 6, 2008.
- City of Oxnard, Letter to California Coastal Commission re: Appeal of the City of Oxnard's Denial of the Edison Peaker Plant Proposal; Appeal No. A-4-OXN-07-096, May 12, 2008.
- City of Oxnard, Letter to California Coastal Commission re: Appeal of the City of Oxnard's Denial of the Edison Peaker Plant Proposal Appeal No. A-4-OXN-07-096, July 18, 2008.
- City of Oxnard, Letter to California Public Utilities Commission re: Oxnard Statement Concerning Application A.07-12-029, Presented at CPUC Workshop, March 2, 2009.
- California Coastal Commission Staff Report A-4-OXN-00-172
- California Coastal Commission Staff Report OXN-MAJ-1-00
- California Coastal Commission Staff Report A-4-OXN-07-096 (Substantial Issue)
- California Coastal Commission, "Designation of Coastal Zone Areas Where Construction of an Electric Power Plant Would Prevent Achievement of the Objectives of the California Coastal Act of 1976," September 1978 (revised in 1984 and re-adopted in December 1985).
- California Public Utilities Commission Rulemaking Nos. 05-12-013 and 06-02-13.
- California Regional Water Quality Control Board, Los Angeles Region, "Notice of Intent to Comply with General Waste Discharge Requirements and National Pollutant Discharge and Elimination System Permit," December 4, 2006.
- California Department of Parks and Recreation, Letter to City of Oxnard - Planning and Environmental Services Division re: MND 07-02 Edison Peaker Plant, June 15, 2007.
- United States Department of the Interior – Fish and Wildlife Service, Letter to City of Oxnard - Planning and Environmental Services Division re: Comments on the Mandalay Peaker Project, Mitigated Negative Declaration, June 18, 2007.

Ventura County Air Pollution Control District, Memorandum: Engineering Analysis of Application No. 07891-100, February 1, 2007.

Ventura County Air Pollution Control District, Memorandum: Health Risk Assessment for Southern California Edison (Application No. 07891-100), November 27, 2006.

Ventura County Air Pollution Control District, Memorandum: Health Risk Assessment for Southern California Edison, June 6, 2007.

Ventura County Watershed Protection District – Planning and Regulatory Division, Memorandum: RMA 07-027 Mandalay Peaker Project, June 1, 2007.

California Burrowing Owl Consortium, “Burrowing Owl Survey Protocol and Mitigation Guidelines,” April 1993.

California Energy Commission, “Opportunities to Expand Coastal Power Plants in California – Staff Report,” May 30, 1980.

Northshore at Mandalay Bay Draft Environmental Impact Report, August 1998.

Northshore at Mandalay Bay Final Environmental Impact Report, March 1999.

Sierra Club - Los Padres Chapter, Letter to California Coastal Commission, August 2, 2008.

Southern California Edison Company, Letter to City of Oxnard – Planning and Environmental Services Division, February 16, 2006.

Southern California Edison Company, Letter to City of Oxnard – Planning and Environmental Services Division, April 19, 2007.

Southern California Edison Company, Letter to City of Oxnard – Planning and Environmental Services Division, June 13, 2007.

Southern California Edison Company, Letter to City of Oxnard – Planning and Environmental Services Division, June 27, 2007.

Southern California Edison Company, Appeal from City of Oxnard CDP No. 06-400-05, August 9, 2007.

Southern California Edison Company, Letter to California Coastal Commission (with attachments), February 21, 2008.

Southern California Edison Company, Letter to California Coastal Commission (with attachments), March 21, 2008.

Southern California Edison Company, Letter to California Coastal Commission (with attachments), April 9, 2008.

Southern California Edison Company, Letter to California Coastal Commission (with attachments), June 24, 2008.

Southern California Edison Company, Letter to California Coastal Commission (with attachment), June 17, 2008.

Southern California Edison Company, Letter to California Coastal Commission, June 26, 2008.

Southern California Edison Company, Letter to California Coastal Commission (with attachments), June 30, 2008.

Southern California Edison Company, Letter to California Coastal Commission (with attachments), October 7, 2008.

Southern California Edison Company, Letter to California Coastal Commission (with attachments), February 5, 2009.

Southern California Edison Company, Letter to California Coastal Commission (with attachments), February 20, 2009.

Southern California Edison Company, Letter to California Coastal Commission (with attachments), March 19, 2009.

Southern California Edison Company, Letter to California Coastal Commission (with compact disc and index of documents from the City of Oxnard administrative record), May 7, 2008.

Southern California Edison Company, Letter to California Coastal Commission re McGrath AQ Impacts, October 3, 2008.

Southern California Edison Company, Letter to California Coastal Commission re Environmental Justice, October 10, 2008.

Southern California Edison, Response to March 2009 Staff Report (with attachments), April 2, 2009.

Southern California Edison, Letter to California Coastal Commission re LCP Policy 57, April 3, 2009.

Southern California Edison, Letter to California Coastal Commission re Conservation Easement (with attachments), April 3, 2009.

Southern California Edison, Letter to California Coastal Commission re Letters in Support of Peaker Project (with attachments), April 9, 2009.

Calleguas Municipal Water District, Letter to Southern California Edison Company, January

15, 2009.

California ISO, Letter to California Coastal Commission, March 10, 2009.

Southern California Edison Company, Letter to Oxnard City Clerk re: Administrative Appeal of the June 28, 2007 Decision of the Oxnard Planning Commission regarding the Southern California Edison Company Mandalay Peaker Project (PZ 06-400-5) with Attachments, July 10, 2007.

Southern California Edison Company, "Fact Sheet: Mandalay Peaker Unit Project," January 2007.

Southern California Edison Company, "Responses to Public Comments from the June 28, 2007, Oxnard Planning Commission Hearing on Planning and Zoning Permit Number 06-400-5," August 30, 2007.

Southern California Edison Company, "Environmental Soil Investigation Results," March 21, 2008.

Southern California Edison Company, "McGrath Beach Peaker Project Greenhouse gas Emission Discussion," April 9, 2008.

Southern California Edison Company, "Construction Emission Calculations ," April 9, 2008.

Southern California Edison Company, "Supplemental Analyses for the Southern California Edison Mandalay Peaker Project" (with attachments), June 17, 2008.

Southern California Edison Company, "McGrath Beach Peaker Landscaping Plan," June 26, 2008.

Southern California Edison Company, "Flood Potential of Southern California Edison's Proposed McGrath Beach Peaker," October 7, 2008.

Chang Consultants, "Study of Flooding Potential at the McGrath Beach Peaker Plant Site in Oxnard," September 17, 2008.

Marine Research Specialists, "SCE McGrath Beach Peaker Project Greenhouse Gas Emissions," July 1, 2008.

Glenn Lukos Associates, "Results of Focused Surveys for Special-Status Plants for Peaker Plant Project East of Harbor Boulevard, Ventura, California," May 19, 2008.

Glenn Lukos Associates, "Results of Studies to Quantify the Composition and Approximate Cover of Vegetation Associated with the McGrath Beach "Peaker" Power Plant Project East of Harbor Boulevard, Ventura, California," October 16, 2008.

Keane Biological Consulting, "Mandalay Peaker Project Biological Resources Assessment," February, 2007.

Keane Biological Consulting, Letter to SCE, December 1, 2007.

Keane Biological Consulting, Letter to Southern California Edison re: McGrath Peaker Project: Responses to California Coastal Commission comments, March 18, 2008.

Entrix, Inc., “Fish survey of waters in the vicinity of Mandalay Generating Station, including the intake area on Mandalay Canal, the discharge basin and the associated beach pond, with special reference to the federally endangered tidewater goby, *Eucyclogobius newberryi*.” February 4, 2007.

Dale Hinkle, P.E. Inc., “Dewatering Plan Mandalay Generating Station Peaking Unit,” June 11, 2007.

David Magney Environmental Consulting, Letter to California Coastal Commission re: SCE’s Mandalay Beach Property Biological Resources (Appeal File No. A-4-OXN-07-096), March 10, 2009.

Weck Laboratories, Inc., “Mandalay Groundwater – Certificate of Analysis,” August 27, 2007.

Weck Laboratories, Inc., “McGrath Beach Soil Testing – Certificate of Analysis,” April 9, 2007.

Southern California Gas Company, Letter to Southern California Edison re: Natural Gas Pipeline Construction and Installation, March 17, 2008.

Kleinfelder, Inc., “Geotechnical Investigation Proposed Peaker Unit Project Mandalay Beach Steam Station Oxnard, California,” December 13, 2006.

Federal Register, Volume 67, Number 196, Pages 62926-62945, “Endangered and Threatened Wildlife and Plants; Proposed Designation of Critical Habitat for *Astragalus pycnostachyus* var. *lanosissimus*, a Plant from the Coast of Southern and Central California,” October 9, 2002.

Baldocchi, D., and S. Wong. 2006. “An assessment of the impacts of future CO₂ and climate on California agriculture.” California Climate Change Center. 34 pp.

Battles, J.J., T. Robards, A. Das, K. Waring, J.K. Gilles, F. Schurr, J. LeBlanc, G. Biging, and C. Simon. 2006. “Climate change impact on forest resources.” California Climate Change Center. 28 pp.

Bindschadler, R. 2006. “Hitting the ice sheets where it hurts.” *Science*. v. 311: 1720-1721.

Caldeira, K., and M.E. Wickett. 2003. “Anthropogenic carbon and ocean pH.” *Nature* v. 425: 365.

California Coastal Commission. 2001. “Overview of Sea Level Rise and Some Implications for Coastal California.”

- Cavagnaro, T., L. Jackson, and K. Scow. 2006. "Climate change: Challenges and solutions for California agricultural landscapes." California Climate Change Center. 107 pp.
- Cayan, D., P. Bromirski, K. Hayhoe, M. Tyree, M. Dettinger, and R. Flick. 2006a. "Projecting future sea level." California Climate Change Center. 53 pp.
- Cayan, D., A.L. Luers, M. Hanemann, G. Franco, and B. Croes. 2006b. "Scenarios of climate change in California: An overview." California Climate Change Center. 47 pp.
- Cayan, D., E. Maurer, M. Dettinger, M. Tyree, K. Hayhoe, C. Bonfils, P. Duffy, and B. Santer. 2006c. "Climate scenarios for California." California Climate Change Center. 44 pp.
- Church, J.A., and N.J. White. 2006. "A 20th century acceleration in global sea-level." Geophysical Research Letters. v. 33.
- Drechsler, D.M., N. Motallebi, M. Kleeman, D. Cayan, K. Hayhoe, L.S. Kalkstein, N. Miller, S. Sheridan, J. Jiming, and R.A. VanCuren. 2006. "Public health-related impacts of climate change in California." California Climate Change Center. 80pp.
- Ekström, G., M. Nettles, and V.C. Tsai. 2006. "Seasonality and increasing frequency of Greenland glacial earthquakes." Science. v. 311: 1756-1757.
- Franco, G., and A.H. Sanstad. 2006. "Climate change and electricity demand in California." California Climate Change Center. 9 pp.
- Fried, J.S., J. K. Gilless, W.J. Riley, T.J. Moody, C.S. de Blas, K. Hayhoe, M. Moritz, S. Stephens, and M. Torn. 2006. "Predicting the effect of climate change on wildfire severity and outcomes in California: Preliminary analysis." California Climate Change Center. 47 pp.
- Friedrich, A., F. Heinen, F. Kamakaté, and D. Kodjak. 2007. "Air Pollution and Greenhouse Gas Emissions from Ocean-going Ships: Impacts, Mitigation Options and Opportunities for Managing Growth." International Council on Clean Transportation. 101 pp.
- Gutierrez, A.P., L. Ponti, C.K. Ellis, and T. d'Oultremont. 2006. "Analysis of climate effects on agricultural systems." California Climate Change Center. 30 pp.
- Heede, R. 2006. "LNG supply chain greenhouse gas emissions for the Cabrillo Deepwater Port: Natural gas from Australia to California: Snowmass, Colorado." Climate Mitigation Services. 28 pp.
- Howell, D.G. 1993. "The future of energy gases." Professional Paper: Washington, D.C., U.S. Geological Survey Professional Paper 1570. 890 pp.
- Joughin, I. 2006. "Greenland rumbles louder as glaciers accelerate." Science. v. 311: 1719-1720.

- Joyce, B., S. Vicuña, L. Dale, J. Dracup, M. Hanemann, D. Purkey, and D. Yates. 2006. "Climate change impacts on water for agriculture in California: A case study in the Sacramento Valley." California Climate Change Center. 76 pp.
- Kerr, R. 2006. "A worrying trend of less ice, higher seas." *Science*, v. 311: 1698-1703.
- Laws, E.A. 1997. *El Niño and the Peruvian Anchovy Fishery: Sausalito, California*. University Science Books. 58 pp.
- Lenihan, J.M., D. Bachelet, R. Drapek, and R.P. Neilson. 2006 "The response of vegetation distribution, ecosystem productivity, and fire in California to future climate scenarios simulated by the MC1 dynamic vegetation model." California Climate Change Center. 19 pp.
- Luers, A.L., D.R. Cayan, G. Franco, H. Hanemann, and B. Croes. 2006. "Our Changing Climate: Assessing the Risks to California." California Climate Change Center. 16 pp.
- Luers, A.L., and S.C. Moser. 2006. "Preparing for the impacts of climate change in California: Opportunities and constraints for adaptation." California Climate Change Center. 41 pp.
- Medellin, J., J. Harou, M. Olivares, J. Lund, R. Howitt, S. Tanaka, M. Jenkins, K. Madani, and T. Zhu. 2006. "Climate warming and water supply management in California." California Climate Change Center. 32 pp.
- Miller, N.L., and N.J. Schlegel. 2006. "Climate change--Projected Santa Ana fire weather occurrence." California Climate Change Center. 11 pp.
- Moritz, M.A., and S.L. Stephens. 2006. "Fire and sustainability: Considerations for California's altered future climate." California Climate Change Center. 6 pp.
- Nezlin, N.P., W.M. Hamner, and L.D. Zeidberg. 2005. "Influence of El Nino 1997-1998 on the pelagic ecosystem off California: Remote-sensed analysis, in Magoon, O.T." Converse, H., B. Baird, B. Jines, and M. Miller-Henson, eds. California and the World Ocean '02: Revisiting and revising California's Ocean Agenda. Reston, Virginia. American Society of Civil Engineers. 1233-1252 pp.
- Schlesinger, W.H. 1997. *Biogeochemistry: An Analysis of Global Change*. San Diego, Academic Press. 587 pp.
- The Royal Society. 2005. *Ocean acidification due to increasing atmospheric carbon dioxide*. London. The Royal Society. 60 pp.
- Vicuña, S. 2006. "Predictions of climate change impacts on California water resources using CALSIM II: A technical note." California Climate Change Center. 24 pp.

Vicuña, S., R. Leonardson, J.A. Dracup, M. Hanemann, and L. Dale. 2006a. "Climate change impacts on high elevation hydropower generation in California's Sierra Nevada: A case study in the Upper American River." California Climate Change Center. 36 pp.

Westerling, A., and B. Bryant. 2006. "Climate change and wildfire in and around California: Fire modeling and loss modeling." California Climate Change Center. 28 pp.

Wolock, D., and G. McCabe. "Climate Research." 1999. "Explaining spatial variability in mean annual runoff in the conterminous United States." Climate Research. v. 11: 149-159.

Kennedy/Jenks Consultants, "Wagon Wheel Development Water Supply Assessment." April 2008.

City of Oxnard, 2005 Urban Water Master Plan.

Appendix B: Selection of Applicable Local Coastal Policies

Local Coastal Policy 6 states, in relevant part: As a part of the Phase III Implementation portion of the LCP process, a resource protection ordinance was created, defining the only uses permitted in areas designated on the land use map with the Resource Protection Zone. The ordinance incorporated the following policies which the City will implement to the extent of its legal and financial ability:

- a. ...
- b. ...
- c. ...
- d. *New development adjacent to wetlands or resource protection areas shall be sited and designed to mitigate any adverse impacts to the wetlands or resource.*

A buffer of 100 feet in width shall be provided adjacent to all resource protection areas. The buffer may be reduced to a minimum of 50 feet only if the applicant can demonstrate the large buffer is unnecessary to protect the resources of the habitat area. All proposed development shall demonstrate that the functional capacity of the resource protection area is maintained. The standards to determine the appropriate width of the buffer area are:

- 1) *biological significance of the area*
- 2) *sensitivity of the species to disruption*
- 3) *susceptibility to erosion*
- 4) *use of natural and topographical features to locate development*
- 5) *parcel configuration and location of existing development*
- 6) *type and scale of development proposed*
- 7) *use of existing cultural features to locate buffer zones*

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

- e. When a development is proposed within or near an environmentally sensitive habitat area, applicable topographic, vegetative and soils information shall be provided. The information shall include physical and biological features existing in the habitat areas.*

Local Coastal Policy 9 states: *Wetlands shall be defined as:*

Land where the water table is at, near, or above the land surface long enough to promote the formation of hydric soils or to support the growth of hydrophytes. In certain types of wetlands, vegetation is lacking and soils are poorly developed or absent as a result of frequent and drastic fluctuations of surface water levels, wave action, waterflow, turbidity or high concentrations of salts or other substances in the water or substrate. Such wetlands can be recognized by the presence of surface water or saturated substrate at some time during the year, and their location within, or adjacent to, vegetated wetlands or deep-water habitats.

Local Coastal Policy 10 states, in relevant part: *The water quality of the City's coastal waters shall be maintained and, where feasible, restored by the following:*

- a. The effects of wastewater discharges which release toxic substances into coastal waters, streams, wetlands, estuaries and lakes shall be minimized, and, where feasible, toxic substances should be removed. Wastewater discharges which do not contain toxic substances and which are necessary to sustain the functional capacity of streams, wetlands, estuaries and lakes shall be maintained.*
- b. ...*
- c. The effects of increased amounts of runoff into coastal waters, streams, wetlands, estuaries and lakes due to development shall minimize through, among other means, grading and other site development controls, and buffer zones.*
- d. ...*
- e. Naturally occurring vegetation that protects riparian habitats shall be maintained and, where feasible, restored.*
- f. ...*
- g. ...*

Local Coastal Policy 52 states, in relevant part: *Industrial and energy-related development shall not be located in coastal resource areas, including sensitive habitats,*

recreational areas, and archaeological sites. All development adjacent to these resource areas or agricultural areas shall be designed to mitigate any adverse impacts...

Local Coastal Policy 57 states: *If it is not possible to reroute pipelines around coastal resource areas, including habitat, recreational and archeological areas, they shall be permitted to cross the areas with the following conditions:*

- a. Pipeline segments shall, in case of break, be isolated by automatic shut-off valves or with other safety techniques approved by the City. If the City determines it is necessary, the valves may be located at intervals less than the maximum required by the Department of Transportation.*
- b. Any routing through resource areas shall be designed to minimize the impacts of a spill, should it occur, by considering spill volumes, durations and trajectories. Plans for appropriate measures for cleanup shall be submitted with permit applications for all pipeline project proposals.*
- c. Except for pipelines exempted from coastal development permits under Sections 30610(c) and (e) of the Coastal Act as defined by the State Coastal Commission's Interpretive Guidelines, a survey shall be conducted along the route of any proposed new pipeline in the coastal zone to determine what, if any, coastal resources may be impacted, by construction and operation of the proposed pipeline. The costs of this survey shall be borne by the applicant. This survey may be conducted as part of environmental review if an EIR is required.*
- d. The survey shall be conducted by a consultant selected jointly by the applicant, the City, and the Department of Fish and Game. If it is determined that the area to be disturbed will not re-vegetate naturally or sufficiently quickly to avoid erosion or other damage, the applicant shall submit a re-vegetation plan. The plan shall also include provisions for the restoration of any habitats disturbed by construction or operation of the proposed pipeline.*
- e. For projects where a re-vegetation plan and/or habitat restoration plan has been required, the area crossed by the pipeline shall be re-surveyed one year after completion of construction to determine the effectiveness of the plan. This survey shall continue on an annual basis to monitor progress in returning the site to preconstruction conditions until the City has determined that the vegetation restoration is complete.*
- f. The City shall require the posting of a performance bond by the applicant to ensure compliance with these provisions.*
- g. Herbicides shall not be used during pipeline construction. The sidecasting of soil may be restricted where the City deems necessary by removal of excess soil to an approved dumping site after the excavation has been backfilled and compacted. The City may require that the trenches be filled by replacing the soil horizons in sequence.*