

CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET
SACRAMENTO, CA 95814-5512
www.energy.ca.gov



California Energy Commission

DOCKETED
12-CAI-3

TN # 66428

AUG 02 2012

DATE: August 2, 2012**TO:** Interested Parties**FROM:** Mary Dyas, Compliance Project Manager**SUBJECT: El Segundo Power Redevelopment Project Complaint (12-CAI-03)**

On July 3, 2012, a formal complaint was filed, pursuant to Title 20, California Code of Regulations, section 1237, by Manhattan Beach residents, Michelle Murphy and Bob Perkins whose residence is located on 45th Street in the City of Manhattan Beach, directly south of the El Segundo Power Redevelopment Project (ESPRP). Staff prepared a report on the complaint, and a copy is enclosed for your information and review.

The original 630 megawatt (MW) ESPRP was certified by the Energy Commission on February 2, 2005. A subsequent amendment to convert the ESPRP to a nominal 560MW rapid response combined-cycle facility using dry-cooling and zero liquid discharge technology was approved by the Energy Commission on June 30, 2010. The facility is located at 301 Vista Del Mar, in the City of El Segundo, approximately two miles south of the Los Angeles International Airport in Los Angeles County. Construction of the project commenced on June 6, 2011, and is 42 percent complete.

The July 3, 2012, complaint raises the issues of visual impacts stemming from noncompliance with Visual Resource Conditions of Certification as well as public safety along the southern boundary of the project property. The complaint addresses the following factors:

1. The placement of the perimeter chain-link fence and the hazards it creates to pedestrians in its current location.
2. The construction of a concrete retaining wall near the southern boundary of the property.
3. The timing of construction and landscaping of the 45th Street berm at the southern boundary of the property.
4. The construction of an open concrete drain at the southern boundary of the property.
5. The construction of a road along the southern boundary of the property.
6. The site lighting along the western boundary of the property.

Energy Commission staff has reviewed the complaint, and conducted site visits to the ESPRP to review each of the complaint items. It is staff's opinion that in regard to Item 3 (Temporary Landscaping) and Item 6 (Lighting) of the complaint, that the project

owner is in compliance with the applicable conditions of certification in the Commission Decision. Staff concludes that Item 1 (Chain Link Fence), Item 2 (Concrete Retaining Wall), and Item 4 (Concrete Drain) appear to be valid complaints. Staff needs more information to determine if Item 5 (Road Construction) is a valid complaint.

Staff is recommending, pursuant to Title 20, California Code of Regulations, section 1237(e)(3), that the Chair of the Energy Commission conduct a hearing to further investigate the matter and then issue a written decision on the complaint.

The complaint and staff's analysis have been posted on the Energy Commission's webpage at

<http://www.energy.ca.gov/sitingcases/elsegundo/compliance/index.html#complaint> .

Pursuant to Title 20, California Code of Regulations, section 1237(d), any person may submit written comments on the complaint or staff report within 14 days after issuance of the staff report. If you have comments on staff's report, please submit them to the address below prior to August 16, 2012.

Mary Dyas, Compliance Project Manager
California Energy Commission
1516 9th Street, MS-2000
Sacramento, CA 95814

Comments may be submitted by fax to (916) 654-3882, or by e-mail to mdyas@energy.ca.gov.

For further information on how to participate in this proceeding, please contact the Energy Commission Public Adviser's Office, at (916) 654-4489, or toll free in California at (800) 822-6228, or by e-mail at publicadviser@energy.ca.gov. News media inquiries should be directed to the Energy Commission Media Office at (916) 654-4989, or by e-mail at mediaoffice@energy.ca.gov.

Enclosure

Mail List #: 7046

EL SEGUNDO POWER REDEVELOPMENT PROJECT COMPLAINT (12-CAI-03) STAFF REPORT

INTRODUCTION

On July 3, 2012, a formal complaint¹ was filed pursuant to Title 20, California Code of Regulations, section 1237, by Manhattan Beach residents Michelle Murphy and Bob Perkins whose residence is located on 45th Street in the City of Manhattan Beach, directly south of the El Segundo Power Redevelopment Project (ESPRP). The complaint states that the project, as it is being constructed, does not comply with Conditions of Certification that were approved by the California Energy Commission (Energy Commission) in its decision dated February 2, 2005 and in the 2010 Amendment Decision.

PROJECT BACKGROUND

The ESPRP site is bordered by Vista Del Mar Boulevard and the Chevron Refinery on the east, Santa Monica Bay on the west, the Chevron Marine terminal on the north, and 45th Street of the City of Manhattan Beach on the south. Project-related activities on the southern boundary are the subject of the complaint.

The ESPRP was originally certified by the Energy Commission on February 2, 2005, as a 630 megawatt (MW) natural gas-fired, combined cycle electric generation facility located in the City of El Segundo in Los Angeles County. The ESPRP would replace the existing El Segundo Generating Station (ESGS) Units 1 and 2.

On June 15, 2007, the project owner of the ESPRP filed a petition with the Energy Commission to amend the Energy Commission Decision for the ESPRP to eliminate the use of ocean water as the cooling water source for the project by redesigning the facility to use fast-start turbines and dry-cooling. The permitting of the project was delayed on July 28, 2008, when a ruling by the Superior Court of Los Angeles vacated the South Coast Air Quality Management District (SCAQMD) air emission offset-related program. Effective January 1, 2010, California Law reinstated the offset program and SCAQMD issued the revised permit on May 18, 2010. The revised project would be rated at 560 MW. The petition to amend was approved by the Commission on June 30, 2010. Demolition and construction activities began on June 6, 2011, and the facility is currently 42 percent complete.

DESCRIPTION OF THE COMPLAINT

The July 3, 2012 complaint raises the issues of visual impacts stemming from noncompliance with Visual Resource Conditions of Certification as well as public safety

¹ Available at: (http://www.energy.ca.gov/sitingcases/elsegundo/compliance/cai-03/2012-07-03_Complaint_regarding_El_Segundo_Power_Redevelopment_Project.pdf)

along the southern boundary of the project property. The complaint addresses the following factors:

1. The placement of the perimeter chain-link fence and the hazards it creates to pedestrians in its current location.
2. The construction of a concrete retaining wall near the southern boundary of the property.
3. The timing of construction and landscaping of the 45th Street berm at the southern boundary of the property.
4. The construction of an open concrete drain at the southern boundary of the property.
5. The construction of a road along the southern boundary of the property.
6. The site lighting along the western boundary of the property.

COMPLAINT REVIEW AND INVESTIGATION PROCESS

The purpose of the Energy Commission's post-certification complaint process is to investigate and review the complaint and present findings to the Commission. The complaint review process includes an investigation by the designated compliance project manager (CPM) and appropriate Energy Commission technical staff. Title 20, California Code of Regulations, section 1237(a), provides in relevant part:

Any person must file any complaint alleging noncompliance with a commission decision...solely in accordance with this section. All such complaints...shall include the following information:

- (1) the name, address, and telephone number of the person filing the complaint (complainant);
- (2) the name, address, and telephone number of the person owning or operating, or proposing to own or operate, the project which is the subject of the complaint;
- (3) a statement of facts upon which the complaint is based;
- (4) a statement indicating the statute, regulation, order, decision, or condition of certification upon which the complaint is based;
- (5) the action the complainant desires the commission to take;
- (6) the authority under which the commission may take the action requested, if known, and;
- (7) a declaration under penalty of perjury by the complainant attesting to the truth and accuracy of the statement of facts upon which the complaint is based.

The complaint reviewed in this report meets all the filing requirements.

STAFF'S ASSESSMENT OF THE COMPLAINT

Staff's assessment of each complaint item is based on information available to date. Pursuant to Title 20, California Code of Regulations, section 1237(b), staff has provided

its conclusions on the validity of each claim. Energy Commission staff conducted site visits on July 11, 2012 and on July 25, 2012, of the ESPRP to review each of the complaint items filed by Michelle Murphy and Bob Perkins ("Complainants"). During these site visits, staff made observations and took photographs. Staff responses and conclusions are based on the information gathered during the site visits, review of the Commission Decision, including the Conditions of Certification, the Final Staff Assessment, and various compliance documents.

1. CHAIN LINK FENCE

The complainants state that the placement of the new security fence on NRG's property line is a hazard to pedestrians as they walk along 45th Street between Vista Del Mar and the beach. Because the original chain link fence was variably set back approximately 4 to 20 feet from NRG's property line, which is also the curb line (see **Figure 1a**), complainants state that visitors to the beach were able to walk on the sandy/dirt trail along the fence line, staying out of the street. Staff cannot confirm whether the public did in fact use the dirt trail access. However, considering that the Chevron Gas station, which is located on the corner of Vista Del Mar and 45th Street, does not have a public sidewalk on 45th Street, pedestrians are forced to walk in the road at this point, which could be considered hazardous for both drivers and pedestrians alike. Section 15-5G-6 of the El Segundo zoning code allows the placement of fences on the property line. As reflected in photos taken along 45th Street, NRG has installed various utilities along their property line (water meter/backflow preventer system) inside the fenceline.

On June 6, 2012, Energy Commission staff met with the planning directors of the cities of Manhattan Beach and El Segundo to discuss ways of resolving the pedestrian problem along 45th Street. Discussion of a new sidewalk outside NRG's fence line was deemed infeasible as two feet of the four foot sidewalk would be within the city of El Segundo city limits line, and two feet within the city of Manhattan Beach's jurisdiction, which would be problematic as to liability if an injury was to occur.

NRG representative George Piantka did acknowledge at the June 6, meeting that they would consider moving their fence approximately two feet back from the property line and provide a sand/rock base walkway as a means of satisfying the concern of the neighbors. But even with this proposed solution, pedestrians would be forced onto 45th Street, both at the top of hill where the Chevron gas station is situated (which is not NRG's responsibility) and also along the southern boundary of NRG's property where placements of various utilities are located on the property line. NRG's main concern is personal liability if they were to allow pedestrian traffic on their property. NRG staff did not commit to the installation of the rock base pedestrian walkway as approval from their management staff would be required.

As shown in **Figure 1b**, an existing four-foot sidewalk located on portions of the southern side of 45th Street was at one time available for pedestrian use, but has since been deemed unusable due to residents installing concrete walls, planter boxes and various other obstructions within the sidewalk. This is in violation of Manhattan Beach zoning codes, but the city has not taken steps to enforce the removal of these obstructions.

Under Conditions of Certification VIS-2 and VIS-9, the project owner was required to establish a committee consisting of representatives of the cities of Manhattan Beach and El Segundo and a representative of the California Coastal Commission, to provide input on the perimeter landscaping and contoured berm along the southern boundary of NRG's property. They met regularly over several months reviewing landscape renderings and providing input on plant screening and design features, including those along the project's 45th Street property line. In March and August 2007, landscape plans were submitted to the CPM for approval that depict an assumed fence line which varies in distance from the curb (Sheet P-3) and varies from mid-berm to near the toe of berm (Exhibit 21B and Exhibit 23). An updated landscape plan was submitted to the Energy Commission Compliance Project Manager (CPM) for approval and the plan was approved by the CPM on April 10, 2012. This version of the landscape plan does not depict a fence along 45th Street.

A cross sectional view of the berm shown in a 2007 version of the plan provided in the Complaint depicts the fence placement towards the middle segment of the landscaped berm. The photo simulations provided by NRG in their May 15, 2002 Visual Enhancement Proposal show the fence further back from the curb than where it is today and what appears to be a sidewalk (see **Figure 1d** and **Figure 1e**). Both city planning managers confirmed at the June 6, meeting that it was their understanding that the fence was to be located on the slope portion of the landscaped berm. Further, landscape plans that were provided by NRG during the meeting on June 6, 2012, depicted the fence placement towards the middle segment of the landscape berm.

Site reconnaissance on July 25, 2012, confirmed that the current existing fence line is approximately 3'1" to 3'3" from the outside edge of the curb on 45th Street (**Figure 1e**), with the toe (bottom) of the slope located approximately 4'-6' inside the fence line (staff was unable to measure inside the fence line). This is seen in **Figure 1c**. This differs from the 4'0" from curb to toe shown on the Berm Concept study dated May 8, 2002. **Figure 1d** shows the simulated berm and the proposed fence location from 2002. Staff has concluded that the placement of the fence is in response to the effort to preserve the existing palm trees. All CPM-approved landscape plans called for the palms to be removed, the berm constructed and new plantings provided. The 2002 photo simulation shows the berm plantings including new palm trees at regularly spaced intervals. The attempt to preserve the existing palms at the request of residents in December 2011 affects not only fence line placement but forces changes in the grading of the berm. This is discussed further in Issue No. 2, below.

VIS-2 in the Commission's 2005 and 2010 decisions states that the "Landscape Plan shall be consistent with the Landscape Concept Plan presented at Evidentiary Hearings...." (Page 184). Staff assumes the concept plan referenced in VIS-2 is the plan reproduced in the Final Staff Assessment as Figure 16B (shown in this report as Figure 1f). This plan does not clearly depict a fence line. The updated landscape plan approved by the CPM on April 10, 2012, also did not depict the fence along 45th Street. However, plans submitted in 2007 and approved by the CPM in 2008 show a fence line that varies from its distance to the curb, but further back from 45th Street in certain

locations than where it was installed. The present location of the chain link fence is non-compliant with the conditions of certification and CPM-approved landscape plans.



Figure 1a. View of historic fence line along 45th Street showing path (from Google Earth).



Figure 1b: View of encroachments onto sidewalk on Manhattan Beach side of 45th Street which impede pedestrian use.



Figure 1c: View from eastern property boundary west along 45th street, showing distance from fence to toe of slope, estimate to be 4'-6'.



Figure 1d: Simulation from the lower level of 4420 The Strand shows location of proposed fence from the 2002 Visual Enhancement Proposal



Figure 1e: Present day picture from 4420 The Strand showing the current location of the fence.

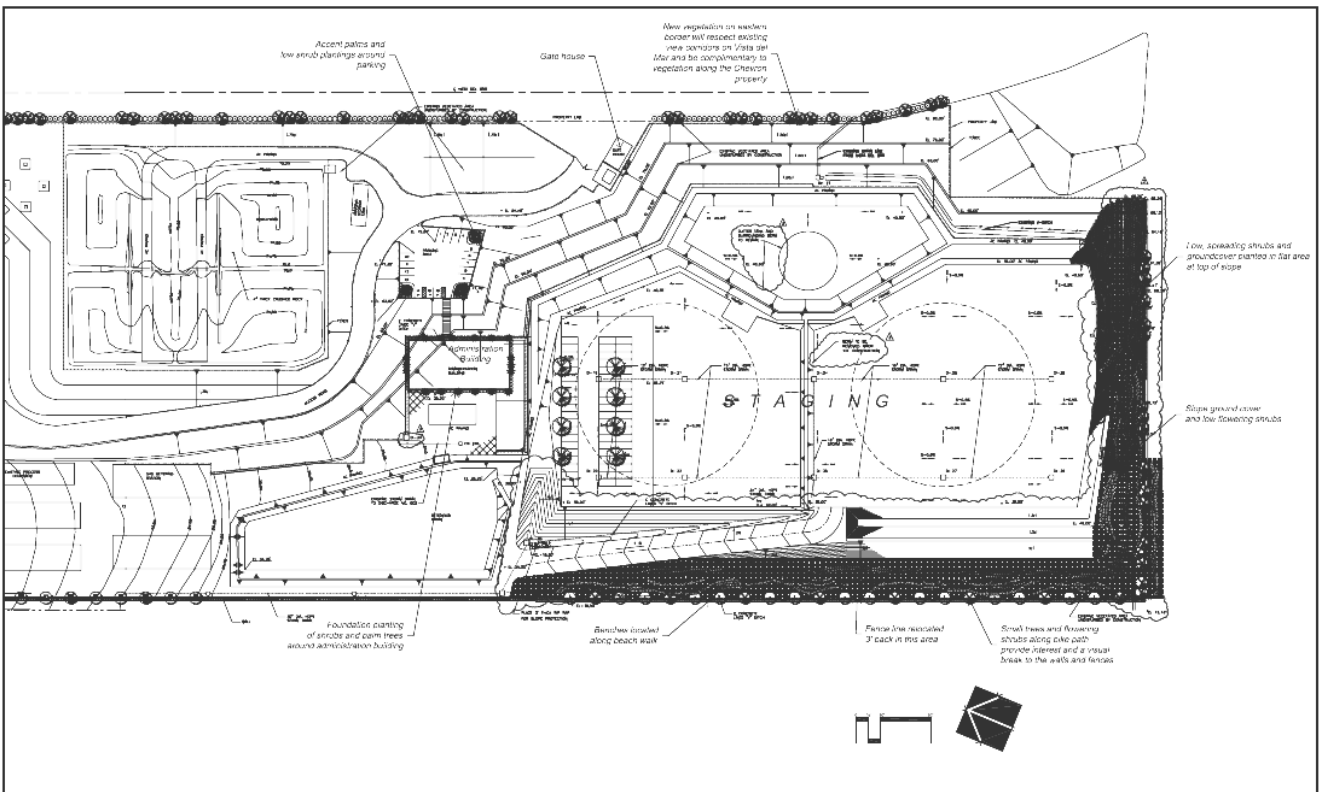


Figure 1f: Landscape Concept Plan from the September 2002 Final Staff Assessment

2. CONCRETE RETAINING WALL

Complainants state that NRG is constructing a concrete retaining wall approximately 80 feet long near the southern boundary of the project site. Complainants claim it was unnecessary to build the wall to save the existing palm trees and that the Energy Commission's decision required both that the trees be saved and that no such unsightly concrete structure be built along 45th Street.

According to NRG, the purpose of the retaining wall is to protect the shallow root ball of the existing palm trees on the southern portion of the NRG property adjacent to 45th Street. The berm, as originally designed and indicated in the grading on Berm Concept Plan (May 8, 2002) from NRG's Visual Enhancement Proposal, would have had a uniform slope of 3:1 facing 45th Street. Staff concurs that this would necessitate removal of the palms to create the new slope. The existing grade of the crown of the rootball cannot be changed without damaging the trees. Burying the trunk and crown would eventually kill the trees. The CPM-approved landscaping plan never intended to retain the existing palms, but remove them and plant new trees as shown in the photo simulation (**Figure 1d**). A very similar photo simulation was provided in Exhibit 23 of NRG's Facility Visual Enhancement Plan dated January 26, 2007, and approved by the CPM on or about September 26, 2008. Because residents asked for the palm trees to remain, NRG began construction of the retaining wall. It is fairly reasonable to conclude, based on observation of the current conditions that the construction of the retaining wall was intended to preserve the existing grade at the base of each tree, while at the same time allowing for the berm to be built up behind it. Work has stopped on the construction of the retaining wall, pending resolution of the complaint. The retaining wall as shown in **Figure 2a** would be a large concrete wall, with no apparent architectural enhancement. This wall will be in clear view to the residents until such time as landscape plants provide partial screening of the wall. The Berm Concept Plan from NRG's Visual Enhancement Proposal, and reproduced in the Final Staff Assessment as Figure 14, depicts a retaining wall on the north side of the berm, not on the south side of the berm. The simulation (**Figure 1d and Exhibit 23**) does not show a retaining wall, only a vegetated berm as required by Condition of Certification VIS-1, which states: "If berms are used, they shall be vegetated and maintained with evergreen, native, and/or species requiring little or no irrigation" (Page181). The retaining wall partially installed by NRG on the 45th Street side of the berm is non-compliant with the Commission Decision and CPM-approved plans.



Figure 2a: View of concrete retaining wall under construction on July 11, 2012. The existing palm trees and backflow preventer can be seen in this view.

3. TIMING OF CONSTRUCTION AND LANDSCAPING

Complainants state that NRG has failed to build and temporarily landscape the 45th Street berm, as required by Condition of Certification VIS-9. VIS-9 requires that “temporary landscaping be installed prior to the start of ground-disturbing activities in those opportunity areas that do not create a hindrance to construction activities”. A temporary landscape plan was submitted and approved by the CPM on September 26, 2008. Based on the wording of the condition, it would not be appropriate to begin installation of temporary landscape plantings until the berm and related facilities have been completed, as it would be a hindrance to construction. The 2002 Plan regarding the berm indicates on page 3-5 a construction sequence to comply with VIS-9 (misabeled as VIS-7). It appears that NRG is in compliance with VIS-9 at this time. As of July 25, 2012, no landscaping has occurred anywhere on the site. Staff will expect temporary landscape plantings to be installed soon after completion of the berm and its associated construction activities.

4. CONCRETE DRAINAGE SYSTEM INSTALLED NEAR THE SOUTHERN BOUNDARY OF THE NRG PROPERTY

The complainants state that a concrete drainage system (spillway) constructed near the southwest corner of the project site is contrary to what the project owner represented during the licensing proceeding would be built. They claim that the tank area’s drainage was, according to the Application for Certification, to be routed through the existing units’ drainage, not to a new structure at the southwest corner.

As indicated earlier under the chain link fence discussion, a landscaping plan was reviewed by the cities of Manhattan Beach and El Segundo, and approved by the CPM in 2008. The CPM-approved plan did not show a spillway, but the updated plan submitted in 2012 shows an unlabeled feature in the spillway location. Because of its immense size, staff does not believe that landscaping will obscure or soften the view of

this massive concrete structure, particularly when viewed from the Strand and beach, and from porches of residences on 45th Street (**Figure 4a**). Recent correspondence from NRG and the Chief Building Official indicates that the spillway as it exists today was designed in early 2012. It was shown on the most recent plans for the landscape plantings and irrigation (2012) but was not labeled or called out in any way on the landscape drawing. There is a cross-section view of this drainage structure on one of the irrigation detail drawings, but it is not cross-referenced to the landscape drawing to show where this structure would be located. Visual resources staff was not consulted on the spillway design and relationship to the berm and plantings prior to design or construction. The concrete drainage system is non-compliant with CPM-approved landscape plans. Sheet P-3 from the 2008 CPM-approved landscape plan shows subsurface drainage leading away from the berm and wall. Staff is uncertain as to why the spillway was installed.



Figure 4a: Close-up view of concrete spillway.



Figure 4b: View of new drainage ditch at eastern property boundary near 45th Street.

5. ROAD CONSTRUCTION

Complainants state that NRG has started to construct an asphalt road along the southern boundary of the property ending on the top of the berm near the tank farm. This road is not depicted on the CPM-approved landscape plans, which show the tank road to be constructed along the western boundary to the tank farm area. **Figure 5a** shows the road questioned in the Complaint. It also appears in the Google Earth image taken prior to construction of the berm (**Figure 5b**). It may be that it was recently paved, possibly in connection with the installation of the concrete spillway. It is not a feature in the approved landscape plans. It may be in use solely for construction access. Staff needs more information to determine if this complaint is valid and whether the road is non-compliant with the CPM-approved plans. It may have also been constructed solely for access for construction vehicles and delivery of soil for the berm construction, and eventually used for delivery of plants to the completed berm.



Figure 5a: Asphalt road leading to new berm and side view of concrete spillway.

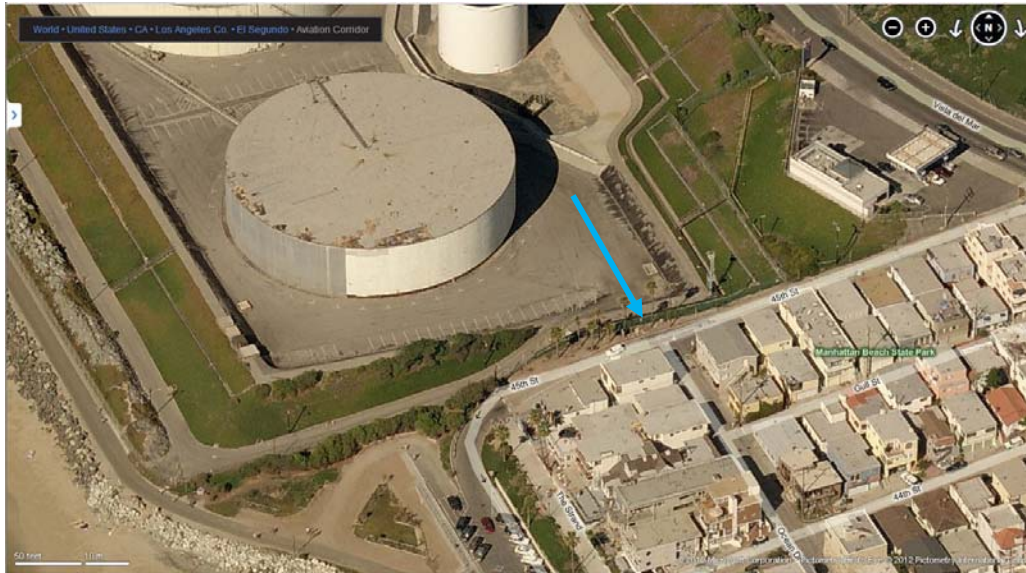


Figure 5b: Aerial view of site prior to construction in berm area. Road in question visible wrapping around southwest corner. Arrow points to pre-construction fence line.
(From Bing Maps)

6. LIGHTING REQUIREMENTS

Complainants state that the lighting requirements under Conditions of Certification VIS-6 and VIS-7 require that site lighting be hooded and shielded to prevent light trespass outside the project boundary. Based on complainants' inspection of the recently installed light standards, no shielding was observed.

Staff inspected the newly installed light fixtures on the western boundary of the El Segundo project site, and the light fixtures are the new, more efficient LED lighting fixtures. Staff took a photo of one of the light fixtures, **Figure 6a**, and from inspection of the close up photo, each lighting fixture consists of approximately 50 LED bulbs. These lighting fixtures are similar to what was approved for the Genesis Solar Project. Based on a telephone conversation with the Genesis lighting engineer, the LED lighting fixtures are designed to provide directional lighting without the installation of shielding or hoods.

Because the lighting fixtures at the El Segundo project site have not been turned on, staff was not able to evaluate whether light spillage would occur beyond the project site. The Energy Commission's conditions of certification require that the project owner notify the CPM before the first turbine roll (VIS-6) or before tank demolition (VIS-7) that lighting has been completed and is ready for inspection. Energy Commission staff typically conducts an onsite inspection of the lighting fixtures in the evening hours to ensure compliance with the lighting requirement. If light spillage occurs, NRG will be required to install shielding or hoods to prevent light spillage outside the boundaries of the project site. To date, NRG has not yet contacted staff to conduct a lighting inspection, since it is premature for staff to inspect the lights at this time based on the verifications set forth in conditions referenced above.



Figure 6a: Light fixture installed on western property boundary adjacent to bike path.

CONCLUSIONS

In regard to Item 3 (Temporary Landscaping) and Item 6 (Lighting), staff concludes that the project owner is in compliance with the applicable conditions of certification in the Commission Decision. Item 1 (Chain Link Fence), Item 2 (Concrete Retaining Wall), and Item 4 (Concrete Drain), appear to be valid complaints. Staff needs more information to determine if Item 5 (Road Construction) is a valid complaint. Staff recommends, pursuant to Title 20, California Code of Regulations, section 1237(e)(3), that the Chair of the Energy Commission conduct a hearing to further investigate the matter and then issue a written decision on the complaint.