

CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET
SACRAMENTO, CA 95814-5512



July 9, 2002

To : Interested Parties

From: California Energy Commission - James W. Reede, Jr.
1516 Ninth Street Energy Commission Project Manager
Sacramento, CA 95814-5512

Subject : **EL SEGUNDO POWER REDEVELOPMENT PROJECT
PROPOSED NOISE CONDITION OF CERTIFICATION**

At the June 26, 2002 workshop, Energy Commission staff reported that a proposed Condition of Certification (NOISE-6) would be included in the Staff Assessment Supplement that would require monitoring to evaluate the relationship of ambient noise, surf noise, and power plant noise prior to project construction. A corresponding Condition (NOISE-7) would require post-construction monitoring and mitigation. Intervenors and the public requested that the pre-construction ambient noise monitoring survey be conducted during the summer months, when surf noise is lowest.

The applicant expressed concern that, given the current schedule for review of this project, inclusion of a Condition of Certification that required pre-construction work during the summer months could delay the start of construction until the fall of 2003. The applicant and the representative from the City of Manhattan Beach suggested that the work could be completed this summer, thus avoiding unnecessary delay, if the proposed Condition of Certification were published now. The workshop participants were informed that the project manager would investigate the early release of the proposed Condition of Certification to allow the applicant to begin monitoring the ambient noise this summer.

Attached are the proposed Conditions of Certification for guidance if the survey is to be conducted during the summer of 2002. Energy Commission staff emphasizes that these are staff proposed conditions, and the final Energy Commission decision on this project may include modified versions of the conditions. Staff believes that ambient monitoring following the protocol listed in this proposed condition would provide valuable information if the applicant chooses to conduct the monitoring. If there are any questions or concerns please contact James W. Reede, Jr., Energy Commission Project Manager, at (916) 653-1245, or at jreede@energy.state.ca.us.

PROPOSED CONDITION OF CERTIFICATION

NOISE-6 Determination of the Ambient Noise Level (L_{50}) at Residential Receivers.

Prior to construction, the project owner shall prepare and submit to the City of El Segundo and City of Manhattan Beach for review and comment, and to the CPM for review and approval, a Pre-Construction Noise Survey Plan. This plan will indicate the survey procedure and methodology for establishing the ambient noise level at nearby residential receivers. At a minimum, the plan will include the following:

- The project owner will conduct a 30-day continuous community noise survey at a residential receptor (on 45th Street in Manhattan Beach), selected by the CPM in cooperation with the City of Manhattan Beach. This pre-construction survey shall be conducted during the period of June 1 to September 30. Hourly L_{eq} , L_{50} and L_{90} values shall be measured.
- To the maximum practical extent, existing ESGS Units 3 and 4 shall be operating normally during the course of the survey. The actual levels of plant operation will be documented during the survey. The Pre-Construction Noise Survey Plan will establish a range of acceptable (“normal”) operating conditions suitable for the purposes of these studies.
- A simultaneous control measurement will be conducted within the project boundary. The site shall be selected to ensure that the dominant noise source will be the surf, requiring a clear line of sight to the surf. A location near the southwest project site corner is preferred to minimize the potential for noise from the existing power plant to influence the surf noise measurements. Wave height and other surf conditions, and any unusual environmental conditions occurring during the survey period shall be documented.
- For each of the days of noise data collected at each receptor where ESGS Units 3 and 4 are operating normally, the arithmetic average median noise level (L_{50}) shall be computed for the quietest consecutive 4-hour period. The resultant average median noise levels shall then be averaged arithmetically to calculate the relationship between surf noise levels and ambient noise levels along the northern side of the El Porto Community.
- If the initial 30-day measurement data, in the judgment of the CPM in consultation with the City of Manhattan Beach, fail to demonstrate a consistent relationship of surf and ambient noise levels, the measurement will be repeated until a consistent relationship can be established.

Following approval of the Survey Plan, the project owner shall implement the survey and present the results in a Pre-Construction Noise Survey Report to the Cities of El Segundo and Manhattan Beach and to the CPM. The Report will include a discussion of the ambient noise level taking into consideration all relevant factors, such as plant operating conditions, surf and wind conditions.

Verification:

- At least 60 days prior to construction, the project owner shall provide the Pre-Construction Noise Monitoring Survey Plan to the CPM for review and approval.

PROPOSED CONDITION OF CERTIFICATION

- Within 30 days of completion of the survey and prior to any demolition or construction activities, the project owner shall provide to the CPM for review and approval the results of the pre-construction noise survey.

NOISE-7 The project design and implementation shall include appropriate noise mitigation measures adequate to ensure that noise due to plant operations will not cause resultant noise levels to exceed the ambient median noise level (L_{50}) at residential receivers by 2 decibels or more, and that the noise due to plant operations will otherwise comply with the noise standards of the El Segundo and Manhattan Beach Municipal Codes.

No new pure tone components may be introduced. No single piece of equipment shall be allowed to stand out as a source of noise that draws legitimate complaints. Steam relief valves shall be adequately muffled to preclude noise that draws legitimate complaints.

Protocol:

- A. Conduct post-construction survey. This survey shall be done as soon as feasible, within the time frame described below and after Units 5, 6 and 7 first achieve a sustained output of 80 percent or greater of rated capacity. The project owner shall conduct short-term survey noise measurements at monitoring sites ST-1, ST-2, ST-3 and ST-12 (as described in the AFC, Section 5.12, Figure 5.12-3, as amended May 4, 2001). In addition, the applicant shall conduct a 30-day community noise survey at the same receptor locations used for the 30-day noise measurement cited in NOISE-6. The post-project community noise survey shall be conducted between June 1 and September 30, using the methods described in NOISE-6. The post-construction survey shall also include measurement of one-third octave band sound pressure levels at each of the above locations to ensure that no new pure-tone noise components have been introduced. If environmental conditions prevent completion of the post-construction community noise survey in a timely manner, then the survey shall be completed as soon as conditions allow.

The project owner shall submit the results in a Post-Construction Noise Survey Report to the Cities of El Segundo and Manhattan Beach and to the CPM. The Report will include a discussion of the relationships between surf and ambient noise levels.

- B. Implement Plant Noise Mitigation if Required. Mitigation measures shall be implemented to reduce noise levels to a level of compliance if the results from the post-construction noise survey at the residential receptor location indicate that the ambient noise level (L_{50}) has increased by 2 decibels or more due to facility operation, as determined by the relationship between surf and ambient noise levels obtained from the pre-construction survey.

If the results of noise measurements at ST-1, ST-2, ST-3 or ST-12 indicate that the ambient noise level has increased by more than 5 decibels due to facility operation, as compared with the baseline noise measurements conducted on

PROPOSED CONDITION OF CERTIFICATION

July 20 and 21, 2000, the owner will implement mitigation measures to reduce the noise at those locations to comply with the Municipal Code of the City of El Segundo.

- C. Implement Pure Tone Mitigation if Required. If a facility-related pure tone is found to be present at any of the above monitoring sites, mitigation measures shall be implemented to eliminate the pure tone. For the purpose of this condition, a pure tone is defined by the State of California's Model Community Noise Control Ordinance.

Verification:

- A. Post-construction Survey. Within 45 days after completing the post-construction surveys, the project owner shall submit a summary report of the survey to the CPM. Included in the report will be a plan for implementing the additional mitigation measures necessary to achieve compliance with the above listed noise limits, and a schedule, subject to CPM approval, for implementing these measures.
- B. Mitigation Implementation. If mitigation is required, the project owner shall implement the approved plan and schedule. Upon completion of installation of these measures, the project owner shall submit to the CPM a summary report of a new noise survey, performed as described in Protocol A and showing compliance with this condition.