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Energy and Ocean Resources

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STATUS REPORT ON SONGS MITIGATION PROGRAM

Following is a brief status report for the mitigation projects required in Southern California Edison Company's (SCE) coastal development permit for the San Onofre Nuclear Generating Station (SONGS) Units 2 and 3 (permit no. 6-81-330, formerly 183-73). The conditions originally were adopted by the Commission in 1991 to mitigate the adverse impacts of the power plant on the marine environment. In 1993, the Commission added a requirement for the permittee to partially fund construction of an experimental fish hatchery. The Commission has since approved amendments to the conditions in April 1997 and October 1998.

WETLAND RESTORATION MITIGATION**The Project**

Condition A of the permit requires the permittee to create or substantially restore a minimum of 150 acres of wetlands to mitigate for impacts to fishes caused by the operation of SONGS. In April 1997, the Commission reaffirmed its 1992 approval of the permittee's choice of the San Dieguito River Valley as the site for the wetland restoration project.

Progress Report

The wetland restoration mitigation project is undergoing a planning and environmental review process which incorporates the mitigation project into the overall San Dieguito River Valley Regional Open Space Park project, and which also includes additional wetland restoration required under the permittee's settlement agreement with the Earth Island Institute.

The CEQA/NEPA documentation is currently being prepared by the lead agencies, the San Dieguito River Valley Regional Open Space Park Joint Powers Authority (JPA) and U.S. Fish and Wildlife Service. An administrative draft EIR/S was circulated in June 1999 to the involved local, state and federal agencies. Review of the administrative draft revealed a number of issues that required additional detailed analyses. The EIR/S team members have been working cooperatively to resolve

issues related to the habitat plans. The EIR/S team agreed to conduct further analyses to establish the upper boundary for high salt marsh so that acreages for existing and created or restored wetlands can be determined. Scientific staff has provided its rationale for designating a +4.5 ft NGVD as the upper boundary of high salt marsh for planning purposes, and SCE is cooperating in obtaining the necessary additional data. It is not yet known how significantly the new analysis will affect the EIR/S process.

KELP REEF MITIGATION

The Project

Condition C of the permit requires construction of an artificial reef that will consist of an experimental reef and a larger mitigation reef. The experimental reef must be a minimum of 16.8 acres and the mitigation reef must be of sufficient size to sustain 150 acres of medium to high density kelp bed community. The purpose of the experimental reef is to determine what combination of substrate type and substrate coverage will best achieve the performance standards specified in the permit. The design of the mitigation reef will be contingent on the results of the experimental reef.

In April 1997, the Commission added the requirement for a payment of \$3.6 million to the State's Ocean Resource Enhancement and Hatchery Program (OREHP) to fund a mariculture/marine fish hatchery to provide compensation for resources not replaced by the artificial mitigation reef. SCE has fully satisfied this requirement.

Progress Report

At the conclusion of the environmental review process for the reef mitigation, the State Lands Commission certified the final PEIR and issued the offshore lease for the experimental reef in June 1999. The Commission approved the coastal development permit for the experimental reef (E-97-10) and the monitoring plan in July, and the U.S. Army Corps of Engineers issued its permit in August.

SCE began construction of the artificial reef on August 18, 1999, and completed the 56-module reef on September 29, 1999.

Shortly after construction, the physical dimensions of each module were monitored on the surface using differential GPS with an accuracy of about 1-foot. In addition, the outline (also termed the "footprint") and the percent cover of each module was monitored with high-resolution side scanning sonar. As a final check, each module was inspected by divers to estimate vertical relief and the degree of overlapping or piling up. SCE presented the results of construction monitoring of the first 24 modules to the staff in September. The staff found that the footprints and percentage covers of the modules conformed very closely to the design specifications. Construction monitoring for the remaining modules has been completed; staff will review those results shortly.

The staff has been conducting field and analytical work to determine the locations of reference sites in nearby natural kelp forests. This work has resulted in a list of 7 likely reference sites in the San Mateo, San Onofre, and Barn kelp beds. The staff has forwarded the locations of these sites to SCE's consulting biologists and hopes to gain consensus on the appropriateness of these reference sites. The staff has continued assembling the materials, equipment and personnel necessary for post-construction monitoring of the experimental reef and reference site.

FISH BEHAVIORAL MITIGATION

The Project

Condition B requires the permittee to install and maintain behavioral barrier devices at SONGS to reduce fish impingement losses.

Progress Report

Following the permittee's experiments on light and sound devices, the permittee considered fish guidance lights to be more effective in preventing fish from being trapped and killed. In October 1998, the Executive Director approved the permittee's installation plan for the lights and the lights were installed in December 1998.

Monitoring to evaluate the effectiveness of the fish guidance lights began in March 1999. Initial data seems to indicate that rather than attracting fish to the fish return system the lights are repelling the fish. The staff is working with SCE to design and implement additional experiments on the lighting system.