

CALIFORNIA COASTAL COMMISSION

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W4b

Energy and Ocean Resources Unit

Staff: CP/SH—SF

Staff Report: November 3, 1995

Hearing Date: November 15, 1995

Item Number: 4b

Commission Action/Vote:

**Work Program Extension and Budget Approval
 SONGS Mitigation Monitoring Program**

I. Staff Recommendation

The staff recommends that the Commission (1) extend the 1995 Work Program for the Commission's mitigation monitoring program for the San Onofre Nuclear Generating Station (SONGS) Units 2 and 3 marine resource mitigation project through December 31, 1996 or until the permit amendment issues are fully resolved, whichever is sooner, and (2) approve a budget for 1996 of \$536,742 to support the work of the monitoring program staff and Scientific Advisory Panel during this period and to provide for consultant assistance, as needed (see Exhibit 1, pg. 6).

II. Motion and Resolution

The action before the Commission to extend the mitigation monitoring program work program and approve a 1996 budget shall be decided by the following motion:

I hereby move that the Commission extend the work program and approve a budget for 1996 as recommended by the staff.

The staff recommends a "yes" vote on the foregoing motion, which will result in the adoption by the Commission of the following resolution:

The Commission hereby determines that the work program extension and 1996 budget that is set forth in this staff recommendation, dated November 3, 1995, carries out the intent of Condition II-D of Permit 6-81-330 (formerly 183-73) requiring the permittee to provide reasonable and necessary funding to the Commission and the Executive Director to perform their responsibilities pursuant to the mitigation and lost resource compensation conditions (II-A through C).

III. Justification for Work Program Extension and Budget Approval

The permittee, Southern California Edison Company (Edison), has submitted an amendment request package to the Coastal Commission seeking changes in the wetland mitigation and fish barrier conditions, changes to the monitoring

requirements, and replacement of the 300-acre reef mitigation requirement with a 12-acre experimental reef. The staff understands that Edison does not intend to pursue implementation of the mitigation projects until the amendment has been brought to and acted upon by the Commission.

Because of the substantial changes proposed by Edison in its amendment package, it is premature for the staff to develop a complete work program and budget for the mitigation monitoring program at this time. An extension is necessary to allow these outstanding permit amendment issues to be resolved. Once the permit amendment issues are resolved and, depending upon the changes to the permit, if any, that the Commission adopts, the staff will prepare a new work program and revised budget, and bring that work program and budget to the Commission for approval. The staff will need the continuing scientific and technical expertise of the monitoring program staff and Scientific Advisory Panel to assist in resolving the permit amendment issues. Funds for 1996 are therefore needed to carry out the Commission's continuing oversight responsibilities required by the permit until these issues are resolved. The budget covers expenses for monitoring program staff salaries, Scientific Advisory Panel, and operations for 1996, as well as for consultant assistance, as shown in Exhibit 1 (pg. 6). Direct and indirect costs incurred by the Commission's permanent staff that spend a portion of their time on this program are not included.

We should point out that over the past two years, the majority of time spent by the monitoring program staff as well as permanent staff devoted to this project has been consumed trying to resolve concerns raised by Edison over the wetland mitigation requirement and over the mitigation monitoring requirement. In an effort to achieve resolution of Edison's concerns, the Commission staff agreed to an expansion of the options for wetland credit to include partial credit for enhancement of existing wetlands (e.g., by maintaining the tidal inlet) and proposed a greatly reduced monitoring program to keep monitoring costs down. Although the staff has made some progress in resolving Edison's concerns, Edison decided to go to the Commission to seek more sweeping changes to the permit than could be negotiated at a staff level.

IV. Background on the Commission's Monitoring Program

In 1974, the Coastal Commission issued a permit (No. 6-81-330, formerly 183-73) to Edison for the operations of Units 2 and 3 of SONGS. A condition of the permit required independent study of the impacts of these operations on the marine environment offshore from San Onofre, and mitigation of any adverse impacts. As a result of the impact studies, in 1991 and 1993 the Coastal Commission added new permit conditions to address the substantial adverse effects of SONGS on the marine environment. The conditions require four types of mitigation: (1) restoration of a southern California wetland, (2) installation of fish barrier devices at the power plant, (3) construction of a kelp reef, and (4) provision of funds for a marine fish hatchery.

In addition, the permit requires Edison to fund the Commission's administrative oversight of the mitigation projects and an independent mitigation monitoring program carried out under the direction of the Executive Director of the Commission. Funding is based on a proposed work program and budget prepared by the Executive Director and approved by the Commission.

The monitoring program has operated under an approved work program and budget since 1993. The staff assigned to work on the monitoring program includes non-civil service contract staff (two scientists and administrative support), hired specifically for this program and funded by Edison, and existing Coastal Commission permanent staff. Edison does not provide funds for the work of the Coastal Commission's permanent staff. A Scientific Advisory Panel established by the Commission regularly provides technical and scientific advice to the staff. In addition, the staff engages consultants to assist with specific tasks as needed.

V. Status of Monitoring Program

The 1995 work program and budget is attached for reference (Appendix A). A brief review of the status of the major monitoring program activities for 1995 follows.

A. Wetland Restoration Monitoring

The permit requires Edison to create or substantially restore a minimum of 150 acres of wetlands. The monitoring program staff reviewed Edison's preliminary studies and preliminary restoration plan (January 1995). Edison proposed to create and/or substantially restore 41.1 acres of wetlands and to receive mitigation credit for enhancing tidal flow into the lagoon. Credit for enhancement (as opposed to substantial restoration or creation) was not contemplated by the permit. The monitoring program staff and Edison have since analyzed hydrological and biological data and developed an approach for determining the improvement to wetland resources resulting from keeping the lagoon inlet open. The Commission staff and Edison agreed in concept to the partial credit methodology, but not on some of the inputs to the model.

In addition, the monitoring program staff developed a greatly reduced monitoring effort that would cut overall costs. Edison does not agree with these proposals and the issues remain unresolved.

B. Behavioral Barriers

The permit requires Edison to install behavioral barrier devices in the cooling water intake system. The monitoring program staff continued its consultation with Edison on its short-term experiments to test the effectiveness of the devices prior to installation.

C. Kelp Reef

The permit requires Edison to construct a 300-acre kelp reef to mitigate for the adverse impact of SONGS operations on the San Onofre kelp bed. The monitoring program staff reviewed Edison's final plan on the siting and design of the mitigation reef and found that the proposed reef does not meet several of the permit conditions. The Commission staff sent Edison a comment letter on March 28, 1995, requesting additional information and explaining the deficiencies in the plan. Edison has not responded to that letter. The monitoring program staff also reviewed Edison's reports re-evaluating the effects of SONGS on the kelp bed.

D. Fish Hatchery

The permit requires Edison to contribute \$1.2 million for construction of an experimental marine fish hatchery. Edison placed the funds into an escrow account in fulfillment of the condition. Construction of the hatchery is expected to be complete before the end of 1995. The Commission's permanent staff continues to participate in the oversight and monitoring of the hatchery studies.

VI. Budget

As noted above, the permit requires Edison to fund the costs of the Commission's administrative oversight and independent monitoring program. The budget includes the amount of funding that is anticipated to be needed to cover the costs for the monitoring program staff, Scientific Advisory Panel, consultants and independent reviewers, operating expense and administrative services. Costs of the Commission's permanent staff that spend a portion of their time on this program, costs for their direct expenses (such as travel expense), and costs for the indirect operating expenses associated with the program are not included.

In December 1994, the Commission approved a total 1995 budget of \$849,084 for the mitigation monitoring program. Edison raised concerns regarding several items. As a result, the Commission staff flagged those items (a total of \$311,000 for consultants and \$10,000 for travel) and agreed not to fund them until the staff had consulted with Edison and either reached agreement on the need for and scope of the task, or, if unable to come to an agreement, the Commission had ruled on the dispute. The staff has since reached agreement with Edison on the expenditure of \$4,000 travel funds for field diving surveys of the kelp reefs. Moneys in all other flagged items (a total of \$317,000) remain untouched; the staff is not seeking authorization to expend any of these funds in 1996.

Of the 1995 budget, approximately \$420,000 is projected to be expended by the end of December 1995. After deducting actual expenditures plus the flagged amount (\$317,000) from the original approved 1995 budget, \$112,084 in unexpended funds remains to be carried over to 1996 for consultants, if needed, to assist the staff in resolving the permit amendment issues.

The full budget for 1996 shown below in Exhibit 1 (pg. 6) totals \$536,742 and includes monitoring program staff salaries, Scientific Advisory Panel expenses, operating expense, and administrative services in addition to the costs for consultants which may be needed to assist the staff in resolving the remaining permit amendment issues.¹ As in previous years, Edison will provide funds quarterly pursuant to an existing agreement between Edison and the Commission staff designed to minimize the advance outlay of cash.

¹ Costs for evaluating Edison's new kelp data, if such an evaluation is necessary, should be paid separately from additional funds provided by Edison pursuant to the Commission's Resolution to Terminate the Existence of the Marine Review Committee for SONGS, dated December 3, 1993 (see staff report on Coastal Commission Review of Executive Director's Decision to Reject Edison's Proposed Amendment to Permit 6-81-330, November 3, 1995.)

EXHIBIT 1
1996 Budget

Staff Salaries and Benefits ¹	
Ecologist (100%)	67,460
Ecologist (100%)	67,221
Sr. Administrator (50%)	43,909
Clerical Assistant (75%)	29,844
Total Staff Salaries and Benefits	208,434
Scientific Advisory Panel ²	106,519
Consultants and Contractors ³	112,084
Operations	
Staff Travel ⁴	36,812
Professional Development ⁵	2,500
Administrative Services ⁶	30,000
Operating Expense and Equipment	
General expense, printing & communications ⁷	14,950
UCSB contract overhead ⁸	10,527
Office/storage space rental ⁹	2,916
Computer repair/maintenance/technical support ¹⁰	6,000
Annual review workshop ¹¹	0
Annual audit ¹²	6,000
Equipment ¹³	0
Total Operations	109,705
TOTAL EXPENSE	\$536,742

BUDGET NOTES:

1. Includes salaries, wages, benefits and payroll taxes for program staff only. The costs for the Commission's permanent staff that spend a portion of their time on this program are not included here and are paid by the Commission.
2. The SAP is a panel of experts established by the Commission to provide scientific and technical advice to the staff. Expenses cover members' time and travel and are limited by the permit to \$100,000 per year adjusted annually in accordance with the consumer price index (CPI) applicable to California. The 1996 budget reflects an increase in the CPI through April 1995.
3. Includes potential costs for independent reviewers and consultants to provide technical and expert advice, if needed to assist the staff in resolving the remaining permit amendment issues. Funds in this line item are approximate and are carried over from unexpended funds from the 1995 budget.
4. Covers staff travel for meetings with Edison, Commission staff, consultants and contractors, attendance at agency and public workshops and meetings, site visits, and attendance at conferences. Travel costs are based on necessary travel for the program staff only. Necessary travel for permanent Commission staff is not included.
5. Covers anticipated costs to allow staff ecologists to attend job-related conferences and sessions to enable them to keep up with advances in restoration and mitigation techniques. Travel expenses are included in the *Staff Travel* budget.

6. Covers the cost of administrative and financial services provided by Simpson & Simpson Business & Personnel Services.
7. Based on Commission's General Expense, Printing, Communications, and Postage line items plus operating expense under the UCSB contract.
8. Overhead charges for the UCSB contract (under which the Commission has hired key staff for the mitigation monitoring program) include: office space and utilities, e-mail and access to other electronic networks, library services, laboratory facilities and equipment, personnel administration (including payroll and benefits administration), informal access to University faculty, and other indirect support for the program, at the nominal state rate of 10% of direct costs.
9. To offset use of office space at the Commission's San Diego offices, it was necessary to rent a small storage space for Commission files and materials. This space currently is rented on a month-to-month basis at \$198/month. An increase to \$243/month is expected in 1996. The building is currently 100% occupied so there is a good possibility that this space will become unavailable and alternative space will have to be leased. In that event, the staff will seek additional funds.
10. Covers costs for maintaining the computers used by the program staff, including regular maintenance, repairs and technical support needed for troubleshooting problems.
11. Covers costs for conducting an annual review workshop. It does not include costs for consultants who may be requested to attend these workshops. The intent of the annual workshop is to determine whether performance standards have been met, whether revisions to the standards are necessary, and whether remedial measures are required. It is premature to apply these issues to the mitigation projects because they are still in the planning stages. No funds are included in this year's budget.
12. Covers costs of an independent audit of the contract reimbursements and service fees for the SONGS monitoring program.
13. Personal use equipment (i.e., computer equipment) and some office furnishings for the program staff have been purchased. The program staff is working in three locations—the Commission's San Francisco and San Diego offices and UCSB's Marine Science Institute offices—where they are provided use of normal office equipment. If it becomes necessary during 1996 to supplement the existing office equipment to accommodate the needs of the program, the staff will seek additional funds.

APPENDIX A
1995 Work Program and Budget

Task 1: Wetland Restoration Monitoring

1.1 Evaluate and consult with SCE on wetland planning

1.1a. Review hydrologic studies and preliminary plan. The staff will continue reviewing the hydrologic studies of the San Dieguito wetland restoration project. Staff ecologists will coordinate with SCE for (1) independent reviews of the second hydrological report from Dr. Howard Chang that contains predictions of his calibrated model of the fluvial processes for the various alternative restoration plans, and (2) independent review of the preliminary restoration plan to insure that the tidal hydrology in all alternative restoration plans is as predicted. Upon completion of reviews, the staff will provide SCE with its recommendations.

1.1b. Consult with SCE on wetland restoration planning. The staff will continue consultation with SCE on the planning of the wetland restoration. The staff will continue to use wetland experts as needed to provide independent evaluation of the wetland restoration planning.

1.1c. Analyze pre-construction monitoring data. The staff will continue its analyses of SCE's pre-construction monitoring data (transferred to CCC in November 1994, see Task 1.1.d, below). Results from these analyses will determine whether any supplementary monitoring is needed for the development of the post-construction monitoring program. The staff will issue contracts for any supplementary monitoring found to be necessary.

1.1d. Coordinate data transfer. The staff will continue the process of data transfer, which will be ongoing during the remaining pre-construction phase.

1.1e. Review preliminary wetland restoration plan. The staff will review the preliminary wetland restoration plan when it is submitted. The staff will seek expert opinion as to whether the biological attributes of the plan are likely to be as predicted.

1.2 Develop methodology and criteria for assessing wetland restoration success

1.2a. Select reference sites. The staff will issue a contract to gather existing information for the purpose of selecting a list of viable wetlands suitable for use as reference sites. Sources of this information have been identified in a data base recently developed by CCC staff. The staff will conduct field surveys and develop a list of potential reference habitats. The staff will issue a contract for field work to measure permit performance standards in potential reference sites. The staff will analyze data from these surveys and use the results of these analyses to determine the most appropriate sites for reference. The staff will consult with SCE and wetland experts on its conclusions.

1.2b. Determine method to be used in assessing similarity. The staff will continue development of a method for assessing similarity of biological performance standards in the restored and reference wetlands. Staff will enlist the opinions of experts (perhaps by holding a small workshop) prior to selecting a method for assessing similarity.

1.3 Develop a sampling design for post-construction monitoring

1.3a. Select sampling stations. The staff will seek the opinions of SCE and obtain independent evaluations from wetland experts in choosing the specific sites within San Dieguito Lagoon and reference sites that are to be monitored during the post-construction period. This task will help to provide the basis for evaluating SCE's compliance with the permit.

1.3b. Develop sampling program. The staff will continue analysis of existing databases, including SCE's pre-construction data and any supplemental data collected by the staff (see Task 1.1c) for the purpose of designing the post-construction sampling program. This is a time consuming task that may require assistance of independent contractors so that it can be done in a timely manner in accordance with SCE's project schedule. The final sampling program cannot be developed, however, until after the wetland restoration plan is approved.

1.4 Develop a data management system. The database for post-construction monitoring is expected to be very large. To insure easy access by both the CCC and SCE it is critical that it be designed in an efficient manner, have detailed documentation, and maintain a high level of quality control. The staff will consult with data management experts to insure that these conditions are met.

Task 2. Behavioral Barriers Monitoring

2.1 Oversee and evaluate behavioral barriers

2.1a. Consult with SCE on short-term experiments. The staff will consult regularly with SCE on the design and implementation of short-term experiments to assess the potential efficacy of various behavioral devices.

2.1b. Coordinate data transfer. The staff will coordinate the transfer of new data from the short term experiments.

2.1c. Evaluate results of experiments/Carry out preliminary sampling program. The staff will evaluate RFPs and protocols for the experiments and independently assess results. At the end of the small scale experiments, the staff and SCE will meet to discuss whether to implement the barrier devices in plant. (The decision is the responsibility of the CCC; however, the staff expects to interact extensively with SCE.) If the devices are implemented, the staff will design and carry out a preliminary sampling program to determine the effort needed to fully assess the effectiveness of the devices. Analyses of data from the small-scale experiments and preliminary sampling program is a time consuming task that may require assistance of independent contractors so that it can be done in a timely manner in accordance with SCE's project schedule.

Task 3. Kelp Reef Monitoring

3.1 Oversee and consult with SCE on reef planning

3.1a. Coordinate data transfer. The staff will coordinate the transfer of data for use in the design of the Commission's post-construction monitoring program.

3.1b. Consult with SCE on reef planning. The staff will continue consulting with SCE as the reef planning work progresses.

3.1c. Review final reef siting and design plan. The staff will review SCE's final plan on reef siting and design and make recommendations to the Commission when SCE submits the final plan. CCC and SCE have agreed to a collaborative process for the external review of all documents associated with the SONGS mitigation project. The staff, in consultation with SCE, will solicit external reviews for the final plan on reef siting and design.

3.2. Design kelp recruitment experiments. The staff will review the MRC findings and other pertinent studies on kelp recruitment and use this information to design kelp recruitment experiments that will determine the best methods for establishing kelp on the mitigation reef. The staff will consult with kelp experts as needed.

Task 4. Fish Hatchery

4.0 Participate in Joint Panel. The Commission's permanent staff will continue to participate as a representative to the Joint Panel during 1995.

Task 5. Annual Review Workshop

5.0 Prepare for and conduct annual review workshop. The staff plans to conduct a workshop in 1995 to review the current status and direction of the project. The staff may call upon the experts who have provided advice to present their viewpoints.

Task 6. Information Transfer Between SCE and Commission Staff

6.0 Conduct information transfer meetings. The information transfer meetings are on-going throughout the period of the work program.

Task 7. 1996 Work Program and Budget

7.0 Prepare work program and budget. The work program and budget for 1996 will be prepared in the fall 1995.

Task 8. Administration

8.0 Administer monitoring program. This task is on-going throughout the period of each work program.

1995 Budget (Revised per CCC mtg)

Staff Salaries and Benefits

Ecologist (100%)	64,243	
Ecologist (50%)	31,766	
Ecologist (50%)	33,205	
Sr. Administrator (50%)	46,561	
Clerical Assistant (75%)	27,308	
Total Staff Salaries and Benefits		203,083

Consultants and Contractors

Task 1: Wetland Restoration

1.1	Evaluate and consult with SCE on wetland planning		
	a. External review of hydrology report and preliminary plan	15,000	
	b. Independent evaluation of restoration plan	8,000	
	c. Collect supplemental pre-construction monitoring data		
	1. Water quality study	5,000	
	2. Collect other pre-construction monitoring data, if necessary	45,000 *	
	e. External review of final restoration plan	20,000 *	
1.2	Develop methodology for assessing success		
	a. Select reference habitats		
	1. Collect existing information	20,000 *	
	4. Measure performance parameters in the field for:		
	• Vegetation	5,000 *	
	• Benthic invertebrates	20,000 *	
	• Fish	40,000 *	
	• Birds	20,000 *	
	• Food chain support	10,000 *	
	• Water quality	5,000 *	
	6. Consult with wetland experts	10,000	
	b. Consult with experts on methods for assessing similarity	25,000 *	
1.3	Develop post-construction monitoring design		
	a. Consult with experts on sampling methodology	16,000 *	
	b. Analyze existing data for sampling design	50,000 ^a *	
1.4	Develop data management system	15,000	
	Total Task 1 Consultants and Contractors		329,000

Task 2: Behavioral Barriers

2.1	Oversee and evaluate behavioral barriers		
	c. Analyze data to evaluate effectiveness	10,000 ^a	
	Total Task 2 Consultants and Contractors		10,000

Budget Note:

* Indicates that this budget item is disputed by SCE. This task will not be funded until after staff has consulted with SCE and reached agreement with SCE on the need for and scope of the task, or, if unable to reach agreement, the Commission has ruled on the dispute.

^a Consultant assistance may be necessary for timely completion, based on SCE submittals.

Task 3: Kelp Reef

3.1	Oversee and consult with SCE on kelp reef planning		
	c. External review of SCE reef siting and design report	25,000 *	
3.2	Consult with experts on kelp recruitment experiments	10,000 *	
	Total Task 3 Consultants and Contractors		35,000^b

Task 5: Annual Review Workshop

5.0	Presentation of experts' views as part of annual review	7,500	
	Total Task 5 Consultants and Contractors		7,500

Scientific Advisory Panel

	Time and travel	104,452	
	Total Scientific Advisory Panel		104,452

Operations

	Staff Travel	40,193 **	
	Professional Development	4,000	
	Operating Expense		
	Supplies, printing and communications	22,825	
	UCSB contract overhead	13,290	
	Office/storage space rental/lease	9,396	
	Workshops/meetings	5,500	
	Annual audit	6,000	
	Equipment		
	Copier, fax, computer equipment	10,000	
	Office furniture	18,845	
	Total Operations		130,049

Administrative Services

	Administrative services fees	30,000	
	Total Administrative Services		30,000

TOTAL EXPENSE

849,084

Budget Notes:

- * Indicates that this budget item is disputed by SCE. This task will not be funded until after staff has consulted with SCE and reached agreement with SCE on the need for and scope of the task, or, if unable to reach agreement, the Commission has ruled on the dispute.
- ** \$10,000 of this budget item is disputed by SCE. The staff will follow the procedure described in Budget Note * above for funding the disputed portion of this task.

b SCE has notified the staff that they intend to dispute the scope of the kelp reef mitigation requirement with new data, collected after the mitigation requirement was imposed. The staff may need to seek additional funds to evaluate and respond to the new data.