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United States Department of the Interior

OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20240

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JUL 7 1986

Vincent S. Noonan, Director
PWR Project Directorate #5
Division of PWR Licensing-A
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Noonan:

The Department of the Interior has reviewed the draft environmental impact statement, operating license stage, for the South Texas Project, Units 1 and 2, Matagorda County, Texas, and has the following comments.

Groundwater

The statement should include values for storage coefficient and for transmissivity obtained from the aquifer testing at the site. Aquifer thickness should also be included. Data in our files indicate considerable variation in the values of these aquifer characteristics, depending upon location and depth. Site-specific values should be provided in the final statement to evaluate the conclusions concerning drawdowns caused by prolonged withdrawals and subsidence.

Impacts to the Little Robbins Slough/Marsh Complex

The main cooling reservoir is sited on a large portion of the former Little Robbins Slough channel. A new channel was constructed outside the main cooling reservoir embankment. This channel meets Executive Order (EO) 11988 (Floodplain Management) requirements of reducing flood risk, but it does not "restore and preserve the natural and beneficial values served by floodplains . . ." (EO 11988, Section 1). The relocated channel does not have the same habitat value as the original slough. The water flow is altered by the virtually straight and steeper new course. This impact should be addressed in the final statement.

The presence of the cooling reservoir will impact the quality and quantity of freshwater flow to the marsh south of the plant site (NUS 1976). The impact statement mentions that "chronic adverse effects on the marsh could result," but addresses the problem by species sampling and ecological monitoring. Flow into the marsh is reduced 24%, but 18% of this flow will be regained by seepage from the main cooling reservoir. The applicant estimates the longterm average annual reduction of freshwater input to be 6%. The problem with the make-up flow from seepage is timing. Seasonal freshwater inflows are very important to estuarine nursery areas and the biological integrity of the estuary. Seasonal freshwater supplementation should be considered.

Use of the cooling ponds by migratory waterfowl is predicted. Thermal loading of the water, coupled with congregation of waterfowl, will result in a potential for wildlife

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diseases. A small outbreak of disease in gregarious species such as waterfowl can create a large scale die-off. We recommend that a contingency plan be developed for the implementation of harassment techniques to dissuade new birds from entering the area in case of a waterfowl die-off. If such an incident occurs, a wildlife pathologist should be consulted.

Endangered and Threatened Species

The South Texas Project could reduce the potential for northward expansion of whooping crane populations. If cranes are noticed in the area, formal consultation with the U.S. Fish and Wildlife Service should be initiated. For all matters pertaining to endangered species, please contact the Field Supervisor, U.S. Fish and Wildlife Service, 17629 El Camino Real, Suite 211, Houston, Texas 77058 (phone FTS 526-7681 or 713 229-3681).

Transmission Lines

Approximately 830 acres of rights-of-way are in wooded areas, and plans include periodic clearing for maintenance. Rights-of-way create edge and habitat diversity useful to many species of wildlife, including migratory raptors. We suggest pruning and trimming of woody species as needed for safety, but elimination of woody species should be avoided.

Radiological Impacts from Routine Operations

Potential radiation exposure pathways at the South Texas Project include gaseous effluents, iodines, and particulate contaminants in the air, as well as station discharge to the cooling pond and then into the Colorado River for proper dilution. The impact assessment in 5.9.3.4 states that "no measurable radiological impact on populations of biota is expected as a result of the routine operation of this facility." Radiological contaminants may accumulate in the food chain through predator-prey relationships. This may result in reduced reproductive success of fish and wildlife. We are particularly concerned about potential adverse effects to raptors and waterfowl.

Consideration should be given to recognition of these concerns in the license conditions.

Sincerely,

Bruce Blanchard, Director
Environmental Project Review