H-GAC

Houston-Galveston Area Council

Office of the Executive Director

PO Box 22777 • Three555 Timmons • Houston, Texas 77227 • 713/627-3200

May 21, 1986

Mr. Vincent S. Norman, Director
Division of PWR Licensing-A
Nuclear Regulatory Commission
Washington, D.C. 20555

RE: Areawide Clearinghouse Review of the Draft Environmental Statement for Operation of the South Texas Project Units 1 and 2

Dear Mr. Norman:

The Houston-Galveston Area Council has reviewed the Draft Environmental Statement on the South Texas Project Units 1 and 2. A Status Report with staff comments (copy enclosed) was presented to H-GAC's Project Review Committee and Board of Directors on May 20, 1986. H-GAC comments are contained on page 4 of the status report.

Thank you for the opportunity to comment on this project. If you have any questions or we can be of further assistance, please contact Mr. Carl Masterson at 713/993-4561.

Sincerely,

Jack Steele

JS:ss

xc: Pat Hall, Governor's Office

Enclosure

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STATUS REPORT

TX-86-04-02-0002-16
U. S. NUCLEAR REGULATORY COMMISSION
DRAFT ENVIRONMENTAL STATEMENT RELATED TO THE OPERATION
OF SOUTH TEXAS PROJECT UNITS 1 AND 2

Staff of the U. S. Nuclear Regulatory Commission has prepared a Draft Environmental Statement (DES) which examines the environmental impacts, consequences and mitigation actions, and environmental and economic benefits and costs associated with the operation of the South Texas Nuclear Plant (STNP) Units 1 and 2. The facility is located in Matagorda County southwest of Bay City. This assessment augments and updates the Final Environmental Statement for the construction phase issued in March 1975. Comments on this environmental statement are forwarded to:

U. S. Nuclear Regulatory Commission
Washington, D.C. 20555
Attention: Director of PWR Licensing - A

The DES details environmental issues and impacts which are summarized as follows:

- LAND USE

  Plant Site - 1,700 acres of bottomland habitat designated as a wildlife preserve; leasing for grazing will continue.

  Transmission Lines - Requires 4,773 acres for rights of way; about 73% of right of way used for crops and pasture; 1,211 acres are potentially prime farmland.

  Possible effects from transmission lines are induced electrical shock and interference with cardiac pacemakers; applicant must follow recommendations of the Rural Electrification Administration (1976) regarding grounding and clearances in addition to other specified reporting and monitoring conditions.

- WATER

  Thermal - When the difference between the temperature of the cooling reservoir and Colorado River is more than 6.9°C (3.8°C) there will be no discharge to the river.

  Water Quality - Discharge to the river may occur only when the freshwater flow of the river is greater than 800 cubic feet/second at the Bay City gauging station and the river is flowing to the Gulf at a velocity of 0.4 feet/second or greater.

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Sanitary wastes will be treated prior to discharge to the cooling reservoir and will meet requirements of the Texas Water Commission (TWC).

Cooling reservoir discharge must meet Environmental Protection Agency (EPA) and TWC effluent guidelines for flow, temperature, suspended solids, oil and grease, 5-Day Biochemical Oxygen Demand, iron, copper and total residual chlorine. EPA and/or TWC may impose additional limitations if needed.

- WATER USE

Surface Water - Under normal operating conditions 1,833,600 gallons per minute will be pumped from the reservoir for cooling purposes and pumped back to be cooled through evaporation.

Make up water for the reservoir will come from the Colorado River; average annual withdrawal will be 83,900 acre-feet. Because of changes in future upstream water use, the effect of withdrawing water at the South Texas Project could change over the life of the plant.

Groundwater - Used for potable and sanitary purposes; three wells will pump from the deep aquifer and have been located to minimize the potential for regional subsidence; withdrawal expected to average about 750 gallons per minute during normal plant operation.

- FLOODPLAIN

Location of the main cooling reservoir in the floodplain of Little Robbins Slough is calculated to have no effect on 100-year flood levels off site.

Flood elevations have been calculated to be essentially the same for pre-project and post-project conditions.

The elevation of the 100-year flood in the Colorado River varies from about 16-20 feet; main plant structures are at an elevation of 28 feet.

- AIR QUALITY

Fog - Using the Cooling Reservoir Fog Predictor Model it is estimated that cooling reservoir operation will result in one additional hour per year of ground fog on Route 60 and FM 1095 above the estimated 120 hours/year of naturally occurring fog.

A fog monitoring program will begin shortly before plant operation.

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Other Emissions - Emissions from operation of emergency diesel generators and auxiliary boilers are required to meet EPA and Texas Air Control Board standards.

- TERRESTRIAL RESOURCES

Impacts on the Site - Applicant states impact of plant operation on terrestrial animals and plants will be slight and mitigated by the 1,700 acre lowland habitat and cessation of pesticide use in that area.

American Alligator is the only species on site appearing on the Federal list of endangered species.

Transmission System - Impacts include audible noise, radio and television interference, light, production of ozone, oxides of nitrogen, induced electric and magnetic fields, bird collisions and effects from maintenance of corridors.

Little Robbins Slough/Marsh Complex - Impacts include reduction of freshwater inflow causing increases in salinity and reduction in the concentrations of important nutrients and total dissolved solids.

Applicant has estimated the reduction in freshwater in flow to be about 6%.

- AQUATIC RESOURCES

Entrainment - Calculations indicate insignificant entrainment(pulling of organisms into the intake structure) of croaker, menhaden, bay anchovy larvae, blue crab and shrimp in the intake structure when compared to impact on entire Gulf and Texas coast populations.

Impingement - The number of all species impinged (dashed) on screens is expected to be low based on sampling in 1983 and 1984.

Screens are mounted flush with the shoreline without protruding sidewalls, helping reduce entrapment.

- ENDANGERED AND THREATENED SPECIES

Terrestrial Species - Fish, turtles and waterfowl in the cooling reservoir will provide food for the American Alligator and possibly the American Bald Eagle; Atwater's Prairie Chicken may find suitable habitat along the transmission corridors.

Aquatic Species - None in the project vicinity.

- HISTORIC AND ARCHEOLOGICAL SITES - No impacts

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· SOCIOECONOMIC - IMPACTS	1,334 employees will be required for operation of Units 1 & 2; about 500 contract workers required. Estimated 70% of workers will reside in Matagorda County, 14% in Brazoria County, and 16% in other surrounding counties. Average annual workers payroll is projected to be about $63,000,000 (1989 dollars); local annual average purchases of materials and supplies is expected to total $770,000 (1991 dollars); purchases expected to be primarily in Brazoria, Harris, Matagorda, Calhoun and Wharton Counties.
· RADIOLOGICAL - IMPACTS	Applicant has considered radioactive releases to the environment surrounding the South Texas site including accidents that could lead to core melting. Applicant must meet regulatory requirements regarding radiation doses to members of the general public in unrestricted areas: 500 millirems in any calendar year, 100 millirems in any consecutive 7 days and 2 millirems in any 1 hour. Nuclear Regulatory Commission staff has determined there are no unique accident-related circumstances that warrant consideration of accident prevention or mitigation alternatives.

STAFF COMMENTS

- o Emergency preparedness plans have not been fully completed. These plans, particularly evacuation measures, should be reviewed and coordinated with affected governmental units. Review must focus on ensuring the adequacy and compatibility of the South Texas Nuclear Plant's emergency preparedness plans and those of surrounding governmental units.

- o H-GAC has contacted local government officials in Matagorda County, who indicate their continuing support for the project (comment attached).

A copy of the DES is available for review in the H-GAC library. Please contact Carl Masterson at (713) 993-4561.

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CITY OF BAY CITY

WILLIAM M. BELL, Mayor

BAY CITY, TEXAS

1901 FIFTH STREET

(409) 245-5311

May 2, 1986

Houston-Galveston Area Council
P. O. Box 22777
Houston, TX 77227

ATTN: MR. STEVE HOWARD

Dear Mr. Howard:

Thank you for your letter dated May 1, 1986 regarding the South Texas Nuclear Project (STP).

The City of Bay City has always been a staunch supporter of STP. We realize that the development of this new energy resource has put a new breath of air into the economy of our fair City. The recent developments in Russia have, surprisingly, not affected the outlook of the populace of Bay City regarding STP. We have no doubts to the safety measures going into this project. The staff of STP have been fastidious in keeping the governmental agencies of the City and the County abreast of all new developments.

If you require any further information regarding STP, please do not hesitate to oontact my office.

With best regards, I am

William M. Bell
Mayor of Bay City

WMB/kma