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April 28, 1992
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U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555

South Texas Project
Units 1 & 2
Docket Nos. STN 50-498 & 50-499
Annual Environmental Operating Report for 1991

Pursuant to the South Texas Project (STP) Unit 1 Operating License NPF-76 and Unit 2 Operating License NPF-80 Appendix B, Environmental Protection Plan (Nonradiological), attached is the Annual Environmental Operating Report for 1991.

If you should have any questions on this matter, please contact Mr. C. A. Ayala at (512) 972-8628.

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Attachment: Annual Environmental Operating Report for 1991

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NOTE: The above copies distributed without attachments except if noted by asterisk (*).

Revised 10/11/91

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ANNUAL ENVIRONMENTAL OPERATING REPORT:

FOR
SOUTH TEXAS PROJECT
ELECTRIC GENERATING STATION
JANUARY 1, 1991 THROUGH DECEMBER 31, 1991

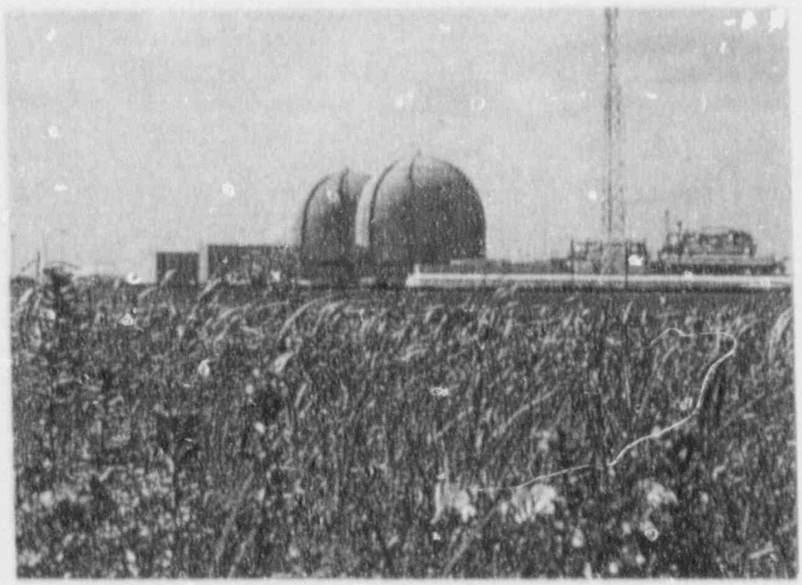
STP M-0943

ANNUAL ENVIRONMENTAL OPERATING REPORT:

for
SOUTH TEXAS PROJECT
ELECTRIC GENERATING STATION
January 1, 1991 through December 31, 1991

Prepared by:
Chemical Operations & Analysis Division
Technical Services Department
Nuclear Plant Operations
Houston Lighting & Power Company

April 1992



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INTRODUCTION AND SUMMARY

The South Texas Project is located on 12,300 acres in Matagorda County, Texas, approximately 15 miles southwest of Bay City along the west bank of the Colorado River. The South Texas Project consists of two 1250-MWe units, a Main Cooling Reservoir, a smaller Essential Cooling Pond, and attendant pumping and discharge facilities. The South Texas Project is jointly owned by Houston Lighting & Power Company (HL&P), Central Power & Light Company, the City of Austin, and the City of San Antonio. HL&P is the designated Project Manager for the owners and is responsible for implementation of all environmental programs.

Environmental responsibility has been a major objective at the South Texas Project since project inception. Formalized management objectives emphasize environmental protection. Towards this goal, the South Texas Project employs a staff of professional environmental personnel who are responsible for developing and implementing site environmental protection programs and monitoring the site's environmental compliance status. HL&P's corporate environmental staff provide support and technical assistance to the South Texas Project and act as liaison with regulatory agencies, exclusive of the Nuclear Regulatory Commission, for the South Texas Project regarding nonradiological environmental issues.

The Annual Environmental Operating Report is a detailed report on the implementation of the South Texas Project Environmental Protection Plan describing nonradiological environmental conditions and compliance monitoring programs at the South Texas Project from January 1 through December 31, 1991. Environmental compliance monitoring for the South Texas Project was conducted by plant and corporate HL&P personnel in accordance with federal and state regulations and applicable plant procedures. As a result, the South Texas Project promptly responded to areas of concern, addressed new and changing regulations, and maintained its high standard of environmental compliance throughout 1991 while serving the needs of the public for efficient and reliable energy production.

ENVIRONMENTAL CONDITIONS

Environmental conditions at the South Texas Project are intensively monitored. Plant personnel routinely monitored site environmental conditions during the year. Corporate and plant personnel conducted internal audits of site environmental programs and procedures. In 1991, representatives from the environmental department of the Central Power & Light Company participated in the annual Quality Assurance audit of site environmental programs. Members of the Texas Water Commission and Texas Department of Health conducted inspections at the site and representatives of the U.S. Environmental Protection Agency visited the site in 1991. Except for minor variations noted in this report, these audits and inspections confirmed the South Texas Project's compliance with applicable environmental laws and site-specific environmental programs.

MAIN COOLING RESERVOIR

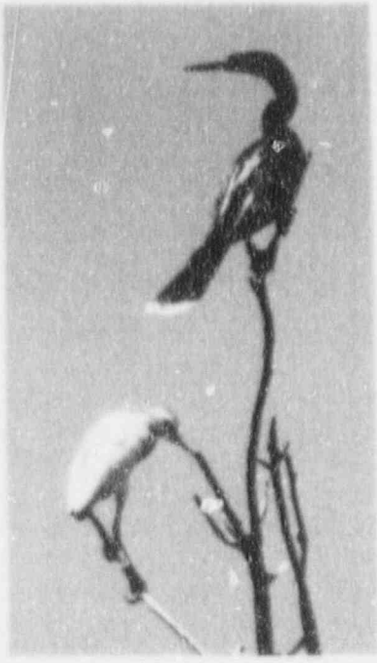
Under normal plant operating conditions, cooling water for the plant is diverted from and returned to the Main Cooling Reservoir. The Main Cooling Reservoir is a 7,000 acre, above grade, off-channel reservoir impounding 202,600 acre-feet of water at a maximum operating level of 49 feet MSL. Reservoir makeup water is withdrawn intermittently from the adjacent Colorado River. The ultimate heat sink is the Essential Cooling Pond which is an approximately 50 acre, below grade, off-channel reservoir impounding 388 acre-feet of water at a maximum operating level of 26 feet MSL. Water right Permit No. 3233, issued by the Texas Water Rights Commission (predecessor to the Texas Water Commission) authorizes the maintenance of these reservoirs, impoundment of water in the reservoirs diverted from the Colorado River, and circulation, diversion, and use of water from the reservoirs for industrial purposes in the operation of the plant. This permit limits the rate of diversion from the Colorado River. Other documents describing the South Texas Project water rights and with which the South Texas Project complies include Certificate of Adjudication 14-5437 issued by the Texas Water Commission, Contractual Permit No. CP-327, and contracts between HL&P and the Lower Colorado River Authority. Approximately 35,021 acre-feet of surface water was diverted from the Colorado River in 1991 for the Main Cooling Reservoir fill operations. The highest Main Cooling Reservoir elevation for 1991 was 45 feet which is the normal operating level. The structural condition of the Main Cooling Reservoir remained satisfactory and unchanged in 1991.

AQUATIC AND ECOLOGICAL MONITORING

The South Texas Project location falls within the Texas Land Resource Area designation as Coastal Prairie and can be divided into three broad ecological areas based on topography, soils, and vegetation. The bottomland area is a riparian habitat comprised of pecan, sycamore, cottonwood and oaks which occupies approximately nine percent of the total site near the Colorado River. This area provides an important habitat for birds, mammals, and herptiles. A spoil impoundment constructed in 1972 by the U.S. Army Corps of Engineers is included in this area. The upland area comprises approximately thirty-five percent of the site and offers limited habitat for mammals and several groups of birds. The 7,000 acre Main Cooling Reservoir occupies fifty-five percent of the site and provides a quality habitat for numerous aquatic and avian species. Site and corporate personnel regularly monitor the site environs for changing conditions. Ecological conditions onsite in 1991 remained unchanged and satisfactory.

Throughout the construction phase of the South Texas Project, and subsequently into plant operations, populations of important wildlife species were monitored to detect population changes. Survey results indicated that the site provided high quality habitat for a wide range of animals to live. Today, the site continues to attract extensive wildlife populations, offering a refuge for resident species as well as seasonal migrants.

During bird surveys conducted by corporate Environmental Department personnel in 1991, several bird species listed on the State and federal threatened or endangered list were observed on site. Those include the bald eagle, peregrine falcon, wood stork, white-faced ibis, and white-tailed hawk. An additional 150 bird species were observed through limited surveys of the site's diverse habitats.



Intensive bird nesting continues throughout the lowland habitat, particularly in a heron rookery around the perimeter of Kelly Lake. Nesting activity on the internal Y-dike of the Main Cooling Reservoir, first recorded in 1986, has steadily increased. Special precautions are taken each spring to protect nesting areas on the internal dike's slopes and roadways.

Alligator surveys conducted in the Main Cooling Reservoir and the surrounding wetland habitats in 1991 reveal approximately 65 alligators residing on site. In addition, a healthy population of white-tailed deer continues to be observed.

The primary reason the site attracts such a variety of wildlife is its' high quality, diverse habitat. Approximately 1,400 acres of prime lowland habitat located between the Colorado River and the east bank of the Main Cooling Reservoir offers a significant source of water year-round. These natural resource areas, in concert with numerous additional wetland and grassland areas, offer all the ingredients necessary to sustain the extensive wildlife population at the South Texas Project.

No aquatic monitoring was required by the U.S. Environmental Protection Agency or the State of Texas under the authority of the Clean Water Act for the time period of this report.

AIR QUALITY COMPLIANCE

Air emission sources at the South Texas Project fall under the scope of air pollution regulations promulgated under the **Texas Clean Air Act** and the **Federal Clean Air Act** and its numerous amendments. The purpose of these regulations is to safeguard air resources from pollution by controlling or abating air pollution and emissions. Of particular significance are emission sources from fossil-fueled boilers and generators, emissions resulting from onsite fire-fighting training, and asbestos removal from renovation and demolition projects. Asbestos removal is also strictly regulated by the Occupational Safety and Health Protection Administration for worker protection.

Fossil-fueled Emission Sources

The South Texas Project utilizes two oil-fired auxiliary steam boilers to furnish steam for deaerator startup, the turbine gland seals, and waste processing when steam is not available from the nuclear steam supply system. The auxiliary boilers are permitted to operate under U.S. Environmental Protection Agency Permit No. PSD-TX-209 and Texas Air Control Board Permit No. R-7410. Neither of the two units were operated in 1991 except for maintenance purposes. A temporary replacement boiler unit last used to support the startup of Unit 2 following a major outage in 1990 was removed from site.

In addition to the two auxiliary steam boilers at the South Texas Project, there are seventeen diesel generators located onsite designed to provide emergency power to various plant systems or buildings in the event of loss of power. These generators are exempt from Texas Air Control Board licensing under Standard Exemption No. 5 as they are internal combustion engine driven generator sets used only for emergency service.

Fire-fighting Activities

The South Texas Project conducts onsite training of selected employees on proper fire-fighting techniques. Most onsite instruction consists of training on the proper use of a fire extinguisher. Advance notification of fire-fighting training sessions is provided to the Matagorda County Health Department and the Texas Air Control Board. Verbal notifications were made to the Texas Air Control Board in 1991 concerning visible emissions resulting from two minor fires which occurred on site. One occasion involved a paper fire in a trash dumpster and the other occasion involved the overheating of a vendor's processing equipment. Due to the relative insignificance of these

occurrences, no follow-up reports were required by the Texas Air Control Board.

Asbestos Removal

Advanced notification is provided to the Texas Air Control Board of the scheduled demolition of buildings onsite. These buildings are inspected for the presence of asbestos prior to demolition. These regulations are found in the U.S. Environmental Protection Agency **National Emission Standards for Hazardous Air Pollutants.** Demobilization of construction phase structures at the South Texas Project progressed in 1991. Asbestos surveys conducted in 1991 in accordance with U.S. Environmental Protection Agency regulations revealed no asbestos present with the exception of small amounts found in the mastic tape on some pipe insulation in the site Administration Building. The asbestos was discovered in a routine building survey conducted prior to the commencement of remodeling activities. The tape was removed and properly packaged for disposal.

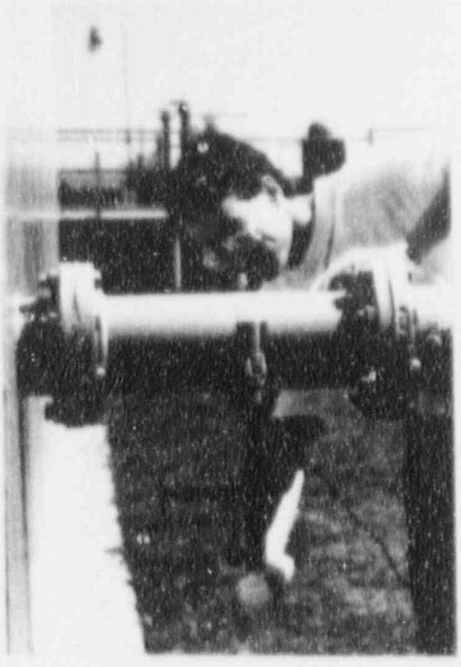
WATER QUALITY COMPLIANCE

Water usage and wastewater treatment at the South Texas Project are regulated under the federal **Safe Drinking Water Act,** the **Clean Water Act,** and the **Texas Water Quality Acts** with the collective purpose of safeguarding public drinking water supplies and maintaining the integrity of state and federal waters. The South Texas Project utilizes surface water and groundwater for industrial uses. Groundwater supplies onsite drinking water. Cooling water for plant activities utilizes surface water from the Main Cooling Reservoir and the Essential Cooling Pond, while five onsite water wells supply groundwater. These water wells supply potable water for the plant, makeup water for the Essential Cooling Pond, service water, firewater, and water for other onsite industrial uses.

Ground and surface water use reports are submitted annually to the Texas Water Commission. Monthly Discharge Monitoring Reports are submitted to the Texas Water Commission and the U.S. Environmental Protection Agency for wastewater discharges. Monthly reports are also submitted to the Texas Department of Health regarding drinking water quality. These reports contain sample dates and analytical results.

Drinking water is routinely monitored for bacteriological contamination, volatile organic compounds, pesticides, and herbicides to ensure the health and safety of site workers. Operation of the potable water systems is maintained by the Plant Operations and Site Facilities Departments and monitored--daily, weekly, and quarterly as applicable--by chemistry and environmental

personnel. Wastewater discharges are monitored for pH, total suspended solids, oil and grease content, chlorine concentrations, temperature, fecal coliform levels, and/or biological oxygen demand as required by permit. Wastewater operations are conducted by the Chemical Operations section and Site Facilities Department and monitored weekly--or more frequently if required or warranted--by chemistry and environmental personnel.



On May 24, 1991, the U.S. Environmental Protection Agency issued an Administrative Order to HL&P for permit exceedences reported by the company from August of 1989 to August of 1990 at the South Texas Project and for improper operation and maintenance of a sanitary waste treatment plant identified in a 1990 Texas Water Commission inspection report. Corrective actions were initiated prior to the issuance of the Order and the Order was promptly closed July 29, 1991, after receipt of HL&P's response. No deficiencies were noted in the 1991 Texas Water Commission inspection report.

The Texas Water Commission wastewater discharge permit (TWC Permit No. 01908) for the South Texas Project was renewed with amendments by the Texas Water Commission and became effective October 2, 1991. These changes, however, cannot be implemented until or unless they are also addressed in the U.S. Environmental Protection Agency NPDES permit (U.S. EPA Permit No. TX0064947) which expires in August of 1993. When implemented, these changes will result in reduced total dissolved solids discharged to the Main Cooling Reservoir and will minimize the amount of chemicals necessary to achieve neutralization of wastewater prior to discharge to the reservoir.

Wastewater Treatment Compliance Status

The South Texas Project currently has eight wastewater outfalls. These outfalls include sanitary waste discharges, discharge from the Neutralization Basin of the Nonradioactive Chemical Waste Treatment System, discharge from the Oily Waste Treatment System and blowdown from the Main Cooling Reservoir. Two of the eight outfalls are no longer in service. Outfall 001 (Cooling Pond Discharge) and Outfall 002 (Construction Sanitary Waste Treatment System) discharge to the Colorado River. No discharges from these

two outfalls took place in 1991. All other outfalls discharge to the Main Cooling Reservoir. The compliance status for each outfall in 1991 is included in the following descriptions.

OUTFALL 001 (COOLING POND DISCHARGE). The South Texas Project cooling pond discharge system transports water by gravity from the Main Cooling Reservoir to the Colorado River. There was no discharge from Outfall 001 in 1991 and no reportable environmental conditions were associated with this outfall.

OUTFALL 002 (CONSTRUCTION SANITARY WASTE TREATMENT SYSTEM). Outfall 002 represents a 60,000 gallon per day sewage treatment facility which discharges to a tidal segment of the lower Colorado River. Effluent is chlorinated prior to discharge in accordance with the applicable permit requirements. Late in 1989, as capacity needs decreased, this treatment system was removed from service. No reportable environmental conditions were associated with this outfall in 1991.

OUTFALL 101 (NEUTRALIZATION BASIN). The Neutralization Basin is a low volume waste treatment system which collects nonradioactive liquid waste consisting primarily of demineralizer regenerate, as well as the effluent from Outfall 501, for treatment prior to discharge to the Main Cooling Reservoir. No reportable environmental conditions were associated with this outfall in 1991.

OUTFALL 201 (OILY WASTE TREATMENT SYSTEM). Outfall 201 represents an approximately 15,000 to 30,000 gallon per day floor drainage treatment facility which discharges to the Main Cooling Reservoir. Oily wastewater from normal equipment leakoff is processed and effluent is pumped to the reservoir while separated oil is transferred to a storage tank for offsite disposal. There were four reported environmental conditions associated with this outfall in 1991.

On April 5, 1991, the daily maximum limit for oil and grease was exceeded due to an unusually heavy rainfall occurring on this date. Wastewater resulting from the influx of

the rainwater into the system necessitated the removal from service of a temporary filter used to polish effluent quality in order to utilize the full capacity of the treatment system. The temporary filter was returned to service after the runoff from the rainfall subsided. Subsequent monitoring by plant personnel determined that no adverse impacts to the environment occurred and that compliant operation was resumed.

The second reported environmental condition associated with the Oily Waste Treatment System in 1991, occurred on May 19, 1991, when the minimum pH limit was exceeded. The low pH of the wastewater occurred during a limited portion of this 24-hour period when temporary polymer addition pumps which were in service while the permanent pumps were being replaced, periodically overfed polymer to the treatment system. Discharge from the treatment system was discontinued upon discovery of the low pH condition. The system was internally recirculated and returned to compliant operation. Replacement of the permanent chemical addition pumps was completed and operations resumed.

On September 25, 1991, the maximum established daily oil and grease limit was exceeded due to operational difficulties with the system. The weekly compliance sample was collected prior to achieving stable operations following the performance of routine maintenance activities and was exacerbated by the receipt of effluent from a vendor sludge processing system and backwash from the system's effluent polishing filters. The system was subsequently stabilized and compliant operations resumed.

A weekly grab sample to monitor for the discharge pH of the Oily Waste Treatment System as required in the U.S. Environmental Protection Agency Permit No. TX0064947 was inadvertently missed for the week of December 22, 1991, resulting in a sampling frequency noncompliance. A sample collected on December 26, 1991, for Total Suspended Solids analysis was analyzed for pH when the omission was discovered. Although this analysis was not

valid for reporting purposes, it is unlikely that the pH deviated substantially during the holding time and was, therefore, indicative of the discharge pH for the sample week. The sample results were well within permit parameters.

None of the reported conditions for Outfall 201 resulted in any adverse impact to the environment.

OUTFALL 301 (EAST SANITARY WASTE TREATMENT SYSTEM). The East Sanitary Waste Treatment System is a 15,000 gallon per day sewage treatment facility which discharges to the Main Cooling Reservoir. This treatment system was removed from service in mid-1989 due to decreased capacity needs. No reportable environmental conditions were associated with this outfall in 1991.

OUTFALL 401 (WEST SANITARY WASTE TREATMENT SYSTEM). The West Sanitary Waste Treatment System is a 60,000 gallon per day sewage treatment facility which discharges to the Main Cooling Reservoir. No reportable environmental conditions were associated with this outfall in 1991.

OUTFALL 501 (METAL CLEANING WASTE). Wastewater generated from flushing and chemical cleaning of piping and equipment is collected in the Inorganics or Organics Basin (Outfall 501) and routed to the Neutralization Basin (Outfall 101), after applicable iron, copper, and pH requirements are met, for ultimate discharge to the Main Cooling Reservoir. No reportable environmental conditions were associated with this outfall in 1991.

OUTFALL 601 (TRAINING FACILITY SANITARY WASTE TREATMENT SYSTEM). The Outfall 601 sewage treatment facility was expanded in the first quarter of 1991 from a 15,000 gallon per day capacity unit to a 60,000 gallon per day unit which continues to discharge to the Main Cooling Reservoir. This expansion was necessitated by the addition of a new office complex. The previous smaller treatment unit

was incorporated into the design of the expanded unit to accommodate the increased demand on this system. Two reported environmental conditions occurred at this treatment system during the course of this transition period in 1991.

On one occasion, sanitary wastewater was discharged onto the ground between February 14, 1991 and February 27, 1991, when a lift station discharge line was apparently broken by a vehicle or other heavy equipment during construction of the expanded facility. The discharge line from the lift station was repaired upon discovery and the system returned to compliant operations. Subsequent monitoring by plant personnel determined that no adverse impact to the environment occurred.

The second occasion occurred on March 4, 1991, when a Total Suspended Solids compliance sample collected by plant personnel was determined not to be representative and therefore invalid for self-reporting purposes. Invalidation of the sample analysis resulted in a frequency noncompliance.

The expansion of the system was completed and no other reportable environmental conditions were experienced with this system.

Each of these reportable conditions were isolated incidents which were reported by HL&P and corrected upon discovery. None of these incidents presented a recurring problem in 1991.

As stated in the Master Operating Plan and Strategic Objectives, the South Texas Project is committed to being a leader in environmental protection. A review of the compliance data for 1991 for the South Texas Project indicates that improvement in reducing parameter exceedences associated with sanitary waste facilities and the Oily Waste Treatment System continues to be made. The overall reduction in reportable conditions associated with wastewater treatment system discharges in 1991 as compared to 1990 continues the trend established in previous years. The reduction in reportable environmental conditions for the past three years attests to the success of corrective actions implemented to date to ensure compliant operations of all the South Texas Project wastewater treatment systems. The South Texas Project is committed to continuing this positive trend in 1992.

SOLID WASTE MANAGEMENT COMPLIANCE

Solid waste management procedures for chemical, hazardous, and nonhazardous wastes generated at the South Texas Project ensure that wastes are properly disposed of in accordance with applicable federal, state, and local environmental and health regulations. By regulation, solid waste includes solid, semi-solid, liquid, and gaseous waste material. Nonradioactive wastes generated at the South Texas Project are regulated primarily by the U.S. Environmental Protection Agency under the **Resource Conservation and Recovery Act** and its amendments and the **Comprehensive Environmental Response, Compensation, and Liability Act** and by the Texas Water Commission under the **Texas Solid Waste Disposal Act**. The Texas Water Commission regulates the collection, handling, storage, and disposal of solid wastes including hazardous wastes. The disposal of municipal-type trash is regulated by the Texas Department of Health and the transportation of waste materials is regulated by the U.S. Department of Transportation.

The South Texas Project is registered with the Texas Water Commission as a large quantity generator of industrial solid wastes including hazardous wastes. Texas Water Commission regulations require that all industrial solid wastes generated at the South Texas Project be identified to the Commission. These wastes are identified in the Texas Water Commission Notice of Registration No. 30651 issued for the South Texas Project. The registration is revised whenever there is a change in waste management practices at the site. As a registered large quantity generator of hazardous waste, the South Texas Project is limited to a maximum storage period of 90 days for hazardous waste. The **Resource Conservation and Recovery Act** and **Texas Solid Waste Disposal Act** also mandate other requirements for large quantity generators, such as the use of proper storage and shipping containers, labels, manifests, reports, personnel training, a spill control plan and an accident contingency plan. Plant environmental personnel conduct weekly inspections of waste storage and accumulation areas to ensure compliance with the regulations. Plant personnel also inspect areas throughout the site to ensure wastes are not stored or accumulated inappropriately. Monthly solid waste inspections are conducted at the site by corporate environmental personnel. Waste handling and disposal activities are summarized and documented in the 1991 Annual Waste Summary for the South Texas Project submitted to the Texas Water Commission.

Hazardous and Nonhazardous Waste Management Activities

Hazardous and nonhazardous waste activities during 1991 included the shipment of 75 drums of hazardous waste for disposal. This is 29% less than the number of hazardous waste drums generated in 1990. An additional 986 drums of nonhazardous waste and 17,580

pounds of nonhazardous organic sludge were shipped offsite for disposal. Municipal-type trash was transported to the county landfill for disposal while construction-related inert debris was placed in the onsite landfill as specified on the South Texas Project's solid waste notice of registration. New regulations from the Texas Department of Health in 1991 required that scrap tires be used beneficially or properly manifested, shredded, and disposed. The South Texas Project shipped 93 tires to the county landfill for shredding and disposal.

Recycling Activities

The **Resource Conservation and Recovery Act** encourages the recycling, recovery, or reuse of waste when possible to reduce the amount of waste being disposed of in landfills. In 1991, the South Texas Project shipped 68,194 gallons of waste oil and 605 gallons of waste solvent for fuel blending and thermal energy recovery. Lead-acid batteries are returned when possible to the original manufacturer for recycle or are shipped to a registered battery recycler thereby reducing the volume of hazardous waste which might otherwise be generated. 1,048 batteries were sent to a registered recycler from the South Texas Project in 1991. A new paper recycling program was initiated at the site in the last quarter of 1991. In this three month period alone, approximately 14 tons of paper, the equivalent of 243 trees saved from destruction, were collected. Plant personnel are exploring areas where recycling activities may be expanded or initiated in 1992.

UNDERGROUND STORAGE TANKS

The **Resource Conservation and Recovery Act** also regulates underground storage tank systems and establishes standards for the installation of new tanks, the upgrade of those that remain below ground, and closure of those permanently removed from service. An underground storage tank system includes the tank, its piping, and all appurtenances. These provisions which include registration, notification, release detection, corrosion protection, spill and overflow protection, financial responsibility demonstrations, recordkeeping, reporting and corrective action requirements were implemented in order to prevent damage to the environment from leaking tank contents.

The South Texas Project currently has three emergency diesel underground storage tanks. In November of 1990, after providing notification to the Texas Water Commission, five underground storage tanks previously in use at the construction-phase fuel island were closed by removal. A new fuel island with aboveground storage tanks replaced the construction-phase fuel island. Three groundwater monitoring wells were established in December of 1990 to assess the extent of hydrocarbon contamination found during

closure activities. Groundwater monitoring was completed in 1991 and all potential sources of petroleum hydrocarbons have been removed. Based on these conditions, HL&P petitioned the Texas Water Commission in January of 1992 to consider the closure clean. To date, no response has been received.

COMPLIANCE WITH SARA TITLE III

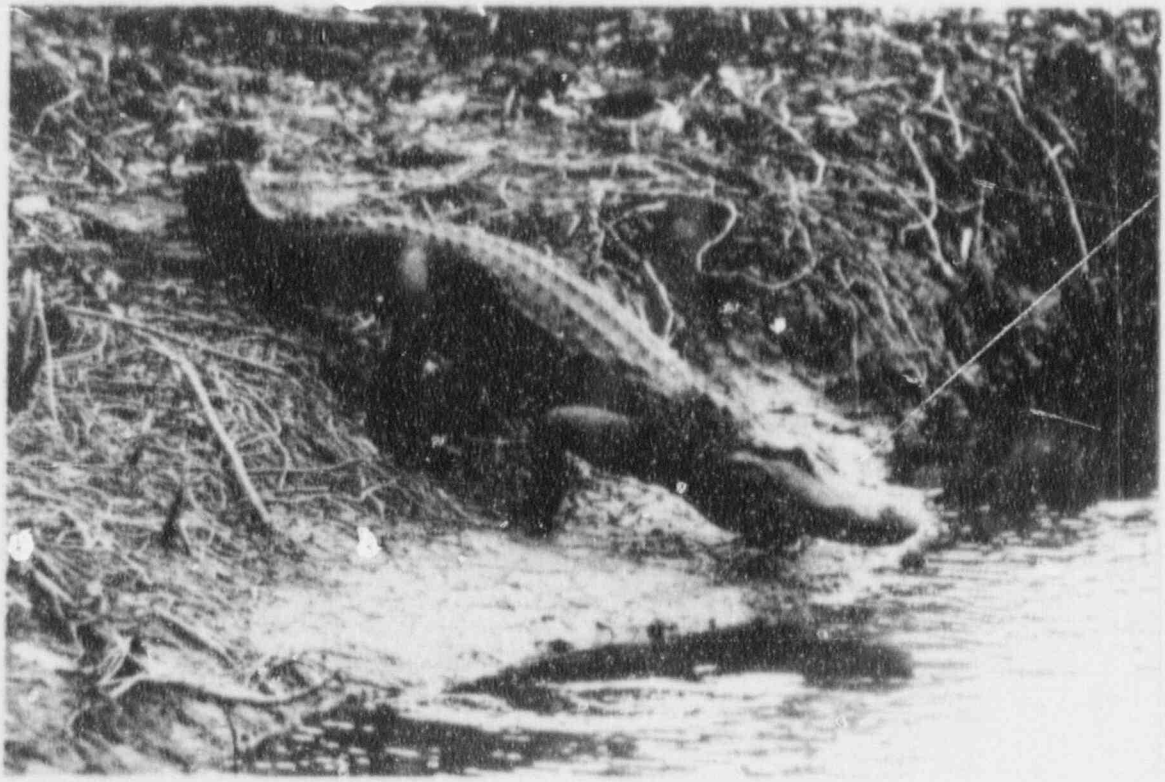
The **Comprehensive Environmental Response, Compensation, and Liability Act** created a federal authority and source of funding for responding to spills and other releases of hazardous materials, pollutants, or contaminants into the environment. Reportable quantities were established for several hundred chemicals and spills exceeding this established quantity must be reported to the U.S. Environmental Protection Agency. This act was amended and enhanced in 1986 to establish new programs for dealing with emergency preparedness and community right-to-know. This amendment is known as **the Superfund Amendment and Reauthorization Act (SARA)**.

The South Texas Project conducted site wide inspections to identify and record all hazardous products and chemicals on site as required by the **Superfund Amendment and Reauthorization Act** and the **Texas Hazard Communication Act**. Annual reports are submitted by March 1 for the preceding calendar year to the Texas Department of Health.

CHEMICAL CONTROL

The Expendable Materials Program was established at the South Texas Project to evaluate those chemicals and products which have the potential to come in contact with plant components. Disposal requirements for each of these chemicals or products are evaluated prior to approval and are clearly outlined on the evaluation form. Approved chemicals and products are listed in the STPEGS Expendable Material Manual which is easily consulted for the proper disposal requirements of that particular material. Standard plant procedures establish disposal requirements and alternate evaluation methods are available for those materials that fall outside the scope of the Expendable Materials Program.

Strict restrictions regarding the storage of product drums and gas cylinders are also proceduralized at the South Texas Project. No more than the amount of material necessary to perform a job is allowed to remain within the Protected Area unless prior authorization is obtained. Weekly inspections are conducted to ensure that unauthorized chemicals are not stored within the Protected Area unless in use. These restrictions aid in minimizing the amount of hazardous and nonhazardous waste generated at the South Texas Project.



ENVIRONMENTAL PROTECTION PLAN STATUS

The Environmental Protection Plan was issued in March of 1989 to provide for the protection of nonradiological environmental values during operation of the South Texas Project. Internal reviews, audits, and inspections conducted in 1991 documented the plant's compliance status with the Environmental Protection Plan. Nonconformities are quickly addressed when identified to maintain operations in an environmentally acceptable manner. This section reviews Environmental Protection Plan noncompliances identified by the plant and associated corrective actions to prevent recurrence, nonroutine reports submitted by plant personnel, and any activities which involved a potentially significant unreviewed environmental question.

ENVIRONMENTAL PROTECTION PLAN STATUS REPORT

As previously discussed, six noncompliances associated with wastewater discharge permits were reported to state and federal agencies in 1991 by the South Texas Project, representing a 33% reduction in the number of reportable environmental conditions associated with wastewater discharge permit criteria. In addition, plant personnel reported a minor release of 3 to 5 gallons of light lubrication oil to the Colorado River. The oil was quickly contained and removed with absorbent material.

A report was also submitted to the Nuclear Regulatory Commission and the Texas Parks and Wildlife Department was notified when a significant number of Atlantic croaker (*Micropogonias undulatus*) in the plant's Main Cooling Reservoir were impacted by sodium hypochlorite used to control biofouling of reservoir water prior to entering plant systems. The site has used sodium hypochlorite for several years to control biofouling with no other known occurrences of this nature. No offsite impact resulted. No water was discharged from the reservoir in 1991. The reservoir is not open for public access nor are any fish harvested from the reservoir for human consumption. Additional administrative controls and engineering alterations were initiated to prevent a recurrence of these circumstances.

No unreviewed environmental questions were identified in 1991.

CONCLUSION

Significant challenges face the plant in 1992 including beneficial land application of sanitary wastewater biosolids, specific waste minimization targeting, oily waste sludge volume reduction, expansion of recycling programs, and rapidly changing and expanding environmental legislation. In keeping with project management's commitment to environmental responsibility, the South Texas Project has initiated an aggressive environmental compliance program. Goals, site procedures, information bulletins, employee training, internal audits, and formal and informal communication methods enable the plant to master these challenges. These efforts have launched the South Texas Project into the forefront of environmental protection. Environmental excellence is and continues to be the foundation of operations at the South Texas Project.