

#### UNITED STATES NUCLEAR REGULATORY COMMISSION

#### REGION IV 611 RYAN PLAZA DRIVE, SUITE 400 ARLINGTON, TEXAS 76011-8064

March 31, 2000

William T. Cottle, President and Chief Executive Officer STP Nuclear Operating Company P.O. Box 289 Wadsworth, Texas 77483

SUBJECT: PLANT PERFORMANCE REVIEW - SOUTH TEXAS PROJECT

Dear Mr. Cottle:

The purpose of this letter is to communicate our assessment of your performance and to inform you of our planned inspections at your facility. On March 2, 2000, we completed a Plant Performance Review (PPR) of South Texas Project. We conduct these reviews to develop an integrated overview of the safety performance of each operating nuclear power plant. We use the results of the PPR in planning and allocating inspection resources and as inputs to our senior management meeting (SMM) process. This PPR evaluated inspection results and safety performance information for the period from January 25, 1999, through February 11, 2000, but emphasized the last 6 months to ensure that our assessment reflected your current performance. Our most recent summary of plant performance at South Texas Project was provided to you in a letter dated September 16, 1999.

The NRC has been developing a revised reactor oversight process that will replace our existing inspection and assessment processes, including the PPR, SMM, and Systematic Assessment of Licensee Performance (SALP). We recently completed a pilot program for the revised reactor oversight process at nine participating sites and are making necessary adjustments based on feedback and lessons learned. We are beginning initial implementation of the revised reactor oversight process industry-wide, including your facility, on April 2, 2000.

This PPR reflects continued process improvements as we make the transition into the revised reactor oversight process. You will notice that the following summary of plant performance is organized differently from our previous performance summaries. Instead of characterizing our assessment results by SALP functional area, we are organizing the results into the strategic arenas embodied in the revised reactor oversight process. Additionally, in assessing your performance we have considered the historical performance indicator data that you submitted in January 2000 in conjunction with the inspection results. The results of this PPR were used to establish the inspection plan in accordance with the new risk-informed inspection program (consisting of baseline and supplemental inspections). Although this letter incorporates some terms and concepts associated with the new oversight process, it does not reflect the much broader changes in inspection and assessment that will be evident after we have fully implemented our revised reactor oversight process.

During the last 6 months, both units of South Texas Project operated at or near full power, but encountered several challenges. Unit 1 tripped during performance of main turbine trip testing. Unit 2, in addition to being shut down for refueling, required two significant power reductions as a result of a loss of low pressure feedwater heater condensate flow and to allow a weld repair on a water detection drain line under the main generator. Overall, South Texas Project continues to operate in a safe manner.

We did not identify any significant performance issues in the reactor safety, radiation safety, or safeguards strategic arenas. We did note that you were challenged by balance-of-plant problems during this assessment period. Replacement of the Unit 1 steam generators is considered a significant and unique activity that warrants inspection in addition to the baseline inspection program. As a result, additional inspections will be conducted during the replacement outage.

Enclosure 1 contains a historical listing of plant issues, referred to as the Plant Issues Matrix (PIM), that were used during this PPR process to arrive at our integrated view of your performance trends. The PIM for this assessment is grouped by the prior SALP functional areas of operations, maintenance, engineering, and plant support, although the future PIM will be organized along the cornerstones of safety as described in the revised reactor oversight process. The attached PIM includes items summarized from inspection reports or other docketed correspondence regarding South Texas Project. We did not document all aspects of licensee programs and performance that may be functioning appropriately. Rather, we only documented issues that we believe warrant management attention or represent noteworthy aspects of performance. In addition, the PPR may also have considered some predecisional and draft material that does not appear in the attached PIM, including observations from events and inspections that had occurred since our last inspection report was issued but had not yet received full review and consideration. We will make this material publically available as part of the normal issuance of our inspection reports and other correspondence.

Enclosure 2 lists our planned inspections for the period April 2000 through March 2001 at South Texas Project to allow you to resolve scheduling conflicts and personnel availability in advance of our inspector arrival onsite. The inspection schedule for the latter half of the period is more tentative and may be adjusted in the future due to emerging performance issues at South Texas Project or other Region IV facilities. Routine resident inspections are not listed due to their ongoing and continuous nature.

We will inform you of any changes to the inspection plan. If you have any questions, please contact me at (817) 860-8243.

Sincerely,

/RA/

Joseph I. Tapia, Chief Project Branch A Division of Reactor Projects Docket Nos.: 50-498

50-499

License Nos.: NPF-76

NPF-80

#### Enclosures:

1. Plant Issues Matrix

2. Inspection Plan

#### cc w/enclosures:

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# United States Nuclear Regulatory Commission PLANT ISSUE MATRIX

В١	/ Primary	<b>Functional</b>	Area
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Date	Source	Functional Area	ID	Туре	Template Codes	Item Title Item Description
02/09/2000	1999021	Pri: OPS	NRC	NEG	Pri: 3B	Spurious AMSAC turbine trip highlighted system, procedure, and knowledge deficiencies.
		Sec:			Sec: 4A	A spurious turbine trip was caused by an actuation of the ATWS (anticipated transient without scram) Mitigation
Dockets Discussed: 05000498 South Texas 1 05000499 South Texas 2					Ter: 3C	System Actuation Circuit (AMSAC) shortly after the system automatically armed. The system provided operators no warning that a low feedwater flow condition was sensed and no warning that the system was preparing to arm as power increased. Additionally, operators were unaware that the feedwater flow signal provided to AMSAC was about 6 percent lower than control room indications because it was not temperature compensated. The licensee decided to follow the industry practice of manually arming AMSAC after verifying no trip conditions existed at a slightly higher power level than it would automatically arm to avoid future spurious trips.
12/25/1999	1999020	Pri: OPS	NRC	NEG	Pri: 1B	A feedwater heater tagout resulted in a major plant transient complicated by unidentified material condition
		Sec:			Sec: 2A	Operators attempted to isolate the normal level control valve for a low pressure feedwater heater without a
<b>Dockets Discussed:</b> 05000499 South Texas 2					Ter: 3C	procedure. This action resulted in sequentially isolating all three strings of low pressure feedwater heaters, in part due to existing but unrecognized material deficiencies. A rapid power reduction was necessary due to reduced condensate system flow, but control room operators were slow to initiate a power reduction and boration, and then did so in a poorly coordinated manner. This event was complicated by several automatic valve failures. A reactor trip criterion intended to protect equipment was exceeded but not recognized because the requirement was not included in any of the procedures in use
12/25/1999	1999020	Pri: OPS	NRC	NEG	Pri: 3B	Reactivity manipulations made a routine transient more severe.
Dockets Discussed: 05000499 South Texas 2		Sec:			Sec: 3C Ter: 1B	Reactor reactivity manipulations were not properly balanced between borations and rod insertion and, as a result, the rod insertion limit was closely approached. Operators chose to override automatic control rod insertion in order to preserve shutdown margin. In doing so, the reactor coolant system temperature and pressure transient was made more severe and Technical Specification action statements for exceeding the minimum temperature for criticality and departure from nucleate boiling minimum pressure were entered for brief periods.
12/25/1999	1999020	Pri: OPS	NRC	NEG	Pri: 5C	Operators failed to correctly determine the impact of a charcoal leak on operability of ventilation equipment
		Sec:			Sec: 1A	Unit 2 operators identified a charcoal leak in the Train B fuel handling building emergency ventilation filter on
Dockets Discussed: 05000498 South Texas 1 05000499 South Texas 2				Ter:	December 3, 1999. It was erroneously considered to have no impact on system operability based on incomplete knowledge. Three and a half days later, the system engineer determined that the leak rendered the system inoperable. On August 19, 1999, a similar leak in Unit 1 was not recognized as rendering the system inoperable until evaluated by the system engineer on August 23. In both cases, no Technical Specification Limiting Condition for Operation was exceeded because the leaks were quickly repaired. The licensee addressed the poor initial operability determinations in Condition Report 99-17218.	
12/25/1999	1999020	Pri: OPS	NRC	POS	Pri: 5A	Plant Operations Review Committee and the Nuclear Safety Review Board were effective.
		Sec:			Sec: 5B	The inspectors observed that the Plant Operations Review Committee and the Nuclear Safety Review Board were
<b>Dockets Discussed:</b> 05000498 South Texas 1 05000499 South Texas 2					Ter: 5C	effective in identifying and resolving problems and improving plant operations. Committee members actively challenged the plant staff with questions focused on safety while reviewing plant procedure changes, safety evaluations, and modifications. Technical Specification requirements governing these committees were satisfied.

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## United States Nuclear Regulatory Commission PLANT ISSUE MATRIX

Βv	Primary	<b>Functional</b>	Area
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Date	Source	Functional Area	ID	Туре	Template Codes	Item Title Item Description
12/25/1999	1999020-01	Pri: OPS	NRC	NCV	Pri: 3C	Procedures did not direct prompt entry into abnormal operating procedures or prompt power reduction or g
		Sec:			<b>Sec:</b> 1B	Annunciator response procedures that indicated reduced condensate flow did not direct entry into the abnormal
Dockets Disc 05000499 So					Ter:	operating procedure for rapid load reduction. In addition, adequate procedural guidance was not provided for timing and flow rate of borations during a rapid load reduction to avoid loss of shutdown margin. These procedural inadequacies constitute multiple examples of procedures inappropriate to the circumstances and are a violation of 10 CFR Part 50, Appendix B, Criterion V. This issue was entered in the licensee's corrective action program as Condition Report 99-17296. This Severity Level IV violation is being treated as a noncited violation, consistent with Section VII.B.1.a of the NRC Enforcement Policy.
12/25/1999	1999020-02	Pri: OPS	NRC	NCV	Pri: 5C	Inadequate corrective actions from a similar event contributed to isolation of feedwater heaters.
		Sec:			Sec:	Corrective actions for a previous uncontrolled power increase caused by improper operation without a procedure of
<b>Dockets Discussed:</b> 05000499 South Texas 2					Ter:	a reheater drain tank level control system were too narrowly focused. Procedural guidance was only created for the reheater drain tank, even though the same guidance was needed for all feedwater heaters. The inadequate corrective actions were a violation of 10 CFR Part 50, Appendix B, Criterion XVI. This issue was entered in the licensee's corrective action program as Condition Report 99-17296. This Severity Level IV violation is being treated as a noncited violation, consistent with Section VII.B.1.a of the NRC Enforcement Policy.
12/25/1999	1999020-03	Pri: OPS	NRC	NCV	Pri: 3A	Failure to follow procedure resulted in inadvertent dilution of reactor coolant system.
		Sec:			Sec:	An inadvertent dilution of the reactor coolant system boron concentration caused a small increase in reactor power.
<b>Dockets Discussed:</b> 05000499 South Texas 2				Ter:	The dilution resulted from an improper valve lineup while refilling the boron concentration monitor tank without a procedure. Operators quickly recognized the power increase and borated to restore power below 100 percent. The significance of the overpower transient was small due to the brief duration and small magnitude. The failure to utilize and follow the procedure for refilling the tank was a violation of 10 CFR Part 50, Appendix B, Criterion V. Thi issue was entered in the licensee's corrective action program as Condition Report 99-17762. This Severity Level IV violation is being treated as a noncited violation, consistent with Section VII.B.1.a of the NRC Enforcement Policy.	
11/06/1999	1999018	Pri: OPS	NRC	NEG	Pri: 1A	THREE EXAMPLES OF POOR CONFIGURATION CONTROL BY OPERATORS
		Sec:			Sec:	Inspectors identified several problems with poor configuration control. A lock was not reinstalled on a motor
Dockets Discussed: 05000498 South Texas 1 05000499 South Texas 2					Ter:	operated valve breaker following maintenance to ensure the valve was not a source for a high energy line break; other administrative controls were adequate to prevent inappropriate operation of the valve, so no violation occurred. Operators failed to repressurize the control air header for Standby Diesel Generator 23 following maintenance, despite having an annunciator indicating the abnormal condition. The diesel tripped when it was started for post maintenance testing as a result; this was not a violation because the diesel was still out of service. Also, inspectors identified 37 motor control center switches, labeled as spares, which were in the ON position despite having no procedure to direct them to be placed in that position. The switches were energized but not connected to any load, so no safety issue existed.
11/06/1999	1999018	Pri: OPS	NRC	NEG	Pri: 1A	OPERATORS FAILED TO RECOGNIZE ENTRY INTO A TECHNICAL SPECIFICATION ACTION STATEMENT W
		Sec:			Sec:	Inspectors identified that Unit 1 operators crosstied safety motor control centers E1A1 and E1A2, but failed to
Dockets Discussed: 05000498 South Texas 1 05000499 South Texas 2					Ter:	understand the requirements of and enter Technical Specification 3.8.3.1, action a. The condition existed briefly during post maintenance testing of the crosstie breaker, so the action statement was not violated.

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**By Primary Functional Area** 

Date	Source	Functional Area	ID	Туре	Template Codes	Item Title Item Description
11/06/1999	1999018	Pri: OPS	NRC	POS	Pri: 3A	MIDLOOP EVOLUTIONS PERFORMED IN CAREFUL MANNER IN UNIT 2
<b>Dockets Discu</b> 05000498 Sou 05000499 Sou	th Texas 1	Sec:			Sec: 1C Ter:	Reactor coolant system reduced inventory and midloop operations were performed in a controlled manner by operators who were knowledgeable and experienced in the evolution. Excellent supervisory oversight helped to effectively coordinate site activities and ensure the safe execution of this important evolution. The licensee conservatively stopped work on all jobs that had the potential to impact the evolution. Contingency actions were briefed in detail and assigned to specific personnel, and venting equipment was installed for immediate use.
11/06/1999	1999018	Pri: OPS	Licensee	POS	Pri: 5A	OPERATIONS SELF ASSESSMENT WAS PROBING, THOROUGH, AND BROAD IN SCOPE
<b>Dockets Discu</b> 05000498 Sou 05000499 Sou	th Texas 1	Sec:			Sec: Ter:	The licensee conducted a thorough self assessment of plant operations. The assessment, performed by an experienced, multi-disciplined team of seven site people and seven industry peers, was broad in scope. The findings were self-critical, and were consistent with NRC observations.
11/06/1999	1999018	Pri: OPS	NRC	POS	Pri: 5A	INSPECTORS CONFIRMED LICENSEE ADEQUATELY CONTROLS POTENTIAL DRAINDOWN PATHS
Dockets Discussed: 05000498 South Texas 1 05000499 South Texas 2		Sec:			Sec: Ter:	The inspectors confirmed that the licensee had adequately searched for potential draindown paths that could be created by operator error or equipment failures, and which could lead to a common-cause failure of residual heat removal and emergency core cooling system pumps during reduced inventory operations. The inspectors determined that the licensee had adequate administrative controls in place to reduce the likelihood of an inadvertent draindown of the reactor coolant system during reduced inventory operations.
11/06/1999	1999018-01	Pri: OPS	Licensee	NCV	Pri: 4A	SDG 22 RENDERED INADVERTENTLY INOPERABLE DUE TO DRAWING ERROR
<b>Dockets Discu</b> 05000498 Sou 05000499 Sou	th Texas 1	Sec:			Sec: 5A Ter:	Operators inadvertently rendered Standby Diesel Generator 22 inoperable while tagging out a portion of the starting air system for maintenance. A drawing error was not recognized until starting air was isolated to the entire system. Technical Specification requirements were quickly satisfied when the error was recognized. This issue was documented in Condition Report 99-13106. The inspectors determined that this was the first time the drawing error was identified or impacted system operability. Failure to have accurate system drawings was a violation of 10 CFR 50, Appendix B, Criterion V. However, this licensee identified and corrected violation will not be cited in accordance with Section VII.B.1.a of the Enforcement Policy.
09/24/1999	1999015	Pri: OPS	NRC	POS	Pri: 3B	LICENSEE'S EVALUATORS DEMONSTRATED HIGH COMPETENCE LEVEL
<b>Dockets Discu</b> 05000498 Sou 05000499 Sou	th Texas 1	Sec:			Sec: Ter:	The licensee's evaluators demonstrated high performance expectations for operators and sustained high levels of competence in examination administration and operator performance assessment. Their threshold for generating constructive comments was low. Examination security was effectively maintained.
09/24/1999	1999015	Pri: OPS	NRC	STR	Pri: 3A	OPERATORS PERFORMED AT A HIGH LEVEL ON OPERATING TEST
<b>Dockets Discu</b> 05000498 Sou 05000499 Sou	th Texas 1	Sec:			Sec: 3B Ter:	The licensed operators performed at a high level during all portions of the biennial examinations with no crew or individual failures during the week of the inspection and only one crew failure during the previous four weeks, which was an overall improvement from that observed during the previous inspection. Communications and teamwork were strengths. During the dynamic scenarios, the operators advocated appropriate responses to changing plant conditions and as plant conditions deteriorated the shift management team conducted frequent briefings covering plant status and strategy for responding to events.

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Region IV SOUTH TEXAS PROJECT **By Primary Functional Area** 

Date	Source	Functional Area	ID	Туре	Template Codes	Item Title Item Description
09/13/1999	1999016	Pri: OPS	NRC	NEG	Pri: 3A	TWO EXAMPLES WHERE OPERATORS DID NOT DETERMINE THE OPERABILITY OF SAFETY RELATED EQ
Dockets Discussed: 05000498 South Texas 1 05000499 South Texas 2		Sec:			Sec: 2A Ter: 5A	Inspectors identified two examples where operators did not determine the operability of safety-related equipment in a timely manner. Operators identified that charcoal was leaking out of the fuel handling building emergency ventilation exhaust filter bed, but did not properly communicate the magnitude of the spilled charcoal to the weekend duty engineering staff. As a result, a performance test to determine the impact of the spill on operability was not conducted until Monday. The filter was found to have been operable. Similarly, operators did not properly communicate the symptoms of a failed power range nuclear instrument following a Unit 1 trip and, as a result, misdirected troubleshooting to find the problem. Specifically, operators did not indicate that all outputs from the instrument were affected. The instrument was declared operable after troubleshooting failed to identify a problem. During the subsequent startup, the instrument failed a channel check. Operators complied with the Technical Specifications, entered the applicable limiting condition for operation, and repaired the instrument.
09/12/1999	1999016	Pri: OPS	Self	NEG	Pri: 2A	UNIT 1 TRIPPED DUE TO A MATERIAL CONDITION DEFICIENCY IN THE TURBINE PROTECTION SYSTEM
Dockets Discussed: 05000498 South Texas 1 05000499 South Texas 2		Sec:			Sec: Ter:	Unit 1 experienced a plant trip due to a material deficiency in the turbine protection system. While the licensee was unable to reproduce the problem, available indications led the licensee to the conclusion that the test switch caused a brief trip signal in Channel 2 at the same time operators were testing Channel 1. The switch was found to have been covered in dust and lint. The licensee's investigation of the trip was prompt and thorough.
08/07/1999	1999014	Pri: OPS	NRC	POS	Pri: 1B	Conservative decisions exhibited during Plant Operations Review Committee meeting.
<b>Dockets Disc</b> 05000498 Sou 05000499 Sou	uth Texas 1	Sec:			Sec: 3A Ter:	Licensee management demonstrated a questioning attitude and conservative decision making during two posttrip Plant Operations Review Committee meetings. Troubleshooting was properly focused, conducted safely, and identified the root cause of the June 27 trip. The plant was started up by knowledgeable operators with good safety focus.
07/15/1999	1999301	Pri: OPS	NRC	STR	Pri: 3A	Excellent examination was technically accurate and required no post exam changes.
<b>Dockets Disc</b> 05000498 Sou 05000499 Sou	uth Texas 1	Sec:			Sec: Ter:	The licensee submitted an examination of excellent quality in that it was technically accurate, responsive to the examination standards without significant changes from NRC review, and required no post examination changes to the grading keys. Detailed licensee process procedures contributed to excellent performance by the examination development and administration team.
07/15/1999	1999301	Pri: OPS	NRC	STR	Pri: 3B	All applicants passed exams and performed well on operating test.
05000498 Sou	Dockets Discussed: 05000498 South Texas 1 05000499 South Texas 2				Sec: Ter:	All 17 applicants passed the examinations and exhibited no broad knowledge or training weaknesses. The applicants performed well during the operating test while exhibiting good oversight and peer checking. Consistent with past observations, the applicants demonstrated strong communications skills throughout the operating test as did the plant control room personnel during special activities.
07/13/1999	1999014	Pri: OPS	NRC	POS	Pri: 1B	Rapid power reduction performed due to a fault in service water pump.
Dockets Discussed: 05000498 South Texas 1 05000499 South Texas 2		Sec:			Sec: 3A Ter:	Unit 2 operators responded well to loss of a service water pump when the redundant pump was not available. Operators prudently conducted a rapid power reduction to 48 percent and reduced heat loads to avoid a turbine trip and allow for an orderly shutdown if the remaining pump was unable to carry the load. Extra operators were provided in the control room to assist and were skillfully directed as a team by the Unit Supervisor.

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## United States Nuclear Regulatory Commission PLANT ISSUE MATRIX

Βv	Primary	<b>Functional</b>	Area
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Date	Source	Functional Area	ID	Туре	Template Codes	Item Title Item Description
06/28/1999	1999014	Pri: OPS	Self	NEG	Pri: 2A	Operators unnecessarily challenged by feedwater heater controller malfunction.
Dockets Discussed: 05000498 South Texas 1 05000499 South Texas 2		Sec:			Sec: Ter:	After securing a low pressure feedwater heater drip pump for planned maintenance, the heater level control system behaved erratically and led to the isolation of one low pressure heater string. Operators evaluated the situation and decided to disregard procedural guidance to reduce power to 90 percent with management concurrence. The heater string was restored in a reasonable time, and the procedure was clarified. This was an example of poorly performing balance of plant equipment challenging operators.
06/27/1999	1999014	Pri: OPS	Self	POS	Pri: 1B	Operators respond well to Unit 1 trip caused by loose wire in turbine control circuit.
Dockets Discussed: 05000498 South Texas 1 05000499 South Texas 2		Sec:			Sec: 3A Ter:	Unit 1 operators responded well to a plant trip. All control rods inserted and plant systems responded as expected. Operators properly implemented plant emergency procedures and quickly stabilized the plant in Mode 3. This plant transient was caused by a loose wire in the turbine control circuit.
06/26/1999	1999013-02	Pri: OPS	Licensee	NCV	Pri: 1B	Several dilutions made without determining plant response caused steam generator overpressure.
Dockets Discussed: 05000498 South Texas 1 05000499 South Texas 2		Sec:			Sec: 3A Ter:	Operators failed to follow the plant startup procedure and caused a steam generator overpressure condition that was mitigated when a steam generator power-operated relief valve lifted. Operators made several reactivity manipulations without properly determining the expected plant response or properly monitoring all affected plant parameters. The inspectors concluded that the licensee's reactivity control program did not provide specific guidance or limits on reactivity manipulations using the chemical control system. Operators focused on power changes and failed to recognize that temperature was out of limits. A noncited violation was identified for failure to follow the plant startup procedure while controlling coolant temperature, which was entered in the licensee's corrective action program under Condition Report 99-3690.
06/10/1999	1999008	Pri: OPS	NRC	POS	Pri: 5A	The corrective action process was effective, timely and properly prioritized, evaluated and resolved problem
<b>Dockets Disc</b> 05000498 Soc 05000499 Soc	uth Texas 1	Sec:			Sec: 5B Ter: 5C	The licensee implemented an effective and timely corrective action process that properly prioritized, evaluated and resolved conditions adverse to quality. The licensee staff understood the process well and exhibited a very low threshold for identifying conditions.
06/03/1999	1999013-01	Pri: OPS	NRC	NCV	Pri: 1A	Shift supervisor authorized deviating from procedure for vacuum fill of the residual heat removal system.
Dockets Discussed: 05000498 South Texas 1 05000499 South Texas 2		Sec:			Sec: 3A Ter:	Inspectors identified a noncited violation for failure to follow procedures by a shift supervisor when he authorized deviation from a procedure used to vacuum-fill the residual heat removal system. When the specified vacuum could not be attained, the shift supervisor erroneously believed that he could authorize continuing with the vacuum that could be attained, contrary to station procedures. This issue was entered into the licensee's corrective action program as Condition Report 99-8977. The inspectors also observed a poor work practice when an operator hit a system vent valve with a wrench to stop a minor seat leak.
05/16/1999	1999013	Pri: OPS	NRC	POS	Pri: 1B	Unit 1 operators responded well to a plant trip caused by trip of reactor coolant pump.
Dockets Discussed: 05000498 South Texas 1 05000499 South Texas 2		Sec:			Sec: 3A Ter: 3B	Unit 1 operators responded well to a plant trip on loss of power to one of the reactor coolant pumps. All control rods inserted and plant systems responded as expected. Operators properly implemented plant emergency procedures and quickly stabilized the plant in Mode 3.

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### United States Nuclear Regulatory Commission PLANT ISSUE MATRIX

Region IV SOUTH TEXAS PROJECT **By Primary Functional Area** 

Date	Source	Functional Area	ID	Туре	Template Codes	Item Title Item Description
05/15/1999	1999011	Pri: OPS	NRC	POS	Pri: 1A	Operators responded well to a feedwater transient and avoided a plant trip.
Dockets Discussed: 05000498 South Texas 1 05000499 South Texas 2		Sec:			Sec: 3A Ter:	Reactor operators responded well to a feedwater flow transient and precluded a trip of the unit. Plant operators demonstrated good attention to detail during tagout activities. Reactor coolant system reduced inventory, midloop, and startup operations were performed in a deliberate and controlled manner by operators who were knowledgeabl and trained in the evolution.
05/15/1999	1999011	Pri: OPS	NRC	POS	Pri: 1A	Reduced tagout errors demonstrated during outage.
		Sec:			<b>Sec</b> : 3A	The licensee made a demonstrable improvement in reducing tagout errors during the Unit 1 outage. Management
Dockets Discussed: 05000498 South Texas 1 05000499 South Texas 2				Ter:	expectations were reinforced during training and evaluated faulted tagouts utilizing a mockup trainer. The licensee performed approximately 30,000 tagout-related activities without a significant error.	
04/22/1999	1999018-02	Pri: OPS	NRC	NCV	Pri: 3C	THIMBLES INSERTED WITHOUT MEETING TS REQUIREMENTS FOR CORE ALTERATIONS
Dockets Discussed: 05000498 South Texas 1 05000499 South Texas 2		Sec:			Sec: 3B Ter:	The inspectors identified one instance where the licensee inserted bottom mounted instrument thimbles into the core, a core alteration per the licensee's existing Technical Specifications, without having containment integrity, communications with the control room established, or containment ventilation isolation operable. The licensee had used MERITS (a version of improved technical specifications) to procedurally define what constituted a core alteration in a way that conflicted with their own Technical Specifications. The safety significance of this issue was low since Improved Technical Specifications permit this condition. Failure to satisfy current Technical Specification requirements for core alterations was a violation. As a result of the inspectors findings the licensee wrote Condition Report 99-14640 to address the violation. This non-repetitive violation will not be cited in accordance with Section VII.B.1.a of the Enforcement Policy.
04/03/1999	1999006	Pri: OPS	NRC	POS	Pri: 1A	Operators performed shutdown well, including response to feedwater pump controller problems.
Dockets Discussed: 05000498 South Texas 1 05000499 South Texas 2		Sec:			Sec: 1B Ter: 3A	Operators performed well while shutting down Unit 1 for its scheduled refueling outage. Reactivity manipulations were well controlled, with excellent support by reactor engineering personnel. Evolutions were well briefed and controlled. Operators responded well to steam generator water level transient caused by a feedwater pump controller problem.
04/03/1999	1999006	Pri: OPS	NRC	POS	Pri: 1A	Midloop and reduced inventory operations were performed well.
		Sec:			Sec: 3A	The front-end reactor coolant system reduced inventory and midloop operations were performed in a well controlled
Dockets Discussed: 05000498 South Texas 1 05000499 South Texas 2					Ter:	manner. Excellent supervisory oversight provided effective coordination of site activities and ensured the safe execution of this important evolution. Detailed procedures effectively implemented relevant corrective actions and commitments. Contingency actions were briefed in detail and assigned to specific personnel and equipment was prestaged. Significant precautions were taken to inform personnel of the restrictions of activities to protect critical equipment.
04/03/1999	1999006	Pri: OPS	NRC	POS	Pri: 3B	Licensed operator requalification evaluated scenarios were challenging.
		Sec:			Sec: 3A	Licensed operator requalification evaluated scenarios were observed to challenge operators. Each crew observed
<b>Dockets Discussed:</b> 05000498 South Texas 1 05000499 South Texas 2					Ter:	demonstrated appropriate accident response, event classification, and prompt reporting.

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#### **United States Nuclear Regulatory Commission PLANT ISSUE MATRIX**

By Primary Functional Area

Region IV **SOUTH TEXAS PROJECT** 

Date	Source	Functional Area	ID	Туре	Template Codes	Item Title Item Description
03/29/1999	1999011-01	Pri: OPS	Licensee	NCV	Pri: 3A	Control room HVAC system placed in wrong mode due to inadequate communication.
Dockets Discussed: 05000498 South Texas 1		Sec:			Sec: 1A Ter:	On March 29, 1999, the licensee discovered that inadequate verbal communication resulted in the performance of an incorrect procedure section. Operators placed the control room heating, ventilation, and air conditioning system in filtered recirculation mode and not in recirculation and filtered make-up mode in violation of Technical Specification 3.3.2.10.c Action 27. This violation is being treated as a noncited violation and is captured in the licensee's corrective action program as Condition Report 99-4632 (LER 498/99003).
03/12/1999	1999006-01	Pri: OPS	NRC	NCV	Pri: 1B	Failure to recognize entry into TS 3.0.3 during loss of offsite power to two trains with inoperable DG.
Dockets Disc 05000499 So		Sec:			<b>Sec</b> : 3A <b>Ter</b> : 3B	Operators did not understand the Technical Specification requirements for supplying offsite power to the engineered safety feature buses. As a result, they failed to enter Technical Specification 3.0.3 and take the required 1 hour actions to prepare to shut the plant down when offsite power was lost to Trains B and C while Standby Diesel Generator 22 was inoperable. When the Technical Specification 3.0.3 entry was recognized, operators incorrectly concluded that offsite power requirements were being met. However, compliance was not restored for another hour and a half, when offsite power was connected to Trains B and C. The inspectors noted that reconstruction of the event, particularly decision making, was significantly hampered because operators did not make log book entries or record adequate notes during the event. This was a violation of Technical Specification 3.0.3. This Severity Level IV violation is being treated as a noncited violation, consistent with Appendix C of the NRC Enforcement Policy. This noncited violation is in the licensee's corrective action program as Condition Report 99-3690.
03/12/1999	1999006-02	Pri: OPS	Self	NCV	Pri: 2A	Failure to perform required checks after racking out breaker caused inoperable DG for two weeks.
Dockets Discussed: 05000499 South Texas 2		Sec:			Sec: 3A Ter:	When a switchyard breaker failed, Unit 2 experienced a loss of offsite power to Trains B and C equipment. The output breaker for Standby Diesel Generator 22 failed to close automatically because an essential chiller breaker cell switch failed to provide a necessary permissive input. Operators had failed to recognize that the diesel had been inoperable for 2 weeks because they did not perform the procedurally required checks. This was a violation or Technical Specification 6.8.1. This Severity Level IV violation is being treated as a noncited violation, consistent with Appendix C of the NRC Enforcement Policy. This noncited violation is in the licensee's corrective action program as Condition Report 99-3690.
03/12/1999	1999006-03	Pri: OPS	NRC	NCV	Pri: 1B	Loss of bus procedure inadequate for the circumstances.
Dockets Discussed: 05000499 South Texas 2		Sec:			Sec: 3C Ter:	During the loss of offsite power to Unit 2 Trains B and C, operators quickly recognized that the diesel breaker failed to shut automatically and manually shut it to restore power to Train B equipment. While this action was appropriate, it was in conflict with the loss of bus procedure. This loss of bus procedure was generic to all buses and, as a result, was very long, cumbersome to use, and did not place a priority on restoring offsite power to the engineered safety feature buses. This was a violation of 10 CFR Part 50, Appendix B, Criterion V, for failure to provide procedures appropriate to the circumstances. This Severity Level IV violation is being treated as a noncited violation, consistent with Appendix C of the NRC Enforcement Policy. This noncited violation is in the licensee's corrective action program as Condition Report 99-3713.
02/20/1999	1999002	Pri: OPS	Self	NEG	Pri: 3A	Unit 2 reactor trip due to operator error during ground isolation
Dockets Discussed:		Sec:			Sec: 3B Ter: 1B	On January 21, 1999, an automatic Unit 2 reactor trip occurred while operators were conducting electrical ground isolation. The operator was in the wrong electrical panel when he inadvertently deenergized turbine trip circuitry. Although lack of self-checking was the root cause of this event, not having a formal process or procedure for ground

Although lack of self-checking was the root cause of this event, not having a formal process or procedure for ground

isolation, and operator knowledge deficiencies in electrical theory were contributing factors to this event.

05000498 South Texas 1

05000499 South Texas 2

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## United States Nuclear Regulatory Commission PLANT ISSUE MATRIX

В١	/ Primary	<b>Functional</b>	Area
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Date	Source	Functional Area	ID	Туре	Template Codes	Item Title Item Description	
02/20/1999	1999002	Pri: OPS	NRC	POS	Pri: 1A	Marked improvement in control room log entries.	
<b>Dockets Disc</b> 05000498 Sou 05000499 Sou	uth Texas 1	Sec:			Sec: Ter:	The inspectors noted a marked improvement in consistency and level of detail provided in control room log Limiting condition for operation action entries were clearly recorded, regardless of the expected length of tin action was expected to be in effect.	
02/20/1999	1999002	Pri: OPS	NRC	POS	Pri: 1B	Simulator training sessions were well performed.	
<b>Dockets Disc</b> 05000498 Sou 05000499 Sou	uth Texas 1	Sec:			Sec: Ter:	The inspectors observed that licensed operator simulator training sessions were well performed and with good control of each session by the training staff. Operators made good use of briefs and status updates. Postscenario discussions were self-critical and operations management personnel frequently participated. The material condition of the simulator was good. However, the inspectors observed that operators frequently did not maintain logs or other routine documentation in the simulator that were required in the plant.	
02/20/1999	1999002-02	Pri: OPS	Licensee	NCV	Pri: 1A	Failure to meet TS requirements for inoperable standby diesel generator	
		Sec:			Sec: 2A	On January 15, 1998, review of failure analysis on standby diesel generator 21 voltage regulator and instantaneous	
Dockets Disc 05000499 Sou					Ter: 5A	preposition board determined the diesel generator had been inoperable from December 28, 1997 until December 30, 1997. TS 3.8.1.1 actions to verify offsite power were not taken because the condition was not recognized until the failure analysis was completed. This nonrepetitive, licensee identified and corrected violation is being treated as a noncited violation, consistent with Section VII.B.1 of the NRC Enforcement Policy. LER 50-499/98001-00.	
02/11/1999	1999002	Pri: OPS	NRC	NEG	Pri: 1A	Power increase caused by steam plant work without a procedure	
		Sec:			<b>Sec:</b> 1C	Operators caused a power increase while attempting to adjust the level controller for Moisture Separator Reheater	
<b>Dockets Disc</b> 05000498 Sou 05000499 Sou	uth Texas 1				Ter:	Drip Tank 22A. In response, control room operators had to take action to restore power below 100 percent. Despit the potential for a positive reactivity increase, this evolution was conducted with an inadequate prejob brief and, without a procedure, supervision or peer checking. Self-checking opportunities were missed by not placing a water level sight-glass in service to monitor tank level during the evolution.	
12/25/1999	1999020	Pri: MAINT	NRC	POS	Pri: 3A	Maintenance was well performed.	
		Sec:			Sec: 2A	The maintenance and surveillance activities observed were well controlled and carefully performed. High quality	
<b>Dockets Disc</b> 05000498 Sou 05000499 Sou	uth Texas 1				Ter:	prejob briefings were consistently observed. Operators and technicians were very knowledgeable of their assigned tasks. The inspectors observed that the preparation and maintenance activities for repairing a hydraulic leak on a main turbine throttle valve on line were carefully coordinated. The necessary plant conditions were established and practiced on the simulator, and the repair work was practiced on a mock-up. Troubleshooting efforts for load instabilities on Standby Diesel Generator 23 were thorough and prompt, and the potential for a common mode failure was promptly determined not to exist.	
11/06/1999	1999018	Pri: MAINT	NRC	POS	Pri: 2B	ERROR-FREE FUEL HANDLING REVERSED PREVIOUSLY IDENTIFIED DECLINING TREND	
<b>Dockets Disc</b> 05000498 Sou 05000499 Sou	uth Texas 1	Sec:			Sec: 3A Ter:	The inspectors observed fuel handling activities during the Unit 2 outage were performed in a careful manner. Improved emphasis on attention to detail during fuel positioning was effective in reversing a previously observed declining trend in performance in this area.	

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## United States Nuclear Regulatory Commission PLANT ISSUE MATRIX

**By Primary Functional Area** 

Date	Source	Functional Area	ID	Туре	Template Codes	Item Title Item Description
10/10/1999	1999018	Pri: MAINT	Self	NEG	Pri: 2A	A LOSS OF MSR REHEAT STEAM DUE TO A CONTROLLER FAILURE WAS COMPLICATED BY MULTIPLE B(
		Sec:			Sec:	A controller power supply for both moisture separator reheaters failed. This caused the loss of reheat steam
Dockets Disc	cussed:				Ter:	because the redundant power supply, although set per vendor instructions, was set too low to function properly.  Operators performed a rapid power reduction to protect the main turbine blades from moisture damage. The
05000498 Sc 05000499 Sc						operators' response was complicated by five steam plant motor operated valves which were mechanically bound or had limit switch problems that required manual action. Material condition deficiencies of balance of plant equipment both initiated and complicated this event.
09/25/1999	1999018	Pri: MAINT	Self	NEG	Pri: 2A	UNCONTROLLED POWER INCREASED DUE TO DEGRADING STEAM LEAK IN BOP EQUIPMENT
		Sec:			<b>Sec</b> : 3A	The licensee identified a steam leak in a balance of plant instrument line that caused the instruments to sense less
Dockets Disc	cussed:				Ter:	than actual steam line pressure. While planning a repair, the leak degraded to the point where the affected instruments opened turbine drains. Despite prompt operator action to limit the magnitude of the transient, this
05000498 So						material deficiency in non-safety equipment caused an uncontrolled reactor power increase from 99 percent to
05000499 So	uth Texas 2					100.15 percent.
09/25/1999	1999018	Pri: MAINT	Self	NEG	Pri: 2A	UNCONTROLLED POWER INCREASE ABOVE 100 PERCENT DUE TO POOR CONTROLS WHILE RETURNING
		Sec:			Sec: 3A	Following a transient caused by a leaking steam pressure instrument line in Unit 1, a temporary modification was
Dockets Disc					Ter:	installed to bypass the leaking line. Maintenance personnel valved in the pressure instruments, causing power to increase from 100 percent to 101.97 percent before operator action turned power. The inspectors concluded that
05000498 Sc 05000499 Sc						the licensee's temporary modification package and the associated work package did not provide precautions to properly restore the instrument line to service. Operator response was quick and effective. Stringent controls and precautions for work with the potential to affect reactor power were not implemented.
09/18/1999	1999016	Pri: MAINT	NRC	POS	Pri: 3A	MAINTENANCE WAS WELL PERFORMED
		Sec:			Sec: 2B	The maintenance and surveillance activities observed were carefully performed and well controlled. High quality
Dockets Disc	cussed:				Ter:	prejob briefings were consistently observed. Operators and technicians were very knowledgeable of their assigned
05000498 Sc 05000499 Sc					Ter.	tasks. A reactor coolant loop flow transmitter was recalibrated after careful deliberations to effectively balance the reactor trip potential with the required instrument accuracy to support reactor safety. New fuel receipts were well supported and supervised. A control rod dimensional tolerance problem was resolved by working closely with the
						fuel vendor.
07/21/1999	1999014-01	Pri: MAINT	Self	NCV	Pri: 2B	Fuel handling error results in two bundles colliding without damaging fuel.
		Sec:			Sec: 3A	Operators moving fuel within the spent fuel pool became distracted while conducting informal training and failed to
Dockets Disc 05000499 So					Ter:	properly verify the correct cell location before moving a bundle. As a result, they moved the wrong bundle and lowered it onto another bundle. This event was caused by inattention and improper verifications. Fuel handling movements were not stopped as required by procedure after the incident. This event was the fourth fuel handling event onsite recently, indicating a weakness in attention to detail while moving fuel. Continuing examples of fuel handling events indicated that the corrective actions program was not adequately dealing with the declining trend. Failure to follow Procedure 0PEP02-ZM-0005 was a violation of Technical Specification 6.8.1. This Severity Level IV violation is being treated as a noncited violation, consistent with Appendix C of the NRC Enforcement Policy. This violation is in the licensee's corrective action program as Condition Report 99-10645.

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# United States Nuclear Regulatory Commission PLANT ISSUE MATRIX

В١	/ Primary	<b>Functional</b>	Area
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Date	Source	Functional Area	ID	Туре	Template Codes	Item Title Item Description	
07/13/1999	1999014	Pri: MAINT	Self	NEG	Pri: 2B	Worker damages service water pump, necessitating rapid power reduction.	
Dockets Disc 05000498 So 05000499 So	uth Texas 1	Sec:			Sec: 3A Ter:	A worker chipping rust at the plant intake structure caused a fault in a service water pump when the tool penetic the conduit. Since the standby pump was removed for planned maintenance, this necessitated a rapid power reduction to reduce heat load on the system in order to avoid tripping the turbine. The licensee was evaluating controls necessary to avoid working in the vicinity of important equipment when redundant trains are removed service, as well as evaluating the material condition of equipment located at the intake structure.	
06/26/1999	1999013	Pri: MAINT	NRC	POS	Pri: 1C	Work performed during maintenance and surveillance activities was well conducted.	
<b>Dockets Disc</b> 05000498 So 05000499 So	uth Texas 1	Sec:			Sec: 3A Ter:	Work performed during maintenance and surveillance activities was well conducted and thorough. The licensee demonstrated safe and conservative action during maintenance activities. Technicians were experienced and knowledgeable of their assigned tasks, equipment performance, and the significance of the systems being worked.	
05/15/1999	1999011	Pri: MAINT	NRC	NEG	Pri: 3A	Minor problems in fuel handling due to lack of attention to detail.	
Daniero Dina		Sec:			Sec:	Fuel handling was adequately performed. However, lack of attention to detail contributed to minor problems. These included: improperly inserting a fuel bundle in the core such that it caused another bundle to lean; inadvertently	
<b>Dockets Disc</b> 05000498 So 05000499 So	uth Texas 1				Ter:	removing a poison panel from the spent fuel pool storage rack while removing a fuel bundle; and forgetting to remove a positioning handcrank before moving the refueling bridge electrically, throwing the handcrank free. Additionally, the licensee was unable to identify the source of a minor fuel leak during fuel inspection activities. Analysis of the isotopes present in water samples demonstrated that the leak was very small and the licensee believed that it was located in a bundle that was to be discharged from the core. However, indications of a continued fuel leak were identified in the reconfigured core after the return to power.	
05/15/1999	1999011	Pri: MAINT	NRC	POS	Pri: 3A	Maintenance and surveillance activities were well performed, exceptional brief for on-line maintenance.	
<b>Dockets Disc</b> 05000498 So 05000499 So	uth Texas 1	Sec:			Sec: 3B Ter:	Maintenance and surveillance activities were well performed. Technicians were experienced and knowledgeable of their assigned tasks, equipment performance, and the significance of the systems being worked. An exceptionally detailed prejob brief was conducted which stressed plant safety and conservatism during on-line maintenance for the Unit 1 feedwater regulating valve controllers. Supervisors and system engineers were frequently monitoring job and equipment performance.	
05/10/1999	1999014-02	Pri: MAINT	Licensee	NCV	Pri: 2A	NCV issued for exceeding allowed outage time for turbine driven auxiliary feedwater pump	
Dockets Disc 05000498 So		Sec:			Sec: 3A Ter:	Maintenance performed on a flow control motor operated valve for the steam driven auxiliary feedwater pump resulted in the valve being inadvertently left in an inoperable state. Testing performed following the original valve work was clearly inadequate to identify this maintenance-induced failure. The inspectors concluded that the valve was degraded but would have functioned to refill the steam generator. Plant risk was not affected, based on licensee and NRC calculations. The staff concluded that this event was a violation of Technical Specification 3.7.1.2 of lesser significance in accordance with Supplement 1 to the Enforcement Policy. This Severity Level IV violation is being treated as a noncited violation consistent with Appendix C of the NRC Enforcement Policy. This violation is in the licensee's corrective action program as Condition Reports 99-7742 and 99-7743. This closed LER 498/99005-00.	

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## United States Nuclear Regulatory Commission PLANT ISSUE MATRIX

Βv	Primary	<b>Functional</b>	Area
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Date	Source	Functional Area	ID	Туре	Template Codes	Item Title Item Description	
04/09/1999	1999010	Pri: MAINT	NRC	NEG	Pri: 2B	The inspector noted specific deficiencies in weld practices related to interpass temperatures.	
<b>Dockets Disc</b> 05000498 Sou 05000499 Sou	uth Texas 1	Sec:			Sec: 3A Ter:	The inspector noted specific deficiencies: (1) welding procedure specification and work instructions did not proclear guidance when to verify interpass and preheat temperature, (2) an inconsistency was noted among craft inspection personnel as to when interpass temperature should be monitored or verified, and (3) a poor work p was identified when a welder did not have all necessary equipment and tools (i.e., temperature stick or pyrome the immediate area to perform a task. Condition Report 99-5468 was initiated to address these observations.	
04/09/1999	1999010	Pri: MAINT	NRC	POS	Pri: 2A	External material condtion of the Unit 2 component cooling water system was good.	
		Sec:			Sec: 2B	The external material condition of the Unit 2 component cooling water (Train B) system piping, valves, and the ring	
05000498 Sou 05000499 Sou	uth Texas 1				Ter:	duct was good, in that no visible oil or excessive water leaks were noted. Overall appearance of the safety-related trains and components was excellent, in that they were color-coded and labeled for proper identification.	
04/09/1999	1999010	Pri: MAINT	NRC	STR	Pri: 2B	Licensee had a well defined first 10-year inservice examination program plan.	
		Sec:			Sec:	The licensee had developed a well-defined first 10-year inservice examination program plan for Units 1 and 2, in that	
05000498 Sou 05000499 Sou	uth Texas 1				Ter:	the examination category, examination method, weld identification figures, augmented inspections, relief requests, code cases implemented, and changes to the examination plan were clearly delineated. The licensee was implementing the program plan requirements in accordance with the requirements of 10 CFR 50.55a.	
04/03/1999	1999006	Pri: MAINT	NRC	NEG	Pri: 1A	Fuel bundle placed on top of filters.	
		Sec:			Sec: 3A	New fuel receipt inspections in Unit 1 were well conducted, utilizing proper supervision and procedural controls.	
<b>Dockets Disc</b> 05000498 Sou 05000499 Sou	uth Texas 1				Ter:	However, fuel movements within the spent fuel pool in Unit 2 were not controlled as well. A fuel bundle was placed in a storage location that contained used fuel pool filters. The fuel bundle was undamaged, but the filters were compressed, making them difficult to remove. The licensee had not documented the storage locations of the filters and had not coordinated storage of the filters with fuel storage. No violations of NRC requirements were identified.	
04/01/1999	1999006	Pri: MAINT	NRC	NEG	Pri: 3A	Local leak rate testing caused false indication in only available reactor vessel level indication.	
		Sec:			Sec:	Following reactor vessel floodup from front-end midloop, local leak rate testing caused the only available level	
05000498 Sou 05000499 Sou	uth Texas 1				Ter:	indicator (a sightglass) to indicate lowering level. A test boundary valve with known seat leakage allowed test pressure to affect the level indication. Test personnel did not evaluate the impact of the leak when the test was rescheduled to be performed during the period when the sightglass was required for plant control.	
02/25/1999	1999004-01	Pri: MAINT	NRC	NCV	Pri: 2B	Inadequate reliability performance measures for 8 risk-significant systems.	
Dockets Disc 05000498 Sou 05000499 Sou	uth Texas 1	Sec:			Sec: Ter:	Inspectors identified inadequate reliability performance measures for eight plant risk-significant systems. As a result of the inadequate performance measures, the 480Vac load center system for both units was allowed to degrade beyond the probabilistic risk assessment assumed performance without the licensee having provided adequate technical justification for not having established goals, or appropriate corrective actions. This was a Severity Level IV violation of the Maintenance Rule and is being treated as a Non-Cited Violation, consistent with Appendix C of the NRC enforcement policy (EA 99-058). This violation is in the licensee's corrective action program as documented by Condition Record 99-2925.	

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### United States Nuclear Regulatory Commission PLANT ISSUE MATRIX

By Primary Functional Area

Date	Source	Functional Area	ID	Туре	Template Codes	Item Title Item Description	
02/20/1999	1999002	Pri: MAINT	NRC	POS	Pri: 2B	Online outages to conduct 18 month and 5 year EDG inspections were well coordinated	
<b>Dockets Disc</b> 05000498 Sou 05000499 Sou	uth Texas 1	Sec:			Sec: Ter:	Maintenance and surveillance activities were thorough and well performed. Extended online outages to cor 18-month and 5-year inspections for two emergency diesel generators were well coordinated and promptly completed. The licensee identified and corrected several emergent equipment problems without significant impacting the outage durations.	
12/25/1999	1999020	Pri: ENG	NRC	POS	Pri: 4B	Good engineering evaluations supported the movement of new steam generators.	
<b>Dockets Disc</b> 05000498 Sou 05000499 Sou	uth Texas 1	Sec:			Sec: Ter:	The licencee's engineering evaluations for the movement and storage of replacement steam generators were thorough and appropriately detailed. Replacement steam generator transport was performed in accordance with the licensee's plan without incident or damage.	
11/06/1999	1999018	Pri: ENG	NRC	NEG	Pri: 4B	SOME 50.59 EVALUATION ASSUMPTIONS FOR PERFORMING FREEZE SEALS AND REPAIRS TO THIMBLE !	
	Se				Sec: 5B	The inspectors reviewed the 50.59 evaluation and work documents for performing freeze seals and repairs to	
<b>Dockets Disc</b> 05000498 Sou 05000499 Sou	uth Texas 1				Ter:	bottom mounted instrument thimble seals. The inspectors identified some of the assumed plant conditions used to evaluate the job were not translated into prerequisites in the work documents that would have ensured that the 50.59 evaluation remained valid.	
09/18/1999	1999016	Pri: ENG	NRC	POS	Pri: 5B	EXCELLENT SUPPORT OF OPERATIONAL PROBLEM BY SYSTEM ENGINEERING	
<b>Dockets Disc</b> 05000498 Sou 05000499 Sou	uth Texas 1	Sec:			Sec: 5C Ter:	System engineering personnel provided excellent response following the failure of a reactor coolant system hot-leg temperature detector on a weekend. The system engineer provided a recommendation to declare the instrument inoperable, removed the bad input, and performed a thorough evaluation of the impact of the problem on the design basis operation of the system.	
08/07/1999	1999014	Pri: ENG	NRC	POS	Pri: 4B	Good engineering evaluation for impact of containment isolation valve leakage	
<b>Dockets Disc</b> 05000498 Sou 05000499 Sou	uth Texas 1	Sec:			Sec: 2A Ter:	Reactor containment building cooling water systems in both units had leaking containment isolation valves that provided system interface isolation. While maintenance efforts failed to eliminate leakage, engineering provided a good evaluation of the radiological monitoring and impact of the measured leakage, which remained within regulatory limits.	
06/26/1999	1999013	Pri: ENG	NRC	NEG	Pri: 4B	No reactor engineers available during power ascension contributed to steam generator overpressurization.	
		Sec:			Sec: 3A	The inspectors noted that there were no reactor engineers available after attaining criticality to provide support to	
<b>Dockets Disc</b> 05000498 Sou 05000499 Sou	uth Texas 1				Ter:	operators during power ascension shortly after a plant trip. Operations did not request support when the duty reactor engineer departed. Reactor engineering personnel contributed to the steam generator overpressure event by providing incorrect guidance with regard to reactivity manipulations for controlling reactor power distribution.	

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#### United States Nuclear Regulatory Commission PLANT ISSUE MATRIX

Region IV SOUTH TEXAS PROJECT **By Primary Functional Area** 

Date	Source	Functional Area	ID	Туре	Template Codes	Item Title Item Description
05/15/1999	1999011	Pri: ENG	NRC	POS	Pri: 4B	Steam Generator manway leak repairs were effective.
<b>Dockets Disc</b> 05000498 So 05000499 So	uth Texas 1	Sec:			Sec: Ter:	Leak repairs to the Steam Generator 1D secondary side manway covers were effectively implemented using appropriate modification processes. The modifications were performed after proper engineering and safety analysis of the impact of the modification. The leak sealing program effectively incorporated industry guidelines and lessons learned and included adequate controls to minimize injection of sealant material into the process stream.
05/15/1999	1999011	Pri: ENG	NRC	WK	Pri: 4B	Plant modification problems identified during outage.
		Sec:			Sec:	During the Unit 1 refueling outage, problems with three plant modifications were identified. The Standby Diesel
<b>Dockets Disc</b> 05000498 So 05000499 So	uth Texas 1				Ter:	Generator 11 digital governor control circuit modification included a design error such that a relay simultaneously received conflicting demands, causing rapid relay failure. A modification to the main feedwater regulating valve control circuit did not ensure sufficient tuning of system response, which caused feedwater flow oscillations. Operator response was hampered by excessively slow feedwater regulating valve operation in manual mode because the valve response characteristics had been modified. A modification to replace the reactor trip switches resulted in the switches not functioning as required, preventing the closing of the reactor trip breakers. The license failed to adequately verify the configuration of the new switches before installation, which was a minor violation due to the low safety significance. These examples demonstrated a weakness in the control of plant modifications.
04/06/1999	9904140134	Pri: ENG	NRC	LIC	Pri: 4C	STPNOC pursued an aggressive and multi-faceted approach to resolve the incomplete rod insertion issue.
<b>Dockets Disc</b> 05000498 So 05000499 So	uth Texas 1	Sec:			Sec: Ter:	The staff reviewed the licensee's June 25, 1998, Unit 1 Cycle 8 and Unit 2 Cycle 6 incomplete control rod insertion (IRI) evaluation criteria and also reviewed the material that STPNOC presented in a January 26, 1999, meeting to discuss the resolution of the IRI problem at STP. Prior to making fuel design changes, STPNOC addressed the IRI problem by limiting burnup in rodded fuel assemblies and with an aggressive rod drop testing plan. The staff found that the evaluation criteria (for rod drop testing) in the June 25, 1998, letter was acceptable. To further address the IRI problem, STPNOC conducted or sponsored post-irradiation examinations, mechanical analysis of span/assembly bow, fuel analysis of the previous and improved fuel designs, and an independent review of the IRI analyses. STPNOC also made several fuel design changes. Overall, STPNOC has pursued an aggressive and multi-faceted approach to resolve the IRI problem.
04/03/1999	1999006	Pri: ENG	NRC	POS	Pri: 4B	Calculations were of good quality.
		Sec:			Sec:	Several engineering calculations performed in support of the Unit 1 outage were reviewed and assessed to be of
<b>Dockets Disc</b> 05000498 So 05000499 So	uth Texas 1				Ter:	good quality. However, decay heat calculations performed in support of earlier entry into a midloop condition were completed late in the outage preparation process, and the outage schedule was built assuming the calculations would demonstrate adequate heat removal capability.
04/03/1999	1999006	Pri: ENG	NRC	POS	Pri: 4B	Rod control system modification was successfully implemented.
		Sec:			Sec: The licensee successfully implemented a modification to the rod control system to minimize ur	
Dockets Discussed: 05000498 South Texas 1 05000499 South Texas 2					Ter:	rod motion due to hot-leg temperature streaming. The 10 CFR 50.59 evaluation was clearly written and comprehensive and adequately addressed applicable accidents analyses. The postmodification testing was appropriate for the modification.

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### United States Nuclear Regulatory Commission PLANT ISSUE MATRIX

By Primary Functional Area

Date	Source	Functional Area	ID	Туре	Template Codes	Item Title Item Description
03/27/1999	1999011-02	Pri: ENG	Licensee	NCV	Pri: 4C	Source range monitors not checked for long term degradation required by Technical Specification.
		Sec:			Sec:	On March 27, 1999, the licensee discovered that the source range monitors were not properly surveillance tested in
<b>Dockets Disc</b> 05000498 So 05000499 So	uth Texas 1				Ter:	either unit. Specifically, long term degradation had not been properly checked as required by Technical Specification 4.3.1.1.6. This violation is being treated as a noncited violation and is captured in the licensee's corrective action program as Condition Report 99-4429 (LER 498;499/99002)
03/17/1999	1998019	Pri: ENG	NRC	NEG	Pri: 4B	The engineers had not performed a thorough comparison review of the UFSAR to the TS bases.
		Sec:			Sec: 3A	The engineers had not performed a thorough comparison review of the Updated Final Safety Analysis Report with
<b>Dockets Disc</b> 05000498 So 05000499 So	uth Texas 1				Ter:	the technical specification bases. This was demonstrated by the failure to include the use of the residual heat removal system pumps for core heat removal in the safety analysis report. This oversight was a concern because it could mislead personnel in the review of changes associated with 10 CFR 50.59, "Changes, Tests and Experiments."
03/17/1999	1998019	Pri: ENG	NRC	NEG	Pri: 4B	Changes to RHR and CCW were not evaluated for impact on design basis.
		Sec:			Sec: 3A	The evaluation of the effect of plant configuration changes with respect to satisfying the design basis was lacking in
<b>Dockets Disc</b> 05000498 So 05000499 So	uth Texas 1				Ter:	instances where modifications were performed on the residual heat removal system and component cooling water pumps without consideration of the effects on system performance of the improved performance of the modified pumps.
03/17/1999	1998019	Pri: ENG	NRC	NEG	Pri: 4B	Design engineering failed to properly consider uncertainties in the performance of RHR flow calculations.
		Sec:			Sec: 4A	Design engineering failed to properly consider random and non-random uncertainties in the performance of residual
<b>Dockets Disc</b> 05000498 So 05000499 So	uth Texas 1				Ter: 3A	heat removal system flow calculations, in general. This was not a significant concern for the steam generator tube rupture accident scenario (which was reviewed); however, improper consideration of both types of uncertainties could have a more significant effect on other instrument loops that were not reviewed.
03/17/1999	1998019	Pri: ENG	NRC	NEG	Pri: 4C	Calculations were adequate but lacked rigor and contained minor errors.
		Sec:			<b>Sec</b> : 3A	In general, the reviewed calculations (approximately 30 electrical, instrumentation, and mechanical) were adequate;
<b>Dockets Disc</b> 05000498 So 05000499 So	uth Texas 1				Ter:	however, a number of minor errors and a lack of rigor to ensure quality were identified.
03/17/1999	1998019	Pri: ENG	NRC	POS	Pri: 4B	System engineer demonstrated good knowledge when he identified possible loss of all RHR trains.
		Sec:			Sec: 3A	The identification of a problem involving the possible loss of all three residual heat removal system trains
<b>Dockets Disc</b> 05000498 So 05000499 So	uth Texas 1				Ter: 4A	demonstrated a good integrated system operational knowledge by the system engineer.

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## United States Nuclear Regulatory Commission PLANT ISSUE MATRIX

В١	/ Primary	<b>Functional</b>	Area

Date	Source	Functional Area	ID	Туре	Template Codes	Item Title Item Description
03/17/1999	1998019	Pri: ENG	NRC	POS	Pri: 4C	The program to address the Y2K concerns appeared to be adequate.
		Sec:			Sec: 3A	On the basis of a brief review, the program to address the concerns associated with the effects on computer
Dockets Disc 05000498 So 05000499 So	uth Texas 1				Ter:	programs which could occur upon the change of date at the end of the 1999 appeared to be adequate.
03/17/1999	1998019-02	Pri: ENG	Licensee	NCV	Pri: 3A	Required service tests of class 1E batteries were not performed in 1995 and 1997.
		Sec:			Sec: 4B	The failure to perform the required service tests for the Unit 2 Class 1E batteries, Trains B and D, in 1995 and 1997,
Dockets Disc 05000499 So					Ter: 3B	was identified as a violation of Technical Specification 4.8.2.1d. The corrective actions taken, and proposed, in the event report adequately address the cause of this technical specification violation. This Severity Level IV violation is being treated as a Non-Cited Violation, consistent with Appendix C of the NRC Enforcement Policy.
03/17/1999	9903180037	Pri: ENG	NRC	LIC	Pri: 4C	Technical content of amendment application was exceptionally thorough.
		Sec:			Sec:	Amendment nos. 104 and 91 to STP licenses revised the spent fuel pool criticality analysis and rack utilization
<b>Dockets Disc</b> 05000498 So 05000499 So	uth Texas 1				Ter:	schemes by allowing credit for spent fuel pool soluble boron. The NRC staff found that the technical content of the application was exceptionally thorough, especially when considering its volume and complexity. However, the staff found administrative errors in the Technical Specifications proposed with the initial application.
03/11/1999	1999005	Pri: ENG	NRC	POS	Pri: 4B	Safety and engineering evaluations for replacement of the Unit 1 steam generators were of high quality.
		Sec:			Sec:	Safety evaluations and an engineering evaluation report supporting replacement of the Unit 1 steam generators
Dockets Disc 05000498 So					Ter:	prepared by licensee contractor personnel were performed in accordance with licensee procedures, met regulatory requirements, and were of high quality.
02/20/1999	1999002	Pri: ENG	NRC	POS	Pri: 4B	Reactor engineering provided excellent support during control rod position changes.
		Sec:			Sec:	Reactor engineering personnel provided excellent support to operators during a periodic change to the full-out
<b>Dockets Disc</b> 05000498 So 05000499 So	uth Texas 1				Ter:	position of control and shutdown rods. The associated configuration changes to the rod control and plant computer systems were independently verified and appropriately documented. A reactor engineer provided a detailed briefing of the procedure and the expected plant response. Control room operators were very knowledgeable and performed the reactivity manipulations in a formal, controlled manner with close supervision.
01/27/2000	2000001	Pri: PLTSUP	NRC	POS	Pri: 3A	An effective radiological effluent control program was maintained.
		Sec:			Sec: 3C	Overall, an effective radiological effluent control program was in place. The 1997 and 1998 Annual Radioactive
<b>Dockets Disc</b> 05000498 So 05000499 So	uth Texas 1				Ter:	Effluent Release Reports were submitted in accordance with regulatory requirements and documented a decreasing trend in the radioactivity released through liquid effluents. Whole-body dose to the public from radiological effluent releases for 1997 and 1998 were less than 1 percent of the yearly regulatory limit. Sampling and analysis procedures provided the staff with the necessary guidance to complete the tasks assigned.

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## United States Nuclear Regulatory Commission PLANT ISSUE MATRIX

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Date	Source	Functional Area	ID	Туре	Template Codes	Item Title Item Description	
01/27/2000	2000001-01	Pri: PLTSUP	NRC	NCV	Pri: 3A	Failure to survey and control radioactive material released from the radiologically controlled area.	
		Sec:			Sec: 3C	A violation of Technical Specification 6.8.1.a was identified for failure to survey and control radioactive material	
Dockets Disc 05000499 So					Ter:	released from the radiologically controlled area. This Severity Level IV violation is being treated as a noncited violation, consistent with Section VII.B.1.a of the NRC Enforcement Policy. Condition Report 99-16737 was written to document this issue.	
01/27/2000	2000001-02	Pri: PLTSUP	NRC	NCV	Pri: 5A	Failure to perform an audit of the Offsite Dose Calculation Manual.	
		Sec:			Sec: 5C	A violation of Technical Specification 6.8.1.g was identified for failure to perform an Offsite Dose Calculation Manual	
<b>Dockets Disc</b> 05000498 So 05000499 So	uth Texas 1				Ter:	audit within 24 months or document and obtain the approval of the Director of Quality to schedule an audit at a lat date. This Severity Level IV violation is being treated as a noncited violation, consistent with Section VII.B.1.a of NRC Enforcement Policy. The licensee wrote Condition Report 00-1346 to document this issue.	
12/25/1999	1999020	Pri: PLTSUP	NRC	NEG	Pri: 3A	Fire watches were not meeting the intent of hourly inspection timing.	
		Sec:			Sec:	The inspectors observed that the licensee was implementing the compensatory hourly fire watch program within	
<b>Dockets Disc</b> 05000498 So 05000499 So	uth Texas 1				Ter:	regulatory requirements. However, the inspectors found that fire watch personnel were, in some instances, performing fire watch inspections at the end of one hour and the beginning of the following hour. In one case, the area inspection was performed twice within 10 minutes, with 1 hour 47 minutes elapsing since the earlier inspection. Licensee management stated that this practice did not meet their expectations and promptly conducted training to clarify expectations and eliminate this practice.	
12/25/1999	1999020	Pri: PLTSUP	NRC	NEG	Pri: 3A	A poor initial dose assessment was performed by the licensee.	
Dockets Disc 05000498 So 05000499 So	uth Texas 1	Sec:			Sec: 5B Ter:	The inspectors determined that the licensee's initial assessment of the dose received while refilling a shield tank around a neutron source utilized electronic dosimetry which did not register neutron dose. A technician had refilled a shield tank around a 3.88 Curie neutron source in response to a low level alarm. Although some loss of shielding resulted from the low level, the licensee subsequently performed a conservative estimate and determined that the dose received was small.	
11/06/1999	1999018	Pri: PLTSUP	NRC	POS	Pri: 4C	CORE BARREL REMOVAL IN UNIT 2 DEMONSTRATED EXCELLENT PLANNING AND DOSE CONTROLS	
<b>Dockets Disc</b> 05000498 So 05000499 So	uth Texas 1	Sec:			Sec: 3A Ter:	The highly radioactive Unit 2 core barrel was successfully removed for inservice inspection using excellent planning and dose controls. The job was completed with minimal dose and without incident. Health Physics performance during the Unit 2 refueling outage was consistent with the good performance of the prior Unit 1 outage.	
11/06/1999	1999018	Pri: PLTSUP	Licensee	POS	Pri: 5B	GOOD COORDNATION BETWEEN CHEMISTRY AND OPERATIONS WHEN RCS BORON SAMPLE RESULTS (	
		Sec:			Sec:	The cooldown of Unit 2 was appropriately delayed when chemistry sample results for reactor coolant system boron	
<b>Dockets Disc</b> 05000498 So 05000499 So	uth Texas 1				Ter:	concentration did not agree with chemical additions. Operations and chemistry personnel coordinated well. Chemistry personnel thoroughly evaluated sources of dilution and analytical error before concluding that the problem was a related to analytical limitations in the lab equipment. The cooldown was performed only when proper shutdown margin was confirmed.	

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### United States Nuclear Regulatory Commission PLANT ISSUE MATRIX

Region IV SOUTH TEXAS PROJECT By Primary Functional Area

Date	Source	Functional Area	ID	Туре	Template Codes	Item Title Item Description
09/18/1999	1999016	Pri: PLTSUP	NRC	POS	Pri: 5B	EMERGENCY RESPONSE DRILL WAS CHALLENGING AND EFFECTIVE
<b>Dockets Disc</b> 05000498 Sou 05000499 Sou	ıth Texas 1	Sec:			Sec: Ter:	The emergency drill effectively exercised the response capabilities of the licensee. The emergency response team's prioritization of actions was effective in combating the simulated problems. The technical support center team demonstrated initiative by brainstorming ways to mitigate a simulated release when traditional methods were ineffective.
08/19/1999	1999012	Pri: PLTSUP	NRC	POS	Pri: 1C	Effective assessment aids.
		Sec:			Sec:	Assessment aids provided effective assessment of the perimeter detection zones. The video capture system
<b>Dockets Disc</b> 05000498 Sou 05000499 Sou	ıth Texas 1				Ter:	provided enhanced ability to determine the cause of perimeter security alarms,
08/19/1999	1999012	Pri: PLTSUP	NRC	POS	Pri: 1C	Security, access authorization, and fitness for duty audits were effective.
Dockets Disc	ussed:	Sec:			Sec: Ter:	The audits of the security program, the access authorization program, and the fitness-for-duty program were effective, thorough, and intrusive.
05000498 South Texas 1 05000499 South Texas 2						
08/19/1999	1999012-01	Pri: PLTSUP	Licensee	NCV	Pri: 1C	IMPROPER GRANTING OF UNESCORTED ACCESS, MULTIPLE OCCURRENCES
<b>Dockets Disc</b> 05000498 Sou 05000499 Sou	ıth Texas 1	Sec:			Sec: 3B Ter:	A violation was identified for failure to review and consider all background investigation information prior to granting unescorted plant access, as required by Paragraph 4.1.2 of the physical security plan and Paragraph 4.1 of Licensee Procedure OHRP01-ZA-0001, Revision 3. On three occasions, the licensee improperly granted unescorted access to an individual who would not have been granted unescorted access if a complete review had been conducted. On two additional occasions, the licensee's reevaluation resulted in continuation of individuals' unescorted access. This Severity Level IV violation is being treated as a noncited violation, consistent with Appendix C of the NRC Enforcement Policy. This violation is in the licensee's corrective action program as Condition Reports 99-8275, 99-6371, and 99-7237. This closes LER 99-S01-00.
08/19/1999	1999012-02	Pri: PLTSUP	Licensee	NCV	Pri: 1C	FAILURE TO MAINTAIN POSITIVE CONTROL OF A VITAL AREA KEY
		Sec:			Sec: 3B	A violation was identified for failure to maintain positive control of a vital area key, as required by Station Procedure
<b>Dockets Disc</b> 05000498 Sou 05000499 Sou	ıth Texas 1				Ter:	OPGP03-ZS-0005. This Severity Level IV violation is being treated as a noncited violation, consistent with Appendix C of the NRC Enforcement Policy. This violation is in the licensee's corrective action program as Condition Report 99-8375. This closed LER 99-S02-00.
08/19/1999	1999012-03	Pri: PLTSUP	Licensee	NCV	Pri: 1C	FAILURE TO PROPERLY REVITALIZE A UNIT 1 VITAL AREA
		Sec:			Sec: 3B	A violation was identified for failure to properly revitalize Unit 1 standby diesel generator No. 11, as required by the
<b>Dockets Disc</b> 05000498 Sou 05000499 Sou	ıth Texas 1				Ter:	security plan. This Severity Level IV violation is being treated as a noncited violation, consistent with Appendix C of the NRC Enforcement Policy. This violation is in the licensee's corrective action program as Condition Report 99-9227. This closes LER 99-S03-00.

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# United States Nuclear Regulatory Commission PLANT ISSUE MATRIX

By Primary I	Functional	Area
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Date	Source	Functional Area	ID	Туре	Template Codes	Item Title Item Description
06/26/1999	1999013	Pri: PLTSUP	NRC	POS	Pri: 3A	Security activities including plant access and support to operations were performed well.
		Sec:			Sec:	Security activities including plant access and support to plant operations and maintenance were well performed.
<b>Dockets Disc</b> 05000498 Sou 05000499 Sou	th Texas 1				Ter:	
05/15/1999	1999011	Pri: PLTSUP	NRC	POS	Pri: 1A	Radiological work practices and low level contamination control declining trends reversed.
<b>Dockets Disc</b> 05000498 Sou 05000499 Sou	th Texas 1	Sec:			Sec: Ter:	The licensee successfully reversed the declining performance trend observed during the previous outage in the area of radiological work practices and low level contamination controls. Planning and staffing of health physics support of work were significantly improved. Contamination control improvements were effective in reducing the spread of low level contamination from the reactor containment building. Shielding and dose controls were effective in maintaining outage collective dose below budget.
05/15/1999	1999011	Pri: PLTSUP	NRC	POS	Pri: 1A	Unit 1 core barrel removal for inservice inspection demonstrated excellent planning and dose control.
<b>Dockets Disc</b> 05000498 Sou 05000499 Sou	th Texas 1	Sec:			Sec: Ter:	The highly radioactive Unit 1 core barrel was successfully removed for inservice inspection using excellent planning and dose controls. Contingency planning for the evolution was extensive. The job was completed with minimal dose and without incident.
05/06/1999	1999009	Pri: PLTSUP	NRC	STR	Pri: 1C	The licensee has implemented a sustained highly effective emergency preparedness program.
<b>Dockets Disc</b> 05000498 Sou 05000499 Sou	th Texas 1	Sec:			Sec: 3B Ter:	The licensee has implemented a sustained highly effective emergency preparedness program. This was evidenced by good operational and emergency plan implementation skills, continuing emergency facility readiness, an effective training program, and sound program oversight. Close coordination with offsite officials remained an important aspect of the licensee's program.
04/09/1999	1999007	Pri: PLTSUP	NRC	POS	Pri: 2B	Housekeeping throughout the radiological controlled area was good.
<b>Dockets Disc</b> 05000498 Sou 05000499 Sou	th Texas 1	Sec:			Sec: Ter:	Housekeeping throughout the radiological controlled area was good. In general, areas were free of debris; tools and equipment staged for work activities were properly controlled.
04/09/1999	1999007	Pri: PLTSUP	NRC	POS	Pri: 3B	Effective controls were implemented to prevent the spread of radioactive materials.
<b>Dockets Disc</b> 05000498 Sou 05000499 Sou	th Texas 1	Sec:			Sec: 3C Ter:	Effective controls were implemented to prevent the spread of radioactive materials. Workers exiting the radiological controlled area used the contamination monitoring equipment in accordance with radiation safety training material. Radiation protection personnel provided appropriate and timely direction to workers who alarmed the contamination monitoring equipment. Radiation workers used good health physics practices during the removal of potentially contaminated clothing. Good controls to prevent the spread of radioactive contamination were in place.

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### United States Nuclear Regulatory Commission PLANT ISSUE MATRIX

By Primary Functional Area

Date	Source	Functional Area	ID	Туре	Template Codes	Item Title Item Description	
04/09/1999	1999007	Pri: PLTSUP	NRC	POS	Pri: 5A	An effective quality assurance program was maintained for radiation protection.	
		Sec:			Sec: 5C	An effective quality assurance program was maintained. The primary auditor was well qualified to perform radiation	
Dockets Disci	ussed:				Ter:	protection audits/assessments. The audit and monitoring reports were comprehensive and provided manageme with a good assessment of the radiation protection program. The station identified radiological concerns and iss	
05000498 Sou	ıth Texas 1					with a good assessment of the radiation protection program. The station identified radiological concerns and issue at the proper threshold which provided management with a good perspective to assess the radiation protection program.	
05000499 Sou	ıth Texas 2						
04/09/1999	1999007	Pri: PLTSUP	NRC	STR	Pri: 3B	Overall, external exposure control program was effectively implemented.	
		Sec:			<b>Sec</b> : 3C	Overall, the external exposure control program was effectively implemented. High radiation areas were properly	
Dockets Disc	ussed:				Ter:	controlled and posted in accordance with regulatory requirements. Radiation work permits and area radiological	
05000498 Sou						survey maps were written clearly and provided station workers with the appropriate controls and radiological information to safely accomplish assigned tasks. An excellent pre-job as low as is reasonably achievable (AL	
05000499 Sou	ıth Texas 2					briefing was provided to the workers involved with the core barrel lift work.	
04/09/1999	1999007	Pri: PLTSUP	NRC	STR	Pri: 3B	A good internal exposure control program was in place.	
		Sec:			<b>Sec</b> : 3C	A good internal exposure control program was in place. Continuous air monitors, portable air samplers, and high	
Dockets Disci	ussed:				Ter:	efficiency particulate air filter ventilation units were appropriately used to monitor and evaluate radiological conditions and limit airborne exposures during work evolutions. No problems were identified with the whole-boccounting and internal dose assessment programs.	
05000498 Sou	ıth Texas 1						
05000499 Sou	ıth Texas 2						
04/09/1999	1999007	Pri: PLTSUP	NRC	STR	Pri: 3B	A good ALARA program was maintained.	
		Sec:			<b>Sec</b> : 3C	A good ALARA program was maintained. The 1999 Unit 1 refueling outage dose goal of 160 person-rem was	
<b>Dockets Disc</b>	ussed:				Ter:	established using past best performance and industry experience for similar scope work. Station department	
05000498 Sou	ıth Texas 1					managers and the ALARA committee were appropriately involved in establishing outage exposure goals.  Chemistry controls reduced reactor coolant system dose rates by about 10 percent.	
05000499 Sou	ıth Texas 2						
04/09/1999	1999007-01	Pri: PLTSUP	NRC	NCV	Pri: 3A	Failure to follow radiation work permit instructions.	
		Sec:			Sec:	Two examples of a violation of Technical Specification 6.8.1 were identified which involved the failure to follow	
Dockets Disc	ussed:				Ter:	radiation work permit instructions. These violations were placed in the licensee's corrective action program as Condition Reports 99-5232 and 99-5374. These Severity Level IV violations are being treated as a non-cited	
05000498 Sou	ıth Texas 1					violation, consistent with Appendix C of the NRC Enforcement Policy.	
05000499 Sou	ıth Texas 2						
04/09/1999	1999007-02	Pri: PLTSUP	NRC	NCV	Pri: 3A	Failure to perform a survey	
		Sec:			Sec:	A violation of 10 CFR 20.1501(a) was identified involving the failure to perform a radiological survey. This Severity	
Dockets Disco					Ter:	Level IV violation is being treated as an Non-Cited Violation consistent with Appendix C of the NRC Enforcement Policy. This violation was placed in the licensee's corrective action program as Condition Report 99-5232.	
05000499 Sou	ıth Texas 2						

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## United States Nuclear Regulatory Commission PLANT ISSUE MATRIX

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Date	Source	Functional Area	ID	Туре	Template Codes	Item Title Item Description	
04/03/1999	1999006	Pri: PLTSUP	NRC	POS	Pri: 2A	Emergency preparedness drill provided effective training.	
<b>Dockets Discu</b> 05000498 Sou 05000499 Sou	th Texas 1	Sec:			Sec: 3B Ter:	An emergency preparedness drill was observed and was found to provide effective training. The emergency response organization was appropriately focused on accident mitigation and measures to protect public health and safety. The licensee's emergency facilities were in good working condition.	
04/03/1999	1999006	Pri: PLTSUP	NRC	POS	Pri: 2B	Outage dose reduction and contamination control showed significant improvements.	
		Sec:			Sec: 3A	Significant improvements over previous outage performance were demonstrated in dose reduction and	
<b>Dockets Discu</b> 05000498 Sou 05000499 Sou	th Texas 1				Ter:	contamination control. Specifically, the licensee implemented several ALARA and engineering controls including: mockup training, low dose waiting areas, newly manufactured shielding, tents on the steam-generator platforms, and covered floor grating areas to prevent spread of contamination.	
02/25/1999	1999003	Pri: PLTSUP	NRC	POS	Pri: 5A	Good, effective audit and quality monitoring reports of the rad. environmental program were performed.	
		Sec:			Sec:	Good, effective audit and quality monitoring reports of the radiological environmental monitoring program were	
05000498 Sou 05000499 Sou	th Texas 1				Ter:	performed by qualified auditors. Condition reports identified issues at the proper threshold to provide management with an overview of the radiological environmental and meteorological monitoring programs. Overall, corrective actions were closed in a timely manner; however, some actions were closed before all items were completed.	
02/25/1999	1999003	Pri: PLTSUP	NRC	STR	Pri: 3A	Overall, radiological environmental monitoring program was effectively implemented.	
		Sec:			Sec: 3B	Overall, the radiological environmental monitoring program was effectively implemented in accordance with the	
05000498 Sou 05000499 Sou	th Texas 1				Ter: 4C	Technical Specification and the Offsite Dose Calculation Manual requirements. Tritium levels in the main cooling reservoir continued to trend down. The operation of South Texas Project Nuclear Station resulted in no detectable buildup of radioactivity off site. Descriptive radiological environmental monitoring program implementing procedures were maintained.	
02/25/1999	1999003	Pri: PLTSUP	NRC	STR	Pri: 3A	Good meteorological monitoring program was in place, exceeded guidance of Regulatory Guide 1.23.	
		Sec:			Sec: 3B	A good meteorological monitoring program was in place. The performance of the meteorological monitoring	
<b>Dockets Discu</b> 05000498 Sou 05000499 Sou	th Texas 1				Ter: 4C	equipment exceeded the guidance contained in Regulatory Guide 1.23.	
02/20/1999	1999002	Pri: PLTSUP	NRC	POS	Pri: 1C	Excellent live firefighting training was provided offsite to fire brigade teams.	
		Sec:			Sec:	Excellent live firefighting training was provided offsite to fire brigade teams. The firefighting training facility was	
Dockets Discu	ussed:				Ter:	tailored to mimic plant areas and equipment to maximize training realism and effectiveness. Plant management was involved in the training.	
05000498 Sou 05000499 Sou							

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### United States Nuclear Regulatory Commission PLANT ISSUE MATRIX

By Primary Functional Area

Region IV

**SOUTH TEXAS PROJECT** 

Date	Source	Functional Area	ID	Туре	Template Codes	Item Title Item Description
02/20/1999	1999002	Pri: PLTSUP	NRC	POS	Pri: 1C	Good sampling and analysis techniques during routine sampling.
	Sec: Dockets Discussed:				Sec:	The inspectors observed good sampling and analysis techniques along with strict procedural adherence by primary
Dockets Disc				Ter:	chemistry technicians during routine sampling. Laboratory equipment was modern and in good condition.	
05000498 South Texas 1						
05000499 Sou	uth Texas 2					

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#### United States Nuclear Regulatory Commission PLANT ISSUE MATRIX

By Primary Functional Area

#### Legend

#### Type Codes:

BU	Bulletin
CDR	Construction
DEV	Deviation
EEI	Escalated Enforcement Item
IFI	Inspector follow-up item
LER	Licensee Event Report
LIC	Licensing Issue
MISC	Miscellaneous
MV	Minor Violation
NCV	NonCited Violation
NEG	Negative
NOED	Notice of Enforcement Discretion
NON	Notice of Non-Conformance
OTHR	Other
P21	Part 21
POS	Positive
SGI	Safeguard Event Report
STR	Strength
URI	Unresolved item
VIO	Violation
WK	Weakness

#### **Template Codes:**

1A	Normal Operations
1B	Operations During Transients
1C	Programs and Processes
2A	Equipment Condition
2B	Programs and Processes
3A	Work Performance
3B	KSA
3C	Work Environment
4A	Design
4B	Engineering Support
4C	Programs and Processes
5A	Identification
5B	Analysis
5C	Resolution

#### ID Codes:

NRC	NRC
Self	Self-Revealed
Licensee	Licensee

#### **Functional Areas:**

OPS	Operations
MAINT	Maintenance
ENG	Engineering
PLTSUP	Plant Support
OTHER	Other

EEIs are apparent violations of NRC Requirements that are being considered for escalated enforcement action in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Action" (Enforcement Policy), NUREG-1600. However, the NRC has not reached its final enforcement decision on the issues identified by the EEIs and the PIM entries may be modified when the final decisions are made.

URIs are unresolved items about which more information is required to determine whether the issue in question is an acceptable item, a deviation, a nonconformance, or a violation. A URI may also be a potential violation that is not likely to be considered for escalated enforcement action. However, the NRC has not reached its final conclusions on the issues, and the PIM entries may be modified when the final conclusions are made.

03/30/2000

**SOUTH TEXAS PROJECT** Inspection / Activity Plan 04/02/2000 - 03/31/2001

16:27:36

Units	Inspection Activity		Title	No. of Staff on Site	No. assigned to Procedure	Planned Dates Start End		Inspection Type
	RPBA17	- DRILL	EVALUATION	2				
1, 2	IP 71114	06	Drill Evaluation		2	04/02/2000	06/24/2000	Baseline Inspections
	SGR2	- STEA	M GENERATOR REPLACEMENT INSPECTION	2				
1	IP 50001		Steam Generator Replacement Inspection		2	04/02/2000	07/01/2000	Regional Initiative
	RPBA13	- TEMP	ORARY PLANT MODIFICATIONS	2				
1, 2	IP 71111	23	Temporary Plant Modifications		2	04/02/2000	03/31/2001	Baseline Inspections
	EMB	- SGRI	· CUTTING, WELDING, NDE	2				
1	IP 50001		Steam Generator Replacement Inspection		1	04/03/2000	04/07/2000	Regional Initiative
	EMB	- ISI		2				
1, 2	IP 71111	08	Inservice Inspection Activities		2	04/03/2000	04/08/2000	Baseline Inspections
	SGRI	- STEA	M GENERATOR REPLACEMENT INSPECTION	2				
1	IP 50001		Steam Generator Replacement Inspection		1	04/10/2000	04/14/2000	Regional Initiative
	SGRI	- STEA	M GENERATOR REPLACEMENT INSPECTION	2				
1	IP 50001		Steam Generator Replacement Inspection		1	04/17/2000	04/21/2000	Regional Initiative
	RPBA21	- EQUIF	PMENT ALIGNMENT	2				
1	IP 71111	04	Equipment Alignment		2	05/07/2000	06/24/2000	Baseline Inspections
	SGRI	- STEA	M GENERATOR REPLACEMENT INSPECTION	2				
1	IP 50001		Steam Generator Replacement Inspection		1	05/08/2000	05/12/2000	Regional Initiative
	PBA-TI		, PI DATA REVIEW	1				
1, 2	IP 2515/1		Performance Indicator Data Collecting and Reporting Process Review		1	05/14/2000	08/05/2000	Safety Issues
	SGRI	- STEA	M GENERATOR REPLACEMENT INSPECTION	2				
1	IP 50001		Steam Generator Replacement Inspection		1	05/15/2000	05/19/2000	Regional Initiative
	OB-PIR	- PIR IN		5				
1, 2	IP 71152		Identification and Resolution of Problems		4	06/19/2000	06/23/2000	Baseline Inspections
	PSB-RP1	- RAD N	MONITORING INSTR	1				
1, 2	IP 71121		Radiation Monitoring Instrumentation		1	06/26/2000	06/30/2000	Baseline Inspections
	PSB-RP7		CONMENTAL MONITORING	1				
1, 2	IP 71122		Radiological Environmental Monitoring Program		1	09/25/2000	09/29/2000	Baseline Inspections
	PSB-S1		TO CONT EVENTS, SEC PLAN, AND PIV	2				
1, 2	IP 71130		Response to Contingency Events (Protective Strategy and Implementation of P		2	09/25/2000		Baseline Inspections
1, 2	IP 71130	04	Security Plan Changes		2	09/25/2000	09/29/2000	'
1, 2	IP 71151		Performance Indicator Verification		2	09/25/2000	09/29/2000	Baseline Inspections
	PSB-EP1		/EXERCISE PERF, EAL/EP, AND PIV	2	_			
1, 2	IP 71114		Exercise Evaluation		2	10/16/2000		Baseline Inspections
1, 2	IP 71114	04	Emergency Action Level and Emergency Plan Changes		2	10/16/2000	10/20/2000	Baseline Inspections
1, 2	IP 71151		Performance Indicator Verification		2	10/16/2000	10/20/2000	Baseline Inspections

This report does not include INPO and OUTAGE activities.
This report shows only on-site and announced inspection procedures.

#### **SOUTH TEXAS PROJECT** Inspection / Activity Plan 04/02/2000 - 03/31/2001

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11.24			No. of Staff	No. assigned	Planned Dates		Inspection
Units			on Site	to Procedure	Start	End	Type
	RPBA32 - EMER	GENCY EXERCISE AND EVALUATION	2				
1, 2	IP 7111401	Exercise Evaluation		2	10/16/2000	10/20/2000	Baseline Inspections
	RPBA25 - ADVE	RSE WEATHER	2				
1, 2	IP 7111101	Adverse Weather Protection		2	11/12/2000	02/10/2001	Baseline Inspections
	PSB-RP2 - ALAR	A PLANNING/CONTROL 1	1				
1, 2	IP 7112102	ALARA Planning and Controls		1	11/13/2000	11/17/2000	Baseline Inspections
	PSB-RP3 - EFFLU	JENTS	1				
1, 2	IP 7112201	Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems		1	12/04/2000	12/08/2000	Baseline Inspections
	PSB-S2 - ACCE	SS AUTH/CONTROL	1				
1, 2	IP 7113001	Access Authorization Program (Behavior Observation Only)		1	12/04/2000	12/08/2000	Baseline Inspections
1, 2	IP 7113002	Access Control (Search of Personnel, Packages, and Vehicles: Identification an		1	12/04/2000	12/08/2000	Baseline Inspections
	PSB-RP4 - RAD N	MATERIAL PROCESSING/SHIPPING	1				
1, 2	IP 7112202	Radioactive Material Processing and Transportation		1	12/18/2000	12/22/2000	Baseline Inspections
	RPBA22 - EQUIP	MENT ALIGNMENT	2				
2	IP 7111104	Equipment Alignment		2	12/31/2000	02/10/2001	Baseline Inspections
	RPBA18 - DRILL EVALUATION		2				
1, 2	IP 7111406	Drill Evaluation		2	12/31/2000	03/31/2001	Baseline Inspections
	PSB-RP5 - ALAR	A PLANNING/CONTROL 2	1				
1, 2	IP 7112102	ALARA Planning and Controls		1	01/02/2001	01/06/2001	Baseline Inspections
	PSB-RP6 - ACCE	SS TO RAD SIGN AREAS AND PIV	1				
1, 2	IP 7112101	Access Control to Radiologically Significant Areas		1	01/29/2001	02/02/2001	Baseline Inspections
1, 2	IP 71151	Performance Indicator Verification		1	01/29/2001	02/02/2001	Baseline Inspections
	EMB - MAINT	ENANCE RULE IMPLEMENTATION	1				
1, 2	IP 7111112B	Maintenance Rule Implementation		1	02/05/2001	02/09/2001	Baseline Inspections
	EMB - 50.59		1				
1, 2	IP 7111102	Evaluation of Changes, Tests, or Experiments		1	02/26/2001	03/02/2001	Baseline Inspections