

UNITED STATES NUCLEAR REGULATORY COMMISSION

REGION IV

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

July 23, 2001

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

SUBJECT: SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION-NRC INTEGRATED INSPECTION REPORT 50-498/01-02; 50-499/01-02

Dear Mr. Cottle:

On June 23, 2001, the NRC completed an inspection at your South Texas Project Electric Generating Station, Units 1 and 2, facility. The enclosed report documents the inspection findings which were discussed on June 26, 2001, with you and other members of your staff.

This inspection examined activities conducted under your licenses as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your licenses. Within these areas, the inspection consisted of selected examination of procedures and representative records, observations of activities, and interviews with personnel.

Based on the results of this inspection, the inspectors identified two issues of very low safety significance (Green). These issues were determined to involve violations of NRC requirements. However, because of their very low safety significance and because they have been entered into your corrective action program, the NRC is treating these issues as noncited violations, in accordance with Section VI.A.1 of the NRC's Enforcement Policy. If you deny these noncited violations, you should provide a response with the basis for your denial, within 30 days of the date of this inspection report, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001; with copies to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region IV, 611 Ryan Plaza Drive, Suite 400, Arlington, Texas 76011; the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Resident Inspector at the South Texas Project Electric Generating Station, Units 1 and 2, facility.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be made available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/NRC/ADAMS/index.html (the Public Electronic Reading Room).

Should you have any questions concerning this inspection, we will be pleased to discuss them with you.

Sincerely,

/RA/

Jeffrey A. Clark, Chief Project Branch A Division of Reactor Projects

Dockets: 50-498

50-499

Licenses: NPF-76

NPF-80

Enclosure:

NRC Inspection Report

50-498/01-02; 50-499/01-02

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T-JAClark	T-JAClark	JBNicholas for	CEJohnson for	/RA/
07/23/01	07/23/01	07/23/01	07/20/01	07/23/01
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JAClark				
/RA/				
07/23/01				

ENCLOSURE

U.S. NUCLEAR REGULATORY COMMISSION REGION IV

Dockets: 50-498

50-499

Licenses: NPF-76

NPF-80

Report No: 50-498/01-02

50-499/01-02

Licensee: STP Nuclear Operating Company

Facility: South Texas Project Electric Generating Station, Units 1 and 2

Location: FM 521 - 8 miles west of Wadsworth

Wadsworth, Texas 77483

Dates: April 1, 2001, through June 23, 2001

Inspectors: N. F. O'Keefe, Senior Resident Inspector

G. L. Guerra, Resident Inspector

L. E. Ellershaw, Senior Reactor Inspector

P. J. Elkman, Emergency Preparedness Inspector

C. A. Clark, Reactor Inspector

Approved By: J. A. Clark, Chief, Project Branch A

Attachment: Supplemental Information

SUMMARY OF FINDINGS

South Texas Project Electric Generating Station, Units 1 and 2 NRC Inspection Report 50-498/01-02; 50-499/01-02

IR 05000498-01-02; IR 05000499-01-02; on 04/01/2001-06/23/2001; STP Nuclear Operating Company; South Texas Project Electric Generating Station; Units 1 & 2. Integrated Resident & Regional Report; Nonroutine Event Followup, Postmaintenance Testing, Emergency Preparedness, and Heat Exchanger Performance.

The inspection was conducted by resident inspectors and region based engineering and maintenance, and plant support inspectors. This report also covers an in-office review of licensee event reports by a regional reactor inspector on April 19, 2001. The inspection identified two Green issues and two noncited violations. The significance of issues is indicated by their color (Green, White, Yellow, or Red) and was determined by the Significance Determination Process in Inspection Manual Chapter 0609. Findings for which the SDP does not apply are indicated by No Color or by the severity level of the applicable violation.

A. <u>Inspector Identified Findings</u>

Mitigating Systems

Green. The inspectors identified a noncited violation for failure to ensure adequate system alignment was maintained. Following modifications to the safety injection test header, freeze seals were melted without first establishing the correct system alignment. Operators repeatedly vented the system without recognizing that this drained water from the 2C safety injection accumulator. The accumulator was drained below the Technical Specification minimum level. This issue was considered to be a cross-cutting issue for both human performance and problem identification and resolution. Human performance problems, in the form of inadequate communications about and review of isolation boundaries, and limited understanding of the impact of the multiple operations of the same system, were the cause of draining water from the safety injection accumulator. Operators were slow to respond to indications of lowering accumulator level and identify the cause. Further, this issue was under-classified by the licensee for significance, such that no probable cause determination or corrective actions beyond restoring operability were initiated until the inspectors brought the significance of the event to licensee management's attention. As a result, this was also considered to be a finding against the licensee's problem identification and resolution process.

This event had actual safety significance because required accident mitigation equipment was unintentionally rendered inoperable. The licensee performed an evaluation that concluded that the safety function was not lost because the total quantity of borated water remaining in the safety injection accumulators was sufficient to fulfill the safety function. However, if the issue was left uncorrected, it would have led to a more significant concern because the injection function would have been jeopardized. As a result, this issue was determined to have very low safety significance. A noncited violation of Technical Specification 6.8.1, for a Regulatory Guide 1.33 referenced procedure, was identified for inadequate procedures to control the use of freeze seals as an equipment tagging barrier. Reference Condition Report 01-8224 (Section 1R14).

Mitigating Systems

Green. Inspectors identified a noncited violation for failure to follow a procedure.
 Maintenance personnel replaced hydraulic fluid in Steam Generator Power Operated
 Relief Valve 1C without first having chemistry personnel sample the new fluid as
 specified in the maintenance procedure. The oil was later determined to be out-of specification due to excessive water content.

The safety significance of this issue was determined to be very low (Green) because the oil was determined to be within limits that support operability of the steam generator power operated relief valve. However, if left uncorrected this issue could become a more significant safety concern and could credibly affect the reliability of safety equipment supplied with oil from this tank. Failure to follow 0PMP04-SG-0007, Revision 10, "Steam Generator PORV Hydraulic Actuator Maintenance," was a violation of Technical Specification 6.8.1, for a Regulatory Guide 1.33 referenced procedure. This violation is being treated as a noncited violation consistent with Section VI.A.1 of the NRC Enforcement Policy and is in the licensee's corrective action program as Condition Report 01-9476 (Section 1R19).

B. Licensee Identified Violations

Violations of very low safety significance which were identified by the licensee have been reviewed by the inspectors. Corrective actions taken or planned by the licensee appear reasonable. These violations are listed in Section 4OA7 of this report.

Report Details

Plant Status

Unit 1 operated at full power during this inspection period.

Unit 2 began the period with operators making preparations to restart. The reactor was restarted on April 2, 2001. Full power was achieved on April 17. During monitoring activities on Main Feed Regulating Valve 2A control system on May 8, feed flow was lost to the associated steam generator, and the plant automatically tripped on low steam generator water level. The plant was restarted on May 11 and returned to full power on May 14. On May 18, operators reduced power to 65 percent for repairs to Main Feedwater Pump 23 and returned to 90 percent power for repairs on other plant equipment. Full power was achieved on May 23. The plant remained at or near full power for the balance of the inspection period.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity

1R01 Adverse Weather Protection (71111.01)

a. Inspection Scope

The inspectors reviewed the licensee's adverse weather preparations for the hurricane season. The inspection included a review of the following licensee procedures:

- 0PGP0-ZV-0001, "Severe Weather Plan," Revision 6
- 0POP04-ZO-0002, "Natural or Destructive Phenomena Guidelines," Revision 15

The inspectors reviewed individual departmental plans, which indicated responsible department coordinators, actions to be taken, and documentation to be protected. Essential supplies inventories were verified. Discussions were held with the licensee's emergency preparedness coordinator to confirm the extent and completeness of preparations.

b. Findings

No findings of significance were identified.

1R04 Equipment Alignment (71111.04)

.1 Partial System Walkdown

a. Inspection Scope

The inspectors performed a partial system walkdown of the fire protection system while Fire Water Storage Tank 1, and two diesel driven fire water pumps, were removed from service for planned maintenance on June 12, 2001. The inspectors used Plant Operating Procedure 0POP02-FP-0001, Revision 12, "Fire Protection System

Operation," and system drawings to verify that the remaining water sources and the fire protection distribution header were in a proper standby line up.

The inspectors performed a partial system walkdown of the Unit 1 Channel I and II emergency safety features (ESF) batteries and distribution rooms on April 12, 2001. They also used Plant Surveillance Procedure 0PSP03-EA-0002, "ESF Power Availability," Revision 8, to verify the proper standby electrical equipment line up. The inspectors also examined component material condition.

The inspectors performed a partial system walkdown of Unit 1 Standby Diesel Generator (SDG) 12 while SDG 11 was removed from service for planned maintenance on April 30, 2001. The inspectors used Plant Operating Procedure 0POP02-DG-0002, "Standby Diesel Generator 12," Revision 29, to verify that the required standby and support systems were in a proper standby line up. The inspectors also examined component material condition.

b. <u>Findings</u>

No findings of significance were identified.

.2 Semi-Annual System Walkdown

a. <u>Inspection Scope</u>

The inspectors performed a complete system walkdown of Standby Diesel Generator 22 and the following support systems during the week of June 11, 2001:

- air starting system
- fire protection foam system
- jacket water system
- diesel fuel oil system
- diesel lube oil system

The inspectors verified that the trains were in a proper standby equipment and control room line up, and that components were in good material condition. The system walkdown included control board and electrical line ups. The inspectors referenced Plant Operating Procedure 0POP02-DG-0002, "Standby Diesel Generator 22," Revision 25, piping and instrumentation drawings, and the Updated Final Safety Analysis Report information.

b. Findings

No findings of significance were identified.

1R05 <u>Fire Protection (71111.05)</u>

.1 Routine Fire Area Walkdowns

a. Inspection Scope

The inspectors used Inspection Procedure 71111.05 to evaluate the control of transient combustibles and ignition sources. This included the material condition and operational line up of reactor plant active and passive fire protection systems, and the material condition and operational status of fire barriers used to prevent fire damage or fire propagation. The following plant areas were inspected:

- Unit 1 Channel I and II battery and distribution rooms (Fire Zones Z001, Z016, Z003, Z002 and Z084)
- Unit 2 Electrical Auxiliary and Control Room Envelope HVAC filtration room areas (Fire Zones Z005, Z039, and Z049)
- Unit 1 Essential Chiller and Component Cooling Water pump rooms (Fire Zones Z128, Z140, and Z139)
- Unit 1 Standby Diesel Generator 12 rooms (Fire Zones Z501, Z504, and Z513)

b Findings

No findings of significance were identified.

.2 Fire Area Walkdowns - Control Room Fire Scenarios Reviewed

a. Inspection Scope

The inspectors used Inspection Procedure 71111.05 to evaluate the control of transient combustibles and ignition sources. This included the material condition and line up of fire detection and suppression systems, the material condition of manual fire equipment and passive fire barriers, and evaluated the effectiveness of compensatory measures for degraded equipment. Fire preplans were also reviewed for these areas:

- Unit 1 Relay Room (Fire Zone Z032)
- Unit 1 Auxiliary Shutdown Panel Areas (Fire Zone Z071)
- Unit 1 Main Control Room (Fire Zone 203)

In addition, the inspectors reviewed the following response procedures and background documentation for fires in these areas. Portions of these procedures were evaluated through field walkthroughs. The inspectors attended classroom training and a walkthrough training exercise on the use of these complicated procedures. At the remote shutdown panels, the inspectors verified that adequate procedures and communications equipment were available to support operators and the emergency director.

- 0POP04-ZO-0001, "Control Room Evacuation," Revision 13
- 0POP04-ZO-0008, "Fire/Explosion," Revision 4
- 0POP02-HE-0001, "Electrical Auxiliary Building Ventilation System," Revision 16
- South Texas Project Fire Hazards Analysis, Revision 2
- Report for Post Fire Operator Actions and Equipment Requirements (5A019MFP0001), Revision 8

b Findings

No findings of significance were identified.

1R07 Heat Sink Performance (71111.07B)

Introduction

The purposes of this biennial review are to verify (1) that any potential heat exchanger deficiencies, which could mask degraded performance, were identified; (2) that any potential common cause heat sink performance problems that had the potential to increase risk at the South Texas Project Electric Generating Station, Units 1 and 2, facility, were identified; and (3) that the licensee had adequately identified and resolved heat sink performance problems that could result in initiating events or affect multiple heat exchangers in mitigating systems and, thereby, increase risk. Four heat exchangers common to each unit ranked high in the plant risk assessment and installed in each of the three redundant essential cooling water loops were chosen for review and are listed below:

- Component cooling water system heat exchangers
- Standby diesel generator heat exchangers
- Essential chiller condensers
- Component cooling water pump supplementary coolers

.1 Performance of Testing, Maintenance, and Inspection Activities

a. Inspection Scope

The inspectors reviewed the licensee's test methodology for the selected heat exchangers. Specifically, the inspectors reviewed the test method and test conditions contained in Procedure OPEP07-EW-0001, "Performance Test for Essential Cooling Water Heat Exchangers," Revision 5, and applicable preventative maintenance tasks.

The inspectors also reviewed the heat exchanger inspection and test results. Specifically, the inspectors verified proper extrapolation of test conditions to design conditions, appropriate test instrumentation used, and appropriate accounting for instrument inaccuracies. Additionally, the inspectors verified that the licensee

appropriately trended these inspection and test results, assessed the causes of the trends, and took necessary actions for any step changes in these trends.

The inspectors also verified that chemical treatments and methods used to control biotic fouling for the essential cooling water and component cooling water systems were sufficient to ensure effective heat exchanger and heat sink performance.

b. <u>Findings</u>

No findings of significance were identified.

.2 Verification of Conditions and Operations Consistent with Design-Bases

a. <u>Inspection Scope</u>

For the selected heat exchangers, the inspectors verified that the licensee-established heat sink and heat exchanger condition, operation, and test criteria was consistent with the design assumptions. Specifically, the inspectors reviewed the applicable test calculations to ensure that the thermal performance test acceptance criteria for the essential cooling water system and component cooling water heat exchangers were being applied consistently throughout the calculations. The inspectors also verified that the appropriate acceptance values for fouling and tube plugging for the component cooling water heat exchanger remained consistent with the values used in the design-basis calculations. Finally, the inspectors verified that the parameters measured during the thermal performance and flow balance tests for the essential cooling water and component cooling water systems were consistent with those assumed in the design-bases.

b. Findings

No findings of significance were identified.

.3 Identification and Resolution of Problems

a. Inspection Scope

The inspectors examined the corrective action program for significant problems with the selected components over the past 3 years. The inspectors selected a sample of 10 condition reports for review, which are identified in the attachment to this report.

The inspectors used Inspection Procedure 71152, "Identification and Resolution of Problems," as additional guidance for reviewing these condition report issues and subsequently verified that the licensee took appropriate actions to prevent recurrence of the identified problems.

b. <u>Findings</u>

No findings of significance were identified.

1R11 <u>Licensed Operator Requalification (71111.11)</u>

a. Inspection Scope

The inspectors observed licensed operator training on control room evacuation procedures on April 11, 2001. This included classroom training, and both simulator and in-plant walkthrough exercises. The inspectors evaluated the operators' understanding and execution of this infrequently-practiced procedure. The inspectors observed crew performance on clarity and formality of communications, correct use of procedures, high risk operator actions, and the oversight and direction provided by the shift supervisor.

b. <u>Findings</u>

No findings of significance were identified.

1R12 Maintenance Rule Functional Failure Review (71111.12)

c. Inspection Scope

The inspectors independently verified that the licensee properly implemented 10 CFR 50.65, "Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," for the following equipment performance problems.

- Unit 2 Power Operated Relief Valve 2A hydraulic pump running backwards
 (Work Authorization Number (WAN) 194142, Condition Report (CR) 01-5407)
- Unit 2 loss of an audible portion of annunciators for Alarm Panels CP004, CP005, and CP006 (WAN 206959, CR 01-8281)
- Unit 2 Instrument Air Compressor unloading solenoid valve would not load automatically (WAN 203626, CR 01-6224)
- Unit 2 Instrument Air Compressor circuit breaker failed during postmaintenance testing (WAN 205511, CR 01-7126)
- Unit 1 7300 System Protection Set II power supply failure (WAN 205591, CR 01-7211)
- Unit 1 Moisture separator reheater temperature controller power supply failure (CR 01-6770, WAN 205059)

The inspectors focused the review on whether the structures, systems, or components (SSCs) that experienced problems were properly characterized in the scope of the program. They also reviewed whether the SSC failure or performance problem was properly characterized. The inspectors assessed the adequacy of the licensee's significance classification for the SSC. This included the appropriateness of

the performance criteria established for the SSC (if applicable), and the adequacy of corrective actions for SSC's classified in accordance with 10 CFR 50.65 a(1) as applicable.

b. <u>Findings</u>

No findings of significance were identified.

1R13 Maintenance Risk Assessment and Emergent Work Evaluation (71111.13)

a. Inspection Scope

The inspectors reviewed selected activities regarding risk evaluations and overall plant configuration control. The inspectors discussed emergent work issues with work control personnel and reviewed the potential risk impact of these activities to verify that the work was adequately planned, controlled, and executed. The activities reviewed were associated with:

- (Unit 1) Train A Standby Diesel Generator 11 Extended Allowed Outage
- (Unit 1) Standby Diesel Generator 12 fuel shutoff valve air leak
- (Unit 1) Circulating Water Pump 12 discharge valve motor actuator replacement
- (Unit 2) Surveillance precautions in response to Loop D over temperature-delta temperature pretrip alarms
- (Unit 2) Crane lifts over ESF transformers
- (Unit 1) Train B work extended due to emergent issues
- (Common Unit) Fire Water Storage Tank Number 1 and two diesel fire pumps removed from service

b. Findings

No findings of significance were identified.

1R14 Personnel Performance During Non-routine Plant Evolutions (71111.14)

.1 Inadequate Tagging Control Results in Partially Draining a Safety Injection Accumulator

a. Inspection Scope

The inspectors reviewed the circumstances surrounding a loss of configuration control by Unit 2 operators that resulted in unintentionally rendering Safety Injection Accumulator 2C inoperable. The inspectors interviewed licensed operators and reviewed written statements, parameter trends, and control room logs. Since the

problem was related to plant modification work requiring the use of freeze seals, the inspectors reviewed the work controls used to implement the modification, including:

- Design Change Package 99-359-28 to install manual valves in the safety injection test header, Train C and associated 50.59 screening
- Work order implementing DCP 99-359-28 (WAN 205489)
- "Postmaintenance Testing Reference Manual," Revision 14
- Work order installing freeze seals in support of DCP 99-359-28 (WAN 205490)
- Vendor manual "Nuclear Plant Freeze Plug Procedures (ST401149-00001-C5X)," Revision K
- 0PGP03-ZO-ECO1, "Equipment Clearance Orders," Revision 10
- Maintenance procedure 0PMP04-ZG-0113, "Liquid Nitrogen Freeze Seal," Revision 5
- Equipment Clearance Order B16044, Revisions 1, 2 and 3

The inspectors discussed the significance of the events with the licensee's thermal-hydraulic analysis and risk analysis personnel, and reviewed the Updated Final Safety Analysis Report.

b. Findings

Following modifications to the safety injection test header, freeze seals were melted without first establishing the correct system alignment. Operators repeatedly vented the system without recognizing that this drained water from the 2C safety injection accumulator until after it was drained below the Technical Specification minimum level. This issue was considered a cross-cutting issue for both human performance and problem identification and resolution.

Sequence of Events

On May 10, 2001, the licensee implemented a modification in Unit 2 to install manual isolation valves. These valves were installed in the Train C portion of a test header that was connected to all three trains of the safety injection and residual heat removal (RHR) systems. The test header, located inside containment, was designed to simplify testing of installed check valves. It was also used to reduce a pressure buildup in the attached systems, caused by system in leakage, by venting it to the refueling water storage tank (RWST) outside containment. Freeze seals were used to isolate various sections of the pipe while the pipe was open to install manual valves. Safety tags were hung to

establish conditions to allow forming the freeze seals, causing the safety injection and residual heat removal pumps to be inoperable, but allowing the safety injection accumulator to remain operable.

Following the freeze seal work, operators aligned the test header to reduce pressure in the Train A RHR header approximately every 30 minutes. When the freeze seals were melted, no valve was shut first to provide a barrier against draining the 2C accumulator. Operators were slow to recognize that the venting lineup also established a flow path from the Train C accumulator to the RWST. The system was vented five times over a 2-hour period, draining approximately 200 gallons from the 2C accumulator. Operators took an additional 2 hours to clear tags and refill the accumulator and return it to operable status. Operators restored the accumulator to operable status within the time allowed by Technical Specifications.

Issues

The inspectors concluded that work documents and prejob briefings concentrated on actions necessary to establish conditions to form the freeze seals, but did not address the configuration during subsequent activities, particularly when melting the freeze seals. Once the freeze seal was formed, operators could have shut Valve SI-FV-3966, which was only required to be open during the freeze seal formation, to prevent over pressurizing the pipe as the ice expanded. However, this was not communicated to the operators. After the new manual valve was installed, it could have been shut at any time, since it was never tagged. An opportunity was missed when modification personnel asked control room operators in what position the new valve should be left, and they responded that it should be left open, since no guidance was available. At least one of these valves should have been shut before melting the freeze seal to re-establish isolation of the line before removing the boundary established by the freeze seal.

The inspectors noted that the tagout clearly stated that the freeze seal was the isolation boundary. However, no administrative control was applied, similar to those of the safety tagging process, to ensure that the boundary was not released until conditions were appropriate. Workers contacted control room operators, rather than the work start authority, for permission to release the freeze seal. As a result, operators did not verify that the system alignment was correct to support releasing the freeze seal boundary before permitting it to be melted. The inspectors concluded that neither the work order (WAN 205490) nor the safety tagging instruction (0PGP03-ZO-ECO1) contained adequate administrative controls for reliably using freeze seals as a work boundary. This is a violation of Technical Specification 6.8.1, for a Regulatory Guide 1.33 referenced procedure. Regulatory Guide 1.33 references that the licensee has administrative procedures for equipment control (e.g., locking and tagging). This violation is being treated as a noncited violation consistent with Section VI.A.1 of the NRC Enforcement Policy and is in the licensee's corrective action program as Condition Report 01-8224 (Noncited Violation (NCV) 498/200102-01).

Contributing to the loss of configuration control were the preparations for a reactor startup, which included two crew turnovers in the control room after the freeze seals were established; a temporary crew relieved the watch at the start of the evening shift while the normal crew received startup training, and were in turn relieved shortly after the 2C accumulator was declared inoperable. The turnover of system alignment information was not sufficiently detailed to either avoid or promptly correct this problem.

This issue was considered a cross-cutting issue for both human performance and problem identification and resolution. Human performance problems in the form of inadequate communications about and review of isolation boundaries, and limited understanding of the impact of the multiple operations of the same system, were the cause of draining water from the safety injection accumulator. Operators were slow to respond to indications of lowering accumulator level and identify the cause. Further, this issue was under-classified by the licensee for significance, such that no probable cause determination or corrective actions beyond restoring operability were initiated until the inspectors brought the significance of the event to licensee management's attention. As a result, this was also considered to have a cause linked to the licensee's problem identification and resolution process.

This finding had actual safety significance because required accident mitigation equipment was unintentionally rendered inoperable per Technical Specifications. The licensee performed an evaluation that concluded that the safety function was not lost because the total quantity of borated water in the three safety injection accumulators was sufficient to fulfill the function. However, if the issue was left uncorrected, it would have led to a more significant concern because the function would be jeopardized.

1R15 Operability Evaluations (71111.15)

a. <u>Inspection Scope</u>

The inspectors used Inspection Procedure 71111, Attachment 15, to review selected operability evaluations conducted by the licensee during the report period involving risk-significant systems or components. The inspectors evaluated the technical adequacy of the licensee's operability determination, verified that appropriate compensatory measures were implemented, and verified that the licensee considered all other pre-existing conditions, as applicable. Additionally, the inspectors evaluated the adequacy of the licensee's problem identification and resolution program as it applied to operability evaluations. Specific operability evaluations reviewed are listed below.

- (Unit 2) Overtorquing of Channel I and III battery terminals
- (Unit 1) Standby diesel generator overspeed fuel shutoff valve air leak (CR 01-6292)
- (Unit 2) Loss of status monitoring with Emergency Response Facility Data Acquisition and Display System computer system (CR 01-7543)

- (Unit 1 and 2) Loss of Integrated Computer System data highway effect on control room annunciators (CR 01-10359)
- (Unit 1) Solid state protection system card failures (CR 01-5714-5)
- (Unit 1) Boron buildup in emergency core cooling sumps (CR 01-2900)
- (Unit 1) Steam Generator Power Operated Relief Valve 12 oil replaced with out of specification oil (CR 01-9172)

b. Findings

No findings of significance were identified.

1R16 Operator Workarounds (71111.16)

a <u>Inspection Scope</u>

The inspectors reviewed licensee identified operator workarounds, and other existing equipment conditions with potential to be workarounds, for the overall impact on human performance during event response. The inspectors specifically focused on identifying equipment conditions that would affect the functionality of mitigating systems.

The inspectors reviewed the impact to plant operations and event response of existing leakage in all three trains of the safety injection system and residual heat removal system in Unit 2. Valve seat leakage caused pressure to increase excessively in the low pressure residual heat removal header and level decreases in safety injection accumulators, requiring frequent actions required to maintain system parameters.

b. <u>Findings</u>

No findings of significance were identified.

1R19 Postmaintenance Testing (71111.19)

a. <u>Inspection Scope</u>

The inspectors witnessed or reviewed the results of postmaintenance testing for the following maintenance activities:

- (Unit 1) Implementation of DCP 98-3864-13 removal of torque switch wiring on SI-MOV-0018C (WAN 192146)
- (Unit 2) Implementation of DCP 95-4416-21 switch from ERFDADS to ICS for status monitoring (WAN 172965)
- (Unit 1) Essential Chiller 12C maintenance (WAN 203246)

- (Unit 1) Protection Set 2 power supply replaced (WAN 205591)
- (Unit 1) Steam generator power operated relief valve 1C preventive maintenance (WAN 139608)
- (Unit 2) Auxiliary feedwater pump 11 lube and inspect (WAN 174361)

In each case, the associated work orders and test procedures were reviewed to determine the scope of the maintenance activity and determine if the test adequately tested components affected by the maintenance. The Updated Final Safety Analysis Report, Technical Specifications, and Design-Basis Documents, were also reviewed to determine the adequacy of the acceptance criteria listed in the test procedures.

The inspectors reviewed Plant Maintenance Procedure 0PMP04-SG-0007, Revision 10, "Steam Generator PORV Hydraulic Actuator Maintenance." Hydraulic oil sample results were reviewed from the period of April 27 through May 2, 2001, and the oil issue and sample process was discussed with personnel from mechanical maintenance, chemistry, and tool issue.

b. Findings

Inspectors identified that maintenance personnel replaced hydraulic fluid in Steam Generator Power Operated Relief Valve (SG PORV) 1C with new fluid that had excessive water content. The out-of-specification condition of the oil was not identified because mechanics did not have chemistry personnel sample the oil, as specified in the maintenance procedure. A Green NCV was identified for failure to follow procedure.

While reviewing the adequacy of postmaintenance testing for Preventive Maintenance Item MM-1-MS-9100086, inspectors identified that maintenance personnel failed to have chemistry personnel sample new hydraulic fluid. This was required by Step 5.16.1 of Maintenance Instruction 0PMP01-SG-0007, before placing it in SG PORV 1C. The inspectors noted mechanics relied on sample sheets, attached to the new oil tank, that were more than a month old. The inspectors noted that the sample sheets reflected the results of a partial analysis conducted on April 27, 2001, which did not include an analysis of water content.

Per normal sampling schedule, chemistry personnel sampled the new oil tank from which the oil in question had been drawn earlier the same day. The sample results indicated the oil was out of specification on water content. The licensee stated that small quantities of water built up in the oil over time from humidity in the air. Condition Report 01-9172 was written documenting the sample results, but the licensee had no process for identifying what equipment might have received out-of-specification oil. When the inspectors questioned why the mechanics had marked the step requiring the sample "not applicable," the licensee investigated and realized that SG PORV 1C had received some of this oil.

The safety significance of this issue was determined to be very low (Green) because the oil was determined to be within limits to support operability of the SG PORV. However,

if left uncorrected this issue could become a more significant safety concern, and could credibly affect the reliability of safety equipment supplied with oil from this tank. Failure to follow 0PMP04-SG-0007 was a violation of Technical Specification 6.8.1, for a Regulatory Guide 1.33 referenced procedure. This violation is being treated as a noncited violation consistent with Section VI.A.1 of the NRC Enforcement Policy and is in the licensee's corrective action program as Condition Report 01-9476 (NCV 498/200102-02).

1R22 Surveillance Testing (71111.22)

a. Inspection Scope

The inspectors evaluated the adequacy of periodic testing of the following important nuclear plant equipment. This included aspects such as preconditioning, the impacts of testing during plant operations, the adequacy of acceptance criteria including test frequency and test equipment accuracy, range and calibration, procedure adherence, record keeping, the restoration of standby equipment, and the effectiveness of the licensee's problem identification and correction program. The inspectors observed or reviewed the following tests:

- (Unit 2) 0PEP07-SG-0005, "Steam Generator Water Level Control Test," Revision 0, for all four Unit 2 steam generators
- (Unit 1) 0PMP04-DG-0023, "Standby Diesel Generator Oil Change and Overspeed Test," Revision 6, for Standby Diesel Generator 13
- (Unit 2) 0PSP02-MS-0514, "Main Steam Pressure Analog Channel Operability Test," Revision 6, on Channel 3 on Steam Generator 2A (P-0516)
- (Unit 1) 0PSP03-DG-0002, "Standby Diesel Generator 12, " Revision 17
- (Unit 2) 0PSP02-RA-8033, "Control Room/Electrical Auxiliary Building Ventilation Radiation Monitor Digital Channel Operability Test," Revision 4
- (Unit 1) 0PSP02-CM-4102, "Containment Hydrogen Analyzer Analog Channel Operability Test," Revision 4

b. Findings

No findings of significance were identified.

1R23 Temporary Plant Modifications (71111.23)

a. Inspection Scope

The inspectors reviewed Temporary Modification T1-00-15889-1, "Lift shield leads due to noise or ground on plant computer points," Revision 0, following Inspection

Procedure 71111, Attachment 23, with respect to design-bases documentation, approvals, and tracking. The inspectors reviewed the 10 CFR 50.59 screening and updated procedures and drawings.

The inspectors reviewed the licensee's review, installation, and control of freeze seals used during modifications to the Unit 2 safety injection test header on May 10-11, 2001. While the licensee did not designate this process as a temporary modification, the control necessary to assure the correct use of this maintenance process was essentially that necessary for the control of other temporary plant modifications. The inspectors reviewed:

- Design Change Package 99-359-28 to install manual valves in the safety injection test header, Train C and associated 50.59 screening
- Work order implementing DCP 99-359-28 (WAN 205489)
- Work order installing freeze seals in support of DCP 99-359-28 (WAN 205490)
- Vendor manual "Nuclear Plant Freeze Plug Procedures (ST401149-00001-C5X)," Revision K
- Maintenance Procedure 0PMP04-ZG-0113, "Liquid Nitrogen Freeze Seal," Revision 5.

b. Findings

Findings associated with this review are documented in Section 1R14 above. No other findings of significance were identified.

Cornerstone: Emergency Preparedness [EP]

1EP1 Drill Evaluation (71114.06)

a. Inspection Scope

On April 25, 2001, the inspectors observed licensed operator simulator training for the timing of event classification and notification, as well as protective action recommendation development.

b. <u>Findings</u>

No findings of significance were identified.

1EP2 Alert Notification System Testing (71114.02)

a. <u>Inspection Scope</u>

The inspector reviewed the following documentation related to the offsite siren and tone alert radio systems to determine the adequacy of licensee methods for testing the alert and notification system in accordance with 10 CFR 50 Appendix E. The licensee's siren testing program was also compared with NUREG-0654, and Federal Emergency Management Agency REP-10:

- 0PGP05-ZV-0007, "Prompt Notification System," Revision 4
- STP Electric Generating Station Prompt Notification System Design Evaluation, Report WR 85-16
- Final Report, STP Site Specific Offsite Radiological Emergency Preparedness Prompt Alert and Notification System Quality Assurance Review, April 1, 1998
- Addendum, Prompt Notification System for the STP Electric Generating Station, FEMA REP 10, April 1997
- Operations Manual, ECO#326, Revision C, Compulert Central Station Controller Model #860, American Signal Corporation
- Installation, Operation, Maintenance and Parts Manual, Penetrator 10 and 15 Rotating Directional Siren, Alerting Communicators of America
- Installation, Operation, Maintenance and Parts Manual, Rotating Directional Siren Model RM127AC, American Signal Corporation

b. Findings

No findings of significance were identified.

1EP3 Emergency Response Organization Augmentation Testing (71114.03)

a. <u>Inspection Scope</u>

The inspector reviewed the following documents related to the emergency response organization augmentation system to determine the licensee's ability to staff emergency response facilities in accordance with the licensee emergency plan and the requirements of 10 CFR 50 Appendix E:

- 0ERP01-ZV-IN03, "Emergency Response Organization Notification," Revision 8
- 0PGP05-ZV-0003, "Emergency Response Organization," Revision 5
- Design documentation for the emergency response augmentation system
- Table of ERO Teams by Position, May 23, 2001
- Results from augmentation drills conducted during calendar year 2000

b. Findings

No findings of significance were identified.

1EP5 Correction of Emergency Preparedness Weaknesses and Deficiencies (71114.05)

a. <u>Inspection Scope</u>

The inspector reviewed the following documents related to the licensee's corrective action program to determine the licensee's ability to identify and correct problems in accordance with 10 CFR 50.47(b)(14) and 10 CFR 50 Appendix E.

- 0PGP03-ZX-0002, "Condition Reporting Process," Revision 21
- 0PQP01-ZA-0001, "Plant Audits," Revision 2
- Summaries of 116 corrective actions assigned to the emergency preparedness department during calendar years 1999 and 2000
- Details of 15 selected Condition Reports
- Quality Audit 00-01, February 23, 2000, and associated audit plan
- Quality Audit 01-02, February 26, 2001, and associated audit plan
- Three drill and exercise evaluation reports for calendar year 2000
- EP Self Assessments: Training Program, March 4, 2000; Radiological Assessment Process, May 2, 2000; Emergency Response Organization and Administration, April 17, 2000; and Public Information, November 21, 2000

b. Findings

No findings of significance were identified.

4OA1 Performance Indicator Verification (71151)

.1 Drill and Exercise Performance

a. Inspection Scope

The inspector reviewed the following documents related to the drill and exercise performance indicator in order to verify the licensee's reported data:

- Drill schedules for calendar years 1999 and 2000
- 0PGP05-ZN-0007, "Preparation and Submittal of NRC Performance Indicators"
- 0PGP05-ZV-0013, "Performance Indicator Tracking Guide," Revision 0

- Drill evaluation worksheets
- Drill evaluation records
- Performance indicator summary sheets
- Performance indicator reports

b. Findings

No findings of significance were identified.

.2 <u>Emergency Response Organization Drill Participation</u>

a. Inspection Scope

The inspector reviewed the following records related to emergency response organization participation in order to verify the licensee's reported data:

- Emergency response organization rosters for the third and fourth quarters of calendar year 2000, and the roster for the first quarter of calendar year 2001
- · List of key emergency response organization positions
- Drill participation records for the second quarter of calendar year 1999 through the first quarter of calendar year 2001
- Qualification records for a sample of 10 emergency responders
- Performance indicator summary sheets
- Performance indicator reports

b. Findings

No findings of significance were identified.

.3 Alert and Notification System

a. <u>Inspection Scope</u>

The inspector reviewed siren testing records for the fourth quarter of calendar year 2000 and the first quarter of calendar year 2001 to verify the accuracy of data reported for this performance indicator.

b. Findings

No findings of significance were identified.

4OA2 Identification and Resolution of Problems (71152)

A finding in the area of problem identification and resolution, with cross-cutting aspects, is documented in Section 1R14 above.

4OA3 Event Follow-up (71153)

.1 (Closed) Licensee Event Report 50-499/1998-003: On October 16, 1998, during the Unit 2 sixth refueling outage, the licensee discovered that the hot-leg straight length of the tube at row 2, column 59 (R02C59) in Steam Generator 2B had inadvertently not been inspected by bobbin coil (eddy-current examination) during the previous Unit 2 fifth refueling outage. A comparison of recorded inspection data revealed that an adjacent row tube (R01C59) was inspected a second time in lieu of Tube R02C59 during the fifth refueling outage. The inspection results of the sampled steam generator tubes during the fifth refueling outage resulted in a C-3 condition. For this condition, Technical Specification 4.4.2 required a tube inspection of 100 percent of all inservice tubes. The missed tube inspection in Steam Generator 2B was a violation of Technical Specification Surveillance Requirement 4.4.5.2 when the steam generator operated a full operating cycle in this condition. This discovery led to the initiation of Westinghouse Nonconformance Report NR-THX-98-002.

Westinghouse and the licensee determined that the cause was due to remote manual manipulation of the eddy current examination robot during the examination of 16 tubes, as opposed to the normal examination where the robot is used in an automatic calibrated mode. Both tubes, R01C59 and R02C59, were in the group of 16 that was examined by the manual manipulation of the eddy-current examination probe. It was further determined that this condition was caused by a lack of controls to prevent error when the steam generator tube inspection data acquisition methodology changed from automatic/calibrated to a manual/out-of-calibration mode. There was no requirement to perform independent or dual verification of position, tube-by-tube, when the acquisition was performed using the robot in a manual mode. Further, there was no requirement for tubes to be positively identified by analytical means, such as comparison of previously recorded imperfections in expected locations.

Corrective actions taken by the licensee included revision to the Unit 2 steam generator inspection database. The inspection procedures were identified for revision prior to the next refueling outage to require dual verification of tube-by-tube position when data acquisition is being performed using the robot in the manual/out-of-calibration mode. The procedures were also identified for inclusion, where practical, of positive confirmation of tube identity by analytical means, such as fingerprinting or by the presence of previously recorded imperfections in expected locations when data acquisition is performed using the robot in the manual/out-of-calibration mode.

During Refueling Outage 2RE06, Tube R02C59 was inspected and no defects were identified. Therefore, Unit 2 has operated since initial startup with no defects in Steam Generator 2B, Tube R02C59. There were no adverse safety or radiological consequences from this event. However, it was fortuitous that there were no defects in the tube.

The failure to identify the error in the selection of tubes was found to have a credible affect on safety. This was based on the fact that the error could have resulted in a tube with degradation being missed and experiencing a failure (Group 1, Question 1). The inspectors were not able to answer any of the Group 2 questions in the affirmative, therefore, this issue was evaluated under the Group 3 questions. The inspectors determined that this issue represented a violation of more than minor significance and assigned the issue no color.

Because the risk significance was very low (no actual tube degradation), this issue was categorized as a licensee-identified noncited violation with no color assigned (see Section 4OA7.1).

.2 (Closed) Licensee Event Report 50-499/1999-007: On October 24, 1999, during Refueling Outage 2RE07, Steam Generator 2C eddy-current examination results fell into Category C-3 in accordance with Technical Specification Surveillance Requirement 4.4.5.2. A Category C-3 inspection result in accordance with Technical Specification Surveillance Requirement 4.4.5.2 is reportable pursuant to 10 CFR 50.72(b)(2). Further, in accordance with Technical Specification 4.4.5.5c, a special report is required to be submitted within 30 days and prior to the resumption of plant operation. This licensee event report was used to report this event.

In Steam Generator 2C, there were 62 tubes plugged as a result of the eddy-current examination findings: 50 were identified as defective tubes and were plugged in accordance with technical specification requirements, and 12 were plugged for preventive measures. Since initial operation of Unit 2, Steam Generator 2C has had 249 tubes plugged. This number exceeded the maximum allowed plugging of 5 percent of the total number of tubes (4,864). The licensee performed the necessary analysis to demonstrate the acceptability of increasing the steam generator tube plugging limit from 5 to 10 percent.

The licensee's actions were performed in accordance with the Technical Specification requirements; thus there was no violation or issue associated with the health and safety of the public.

4OA5 Other

.1 (Closed) Unresolved Item 498/499;200012-2: Inspectors identified that the licensee's reporting of performance indicator data for residual heat removal unavailability did not include required elements for the low pressure injection function. The licensee's unique design necessitated accounting for the low pressure safety injection system unavailability for modes 1 through 4, and for the residual heat removal system during modes 4 through 6. The licensee's corrected method of accounting was approved by the Nuclear Energy Institute and the NRC, as documented in Appendix D of Revision 1 to NEI 99-03. The inspectors verified the licensee's new accounting method was used to reevaluate previously reported data, and that all data continued to be categorized as Green. Since the revised data did not change the regulatory response to the affected performance indicator, there was no regulatory or safety significance to this issue. Therefore, no enforcement action will be taken for incorrect reporting, consistent with the NRC's Interim

Enforcement Policy regarding Enforcement Discretion for Inaccurate or Incomplete Performance Indicator Data for Nuclear Power Plants, which was effective at the time the error was identified.

4OA6 Meetings, including Exit Meeting

Exit Meeting Summary

The results of the emergency preparedness inspection were presented to Mr. J. Sheppard, Vice President, Engineering and Technical Services, and other members of licensee management at the conclusion of the inspection on May 24, 2001. The licensee acknowledged the findings presented.

The results of the heat sink performance inspection were presented to Mr. W. Cottle, President and Chief Executive Officer, and other members of licensee management on June 14, 2001. The licensee acknowledged the findings presented.

The results of the resident inspection were presented to Mr. G. Parkey, Plant General Manager, and other members of licensee management on June 26, 2001. The licensee acknowledged the findings presented.

In each case, the inspectors asked the licensee whether any materials discussed during the exit should be considered proprietary. No proprietary information was identified.

4OA7 <u>Licensee-Identified Violations</u> - The following findings of very low significance were identified by the licensee and were violations of NRC requirements which meet the criteria of Section VI of the NRC Enforcement Policy, NUREG-1600 for being dispositioned as noncited violations (NCV).

NCV Tracking Number

Requirement Licensee Failed to Meet

.1 NCV 50-499/0102-03

Technical Specification 4.4.5.2 requires a 100 percent expanded eddy current examination of all inservice steam generator tubes when the defect threshold is exceeded. In February 1997, during Refueling Outage 2RE05, the defect threshold was exceeded and the Technical Specification requirement was invoked. On October 16, 1998, during Refueling Outage 2RE06, it was discovered that Tube R02C59 in Unit 2 Steam Generator 2B was inadvertently not examined as required during the previous refueling outage. Thus, the steam generator was operated in this condition for a full cycle in violation of the Technical Specification. During subsequent examination of Tube R02C59, it was determined that no indications or defects existed. This condition was identified by the licensee and corrective actions were specified in Nonconformance Report NR-THX-98-002, and reported in LER 50-499/1998-003 (see Section 4OA3.1).

.2 NCV 50-499/0102-04

The licensee identified the first isolation valve, from the reactor coolant system in the letdown line, had an inappropriate packing configuration. This manual valve had been changed from a dual packing arrangement with a leakoff line between packing sets to a single packing configuration. However, the single set of packing was above the leakoff line such that the valve had to be backseated to keep reactor coolant from leaking to the reactor coolant drain tank. This issue was an example of inadequate design control, contrary to 10 CFR 50, Appendix B, Criterion III. This violation is being treated as a noncited violation. Reference Condition Report 01-5556.

ATTACHMENT

Supplemental Information

PARTIAL LIST OF PERSONS CONTACTED

Licensee

- J. Cook, Supervisor, NSSS Systems
- W. Cottle, President and chief Executive Officer
- R. Dally-Piggott, Licensing Specialist
- W. Dowdy, Manager, Generation Support
- R. Gangluff, Manager, Chemistry
- S. Head, Manager, Licensing
- W. Jump, Manager, Engineering
- M. McBurnett, Director, Quality and Licensing
- W. Mookhoek, Licensing Engineer
- G. Parkey, Plant General Manager
- G. Powell, Manager, Health Physics
- J. Sheppard, Vice President, Engineering and Technical Services
- D. Stillwell, Senior Risk Analyst
- D. Towler, Manager, Generation Quality
- J. Winters, Maintenance Rule Coordinator
- R. Grantom, Manager, Risk Management
- E. Kee, Consulting Engineer
- K. Bowles, Manager Mechanical/Maintenance
- E. Halpin, Manager, Operations
- M. Berrens, Manager, Work Control
- M. Berg, Manager, Operating Experience Group
- A. Kent, Manager, Testing/Programs
- A. Aldridge. Supervisor, Fire Protection
- D. Wiegand, Fire Protection Engineer
- R. Lovell, Manager, Training
- C. Morgan, Supervisor, Emergency Preparedness
- P. Serra, Manager, Plant Protection

NRC

- K. Kennedy, Senior Reactor Analyst, Region IV
- T. Pruett, Senior Reactor Analyst, Region IV

Opened

50-498/0102-01

NCV

Inadequate procedure to control freeze seals as an equipment tagging barrier (Section 1R14)

50-498/0102-02	NCV	Failure to obtain a required chemistry sample prior to replacing oil in SG PORV 1C (Section 1R19)
50-499/0102-03	NCV	A steam generator tube was not inspected under the 100 percent expanded eddy current examination requirement invoked by Technical Specification 4.4.5.2 (Section 4OA7)
50-499/0102-04	NCV	Inadequate design control for packing in RC-85, contrary to 10 CFR 50, Appendix B, Criterion III (Section 4OA7)
Closed		
50-498/0102-01	NCV	Inadequate procedure to control freeze seals as an equipment tagging barrier (Section 1R14)
50-498/0102-02	NCV	Failure to obtain a required chemistry sample prior to replacing oil in SG PORV 1C (Section 1R19)
50-499/0102-03	NCV	A steam generator tube was not inspected under the 100 percent expanded eddy current examination requirement involked by Technical Specification 4.4.5.2. (Section 4OA7)
50-499/0102-04	NCV	Inadequate design control for packing in RC-85, contrary to 10 CFR 50, Appendix B, Criterion III (Section 4OA7)
50-499/1998-003	LER	Steam Generator 2B, Tube R02C59, had inadvertently not been inspected by bobbin coil (Section 4OA3)
50-499/1999-007	LER	Steam Generator 2C eddy-current examination results fell into Category C-3 in accordance with Technical Specification Surveillance Requirement 4.4.5.2 (Section 4OA3)
50-498;499/200012-02	URI	RHR Unavailability Performance Indicator Reporting (Section 4OA1)

<u>Discussed</u>

None.

LIST OF ACRONYMS USED

CFR	Code of Federal Regulations
EDG	emergency diesel generator
ESF	engineered safety feature
LER	licensee event report
NCV	noncited violation
NEI	Nuclear Energy Institute
RHR	residual heat removal
RWST	refueling water storage tank
SSC	structure, system, or component
URI	unresolved item

DOCUMENTS REVIEWED

The following documents were selected and reviewed by the inspectors to accomplish the objectives and scope of the inspection and to support any findings:

Heat Sink Performance Inspection

PROCEDURES

NUMBER	DESCRIPTION	REVISION
OPCP01-ZA-0038	Plant Chemistry Specifications	20
OPEP07-EW-0001	Performance Test For Essential Cooling Water Heat Exchangers	5
OPOP02-EW-0001	Essential Cooling Water Operation	14
OPSP04-DG-0002	Standby Diesel Generator 5 Year Inspection	4 & 8

CONDITION REPORTS

01-10033	00-13132	99-17888	99-12591
01-10031	00-11416	99-13160	99-8727
01-8419	00-3151	99-13158	97-14662
01-4969			

MISCELLANEOUS DOCUMENTS

NUMBER	DESCRIPTION	REVISION/ DATE
88-CC-003	Engineering Support Request No. 88-CC-003	0 / 04/05/88
5R289MC6096	Component Cooling Water Heat Exchanger Fouling Calculation No. 5R289MC6096	0 / 07/11/88
GL 89-13	Service Water System Problems Affecting Safety-Related Equipment (Generic Letter 89-13)	07/18/89
GL 89-13 Supplement 1	Service Water System Problems Affecting Safety-Related Equipment (Generic Letter 89-13, Supplement 1)	04/04/90
ST-HL-AE-3341	STP Letter (ST-HL-AE-3341) Service Water System Problems Affecting Safety-Related Equipment	01/29/90
ST-AE-HL-92667	NRC GL 89-13 Response Letter (ST-AE-HL-92667)	02/04/91
ST-HL-AE-3720	STP Letter (ST-HL-AE-3720) Correction of Response To NRC Generic Letter 89-13, "Service Water System Problems Affecting Safety-Related Equipment"	03/27/91
ST-HL-AE-3701	STP Letter (ST-HL-AE-3701) Revised Schedule For NRC Generic Letter 89-13, "Service Water System Problems Affecting Safety-Related Equipment"	04/03/91
ST-HL-AE-3761	STP Letter (ST-HL-AE-3761) Supplement Response to NRC Generic Letter 89-13, "Service Water System Problems Affecting Safety-Related Equipment"	05/15/91

NUMBER	DESCRIPTION	REVISION/ DATE
ST-HL-AE-4126	STP Letter (ST-HL-AE-4126) Revised Response To NRC Generic Letter 89-13, "Service Water System Problems Affecting Safety-Related Equipment"	06/23/92
IR 91-06	RIV NRC Inspection Report 50-498/91-06; 50-499/91-06	04/04/91
IR 91-201	NRR NRC Inspection Report 50-498/92-201; 50-499/92-201	08/24/92
IR 97-06	RIV NRC Inspection Report 50-498/97-06; 50-499/97-06	12/08/97
IR 98-03	RIV NRC Inspection Report 50-498/98-03; 50-499/98-03	03/24/98
OPEP07-EW-0001	Unit 1 Test Data for testing completed per Procedure OPEP07-EW-0001, Revision 5, on 03/08/00	03/08/00
OPEP07-EW-0001	Unit 1 Test Data for testing completed per Procedure OPEP07-EW-0001, Revision 5, on 03/24/99	03/24/99
MM-2-CC-87001592	Unit 2 completed Visual Inspection Data for Preventive Maintenance (PM) No. MM-2-CC-87001592, Component Cooling Water 2A Heat Exchanger	10/25/90
MM-2-CC-87001592	Unit 2 completed Visual Inspection Data for PM No. MM-2-CC-87001592, Component Cooling Water 2B Heat Exchanger	01.E / 10/09/90
MM-2-CC-87001592	Unit 2 completed Visual Inspection Data for PM No. MM-2-CC-87001592, Component Cooling Water 2C Heat Exchanger	01.F / 11/13/90

NUMBER	DESCRIPTION	REVISION/ DATE
PT-1-CC-96000359	Unit 1 completed Visual Inspection Data for PM No. PT-1-CC-96000359, Unit 1 Component Cooling Water 1A Heat Exchanger	03/15/00
PT-1-CC-96000359	Unit 1 completed Visual Inspection Data for PM No. PT-1-CC-96000359, Unit 1 Component Cooling Water 1A Heat Exchanger	03/30/99
PM No. 99000497	PM No. 99000497 for Visual Inspection of Diesel Generator No. 13 Intercoolers	N/A
PM No. 99000492	PM No. 99000492 for Visual Inspection of Diesel Generator No. 13 Lube Oil Cooler	N/A
PM No. 99000485	PM No. 99000485 for Visual Inspection of Diesel Generator No. 13 Jacket Water Cooler	N/A
MM-1-CH-87014467	PM No. MM-1-CH-87014467, for clean/inspect Unit 1 Condenser Tubes Essential Chiller No. 6 (Chiller 12C)	07/27/99
MM-2-EW-94003922	PM No. MM-2-EW-94003922, for clean/inspect of Unit 2 component cooling water pump supplement air handling unit cooling coil	05/07/01
01-008	Quality Surveillance Report 01-008	06/05/01
N/A	System Engineering Recommendations for the May 2001 Standby Diesel Generator 13 Extended Allowed Outage Time (EAOT).	0 / 04/05/01
USQE 96-12589-2	USQE 96-12589-2, Update UFSAR Description On CCW Heat Exchangers Pressure Differences	0 / 01/26/00