



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
1600 EAST LAMAR BLVD
ARLINGTON, TEXAS 76011-4511

November 20, 2012

EA-12-227

ML12325A789

Mr. Dennis Koehl
President and Chief Executive Officer
STP Nuclear Operating Company
P.O. Box 289
Wadsworth, TX 77483

SUBJECT: SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION – NRC
PROBLEM IDENTIFICATION AND RESOLUTION INSPECTION REPORT
05000498/2012007 AND 05000499/2012007 AND NOTICE OF VIOLATION

Dear Mr. Koehl:

On October 4, 2012, the U.S. Nuclear Regulatory Commission (NRC) completed a Problem Identification and Resolution biennial inspection at your South Texas Project Electric Generating Station, Units 1 and 2, facility. The enclosed inspection report documents the inspection results, which the inspection team discussed on October 4, 2012, with Mr. G. Powell, Vice President, Generation, Units 1 and 2, and other members of your staff. The lead inspector discussed an update to these results on October 31, 2012, with Mr. M. Murray, Manager Regulatory Affairs.

This inspection was an examination of activities conducted under your license as they relate to problem identification and resolution and to compliance with the Commission's rules and regulations and the conditions of your license. Within these areas, the inspection involved examination of selected procedures and representative records, observations of activities, and interviews with personnel.

Based on the inspection sample, the inspection team concluded that the implementation of the corrective action program and the overall performance related to identifying, evaluating, and resolving problems at South Texas Project was effective. Your staff generally identified problems and entered them into the corrective action program at a low threshold, though the team noted some exceptions that are described in the attached report. The team noted some weaknesses in your prioritization and evaluation processes, but in most cases your staff effectively prioritized and evaluated commensurate with their safety significance, resulting in the identification of appropriate corrective actions for most problems. Your staff generally implemented these actions in a timely manner, commensurate with the safety significance of the problems. Most corrective actions addressed the causes of identified problems. The station generally reviewed and applied lessons learned from industry operating experience. The station's audits and self-assessments effectively identified problems and appropriate corrective actions, though in some cases these actions were delayed or deferred. Finally, the team determined that your station's management maintains a safety-conscious work environment where employees feel free to raise nuclear safety concerns without fear of retaliation.

The NRC identified one violation during this inspection. The associated performance deficiency, which the NRC evaluated under the risk significance determination process as having very low safety significance (Green), did not meet the criteria to be treated as a non-cited violation. The violation associated with this issue was evaluated in accordance with the NRC Enforcement Policy. The current version of this Policy is available on the NRC website at <http://www.nrc.gov/about-nrc/regulatory/enforcement/enforce-pol.html>. This violation is cited in the enclosed Notice of Violation (Notice) and the circumstances surrounding it are described in detail in the subject inspection report. The violation is being cited in the Notice in accordance with Section 2.3.2 of the Enforcement Policy because after the violation was previously identified as a non-cited violation, you failed to restore compliance within a reasonable time.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. If you have additional information that you believe the NRC should consider, you may provide it in your response to the Notice. The NRC review of your response to the Notice will also determine whether further enforcement action is necessary to ensure compliance with regulatory requirements.

Additionally, a licensee-identified violation that was determined to be of very low safety significance is listed in this report. The NRC is treating this violation as a non-cited violation (NCV), consistent with Section 2.3.2 of the Enforcement Policy.

If you contest either of these violations, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington DC 20555-0001, with copies to the Regional Administrator, Region IV; the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Resident Inspector at South Texas Project.

If you disagree with a cross-cutting aspect assignment in this report, you should provide a response within 30 days of the date of this inspection report, with the basis for your disagreement, to the Regional Administrator, Region IV, and the NRC Resident Inspector at South Texas Project.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response (if any) will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's Agencywide Document Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room). To the extent possible, your response should not include any personal privacy or proprietary information so that it can be made available to the Public without redaction.

Sincerely,

/RA/

Ray L. Kellar, P.E., Chief
Technical Support Branch
Division of Reactor Safety

Docket No.: 50-498, 50-499
License No.: NPF-76, NPF-80

Enclosures:

1. Notice of Violation
2. Inspection Report 05000498/2012007 and
05000499/2012007
w/ Attachments

Electronic Distribution to South Texas Project

Electronic distribution by RIV:

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ADAMS ML 12325A789

SUNSI Rev Compl.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	ADAMS	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Reviewer Initials	EAR	
Publicly Avail.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Sensitive	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Sens. Type Initials		
DRP/PBA	DRS/EB2	DRP/PBA	C:DRS/TSB	C:DRP/PBA	ORA/ACES	RIV/DRS/TSB
MOHayes	SRachen	BKTharakan	RLKellar	WCWalker	RSBrowder	EARuesch
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NOTICE OF VIOLATION

STP Nuclear Operating Company
South Texas Project Nuclear Generating Station, Units 1 and 2

Docket No: 50-498, 50-499
License No: NPF-76, NPF-80
EA-12-227

During an NRC inspection conducted from September 17 through October 4, 2012, a violation of NRC requirements was identified. In accordance with the NRC Enforcement Policy, the violation is listed below:

License Condition 2.E requires, in part, that the licensee implement and maintain in effect all provisions of the approved fire protection program as described in the Final Safety Analysis Report through Amendment 55 and the Fire Hazards Analysis Report through Amendment 7 and as approved in the Safety Evaluation Report (NUREG-0781) dated April 1986 and its supplements. Section 9.5.1 of the Final Safety Analysis Report states the Operations Quality Assurance Plan ensures that regulatory requirements and commitments concerning fire protection are satisfied during plant operations. The Operations Quality Assurance Plan further states that procedures shall provide administrative controls that include taking actions to assure timely corrective action on conditions adverse to quality.

Contrary to the above, from May 18, 2006 to October 4, 2012, the licensee failed to implement and maintain in effect all provisions of the approved fire protection program. The licensee failed to implement timely corrective actions to correct conditions adverse to the fire protection provisions of its Operations Quality Assurance Plan in order to ensure that regulatory requirements and commitments concerning fire protection were satisfied during plant operations. Specifically, the licensee did not meet the license basis requirement to be able to shut down the plant by taking a single operator action in the control room and it failed to assure timely corrective action was taken following identification of this condition on May 18, 2006. The licensee entered this deficiency into its corrective action program as CR 12-27648.

This violation is associated with a Green Significance Determination Process finding.

Pursuant to the provisions of 10 CFR 2.201, STP Nuclear Operating Company is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001 with a copy to the Regional Administrator, Region IV, and a copy to the NRC Resident Inspector at South Texas Project Electric Generating Station, Units 1 and 2, within 30 days of the date of the letter transmitting this Notice of Violation (Notice). This reply should be clearly marked as a "Reply to Notice of Violation EA-12-227," and should include: (1) the reason for the violation, or, if contested, the basis for disputing the violation or severity level, (2) the corrective steps that have been taken and the results achieved, (3) the corrective steps that will be taken to avoid further violations, and (4) the date when full compliance will be achieved. Your response may reference or include previous docketed correspondence, if the correspondence adequately addresses the required response. If an adequate reply is not received within the time specified in this Notice, an order or a Demand for Information may be issued as to why the license should not be modified, suspended, or revoked, or why such other action as may be proper should not be taken. Where good cause is shown, consideration will be given to extending the response

time. If you contest this enforcement action, you should also provide a copy of your response, with the basis for your denial, to the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001.

Because your response will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS), accessible from the NRC website at www.nrc.gov/reading-rm/pdr.html or www.nrc.gov/reading-rm/adams.html, to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the public without redaction. If personal privacy or proprietary information is necessary to provide an acceptable response, then please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request withholding of such material, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the basis for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.390(b) to support a request for withholding confidential commercial or financial information).

Dated this 20th day of November, 2012.

**U.S. NUCLEAR REGULATORY COMMISSION
REGION IV**

Docket: 50-498, 50-499

License: NPF-76, NPF-80

Report: 05000498/2012007 and 05000499/2012007

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: September 17 through October 4, 2012

Team Leader: E. Ruesch, Senior Reactor Inspector

Inspectors: S. Achen, Reactor Inspector
M. Hayes, Resident Inspector
B. Tharakan, Resident Inspector

Approved By: R.L. Kellar, P.E., Chief
Technical Support Branch
Division of Reactor Safety

SUMMARY OF FINDINGS

IR 05000498/2012008 and 05000499/2012008; September 17, 2012 – October 4, 2012; South Texas Project Electric Generating Station, Units 1 and 2, Biennial Baseline Inspection of the Identification and Resolution of Problems

The team inspection was performed by one senior reactor inspector, one reactor inspector, and two resident inspectors. One violation of Green significance was identified during this inspection. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using Inspection Manual Chapter 0609, "Significance Determination Process". Findings for which the significance determination process does not apply may be Green or be assigned a severity level after NRC management review. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG 1649, "Reactor Oversight Process," Revision 4, dated December 2006.

Identification and Resolution of Problems

The team reviewed approximately 210 condition reports, including associated work orders, engineering evaluations, root and apparent cause evaluations, and other supporting documentation. The purpose of this review, focused on documentation of higher-significance issues, was to determine if problems were being properly identified, characterized, and entered into the corrective action program for evaluation and resolution. The team reviewed a sample of system health reports, self-assessments, trending reports and metrics, and various other documents related to the corrective action program. The team concluded that with limited exceptions, the licensee maintained a corrective action program in which issues were generally identified at an appropriately low threshold. Issues entered into the corrective action program were appropriately evaluated and timely addressed, commensurate with their safety significance. Corrective actions were generally effective, addressing the causes and extents of condition of problems.

The licensee appropriately evaluated industry operating experience for relevance to the facility and entered applicable items in the corrective action program. The licensee used industry operating experience when performing root cause and apparent cause evaluations. The licensee performed effective quality assurance audits and self-assessments, as demonstrated by its self-identification of some needed improvements in corrective action program performance and of ineffective corrective actions.

The licensee maintained a safety-conscious work environment in which personnel felt free to raise nuclear safety concerns without fear of retaliation. All individuals interviewed by the team were willing to raise these concerns by at least one of the several methods available.

A. NRC-Identified and Self-Revealing Findings

Cornerstone: Mitigating Systems

- Green. The team identified a violation of License Condition 2.E for the failure to correct a noncompliance. Procedure 0POP04-ZO-0001, "Control Room Evacuation," Revision 35, was not consistent with the post-fire safe shutdown analysis in that it failed to ensure the actions met critical time requirements. The licensee failed to implement timely corrective actions to correct this deficiency. Inspection Report 05000498/2011006 and 05000499/2011006 documented a violation involving

the failure to implement and maintain in effect all provisions of the approved fire protection program. During this inspection, the team identified that the licensee had failed to restore compliance with its license condition within a reasonable time.

The licensee's failure to implement timely corrective actions to correct conditions adverse to fire protection as required by its Operations Quality Assurance Plan is a performance deficiency. This performance deficiency was of more than minor safety significance because it was associated with the mitigating systems cornerstone and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events (such as fire) to prevent undesirable consequences. Specifically, the licensee failed to ensure reliability of its post-fire safe shutdown systems by demonstrating that it could achieve safe shutdown following a fire in the control room by using approved actions. The significance of this finding could not be evaluated using Inspection Manual Chapter 0609, Appendix F, "Fire Protection Significance Determination Process," because the performance deficiency involved a control room fire that led to control room evacuation. A senior reactor analyst determined that the upper bound for the overall change in core damage frequency that resulted from this performance deficiency was $2.702E-7/\text{yr}$ and was not significant with respect to large early release frequency. The analyst therefore determined that this performance deficiency was of very low risk significance (Green). The team determined that the performance deficiency had a cross-cutting aspect in the corrective action component of the problem identification and resolution cross-cutting area because the licensee did not thoroughly evaluate the problem such that resolutions addressed the cause. Specifically, the licensee failed to take adequate corrective actions to ensure that operators could perform all necessary manual actions as approved prior to exceeding the regulatory requirements (P.1(c)). (Section 4OA2.5)

B. Licensee-Identified Violations

A violation of very low safety significance that had been identified by the licensee was reviewed by the team during this inspection. Corrective actions taken or planned by the licensee were entered into the licensee's corrective action program. This violation and the associated corrective action tracking numbers are listed in Section 4OA7 of this report.

REPORT DETAILS

4. OTHER ACTIVITIES (OA)

4OA2 Problem Identification and Resolution (71152)

The team based the following conclusions on a sample of corrective action documents that were open during the assessment period, which ranged from September 16, 2010, to the end of the on-site portion of this inspection on October 4, 2012.

.1 **Assessment of the Corrective Action Program Effectiveness**

a. Inspection Scope

The team reviewed approximately 210 condition reports (CRs), including associated root cause, apparent cause, and direct cause evaluations, from approximately 28,000 that had been initiated between September 16, 2010, and October 5, 2012. This review, which focused on higher-tier CRs, was to determine if problems were being properly identified, characterized, and entered into the corrective action program for evaluation and resolution. The team reviewed a sample of system health reports, operability determinations, self-assessments, trending reports and metrics, and various other documents related to the corrective action program. The team evaluated the licensee's efforts in establishing the scope of problems by reviewing selected logs, work orders, self-assessment results, audits, system health reports, action plans, and results from surveillance tests and preventive maintenance tasks. The team reviewed daily CRs, and attended the licensee's weekly Condition Review Group meetings to assess the reporting threshold, prioritization efforts, and significance determination process, and to observe the interfaces with the operability assessment and work control processes when applicable. The team's review included verification that the licensee considered the full extent of cause and extent of condition for problems, as well as a review of how the licensee assessed generic implications and previous occurrences. The team assessed the timeliness and effectiveness of corrective actions, completed or planned, and looked for additional examples of similar problems. The team conducted interviews with plant personnel to identify other processes that may exist where problems may be identified and addressed outside the corrective action program.

The team reviewed corrective action documents that addressed past NRC-identified violations to ensure that corrective actions addressed the issues described in the inspection reports. The team reviewed a sample of corrective actions closed to other corrective action documents to ensure that corrective actions remained appropriate and timely.

The team considered risk insights from both the NRC's and South Texas Project's risk assessments to focus the sample selection and plant tours on risk-significant systems and components. The team focused its sample on emergency core cooling systems, emergency diesel generators, and the Class-1E 4160V electrical distribution system, which the team selected for a five-year in-depth review. The samples reviewed by the team focused on but were not limited to these systems. The team conducted walk-downs of these systems to assess whether the licensee identified problems and entered them into the corrective action program.

b. Assessments

1. Effectiveness of Problem Identification

The team concluded that in most cases, the licensee identified issues and adverse conditions in accordance with its corrective action program procedures and with NRC requirements. The team determined that the licensee generally identified these problems at a low threshold and entered them into the corrective action program. However, the team found several examples of deficiencies and received several comments during interviews that indicated a reluctance of some plant personnel to use the corrective action program to evaluate and resolve problems that they perceived as minor.

During the 25-month inspection period, licensee staff generated approximately 28,000 condition reports. The licensee's CR generation rate of approximately 15,000 per year had been relatively constant over the previous four years. The team identified that most conditions that required generation of a CR by OPGP03-ZX-0002, "Condition Reporting Process," and CAP-0001, "CR Classification Guide," were being appropriately entered into the corrective action program. However, the team noted several exceptions:

- During the focus groups interviews conducted by the team to evaluate the licensee's safety conscious work environment (SCWE), several personnel stated that they did not write CRs for potential personnel-safety issues. This observation is further discussed in section 4OA2.4.b of this report.
- To identify adverse trends in lower-level conditions, the licensee relied on CRs that were automatically generated by the condition reporting system when the number of CRs containing the same trend codes passed a preset threshold. However, the team identified several instances of CRs identifying similar conditions but tagged with different trend codes. The team determined that this could lead to evolving trends of low-level events not being timely identified.
- Ten of the twelve QA audits reviewed by the team identified misclassification of CRs. However, CR misclassification was not identified by the licensee as a condition requiring evaluation until the licensee's CAP assessment, which was conducted in preparation for this inspection. This is further discussed in sections 4OA2.3 and 4OA7 of this report.
- The team identified transient combustible material in the Unit 1 and Unit 2 component cooling water heat exchanger rooms that exceeded the limits specified in OPGP03-ZF-0019, "Control of Transient Fire Loads and Use of Combustibles and Flammable Liquids and Gases," Revision 9, and was not being controlled by a transient combustible permit. Further, the team identified that rubber hoses, which were permanently stored in the component cooling water heat exchanger rooms, had not been approved for permanent storage in Addendum 4 of OPGP03-ZF-0019. The additional combustible material adversely impacted the fire loading calculation for the CCW heat exchanger room. However, because the impact on the available margin was minimal, this

failure to comply with fire loading procedures is a minor performance deficiency that is not subject to enforcement action in accordance with the NRC's Enforcement Policy. The licensee documented this deficiency in CRs 12-27640 and 12-27641.

- On August 14, 2011, extended range nuclear instrument 46A (NI-46A) drifted low, indicating 34 percent power while Unit 1 was actually at 100 percent power. The licensee documented the failure in CR 11-13155, declared NI-46A inoperable, and performed troubleshooting and repairs. During the repair activity the AT1 isolator card failed. The licensee replaced the failed card, but did not initiate a new condition report as required by OPGP03-ZX-0002, "Condition Reporting Process," Revision 43. The team determined that the failure to initiate a condition report as required by procedure was a minor performance deficiency that was not subject to enforcement action in accordance with NRC's Enforcement Policy. The licensee wrote Condition Report 12-27667 to address this minor violation.
- The team noted that CAP-0001, "CR Classification Guideline," Revision 4, directed that personnel initiate a new condition report to document an improperly classified CR. Licensee personnel explained to the team that this requirement only applied after the initial CR screening was complete; prior to the initial CR classification being finalized, the classification could be changed with no CR initiated to document the change. However, the licensee had no clear guidance describing at what point the CR screening process was complete and the initial CR classification was finalized.

The team concluded that despite these exceptions, the licensee maintained a low threshold for the formal identification of problems and entry into the corrective action program for evaluation. With the exception of some industrial safety issues noted above and in section 4OA2.4 of this report, the team noted that most problems were adequately addressed through the licensee's corrective action program.

2. Assessment - Effectiveness of Prioritization and Evaluation of Issues

The team concluded that once the licensee entered issues into its corrective action program, most issues were appropriately evaluated and prioritized. The licensee screened approximately one third of the 28,000 CRs generated during the inspection period as conditions adverse to quality (CAQs) or significant conditions adverse to quality (SCAQs). The balance were evaluated to be conditions not adverse to quality (CNAQs), the lowest-significance tier in the licensee's condition reporting system. Except as discussed below, the team determined that the screening of these conditions was performed in accordance with the licensee's procedures. While the team noted some issues with the timeliness of corrective actions, particularly for the fire protection manual actions issue discussed below, actions were generally completed by their due dates; due date extensions were generally reasonable and were not overused. However, the team noted some weaknesses in the licensee's evaluation of some identified adverse conditions and, as also noted above, in its implementation of its program to identify trends:

- The licensee lacks a uniform process for screening condition reports. Procedurally, individual CAP Supervisors determine the significance of each

identified condition. There is no required review or second check of the screening results. The team determined that this had resulted in inconsistent screening of issues. The licensee documented these observations in CR 12-27600.

- CAP Supervisors must be qualified through a formal training program, but this program has no requirements for continued proficiency. Further, despite multiple revisions to the licensee's CAP and its screening criteria, the licensee had performed no formally documented refresher training for CAP Supervisors since 2008.
- In some cases, CAP Supervisors' CR screening was supplemented with workgroup screening meetings. These screening meetings were not proceduralized—some workgroups held these meetings; some did not. Among the workgroups that held them, the conduct and attendance of the meetings varied. The team noted that in some cases, ad hoc processes used by individual workgroups enhanced the CR screening performed by that workgroup. But because these processes were not covered by procedures and thus varied group-by-group, they did not improve consistency of screening site-wide.
- The licensee's process allows a condition report to be initiated, classified, screened, and then closed by one individual. In one quality assurance audit, the licensee had identified a case where three condition reports had been initiated and screened by the same individual. All had been misclassified. The licensee documented the NRC's observation of this deficiency in CR 12-26700.
- For lower-level conditions adverse to quality (CAQ-Ds), the licensee relies on two methods to identify potential adverse trends. The team identified that the licensee's inconsistent screening process may adversely affect each of these methods. The first method is based on the number of CRs having the same trend code reach a predetermined threshold. When this threshold is crossed, the system automatically generates a CR. The licensee then evaluates the CR to determine if an adverse trend exists. However, the large number of available trend codes available to CAP Supervisors had, in at least one case identified by the team, resulted in multiple similar conditions being assigned different trend codes. The team noted that this could result in the licensee's failure to identify an emerging adverse trend due to a decrease in the number of CRs assigned a particular code. The licensee also identifies trends using qualitative criteria—supervisors or managers identifying that certain conditions had recurred. However, the team noted that adverse trends may be missed by this method as well because different individuals may review CRs identifying similar issues.
- In ten of the twelve quality assurance audits reviewed by the team, the licensee had identified CRs that had been incorrectly classified at a lower significance than required by procedure. These misclassified CRs accounted for approximately 2% of the CRs reviewed by the auditors. The licensee's self-assessment of its problem identification and resolution processes identified that

approximately 2.7% of the CRs initiated over the previous two-year period had been initially classified incorrectly by the CAP Supervisor. This issue is documented in section 4OA7 as a licensee-identified violation of an NRC requirement.

- During the in-depth review of Class 1E electrical systems, the team noted that the licensee generally identified issues important to safety and took corrective actions to address the issues in a timely manner commensurate with safety. Although conditions affecting Class 1E equipment were generally identified and corrected in a timely manner, inspectors noted that the licensee did not timely implement corrective actions for other deficiencies associated with some other systems. One example is further discussed in section 4OA2.5.

Additionally, during another inspection conducted during the inspection period, the NRC documented one finding that was evaluated to have a P.1(c) cross-cutting aspect. This assigned cross-cutting aspect indicated a potential deficiency in the licensee's prioritization and evaluation of problems:

- NCV 2011002-03 documented a self-revealing finding for the licensee's failure to assure that corrective actions were timely implemented. On June 2, 2008, steam generator power operated relief valve 1A failed to stroke fully closed during surveillance testing. The licensee's operability determination concluded that the steam generator power operated relief valves were operable but nonconforming. On August 25, 2010, steam generator power operated relief valve 1D again failed to stroke closed as part of surveillance testing. This new prompt operability determined that the previous operability determination had been flawed. The inspector determined that this finding had a P.1(c) cross-cutting aspect because the licensee had not thoroughly evaluated the problem such that the resolution addressed the cause, and had not properly evaluated the condition for operability.

Overall, the team determined that the licensee had an adequate process for screening and prioritizing issues that had been entered into the corrective action program, though the process was not uniform across the site.

3. Assessment – Effectiveness of Corrective Actions

Overall, the team concluded that the licensee implemented effective corrective actions for problems identified and evaluated in the corrective action program. The team reviewed nine corrective action effectiveness reviews for significant conditions adverse to quality (SCAQs) and determined that the licensee had implemented effective corrective actions for the conditions. However, the team noted several instances where corrective actions had not been effective, had not been complete, or had not been timely reviewed to ensure their effectiveness:

- On November 23, 2010, the licensee inadvertently drained reactor coolant system water to the normal containment sump during refueling operations because a drain valve was left open during the evolution. The licensee documented this condition in CR 10-25309 and performed a root cause evaluation. One of the two root causes the licensee identified was that the drain valve had not been properly aligned by a baseline valve lineup prior to the

evolution. The licensee revised the baseline lineup to ensure the drain valve was listed in the closed position. However, the licensee failed to evaluate the extent of this cause to determine if other similar drain valves were correctly listed as closed in other baseline lineups. After the team discussed this concern with the licensee, the licensee assessed whether the extent of cause should have been evaluated. The licensee determined that, because the drain valve was on a temporary manifold that is only connected to the reactor coolant system during cold shutdown and refueling modes, the extent of cause was not applicable to baseline lineups of permanently installed piping.

- On March 27, 2012, the licensee initiated CR 12-13333, documenting the failure of Unit 1 extended range nuclear instrument 45A to pass its surveillance requirements. The licensee determined that this was a significant condition adverse to quality, performed a root cause evaluation, and identified corrective actions to prevent recurrence as required by OPGP03-ZX-0002B, "Root Cause Investigations," Revision 0. However, the licensee failed to identify compensatory actions pending completion of the corrective actions to prevent recurrence as also required by OPGP03-ZX-0002B. During the week of October 1, 2012, the licensee satisfactorily completed the corrective actions to prevent recurrence by implementing preventative maintenance procedures that tested all of the extended range nuclear instruments; all tested satisfactorily. The team determined the failure to identify compensatory actions as required by procedure was a minor performance deficiency that was not subject to enforcement action in accordance with the NRC's Enforcement Policy. The licensee initiated CR 12-27666 to address this minor violation. This issue is further discussed in section 4OA3 of this report.
- In a corrective action program audit completed on September 6, 2012, the licensee identified that 37 effectiveness reviews for CAPRs were open, that the actions to perform these reviews had been extended an average of five times, and that there were two overdue actions, one of which was overdue by nine months.

With the exception of the fire protection issue discussed in Section 4OA2.5, the team noted that corrective actions to address the sample of NRC non-cited violations and findings since the last problem identification and resolution inspection had been timely and effective. Overall, the team concluded that the licensee generally developed appropriate corrective actions to address identified problems.

The licensee generally implemented these corrective actions in a timely manner, commensurate with their safety significance, and reviewed the effectiveness of the corrective actions appropriately.

.2 Assessment of the Use of Operating Experience

a. Inspection Scope

The team examined the licensee's program for reviewing industry operating experience, including reviewing the governing procedure and self-assessments. The team reviewed a sample of industry operating experience communications to assess whether the licensee had appropriately evaluated the communications for relevance to the facility.

The team also reviewed assigned actions to determine whether they were appropriate. The team reviewed a sample of root and apparent cause evaluations to ensure that the licensee had appropriately included industry operating experience.

b. Assessment

Overall, the team determined that the licensee appropriately evaluated industry operating experience for its relevance to the facility. Of the operating experience items reviewed by the team, the licensee had entered all applicable items into the corrective action program and had evaluated these items in accordance with station procedures.

During the 2010 problem identification and resolution inspection, documented in inspection report 05000498/2010006 and 05000499/2010006 (ML103010543), the NRC identified a programmatic concern with the licensee's prioritization and classification of operating experience reports. In CR 12-25361, the licensee documented changes it had made to its operating experience program since the 2010 inspection. These changes included a recent revision to OPGP03-ZX-0013, "Operating Experience Program," which established an effective methodology for entering and tracking site and industry operating experience into the corrective action program. The licensee incorporated the same timeliness and management review requirements as those described in station procedure OPGP03-ZX-0002, "Condition Reporting Process." The team reviewed these changes and, based on its review, concluded that the licensee had effectively resolved the programmatic concern.

The team further determined that the licensee appropriately evaluated industry operating experience when performing root cause investigations and apparent cause evaluations. The licensee appropriately incorporated both internal and external operating experience into lessons-learned for training and pre-job briefs.

In addition, the team reviewed twelve NRC bulletins and information notices issued during the inspection period and found that in all cases, the licensee wrote a condition report and evaluated the applicability of the bulletin or information notice to their facility. The team found the assessments were clearly documented and were appropriate for the circumstances.

.3 Assessment of Self-Assessments and Audits

a. Inspection Scope

The team reviewed a sample of licensee self-assessments and audits to assess whether the licensee was regularly identifying performance trends and effectively addressing them. The team also reviewed audit reports to assess the effectiveness of assessments in specific areas. The specific self-assessment documents and audits reviewed are listed in Attachment 1.

b. Assessment

The team concluded that the licensee generally had an effective self-assessment process. Attention was given to assigning team members with the proper skills and experience to perform effective self-assessments and Audits and to include people from outside organizations. Audits were self-critical, thorough, and identified new

performance deficiencies in addition to evaluating known performance deficiencies across key functional areas. The licensee generated CRs to document deficiencies and improvement opportunities identified through audits. However, the team identified that the corrective actions for findings from the audits and self-assessments were not always successful. The team identified two weaknesses associated with trending of findings from the audit process:

- During reviews of audit reports, the team identified inconsistencies in the tracking and trending of misclassified condition reports. In a majority of the audits reviewed by inspectors, the licensee had identified examples of misclassified condition reports over different functional areas. However, the licensee had not identified the misclassification of condition reports as a trend. The licensee documented this concern as CR 12-27789. This is further discussed in section 4OA2.1.b.1 and 4OA7 of this report.
- Similar to an observation discussed in section 4OA2.1.b.1, the team noted that the licensee had no threshold defining what constituted a trend when Quality Assurance identified similar findings in multiple audits of different functional areas.

Overall, the team determined that the licensee had generally developed appropriate corrective actions to address findings from audits and self-assessments, though these were not always effectively implemented. Except for the trending of misclassified condition reports, the licensee generally identified adverse performance trends through self-assessments and audits; the licensee effectively addressed these trends.

The team noted that over the past several years, the licensee had performed and documented multiple audits and formal and informal self-assessments that identified programmatic problems with its corrective action program. However, the deficiencies identified in these reports had not been effectively corrected. The team concluded that the corrective actions identified in the most recent self-assessments, including the licensee's "Organizational Effectiveness Improvement Plan of the Plan," dated July 23, 2012, and its "Corrective Action Program (CAP) Improvement Review Team Report," dated July 24, 2012, had identified corrective actions that, if fully implemented, would likely remedy these programmatic issues.

.4 Assessment of Safety-Conscious Work Environment

a. Inspection Scope

The team interviewed forty-five individuals in six focus groups. The purpose of these interviews was (1) to evaluate the willingness of licensee staff to raise nuclear safety issues, either by initiating a condition report or by another method, (2) to evaluate the perceived effectiveness of the corrective action program at resolving identified problems, and (3) to evaluate the licensee's safety-conscious work environment (SCWE). The focus group participants were from the Operations, Maintenance, Engineering, Health Physics, and Work Control groups. The individuals were selected blindly from these work groups, based partially on availability. To supplement these focus group

discussions, the team interviewed the Employee Concerns Program (ECP) manager to assess his perception of the site employees' willingness to raise nuclear safety concerns. The team also reviewed selected ECP documents to assess the licensee's SCWE.

b. Assessment

1. Willingness to Raise Nuclear Safety Issues

The individuals interviewed indicated they had no hesitancy in raising nuclear safety issues. Most feel that their management is receptive to nuclear safety concerns, and is willing to address them. Most of the interviewees also stated that if they were not satisfied with the response from their immediate supervisor, they would feel free to escalate the concern. In most cases, interviewees had raised issues and concerns to their supervisors and then followed the supervisor's recommendation, which often involved entering the issue into the corrective action program. Most expressed positive experiences after raising issues to their supervisors or documenting issues in condition reports, though some expressed concerns with supervisors' ability to modify, without consulting the condition report initiator, issues that had been documented in the corrective action program.

Approximately 15 percent of the focus group participants felt that supervisors were not receptive to some concerns involving personnel safety. These personnel generally believed that while their supervision and management would address nuclear safety concerns regardless of impact on production, potential problems with personnel safety did not receive the same attention. Several of these personnel stated that they no longer raised personnel safety concerns to their supervisors because they felt that the concerns would not be addressed.

2. Employee Concerns Program

Most interviewees were aware of the Employee Concerns Program. Most explained that they have heard about the program through various means, such as posters, training, presentations, and discussion by supervisors or management at meetings. Most did not have any personal experience with the ECP because, as noted above, they felt free to raise safety concerns to their supervisors; they did not need to use the ECP in these cases. However, everyone interviewed stated that they would use the program if they felt it was necessary. None of the interviewed personnel had heard of any issues dealing with breaches of confidentiality by the ECP staff.

3. Preventing or Mitigating Perceptions of Retaliation

When asked if there have been any instances where individuals experienced retaliation or other negative reaction for raising issues, all individuals interviewed stated that they had neither experienced nor heard of an instance of retaliation, harassment, intimidation or discrimination at the site. The team determined that processes in place to mitigate these issues were being successfully implemented.

.5 Finding

Failure to Timely Correct Conditions Adverse to Fire Protection

Introduction. The team identified a violation of License Condition 2.E for the failure to correct a noncompliance. Procedure 0POP04-ZO-0001, "Control Room Evacuation," Revision 35, was not consistent with the post-fire safe shutdown analysis in that it failed to ensure the actions met critical time requirements. The licensee failed to implement timely corrective actions to correct this deficiency. Inspection Report 05000498/2011006 and 05000499/2011006 (ML11223A193) documented a violation involving the failure to implement and maintain in effect all provisions of the approved fire protection program. During this inspection, the team identified that the licensee had failed to restore compliance with its license condition within a reasonable period of time.

Description. In 2005, the NRC identified that South Texas Project was crediting unapproved manual actions in its safe shutdown analysis for control room fires. Since then, the NRC has issued two non-cited violations associated with this condition. The team reviewed the licensee's actions, completed and planned, to address these violations.

BACKGROUND AND TIMELINE

On July 14, 2005, during a triennial fire protection inspection, NRC inspectors identified an unresolved item (URI) associated with the licensee's potential failure to maintain an adequate written evaluation for a control room fire scenario (URI 05000498/2005006-03 and 05000499/2005006-03). Specifically, the licensee had credited the performance of eight operator manual actions in the control room prior to evacuation; the licensee had not obtained the required NRC approval for these manual actions.

On May 18, 2006, the NRC closed this URI, issuing a non-cited violation of the licensee's fire protection license condition. This violation was associated with the licensee's failure to demonstrate that the additional control room actions met applicable requirements in its approved post-fire safe shutdown analysis (NCV 05000498/2006002-05 and 05000499/2006002-05).

On February 4, 2008, shortly before the 2008 triennial fire protection inspection, the licensee submitted a license amendment request to the NRC requesting approval to credit the eight additional control room actions in the approved fire protection program. On June 19, 2008, the NRC completed the on-site portion of its triennial inspection. Also on June 19, 2008, the licensee withdrew its request.

On June 2, 2011, the licensee submitted a second license amendment request. In this request, submitted shortly before the 2011 triennial fire protection inspection, the licensee requested approval of revised steps in its procedure for combating a fire in the control room. These revised steps included the additional operator actions.

On August 10, 2011, following the 2011 triennial fire protection inspection, the NRC documented another non-cited violation of the licensee's fire protection license condition. This violation was associated with the licensee's failure to implement timely corrective actions to correct the performance deficiency identified in the 2006 non-cited violation (NCV 05000498/2011006-01 and 05000499/2011006-01). The licensee documented this deficiency in its corrective action program as CR 11-10905.

On July 31, 2012, the licensee withdrew its second license amendment request.

REVIEW OF CORRECTIVE ACTIONS

In its review of the licensee's corrective actions associated with the 2006 and 2011 non-cited violations, the team identified that the licensee continued to credit the unapproved manual actions. The licensee had implemented no additional compensatory measures or otherwise restored compliance with its license condition since the NRC issued the 2011 non-cited violation. The team determined that because the licensee still had not implemented timely corrective actions to correct the performance deficiency identified in the 2006 non-cited violation, the violation documented in 2011 continued to exist; the licensee had failed to restore compliance in a timely manner.

The licensee entered this deficiency into its corrective action program as CR 12-27648.

Analysis. The licensee's failure to implement timely corrective actions to correct conditions adverse to fire protection as required by its Operations Quality Assurance Plan was a performance deficiency. This performance deficiency was of more than minor safety significance because it was associated with the mitigating systems cornerstone and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events (such as fire) to prevent undesirable consequences. Specifically, the licensee failed to ensure the reliability of its post-fire safe shutdown systems by demonstrating that it could achieve safe shutdown following a fire in the control room using approved actions.

The significance of this finding could not be evaluated using Inspection Manual Chapter 0609, Appendix F, "Fire Protection Significance Determination Process," because the performance deficiency involved a potential control room fire leading to control room evacuation. Following the NRC's initial identification of this violation in 2011, a senior reactor analyst performed a Phase 3 bounding evaluation. The analyst determined that the upper bound for the overall change in core damage frequency that resulted from this performance deficiency was $2.702 \times 10^{-7}/\text{yr}$ and was not significant with respect to large early release frequency. The analyst therefore determined that this performance deficiency was of very low risk significance (Green). Because the licensee had made no changes to its facility or procedures that affected the assumptions of the analyst's evaluation, the bounding evaluation performed for that 2011 violation, documented as NCV 05000498/2011006-01 and 05000499/2011006-01 (see ML11223A193), remained valid.

The team determined that the performance deficiency had a cross-cutting aspect in the corrective action component of the problem identification and resolution cross-cutting area because the licensee did not thoroughly evaluate the problem such that resolutions addressed the cause. Specifically, the licensee failed to take adequate corrective actions to ensure that operators could perform all necessary manual actions as approved prior to exceeding the regulatory requirements (P.1(c)).

Enforcement. License Condition 2.E requires, in part, that the licensee implement and maintain in effect all provisions of the approved fire protection program as described in the Final Safety Analysis Report through Amendment 55 and the Fire Hazards Analysis Report through Amendment 7 and as approved in the Safety Evaluation Report (NUREG-0781) dated April 1986 and its supplements. Section 9.5.1 of the Final Safety Analysis Report states the Operations Quality Assurance Plan ensures that regulatory requirements and commitments concerning fire protection are satisfied during plant

operations. The Operations Quality Assurance Plan further states that procedures shall provide administrative controls that include taking actions to assure timely corrective action on conditions adverse to quality.

Contrary to the above, from May 18, 2006 to October 4, 2012, the licensee failed to implement and maintain in effect all provisions of the approved fire protection program. The licensee failed to implement timely corrective actions to correct conditions adverse to the fire protection provisions of its Operations Quality Assurance Plan in order to ensure that regulatory requirements and commitments concerning fire protection were satisfied during plant operations. Specifically, the licensee did not meet the license basis requirement to be able to shut down the plant by taking a single operator action in the control room and it failed to assure timely corrective action was taken following identification of this condition on May 18, 2006. The licensee entered this deficiency into its corrective action program as CR 12-27648.

Because the licensee failed to restore compliance within a reasonable period of time after this violation was initially identified, this violation is being treated as a cited violation, consistent with the NRC Enforcement Policy, Section 2.3.2. This is a violation of License Condition 2.E. A Notice of Violation is included with this report: VIO 05000498/2012007-01 and 05000499/2012007-01, "Failure to Timely Correct Conditions Adverse to Fire Protection."

40A3 Event Follow-up (71153)

(Closed) Licensee Event Report 05000498/2012-001, Revisions 0 and 1, "Nuclear Instrumentation Channel NI-45A Failed Channel Check"

The licensee submitted this event report in accordance with 10 CFR 50.73(a)(2)(i)(B) after identifying a condition prohibited by the plant's technical specifications. On March 27, 2012, Nuclear Instrument Channel 45A (NI-45A) was declared inoperable after failing to meet channel check acceptance criteria of being within a factor of 10 of Nuclear Instrument Channel 46A output. Upon investigation, the licensee found a degraded condition in the channel's isolation circuit card, AT1. The degraded condition affected the indication of NI-45A lower range; it would have prevented the nuclear instrument from performing its function to measure neutron flux in the reactor during shutdown conditions. The licensee determined that a downward trend in the channel's operation began in December 2011. However, the channel continued to pass the surveillance test requirements and associated channel checks until March 2012. The licensee reviewed the degrading trend data and determined that on February 29, 2012, NI-45A would have failed the channel check acceptance criteria. The channel was therefore inoperable from February 29 to March 30, 2012, when the AT1 circuit card was replaced and the channel was restored. Technical Specification 3.3.3.6 requires that if the inoperable extended range NI-45A channel is not restored to operable status within 7 days, the licensee must shut down the reactor. Since there was firm evidence that the channel had been inoperable for longer than 7 days, the licensee determined this event was reportable. The licensee implemented corrective actions to perform preventative maintenance twice a week to ensure the AT1 circuit card is not degrading.

The team reviewed the licensee event report and the root cause investigation and interviewed licensee personnel involved with the event. The team determined that the licensee took the actions required by the technical specifications upon discovery of the

condition. No findings or violations of NRC requirements were identified for this event. However, the team identified that the licensee failed to comply with station procedures and to implement compensatory actions until the longer term corrective actions to perform preventative maintenance were implemented. This minor violation of station procedures is further described in Section 4OA2.1.b.3 of this report.

This licensee event report is closed.

4OA6 Meetings

Exit Meeting Summary

On October 4, 2012, the team presented the inspection results to Mr. G. Powell, Vice President, Generation, Units 1 and 2, and other members of the licensee staff. The licensee acknowledged the issues presented. The team noted that proprietary information had been included electronically in the response to the initial information request and that this information would be destroyed. The licensee acknowledged that other proprietary information that the team reviewed had been returned.

On October 31, 2012, the lead inspector discussed updated inspection results with Mr. M. Murray, Manager Regulatory Affairs. Mr. Murray acknowledged the update.

4OA7 Licensee-Identified Violation

The following violation of NRC requirements was identified by the licensee. The team determined that the violation was of very low safety significance (Green) and that it met the criteria of the NRC Enforcement Policy for being dispositioned as a non-cited violation:

Criterion V of 10 CFR Part 50, Appendix B, requires that activities affecting quality shall be prescribed by procedures and accomplished in accordance with those procedures. Procedure OPGP03-ZX-002, "Condition Reporting Process," Revision 44, provides criteria for classifying conditions identified in condition reports. While performing quality audits between 2010 and 2012, the licensee identified multiple examples of documented deficiencies associated with procedures or activities affecting quality that had been misclassified as conditions not adverse to quality. These misclassifications were contrary to the requirements of OPGP03-ZX-002; they therefore represented violations of 10 CFR 50, Appendix B, Criterion V. The performance deficiency associated with this violation is of greater than minor safety significance because if left uncorrected, it would have the potential to lead to a more significant safety concern. Using qualitative engineering judgment and regulatory oversight experience in accordance with Inspection Manual Chapter 0609, Appendix M, the team determined the finding to be of very low safety significance (Green). The licensee identified this violation and documented it in its corrective action program as CR 12-27789.

ATTACHMENTS:

1. Supplemental Information
2. Information Request
3. Supplemental Information Request

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee Personnel

R. Aguilera, Manager Health Physics
R. Barr, Specialist Organizational Effectiveness
D. Billings, Specialist Performance Improvement
D. Cobb, Manager Safety & Quality Concerns Program (ECP)
J. Cole, Manager Organizational Effectiveness
F. Cox, Specialist Mechanical/Civil Design Engineering
K. Frazier, Supervisor Systems Engineering
B. Jenewein, Manager Systems Engineering
K. Kieler, Supervisor Quality
R. Lozano, Engineer Electrical & Auxiliaries Systems Engineering
M. Murray, Manager Regulatory Affairs
J. Paul, Supervisor Licensing
L. Peter, Plant General Manager
D. Rohan, Specialist Operations Support
R. Savage, Specialist Licensing
J. Savage, Specialist Quality
M. Schoonover, Specialist Instrumentation/Monitoring Systems Engineering
J. Sepulveda, Supervisor Radiation Protection
L. Sterling, Supervisor Operations Support
D. Swett, General Supervisor Health Physics
K. Taplett, Engineer Licensing
D. Towler, Manager Quality
P. Travis, Supervisor Instrumentation/Monitoring Systems Engineering

NRC personnel

J. Dixon, Senior Resident Inspector
G. Miller, Branch Chief, Engineering Branch 2
G. Repogle, Senior Reactor Analyst

LIST OF ITEMS OPENED, CLOSED AND DISCUSSED

Opened

05000498/2012007-01; 05000499/2012007-01	VIO	Failure to Timely Correct Conditions Adverse to Fire Protection (Section 40A2.5)
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Closed

05000498/2012-001-00; 05000498/2012-001-01	LER	Nuclear Instrumentation Channel NI-45A Failed Channel Check (Section 40A3)
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LIST OF DOCUMENTS REVIEWED

Condition Reports (CRs)

04-11502	09-15264	10-20309	11-12723	11-3194	12-19711	12-24153
04-8222	09-16115	10-20713	11-12769	11-3196	12-20026	12-24303
04-8235	09-17914	10-20859	11-13085	11-3235	12-2111	12-24354
05-8507	09-19940	10-21452	11-13155	11-324	12-21189	12-24453
06-12171	09-20129	10-21696	11-14081	11-3323	12-21228	12-25040
06-14970	09-20251	10-22056	11-15620	11-3667	12-21236	12-25254
06-16998	09-21177	10-22348	11-1612	11-3756	12-21297	12-25361
06-6445	09-2790	10-22911	11-1652	11-4410	12-21347	12-25395
07-1038	09-4716	10-23446	11-16578	11-5023	12-21357	12-25396
07-11533	09-5737	10-23832	11-18361	11-6128	12-21518	12-25596
07-1630	09-771	10-25309	11-19073	11-7740	12-21577	12-25599
07-1765	10-1065	10-25370	11-19501	11-8437	12-21650	12-26062
07-18706	10-11103	10-26118	11-2003	11-8545	12-21808	12-26700
07-953	10-1304	10-27139	11-20456	11-8784	12-21882	12-26787
08-1057	10-14981	10-2923	11-22282	12-1018	12-21908	12-26788
08-13152	10-15692	10-4007	11-22741	12-10814	12-21922	12-26789
08-15384	10-15880	10-7748	11-24330	12-10847	12-21925	12-26810
08-16599	10-16119	10-9893	11-24637	12-10893	12-21943	12-27289
08-3510	10-16338	11-10205	11-24638	12-12326	12-22152	12-27532
08-5464	10-16341	11-10852	11-25924	12-12812	12-2218	12-27600
08-5486	10-17147	11-10905	11-26418	12-13333	12-22357	12-27640
08-7716	10-18143	11-11281	11-26997	12-13870	12-22569	12-27641
08-8530	10-18480	11-11508	11-27377	12-14124	12-22669	12-27648
08-9589	10-18786	11-11588	11-27390	12-17207	12-22701	12-27789
09-10866	10-18940	11-11608	11-27425	12-18114	12-22818	12-5853
09-11441	10-19215	11-12040	11-29141	12-18536	12-23132	12-7416
09-13808	10-19678	11-12081	11-30107	12-18886	12-23340	12-8738
09-13930	10-20052	11-12322	11-30419	12-19055	12-23398	12-8858
09-14706	10-20098	11-12475	11-31051	12-19433	12-23456	12-9001

09-14858 10-20208 11-12582 11-31538 12-19672 12-23701 12-9767

Work Orders

33196374 33165910

Work Authorization Numbers

293163	361376	410365	429198	433483	449539
328190	364878	410731	431164	440037	449540
330270	370745	422883	431321	449536	449541
333037	396339	423051	432076	449537	449542
360752	400212	428402	432086	449538	449543

Procedures

Number	Title	Revision
0PAP01-ZA-0102	Plant Procedures	13
0PGP03-ZA-0098	Station Housekeeping	14
0PGP03-ZE-0133	Boric Acid Corrosion Control Program	4
0PGP03-ZF-0001	Fire Protection Program	25
0PGP03-ZF-0019	Control of Transient Fire Loads and Use of Combustible and Flammable Liquids and Gases	9
0PGP03-ZN-0004	Changes to Licensing Basis Documents and Amendments to the Operating License	20
0PGP03-ZO-0039	Operations Configuration Management	26
0PGP03-ZO-9900	Operability Determinations and Functionality Assessments Program	3
0PGP03-ZR-0044	Contamination Control Program	17
0PGP03-ZR-0051	Radiological Access Controls/Standards	25
0PGP03-ZX-0002	Condition Reporting Process	41
0PGP03-ZX-0002	Condition Reporting Process	42
0PGP03-ZX-0002	Condition Reporting Process	43
0PGP03-ZX-0002	Condition Reporting Process	44
0PGP03-ZX-0002B	Root Cause Investigations	0
0PGP03-ZX-0002B	Root Cause Investigations	1
0PGP03-ZX-0002C	Common Cause Analysis and AFI Investigations	0
0PGP03-ZX-0002D	Apparent Cause Evaluations	0

Number	Title	Revision
0PGP03-ZX-0013	Operating Experience Program	9
0PGP03-ZX-0013	Operating Experience Program	10
0PGP03-ZX-0013	Operating Experience Program	11
0PGP03-ZX-0003	Self Assessment Program	4
0PGP04-ZA-0002	Condition Report Engineering Evaluation	16
0PGP04-ZA-0010	Performing and Verifying Station Activities	33
0PGP04-ZA-0108	Control of Vendor Technical Information	4
0PGP04-ZE-0312	Design Change Implementation	6
0PGP05-ZN-0004	Changes to Licensing Basis Documents and Amendments to the Operating License	20
0PMP05-ZE-0408	Limiter Operator Maintenance Type SMB/SB-2 Actuator	11
0PMP05-ZE-0408	Limiter Operator Maintenance Type SMB/SB-2 Actuator	12
0PMP07-NI-0045	Extended Range Neutron Flux Shutdown Monitor Functional Check	0
0POP01-ZO-0011	Operability, Functionality, and Reportability Guidance	5
0POP01-ZQ-0022	Plant Operations Shift Routines	66
0POP01-ZQ-0032	Plant Operations Department Self-Assessment Program	4
0POP02-AE-0002	Transformer Normal Breaker and Switch Lineup	47
0POP02-RC-0003	Filling and Venting the Reactor Coolant System	36
0POP04-ZO-0001	Control Room Evacuation	35
0POP11-SI-0001	Safety Injection/Containment Spray Pump Online Isolation and Restoration	3
0POP11-SI-0001	Safety Injection/Containment Spray Pump Online Isolation and Restoration	7
0PQP01-ZA-0001	Internal Audits	16
0PRP05-RA-0007	Grab Sample Collection on the (PIG) Continuous Atmospheric Monitors	12
0PRP07-ZR-0010	Radiation Work Permits/Radiological Work ALARA Reviews	24
0PSP11-SI-0001	LLRT: M-22 Emergency Sump 1A/2A	12
ACE-0001	Apparent Cause Evaluator's Manual	4

Number	Title	Revision
ACE-0001	Apparent Cause Evaluator's Manual	5
CAP-0001	CR Classification Guideline	4
CAP-0002	Causal Analysis Guideline	0
CAP-0002	Causal Analysis Guideline	1
Chapter 9	Conduct of Operations for Radiation Protection: Radiation Protection Condition Reporting Guideline	11
ENG-0003	Conduct of Engineering	6
QDG-EXP1	Expectations for Quality Activities	13
RCA-0001	Root Cause Investigator Manual	11
RCA-0001	Root Cause Investigator Manual	12
STI 33597338	Conduct of Operations for Radiation Protection	82
WCG-0001	Work Screening and Processing	24

Other

Number	Title	Revision
	STP Nuclear Operating Company Independent Plant Assessment Report 12-01 "Corrective Action Program Gaps to Excellence"	
	Second Quarter 2012 System Health Reports	
	Pathway to Action: Organizational Effectiveness Improvement Plan of the Plan	0
	Corrective Action Program (CAP) Improvement Review Team Report	July 24, 2012
00000EAAAA	Main One Line Diagram	REV 24
5N129F05013#1	Piping & Instrumentation Diagram Safety Injection System	30
5N129F05014#1	Piping & Instrumentation Diagram Safety Injection System	18
5N129F05015#1	Piping & Instrumentation Diagram Safety Injection System	23
5N129F05016#1	Piping & Instrumentation Diagram Safety Injection System	15
5R169F20000#1	Piping & Instrumentation Diagram Residual Heat Removal System	26
Audit 10-04	Quality Audit	

Number	Title	Revision
Audit 10-05	Plant Operations Quality Audit Report	
Audit 10-06	Systems Engineering Quality Audit Report	
Audit 10-07	Physical Security Quality Audit Report	
Audit 10-08	Nuclear Fuels and Analysis Quality Audit Report	
Audit 11-01	Emergency Preparedness Quality Audit Report	
Audit 11-02	Administrative Controls Quality Audit Report	
Audit 11-03	Chemistry/Environmental Quality Audit Report	
Audit 11-04	Maintenance Quality Audit Report	
Audit 11-04	Maintenance Quality Audit Report	August 8, 2011
Audit 11-05	Fire Protection Quality Audit Report	
Audit 11-06	Supply Chain Quality Audit Report	
Audit 11-07	Physical Security Quality Audit Report	
Audit 11-08	Design Control Quality Audit Report	
Audit 11-09	Accredited Training Quality Audit Report	
Audit 12-01	Emergency Preparedness Quality Audit Report	
Audit 12-02	Radiological Controls Quality Audit Report	
Audit 12-03	Plant Operations Quality Audit Report	
Audit 12-04	Testing/Programs Engineering Quality Audit Report	
Audit 12-05	Access Authorization /Fitness for Duty Quality Audit Report	
Audit 12-08	Systems Engineering Quality Audit Report	
Calc EC00320	Hot Short Calculations for MOVs 642-645 and Valve FCV-0205 in Fire Area 27	0
Calculation 5A011MC6023	Fire Area 27 Area Summary	12
CAP001.01	Condition Reporting Process (OPGP03-ZX-0002) Training for CAP Supervisors	10
IPA 12-01	Independent Plant Assessment Report 12-01 Corrective Action Program Gaps to Excellence	
MN-12-0-91307	Quality Monitoring Report	
MN-12-0-92801	Quality Monitoring Report	
Oversight Report 11-02	Quality Independent Oversight Report	1

Number	Title	Revision
Q54.11	Common Audit Objective (CAO) Master Scope List	1d

**Information Request
July 27, 2012
Biennial Problem Identification and Resolution Inspection
September 17 – October 5, 2012
South Texas Project
Inspection Report 50-498 & 50-499/2012-007**

This inspection will cover the period from September 16, 2010 to October 5, 2012. All requested information should be limited to this period or to the date of this request unless otherwise specified. To the extent possible, the requested information should be provided electronically in Adobe PDF (preferred) or Microsoft Office format. Lists of documents should be provided in Microsoft Excel or a similar sortable format.

Please provide the following no later than August 28, 2012:

1. Document Lists

Note: For these summary lists, please include the document/reference number, the document title, initiation date, current status, and long-text description of the issue.

- a. Summary list of all corrective action documents related to significant conditions adverse to quality that were opened, closed, or evaluated during the period
- b. Summary list of all corrective action documents related to conditions adverse to quality that were opened or closed during the period
- c. Summary lists of all corrective action documents which were upgraded or downgraded in priority/significance during the period (these may be limited to those downgraded from, or upgraded to, apparent-cause level or higher)
- d. Summary list of all corrective action documents that subsume, "roll up," or identify a trend of one or more smaller issues for the period
- e. Summary lists of operator workarounds, engineering review requests and/or operability evaluations, temporary modifications, and control room and safety system deficiencies opened, closed, or evaluated during the period
- f. Summary list of plant safety issues raised or addressed by the Employee Concerns Program (or equivalent)
- g. Summary list of all Apparent Cause Evaluations completed during the period
- h. Summary list of all Root Cause Evaluations planned or in progress but not complete at the end of the period, with planned completion or due date

2. Full Documents with Attachments

- a. Root Cause Evaluations completed during the period
- b. Quality assurance audits performed during the period

- c. All audits/surveillances performed during the period of the Corrective Action Program, of individual corrective actions, and of cause evaluations
- d. Corrective action activity reports, functional area self-assessments, and non-NRC third party assessments completed during the period (do not include INPO assessments)
- e. Corrective action documents generated during the period associated with the following:
 - i. All NRC findings and/or violations issued to South Texas Project
 - ii. All Licensee Event Reports issued by South Texas Project
- f. Corrective action documents generated for the following, if they were determined to be applicable to South Texas Project (for those that were evaluated but determined not to be applicable, provide a summary list):
 - i. NRC Information Notices, Bulletins, and Generic Letters issued or evaluated during the period
 - ii. Part 21 reports issued or evaluated during the period
 - iii. Vendor safety information letters (or equivalent) issued or evaluated during the period
 - iv. Other external events and/or Operating Experience evaluated for applicability during the period
- g. Corrective action documents generated for the following:
 - i. Emergency planning drills and tabletop exercises performed during the period
 - ii. Maintenance preventable functional failures which occurred or were evaluated during the period
 - iii. Adverse trends in equipment, processes, procedures, or programs which were evaluated during the period
 - iv. Action items generated or addressed by plant safety review committees during the period

3. Logs and Reports

- a. Corrective action performance trending/tracking information generated during the period and broken down by functional organization
- b. Corrective action effectiveness review reports generated during the period
- c. Current system health reports or similar information

- d. Radiation protection event logs during the period
 - e. Security event logs and security incidents during the period (sensitive information can be provided by hard copy during first week on site)
 - f. Employee Concern Program (or equivalent) logs (sensitive information can be provided by hard copy during first week on site)
 - g. List of training deficiencies, requests for training improvements, and simulator deficiencies for the period
4. Procedures
- a. Corrective action program procedures, to include initiation and evaluation procedures, operability determination procedures, apparent and root cause evaluation/determination procedures, and any other procedures which implement the corrective action program at South Texas Project
 - b. Quality Assurance program procedures
 - c. Employee Concerns Program (or equivalent) procedures
 - d. Procedures which implement/maintain a Safety Conscious Work Environment
5. Other
- a. List of risk significant components and systems
 - b. Organization charts for plant staff and long-term/permanent contractors

Note: "Corrective action documents" refers to condition reports, notifications, action requests, cause evaluations, and/or other similar documents, as applicable to South Texas Project.

All requested documents should be provided electronically. Regardless of whether they are uploaded to an internet-based file library (e.g., Certrec's IMS), please provide copies on CD or DVD. Four copies of the CD or DVD should be sent to the team lead, to arrive no later than August 28, 2012:

Eric A. Ruesch
U.S. NRC Region IV
1600 East Lamar Blvd.
Arlington, TX 76011-4511

Supplemental Information Request
September 12, 2012
Biennial Problem Identification and Resolution Inspection
September 17 – October 5, 2012
South Texas Project
Inspection Report 50-498 & 50-499/2012-007

This request supplements the original information request. Where possible, the information should be available to the inspection team immediately following the entrance meeting. This inspection will cover the period from September 16, 2010 to October 5, 2012. All requested information should be limited to this period or to the date of this request unless otherwise specified.

Please provide the following:

1. Electronic copies of the FSAR, technical specifications, and technical specification bases
2. For each week the team is on site,
 - Planned work/maintenance schedule for the station
 - Schedule of management or corrective action review meetings (e.g. CRB, MRM, CAR screening meetings, etc.)
 - Agendas for these meetings
3. As part of the inspection, the team will do a five-year in-depth review of issues and corrective actions related to the Class 1E electrical system. The following documents are to support this review (electronic format preferred):
 - Copies of upper and lower tier cause evaluations performed on the Class 1E electrical system within the last 5 years
 - List of all surveillances run on the Class 1E electrical system within the last five years, sortable by component and including acceptance criteria
 - List of all corrective maintenance work orders performed on the Class 1E electrical system within the last 5 years
 - List of maintenance rule functional failure assessments—regardless of the result—performed on the Class 1E electrical system within the last 5 years
 - System training manual(s) for the Class 1E electrical system
 - Provide any engineering forms containing notes from the last two walk-downs of the 480V class 1E electrical system.
4. The team will also review the station's implementation of the fatigue rule. These documents support this review:
 - List of all fatigue assessments performed during the inspection period separated by department
 - List of all work hour rule waivers and violations during the inspection period separated by department
 - Fatigue rule implementing procedures
5. Summary Lists:
 - Summary list of operator burdens not included in item 1.e of the initial information request
 - Summary list of PMs performed on Emergency Diesel Generators

6. Specific documents:

- Conduct of Operations procedure(s), or equivalent
- OPOP01-ZQ-0032 "Plant Operations Department Self Assessments"
- OPQP01-ZA-0001 "Internal Audits"
- OPOP02-AE-0002 "Transformer Normal Breaker and Switch Lineup"
- OPGP03-ZA-0506, Tests or Evolutions Requiring Additional Controls
- OPGP03-ZX-0013, Operating Experience Program
- Full CRs with attachments: 09-19940, 11-11508
- Work Orders: 496488, 496488