



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**

REGION IV  
1600 E. LAMAR BLVD.  
ARLINGTON, TX 76011-4511

June 29, 2017

EA-16-216

Mr. G. T. Powell, Executive Vice  
President and Chief Nuclear Officer  
STP Nuclear Operating Company  
South Texas Project Electric  
Generating Station  
P.O. Box 289  
Wadsworth, TX 77483

**SUBJECT: SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION,  
UNITS 1 AND 2 - NRC INSPECTION REPORT 05000498/2016010;  
05000499/2016010 AND NRC INVESTIGATION REPORTS 4-2015-014 AND  
4-2016-008**

Dear Mr. Powell:

This letter refers to the investigations conducted at the South Texas Project Electric Generating Station, Units 1 and 2, by the U.S. Nuclear Regulatory Commission's (NRC's) Office of Investigations. The purpose of the investigations was to determine if willful fire protection-related violations of NRC requirements occurred at the South Texas Project Electric Generating Station, Units 1 and 2. The investigations were initiated on March 25, 2015, and December 2, 2015, and were completed on September 23, 2016, and February 24, 2017, respectively. The issues were discussed with you and other members of your staff during a telephone conversation on June 19, 2017. A factual summary (Enclosure 1) provides a summary of the staff's review of the facts of the case.

Based on the results of the investigations, two apparent violations were identified and are being considered for escalated enforcement action in accordance with the NRC Enforcement Policy. The Enforcement Policy can be found on the NRC's Web site at <http://www.nrc.gov/about-nrc/regulatory/enforcement/enforce-pol.html>. The apparent violations being considered for escalated enforcement action involve two examples of the licensee's failure to implement written procedures covering the fire protection program; and three examples of the licensee's failure to ensure that information required by the Commission's regulations, orders, or license conditions to be maintained by the licensee shall be complete and accurate in all material respects. The details of the apparent violations are documented in Enclosure 2.

A licensee-identified violation which was determined to be of very low safety significance, is documented in Enclosure 2. The NRC is treating this violation as a non-cited violation consistent with Section 2.3.2.a of the Enforcement Policy.

Before the NRC makes its enforcement decision, we are providing you an opportunity to: (1) respond to the apparent violations addressed in this inspection report within 30 days of the date of this letter, (2) request a predecisional enforcement conference (PEC), or (3) request alternative dispute resolution (ADR). If a PEC is held, the NRC may issue a press release to

announce the time and date of the conference; however, the PEC will be closed to public observation since information related to an Office of Investigations report will be discussed and the report has not been made public.

If you decide to participate in a PEC or pursue ADR, please contact Mr. Gregory Werner, Chief, Engineering Branch 2, at 817-200-1137 within 10 days of the date of this letter. A PEC should be held within 30 days and an ADR session within 45 days of the date of this letter.

If you choose to provide a written response, it should be clearly marked as a "Response to Apparent Violations in NRC Inspection Report 05000498/2016010; 05000499/2016010; EA-16-216" and should include for each apparent violation: (1) the reason for the apparent violation or, if contested, the basis for disputing the apparent violation; (2) the corrective steps that have been taken and the results achieved; (3) the corrective steps that will be taken; and (4) the date when full compliance will be achieved. Your response may reference or include previously docketed correspondence, if the correspondence adequately addresses the required response.

Your written response should be sent to the NRC's Document Control Center, with a copy mailed to Mr. Anton Vogel, Director, Division of Reactor Safety, U.S. Nuclear Regulatory Commission, Region IV, 1600 E. Lamar Blvd., Arlington, TX 76011-4511, within 30 days of the date of this letter. If an adequate response is not received within the time specified or an extension of time has not been granted by the NRC, the NRC will proceed with its enforcement decision or schedule a PEC.

If you choose to request a PEC, the conference will afford you the opportunity to provide your perspective on these matters and any other information that you believe the NRC should take into consideration before making an enforcement decision. The decision to hold a PEC does not mean that the NRC has determined that a violation has occurred or that enforcement action will be taken. This conference would be conducted to obtain information to assist the NRC in making an enforcement decision. The topics discussed during the conference may include information to determine whether a violation occurred, information to determine the significance of a violation, information related to the identification of a violation, and information related to any corrective actions taken or planned. In presenting your corrective actions, you should be aware that the promptness and comprehensiveness of your actions will be considered in assessing any civil penalty for the apparent violations.

In lieu of a PEC, you may request ADR with the NRC in an attempt to resolve this issue. Alternative dispute resolution is a general term encompassing various techniques for resolving conflicts using a neutral third party. The technique that the NRC has decided to employ is mediation. Mediation is a voluntary, informal process in which a trained neutral mediator works with parties to help them reach resolution. If the parties agree to use ADR, they select a mutually agreeable neutral mediator who has no stake in the outcome and no power to make decisions. Mediation gives parties an opportunity to discuss issues, clear up misunderstandings, be creative, find areas of agreement, and reach a final resolution of the issues.

Additional information concerning the NRC's ADR program can be obtained at <http://www.nrc.gov/about-nrc/regulatory/enforcement/adr/post-investigation.html>. The Institute on Conflict Resolution at Cornell University has agreed to facilitate the NRC's program as a neutral third party. Please contact Cornell at 877-733-9415 within 10 days of the date of this letter if you are interested in pursuing resolution of this issue through ADR.



In addition, please be advised that the number and characterization of apparent violations described in the enclosed inspection report may change as a result of further NRC review. You will be advised by separate correspondence of the results of our deliberations on this matter.

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

For administrative purposes, this letter is issued as NRC Inspection Report 05000498/2016010; 050000499/2016010 and the apparent violations will be issued as AV 05000498/2016010-01; 05000499/2016010-01 and AV 05000498/2016010-02; 05000499/2016010-02, as described in Enclosure 2.

If you have any questions concerning this matter, please contact Mr. Gregory Werner of my staff at 817-200-1137.

Sincerely,

A handwritten signature in black ink, appearing to read "AVogel", with a stylized flourish at the end.

Anton Vogel, Director  
Division of Reactor Safety

Docket Nos. 50-498 and 50-499  
License Nos. NPF-76 and NPF-80

Enclosures:

1. Factual Summary
2. NRC Inspection Report 05000498/2016010;  
050000499/2016010

cc w/enclosures: Electronic Distribution

## **FACTUAL SUMMARY**

### **Office of Investigations Report 4-2015-014**

An investigation was initiated by the U.S. Nuclear Regulatory Commission (NRC), Office of Investigations on March 25, 2015, to determine if: (1) Supervisor 1 willfully failed to properly follow the fire protection procedural requirements; (2) Supervisor 1 willfully allowed credit for a fire watch, when a fire watch was required for a nearby area, but was not posted; (3) Supervisor 2 willfully falsified fire watch logs; and (4) fire watch employees (Employees 1 and 2) were willfully inattentive to duty (i.e., "sleeping") during a fire watch patrol. The term "supervisor" is used to represent an individual that has the formal or informal authority to direct the actions of others. The NRC completed its investigation on September 23, 2016.

1. Determine if Supervisor 1 willfully failed to properly follow the fire protection procedural requirements.

Supervisor 1 entered special "scan and go" instructions in hourly fire watch postings, directing fire watch personnel to observe only impaired areas instead of conducting walkdowns of entire rooms. During interviews, five individuals stated that they warned Supervisor 1 on multiple occasions that the "scan and go" method was not in accordance with the fire protection program and that the procedure needed to be changed. Supervisor 1 admitted, during one interview, that he was "over-confident," and disagreed with the other individuals and continued with the special instructions, until he was directed by Quality Assurance to remove the special instructions from the fire watch logs on May 15, 2014. Based on the evidence, it appears that Supervisor 1 willfully failed to properly follow the fire protection procedural requirements, which caused inaccurate documentation of properly completed fire watches. This appears to have caused the licensee to be in violation of 10 CFR 50.48(a)(1)(iv) and 10 CFR 50.9.

2. Determine if Supervisor 1 willfully allowed credit for a fire watch when a fire watch was required for a nearby area, but was not posted.

On March 3, 2015, a Condition Report was entered to document that a fire watch posting had been inadvertently closed during the previous shift. Supervisor 1 closed the Condition Report and allowed credit for the fire watch with the justification that fire watch personnel routinely traverse the area. During the investigation, numerous interviewed individuals identified that the fire watch posting for Unit 2, Mechanical Auxiliary Building, Room 67 was inadvertently closed and then re-opened 8 hours later; however, based on the configuration of the room and path of other fire watches, no other fire watches would have traversed through this room.

During interviews, Supervisor 1 acknowledged that he failed to review maps and fact check his assumption that fire watch personnel had traversed the room, but simply relied on his memory of the location. Supervisor 1 admitted that the information in Condition Report 15-4871 was not correct and that the fire watch was missed. The Office of Investigations' investigator concluded that Supervisor 1 willfully allowed credit of a nearby fire watch for completion of a fire watch posting that never entered the fire watch area. Based on the evidence, it appears that Supervisor 1 willfully allowed credit of a nearby fire watch that was performed and willfully documented inaccurate information in a condition report, when a fire

watch was not posted. This appears to have caused the licensee to be in violation of 10 CFR 50.48(a)(1)(iv) and 10 CFR 50.9.

3. Determine if Supervisor 2 willfully falsified fire watch logs

The investigator reviewed the procedural requirements concerning the review of fire watch records, interviewed Supervisor 2 and other individuals, and reviewed the actual fire watch documents in question. The investigator confirmed through interviews of Supervisor 2 that the fire watch logs were taken home to be reviewed, which was not prohibited by procedures. The Office of Investigations' investigator conducted a review of the fire watch documents in question and found no evidence of falsification. Based on the evidence, it appears that Supervisor 2 did not falsify fire watch logs.

4. Determine if fire watch employees (Employee 1 and Employee 2) were willfully inattentive to duty (i.e., "sleeping") during a fire watch patrol.

During the interviews of the two fire watch employees, both employees admitted to being inattentive on one (separate) occasion. For Employee 1, the investigator determined that no fire watches were missed as a result of inattentiveness. For Employee 2, during interviews with multiple individuals, it was established that the Employee 2 requested relief on multiple occasions and was required to work as a fire watch for 17 continuous hours without relief due to limited staffing. The investigator also determined that the fire watch staff was not trained on compensatory measures or given tools to maintain alertness. Based on the evidence, it appears that neither of the fire watch employees were willfully inattentive to duty "sleeping" during a fire watch patrol. However, Employee 2 appears to have caused the licensee to be in violation of 10 CFR 50.48(a)(1)(iv).

**Office of Investigations Report 4-2016-008**

An investigation was initiated by the U.S. Nuclear Regulatory Commission (NRC), Office of Investigations on December 2, 2015, to determine if Supervisor 1 willfully closed out Condition Report 15-9793 knowingly using inaccurate and incomplete information to document completion of a fire watch patrol without completed fire watch records. The NRC completed its investigation on February 24, 2017.

Condition Report 15-9793 identified that a fire watch log for a specific period was unable to be located. Supervisor 1 stated in his closure of the Condition Report that field interviews of individuals in specified fire watch positions confirmed that the fire watch in question had been properly performed. During the investigation interviews, four individuals, including the individuals in the positions specified in the Condition Report closure, stated that Supervisor 1 never talked with them about whether the fire watch in question was performed. Additionally, Supervisor 1 admitted that information he wrote in Condition Report 15-9793 was inaccurate. He stated, in part, "The wording I used was poor, extremely poor. . . what I was trying to say was that, hey, this is what would have been done, I know that that probably would have been done." The original fire watch records were subsequently found on September 28, 2015, and demonstrated that the fire watches were performed correctly.

Based on the evidence, it appears that Supervisor 1 deliberately documented inaccurate information in a condition report concerning discussions with personnel involving missed fire watches. This appears to have caused the licensee to be in violation of 10 CFR 50.9.

**U.S. NUCLEAR REGULATORY COMMISSION**

**REGION IV**

Docket No.: 05000498 and 05000499  
License No.: NPF-76 and NPF-80  
Report No.: 05000498/2016010; 05000499/2016010  
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: November 14, 2016– June 19, 2017  
Inspectors: J. Watkins, Reactor Inspector  
Approved By: Gregory E. Werner  
Chief, Engineering Branch 2  
Division of Reactor Safety

## **SUMMARY OF APPARENT VIOLATIONS**

- A. 10 CFR 50.48(a)(1)(iv) requires, in part, that a licensee must have a fire protection plan that outlines the plans for fire protection, fire detection, suppression capability, and limitation of fire damage.

STP Nuclear Operating Company Technical Specification 6.8.1.d requires, in part, that written procedures shall be established, implemented, and maintained covering the fire protection program implementation.

Procedure ZFG-0001, "Fire Watch Program Guideline," Revision 10, Step 4.2 requires, in part, that each hourly fire watch shall be responsible for inspecting all areas of the room for possible indications of smoke, fire, or potential fire hazards, which includes looking behind all accessible areas, behind panels and components that may obscure the fire watches' view.

Procedure ZFG-0001, "Fire Watch Program Guideline," Revision 11, Step 6.0, requires, in part, that a condition report shall be written for a missed fire watch. Procedure OPGP03-ZX-0002, "Condition Reporting Process," Revision 50, Step 3.7 requires, in part, that condition report owners are responsible for proper resolution of the condition, including ensuring that the condition report description is accurate and actions are initiated to address the condition.

Contrary to the above, the licensee failed to implement written procedures covering the fire protection program as evidenced by the following two examples:

1. On May 8-15, 2014, hourly fire watches failed to follow Procedure ZFG-0001 and inspect all areas of the room for possible indications of smoke, fire, or potential fire hazards. Specifically, 20 fire watches, 17 in Unit 1 and 3 in Unit 2, were improperly performed as a result of improper written instructions provided by a supervisor to direct the hourly fire watches to only look at areas of impairments or transient fire loads instead of inspecting all areas of the room as required by fire protection program requirements.
2. On March 4, 2015, a supervisor failed to follow Procedure OPGP03-ZX-0002 when the supervisor closed a condition report and failed to ensure that the condition report description was accurate and actions were initiated to address the condition. Specifically, the supervisor documented inaccurate information in Condition Report 15-4871 that stated, in part, that when a fire watch for Unit 2, Mechanical Auxiliary Building, Room 67 was inadvertently closed, fire watch personnel routinely traversed through the area while performing rounds, and once identified the round was performed immediately with no issues identified. However, no fire watch personnel traversed the area because the room was locked and was not part of their normal route. Therefore, no fire watch personnel entered the room as documented in the condition report closure.

The apparent violation is designated as AV 05000498/2016010-01; 05000499/2016010-01, "Failure to Follow Fire Protection Program Procedure Requirements."

- B. 10 CFR 50.9 requires, in part, that information required by the Commission's regulations, orders, or license conditions to be maintained by the licensee shall be complete and accurate in all material respects.

STP Nuclear Operating Company Technical Specification 6.8.1.d requires, in part, that written procedures shall be established, implemented, and maintained covering the fire protection program implementation.

Procedure ZFG-0001, "Fire Watch Program Guideline," Revision 10, Step 4.2 requires, in part, that each hourly fire watch shall be responsible for inspecting all areas of the room for possible indications of smoke, fire, or potential fire hazards, which includes looking behind all accessible areas, behind panels and components that may obscure the fire watches' view. Step 4.2.12 requires, in part, that after completing the inspection of the assigned area, scan the appropriate "Fire Watch Scan Point" above the fire watch posting.

Procedure ZFG-0001, "Fire Watch Program Guideline," Revision 11, Step 6.0, requires, in part, that a condition report shall be written for a missed fire watch. Procedure OPGP03-ZX-0002, "Condition Reporting Process," Revision 50, Step 3.7 requires, in part, that condition report owners are responsible for proper resolution of the condition, including ensuring that the condition report description is accurate and actions are initiated to address the condition.

Contrary to the above, the licensee failed to ensure that information required by the Commission's regulations, orders, or license conditions to be maintained by the licensee shall be complete and accurate in all material respects as evidenced by the following three examples:

1. On May 8-15, 2014, the licensee failed to maintain complete and accurate records associated with hourly fire watches. Specifically, a total of 20 fire watch records, 17 in Unit 1 and 3 in Unit 2, were recorded (scanned) as being completed without inspecting all areas of the room for possible indications of smoke, fire, or potential fire hazards. This information was material to the NRC because the performance of fire watches enables the rapid detection, control, and suppression of a fire in accordance with the fire protection program requirements.
2. On March 4, 2015, the licensee failed to maintain complete and accurate records associated with a condition report. Specifically, a supervisor willfully documented inaccurate information in Condition Report 15-4871 that stated, in part, that when a fire watch for Unit 2, Mechanical Auxiliary Building, Room 67 was inadvertently closed, fire watch personnel routinely traversed through the area while performing rounds, and once identified the round was performed immediately with no issues identified. However, no fire watch personnel traversed the area because the room was locked and was not part of their normal route. Therefore, no fire watch personnel entered the room as documented in the condition report closure. This information was material to the NRC because condition reports associated with missed fire watches provide evidence of compliance with licensee procedures and NRC requirements.



3. On April 14, 2015, the licensee failed to maintain complete and accurate records associated with a condition report. Specifically, a supervisor deliberately documented inaccurate information in Condition Report 15-9793 that stated, in part, that field interviews with a fire watch manager and a fire watch lead indicated that the Unit 2 fire watches (FW8934) were properly performed. However, the supervisor did not confirm with the fire watch manager or a fire watch lead that the fire watches had been performed. This information was material to the NRC because condition reports associated with missed fire watches provide evidence of compliance with licensee procedures and NRC requirements.

The apparent violation is designated as AV 05000498/2016010-02; 05000499/2016010-02, "Failure to Maintain Complete and Accurate Information for the Fire Protection Program."

## **LICENSEE-IDENTIFIED VIOLATION**

The following violation of very low safety significance (Green) was identified by the licensee and is a violation of NRC requirements which meets the criteria of the NRC Enforcement Policy for being dispositioned as a non-cited violation.

Title 10 CFR 50.48(a)(1)(iv) requires, in part, that a licensee must have a fire protection plan that outlines the plans for fire protection, fire detection, suppression capability, and limitation of fire damage. Technical Specification 6.8.1.d requires, in part, that written procedures shall be established, implemented, and maintained covering the fire protection program implementation. Procedure ZFG-0001, "Fire Watch Program Guideline," Revision 11, Step 2.5 defines a continuous fire watch, in part, as the act of monitoring an area for conditions that could lead to a fire without leaving the assigned area until relieved by another qualified fire watch person, or when the posting is closed. Step 5.2.8 requires, in part, that, for a continuous fire watch, the fire watch is to inspect the area of the posting to ensure the fire watch pays attention to any possible smells indicating problems (burning rubber, plastic, wood, etc.).

Contrary to the above, on January 30, 2015, a continuous fire watch failed to inspect the area of the posting, Unit 2 Electrical Auxiliary Building, Elevation 23, Room 101, and failed to ensure they were attentive to any possible smells indicating problems. Specifically, the continuous fire watch was found inattentive.

In accordance with Inspection Manual Chapter 0609 Appendix F, "Fire Protection Significance Determination Process," dated September 20, 2013, the inspectors determined that this finding has a very low safety significance (Green) per Task 1.3.1, "Screen Fire Finding for Ability to Achieve Safe Shutdown," because Train C was available for safe shutdown. This issue was entered into the licensee's corrective action program as Condition Report 15-2506.