



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
REGION II
245 PEACHTREE CENTER AVENUE NE, SUITE 1200
ATLANTA, GEORGIA 30303-1257

July 27, 2016

EA-16-064

Mr. Joseph W. Shea
Vice President, Nuclear Licensing
Tennessee Valley Authority
1101 Market Street, LP 3D-C
Chattanooga, TN 37402-2801

**SUBJECT: BROWNS FERRY NUCLEAR PLANT - INSPECTION REPORT
05000296/2016013; INVESTIGATION REPORT NO. 2-2015-037; AND
APPARENT VIOLATIONS**

Dear Mr. Shea:

This refers to the investigation completed on March 11, 2016, by the Nuclear Regulatory Commission's (NRC) Office of Investigations (OI) concerning activities at the Tennessee Valley Authority's (TVA) Browns Ferry Nuclear Plant (BFN). The purpose of the investigation was to determine whether Day and Zimmerman (DZ) contract fire watch employees deliberately failed to conduct roving fire watches at BFN Units 1, 2, and 3. A Factual Summary of the OI investigation is provided as Enclosure 1.

Based on the results of the investigation, two apparent violations (AVs) were identified, one of which is being considered for escalated enforcement action in accordance with the NRC Enforcement Policy. The current Enforcement Policy is included on the NRC's Web site at <http://www.nrc.gov/about-nrc/regulatory/enforcement/enforce-pol.html>. Both AVs are more fully discussed in Enclosure 2.

The apparent violation being considered for escalated enforcement involves the requirements of 10 CFR § 50.48, Fire Protection. Specifically, five DZ contract fire watch employees failed to conduct roving fire watches on at least one occasion in May 2015, by either failing to enter the Unit 3 4 kilovolt (kV) Shutdown Board Room, or failing to traverse the room to its farthest point, as required by procedure FP-0-000-INS012, Fire Watch Expectations. The NRC concluded that the actions of the five fire watch employees were apparently deliberate as discussed in the enclosed Factual Summary, and caused TVA to be in apparent violation of procedure FP-0-000-INS012, Fire Watch Expectations, Revision (Rev.) 0001, which is required by BFN Technical Specification 5.4.1.d.

The second AV involves the inaccurate/incomplete documentation of hourly fire watch records, contrary to the requirements of 10 CFR § 50.9(a), Completeness and Accuracy of Information. Specifically, hourly fire watch records were not completed in accordance with TVA Corporate Procedure NPG-SPP-18.4.6, Control of Fire Protection Impairments, Rev. 0006. The NRC concluded that this AV is not willful, and is not being considered for escalated enforcement action. This AV will be processed via traditional enforcement at the conclusion of the escalated enforcement process.

Regarding the AV of 10 CFR § 50.48, before the NRC makes its enforcement decision, we are providing you an opportunity to: (1) respond to this AV in writing within 30 days of the date of this letter; (2) request a Pre-decisional Enforcement Conference (PEC); or (3) request Alternative Dispute Resolution (ADR) as discussed below. If a PEC is held, the NRC will issue a press release to announce the time and date of the conference; however the PEC will be closed to public observation since it is associated with an OI report, the results of which have not been publicly released. If you decide to participate in a PEC, or pursue ADR, please contact Alan Blamey at 404-997-4415 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 Violation in NRC Inspection Report 05000296/2016013 and Investigation Report No. 2-2015-037, EA-16-064" and should include (1) the reason for the AV 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. Additionally, your response should be sent to the NRC's Document Control Center, with a copy mailed to Mark Franke, Director of Reactor Projects, Region II, 245 Peachtree Center Avenue NE, Atlanta, GA 30303, 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 lieu of a PEC, you may request Alternative Dispute Resolution (ADR) with the NRC in an attempt to resolve this issue. ADR is a general term encompassing various techniques for resolving conflicts using a third party neutral. The technique that the NRC has decided to employ is mediation. Mediation is a voluntary, informal process in which a trained neutral (the "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 program can be obtained at <http://www.nrc.gov/about-nrc/regulatory/enforcement/adr.html>. The Institute on Conflict Resolution (ICR) at Cornell University has agreed to facilitate the NRC's program as a neutral third party. Please contact ICR 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," after completion of enforcement related activities, 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 Inspection Report 05000296/2016013 and the apparent violations are designated as AV 05000296/2016013-01, Failure to Implement Proper Control of Fire Protection Impairments and AV 05000296/2016013-02, Failure to Maintain Complete and Accurate Fire Watch Records.

If you have any questions concerning this matter, please contact Mr. Alan Blamey of my staff at 404-997-4415.

Sincerely,

/RA/

Mark E. Franke, Acting Director
Division of Reactor Projects

Docket No.: 50-296
License No.: DPR-68

Enclosures:

1. Factual Summary
2. Apparent Violations

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," after completion of enforcement related activities, 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 Inspection Report 05000296/2016013 and the apparent violations are designated as AV 05000296/2016013-01, Failure to Implement Proper Control of Fire Protection Impairments and AV 05000296/2016013-02, Failure to Maintain Complete and Accurate Fire Watch Records.

If you have any questions concerning this matter, please contact Mr. Alan Blamey of my staff at 404-997-4415.

Sincerely,

/RA/

Mark E. Franke, Acting Director
Division of Reactor Projects

Docket No.: 50-296
License No.: DPR-68

Enclosures:

1. Factual Summary
2. Apparent Violations

PUBLICLY AVAILABLE NON-PUBLICLY AVAILABLE SENSITIVE NON-SENSITIVE
ADAMS: Yes ACCESSION NUMBER: _____ SUNSI REVIEW COMPLETE FORM 665 ATTACHED

OFFICE	RII:DRP	RII:DRP	RII:EICS	RII:EICS	RII:DRP	
SIGNATURE	DJS3	AJB3	DLG2	SAP1	MEF1	
NAME	J. Seat	A. Blamey	D Gamberoni	S. Price	M. Franke	
DATE	7/ 18 /2016	7/ /2016	/ /2016	/ /2016	/ /2016	
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

DISTRIBUTION:

V. McCree, OEDO

Region II Regional Coordinator, OEDO

W. Dean, NRR

J. Martin, OGC

M. Johnson, OEDO

E. Julian, SECY

D. Decker, OCA

All Regions Enforcement Coordinators

H. Harrington, OPA

K. Fowler, OI

H. Bell, OIG

L. Casey, NRR

M. Ring, OGC

G. Figueroa, OE

L. Wert, RII

M. Franke, RII

A. Blamey, RII

C. Kontz, RII

A. Gody, RII

R. Hannah, RII

J. Ledford, RII

J. Pelchat, RII

S. Price, RII

D. Gamberoni, RII

L. Gibson, RII

P. Jefferson, RII OI

OEMAIL Resource

RidsNrrDirs Resource

Public

FACTUAL SUMMARY
OFFICE OF INVESTIGATIONS REPORT NO. 2-2015-037

On March 11, 2016, the Nuclear Regulatory Commission's (NRC) Office of Investigations (OI) completed an investigation at the Tennessee Valley Authority's (TVA) Browns Ferry Nuclear Plant (BFN). The purpose of the investigation was to determine whether Day and Zimmerman (DZ) contract fire watch employees deliberately failed to conduct roving fire watches at BFN Units 1, 2 and 3.

On or about May 18, 2015, five DZ contract employees were tasked with performing roving fire watches in multiple locations inside the Control Building and the Emergency Diesel Generator Building, using TVA Corporate Procedure NPG-SPP-18.4.6, Control of Fire Protection Impairments, Revision (Rev.) 0006. This procedure is the implementing/controlling process for all fire protection impairments, and establishes the process for implementing compensatory actions for fire impairments. NPG-SPP-18.4.6, Section 3.2.6.A, states that fire watches are utilized for the surveillance of areas where fire protection systems are impaired.

Fire Protection Impairment Permit 12-3612 dated July 23, 2012, established an hourly fire watch for several plant fire areas, including the Unit 3 Diesel Generator Building and Unit 3 4 kilovolt (kV) Shutdown Board Room, due to the Control Bay Ventilation elevation 593' Air Handling Unit 1A Local Start function being impaired. This impairment was effective through May 22, 2016.

BFN procedure FP-0-000-INS012, Fire Watch Expectations, requires fire watch employees to enter and traverse into a room or area to its farthest point to observe conditions that would indicate a fire.

During transcribed interviews with NRC OI, five DZ contract employees stated that each had received on-the-job training to learn the roving fire watch routes and responsibilities. Each contract employee also signed a form attesting that he/she had "... walked all my routes with my Foreman []. I fully and clearly understand my roles and responsibilities as a Roving Fire Watch." Each DZ contract employee also acknowledged an understanding of roles and responsibilities as a Roving Fire Watch to the NRC OI investigator during transcribed interviews. Finally, DZ contract employees signed a TVA Fire Watch and Turnover Form at the beginning of their respective shift stating that "a briefing has been performed and [the individual] understands the assignment and responsibilities."

Based on documentary and testimonial evidence acquired during the OI investigation, five DZ contract employees had training, experience, and knowledge of the requirements of TVA BFN procedure FP-0-000-INS012, Fire Watch Expectations.

During transcribed interviews with NRC OI, four of the five DZ contract employees acknowledged that he/she did not conduct a roving fire watch by entering and fully traversing the Unit 3 4kV Shutdown Board Room on or about May 18, 2015, as required by procedure FP-0-000-INS012. An NRC inspector also independently confirmed, through visual observation, that three of the five DZ contract employees either did not enter or fully traverse the Unit 3 4kV Shutdown Board Room on or about May 18, 2015, including the contract employee who did not acknowledge failure to conduct a roving fire watch during the OI interviews.

APPARENT VIOLATIONS

1. 10 CFR § 50.48, "Fire Protection," requires that a licensee must have a fire protection plan that, in part, outlines the plans for fire protection, fire detection, suppression capability, and limitation of fire damage. The Browns Ferry Fire Protection Report lists compensatory actions that must be implemented when there are impaired fire protection systems, including under some circumstances, hourly fire watches. Technical Specification 5.4.1.d requires, in part, that written procedures shall be established, implemented, and maintained covering the activities involved with the fire protection program. TVA Corporate Procedure NPG-SPP-18.4.6, "Control of Fire Protection Impairments," Rev. 0006, Section 3.2.6.A, states that fire watches are utilized for the surveillance of areas where fire protection systems are impaired. Fire Protection Impairment Permit 12-3612, dated July 23, 2012, established an hourly fire watch for several plant areas, including the Unit 3 Diesel Building and Unit 3 4kV Shutdown Board Room, due to impairment of elevation 593' Control Bay Ventilation Air Handling Unit 1A Local Start Function. BFN procedure FP-0-000-INS012, "Fire Watch Expectations," requires fire watch employees to enter and traverse into a room or area to its farthest point to observe conditions that would indicate a fire.

Contrary to the above, on multiple occasions in May 2015, five contract employees assigned to conduct roving fire watch patrols in the Unit 3 Diesel Building and Unit 3 4kV Shutdown Board Room due to Fire Protection Impairment Permit 12-3612, failed to conduct hourly fire watch patrols as required by NPG-SPP-18.4.6. Specifically, contract employees either failed to enter the Unit 3 4kV Shutdown Board Room, or failed to traverse the room to its farthest point, as required by procedure FP-0-000-INS012, "Fire Watch Expectations." Therefore, there was an apparent violation of 10 CFR § 50.48 because the fire watch employees failed to implement the procedures required by 10 CFR § 50.48.

2. 10 CFR § 50.9, "Completeness and Accuracy of Information," states, in part, 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.

Contrary to the above, on multiple occasions in May 2015, TVA maintained records of hourly fire watch patrols that were not complete and accurate in all material respects. Specifically, fire watch patrol documentation required by NPG-SPP-18.4.6 contained incomplete documentation of fire watches for a fire impairment in the Unit 3 Diesel Building and Unit 3 4kV Shutdown Board Room. Procedure NPG-SPP-18.4.6, Rev. 0006, "Control of Protection Impairments," requires the licensee to complete Attachment 6, NPG-SPP-18.4.6-6, "Hourly Compensatory Fire Watch Route Sheet," by entering the time, printing name, and signing as each area is patrolled, and returning it to the foreman at the end of the shift. The procedure allows the use of an equivalent form which shall include at least: impairment number, date of coverage, area covered, and start time. However, the equivalent form intended to document completion of the fire watch patrols of the Unit 3 Diesel Building and Unit 3 4kV Shutdown Board Room in May 2015, NPG-SPP-18.4.6-2[12-10-2010], "Roving Fire Watch Route/Coverage Sheet," was not filled out completely. Specifically, the start/stop times and employees' initials were not entered. Complete hourly fire watch patrol data is material to the NRC in that it provides evidence of compliance with the regulatory requirements of 10 CFR § 50.48. Therefore, there was an apparent violation of 10 CFR § 50.9 because the record the licensee is required to maintain to document completion of hourly fire watch patrols in the Unit 3 Diesel Building and Unit 3 4kV Shutdown Board Room was incomplete.