



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

March 9, 2015

EA-14-003

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

**SUBJECT: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTY-
\$70,000 (NRC INSPECTION REPORT NO. 05000327/2015008,
05000328/2015008 AND INVESTIGATION REPORT NO. 2-2013-006,
SEQUOYAH NUCLEAR PLANT)**

Dear Mr. Shea:

This refers to an investigation initially completed on December 19, 2013, and then supplemented on May 12, 2014, by the U.S. Nuclear Regulatory Commission's (NRC) Office of Investigations (OI) at Tennessee Valley Authority's (TVA) Sequoyah Nuclear Plant (Sequoyah), as described in NRC Inspection Reports 05000327/2014008 and 05000328/2014008 dated December 29, 2014.

The purpose of the investigation was to determine whether TVA's contract fire watch personnel employed at Sequoyah deliberately failed to conduct fire watches required by NRC regulations and whether documentation of fire watches was falsified, as well as whether there was any managerial influence or involvement in the falsification. The inspection report documented the identification of two apparent violations, involving missed fire watches and subsequent falsification of procedurally required paperwork, which occurred in October and November of 2012. Both apparent violations were considered for escalated enforcement in accordance with the NRC's Enforcement Policy.

In the letter transmitting the inspection report, we provided you the opportunity to address the apparent violations identified in the report by either attending a pre-decisional enforcement conference, providing a written response before we made our final enforcement decision, or requesting Alternative Dispute Resolution. In a letter dated January 23, 2015, you provided a response to the apparent violations. In your response, you accepted the violations as described in the inspection report, including the willful aspects, and provided details of your corrective actions to preclude recurrence.

Based on the information developed during the investigation and the information that you provided in your response of January 23, 2015, the NRC has concluded that two violations of NRC requirements occurred. These violations are cited in the enclosed Notice of Violation (Notice) and the circumstances surrounding them are described in detail in the subject inspection report. To summarize, the first violation involved contract laborers, including four

foremen, who deliberately failed to conduct compensatory hourly fire watches as required by TVA Procedure NPG-SPP-18.4.6, Control of Fire Protection Impairments, Revision 1, in October and November of 2012. These hourly fire watches were required as compensatory measures for fire protection equipment that was out of service at that time. In addition, the NRC found that four foremen deliberately failed to exercise supervisory duties as required by Appendix A to NPG-SPP-18.4.6.

The second violation involved the subsequent falsification of procedurally required forms (TVA Procedure NPG-SPP-18.4.6-2) during the same time frame, when individuals initialed that fire watches were performed with knowledge that watches had, in fact, not been performed. These actions represented a violation of 10 CFR 50.9(a), *Completeness and accuracy of information*, which states that information required to be maintained shall be complete and accurate in all material respects.

Based on the NRC's review, the violations did not result in any actual consequences. In this case, an actual fire did not occur in the fire zones in question during the time frame the fire watches were missed.

The potential consequences of multiple missed fire watches, by numerous contract personnel, is a concern to the NRC. Fire watches are conducted as a compensatory measure for fire protection equipment or features that are out of service, and among other purposes, serve to identify unapproved fire loadings or undesirable plant conditions, and may provide early detection or mitigation of a fire. Although the NRC recognizes that other fire protection plan features serve as defense in depth to provide early detection or mitigation of fires, routine fire watches are an important part of the overall fire protection plan strategy to reduce the risk and consequences of a fire at the facility.

In addition to the importance of fire watches, of greater concern to the NRC is the fact that multiple contract personnel, including several foremen, conspired and/or engaged in deliberate misconduct such that fire watches were not performed as required, and accompanying paperwork was falsified. Furthermore, in this case, TVA management failed to provide necessary management oversight of these contractor personnel, and failed to instill a culture of commitment to procedural compliance. As discussed in the NRC Enforcement Policy, willful violations are of particular concern because the NRC's regulatory program is based on licensees and their contractors, employees, and agents acting with integrity and communicating with candor. Based on the above and in light of the interrelation of the two violations, the NRC has concluded that the significance of the two violations should be characterized as a Severity Level III problem.

In accordance with the Enforcement Policy, a base civil penalty in the amount of \$ 70,000 is considered for a Severity Level III problem. Because your facility has been the subject of escalated enforcement actions within the last 2 years¹ and because the violations were willful, the NRC considered whether credit was warranted for *Identification* and *Corrective Action* in accordance with the civil penalty assessment process in Section 2.3.4 of the Enforcement Policy.

The issue involving missed fire watches and subsequent falsification during the October and

¹ On June 4, 2013 (EA-13-023) a SLIII violation of 10 CFR 50.72 was issued (ADAMS Accession No. ML13155A560)

November 2012 timeframe was brought to the attention of NRC staff prior to TVA's knowledge and involvement, and as such, credit is not warranted for the factor of *Identification*. Regarding the factor of *Corrective Action*, TVA's letter of January 23, 2015, identified a number of actions, including but not limited to: (1) suspension of unescorted access for the six individuals identified; (2) development and implementation of a Fire Watch/Route Accountability Log to be maintained by the Sequoyah Fire Operations Foreman; (3) establishment of a pre-job brief each shift to ensure applicable fire watches (FW) and fire routes are performed in an accountable manner; (4) revision to Sequoyah processes to conduct two observations of FW duties each week and incorporated requirements for the Fire Watch/Route Accountability Log and shift briefings; and (5) the conduct of briefings for FW implementing organizations to ensure accountability of FW. Based on the above, credit is warranted for the factor of *Corrective Action*.

Therefore, to emphasize the importance of prompt identification of violations, the importance of TVA's oversight of its fire protection plan implementation, and in recognition of the willful aspects of the violations, I have been authorized, after consultation with the Director, Office of Enforcement, to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalty (Notice), in the base amount of \$70,000 for the Severity Level III problem. The NRC plans to conduct a followup inspection in accordance with Inspection Procedure 92702, "Followup on Traditional Enforcement Actions Including Violations, Deviations, Confirmatory Action Letters, Confirmatory Orders, and Alternative Dispute Resolution Confirmatory Orders." The followup inspection will verify that adequate corrective actions have been implemented, the root cause has been identified, generic implications have been addressed, and that your programs and practices have been appropriately enhanced to prevent recurrence. The NRC requests that your staff provide notification of your readiness for the NRC to conduct the traditional enforcement followup inspection to review the actions taken to address the Severity Level III violation.

The NRC has concluded that information regarding: (1) the reason for the violations; (2) the corrective steps that have been taken and the results achieved; and (3) the corrective steps that will be taken; and (4) the date when full compliance was achieved is already adequately addressed on the docket in TVA's letter dated January 23, 2015. Therefore, you are not required to respond to this letter unless the description therein does not accurately reflect your corrective actions or your position. In that case, or if you choose to provide additional information, you should follow the instructions specified in the enclosed Notice.

For administrative purposes, this letter is issued as NRC Inspection Report 05000327/2015008 and 05000328/2015008. Apparent Violations (AV) 05000327, 05000328/2014008-01, "Failure to Implement Proper Control of Fire Protection Impairments," and AV 05000327, 05000328/2014008-02, "Failure to Maintain Complete and Accurate Records of Fire Watches," have been re-designated as Violation 05000327, 328/2015008-01, "Problem Implementing Fire Protection Program Requirements."

J. Shea

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In accordance with 10 CFR 2.390 of the NRC's "Agency Rules of Practice and Procedure," a copy of this letter and its enclosures 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 Web site at <http://www.nrc.gov/reading-rm/adams.html>. The NRC also includes significant enforcement actions on its Web site at (<http://www.nrc.gov/reading-rm/doc-collections/enforcement/actions/>).

Sincerely,

/RA/

Victor M. McCree
Regional Administrator

Docket Nos.: 50-327, 50-328
License Nos.: DPR- 77, DPR-79

Enclosure: Notice of Violation

cc: Distribution via Listserv

J. Shea

4

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Sincerely,

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Victor M. McCree
Regional Administrator

Docket Nos.: 50-327, 50-328
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PUBLICLY AVAILABLE NON-PUBLICLY AVAILABLE SENSITIVE NON-SENSITIVE
ADAMS: X Yes ACCESSION NUMBER: ML15068A132 SUNSI REVIEW COMPLETE FORM 665 ATTACHED

OFFICE	RII:DRP	RII:DRP	RII: DRP	RII: EICS	RII:ORA	RII:ORA	RII:RA
SIGNATURE	/RA By SRS5/	/RA By MFK1/	/RA By JTM/	/RA By DLG2/	/RA By SAP1/	/RA By LDW/	/RA By VMM/
NAME	SSandal	MKing	JMunday	DGamberoni	SPrice	LWert	VMcCree
DATE	02/17/15	02/18/15	02/23/15	02/19/15	02/19/15	02/24/15	3/6/2015
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO
OFFICE	HQ:OE	HQ:NRR	HQ:OGC				
SIGNATURE	/Via Email CMF2/	/Via Email LRC1/	/Via Email PAJ/				
NAME	CFaria-Ocasio	LCasey	PJehle				
DATE	03/02/15	02/27/15	02/25/15				
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

OFFICIAL RECORD COPY DOCUMENT NAME: G:\DRPI\RPB6\SEQUOYAH\SEQUOYAH FINAL EA-14-003.DOCX

**NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTY**

Tennessee Valley Authority
Sequoyah Nuclear Plant
Units 1 and 2

Docket Nos.: 50-327/328
License Nos.: DPR-77/79
EA-14-003

During an NRC investigation completed on December 19, 2013, and supplemented on May 12, 2014, violations of NRC requirements were identified. In accordance with the NRC Enforcement Policy, the NRC proposes to impose a civil penalty pursuant to Section 234 of the Atomic Energy Act of 1954, as amended (Act), 42 U.S.C. 2282, and 10 CFR 2.205. The particular violations and associated civil penalty are set forth below:

- A. 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.

Sequoyah Nuclear Plant Units 1 and 2 Technical Specification 6.8.1.f requires, in part, that written procedures be established, implemented, and maintained covering the activities involved with Fire Protection Program implementation.

Tennessee Valley Authority (TVA) Corporate Procedure NPG-SPP-18.4.6, Control of Fire Protection Impairments, Revision 1, requires, in part:

- Section 3.6.A, requires fire watch supervisors communicate fire watch requirements.
- Section 3.2.6.A, states that fire watches are utilized for the surveillance of areas where fire protection systems are impaired.
- Section 4.2.B, states that Fire Watch Route Sheets will be retained by Fire Protection for 90 days.
- Appendix A, Section 3.2 requires fire watches to complete Form NPG-SPP-18.4.6-2 Fire Watch Route Sheet, as each area is patrolled.

Fire Protection Impairment Permit FOR120937 dated October 2, 2012, established an hourly fire watch for a diesel generator board room air intake fire damper that failed to close and was considered to be impaired.

Contrary to the above, on multiple occasions during October and November 2012, TVA willfully failed to implement procedures covering the activities involved with Fire Protection Program implementation. Specifically, the designated fire watch foremen willfully failed to have proper oversight of fire watch activities. In addition TVA's contractors willfully failed to conduct roving fire watch patrols in the Emergency Diesel Generator Building. Specific examples include:

- Hourly fire watches in areas where fire protection systems were impaired were not performed on multiple occasions.

Enclosure

- Fire Watch Route Sheets were not retained by Fire Protection for 90 days as required by NPG-SPP-18.4.6 section 4.2.
 - TVA's contract supervisors deliberately solicited individuals to falsify fire watch forms
- B. 10 CFR 50.9 states, in part, that information required by the Commission's regulations, orders, or license conditions to be maintained shall be complete and accurate in all material respects.

Sequoyah Nuclear Plant Units 1 and 2 Technical Specification 6.8.1.f requires, in part, that written procedures be established, implemented, and maintained covering the activities involved with Fire Protection Program implementation.

NPG-SPP-18.4.6, Control of Fire Protection Impairments, Revision 1, Section 3.2.6.A, states that "Fire watches are utilized for the surveillance of areas where fire protection systems are impaired. The compensatory fire watch process is described in Appendix A."

Appendix A to NPG-SPP-18.4.6, Section 3.2.C, specifies compensatory fire watch duties and responsibilities, and requires that compensatory fire watch personnel complete Form NPG-SPP-18.4.6-2 by entering the time and initials as each area is patrolled, and return it to the Fire Protection Foreman/designee at the end of the shift.

NPG-SPP-18.4.6 Rev. 0001, Section 4.2.B, specifies a 90 day retention for Form NPG-SPP-18.4.6-2, Fire Watch Route Sheet.

Fire Protection Impairment Permit FOR120937 dated October 2, 2012, established an hourly fire watch for a diesel generator board room because an air intake fire damper failed to close (was impaired).

Contrary to the above, on multiple occasions in October and November 2012, TVA failed to maintain complete and accurate records of hourly fire watch patrols. These records were material to the NRC. Specifically, fire watch patrol records required by NPG-SPP-18.4.6 certified hourly fire watches were completed during the fire impairment in the Emergency Diesel Generator Building. However, the NRC has determined that in fact many fire watches were not performed. The hourly fire watch patrol data is material to the NRC because it provides evidence of compliance with NRC safety requirements.

This is a Severity Level III Problem (NRC Enforcement Policy Section 6.1, 6.9).

Civil Penalty - \$70,000. (EA-14-003)

The NRC has concluded that information regarding the reason for the violations, the corrective actions taken and planned to correct the violations and prevent recurrence, and the date when full compliance was achieved is already adequately addressed on the docket in a letter from TVA dated January 23, 2015. However, if the description therein does not accurately reflect your position or your corrective actions, you are required to submit a written statement or explanation pursuant to 10 CFR 2.201 within 30 days of the date of the letter transmitting this Notice of Violation. In that case, or if you choose to respond, clearly mark your response as a "Reply to a Notice of Violation", and send it to the Director, Office of Enforcement, U.S. Nuclear

Regulatory Commission, One White Flint North, 11555 Rockville, MD 20852-2738, with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region II, the NRC Resident Inspector at the facility that is the subject of this Notice, and the Document Control Desk, Washington, DC 20555-0001.

TVA may pay the civil penalty proposed above or the cumulative amount of the civil penalties if more than one civil penalty is proposed, in accordance with NUREG/BR-0254 and by submitting to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, a statement indicating when and by what method payment was made, or may protest imposition of the civil penalty in whole or in part, by a written answer addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, within 30 days of the date of this Notice.

Should TVA fail to answer within 30 days of the date of this Notice, the NRC will issue an order imposing the civil penalty. Should TVA elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalty, in whole or in part, such answer should be clearly marked as an "Answer to a Notice of Violation" and may: (1) deny the violations listed in this Notice, in whole or in part; (2) demonstrate extenuating circumstances; (3) show error in this Notice; or (4) show other reasons why the penalty should not be imposed. In addition to protesting the civil penalty in whole or in part, such answer may request remission or mitigation of the penalty.

In requesting mitigation of the proposed penalty, the response should address the factors addressed in Section 2.3.4 of the Enforcement Policy. Any written answer addressing these factors pursuant to 10 CFR 2.205 should be set forth separately from the statement or explanation provided pursuant to 10 CFR 2.201, but may incorporate parts of the 10 CFR 2.201 reply by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. The attention of TVA is directed to the other provisions of 10 CFR 2.205 regarding the procedure for imposing a civil penalty.

Upon failure to pay any civil penalty which subsequently has been determined in accordance with the applicable provisions of 10 CFR 2.205 to be due, this matter may be referred to the Attorney General, and the penalty, unless compromised, remitted, or mitigated, may be collected by civil action pursuant to Section 234c of the Act, 42 U.S.C. 2282c.

The responses noted above, i.e., Reply to Notice of Violation, Statement as to payment of civil penalty, and Answer to a Notice of Violation, should be addressed to: Patricia Holahan, Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, One White Flint North, 11555 Rockville Pike, Rockville, MD 20852-2738, with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region II, the NRC Resident Inspector at the facility that is the subject of this Notice, and the Document Control Center, Washington, DC 20555-0001.

If you choose to respond, your response will be made available electronically for public inspection in the NRC Public Document Room or in 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 or proprietary information. 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 that such material is

withheld from public disclosure, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your claim (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). If safeguards information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21.

In accordance with 10 CFR 19.11, you may be required to post this Notice within two working days of receipt.

Dated this 9th day of March 2015