



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II  
245 PEACHTREE CENTER AVENUE N.E., SUITE 1200  
ATLANTA, GEORGIA 30303-1200

January 17, 2020

Mr. Jim Barstow  
Vice President, Nuclear Regulatory Affairs & Support Services  
Tennessee Valley Authority  
1101 Market Street, LP 4A-C  
Chattanooga, TN 37402-2801

SUBJECT: BROWNS FERRY NUCLEAR PLANT – FOLLOW UP FOR NRC  
CONFIRMATORY ORDER EA-17-022 NRC INSPECTION REPORT  
05000259/2019011, 05000260/2019011, AND 05000296/2019011

Dear Mr. Barstow:

On December 12, 2019, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Browns Ferry Nuclear Plant and discussed the results of this inspection with Steven M. Bono, Site Vice President and other members of your staff. The results of this inspection are documented in the enclosed report.

One Severity Level IV violation without an associated finding is documented in this report. We are treating this violation as a non-cited violation (NCV) consistent with Section 2.3.2 of the Enforcement Policy.

If you contest the violation or the significance or severity of the violation documented in this inspection report, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001; with copies to the Regional Administrator, Region II; the Director, Office of Enforcement; and the NRC Resident Inspector at Browns Ferry Nuclear Plant.

This letter, its enclosure, and your response (if any) will be made available for public inspection and copying at <http://www.nrc.gov/reading-rm/adams.html> and at the NRC Public Document Room in accordance with Title 10 of the *Code of Federal Regulations* 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

/RA/

Thomas A. Stephen, Chief  
Reactor Projects Branch 5  
Division of Reactor Projects

Docket Nos. 05000259, 05000260, and 05000296  
License Nos. DPR-33, DPR-52, and DPR-68

Enclosure:  
As stated

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DATED JANUARY 17, 2020

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NAME	DJackson	SMendez	RTaylor	TStephen	
DATE	01/09/2020	01/14/2020	01/16/2020	01/17/2020	

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**U.S. NUCLEAR REGULATORY COMMISSION**  
**Inspection Report**

Docket Numbers: 05000259, 05000260 and 05000296

License Numbers: DPR-33, DPR-52 and DPR-68

Report Numbers: 05000259/2019011, 05000260/2019011 and 05000296/2019011

Enterprise Identifier: I-2019-011-0051

Licensee: Tennessee Valley Authority

Facility: Browns Ferry Nuclear Plant

Location: Athens, Alabama

Inspection Dates: December 09, 2019 to December 12, 2019

Inspectors: R. Taylor, Senior Project Engineer (Team Leader)  
D. Jackson, Allegations/Enforcement Specialist  
S. Mendez, Allegations Specialist

Approved By: Thomas A. Stephen, Acting Branch Chief  
Reactor Projects Branch 5  
Division of Reactor Projects

Enclosure

## SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee's performance by conducting a NRC inspection at Browns Ferry Nuclear Plant, in accordance with the Reactor Oversight Process. The Reactor Oversight Process is the NRC's program for overseeing the safe operation of commercial nuclear power reactors. Refer to <https://www.nrc.gov/reactors/operating/oversight.html> for more information.

### List of Findings and Violations

Failure to Adequately Implement Requirements of Confirmatory Order EA-17-022, commitment V.1.b.3			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Not Applicable	NCV 05000259, 05000260, 05000296/ 2019011-01 Open/Closed	Not Applicable	92702 CONF
The inspectors identified a Severity Level IV non-cited violation (NCV) for the licensee's failure to adequately implement requirements of Confirmatory Order EA-17-022, Commitment V.1.b.3. Specifically, the licensee failed to ensure that new supervisory employees completed safety conscious work environment (SCWE) training within three months of their hire or promotion effective date.			

### Additional Tracking Items

None.

## INSPECTION SCOPES

Inspections were conducted using the appropriate portions of the inspection procedures (IPs) in effect at the beginning of the inspection unless otherwise noted. Currently approved IPs with their attached revision histories are located on the public website at <http://www.nrc.gov/reading-rm/doc-collections/insp-manual/inspection-procedure/index.html>. Samples were declared complete when the IP requirements most appropriate to the inspection activity were met consistent with Inspection Manual Chapter (IMC) 2515, "Light-Water Reactor Inspection Program - Operations Phase." The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel to assess licensee performance and compliance with Commission rules and regulations, license conditions, site procedures, and standards.

## OTHER ACTIVITIES – TEMPORARY INSTRUCTIONS, INFREQUENT AND ABNORMAL

### 92702 CONF - Enforcement Related Order Follow-Up-Only

#### Enforcement Related Order Follow-Up-Only (1 Sample)

- (1) The inspectors reviewed commitments associated with four items from Confirmatory Order EA-17-022, issued to TVA on July 27, 2017.
  - (1) Commitment V.1.b.2: This commitment and action required that training be provided within one year and on an annual basis thereafter to, at a minimum, all working status nuclear business group supervisory employees, contractor supervisory employees involved in nuclear-related work activities, human resource staff involved in the adverse employment action process, employee concerns program staff, contract technical stewards for nuclear related work activities, and the personnel in the TVA Office of General Counsel who are engaged in nuclear-related work activities. TVA initially identified 259 individuals at Browns Ferry who were required to complete the training. The inspectors verified that the list of individuals included first line supervisors and above, contract technical stewards, human resources personnel, and employee concerns personnel. The inspection was only completed for Browns Ferry.
  - (2) Commitment V.1.b.3: This commitment and action required that new supervisory employees complete initial training through in-person or computer-based training within three months of their hire or promotion effective date. The training also required, at a minimum, a discussion of the training material with personnel in the TVA Office of General Counsel who are engaged in nuclear-related work activities. This commitment applied to new supervisory employees who were not included in the initial training specified in Commitment V.1.b.2. The inspectors reviewed records of TVA Browns Ferry employees and contractors who were hired or promoted into supervisory positions after July 28, 2018 to verify that personnel had completed the specified training within three months of their hire or promotion effective date. The inspection was only completed for Browns Ferry.
  - (3) Commitment V.1.d.1: This commitment required an independent third-party to perform quarterly audits for the first year after the date of issuance of the CO, and semi-annually for the next two years, of the adverse employment action process. The inspectors reviewed the "Sixth Independent Auditor's Report of the TVA Adverse Employment Action Process for Quarter Ending 6/30/2019," dated 6/27/2019. The

inspectors verified that the audits included a review of all adverse employment actions, periodical attendance at Executive Review Boards and a review of chilling effect mitigation plans (inclusive of recommendations as appropriate). The inspection was only completed for Browns Ferry.

(2) Commitment V.1.e.1: This commitment required TVA to conduct an independent nuclear safety culture assessment at Browns Ferry in 2019, evaluate the results and develop, implement, and track to completion corrective actions to address weaknesses identified through the assessment. The inspectors reviewed corrective actions and enhancements associated with the 2019 nuclear safety culture assessment at Browns Ferry to verify that corrective actions were developed and appropriate to address the weaknesses identified through the assessment. The inspection was completed for Browns Ferry and TVA corporate.

## INSPECTION RESULTS

Failure to Adequately Implement Requirements of Confirmatory Order EA-17-022, commitment V.1.b.3			
Cornerstone	Severity	Cross-Cutting Aspect	Report Section
Not Applicable	Severity Level IV NCV 05000259, 05000260, 05000296/ 2019011-01 Open/Closed	Not Applicable	92702 CONF
<p>The inspectors identified a Severity Level IV non-cited violation (NCV) for the licensee's failure to adequately implement requirements of Confirmatory Order EA-17-022, Commitment V.1.b.3. Specifically, the licensee failed to ensure that new supervisory employees completed safety conscious work environment (SCWE) training within three months of their hire or promotion effective date.</p> <p><u>Description:</u> Confirmatory Order (CO) EA-17-022, issued to TVA on July 27, 2017, requires, in part, that certain personnel complete initial and recurring SCWE training. Specifically, Commitment V.1.b.3 in CO EA-17-022 requires that: "New supervisory employees shall complete initial training through in-person or computer based training within three months of their hire or promotion effective date. The training shall require, at a minimum, a discussion of the training material with personnel in the TVA Office of General Counsel who are engaged in nuclear related work activities."</p> <p>On December 26, 2018, the licensee identified five employees at Browns Ferry Nuclear Plant (BFN) who were hired into or promoted to supervisory positions after July 27, 2018, but who did not complete the specified SCWE training within three months of their hire or promotion effective date. The licensee entered this issue into their corrective action program (CAP) as condition report (CR) 1478017. The five employees completed the training by January 14, 2019.</p> <p>During initial implementation of the CO actions, and at the time the CR was written, it was interpreted by the licensee that the three-month training requirement only applied to permanent TVA (BFN) employees and therefore, contract supervisor employees were not included in that population. In March of 2019, at an NRC inspection exit meeting at Watts Bar, TVA was notified that the three-month SCWE training requirement does apply to supplemental workers.</p>			

On March 15, 2019, the licensee completed an extent of condition review and identified 14 supplemental/contract workers who had not received the SCWE training within three months of employment or elevation to supervisor at BFN. All 14 workers completed the required training by April 2, 2019. The licensee initiated CR 1499298 to address this issue.

Additionally, on May 21, 2019, the licensee identified two additional contract supervisors who did not meet the three-month SCWE training requirement. The contractor supervisors worked continuously at BFN for greater than 90 days (one from 7/26/2018 to 11/20/2018 and the second from 10/10/2018 to 3/28/2019). When identified, the two contract supervisors were no longer employed with BFN (or any other TVA site). The licensee initiated CR 1518645 to address this issue.

On May 30, 2019, TVA initiated fleet-wide CR 1520850 to address the examples identified above, along with others within the fleet, to ensure the requirements of the order are met, particularly for supplemental workers.

**Corrective Actions:** The licensee entered all issues described above into their corrective action program and took action to ensure all supervisors (including contractors) identified as having missed the requirement, had completed the training by April 2, 2019. Additionally, fleet-wide actions were taken to identify a process to help ensure contract supervisors also met the three-month SCWE training requirement. The fleet-wide corrective actions included 1) Training Support organization has taken interim actions (to remain in place until a long-term solution is implemented) at the sites to identify current supplemental supervisors and track them to completion of the 90-day requirement; and 2) licensee procedure TPD-SCWE, Safety Conscious Work Environment Training, was revised to have supplemental supervisors complete SCWE 2017 computer-based training (NRC Confirmatory Order EA 17-022) as part of their training at the Central In-Processing Facility, and would only require the Office of General Counsel discussion if they worked with TVA Nuclear for 90 days or more.

**Corrective Action References:** CR 1478017, CR 1499298, CR 1518645, CR 1520850

**Performance Assessment:** The licensee's failure to ensure that new supervisory employees completed SCWE training within three months of their hire or promotion effective date was in violation of commitment V.1.b.3 in Confirmatory Order EA-17-022. The inspectors determined that this violation was associated with impeding the regulatory process and subject to traditional enforcement as described in the NRC Enforcement Policy, dated May 28, 2019.

**Enforcement:** The ROP's significance determination process does not specifically consider the regulatory process impact in its assessment of licensee performance. Therefore, it is necessary to address this violation which impedes the NRC's ability to regulate using traditional enforcement to adequately deter non-compliance.

**Severity:** The inspectors determined this violation constituted a more than minor traditional enforcement violation associated with failure to implement the requirements of Confirmatory Order EA-17-022. The inspectors determined that the failure to ensure that current and future confirmatory order requirements continue to be met could potentially impact safety. Specifically, failure to ensure new supervisory employees complete SCWE training in a timely manner could cause missed opportunities to identify and/or prevent an environment where individuals would be hesitant to raise nuclear safety concerns for fear of retaliation. The violation is more than minor because it was not isolated to one or two individuals. The inspectors determined that the licensee's failure to implement the

requirements of the Confirmatory Order is considered an SL IV violation, consistent with Section 2.2.2.d of the NRC Enforcement Policy, dated May 28, 2019.

Violation: Commitment V.1.b.3 of Confirmatory Order EA-17-022, issued to TVA on July 27, 2017, requires, in part, that: "New supervisory employees shall complete initial training through in-person or computer-based training within three months of their hire or promotion effective date. The training shall require, at a minimum, a discussion of the training material with personnel in the TVA Office of General Counsel who are engaged in nuclear related work activities."

Contrary to the above, from July 28, 2018, to May 21, 2019, the licensee failed to ensure that new supervisory employees completed safety conscious work environment (SCWE) training within three months of their hire or promotion effective date. Specifically, five BFN supervisory employees and 16 contractor supervisory employees at BFN involved in nuclear related work activities, did not complete the SCWE training within three months as required.

Enforcement Action: This violation is being treated as a non-cited violation, consistent with Section 2.3.2 of the Enforcement Policy.

## **EXIT MEETINGS AND DEBRIEFS**

The inspectors verified no proprietary information was retained or documented in this report.

- On December 12, 2019, the inspectors presented the NRC inspection results to Steven M. Bono, Site Vice President and other members of the licensee staff.