

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

In the Matter of	)	
	)	
U.S. Tennessee Valley Authority	)	Docket Nos. 50-390; 50-391; 50-259;
Watts Bar Nuclear Plant	)	50-260; 50-296; 50-327; 50-328;
Browns Ferry Nuclear Plant	)	License Nos. NPF-90; NPF-96; DPR-33;
Sequoyah Nuclear Plant	)	DPR-52; DPR-68; DPR-77; DPR-79
	)	
	)	EA-17-022

CONFIRMATORY ORDER  
(EFFECTIVE UPON ISSUANCE)

I

U.S. Tennessee Valley Authority (TVA or Licensee) is the holder of Operating License Nos. NPF-90; and NPF-96; DPR-33; DPR-52; DPR-68; DPR-77; and DPR-79; issued by the U.S. Nuclear Regulatory Commission (NRC or Commission) pursuant to part 50 of title 10 of the Code of Federal Regulations (10 CFR). The licenses authorize the operation of the Watts Bar Nuclear Plant (WBN) Units 1 and 2, Browns Ferry Nuclear Plant, Units 1, 2 and 3, and Sequoyah Nuclear Plant, Units 1 and 2, in accordance with conditions specified therein. These facilities are located in Spring City, Tennessee, Athens, Alabama, and Soddy Daisy, Tennessee, respectively.

This Confirmatory Order (CO) is the result of an agreement reached during an alternative dispute resolution (ADR) mediation session conducted on June 9, 2017.

On December 1, 2016, the U. S. Nuclear Regulatory Commission (NRC) completed a Problem Identification and Resolution inspection at TVA's Watts Bar Nuclear Plant (WBN), Units 1 and 2 (Inspection Report 05000390/2016013, 05000391/2016013, ML17069A133). The results of the inspection were transmitted to TVA by letter dated March 10, 2017, and included the identification of one Apparent Violation (AV) of a previously issued CO, (EA-09-009,203, dated December 22, 2009, ML093510993). The AV involved the following:

Confirmatory Order Modifying License, (EA-09-009,203) dated December 22, 2009, (ML093510993) states, in part, that by no later than ninety (90) calendar days after the issuance of this Confirmatory Order, TVA shall implement a process to review proposed licensee adverse employment actions at TVA's nuclear plant sites before actions are taken to determine whether the proposed action comports with employee protection regulations, and whether the proposed actions could negatively impact the Safety Conscious Work Environment (SCWE). Such a process should consider actions to mitigate a potential chilling effect if the employment action, despite its legitimacy, could be perceived as retaliatory by the workforce.

Additionally, by no later than one hundred twenty (120) calendar days after the issuance of the Confirmatory Order, TVA shall implement a process to review proposed significant adverse employment actions by contractors performing services at TVA's nuclear plant sites before the actions are taken to determine whether the proposed action comports with employee protection regulations, and whether the proposed action could negatively impact the SCWE. Such a process will likewise consider actions to mitigate a potential chilling effect if the employment action, despite its legitimacy, could be perceived as retaliatory by the workforce.

TVA implements the above process through procedure NPG-SPP-11.10, Adverse Employment Action. NPG-SPP-11.10, Section 3.2.2, entitled "Review Process - Personnel Actions Impacting TVA Employees", paragraph D, states that the "Vice President (or designee) will complete section 3, Vice President Record of Action of form 41175" (attachment 2 to NPG-SPP-11.10). Form 41175, entitled "TVA 41175 Adverse Employment Action Review", states that "the purpose of the review is to ensure that proposed actions: (1) are warranted; (2) do not occur because an individual has engaged in a protected activity; and (3) do not create the perception that persons were retaliated against because they engaged in a protected activity."

Additional actions are delineated in NPG-SPP-11.10 Sections 3.2.2, subsections A, B, C, E, F, G, related to the positions of the Vice President, Line Manager and the Human Resource Representative, and in Section 3.2.3, entitled "Review Process - Personnel Actions Impacting Contractors."

Contrary to the above, from November 2014 to August 2016, TVA failed to comply with Confirmatory Order (EA-09-009,203), in that WBN: (1) failed to implement a process to review proposed licensee adverse employment actions at WBN before actions were taken to determine whether the proposed action comports with employee protection regulations, and whether the proposed actions could negatively impact the SCWE; and (2) failed to implement a process to review proposed significant adverse employment actions by contractors performing services at TVA's nuclear plant sites before the actions were taken to determine whether the proposed action comports with employee protection regulations, and whether the proposed action could negatively impact the SCWE. WBN failed to comply with the CO because the site failed to implement

procedure NPG-SPP-11.10, "Adverse Employment Action". Specifically, the Vice President (or designee) failed to complete Form 41175, entitled "TVA 41175 Adverse Employment Action Review" as required by Section 3.2.3.D, for multiple adverse employment actions taken against TVA and contractor personnel during this time period. Additionally, the Vice President, Line Management, and HR Representatives did not perform procedural steps that were required by procedure NPG-SPP-11.10, subsection 3.2.2.A, B, C, E, F, and G, and in Section 3.2.3.

In response to the NRC's inspection report of March 10, 2017, TVA advised of its desire to participate in the Agency's ADR program to resolve the enforcement aspects of this matter.

### III

On June 9, 2017, the NRC and TVA met in an ADR session mediated by a professional mediator, arranged through Cornell University's Institute on Conflict Resolution. ADR is a process in which a neutral mediator with no decision-making authority assists the parties in reaching an agreement or resolving any differences regarding their dispute. This CO is issued pursuant to the agreement reached during the ADR process. The elements of the agreement consist of the following:

1. The NRC and TVA agreed that the issue described above represents a violation of regulatory requirements. The NRC and TVA agree that the violation is a significant matter.
2. Based on a review of the incident, TVA completed a number of corrective actions and enhancements to preclude recurrence of the violation including, but not limited to, the

following:

- a. Performance of a Level I Root Cause Analysis (RCA), COC condition report (CR) 1271309, WBN Failure to Implement Adverse Employment Action Process, dated May 26, 2017, which identified direct, root, and contributing causes of the violation. The RCA also included an extent of condition review, an extent of cause review, and identified specific corrective actions that were entered into TVA's Corrective Action Program. TVA concluded that the causes and corrective actions are applicable to all TVA nuclear sites.
- b. TVA took immediate actions to reinforce the requirements in the Adverse Employment Action process to TVA Nuclear Suppliers and Contractors and to TVA Contract Technical Stewards (CTS).
- c. Establishment of an Executive Review Board (ERB) process to review procedurally specified personnel actions to ensure that actions do not constitute retaliation based on employee personal participation in protected activities. The ERB process and procedure was informed by benchmarking other organizations in the nuclear industry. The ERB may be advised by representatives from human resources, legal and ECP as appropriate, so that ERB is informed if the subject employee has engaged in any known relevant protected activity.
- d. TVA communicated the following to nuclear employees, via a written Fleet Focus memo from the Chief Nuclear Officer, entitled "Key Revisions to Adverse Employment Action Procedure," dated June 6, 2017: a summary of the AV, the results of TVA's root cause analysis, purpose of the Adverse Action process, planned actions to correct the process, and expectations for managers to consider the impact of an adverse action on the organizational SCWE and need to communicate effectively to employees.
- e. TVA hired an experienced Executive Safety Culture Advisor, to review and observe

activities at TVA through December 31, 2017. This consultant is contracted to conduct leadership observations and provide insights to TVA executives regarding leadership behaviors to continue to improve TVA's nuclear safety culture and SCWE.

- f. TVA hired a third-party, independent consultant to perform a comprehensive nuclear safety culture assessment at Watts Bar Nuclear Plant in order to assess the Nuclear Safety Culture and Safety Conscious Work Environment programs.

- 3. Based on TVA's review of the incident and NRC's concerns with respect to precluding recurrence of the violation, TVA agrees to implement the following corrective actions and enhancements:

- a. Communication

- 1) By no later than three months after issuance of the CO, the TVA Chief Nuclear Executive Officer (CNO) shall:

- a) Inform all working status TVA nuclear first line supervisory employees and above, as of the date of this CO, about employee protections and the need to maintain an environment free from even the appearance of retaliation or discrimination.

- b) As a followup to the written communication issued by the CNO on June 6, 2017, conduct a video briefing by the CNO for all working status TVA nuclear employees and contractors who perform NRC regulated activities, describing the following: 1) reason why TVA's implementation of the Adverse Employment Action process as required by the 2009 CO had not been fully effective, 2) a brief summary regarding the background and reason the Adverse Employment Action Process exists, 3) summary of the NRC's concerns expressed in the March 2017 Inspection Report, 4) the corrective

actions both taken and planned to restore TVA's compliance, and 5) informing employees of the possible avenues (including to the NRC) that they have to raise concerns as outlined in TVA-SPP-11.8.4, Expressing Concerns and Differing Views. TVA shall make this video briefing available to the NRC.

- c) Document that all working status TVA nuclear employees and contractors who perform NRC regulated activities (i.e. individuals who work on safety-related structures, systems, and components) as of the date of this CO have received the one time video briefing, which will also require responses to one or more questions to document employee understanding in order to receive credit for the training.
  - d) Each site Vice President shall conduct an All Hands meeting at each TVA nuclear site. During the meeting employees will be allowed the opportunity to provide feedback and ask questions of management related to the communications listed above.
- 2) By no later than four months after issuance of the CO, TVA shall ensure that its nuclear safety culture and safety conscious work environment policies and guidance (e.g., procedures), are in place, updated, and consistent with: 1) the NRC's March 2011 Safety Culture Policy Statement and associated traits described within; and 2) the NRC's May 1996 Safety Conscious Work Environment Policy Statement; and are informed by: 1) the NRC's Regulatory Issue Summary 2005-18, "Guidance for Establishing and Maintaining a Safety Conscious Work Environment"; and 2) the industry's common language initiative (i.e. , INPO 12- 012, Revision 1, April 2013).
- a) TVA shall make updated policies and guidance available to the NRC, and
  - b) TVA will make updated policies and guidance available to employees, and inform employees where related materials are located.

3) By no later than six months after issuance of the CO, a Senior TVA manager shall share the company's experiences and insights with respect to the importance of properly implementing an Adverse Employment Action process, including lessons learned and actions taken by TVA, in a presentation to other nuclear utilities at an industry meeting.

b. Training

1) By no later than three months after the issuance of the CO, TVA shall acquire an independent third party who is experienced with NRC employee protection regulations (10 CFR 50.7, Section 211 of the Energy Reorganization Act, as amended), and nuclear safety culture and safety conscious work environment policies to assist TVA in development of initial and refresher training on employee protection and safety conscious work environment.

a) Training shall include:

- i) case study examples of discriminatory practices as well as examples related to the adverse action process implementation.
- ii) the definition of key terms included in employee protection regulations, nuclear safety culture and safety conscious work environment policy statements, and be informed by the industry's common language initiative (e.g., nuclear safety issue, protected activity, adverse action, nuclear safety culture traits).
- iii) behavioral expectations for demonstrating support for raising nuclear safety and quality concerns without fear of retaliation, and available avenues for raising concerns.
- iv) how to properly implement the adverse employment action process including at a minimum discussion on the following:



- (1) Disciplinary action is not taken as a result of an employee's engagement in activities protected by the employee protection regulations of 10 CFR 50.7;
- (2) Determination if the action could be perceived as negatively impacting any individual or organizational aspect of Safety Conscious Work Environment, cause a potential chilling effect or be perceived as retaliatory, independent of discipline legitimacy.
  - b) The training material shall be available to the NRC upon request.
  - c) Training records shall be retained consistent with applicable TVA record retention policies and be made available to the NRC upon request.
- 2) The training will 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.
- 3) 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.
- 4) The initial training for personnel specified in III.3.b.2 who work at WBN and personnel in the TVA Office of General Counsel who are engaged in nuclear related work activities shall be conducted in-person by the independent third-party. Initial training for the other employees specified in III.3.b.2 and subsequent

refresher training shall be conducted by personnel in the TVA Office of General Counsel who are engaged in nuclear related work activities.

c. Work Processes

- 1) By no later than six months after the issuance of the CO, TVA shall maintain a uniform process to ensure independent management review of all proposed adverse actions in accordance with the procedure. This process shall be executed by an ERB chaired by a TVA Vice President or above. The ERB shall, at a minimum, review proposed adverse employment actions to include suspensions (one or more days off without pay), terminations for cause, involuntary reduction in force, and no-fault terminations of employment.
- 2) By no later than three months after the issuance of the CO, TVA shall revise the Adverse Employment Action procedure to require all adverse employment actions, as described in III.3.c.1), to be reviewed for potential effects on the safety conscious work environment, regardless of whether the employee engaged in a protected activity.
- 3) By no later than three years after the issuance of the CO, TVA shall perform in-person benchmarking of at least two external organizations in the nuclear industry with developed adverse employment action processes, specifically including ERBs.
- 4) Develop individual performance appraisal assessment criteria for nuclear vice presidents and plant managers, to evaluate if these individuals are meeting expectations with regard to employee protection, nuclear safety culture, and safety conscious work environment for their respective organizations. The assessment criteria and results of the evaluation shall be

documented in their performance appraisals for the 2017, 2018, and 2019 performance review cycles.

- 5) Within six months following issuance of the CO, TVA shall revise Nuclear Safety Culture Monitoring guidance to incorporate a requirement for the Senior Leadership Team to conduct a review of Adverse Employment Actions to identify potential trends that could impact an organization's nuclear safety culture.
- 6) By no later than three months after issuance of the CO, TVA shall reinforce through a written fleet communication that personnel who may have engaged in work associated with NRC-regulated activities departing the company have the opportunity to participate in an Employee Concerns Program Exit Interview/Survey to facilitate identification of nuclear safety issues and identifying resulting trends and conclusions as part of the TVA Employee Checkout process.
- 7) By no later than six months after issuance of the CO, TVA shall establish procedural guidance for a safety culture peer team outlining additional oversight specifically focused on fleet wide safety culture performance and safety conscious work environment at all TVA nuclear locations.
  - a) The peer team will assess, at least twice a year, the nuclear safety culture trends in process inputs that could be early indications of a nuclear safety culture weakness.
  - b) The peer team guidance shall be informed by guidance in NEI's 09-07, Revision 1, Fostering a Healthy Nuclear Safety Culture.
  - c) The initial implementation of the peer team will be advised by an

external consultant with extensive nuclear experience.

d. Independent Oversight

- 1) Beginning in 2017, an independent third-party shall 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 to evaluate whether TVA is in compliance with the Adverse Employment Action Process. The independent person/group shall be experienced with NRC employee protection regulations (10 CFR 50.7, Section 211 of the Energy Reorganization Act, as amended), nuclear safety culture and safety conscious work environment, and ERBs. The third-party chosen to audit the adverse action process must be independent of TVA, and must have had no direct, previous involvement with implementation of the adverse employment action process at TVA. The audit shall include reviewing all adverse employment actions, periodically attending ERBs, reviewing chilling effect mitigation plans, and providing recommendations as appropriate. The audit shall evaluate whether the process is effective at determining whether adverse employment actions comport with employee protection regulations, whether adverse employment actions could negatively impact the SCWE, and developing plans to mitigate the potential chilling effects of adverse employment actions. The third-party shall report all findings and recommendations from the audits to the CNO. The audits shall be available for NRC review. This shall remain in effect for three years after issuance of the CO.
- 2) By no later than three months after the issuance of the CO, TVA shall modify its process for conducting pulsing surveys such that it is informed by

the adverse action process. Pulsing surveys shall be conducted, as appropriate, shortly after a SCWE mitigation plan has been implemented to assess whether additional mitigation actions are necessary.

e. Assess and Monitor Nuclear Safety Culture and Safety Conscious Work

Environment

- 1) An independent nuclear safety culture (NSC) assessment, consistent with industry practices, shall be conducted at WBN in 2017. Within one year of issuance of the CO, TVA shall perform an independent NSC assessment consistent with industry practices, at Browns Ferry Nuclear Plant, Sequoyah Nuclear Plant and Corporate Nuclear. One additional independent NSC assessment shall be performed at each site, within approximately two years of the first assessment at that site. TVA shall compare the result of the assessment with prior years' survey results in an effort to identify trends. TVA shall evaluate the results and develop, implement, and track to completion corrective actions to address weaknesses identified through the assessments. TVA shall make the results of each survey and the planned corrective actions available for NRC review after the development of the planned corrective actions.
- 2) TVA shall maintain a nuclear safety culture monitoring panel, informed by the guidance in NEI's 09-07, Revision 1, Fostering a Healthy Nuclear Safety Culture.
- 3) By no later than three months after the issuance of the CO, TVA shall develop initial and refresher training for members of the nuclear safety culture monitoring panel. The initial and refresher training shall be developed by an independent third-party familiar with nuclear safety culture, and include behavioral indicators

of a declining safety culture, as well as actions to address a declining safety culture.

f. Other

- 1) TVA's RCA identified a contributing cause (CC-03) of the violation to involve a deficiency in its holistic framework for managing COs. To preclude recurrence of the violation related to this contributing cause, TVA agrees to the following corrective actions:
  - a) Within four months of issuance of the CO, TVA shall conduct a review of all previously issued COs.
    - i) The review shall entail:
      - (1) an assessment of the safety impact of CC-03 on the nuclear fleet;
      - (2) an evaluation of compliance with previously issued COs,
      - (3) identification of periods of time when TVA was not in compliance with previously issued COs,
      - (4) corrective actions taken and planned and timeline to restore compliance, and corrective actions taken and planned to preclude recurrence.
    - ii) TVA shall submit the results of the review to the NRC within one month of completion of the review.
  - b) Within six months of issuance of the CO, TVA shall revise corporate and site procedures, as appropriate, to ensure that current and future CO requirements continue to be met.
  - c) Three years after issuance of the CO (+/- 3 months), TVA will perform an assessment of the effectiveness of corrective actions taken in response to CC-03. Any identified violations or other deficiencies will be incorporated into the Corrective Action Program (CAP). This assessment will be made

available for NRC review.

4. Upon completion of the terms of items of the CO, TVA will provide the NRC with a letter discussing its basis for concluding that the Order has been satisfied.
5. The NRC considers the corrective actions and enhancements discussed in Items III.2 and III.3 above to be appropriately prompt and comprehensive to address the causes which gave rise to the incident discussed in the NRC's IR of March 10, 2017.
6. The NRC and TVA agree that the above elements will be incorporated into issuance of a CO.
7. In consideration of the commitments delineated above, the NRC agrees to refrain from proposing a civil penalty or issuing a Notice of Violation, for all matters discussed in the NRC's IR to TVA dated March 10, 2017 (EA-17-022).
8. This agreement is binding upon successors and assigns of TVA.

On July 21, 2017, TVA consented to issuance of this Order with the commitments, as described in Section V below. TVA further agreed that this Order is to be effective upon issuance and that it has waived its right to a hearing.

IV

Because TVA has agreed to take additional actions to address NRC concerns, as set forth in Section III above, the NRC has concluded that its concerns can be resolved through issuance of this CO.

I find that TVA's commitments as set forth in Section V are acceptable and necessary and conclude that with these commitments, the public health and safety are reasonably assured. In view of the foregoing, I have determined that public health and safety require that TVA's commitments be confirmed by this Order. Based on the above and TVA's consent, this CO is effective upon issuance.

V

Accordingly, pursuant to Sections 104b., 161b., 161i., 161o., 182, and 186 of the Atomic Energy Act of 1954, as amended, and the Commission's regulations in 10 CFR 2.202 and 10 CFR part 50, IT IS HEREBY ORDERED, THAT LICENSE NOS. NPF-90, NPF-96, DPR-33, DPR-52, DPR-68, DPR-77, AND DPR-79 IS MODIFIED FOLLOWS:

1. TVA agrees to implement the following corrective actions and enhancements:
  - a. Communication
    - 1) By no later than three months after issuance of the CO, the TVA CNO shall:
      - a) Inform all working status TVA nuclear first line supervisory employees and above, as of the date of this CO, about employee protections and the need to maintain an environment free from even the appearance of retaliation or discrimination.
      - b) As a follow up to the written communication issued by the CNO on June 6, 2017, conduct a video briefing by the CNO for all working status TVA nuclear employees and contractors who perform NRC regulated activities,



describing the following: 1) reason why TVA's implementation of the Adverse Employment Action process as required by the 2009 CO had not been fully effective, 2) a brief summary regarding the background and reason the Adverse Employment Action Process exists, 3) summary of the NRC's concerns expressed in the March 2017 Inspection Report, 4) the corrective actions both taken and planned to restore TVA's compliance, and 5) informing employees of the possible avenues (including to the NRC) that they have to raise concerns as outlined in TVA-SPP-11.8.4, Expressing Concerns and Differing Views. TVA shall make this video briefing available to the NRC.

- c) Document that all working status TVA nuclear employees and contractors who perform NRC regulated activities (i.e. individuals who work on safety-related structures, systems, and components) as of the date of this CO have received the one time video briefing, which will also require responses to one or more questions to document employee understanding in order to receive credit for the training.
  - d) Each site Vice President shall conduct an All Hands meeting at each TVA nuclear site. During the meeting employees will be allowed the opportunity to provide feedback and ask questions of management related to the communications listed above.
- 2) By no later than four months after issuance of the CO, TVA shall ensure that its nuclear safety culture and safety conscious work environment policies and guidance (e.g., procedures), are in place, updated, and consistent with: 1) the NRC's March 2011 Safety Culture Policy Statement and associated traits, described within; and 2) the NRC's May 1996 Safety Conscious Work Environment Policy Statement; and are informed by: 1) the NRC's Regulatory Issue Summary 2005-18, "Guidance for Establishing and Maintaining a Safety

Conscious Work Environment”; and 2) the industry’s common language initiative (i.e. , INPO 12- 012, Revision 1, April 2013).

a) TVA shall make updated policies and guidance available to the NRC, and

b) TVA will make updated policies and guidance available to employees, and inform employees where related materials are located.

3) By no later than six months after issuance of the CO, a Senior TVA manager shall share the company’s experiences and insights with respect to the importance of properly implementing an Adverse Employment Action process, including lessons learned and actions taken by TVA, in a presentation to other nuclear utilities at an industry meeting.

b. Training

1) By no later than three months after the issuance of the CO, TVA shall acquire an independent third party who is experienced with NRC employee protection regulations (10 CFR 50.7, Section 211 of the Energy Reorganization Act, as amended), and nuclear safety culture and safety conscious work environment policies to assist TVA in development of initial and refresher training on employee protection and safety conscious work environment.

a) Training shall include:

i) case study examples of discriminatory practices as well as examples related to the adverse action process implementation.

ii) the definition of key terms included in employee protection regulations, nuclear safety culture and safety conscious work environment policy statements, and be informed by the industry’s common language initiative (e.g., nuclear safety issue, protected activity, adverse action, nuclear safety culture traits).

- iii) behavioral expectations for demonstrating support for raising nuclear safety and quality concerns without fear of retaliation, and available avenues for raising concerns.
  - iv) how to properly implement the adverse employment action process including at a minimum discussion on the following:
    - (1) Disciplinary action is not taken as a result of an employee's engagement in activities protected by the employee protection regulations of 10 CFR 50.7;
    - (2) Determination if the action could be perceived as negatively impacting any individual or organizational aspect of Safety Conscious Work Environment, cause a potential chilling effect or be perceived as retaliatory, independent of discipline legitimacy.
  - b) The training material shall be available to the NRC upon request.
  - c) Training records shall be retained consistent with applicable TVA record retention policies and be made available to the NRC upon request.
- 2) The training will 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.
- 3) 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.

- 4) The initial training for personnel specified in V.1.b.2 who work at Watts Bar and personnel in the TVA Office of General Counsel who are engaged in nuclear related work activities shall be conducted in-person by the independent third-party. Initial training for the other employees specified in V.1.b.2 and subsequent refresher training shall be conducted by personnel in the TVA Office of General Counsel who are engaged in nuclear related work activities.

c. Work Processes

- 1) By no later than six months after the issuance of the CO, TVA shall maintain a uniform process to ensure independent management review of all proposed adverse actions in accordance with the procedure. This process shall be executed by an ERB chaired by a TVA Vice President or above. The ERB shall, at a minimum, review proposed adverse employment actions to include suspensions (one or more days off without pay), terminations for cause, involuntary reduction in force, and no-fault terminations of employment.
- 2) By no later than three months after the issuance of the CO, TVA shall revise the Adverse Employment Action procedure to require all adverse employment actions, as described in V.1.c.1), to be reviewed for potential effects on the safety conscious work environment, regardless of whether the employee engaged in a protected activity.
- 3) By no later than three years after the issuance of the CO, TVA shall perform in-person benchmarking of at least two external organizations in the nuclear

industry with developed adverse employment action processes, specifically including ERBs.

- 4) Develop individual performance appraisal assessment criteria for nuclear vice presidents and plant managers, to evaluate if these individuals are meeting expectations with regard to employee protection, nuclear safety culture, and safety conscious work environment for their respective organizations. The assessment criteria and results of the evaluation shall be documented in their performance appraisals for the 2017, 2018, and 2019 performance review cycles.
- 5) Within six months following issuance of the CO, TVA shall revise Nuclear Safety Culture Monitoring guidance to incorporate a requirement for the Senior Leadership Team to conduct a review of Adverse Employment Actions to identify potential trends that could impact an organization's nuclear safety culture.
- 6) By no later than three months after issuance of the CO, TVA shall reinforce through a written fleet communication that personnel who may have engaged in work associated with NRC-regulated activities departing the company have the opportunity to participate in an Employee Concerns Program Exit Interview/Survey to facilitate identification of nuclear safety issues and identifying resulting trends and conclusions as part of the TVA Employee Checkout process.
- 7) By no later than six months after issuance of the CO, TVA shall establish procedural guidance for a safety culture peer team outlining additional oversight specifically focused on fleet wide safety culture performance and safety conscious work environment at all TVA nuclear locations.

- a) The peer team will assess, at least twice a year, the nuclear safety culture trends in process inputs that could be early indications of a nuclear safety culture weakness.
- b) The peer team guidance shall be informed by guidance in NEI's 09-07, Fostering a Healthy Nuclear Safety Culture, Rev. 1.
- c) The initial implementation of the peer team will be advised by an external consultant with extensive nuclear experience.

d. Independent Oversight

- 1) Beginning in 2017, an independent third-party shall 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 to evaluate whether TVA is in compliance with the Adverse Employment Action Process. The independent person/group shall be experienced with NRC employee protection regulations (10 CFR 50.7, Section 211 of the Energy Reorganization Act, as amended), nuclear safety culture and safety conscious work environment, and ERBs. The third-party chosen to audit the adverse action process must be independent of TVA, and must have had no direct, previous involvement with implementation of the adverse employment action process at TVA. The audit shall include reviewing all adverse employment actions, periodically attending ERBs, reviewing chilling effect mitigation plans, and providing recommendations as appropriate. The audit shall evaluate whether the process is effective at determining whether adverse employment actions comport with employee protection regulations, whether adverse employment actions could negatively impact the SCWE, and developing plans to mitigate the potential chilling effects of adverse employment actions. The third-party

shall report all findings and recommendations from the audits to the CNO. The audits shall be available for NRC review. This shall remain in effect for three years after issuance of the CO.

- 2) By no later than three months after the issuance of the CO, TVA shall modify its process for conducting pulsing surveys such that it is informed by the adverse action process. Pulsing surveys shall be conducted, as appropriate, shortly after a SCWE mitigation plan has been implemented to assess whether additional mitigation actions are necessary.

e. Assess and Monitor Nuclear Safety Culture and Safety Conscious Work Environment

- 1) An independent nuclear safety culture (NSC) assessment, consistent with industry practices, shall be conducted at WBN in 2017. Within one year of issuance of the CO, TVA shall perform an independent NSC assessment consistent with industry practices, at Browns Ferry Nuclear Plant, Sequoyah Nuclear Plant, and Corporate Nuclear. One additional NSC assessment shall be performed at each site, within approximately two years of the first assessment at that site. TVA shall compare the result of the assessment with prior years' survey results in an effort to identify trends. TVA shall evaluate the results and develop, implement, and track to completion corrective actions to address weaknesses identified through the assessments. TVA shall make the results of each survey and the planned corrective actions available for NRC review after the development of the planned corrective actions.
- 2) TVA shall maintain a nuclear safety culture monitoring panel, informed by the guidance in NEI's 09-07, Revision 1, Fostering a Healthy Nuclear Safety Culture.
- 3) By no later than three months after the issuance of the CO, TVA shall develop initial and refresher training for members of the nuclear safety culture monitoring panel. The initial and refresher training shall be developed by an independent third-party familiar with nuclear safety culture, and include behavioral indicators of a declining safety

culture, as well as actions to address a declining safety culture.

f. Other

1) TVA's RCA identified a contributing cause (CC-03) of the violation to involve a deficiency in its holistic framework for managing COs. To preclude recurrence of the violation related to this contributing cause, TVA agrees to the following corrective actions:

a) Within four months of issuance of the CO, TVA shall conduct a review of all previously issued COs. TVA shall submit the results of the review to the NRC within one month of completion of the review. The review shall entail:

- i) an assessment of the safety impact of CC-03 on the nuclear fleet;
- ii) an evaluation of compliance with previously issued COs,
- iii) periods of time when TVA was not in compliance with previously issued COs,
- iv) corrective actions taken and planned and timeline to restore compliance, and corrective actions taken and planned to preclude recurrence.

b) Within six months of issuance of the CO, TVA shall revise corporate and site procedures, as appropriate, to ensure that current and future CO requirements continue to be met.

c) Three years after issuance of the CO (+/- 3 months), TVA will perform an assessment of the effectiveness of corrective actions taken in response to CC-03. Any identified violations or other deficiencies will be incorporated into the CAP. This assessment will be made available for NRC review.

2) Upon completion of the terms of items of the CO, TVA will provide the NRC with a letter discussing its basis for concluding that the Order has been satisfied.

3) The Regional Administrator, NRC Region II, may relax or rescind, in writing, any of



the above conditions upon a showing by TVA of good cause.

## VI

In accordance with 10 CFR 2.202 and 10 CFR 2.309, any person adversely affected by this CO, other than TVA, may request a hearing within 30 calendar days of the date of issuance of this CO. Where good cause is shown, consideration will be given to extending the time to request a hearing. A request for extension of time must be made in writing to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, DC 20555, and include a statement of good cause for the extension.

All documents filed in NRC adjudicatory proceedings, including a request for hearing, a petition for leave to intervene, any motion or other document filed in the proceeding prior to the submission of a request for hearing or petition to intervene, and documents filed by interested governmental entities participating under 10 CFR 2.315(c), must be filed in accordance with the NRC E-Filing rule (72 FR 49139, August 28, 2007, as amended at 77 FR 46562, August 3, 2012). The E-Filing process requires participants to submit and serve all adjudicatory documents over the internet, or in some cases to mail copies on electronic storage media. Participants may not submit paper copies of their filings unless they seek an exemption in accordance with the procedures described below.

To comply with the procedural requirements of E-Filing, at least ten (10) days prior to the filing deadline, the participant should contact the Office of the Secretary by e-mail at [hearing.docket@nrc.gov](mailto:hearing.docket@nrc.gov), or by telephone at (301) 415-1677, to request (1) a digital identification (ID) certificate, which allows the participant (or its counsel or representative) to digitally sign documents and access the E-Submittal server for any proceeding in which it is

participating; and (2) advise the Secretary that the participant will be submitting a request or petition for hearing (even in instances in which the participant, or its counsel or representative, already holds an NRC-issued digital ID certificate). Based upon this information, the Secretary will establish an electronic docket for the hearing in this proceeding if the Secretary has not already established an electronic docket.

Information about applying for a digital ID certificate is available on NRC's public Web site at <https://www.nrc.gov/site-help/e-submittals/getting-started.html>. System requirements for accessing the E-Submittal server are detailed in NRC's "Guidance for Electronic Submission," which is available on the agency's public Web site at <https://www.nrc.gov/site-help/e-submittals.html>. Participants may attempt to use other software not listed on the Web site, but should note that the NRC's E-Filing system does not support unlisted software, and the NRC Electronic Filing Help Desk will not be able to offer assistance in using unlisted software.

If a participant is electronically submitting a document to the NRC in accordance with the E-Filing rule, the participant must file the document using the NRC's online, Web-based submission form. In order to serve documents through the Electronic Information Exchange System (EIE), users will be required to install a Web browser plug-in from the NRC Web site. Further information on the Web-based submission form, including the installation of the Web browser plug-in, is available on the NRC's public Web site at <https://www.nrc.gov/site-help/e-submittals.html>.

Once a participant has obtained a digital ID certificate and a docket has been created, the participant can then submit a request for hearing or petition for leave to intervene through the EIE System. Submissions should be in Portable Document Format (PDF) in accordance with

NRC guidance available on the NRC public Web site at <https://www.nrc.gov/site-help/e-submittals.html>. A filing is considered complete at the time the documents are submitted through the NRC's E-Filing system. To be timely, an electronic filing must be submitted to the E-Filing system no later than 11:59 p.m. Eastern Time on the due date. Upon receipt of a transmission, the E-Filing system time-stamps the document and sends the submitter an e-mail notice confirming receipt of the document. The E-Filing system also distributes an e-mail notice that provides access to the document to the NRC Office of the General Counsel and any others who have advised the Office of the Secretary that they wish to participate in the proceeding, so that the filer need not serve the documents on those participants separately. Therefore, applicants and other participants (or their counsel or representative) must apply for and receive a digital ID certificate before a hearing request/petition to intervene is filed so that they can obtain access to the document via the E-Filing system.

A person filing electronically using the agency's adjudicatory E-Filing system may seek assistance by contacting the NRC Electronic Filing Help Desk through the "Contact Us" link located on the NRC Web site at <https://www.nrc.gov/site-help/e-submittals.html>, by e-mail at [MSHD.Resource@nrc.gov](mailto:MSHD.Resource@nrc.gov), or by a toll-free call at (866) 672-7640. The NRC Electronic Filing Help Desk is available between 9 a.m. and 6 p.m., Eastern Time, Monday through Friday, excluding government holidays.

Participants who believe that they have a good cause for not submitting documents electronically must file an exemption request, in accordance with 10 CFR 2.302(g), with their initial paper filing stating why there is good cause for not filing electronically and requesting authorization to continue to submit documents in paper format. Such filings must be submitted by: (1) first class mail addressed to the Office of the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, Attention: Rulemaking and

Adjudications Staff; or (2) courier, express mail, or expedited delivery service to the Office of the Secretary, Sixteenth Floor, One White Flint North, 11555 Rockville Pike, Rockville, Maryland, 20852, Attention: Rulemaking and Adjudications Staff. Participants filing a document in this manner are responsible for serving the document on all other participants. Filing is considered complete by first-class mail as of the time of deposit in the mail, or by courier, express mail, or expedited delivery service upon depositing the document with the provider of the service. A presiding officer, having granted an exemption request from using E-Filing, may require a participant or party to use E-Filing if the presiding officer subsequently determines that the reason for granting the exemption from use of E-Filing no longer exists.

Documents submitted in adjudicatory proceedings will appear in NRC's electronic hearing docket which is available to the public at <https://adams.nrc.gov/ehd/>, unless excluded pursuant to an order of the Commission, or the presiding officer. Participants are requested not to include personal privacy information, such as social security numbers, home addresses, or home phone numbers in their filings, unless an NRC regulation or other law requires submission of such information. With respect to copyrighted works, except for limited excerpts that serve the purpose of the adjudicatory filings and would constitute a Fair Use application, participants are requested not to include copyrighted materials in their submission.

If a person (other than TVA) requests a hearing, that person shall set forth with particularity the manner in which his interest is adversely affected by this CO and shall address the criteria set forth in 10 CFR 2.309(d) and (f).

If a hearing is requested by a person whose interest is adversely affected, the Commission will issue an order designating the time and place of any hearing. If a hearing is held, the issue to be considered at such hearing shall be whether this CO should be sustained.

In the absence of any request for hearing, or written approval of an extension of time in which to request a hearing, the provisions specified in Section V above shall be final 30 days from the date of this CO without further order or proceedings. If an extension of time for requesting a

hearing has been approved, the provisions specified in Section V shall be final when the extension expires if a hearing request has not been received.

Dated at Atlanta, Georgia, this 27<sup>th</sup> day of July 2017.

For the Nuclear Regulatory Commission

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Leonard D. Wert  
Deputy Regional Administrator for Operations