



1101 Market Street, Chattanooga, Tennessee 37402

CNL-22-004

October 5, 2022

10 CFR 2.202
EA-17-022

ATTN: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Browns Ferry Nuclear Plant, Units 1, 2, and 3
Renewed Facility Operating License Nos. DPR-33, DPR-52, and DPR-68
NRC Docket Nos. 50-259, 50-260, and 50-296

Sequoyah Nuclear Plant, Units 1 and 2
Renewed Facility Operating License Nos. DPR-77 and DPR-79
NRC Docket Nos. 50-327 and 50-328

Watts Bar Nuclear Plant, Units 1 and 2
Facility Operating License Nos. NPF-90 and NPF-96
NRC Docket Nos. 50-390 and 50-391

Subject: **Completion of Actions Required by NRC Confirmatory Order EA-17-022**

References: Letter from NRC to TVA, "Confirmatory Order (Nuclear Regulatory Commission Inspection Report 05000390/2016013, 05000391/2016013)," July 27, 2017 (ML17208A596), with the enclosed TVA Confirmatory Order (ML17208A647) and Signed Hearing Waiver (ML17208A675)

The above referenced Confirmatory Order from the Nuclear Regulatory Commission (NRC) to Tennessee Valley Authority (TVA) confirms commitments to complete corrective actions and enhancements agreed upon in an alternative dispute resolution (ADR) session held on June 9, 2017. Sections I through IV of the Order provide the background and basis for the Order. Section V of the Order specifies the actions that modify the licenses for Browns Ferry, Sequoyah, and Watts Bar Nuclear Plants.

The purpose of this letter is to satisfy the Confirmatory Order action V.1.f.2 to provide TVA's basis for concluding that the Order has been satisfied. TVA entered the Confirmatory Order actions into the corrective action program and completed the associated Condition Report (CR) actions. Based on the completion of these activities, TVA concludes that the Confirmatory Order has been satisfied. A summary of the actions taken is provided below.

Actions Taken

1. TVA has completed the Communication actions specified in Section V.1.a, including informing supervisors, employees, and contractors of the protections for those who perform NRC regulated activities, specifically addressing nuclear safety culture, a safety conscious work environment, and TVA's Adverse Employment Action Process. TVA has also shared its experiences and insights regarding the importance of properly implementing an adverse employment action process with other nuclear utilities at a nuclear industry meeting.
2. TVA has completed the Training actions specified in V.1.b, including initial and refresher training on employee protection and safety conscious work environment.
3. TVA has completed development of a uniform work process to ensure independent management review of proposed adverse employment actions.
4. TVA has obtained independent audits for three years to evaluate TVA's compliance with the Adverse Employment Action Process.
5. TVA has performed independent nuclear safety culture assessments and maintains a nuclear safety culture monitoring panel (NSCMP). TVA has developed initial and refresher training for the NSCMP members.
6. TVA has evaluated and reported compliance with previously issued COs, implemented new procedural requirements for management of NRC confirmatory orders, and assessed effectiveness of corrective actions to manage CO compliance.

The enclosure to this letter provides details of the actions specified in the confirmatory order and the actions taken by TVA in response to the order for each action.

There are no new regulatory commitments associated with this submittal. Please address any questions regarding this submittal to Stuart Rymer, Director, Nuclear Regulatory Affairs (Acting) at slymer@tva.gov.

I declare under penalty of perjury that the foregoing is true and correct. Executed on this 5th day of October 2022.

Respectfully,



Digitally signed by Rearden,
Pamela S
Date: 2022.10.05 09:53:05 -04'00'

James Barstow
Vice President, Nuclear Regulatory Affairs & Support Services

Enclosure: Basis for Considering TVA Actions in Response to EA-17-022 Complete

cc: See Page 3

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cc: (with Enclosure):

NRC Regional Administrator - Region II
NRC Senior Resident Inspector - Browns Ferry Nuclear Plant
NRC Senior Resident Inspector - Sequoyah Nuclear Plant
NRC Senior Resident Inspector - Watts Bar Nuclear Plant
NRC Project Manager - Browns Ferry Nuclear Plant
NRC Project Manager - Sequoyah Nuclear Plant
NRC Project Manager - Watts Bar Nuclear Plant

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Basis for Considering TVA Actions in Response to EA-17-022 Complete

EA-17-022 Section V Requirement Statement	CR Action and Actions Taken in Response
<p>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:</p>	<p>1322419-041</p> <p>In anticipation of the confirmatory order, the Tennessee Valley Authority (TVA) established a CO response team and plan for implementation.</p>
<p>1. TVA agrees to implement the following corrective actions and enhancements:</p>	
<p>a. Communication</p>	
<p>1) By no later than three months after issuance of the CO, the TVA CNO shall:</p>	
<p>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.</p>	<p>1322419-001</p> <p>TVA informed all working status TVA nuclear first line supervisory employees and above, as of the date of the CO, about employee protections and the need to maintain an environment free from even the appearance of retaliation or discrimination. This was accomplished by the distribution of a TVA Nuclear Fleet Focus communication sent on August 14, 2017 and September 18, 2017.</p>
<p>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</p>	<p>1322419-002</p> <p>A video briefing by the TVA Chief Nuclear Officer (CNO) that addresses the five elements specified in the CO was provided for all working status TVA nuclear employees and contractors who perform Nuclear Regulatory Commission (NRC) regulated activities. The video was</p>

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<p>activities, describing the following:</p> <ol style="list-style-type: none"> 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. 	<p>provided in TVA's Learning Management System (LMS) as LMS 50005782, "Enhancing Compliance with TVA Nuclear's Adverse Employment Action Process."</p> <p>NRC was notified by email of the availability of this video in LMS, and although the LMS item has been inactivated, a link to the video can be obtained by contacting TVA Nuclear Regulatory Affairs.</p>
<p>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.</p>	<p>1322419-003</p> <p>All individuals in the CNO Video target population completed the assignment as documented by the tracking spreadsheet and within LMS. The personnel identified for the target population included all TVA nuclear employees and contractors who perform NRC regulated activities who were in a working status as of the date of the confirmatory order, July 27, 2017. Additional individuals included human resources staff with potential for involvement in the adverse employment action process, employee concerns program staff, contract technical stewards</p>

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	for nuclear-related work activities, and personnel in the TVA Office of the General Counsel who are engaged in nuclear related work activities.
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.	1322419-004 Each site Vice President conducted All Hands meetings at each TVA nuclear site (BFN, SQN, and WBN) and Corporate. During the meetings employees were allowed the opportunity to provide feedback and ask questions of management related to the communications about employee protections, the need to maintain an environment free from even the appearance of retaliation or discrimination, and the CNO video briefing.

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EA-17-022 Section V Requirement Statement	CR Action and Actions Taken in Response
<p>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).</p>	<p>1322419-005</p> <p>Issued revised procedures NPG-SPP-01.7, Nuclear Safety Culture, NPG-SPP-01.7.2, Nuclear Safety Culture Monitoring, and NPG-SPP-01.7.4, Adverse Employment Action and the Executive Review Board. The procedures were source noted to reflect the requirement that "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)."</p>
<p>a) TVA shall make updated policies and guidance available to the NRC, and</p>	<p>These procedures are maintained in TVA's Enterprise Content Management (ECM) system and are available to NRC upon request.</p> <p>1322419-042</p>
<p>b) TVA will make updated policies and guidance available to employees, and inform employees where related materials are located.</p>	<p>A TVA Nuclear "Keeping Current" bulletin was sent to TVA Nuclear employees on November 21, 2017 to inform employees of the revised Nuclear Safety Culture and Nuclear Safety Culture Monitoring procedures (NPG-SPP-1.7, Nuclear Safety Culture and NPG-SPP-01.7.2, Nuclear Safety Culture Monitoring) and where the procedures can be accessed.</p>

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<p>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.</p>	<p>1322419-006</p> <p>TVA's Senior Manager of Fleet Regulatory Operations shared TVA's experience and insights with respect to the importance of properly implementing an Adverse Employment Action Process and shared lessons learned and actions taken with industry peers at the Regional Utilities Group (RUG II) Meeting on November 29, 2017.</p>
<p>b. Training</p>	<p>1322419-007</p> <p>TVA contracted an independent third party 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 on August 7, 2017 to assist TVA in development of initial and refresher training on employee protection and safety conscious work environment.</p>
<p>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.</p>	

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<p>a) Training shall include:</p> <ul style="list-style-type: none">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:	<p>This contract resulted in development of HRD099.031-VENDOR for vendor-led training and in HRD099.031 for TVA-led training for both initial and refresher training. The training includes elements specified in the order and emphasizes management role in promoting SCWE, including support for use of multiple paths for problem identification and resolution.</p>

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<p>(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;</p> <p>(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.</p>	
<p>b) The training material shall be available to the NRC upon request.</p>	<p>The training material is maintained in ECM and is available to the NRC upon request.</p>
<p>c) Training records shall be retained consistent with applicable TVA record retention policies and be made available to the NRC upon request.</p>	<p>This training is offered and tracked through TVA's Learning Management System (LMS) and records are available to NRC upon request.</p>

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<p>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.</p>	<p>1322419-008</p> <p>The initial training was accomplished using either HRD099.031, Management Actions to Promote a Safety Conscious Work Environment, or the vendor-led version, HRD099.031-Vendor.</p> <p>The requirements going forward have been incorporated in TPD-SCWE, Safety Conscious Work Environment Training Program Description, which establishes requirements for initial and continuing training on an annual basis to comply with NRC CO EA-17-022. TPD-NSP, Nuclear Supervisory Personnel Training Program Description, also specifies the TPD-SCWE curriculum for new supervisors. This training is tracked in LMS, and records are available upon request.</p>
<p>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.</p>	<p>1322419-009</p> <p>The requirement for new supervisors to receive training within 90 days has been placed in governance via TPD-NSP, Nuclear Supervisor Program Training Program Description, and TPD-SCWE, Safety Conscious Work Environment Training Program Description. New supervisors are required to either attend the classroom module, HRD099.031, within 90 days OR complete the CBT version and complete a discussion with OGC personnel within 90 days AND complete the classroom module within the first year.</p>

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<p>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.</p>	<p>1322419-010</p> <p>The initial training for Watts Bar and Office of the General Counsel personnel was conducted by the vendor in the vendor-led version of the training, HRD099.031-Vendor. A few of the other employees specified in V.1.b.2 also attended the vendor sessions. More than 95% of those other employees attended HRD099.031 led by Office of the General Counsel personnel who are engaged in nuclear related work activities.</p> <p>The requirements going forward are captured in TPD-NSP, Nuclear Supervisor Program Training Program Description, and TPD-SCWE, Safety Conscious Work Environment Training Program Description. Compliance with the training requirements is managed in LMS, with regular Fleet LMS reports for new supervisors' 90-day requirements, and annual reporting for the continuing training.</p>

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c. Work Processes	
<p>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.</p>	<p>1322419-011</p> <p>Issued new procedure, NPG-SPP-01.7.4, Adverse Employment Action and the Executive Review Board, that contains the requirements and source notes for TVA to maintain a uniform process to ensure independent management review of all proposed adverse actions in accordance with the procedure. This process is executed by an Executive Review Board (ERB) chaired by a TVA Vice President or above.</p> <p>The ERB reviews proposed adverse employment actions, including suspensions (one or more days off without pay), terminations for cause, involuntary reduction in force, and no-fault terminations of employment, before taking the actions.</p>
<p>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.</p>	<p>1322419-012</p> <p>Revised the Adverse Employment Action procedure, NPG-SPP-01.7.4, 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.</p>
<p>3) By no later than three years after the issuance of the CO, TVA shall perform in-person benchmarking of at least two external</p>	<p>1322419-013</p>

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<p>organizations in the nuclear industry with developed adverse employment action processes, specifically including ERBs.</p>	<p>Benchmarking was conducted in the following locations as potentially similar to TVA.</p> <p>Benchmarking CR 1529234 compared the Nuclear Industry AEA Processes at Wolf Creek and Diablo Canyon to TVA Nuclear AEA/ERB process.</p> <p>Benchmarking CR 1612770 compared the Oak Ridge AEA/Disciplinary process to the TVA Nuclear AEA/ERB process.</p> <p>Benchmarking CR 1612145 reviewed and compared Nuclear Industry AEA Processes at INPO on February 27 and April 21, 2020, with NSC representatives, as part of an NSC forum.</p> <p>These benchmarks were completed by June 2020, within three years of CO issuance.</p>
<p>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.</p>	<p>1322419-014</p> <p>Performance appraisal assessment criteria has been established 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 has been documented in their performance appraisals for the 2017 FY.</p> <p>1322419-015</p> <p>Performance appraisal assessment criteria has been established for nuclear vice presidents and plant managers, to evaluate if these individuals are meeting expectations with regard to employee protection,</p>

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	<p>nuclear safety culture, and safety conscious work environment for their respective organizations. The assessment criteria and results of the evaluation has been documented in their performance appraisals for the 2018 FY.</p> <p>1322419-016</p> <p>Performance appraisal assessment criteria has been established 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.</p> <p>The assessment criteria and results of the evaluation have been documented in their performance appraisals for the 2019 FY.</p> <p>However, two individuals were promoted to plant managers in February 2019. Their performance appraisals were not updated with the required criteria in compliance with the CO. CR 1555223 was initiated to document identification and resolution of this issue. Performance appraisals for the two Plant Managers were updated with the required criteria and associated evaluation.</p>
<p>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</p>	<p>1322419-017</p> <p>Revised the Nuclear Safety Culture Monitoring guidance in NPG-SPP-01.7.2 in November 2017 (Rev. 10) to incorporate a requirement for the Senior Leadership Team to conduct a review of Adverse Employment</p>

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<p>Actions to identify potential trends that could impact an organization's nuclear safety culture.</p>	<p>Actions to identify potential trends that could impact an organization's nuclear safety culture.</p> <p>Additionally, NPG-SPP-01.7.4 Adverse Employment Action and the Executive Review Board was initially issued in October 2017 to replace NPG-SPP-11.10 and establish a process where Sr. Management reviews adverse actions, and reports are provided to the Nuclear Safety Culture Monitoring Panel (NSCMP) and Nuclear Safety Culture Peer Team (NSCPT).</p>
<p>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.</p>	<p>1322419-018</p> <p>TVA reinforced to personnel who may have engaged in work associated with NRC-regulated activities departing the company that they 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 by written communication on 9/25/2017 via the "TVA Nuclear Keeping Current" email distribution.</p>
<p>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</p>	<p>1322419-019</p> <p>Revised and implemented NPG-SPP-01.7.2 Nuclear Safety Culture Monitoring in November 2017 (Rev 10). Currently Rev 15, the procedure establishes procedural guidance for a safety culture peer team outlining</p>

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performance and safety conscious work environment at all TVA nuclear locations.	<p>additional oversight specifically focused on fleet wide safety culture performance and safety conscious work environment at all TVA nuclear locations. The procedure states the following:</p> <p>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.</p> <p>b) The peer team guidance is informed by the Nuclear Energy Institute (NEI) 09-07, Fostering a Healthy Nuclear Safety Culture, Rev. 1.</p> <p>c) The initial implementation of the peer team will be advised by an external consultant with extensive nuclear experience.</p>
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	<p>1322419-020 through -027</p> <p>An independent third-party 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 who was independent of TVA, and had no direct, previous involvement with implementation of the adverse employment action process at TVA performed quarterly audits for the first year following issuance of the confirmatory order and semiannual audits for the subsequent two years. These reports were provided to the</p>

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<p>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.</p>	<p>CNO. Recommendations from these audits were addressed in condition reports and used to further develop TVA's Adverse Employment Action Process. By the end of the final independent audit period on June 30, 2020, all audit recommendations had been closed, and there were no open recommendations. These audit reports and condition reports are available for NRC review.</p>
<p>2) By no later than three months after the issuance of the CO, TVA shall modify its</p>	<p>1322419-028</p>

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<p>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.</p>	<p>TVA revised NPG-SPP-01.7.1 and NPG-SPP-01.7.4 in October 2017 to modify the process for conducting pulsing surveys such that it is informed by the adverse action process. These procedures require pulsing surveys to be conducted, as appropriate, shortly after a SCWE mitigation plan has been implemented to assess whether additional mitigation actions are necessary.</p>
<p>e. Assess and Monitor Nuclear Safety Culture and Safety Conscious Work Environment</p>	
<p>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</p>	<p>1322419-029</p> <p>An independent nuclear safety culture assessment was completed at WBN by the Oak Ridge Associated Universities in 2017. TVA compared the results of the assessment with prior survey results to identify trends and develop corrective actions for the survey and the comparison.</p> <p>1322419-030</p> <p>This action implemented the BFN, SQN and COC FY18 assessments. The assessments identified NSC characteristics for the sites and across the fleet and resulted in recommendations to improve safety culture for each site. CRs were generated to track TVA's evaluation of the results and development and implementation of corrective actions for each site and the TVA fleet to address weaknesses identified through the assessments.</p>

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<p>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.</p>	<p>1322419-031</p> <p>An independent nuclear safety culture assessment was completed at WBN by the Oak Ridge Associated Universities approximately two years after the first assessment at WBN. TVA compared the results of the assessment with prior survey results in an effort to identify trends. Actions to respond to recommendations from the survey results were tracked in CRs 1551540, 1551546, 1551547, 1551549, and 1551550.</p> <p>1322419-032</p> <p>An independent nuclear safety culture assessment at BFN, SQN and Corporate was completed within approximately two years of their first assessments. TVA compared the results of the assessment with the prior survey results in an effort to identify trends. Actions to respond to recommendations from the survey results and the comparison were tracked in CRs 1575596, 1557934, and 1565109.</p>
<p>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.</p>	<p>1322419-033</p> <p>TVA revised NPG-SPP-01.7.2 Nuclear Safety Culture Monitoring to source note the statement that 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.</p>
<p>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</p>	<p>1322419-034, -035</p> <p>TVA procured development of initial and refresher training for members of the Nuclear Safety Culture Monitoring Panel from an independent third-party familiar with nuclear safety culture, behavioral indicators of a</p>

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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.	declining safety culture, as well as actions to address a declining safety culture. The training developed has been assigned to the NSCMP/SLT quorum members via LMS (CBT # 50005933) and completed as applicable. The requirement to take the training has been specified in the governing procedure NPG-SPP-01.7.2.
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:	1322419-036, -037 TVA completed a review of previously issued Confirmatory Orders and submitted the results of that review in a letter to NRC on December 27, 2017 (ADAMS ML17361A395). TVA documented the identified non-compliances in condition report CR 1362399. The non-compliances either occurred in the past or were administrative, procedural, and/or training related. The non-compliances had no substantive safety impact. Corrective actions were provided in CR 1362399.
i) an assessment of the safety impact of CC-03 on the nuclear fleet;	
ii) an evaluation of compliance with previously issued COs,	

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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.	<p>1322419-038</p> <p>TVA revised NPG-SPP-03.12, "Technical Specifications/Licenses and Amendments," to address NRC Confirmatory Orders by adding requirements in section 3.2.8 to address planning, documenting, and tracking order actions. TVA addresses license management for all its nuclear sites with this corporate SPP, so it is not necessary to change any site procedures to ensure that current and future CO requirements continue to be met. These changes were incorporated in Revision 4 of NPG-SPP-03.12, effective January 5, 2018, and are still current in Revision 6.</p>
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.	<p>1322419-039</p> <p>TVA reviewed confirmatory order documentation after implementation of CC-03 corrective actions to assess effectiveness of those actions and did not identify any order violations. This review was documented in CR 1322419-039 and in the subsequently documented self-assessment CR 1613639, both of which are available in Maximo and can be provided to NRC upon request.</p>

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	<p>TVA procedures and training were reviewed along with NRC Orders for TVA Nuclear sites to determine whether the corrective actions taken in response to the lack of a holistic program to address confirmatory orders have been effective.</p> <p>As there have been no additional orders since EA-17-022, it was not possible to fully evaluate application of the new governance to a new order. However, EA-17-022 appeared to benefit from the new approach. Existing orders were verified to be in TVA's document management system as part of the Technical Specifications manuals for each site.</p> <p>Procedures were reviewed to determine whether they had appropriately source-noted the requirements from orders to ensure that they would not be inadvertently dropped as a result of future changes. Confirmatory order requirements for procedures and training were checked to confirm that they are still in place and appropriately identified with the order requiring the action.</p> <p>It was noted that Training documents did not have a consistent approach to identify NRC confirmatory orders as requirements. CR 1624268 was initiated to consider improvements and resulted in adding a "commitments" section to training program description template where requirements could be added to assure sustainability.</p> <p>The confirmatory order management program identified in NPG-SPP-03.12 appeared to be effective at ensuring order requirements are maintained.</p> <p>No violations of NRC confirmatory order requirements were identified in this review. This review was subsequently documented as self-assessment CR 1613639.</p>

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	<p>A follow-up self-assessment, CR 1747574, was performed in 2022, which also found that program changes had been effective and did not identify any violations of confirmatory order requirements. This assessment identified one case of inappropriate removal of a reference to a confirmatory order in a procedure source note that did not affect order compliance, one minor reference error, and continuing opportunity to improve awareness of confirmatory order compliance management. These issues are documented in CRs 1798237, 1800645, and 1800650. The source note reference correction has been made and is currently in the workflow process to issue.</p>
<p>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.</p>	<p>1322419-040 This letter is the fulfillment of this action.</p>
<p>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.</p>	<p>N/A</p>