



Tennessee Valley Authority, 1101 Market Street, Chattanooga, Tennessee 37402

CNL-16-012

January 14, 2016

10 CFR 50.54(q)
10 CFR 72.44(f)

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, 50-296, and 72-052

Sequoyah Nuclear Plant, Units 1 and 2
Renewed Facility Operating License Nos. DPR-77 and DPR-79
NRC Docket Nos. 50-327, 50-328, and 72-034

Watts Bar Nuclear Plant, Units 1 and 2
Facility Operating License Nos. NPF-90 and NPF-96
NRC Docket Nos. 50-390, 50-391, and 72-1048

**SUBJECT: TENNESSEE VALLEY AUTHORITY - RADIOLOGICAL EMERGENCY PLAN
REVISION AND CENTRAL EMERGENCY CONTROL CENTER EMERGENCY
PLAN IMPLEMENTING PROCEDURE REVISION**

In accordance with the requirements of Title 10 of the *Code of Federal Regulations* (10 CFR) 50.54(q) and 10 CFR 72.44(f), enclosed is a report of changes made in Revision 106 of the Tennessee Valley Authority (TVA) Radiological Emergency Plan (REP). Revision 106 of the Generic REP became effective on December 18, 2015.

In addition to the revision to the Generic REP, two plant-specific appendices of the REP and one Central Emergency Control Center (CECC) Emergency Plan Implementing Procedure (EPIP) were revised. The REP Appendix A is applicable to the Browns Ferry Nuclear Plant, Units 1, 2, and 3. Revision 106 of REP Appendix A became effective on December 18, 2015. REP Appendix C is applicable to the Watts Bar Nuclear Plant (WBN), Units 1 and 2. Revision 109 of REP Appendix C became effective on December 17, 2015. The CECC EPIP-3, "Operations Duty Specialist Procedure for Alert, Site Area Emergency, or General Emergency," Revision 48, became effective December 15, 2015.

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The enclosure provides a summary of the changes and the analysis performed that concluded the changes to the REP, REP Appendices, and CECC EPIP-3 do not reduce the effectiveness of the plan, and the plan, as revised, continues to meet the requirements in Appendix E to 10 CFR 50 and the planning standards of 10 CFR 50.47(b).

There are no new regulatory commitments in this letter. If you have any questions regarding this submittal, please contact Edward D. Schrull at (423) 751-3850.

Respectfully,



J. W. Shea
Vice President, Nuclear Licensing

Enclosure: Summary of the Changes and Analysis for Radiological Emergency Plan and Central Emergency Control Center Emergency Plan Implementing Procedure Revisions

cc (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
NRR Project Manager - Browns Ferry Nuclear Plant
NRR Project Manager - Sequoyah Nuclear Plant
NRR Project Manager - Watts Bar Nuclear Plant
NRC Director - Division of Spent Fuel Management, NMSS

Enclosure

**Summary of the Changes and Analysis for Radiological Emergency Plan and Central
Emergency Control Center Emergency Plan Implementing Procedure Revisions**

Affected Document	Description of Changes	Summary of Analysis of Change
REP, Generic Revision 106	The location of the BFN Joint Information Center (JIC) was changed.	<p>The movement of the JIC does not compromise the ability of the JIC to perform its function. The new JIC can be activated in a more timely manner because the facility is already set up. The old JIC required significant setup in order to become operational. The new facility's primary purpose is as a JIC. The new JIC also contains complete TVA networking capabilities as well as updates to equipment and technology (TVs, copy machines, etc.), all of which represent improvements over the old JIC. Although the total number of land lines in the facility has been reduced, there had been few updates to the facility layout since the advent of cell phones and it is anticipated that the majority of news media will provide their own cell phones and other communications devices. Therefore, there is no reduction in the ability to communicate information in a timely manner. Additionally, the new JIC facility is owned by TVA, so there are no issues with scheduling or access to the facility.</p> <p>The change does not constitute a reduction in effectiveness.</p>
REP, Generic Revision 106	The JIC Liaison position was removed.	<p>The JIC Liaison was previously responsible for contacting responding agencies and transmitting information for coordination. These functions are performed primarily by the Public Information Manager (PIM) in conjunction with the TVA public relations organization. The proposed change continues to ensure the capability to perform the functions. Due to advances in technology, the PIM is able to make multiple notifications and provide information to multiple individuals simultaneously. Therefore, there is no effect on timeliness of these notifications.</p> <p>The establishment and maintenance of information flow from the JIC or Site Communications to the CECC is now primarily performed via email and a hosted internet solution. Because this information flow now occurs between the various positions and facilities without any coordination effort by the JIC Liaison, there is improved capability to perform the function.</p> <p>The JIC Liaison responsibility to coordinate information with employee communications is performed by the PIM. This change adds no new responsibilities to the PIM because distribution of information to employee communications occurs as part of a task that the PIM was already performing.</p> <p>The change does not constitute a reduction in effectiveness.</p>

Enclosure

Summary of the Changes and Analysis for Radiological Emergency Plan and Central Emergency Control Center Emergency Plan Implementing Procedure Revisions

Affected Document	Description of Changes	Summary of Analysis of Change
REP, Generic Revision 106	Language referencing "Plan Effectiveness Determinations" (PEDs) was updated to refer to "NPG Emergency Plan Effectiveness Reviews [10 CFR 50.54(q)]."	<p>The language was revised to reflect changes to 10 CFR 50.54(q) described in Regulatory Guide 1.219 Section B. This change to the REP does not affect any 10 CFR 50.47(b) planning standard or site-specific Emergency Planning Commitment.</p> <p>The change does not constitute a reduction in effectiveness.</p>
REP, Generic Revision 106	A reference was added in Section 16.3 to EPDP-3, "Emergency Plan Exercises and Preparedness Drills."	<p>The addition of this reference is the result of an activity that has prior NRC approval. TVA committed to revise the REP to include reference to TVA procedure EPDP-3 as a result of an NRC request for additional information response related to the licensing of Watts Bar Unit 2 (WBN2).</p> <p>In NUREG-0847, Supplement 28, the NRC relied upon the review of EPDP-3 to conclude TVA's drill and exercise program met the requirements of 10 CFR 50, Appendix E, Section IV.F.2.</p>
REP, Generic Revision 106	<p>The following changes were made:</p> <ul style="list-style-type: none"> • Changed title of VP, Support Services to GM, Support Services • Corrected the reference to Figure 3-1 in Section 3.3 • Change PIO Manager to PIM throughout procedure • Changed PIO Writer to Public Information Writer (PIW) throughout procedure • Changed section references to electronic cross references and capitalized "Section" where used prior to a section reference • Corrected spelling of "noncontaminated" • Added commitment references to Sections 8.1.1 and 8.1.2 in accordance with TVA procedures 	The changes are editorial or typographical.
REP Appendix A Revision 106	The reference in Section A.3.6 was corrected from Figure A-4 to Figure A-5. The reference in Table 8.2-U was corrected from Nextel radios to portable radios.	The changes are editorial or typographical.

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REP Appendix C Revision 109	<p>The following errors and inaccuracies in Emergency Action Levels (EALs) were corrected:</p> <ul style="list-style-type: none"> • Ultimate Heat Sink Temperature - EAL 5.5 - The temperature was revised from 83 degrees F to 85 degrees F to align with Essential Raw Cooling Water (ERCW) design basis documents and Technical Specification (TS) 3.7.9. • "Loss" to "Potential Loss" - EAL Initiating Condition (IC) 1.3.5 - Removed erroneous reference to "Loss" IC, because it is not applicable in this EAL. • FR-H.1 (Loss of Heat Sink) flow rates for WBN2 - EAL ICs 1.1.1 and 1.2.1 and EALs 2.2-S and 2.3-G - Watts Bar Unit 2 unit-specific value for Aux Feedwater flow was included because it differs from the Unit 1 value. • "Containment" to "Reactor Building" - EAL 2.8-A - Revises the terminology for applicable areas where visible damage from turbine projectiles would meet the EAL criteria. This change aligns with EALs 4.1-A, 4.1-U, 4.2-A, 4.3-A, 4.3-U, 4.4-A, 4.4-U, 5.2-A, and 5.3-A, and NUMARC/NESP-007. • Location of 1,2-RE-90-61 - Table 7-2 - Corrects the location of radiation monitors. 	<p>The changes correct errors and inaccuracies in the EALs. These changes improve the effectiveness of the REP by improving the accuracy of emergency declarations. There is continued capability to perform the required functions. None of the changes adversely affects the timeliness associated with declaring an event.</p> <p>The changes do not constitute a reduction in effectiveness.</p>
REP Appendix C Revision 109	<p>The following changes were made:</p> <ul style="list-style-type: none"> • Corrected spelling of "judgment" throughout procedure • Added a degree symbol for TS 3.1.2 reference in EAL 6.1-A • Added a second mR/h in the units for Steam Generator discharge in Table 7.1 • Corrected spelling of "description" in EAL 2.3-A • Deleted "(1)" from EAL 2.4-U and added a space between E and μ. • Un-bolded all mode applicability lists for EAL 3.1 • Added spaces between descriptors in EAL 7.1-A • Added spaces between values and associated rad. monitors in IC 1.3.5. 	<p>The changes are editorial or typographical.</p>

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Affected Document	Description of Changes	Summary of Analysis of Change
REP Appendix C Revision 109	Section C.5.1 was corrected to align with Figure 1-C regarding the number of Assistant Unit Operators (AUOs) in the minimum shift component, reflecting the updated unit shift staffing requirements following issuance of the WBN2 Operating License.	The proposed change improves the effectiveness of the REP because it corrects a discrepancy and ensures that the appropriate number of individuals are available in the event of an emergency. This change does not affect the timeliness of staffing any of the emergency facilities and deals solely with the number of on-shift personnel. All required functions continue to be met and are more correctly described in the proposed change. The change does not constitute a reduction in effectiveness.
EPIP-3, Revision 48	The following changes were made: <ul style="list-style-type: none">• The Revision Log was converted to the new template format.• Section 4.2 was reformatted to correct the step logic.• Position titles in Step 4.1[4] were revised to match TEENS and placed in alphabetical order.	The changes are editorial or typographical.