



Tennessee Valley Authority, Post Office Box 2000, Soddy-Daisy, Tennessee 37379

February 1, 2000

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

Gentlemen:

In the Matter of) Docket Nos. 50-327
Tennessee Valley Authority) 50-328

**SEQUOYAH NUCLEAR PLANT (SQN) - REVISION TO THE TECHNICAL
REQUIREMENTS MANUAL (TRM) (REVISIONS 4, 5, 6, AND 7)**

The purpose of this letter is to inform NRC of changes that we have incorporated into the TRM. Specifically, TRM Revision 4 added the requirements for seismic instrumentation to Section 3.3.3.3 of the TRM. This revision was performed in conjunction with SQN technical specifications (TS) Amendments 245 and 236 for Units 1 and 2, respectively, and provided for the relocation of these requirements to the TRM. Revision 5 of the TRM added the requirements for flood protection to Section 3.7.6 of the TRM. This revision was performed in conjunction with SQN TS Amendments 247 and 238 for Units 1 and 2, respectively, and provided for the relocation of these requirements to the TRM. Revision 6 of the TRM revised the requirements for the seismic instrumentation to accommodate plant modifications. These revisions reflected the addition and deletion of seismic instrumentation consistent with the intent of Regulatory Guide 1.12, Revision 1. Revision 7 corrected inadequate information contained in the TRM. The affected information included an inappropriate allowance to deviate from American Society of Mechanical Engineers, Section XI requirements, a

DD30

U.S. Nuclear Regulatory Commission
Page 2
February 1, 2000

clarification of the 10 CFR 50.59 applicability for TRM revisions that are bounded by NRC reviewed and approved activities, and the addition of revision numbers to affected pages for historical purposes.

The enclosure provides the revised TRM pages affected by these revisions.

Please direct questions concerning this issue to me at (423) 843-7170 or J. D. Smith at (423) 843-6672.

Sincerely,



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Enclosure

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ENCLOSURE

SEQUOYAH NUCLEAR PLANT (SQN)
REVISION TO THE TECHNICAL REQUIREMENTS MANUAL (TRM)
(REVISIONS 4, 5, 6, AND 7)

UNITS
1 and 2

TRM PAGE

TRM R4

Index Page III
Index Page IV
3/4 3-5
3/4 3-6
3/4 3-7
3/4 3-8
B 3/4 3-1
B 3/4 3-2

TRM R5

Index Page III
Index Page IV
3/4 7-1
3/4 7-2
3/4 7-3
B 3/4 7-1
B 3/4 7-2
B 3/4 7-3

TRM R6

3/4 3-6
3/4 3-7
3/4 3-8
B 3/4 3-2
B 3/4 3-3
B 3/4 3-4
B 3/4 3-5
B 3/4 3-6

TRM R7

3/4 0-2
3/4 0-3
6-1

INDEX

TECHNICAL REQUIREMENTS

<u>SECTION</u>	<u>PAGE</u>
<u>TR 3/4.0 APPLICABILITY</u>	3/4 0-1
<u>TR 3/4.1 REACTIVITY CONTROL SYSTEMS</u>	
No current requirements	
<u>TR 3/4.2 POWER DISTRIBUTION LIMITS</u>	
No current requirements	
<u>TR 3/4.3 INSTRUMENTATION</u>	
TR 3/4.3.1 Through TR 3/4.3.2 (No current requirements)	3/4 3-1
<u>TR 3/4.3.3 MONITORING INSTRUMENTATION</u>	
TR 3/4.3.3.1 RADIATION MONITORING INSTRUMENTATION	3/4 3-2
TR 3/4.3.3.2 (No current requirements)	3/4 3-5
TR 3/4.3.3.3 SEISMIC INSTRUMENTATION	3/4 3-6
<u>TR 3/4.4 REACTOR COOLANT SYSTEM</u>	
No current requirements	
<u>TR 3/4.5 EMERGENCY CORE COOLING SYSTEMS (ECCS)</u>	
No current requirements	
<u>TR 3/4.6 CONTAINMENT SYSTEMS</u>	
No current requirements	
<u>TR 3/4.7 PLANT SYSTEMS</u>	
TR 3/4.7.1 Through TR 3/4.7.6 (No current requirements)	3/4 7-1
TR 3/4.7.7 CONTROL ROOM EMERGENCY VENTILATION SYSTEM	3/4 7-2
TR 3/4.7.8 (No current requirements)	3/4 7-3
TR 3/4.7.9 SNUBBERS	3/4 7-4
<u>TR 3/4.8 ELECTRICAL POWER SYSTEMS</u>	
No current requirements	
<u>TR 3/4.9 REFUELING OPERATIONS</u>	
No current requirements	
<u>TR 3/4.10 SPECIAL TEST EXCEPTIONS</u>	
No current requirements	
<u>TR 3/4.11 RADIOACTIVE EFFLUENTS</u>	
No current requirements	

INDEX

TECHNICAL REQUIREMENTS BASES

<u>SECTION</u>	<u>PAGE</u>
<u>TRB 3/4.0 APPLICABILITY</u>	B 3/4 0-1
<u>TRB 3/4.1 REACTIVITY CONTROL SYSTEMS</u>	
No current discussions	
<u>TRB 3/4.2 POWER DISTRIBUTION LIMITS</u>	
No current discussions	
<u>TRB 3/4.3 INSTRUMENTATION</u>	
TRB 3/4.3.1 Through TRB 3/4 3.3.2 (No current discussions).....	B 3/4 3-1
TRB 3/4.3.3.3 SEISMIC INSTRUMENTATION.....	B 3/4 3-2
<u>TRB 3/4.4 REACTOR COOLANT SYSTEM</u>	
No current discussions	
<u>TRB 3/4.5 EMERGENCY CORE COOLING SYSTEMS</u>	
No current discussions	
<u>TRB 3/4.6 CONTAINMENT SYSTEMS</u>	
No current discussions	
<u>TRB 3/4.7 PLANT SYSTEMS</u>	
TRB 3/4.7.1 Through TRB 3/4 7.8 (No current discussions).....	B 3/4 7-1
TRB 3/4.7.9 SNUBBERS.....	B 3/4 7-2
<u>TRB 3/4.8 ELECTRICAL POWER SYSTEMS</u>	
No current discussions	
<u>TRB 3/4.9 REFUELING OPERATIONS</u>	
No current discussions	
<u>TRB 3/4.10 SPECIAL TEST EXCEPTIONS</u>	
No current discussions	
<u>TRB 3/4.11 RADIOACTIVE EFFLUENTS</u>	
No current discussions	

INSTRUMENTATION

TR 3/4.3.3.2 No current requirements

INSTRUMENTATION

SEISMIC INSTRUMENTATION

LIMITING CONDITION FOR OPERATION

TR 3.3.3.3 The seismic monitoring instrumentation shown in Table 3.3-7 shall be OPERABLE.

APPLICABILITY: At all times.

ACTION:

- a. With one or more seismic monitoring instruments inoperable for more than 30 days, prepare and submit a Special Report to the Commission pursuant to Technical Specification 6.9.2 within the next 10 days outlining the cause of the malfunction and the plans for restoring the instrument(s) to OPERABLE status.
- b. The provisions of Technical Requirements 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

TR 4.3.3.3.1 Each of the above seismic monitoring instruments shall be demonstrated OPERABLE by the performance of the CHANNEL CHECK, CHANNEL CALIBRATION and CHANNEL FUNCTIONAL TEST operations at the frequencies shown in Table 4.3-4.

TR 4.3.3.3.2 Each of the above seismic monitoring instruments actuated during a seismic event shall be restored to OPERABLE status within 24 hours and a CHANNEL CALIBRATION performed within 5 days following the seismic event. Data shall be retrieved from actuated instruments and analyzed to determine the magnitude of the vibratory ground motion. A Special Report shall be prepared and submitted to the Commission pursuant to Technical Specification 6.9.2 within 10 days describing the magnitude, frequency spectrum and resultant effect upon facility features important to safety.

TABLE 3.3-7

SEISMIC MONITORING INSTRUMENTATION

<u>INSTRUMENTS AND SENSOR LOCATIONS</u>	<u>MEASUREMENT RANGE</u>	<u>MINIMUM INSTRUMENTS OPERABLE</u>
1. Triaxial Time-History Accelerographs		
a. O-XT-52-75A, Containment, Elev. 734	0-1.0g	1
b. O-XT-52-75B, Annulus, Elev. 680	0-1.0g	1*
c. O-XR-52-77, Diesel Building, Elev. 722	0-1.0g	1
2. Triaxial Peak Accelerographs		
a. O-XR-52-84, Containment, SIS Pipe, Elev. 702	0-5.0g	1
b. O-XR-52-83, Containment, UHI Pipe, Elev. 706	0-5.0g	1
c. O-XR-52-82, Control Building, MCR, Panel O-M-25, Elev. 739	0-5.0g	1
3. Biaxial Seismic Switches		
a. O-XS-52-79, Annulus, Elev. 680	0.025-0.25g	1*
b. O-XS-52-80, Annulus, Elev. 680	0.025-0.25g	1*
c. O-XS-52-81, Annulus, Elev. 680	0.025-0.25g	1*
4. Triaxial Response-Spectrum Recorders		
a. O-XR-52-86, Annulus, Elev. 680	2-25.4 Hz, 0.003-32g	1*
b. O-XR-52-87, Reactor Containment Bldg., Elev. 734	2-25.4 Hz, 0.003-32g	1
c. O-XR-52-88, Aux. CR, Elev. 734	2-25.4 Hz, 0.003-32g	1
d. O-XR-52-89, Diesel Generator, Elev. 722	2-25.4 Hz, 0.003-32g	1

*With reactor control room indication.

TABLE 4.3-4

SEISMIC MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>INSTRUMENTS AND SENSOR LOCATIONS</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>CHANNEL FUNCTIONAL TEST</u>
1. Triaxial Time-History Accelerographs			
a. O-XT-52-75A, Containment, Elev. 734	M*	R***	SA
b. O-XT-52-75B, Annulus, Elev. 680**	M*	R***	SA
c. O-XR-52-77, Diesel Building, Elev. 722	M*	R***	SA
2. Triaxial Peak Accelerographs			
a. O-XR-52-84, Containment, SIS Pipe, Elev. 702	NA	R	NA
b. O-XR-52-83, Containment, UHI Pipe, Elev. 706	NA	R	NA
c. O-XR-52-82, Control Building, MCR, Panel O-M-25, Elev. 739	NA	R	NA
3. Biaxial Seismic Switches			
a. O-XS-52-79, Annulus, Elev. 680**	M	R	SA
b. O-XS-52-80, Annulus, Elev. 680**	M	R	SA
c. O-XS-52-81, Annulus, lev. 680**	M	R	SA
4. Traixial Response-Spectrum Recorders			
a. O-XR-52-86**, Annulus Elev. 680	M	R	SA
b. O-XR-52-87, Reactor Containment Bldg, Elev. 734	NA	R	NA
c. O-XR-52-88, Aux. CR, Elev. 734	NA	R	NA
d. O-XR-52-89, Diesel Building, Elev. 722	NA	R	NA

*Except seismic trigger
 **With reactor control room indications
 ***Includes seismic trigger

3/4.3 INSTRUMENTATION

BASES

TRB 3/4.3.1 No current requirements

TRB 3/4.3.2 No current requirements

TRB 3/4.3.3.1 No current requirements

TRB 3/4.3.3.2 No current requirements

INSTRUMENTATION

BASES

TRB 3/4.3.3.3 SEISMIC INSTRUMENTATION

The OPERABILITY of the seismic instrumentation ensures that sufficient capability is available to promptly determine the magnitude of a seismic event and evaluate the response of those features important to safety. This capability is required to permit comparison of the measured response to that used in the design basis for the facility to determine if plant shutdown is required pursuant to Appendix "A" of 10 CFR Part 100. All specified measurement ranges represent the minimum ranges of the instruments. This instrumentation is consistent with the recommendations of Regulatory Guide 1.12, "Instrumentation for Earthquakes," April 1974.

INDEX

TECHNICAL REQUIREMENTS

<u>SECTION</u>	<u>PAGE</u>
<u>TR 3/4.0 APPLICABILITY</u>	3/4 0-1
<u>TR 3/4.1 REACTIVITY CONTROL SYSTEMS</u>	
No current requirements	
<u>TR 3/4.2 POWER DISTRIBUTION LIMITS</u>	
No current requirements	
<u>TR 3/4.3 INSTRUMENTATION</u>	
<u>TR 3/4.3.1 Through TR 3/4.3.2 (No current requirements)</u>	3/4 3-1
<u>TR 3/4.3.3 MONITORING INSTRUMENTATION</u>	
<u>TR 3/4.3.3.1 RADIATION MONITORING INSTRUMENTATION</u>	3/4 3-2
<u>TR 3/4.3.3.2 (No current requirements)</u>	3/4 3-5
<u>TR 3/4.3.3.3 SEISMIC INSTRUMENTATION</u>	3/4 3-6
<u>TR 3/4.4 REACTOR COOLANT SYSTEM</u>	
No current requirements	
<u>TR 3/4.5 EMERGENCY CORE COOLING SYSTEMS (ECCS)</u>	
No current requirements	
<u>TR 3/4.6 CONTAINMENT SYSTEMS</u>	
No current requirements	
<u>TR 3/4.7 PLANT SYSTEMS</u>	
<u>TR 3/4.7.1 Through TR 3/4 7.5 (No current requirements)</u>	3/4 7-1
<u>TR 3/4.7.6 FLOOD PROTECTION</u>	3/4 7-2
<u>TR 3/4.7.7 CONTROL ROOM EMERGENCY VENTILATION SYSTEM</u>	3/4 7-4
<u>TR 3/4.7.8 (No current requirements)</u>	3/4 7-5
<u>TR 3/4.7.9 SNUBBERS</u>	3/4 7-6
<u>TR 3/4.8 ELECTRICAL POWER SYSTEMS</u>	
No current requirements	
<u>TR 3/4.9 REFUELING OPERATIONS</u>	
No current requirements	
<u>TR 3/4.10 SPECIAL TEST EXCEPTIONS</u>	
No current requirements	
<u>TR 3/4.11 RADIOACTIVE EFFLUENTS</u>	
No current requirements	

INDEX

TECHNICAL REQUIREMENTS BASES

<u>SECTION</u>	<u>PAGE</u>
<u>TRB 3/4.0 APPLICABILITY</u>	B 3/4 0-1
<u>TRB 3/4.1 REACTIVITY CONTROL SYSTEMS</u>	
No current discussions	
<u>TRB 3/4.2 POWER DISTRIBUTION LIMITS</u>	
No current discussions	
<u>TRB 3/4.3 INSTRUMENTATION</u>	
TRB 3/4.3.1 Through TRB 3/4 3.3.2 (No current discussions).....	B 3/4 3-1
TRB 3/4.3.3.3 SEISMIC INSTRUMENTATION.....	B 3/4 3-2
<u>TRB 3/4.4 REACTOR COOLANT SYSTEM</u>	
No current discussions	
<u>TRB 3/4.5 EMERGENCY CORE COOLING SYSTEMS</u>	
No current discussions	
<u>TRB 3/4.6 CONTAINMENT SYSTEMS</u>	
No current discussions	
<u>TRB 3/4.7 PLANT SYSTEMS</u>	
TRB 3/4.7.1 Through TRB 3/4 7.5 (No current discussions).....	B 3/4 7-1
TRB 3/4.7.6 FLOOD PROTECTION.....	B 3/4 7-2
TRB 3/4.7.7 Through TRB 3/4 7.8 (No current discussions).....	B 3/4 7-3
TRB 3/4.7.9 SNUBBERS.....	B 3/4 7-4
<u>TRB 3/4.8 ELECTRICAL POWER SYSTEMS</u>	
No current discussions	
<u>TRB 3/4.9 REFUELING OPERATIONS</u>	
No current discussions	
<u>TRB 3/4.10 SPECIAL TEST EXCEPTIONS</u>	
No current discussions	
<u>TRB 3/4.11 RADIOACTIVE EFFLUENTS</u>	
No current discussions	

TR 3/4.7 PLANT SYSTEMS

TR 3/4 7.1 No current requirements

TR 3/4 7.2 No current requirements

TR 3/4 7.3 No current requirements

TR 3/4 7.4 No current requirements

TR 3/4 7.5 No current requirements

PLANT SYSTEMS

TR 3/4.7.6 FLOOD PROTECTION

LIMITING CONDITION FOR OPERATION

TR 3.7.6 The flood protection plan shall be ready for implementation to maintain the plant in a safe condition.

APPLICABILITY: When one or more of the following conditions exist:

- a. heavy rainfall conditions in the east Tennessee watershed,
- b. an early warning or alert that a critical combination of flood and/or high headwater levels may or have developed,
- c. an early warning or alert involving Fontana Dam, or
- d. recognizable seismic activity in the east Tennessee region.

ACTION:

- a. With a Stage I flood warning issued initiate and complete within 10 hours the Stage I flood protection procedure which shall include being in at least HOT STANDBY within 6 hours, with a SHUTDOWN MARGIN of at least 5% delta k/k and T_{avg} less than or equal to 350°F within the following 4 hours. If within 10 hours following the issuance of a Stage I flood warning communications between the TVA Division of Water Resources and the Sequoyah Nuclear Plant cannot be verified, initiate and complete the Stage II flood protection procedure within the following 17 hours. With a Stage II flood warning issued initiate the Stage II flood protection plan in time to ensure completion before the predicted flooding of the site and no later than 17 hours prior to the predicted arrival time of the initial critical flood level (703 ft msl winter and summer).
- b. With a seismic event occurring after a critical combination of flood and/or headwater alerts are issued verify and maintain communications between TVA Power Control Center and the Sequoyah Nuclear Plant within 6 hours or initiate and complete the Stage I flood protection plan within the following 10 hours. If communications have not been established upon completion of the Stage I flood protection plan initiate and complete the Stage II flood protection plan within the following 17 hours.
- c. With a Fontana Dam Alert issued verify and maintain communications between Fontana Dam and the Sequoyah Nuclear Plant with 1 hour or initiate and complete the Stage I flood protection plan within 10 hours. If communications have not been established upon completion of the Stage I flood protection plan initiate and complete the Stage II flood protection plan within the following 17 hours.

PLANT SYSTEMS

TR 3/4.7.6 FLOOD PROTECTION

LIMITING CONDITION FOR OPERATION (Continued)

- d. With either the Norris, Cherokee, Douglas, Fort Loudon, Fontana, Hiwassee, Apalachia, Blue Ridge or Tellico dam failed seismically, after a critical combination of flood and/or headwater alerts is issued initiate and complete the Stage I flood protection plan within 10 hours. Upon completion of the Stage I flood protection plan initiate and complete the Stage II flood protection plan within the following 17 hours. Both the Stage I and the Stage II flood protection plans will be terminated if it is determined that the potential for flooding the site does not exist.

SURVEILLANCE REQUIREMENTS

TR 4.7.6.1 The water level in the forebay shall be determined at least once per 8 hours when the water level is less than or equal to 693 feet Mean Sea Level USGS datum and at least once per 15 minutes when the water level is above these limits.

TR 4.7.6.2 Communications between Sequoyah Nuclear Plant:

- a. and TVA Division of Water Resources shall be maintained every 3 hours during heavy rainfall condition in the east Tennessee watershed.
- b. and TVA Power Control Center shall be maintained every 3 hours following a recognizable seismic event that has occurred when a critical combination of flood and/or headwater alert is issued. Communications shall be maintained until it has been determined that the potential for flooding the site does not exist.
- c. and Fontana Dam shall be maintained every hour when an alert involving Fontana Dam has been issued by TVA Division of Water Resources.

TRB 3/4.7 PLANT SYSTEMS

BASES

TRB 3/4.7.1 No current discussions

TRB 3/4.7.2 No current discussions

TRB 3/4.7.3 No current discussions

TRB 3/4.7.4 No current discussions

TRB 3/4.7.5 No current discussions

TRB 3/4.7 PLANT SYSTEMS

BASES

TRB 3/4.7.6 FLOOD PROTECTION

The requirements for flood protection ensures that facility protective actions will be taken and operation will be terminated in the event of flood conditions. A Stage I flood warning is issued when the water in the forebay is predicted to exceed 697 feet Mean Sea Level USGS datum during October 1 through April 15, or 703 Feet Mean Sea Level USGS datum during April 15 through September 30. A Stage II flood warning is issued when the water in the forebay is predicted to exceed 703 feet Mean Sea Level USGS datum. A maximum allowed water level of 703 Mean Sea Level USGS datum provides sufficient margin to ensure waves due to high winds cannot disrupt the flood mode preparation. A Stage I or Stage II flood warning requires the implementation of procedures which include plant shutdown. Further, in the event of a loss of communications simultaneous with a critical combination flood, headwaters, and/or seismically induced dam failure the plant will be shutdown and flood protection measures implemented.

TRB 3/4.7 PLANT SYSTEMS

BASES

TRB 3/4.7.7 No current discussions

TRB 3/4.7.8 No current discussions

INSTRUMENTATION

SEISMIC INSTRUMENTATION

LIMITING CONDITION FOR OPERATION

TR 3.3.3.3 The seismic monitoring instrumentation shown in Table 3.3-7 shall be OPERABLE.

APPLICABILITY: At all times.

ACTION:

- a. With seismic monitoring instrument 0-XT-52-75B or Panel 0-R-113 inoperable for more than 30 days, prepare and submit a Special Report to the Commission pursuant to Technical Specification 6.9.2 within the next 10 days outlining the cause of the malfunction and the plans for restoring the instrument(s) to OPERABLE status.
- b. With one or more of the remaining seismic monitoring instruments inoperable for more than 60 days, prepare and submit a Special Report to the Commission pursuant to Technical Specification 6.9.2 within the next 10 days outlining the cause of the malfunction and the plans for restoring the instrument(s) to OPERABLE status.
- c. The provisions of Technical Requirements 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

TR 4.3.3.3.1 Each of the above seismic monitoring instruments shall be demonstrated OPERABLE by the performance of the CHANNEL CHECK, CHANNEL CALIBRATION and CHANNEL FUNCTIONAL TEST operations at the frequencies shown in Table 4.3-4.

TR 4.3.3.3.2 Each of the above seismic monitoring instruments actuated during a seismic event shall be restored to OPERABLE status within 24 hours and a CHANNEL CALIBRATION performed within 10 days following the seismic event. Data shall be retrieved from actuated instruments and the data from accelerometer 0-XT-52-75B analyzed within 4 hours to determine the magnitude of the vibratory ground motion. Walkdowns of accessible plant areas shall be performed within 8 hours following the event to determine plant condition. A Special Report shall be prepared and submitted to the Commission pursuant to Technical Specification 6.9.2 within 14 days describing the magnitude, frequency spectrum and resultant effect upon facility features important to safety.

TABLE 3.3-7

SEISMIC MONITORING INSTRUMENTATION

<u>INSTRUMENTS AND SENSOR LOCATIONS</u>	<u>MEASUREMENT RANGE</u>	<u>MINIMUM INSTRUMENTS OPERABLE</u>
Triaxial Time-History Accelerographs		
1. O-XT-52-75B, Annulus, Elev. 680**	0-1.0g	1*
2. O-XT-52-75A, Containment, Elev. 734**	0-1.0g	1
3. O-XR-52-77, Diesel Building, Elev. 722	0-2.0g	1
4. O-XR-52-92, Auxiliary Building, Elev. 734	0-2.0g	1

*With reactor control room indication

**With associated acceleration triggers and indication on O-XR-52-75 and recording and analyzing components on O-R-113.

TABLE 4.3-4

SEISMIC MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>INSTRUMENTS AND SENSOR LOCATIONS</u>	<u>CHANNEL CHECK⁽²⁾</u>	<u>CHANNEL CALIBRATION⁽³⁾</u>	<u>CHANNEL FUNCTIONAL TEST⁽⁴⁾</u>
Triaxial Time-History Accelerographs			
1. O-XT-52-75B, Annulus, Elev. 680 ⁽¹⁾	M	R	SA
2. O-XT-52-75A, Containment, Elev. 734 ⁽¹⁾	M	R	SA
3. O-XR-52-77, Diesel Building, Elev. 722	M	R	SA
4. O-XR-52-92, Auxiliary Bldg., Elev. 734	M	R	SA

⁽¹⁾ With associated acceleration triggers and indication on O-XR-52-75 and recording and analyzing components on O-R-113

⁽²⁾ Except acceleration trigger

⁽³⁾ Includes acceleration trigger

⁽⁴⁾ Except setpoint verification

INSTRUMENTATION

BASES

TRB 3/4.3.3.3 SEISMIC INSTRUMENTATION

BACKGROUND

The seismic instrumentation is made up of several instruments such as accelerometers, accelerographs, recorders, etc. These instruments are placed in several appropriate locations throughout the plant in order to provide 1) data on the seismic input to containment, 2) data on the frequency, amplitude and phase relationship of the seismic response of the containment structure, and 3) data on the seismic input to and response of other Seismic Category I structures (Ref 1).

This instrumentation is consistent with the intent of Regulatory Guide 1.12, Revision 1.

The original seismic instrumentation was replaced with state of the art digital instrumentation in order to facilitate application of EPRI OBE (i.e., 1/2 SSE for Sequoyah) Exceedance Criteria, as delineated in References 2 and 5. The replacement instrumentation is capable of recording a seismic event and performing appropriate analyses of the recorded data to provide a timely basis for determining whether a potentially damaging OBE exceedance has occurred. This information must be evaluated within 4 hours after an event and a walkdown of accessible plant features must be accomplished within 8 hours after an event.

OPERABILITY

TR 3.3.3.3a requires that the seismic monitoring instrumentation which is shown in Table 3.3-7 shall be OPERABLE. This requirement ensures that an assessment can be made of the effects on the plant of earthquakes which may occur that exceed the design basis spectra for the Operating Basis Earthquake (Ref. 4). The OPERABILITY of the seismic instrumentation ensures that sufficient capability is available to promptly determine the magnitude of a seismic event and to determine the impact on those features important to safety. This capability is required to permit comparison of the measured response to that used in the design basis for the unit to determine if plant equipment inspection is required pursuant to Appendix A of 10 CFR part 100 prior to restart. Seismic risks which appear as dominant sequences

INSTRUMENTATION

BASES

in PRAs occur for very severe earthquakes with magnitudes which are a factor of two or three above the Safe Shutdown Earthquake and Design Basis Earthquake. The Seismic Instrumentation System was not designed to function or to provide comparative information for such severe earthquakes. This instrumentation is more pertinent to determining the need to shut down following a seismic event and the ability to restart the plant after seismic events which are not risk contributors, and is therefore not of prime importance in risk dominant sequences.

The determination as to whether an OBE exceedance has occurred is made by comparing the calculated spectra for the event with the applicable design basis spectra for that building and location. For Sequoyah, this determination is to be made considering the data from instruments located on the containment foundation. Therefore, the exceedance determination for Sequoyah will be made using event data from 0-XT-52-75B in the containment annulus. Data from this instrument is recorded at panel 0-R-113, which also contains the computer used to calculate the spectral content and the alarm panel used to annunciate in the control room. These devices are the key components used to detect the event and make a shutdown determination. With accelerometer 0-XT-52-75B or panel 0-R-113 inoperable for more than 30 days, a report must be submitted to the NRC in accordance with Technical Specification 6.9.2. This report is to outline the cause of the malfunction and the plans for restoring the inoperable instruments to OPERABLE status.

With one or more of the remaining seismic instruments in Table 3.3-7 inoperable for more than 60 days, a report must also be submitted as noted above. A longer period of inoperability is allowed for these instruments since they are used only for evaluating plant condition following an event and not for input to the shutdown decision. The completion time of 10 days to perform LCO Action 3.3.3.3.a is reasonable and is based upon the typical time necessary to prepare and submit a report to the NRC.

INSTRUMENTATION

BASES

ACTIONS

The determination as to whether an 1/2 SSE Exceedance has occurred is made by comparing the calculated spectra for the event with the applicable site design basis spectra, which is defined at top of rock for Sequoyah (ref. 4). Therefore, the exceedance determination for SQN will be made using uncorrected event data from accelerometer 0-XT-52-75B in the Containment annulus. The use of uncorrected event data is known to be conservative because of the inherent response characteristics of the accelerometer. Data from this instrument is recorded at the top of the containment foundation, which is rock-supported. The recorder for this accelerometer is located in panel 0-R-113. As noted above, this accelerometer and recorder are the key components used to detect and record the event in order to make a shutdown decision. The recorder can function for up to 36 hours from internal rechargeable batteries, which are constantly recharged from 120VAC Instrument Power. Panel 0-R-113 also contains the computer, LCD display, and printer used to calculate and display the spectral content of the event, and the alarm panel used to annunciate in the control room. These devices are also powered by 120VAC Instrument Power, but have no backup battery power. Power to these devices may be manually restored in the unlikely event of loss of AC power.

When one or more seismic monitoring instruments actuate during a seismic event with greater than or equal to 0.01g ground acceleration, the data retrieved from the actuated instruments must be analyzed to determine the magnitude of the vibratory ground motion. The replacement digital instrumentation provides the capability to analyze the event data onsite and generate event spectra to be used in determining whether an 1/2 SSE exceedance has occurred. References 2 and 5 direct that this evaluation should occur within 4 hours after the event. Reference 5 also requires performance of a limited scope walkdown to determine the extent of actual damage within 8 hours following the event. The information provided by this walkdown and the spectral analysis are to be used in making a determination as to whether to proceed with plant shutdown, if a shutdown has not already occurred.

INSTRUMENTATION

BASES

TR 4.3.3.3.2 requires that each actuated monitoring instrument must be restored to OPERABLE status within 24 hours. Within 10 days of the actuation, a CHANNEL CALIBRATION must be performed on each actuated monitoring instrument. The completion time of 10 days to perform CHANNEL CALIBRATION is reasonable and is based on engineering judgement.

Subsequent analysis must then be performed using data from the remaining seismic monitoring instruments to evaluate the plant response in comparison with previously generated design basis spectra at the locations of those instruments. A report must be sent to the NRC in accordance with 10 CFR 50.4. This report is to describe the magnitude, frequency spectrum, and resultant effect upon unit features important to safety. The completion time of 14 days to perform these actions is reasonable and based upon the typical time necessary to analyze data and prepare a report.

SURVEILLANCE REQUIREMENTS

TR 4.3.3.3.1 requires performance of surveillance instructions at the frequency shown in Table 4.3-4. Performance of a CHANNEL CHECK on the seismic instrumentation once every 31 days ensues that a gross failure of instrumentation has not occurred. A CHANNEL CHECK is a comparison of the parameter indicated on one channel to a similar parameter on other channels. It is based on the assumption that instrument channels monitoring the same parameter should read approximately the same value. Significant deviations between the instrument channels could be an indication of excessive instrument drift in one of the channels or of even something more serious. CHANNEL CHECK will detect gross channel failure; thus, it is key to verifying that the instrumentation continues to operate properly between each CHANNEL CALIBRATION.

The surveillance frequency of 31 days is based on operating experience related to channel OPERABILITY and drift, which demonstrates that failure of more than one channel of a given function in any 31 day interval is a rare event.

INSTRUMENTATION

BASES

A CHANNEL FUNCTIONAL TEST is to be performed on each required channel to ensure the entire channel will perform the intended function. A CHANNEL FUNCTIONAL TEST is the comparison of the response of the instrumentation, including all components of the instrument except the sensor, to a known signal. The surveillance frequency of 184 days is based upon the known reliability of the monitoring instrumentation and has been shown to be acceptable through operating experience.

A CHANNEL CALIBRATION is a complete check of the instrument loop and the sensor by comparing the response of the instrument to a known input on the sensor. This test verifies the capability of the seismic instrumentation to correctly determine the magnitude of a seismic event and evaluate the response of those features important to safety. The surveillance frequency of 18 months is based upon operating experience and consistency with the typical industry refueling cycle.

REFERENCES

1. Regulatory Guide 1.12, "Instrumentation for Earthquakes," Revision 1, April 1974.
2. EPRI NP-5930, July 1988, "A Criterion For Determining Exceedance Of The Operating Basis Earthquake"
3. EPRI TR-104239, June 1994, "Seismic Instrumentation In Nuclear Power Plants For Response To OBE Exceedance: Guideline For Implementation"
4. Sequoyah FSAR, Sections 2.5 and 3.7.1
5. EPRI NP-6695, December 1989, "Guidelines for Nuclear Plant Response to an Earthquake"

APPLICABILITY

SURVEILLANCE REQUIREMENTS

TR 4.0.1 Surveillance Requirements shall be met during the OPERATIONAL MODES or other conditions specified for individual Limiting Conditions for Operation unless otherwise stated in an individual Surveillance Requirement.

TR 4.0.2 Each Surveillance Requirement shall be performed within the specified surveillance interval with a maximum allowable extension not to exceed 25 percent of the specified surveillance interval.

TR 4.0.3 Failure to perform a Surveillance Requirement within the allowed surveillance interval, defined by Technical Requirement 4.0.2, shall constitute noncompliance with the OPERABILITY requirements for a Limiting Condition for Operation. The time limits of the ACTION requirements are applicable at the time it is identified that a Surveillance Requirement has not been performed. The ACTION requirements may be delayed for up to 24 hours to permit the completion of the surveillance when the allowable outage time limits of the ACTION requirements are less than 24 hours. Surveillance Requirements do not have to be performed on inoperable equipment.

TR 4.0.4 Entry into an OPERATIONAL MODE or other specified condition shall not be made unless the Surveillance Requirement(s) associated with the Limiting Condition for Operation have been performed within the specified surveillance interval or as otherwise specified. This provision shall not prevent passage through or to OPERATIONAL MODES as required to comply with ACTION requirements.

TR 4.0.5 Surveillance Requirements for inservice inspection and testing of ASME Code Class 1, 2, and 3 components shall be as follows:

Inservice Inspection Program

This program provides controls for inservice inspection of ASME Code Class 1, 2, and 3 components, including applicable supports. The program shall include the following:

- a. Provisions that inservice testing of ASME Code Class 1, 2, and 3 components shall be performed in accordance with Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as required by 10 CFR 50.55a;
- b. The provisions of Technical Requirement 4.0.2 are applicable to the frequencies for performing inservice inspection activities;
- c. Inspection of each reactor coolant pump flywheel per the recommendation of Regulation Position c.4.b of Regulatory Guide 1.14, Revision 1, August 1975.

APPLICABILITY

SURVEILLANCE REQUIREMENTS (Continued)

TR 4.0.5 (Continued)

Inservice Testing Program

This program provides controls for inservice testing of ASME Code Class 1, 2, and 3 components including applicable supports. The program shall include the following:

- a. Provisions that inservice testing of ASME Code Class 1, 2, and 3 pumps and valves shall be performed in accordance with Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as required by 10 CFR 50.55a;
- b. Testing Frequencies specified in Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as follows:

<u>ASME Boiler and Pressure Vessel Code and applicable Addenda terminology for inservice testing activities</u>	<u>Required frequencies for performing inservice testing activities</u>
Weekly	At least once per 7 days
Monthly	At least once per 31 days
Quarterly or every 3 months	At least once per 92 days
Semiannually or every 6 months	At least once per 184 days
Every 9 months	At least once per 276 days
Yearly or annually	At least once per 366 days
Biennially or every 2 years	At least once per 731 days

- c. The provisions of Technical Requirement 4.0.2 are applicable to the above required Frequencies for performing inservice testing activities;
- d. The provisions of Technical Requirement 4.0.3 are applicable to inservice testing and activities.

6.0 ADMINISTRATIVE CONTROLS

6.1 TECHNICAL REQUIREMENTS (TR) CONTROL PROGRAM

This Program provides a means for controlling changes or additions to the Technical Requirements and their Bases.

6.1.1 Changes or additions to the Technical Requirements Manual (TRM) shall be made under appropriate administrative controls and reviews.

6.1.2 Changes or additions to the Technical Requirements Manual (TRM) shall include an evaluation in accordance with 10 CFR 50.59 or applicable NRC issued SER that bounds the change or addition.

6.1.3 Licensees may make additions to the TRM without prior NRC approval provided the changes have been determined not to be candidates for inclusion in the Technical Specifications (TSs). The determination that the changes do not need to be included in TS shall include screening the change against the criteria contained in 10 CFR 50.36(c)(2)(ii). An exception to this requirement is allowed if a temporary addition is needed pending a subsequent TS change where conservative (safe direction) administrative controls are implemented in accordance with NRC Administrative Letter 98-10, "Dispositioning Of Technical Specifications That Are Insufficient To Assure Plant Safety." These additions must not be in conflict with existing TS requirements, and should be removed upon NRC approval of the TS. Removal of the temporary addition is acceptable based upon the NRC TS change Safety Evaluation Report authorizing the change and further 10 CFR 50.59 evaluation is not required due to NRC approval to place in TSs.

6.1.4 Changes or additions to the TRM will be evaluated to ensure that they are accurately reflected in the FSAR as appropriate.

6.1.5 Proposed changes or additions that do not meet the criteria of 6.1.2 shall be reviewed and approved by the NRC prior to implementation. Changes or additions to the TRM implemented without prior NRC approval shall be provided to the NRC on a frequency consistent with 10 CFR 50.71(e).