

## INSTRUMENTATION

### SEISMIC INSTRUMENTATION

#### LIMITING CONDITION FOR OPERATION

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 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 Specifications 3.0.3 and 3.0.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

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.

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 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 INSTRUMENT OPERABLE</u>
1. Triaxial Time-History Accelerographs		
a. ACS-8003, Unit 1 Containment Base Slab, Elev. 335'6"	0.01-1.0g	1
b. ACS-8004, Unit 1 Top of Containment, Elev. 531'6"*	0.01-1.0g	1
2. Triaxial Peak Accelerographs		
a. 2CR-8347, Containment Base Slab, Elev. 336'6"	0.01-1.0g	1
b. 2XR-8348, Primary Shield O/S Reactor Cavity, Elev. 366'3"	0.05-1.0g	1
c. 2XR-8349, Top of Containment, Elev 531'6"	0.051-1.0g	1
3. Triaxial Response-Spectrum Recorders		
a. 2CR-8350, Containment Base Slab, Elev. 335'6" (O/S Containment)	2-25.4 Hz	1

\*With Unit 1 control room indication/or alarm

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. ACS-8003, Unit 1 Containment Base Slab, Elev. 335'**	M*	R	SA
b. ACS-8004, Unit 1 Top of Containment Elev. 531'6"***	M*	R	SA
2. Triaxial Peak Accelerographs			
a. 2XR-8347, Containment Base Slab, Elev. 336'6"	NA	R	NA
b. 2XR-8348, Primary Shield O/S reactor Cavity, Elev. 366'3"	NA	R	NA
c. 2XR-8349, Top of Containment, Elev. 531'6"	NA	R	NA
3. Triaxial Response-Spectrum Recorders			
a. 2XR-8350, Containment Base Slab, Elev. 335'6" (O/S Containment)	NA	R	R

\* Except seismic trigger

\*\* With Unit 1 control room indication