Enclosure 2

NUCLEAR GENERATION SITE
UNITS 2 AND 3
COMPLETE REVISION
EFFECTIVE DATE AUG 20 1984

EMERGENCY OPERATING PROCEDURE SO23-3-5.27
REVISION 6

EARTHQUAKE

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EARTHQUAKE

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2.3 Possible turbine trip due to high vibration

2.4 Possible storage tank Hi/Lo level alarm, feedwater heater Hi/Lo level alarms, or sump high level alarms

3.0 IMMEDIATE OPERATOR ACTIONS

3.1 If reactor trip has occurred, carry out all immediate operator actions per SO23-3-5.1, "Emergency Plant Shutdown".

3.2 Use the public address system to notify onsite personnel concerning the nature of the emergency.

CAUTION

Do not place system in "MANUAL" unless misoperation in "AUTOMATIC" is apparent. Systems placed in "MANUAL" must be checked frequently to ensure proper operation.

4.0 SUBSEQUENT OPERATOR ACTIONS

4.1 Verify all immediate operator actions have been initiated as follows:

4.0 SUBSEQUENT OPERATOR ACTIONS (Continued) *INITIALS

4.1.1 With a reactor trip verify all immediate and subsequent operator actions per SO23-3-5.1, "Emergency Plant Shutdown", are being performed concurrently with the steps in this instruction. _____

4.1.2 Notify onsite personnel, on the public address system, concerning the nature of this emergency. _____

4.1.3 With valid initiation of the "Seismic Recording System Activation" alarm 61C21, as indicated by an illuminated amber alarm on the Seismic Instrumentation Panel, or if notified by Unit 1 that Seismic Instrumentation has been activated, complete Section 4.3.

4.1.4 With a valid "Operating Basis Earthquake Acceleration" (OBE) alarm, 61C22, or red alarm light on the Seismic Instrumentation Panel indicating a 0.33g ground motion, complete Section 4.4. _____

4.2 The Shift Superintendent shall notify the Plant Superintendent or designee and Shift Technical Advisor and discuss the situation. _____

4.2.1 Within 15 minutes an assessment of the plant status and safety shall be made and the event classified per SO23-VIII-1, "Recognition and Classification of Emergency." _____

4.2.2 If an emergency is declared (Unusual, Alert, Site Emergency or General Emergency), then use the Emergency Procedures to implement the SONGS 1, 2 and 3 Emergency Plan. _____

4.2.3 Notify the NRC via the Red Phone within one hour, per SO23-0-25, "Telephone Notification of NRC for Significant Events." _____

4.2.3.1 If possible, discuss the contents of the notification with the Plant Superintendent or designee prior to the notification. _____

* The initial column is an operator aid and is intended to be used as follows:

Initial each completed action. Do not write NA; leave blank items that are not applicable. Proceed through the instruction, performing all applicable steps, frequently rechecking those steps passed over to ensure action is taken when applicable.

4.0 SUBSEQUENT OPERATOR ACTION (Continued) INITIALS

4.2.3.2 Record the names of the persons involved with the notification and time. _____

NRC _____ _____ _____
Bethesda Time Region V/Time Resident/Time

SCE _____ _____ _____
Shift Supt. Plant Supt/Time CC&C/TIme

4.2.3.3 Notify the Systems Operating Supervisor concerning the nature of the emergency. _____

4.2.3.4 Notify Emergency Preparedness concerning the nature of the emergency. _____

4.2.3.5 Notify Station Engineering that an analysis of the seismic recording and indicating instrumentation is to be performed to determine exact magnitude of the earthquake. _____

4.2.3.6 The Emergency Coordinator (Shift Superintendent, until properly relieved by a designated alternate) should ensure the emergency classification is evaluated for revision as more definite information is obtained concerning the magnitude of the earthquake. _____

4.3 Following a seismic event greater than or equal to .05g perform the following: _____

4.3.1 Within 2 hours, per T.S. 4.3.3.7.4.a, each zone shown in Tech. Spec. Table 3.3-11 (Attachment 1) shall be inspected for fires. Log completion of inspection and results in Control Operator's and Shift Superintendent's log book. _____

NOTE: If the Seismic Event renders any portion of the fire detection inoperable, then a fire watch must be established within (1) one hour.

4.3.2 Within 72 hours, an engineering evaluation shall be performed to verify the OPERABILITY of the fire detection system in each zone in Tech. Spec. Table 3.3-11. (Attachment 1) _____

4.3.3 Perform SO23-3-3.37, "RCS Water Inventory Balance." _____

4.0 SUBSEQUENT OPERATOR ACTION (Continued) INITIALS

4.3.4 Verify there is no increase in flow above normal into the containment sump. _____

4.3.5 Exercise the control rods as outlined in SO23-3-3.5, "CEA Operability". _____

4.3.6 Perform a routine test of auxiliary feedwater pumps per SO23-3-3.16, "Auxiliary Feedwater Pump 31 Day Operation Test". _____

4.3.7 Perform a routine monthly test of both Diesel Generators per SO23-3-3.23, "Diesel Generator Monthly Test." _____

4.3.8 Complete electrical supply breaker alignment and power availability Check-Off Sheet per SO23-3-3.27.2, "Weekly Electrical Bus Surveillance" _____

4.3.9 A physical inspection shall be made of the plant paying particular attention to the following systems:

4.3.9.1 Safety Injection System, including the RWST. _____

4.3.9.2 Radwaste System, including the part of the CVCS that is located within the reactor auxiliary building. _____

4.3.9.3 Inspect Fuel Handling Building for the following:

4.3.9.3.1 Proper water level in the spent fuel pool. _____

4.3.9.3.2 Leakage of the spent fuel pool liner. _____

4.3.9.3.3 Leakage at the sumps of the spent fuel transfer tube. _____

4.3.9.4 Component Cooling Water System for leakage. _____

4.3.9.5 Boric acid storage tank and associated piping for leaks. _____

4.3.9.6 Containment electrical and piping penetrations. _____

4.3.9.7 Containment Spray System including the NaOH chemical additive tank. _____

4.0 SUBSEQUENT OPERATOR ACTION (Continued) INITIALS

4.3.9.8 Atmospheric Steam Dump System air supply and back-up nitrogen supply to both atmospheric dump valves. _____

4.3.9.9 Station Fire Main and Fire Fighting systems _____

4.3.9.9.1 If fire system is ruptured, relocate Seismic Tankers to Seismic Stand pipes and connect to Fire Main per SO23-XIII-60 "Post Earthquake Fire Water System Operation." _____

4.3.10 Have Instrumentation and Control reset the seismic recording and indicating instrumentation. Refer to Technical Specification 3-4.3.3, "Monitoring Instrumentation", Specification 3.3.3.3, "Seismic Instrumentation". _____

4.3.11 With each seismic event, complete SO23-0-20, "Cumulative Equipment Inoperability and Design Cycles". _____

4.4 For "Operating Basis Earthquake", (greater than 0.33g ground motion) perform the following:

4.4.1 If in Modes 1 or 2, commence a unit shutdown to cold shutdown conditions per SO23-5-1.4, "Plant Shutdown from Minimum Load to Hot Standby" performing applicable steps concurrently with the steps in this instruction. _____

4.4.2 If in Modes 3 or 4, commence cooldown to Cold shutdown conditions per SO23-5-1.5, "Plant Shutdown - Hot Standby to Cold Shutdown" performing applicable steps concurrently with the steps in this instruction. _____

4.4.3 Perform the inspections in steps 4.3.1 through 4.3.11. _____

4.4.4 The unit shall not be returned to service following an "OBE" until an evaluation has been made by the On-Site Review Committee. _____

4.4.5 Any observed damage to the plant shall be documented in the Control Operator's and Shift Superintendent's Log Books so that it can be related to the intensity of the earthquake. _____

4.0 SUBSEQUENT OPERATOR ACTION (Continued) INITIALS

4.4.6 Have Engineering conduct a piping penetration leak rate test on all penetrations except those that are required to place the plant in cold shutdown. _____

4.4.7 Have Instrumentation and Control perform Station Procedure SO23-II-1.1, "Reactor Protection System Testing - 31 day Interval", ESFAS Section. _____

4.4.8 Have Instrumentation and Control perform SO23-II-5, "Nuclear Instrumentation Calibration Wide Range Log Linear Power Safety Channels". _____

4.4.9 Make a thorough inspection of the RCS, including the control rod housings, the steam generators, the RCP's, the pressurizer, and all associated piping. _____

4.4.10 Perform SO23-3-3.8, "Safety Injection Monthly Tests". _____

4.4.11 Perform SO23-3-3.11, "Containment Spray Monthly and Refueling Tests". _____

4.4.12 Obtain a RCS sample and analyze for total activity. _____

4.4.13 Obtain an incore thermocouple map and have Engineering evaluate. _____

4.4.14 Obtain an incore flux map and have Engineering evaluate. _____

4.4.15 Have Instrumentation and Control reset the seismic recording and indicating instrumentation. Refer to Technical Specification 3.3.3.3, "Seismic Instrumentation". _____

4.4.16 Record date and time this procedure was terminated and unit affected. _____

Date _____ Time _____ Unit _____

5.0 ATTACHMENT

5.1 Attachment 1, "Fire Zone Check Sheet" (Tech. Spec. Table 3.3-11)

6.0 REFERENCE(S)

6.1 None

7.0 RECORDS REQUIRED

7.1 File per SO23-0-11, "Trip/Transient Review."

FIRE ZONE CHECK SHEET
(Tech Spec Table 3.3-11)

TIME OF SEISMIC EVENT: _____

TIME CHECK SHEET COMPLETED: _____

COMPLETION VERIFIED BY: _____
(S.R.O.)

ZONE	INSTRUMENT LOCATION	CHECKED BY:
1	Containment	
	Cable Tray Areas Elev. 63'3"	_____
	Cable Tray Areas Elev. 45'	_____
	Cable Tray Areas Elev. 30'	_____
	Combustible Oil Area	_____
	Two steam generator rooms	_____
	Charcoal Filter Area, Elev 45'	_____
2	Penetration	
	Elev. 63'6"	_____
4	New Fuel Storage Area and Spent Fuel Pool Areas	
	Spent Fuel Pool	_____
	New Fuel Pool	_____
5	Control Building Elev 70'	
	Cable Riser Gallery Rm 423	_____
	Cable Riser Gallery Rm 449	_____
6	Control Building Elev 70'	
	Radiation Chemical Lab Rm 421	_____
	Radiation Chemical Lab Rm 420	_____
7	Radwaste Elev 63'6"	
	Chemical Storage Area Rm 503	_____
	Radwaste Control Panel Rm 513	_____
	Storage Area Rm 523	_____
	Hot Machine Shop	_____

FIRE ZONE CHECK SHEET
(Tech Spec Table 3.3-11)

ZONE	INSTRUMENT LOCATION	CHECKED BY:
8	Radwaste Elev 63'6"	
	Waste Decay Tank	_____
	Rms 511A	_____
9	Fuel Handling Building Elev 45'	
	Emgy. A.C. Unit Rm 309-Train A	_____
	Emgy. A.C. Unit Rm 301-Train B	_____
10	Penetration	
	Elev. 45'	_____
11	S.E.B. Roof and Main Steam Relief Valves	_____
12	Control Building Elev 50'	
	Cable Riser Gallery Rm 305	_____
	Cable Riser Gallery Rm 315	_____
13A	Control Building Elev 30'	
	Emgy. HVAC Unit Rm 309A	_____
13B	Control Building Elev 50'	
	Emgy. HVAC Unit Rm 309B	_____
14	Radwaste Elev 24'	
	Boric Acid Makeup Tank Rm 204B	_____
	Boric Acid Makeup Tank Rm 204A	_____
15	Control Building Elev 50'	
	ESF Switchgear Rm 308A	_____
	ESF Switchgear Rm 308B	_____
16	Radwaste Elev 37' & 50'	
	Ion Exchangers	_____
17	Diesel Generator Building	
	Train A	_____
	Train B	_____
18	Diesel Fuel Oil Storage Tank Underground Vaults	_____
20	Condensate Storage Tank T-121	_____
21	Nuclear Storage Tank T-104	_____
22	Auxiliary Feedwater Pump Room	_____
23	Fuel Handling Bldg Elev 30'	
	Spent Fuel Pools Heat Exchange Room 209	_____
28	Penetration Elev. 30'	_____

FIRE ZONE CHECK SHEET
(Tech Spec Table 3.3-11)

ZONE	INSTRUMENT LOCATION	CHECKED BY:
29	Control Building Elev. 30' Cable Riser Gallery Rm 236 Cable Riser Gallery Rm 224	_____ _____
30	Electrical Tunnel Elev. 30'6"	_____
31	Control Building Elev. 30'	_____
32A	Control Building Elev. 30' Fan Room 219 & Corridor 221	_____
32B	Control Building Elev. 30' Fan Room Rm 233 and Corridor Rm 234	_____ _____
34	Radwaste Elev. 9' and 24' Secondary Radwaste Tank Rms 126A,B, and 127 A & B	_____ _____
35	Radwaste Elev. 9' and 24' Spent Resin Tank Rms 125A, B	_____
36	Fuel Handling Building Elev. 17'6" Spent Fuel Pool Pump Rm 107	_____
37	Radwaste Elev. 24' Letdown Heat Exchanger Rms 209A,B	_____
38	Radwaste Elev. 24' Letdown Control Valve Rms 218A,B	_____
39	Radwaste Elev. 24' Filter Crvd Tank Rm 216	_____
40	Radwaste Elev. 9' and 24' Primary Radwaste Tank Rms 211A,D	_____
41	Control Building Elev. 9' Cable Spreading Rm 111A Cable Spreading Rm 111B	_____ _____
42	Control Building Elev. 9' Cable Riser Gallery Rm 110 Cable Riser Gallery Rm 112	_____ _____
43	Control Building Elev. 9' Emgy. Chiller Rm 115 Emgy. Chiller Rm 117	_____ _____

FIRE ZONE CHECK SHEET
(Tech Spec Table 3.3-11)

ZONE	INSTRUMENT LOCATION	CHECKED BY:
44	Intake Structure Pump Rm. T2-106 Pump Rm. T3-106	_____ _____
45	Penetration Area Elev. 9' & 15' Piping Penetration Area 15'	_____
48	Safety Equipment Building Elev. 9' CCW HX and Piping Rm 022-025	_____
50	Radwaste Elev. 9' Charging Pump Rms 106A-F	_____
51	Radwaste Elev. 9' Boric Acid Makeup Tank Rms 105A-D	_____
53	Electrical Tunnel Elev. 9'6", 11'6", (-) 2'6"	_____
54	Safety Equipment Bldg Elev. 15'6" and 8' Shutdown HX Rms 003, 004, 016, 018	_____
55	Safety Equipment Bldg Elev. 8' Chemical Storage Tank Rm 019	_____
56	Safety Equipment Bldg Elev. 8' Component Cooling Water Surge Tank Rms 020, 021	_____
57	Safety Equipment Bldg Elev. 15'6" Pump Rm 005	_____
58	Radwaste Elev. 37' Reactor Trip System Rms 308A-D, 309-A-C	_____
59	Safety Equipment Bldg Elev. 15'6" Pump Rm 001	_____
60	Safety Equipment Bldg Elev. 15'6" Pump Rm 015	_____
61	Safety Equipment Bldg Elev. 15'6" Component Cooling Water Pump Rms 006, 007, 008	_____
62	Radwaste Elev. 50' Volume Control Valve Rooms	_____
63	Control Building Elev. 50' Corridor	_____
64	Control Building Elev. 50' Vital Power Distribution Rms 310A-H	_____

FIRE ZONE CHECK SHEET
(Tech Spec Table 3.3-11)

ZONE	INSTRUMENT LOCATION	CHECKED BY:
65	Control Building Elev. 50' Battery Rms 306B-J	_____
66	Control Building Elev. 50' Evacuation Rm 311	_____
67	Radwaste Elev. 63'6" Cable Riser Gallery Rm 506A Cable Riser Gallery Rm 506B	_____ _____
68	Penetration 9' - 63'6" Cable Riser Shaft	_____
69	Safety Equipment Bldg Elev. 5'3" Salt Water Cooling Piping Rm 010	_____
70	Radwaste Elev. 24' Duct Shaft Rms 222A,B	_____
72	Control Building Elev. 70' Corridor 442	_____
75	Refueling Water Storage Tank T-005	_____
76	Refueling Water Storage Tank T-006	_____
78	Control Building Elev. 9' Corridor Rm 105	_____
79	Control Building Elev. 50' ESF Switchgear Rm 302A ESF Switchgear Rm 302B	_____ _____
80	Radwaste Elev. 37' and 50' Duct Shaft Rms	_____
81	Radwaste Elev. 63'6" Duct Shaft Rms 527A,B	_____
83	Salt Water Cooling Tunnel	_____
84	Safety Equipment Bldg Elev. 8' HVAC Rm 017	_____

Date _____ Time _____ Unit _____