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July 28, 1986

Director, Office of Nuclear Reactor Regulation
Attention: G. E. Lear, Director
PWR Project Directorate No. 1
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

Gentlemen:

Subject: Docket No. 50-206
Schedules for Actions Resulting from
the Systematic Evaluation Program (SEP)
San Onofre Nuclear Generating Station
Unit 1

Reference: Letter, M. O. Medford, SCE, to J. A. Zwolinski, dated October 4, 1985

During the current outage, we were scheduled to provide several submittals regarding the SEP (see referenced letter). Due to the manpower diverted to address the November 21, 1985 loss of power and water hammer event and other issues addressed during the current outage, we have had to delay a number of these projects. The enclosure to this letter provides a revised summary of remaining actions required as a result of SEP and provides new dates for completion of some of these projects. All changes are indicated by a change bar in the right column.

In addition, our response provided in the referenced letter indicated that for item 4.23.7.2, procedures were in place for isolation of certain steamline valves. Our further review of the drain lines on the main steam system has identified additional drain valves that may need to be isolated. Revised item 4.23.7.2 in the enclosure reflects this information.

If there are any questions, please contact me.

Very truly yours,

M O Medford

Enclosure

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COMPLETION DATES FOR SEP PROJECTS

Topic	IPSAR Section No.	Title	Requirement	Completion Date
III-1	4.4	Classification of Structures, Systems and Components (Seismic and Quality)	Perform the following analyses as practical, otherwise evaluate component safety significance.	Per 10 CFR 50.71(e)(3)(ii)
	4.4.1	Radiography Requirements	Verify that specified components have been radiographed or volumetrically inspected; otherwise perform volumetric inspection.	Per 10 CFR 50.71(e)(3)(ii)
	4.4.2	Pressure Vessels	Show compliance with fatigue analysis requirements.	Per 10 CFR 50.71(e)(3)(ii)
	4.4.3	Fracture Toughness	Evaluate to determine if material toughness is sufficient to prevent failure.	Per 10 CFR 50.71(e)(3)(ii)
	4.4.4	Piping	Assess impact on usage factor of gross discontinuities in Class 1 piping for cyclic loads.	Per 10 CFR 50.71(e)(3)(ii)
	4.4.5	Valves	Verify on sampling basis that Class 1 valve stress limits meet criteria for body shape and Service Level C conditions; verify pressure-temperature rating of Class 2/3 valves.	Per 10 CFR 50.71(e)(3)(ii)
	4.4.6	Pumps	Demonstrate fatigue analysis compliance for reactor coolant pumps; evaluate design of other pumps.	Per 10 CFR 50.71(e)(3)(ii)
	4.4.7	Storage Tanks	Evaluate tanks to determine if specified stress limits are met.	Per 10 CFR 50.71(e)(3)(ii)

Topic	IPSAR Section No.	Title	Requirement	Completion Date
III-2	4.5	Wind and Tornado Loadings	Perform cost-benefit analysis of upgrading at specific windspeeds.	August 31, 1986
III-3.A	4.6	Effects of High Water Level on Structures		
	4.6.1	Groundwater	Evaluate short-term hydrostatic load at grade. Evaluate and justify lower levels if necessary.	September 30, 1986
	4.6.2	Roof Loadings	Demonstrate roofs can withstand ponding load, or propose corrective measures.	Complete 4/26/85
III-3.C	4.7	Inservice Inspection of Water Control Structures	Revise inspection program in accordance with NRC staff comments.	Prior to next inspection
			Provide details of Intake Structure Surveillance Program	10/4/85
			Inspect Seawall	Complete Cycle IX Outage
III-4.A	4.8	Tornado Missiles	Perform cost-benefit per III-2 above.	August 31, 1986
III-5.A	4.9	Effects of Pipe Break on Structures, Systems and Components Inside Containment	Perform fracture mechanics analyses, systems analyses, etc. Determine need for change in leak detection system sensitivity. (Integrate Topic V-5)	January 30, 1987
III-5.B	4.10	Pipe Break Outside Containment	Perform fracture mechanics analyses, systems analyses, etc.	January 30, 1987
III-6	4.11	Seismic Design	Complete analysis of remaining safety related piping and implement necessary modifications.	Complete Cycle IX Outage
III-7.B	4.12.1	Design Codes, Criteria, and Load Combinations	Confirm that seismic loads dominate tornado loads and that correct combinations were used. (Integrate with other topics III-2, III-5.A, III-5.B) To be completed with other SEP topics.	See related topics

Topic	IPSAR Section No.	Title	Requirement	Completion Date
V-5	4.18	Reactor Coolant Pressure Boundary Leakage Detection		
	4.18.1.1	System Sensitivity	See III-5.A.	January 30, 1987
	4.18.1.2	Operability Requirements	Provide Technical Specifications for surveillance regarding operability of leak detection systems.	November 14, 1986
	4.18.1.3	Seismic Qualification	Provide procedures or qualify one leak detection system.	November 14, 1986
V-11.B	4.21	Residual Heat Removal System Interlocks Requirements		
	4.21.2	Overpressurization Protection of RHR System	Provide Technical Specifications for operability of Overpressure Mitigation System when necessary to protect RHR system.	November 14, 1986
VI-1	4.22	Organic Materials and Post-Accident Chemistry	Institute periodic inspection program. Program to be done with Type A testing and will be visual inspection.	Complete
VI-4	4.23	Containment Isolation System		
	4.23.1.2	Key Control and Control Panel Access Procedures for Sequencer Door	Provide procedures for control panel access.	Complete
	4.23.4	Valve Location	Seismically qualify lines.	Complete Cycle IX Outage
	4.23.5	Isolation of Closed Systems	Seismically qualify lines.	Complete Cycle IX Outage
		Isolation of Closed Systems	Develop procedures to identify when CCW valves need to be closed for containment integrity.	November 14, 1986

Topic	IPSAR Section No.	Title	Requirement	Completion Date
	4.23.6	Isolation of Air Handling Unit Cooling Lines	Seismically qualify lines.	Complete Cycle IX Outage
	4.23.7	Isolation of Branch Lines		
	4.23.7.1	Refueling Water Supply Line	Provide administrative procedures and/or locking devices for refueling water line.	Complete
		Refueling Water Return Line	Evaluate when to close valves in refueling water return line and incorporate in procedures as necessary.	November 14, 1986
	4.23.7.2	Main Steamlines	Develop procedures to isolate main steamline branch lines and drain taps.	November 14, 1986
VI-7.B	4.24	Engineered Safety Feature Switchover from Injection to Recirculation Mode (Automatic Emergency Core Cooling System Realignment)	Provide automatic termination of injection and a backup to the refueling water storage tank level indicator; review procedures and training.	To be determined in accordance with ILS
VI-7.C.2	4.25	Failure Mode Analysis		
	4.25.4	Other Modifications	Evaluate benefits of incorporating recommended modifications.	September 30, 1986
VI-10.A	4.26	Testing of Reactor Trip System and Engineered Safety Features, Including Response-Time Testing		
	4.26.1	Response Time Testing of Reactor Protection System	Include testing now done by procedures into Technical Specifications.	November 14, 1986
	4.26.2	Testing of Engineered Safety Features	Include test for Containment Spray Actuation System in T.S.	November 14, 1986

Topic	IPSAR Section No.	Title	Requirement	Completion Date
VII-3	4.28	Systems Required for Safe Shutdown		
	4.28.3	TMI Task Action Plan Item III.E.1.1 "Auxiliary Feedwater System Evaluation"	Integrate into topics III-1, III-2, III-4.A, III-5.A, III-5.B, III-6, VIII-3 and XV-2. Upgrade third train of auxiliary feedwater.	Third pump installed Cycle IX. Upgrade scheduled for Cycle X refueling.
VIII-1.A	4.29	Potential Equipment Failures Associated with Degraded Grid Voltage	Implement modifications and Technical Specification for undervoltage protection.	To be determined in accordance with ILS
			Provide voltage monitoring program for tap settings.	Complete by letters December 4, 1985 and June 19, 1986
VIII-4	4.31	Electrical Penetrations of Reactor Containment	No modifications are required; however, penetrations of concern were replaced as part of Environmental Qualification Program.	Complete Cycle IX Outage
IX-3	4.32	Station Service and Cooling Water Systems		
	4.32.3	Component Cooling Water System Passive Failures	Install Dedicated Shutdown System.	Complete Cycle IX Outage
			Develop procedures for use in event of CCW passive failure.	November 14, 1986
	4.32.5	Independence of Saltwater Cooling System Components	See VI-7.C.2.	September 30, 1986
	4.32.7	Saltwater Cooling System Reliability	Perform reliability evaluation of saltwater cooling system.	August 31, 1986

Topic	IPSAR Section No.	Title	Requirement	Completion Date
IX-5	4.33	Ventilation Systems		
	4.33.2	Switchgear, Cable Spreading and 480-V Switchgear Rooms	Implement temperature monitoring program and procedures.	Complete by letter January 17, 1986
	4.33.3	Administration Building (Battery and Inverter Room)	Develop a procedure for room hydrogen dispersion.	Complete
IX-6	4.34	Fire Protection	Provide dedicated system.	Complete Cycle IX Outage
XV-1	4.35	Decrease in Feedwater Temperature, Increase in Feedwater Flow, Increase in System Flow, and Inadvertent Opening of a Steam Generator Relief or Safety Valve	Determine corrective measures.	November 14, 1986
XV-2	4.36	Spectrum of Steam System Piping Failures Inside and Outside Containment	Install additional train of motor-driven auxiliary feedwater.	Third pump installed Cycle IX. Upgrade scheduled for Cycle X refueling.

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