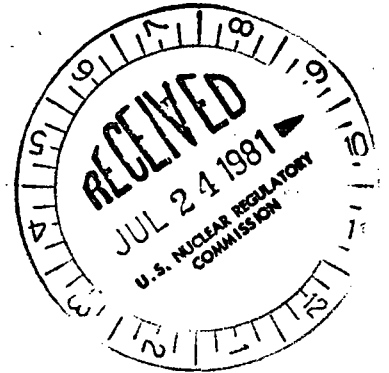


JUL 20 1981



Docket No. 50-206

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MEMORANDUM FOR: H. A. Wilber, Chief, Reactor Projects Section, Regions II, IV, and V, RRRI, IE:HQ

THRU: J. L. Crews, Director, Division of Resident, Reactor Project and Engineering Inspection, IE:RV

FROM: A. E. Chaffee, Regional Reactor Inspector, San Onofre Unit 1

SUBJECT: (SALP) ITEM: SURVEILLANCE REVIEW OF SAN ONOFRE UNIT 1

As a result of concerns addressed in the SALP Review Board conducted in 1980, a preliminary review was done of San Onofre Unit 1 Technical Specifications (Amendment 56) versus the Westinghouse Standard Technical Specifications (NUREG 0452, Rev. 3). This review was focused on surveillance requirements. It revealed a large number (101) of surveillance items which are not covered by Songs 1 Technical Specifications. Many of these items appear to be significant. Enclosure 1 is forwarded for your review and action.

Original signed by
A. E. Chaffee

A. E. Chaffee
Regional Reactor Inspector

Enclosure:
List of Surveillance Items
of Potential Concern

Sent to DMB for DCS Processing

Distributed by RV:
RV PDR
Engelken (ltr)
State of CA (Hahn, Johnson)
Resident Inspector

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OFFICE	RV/db/mm/1a	<i>Jeg</i>	<i>acc</i>	<i>JL</i>			
SURNAME	Engelken	T. Young	A. Chaffee	J.L. Crews			
DATE	7/20/81	7/20/81	7/ /81	7/20/81			

Listing of (W) Standard Technical Specification
Surveillance Items Incompletely Covered in
San Onofre Unit 1 Technical Specifications

Surveillance Item #	Comments	Applicable Technical Specification Requirement	Importance
<u>Reactivity Control Systems</u>			
4.1.1.1.1	Shutdown Margin for Tavg > 200 ⁰ F	No	3
4.1.1.1.2	Actual reactivity balance compared to predicted	4.8	3
4.1.1.2	Shutdown Margin for Tavg < 200 ⁰ F	No	3
4.1.1.3	Verification of MTC	No	3
4.1.1.4	Tavg within limits	2.1(2) 3.1.3D	2
4.1.2.1	Boration System Flow Path shutdown	3.2A	1
4.1.2.2	Boration System Flow Path critical	3.2B	1
4.1.2.3.2	Remaining charging pump inoperability to allow 1 PORV to prevent pressure transient (Modes 5 and 6)	No	1*
4.1.2.4.2	See 4.1.2.3.2 (Mode 4)	No	1*
4.1.2.5	Borated water source (needs clarification) (Modes 5 and 6)	3.3.3, 4.1 (Table 4.1.2, Item 2)	1
4.1.2.6	Verification of Two Boration water sources (Modes 1, 2, 3, and 4)	3.3.3, 4.1 (Table 4.1.2, Item 2), 3.2 A(3)	1
4.1.3.4b	Rod drop times after maintenance or modification	No	3
4.1.3.5	Verify shutdown rods fully withdrawn (Modes 1 and 2)	No*	1*

Surveillance Item #	Comments	Applicable Technical Specification Requirement	Importance
<u>Power Distribution Limits</u>			
4.2.1.1	Verify Axial flux difference within limits	3.11	1
4.2.2.2	Fxy	No	3
4.2.2.3	$F_Q(z)$	No	3
4.2.3.2	Verify reactor coolant flow rate adequate	3.1.2 E	2
4.2.3.3	" (note different frequency) "	3.1.2 E	2
4.2.3.5	Measurement of RCS flow rate	No	1
4.2.4.1	Quadrant Power Tilt Ratio	No	3
4.2.4.2	Quadrant Power Tilt Ratio	No	3
4.2.5	Verify Tavg and Press are less than DNB (TMI item)	2.1	1
<u>Instrumentation</u>			
4.3.1.1	Reactor Trip Interlocks (e.g., p-8 and p-7)	No	1
4.3.1.2	Reactor Trip Response Times	No	1
4.3.2.1	ESFAS Manual Switches	No	1
4.3.2.2	ESFAS Response Times	No	1
4.3.3.1	Radiation Monitors (could be more specific)	4.1 (Table 4.1.1, Item 18)	3
4.3.3.2	Verification of Operability of Incore Detectors	3.10	1
4.3.3.3.1	Operability of Seismic Event Monitoring Equipment	No	2
4.3.3.3.2	" (note: after Seismic Event) "	No	2
4.3.3.4	Operability of Meteorological Monitoring equipment	No	1
4.3.3.5	Calibration of Remote Shutdown Instrumentation	No	1

Surveillance Item #	Comments	Applicable Technical Specification Requirement	Importance
4.3.3.6	Accident Monitoring Instrumentation Note: Subcooling Meter will be installed prior to S/U (This item is TMI related.) (Licensee has submitted proposed Tech. Spec. Change Amend. 97, letter dated May 7, 1981, to Licensing.)	No	1
4.3.3.8.2	Supervisory circuits for fire protection circuits (not sure if applicable to Songs 1)	No (see letter dated October 23, 1979, page 2)	1
4.3.3.8.3	Fire Protection (None Supervised Circuits)	No	1
4.3.4.2	Turbine overspeed protection	No	1
<u>Reactor Coolant System</u>			
4.4.1.1		3.1.2 D	2
4.4.1.2.1	Reactor Coolant loop operability verification for different modes of operation (includes operability of S/G in hot shutdown)	3.1.2 E	2
4.4.1.2.2		3.1.2 F	2
4.4.1.3.1			2
4.4.1.3.2			1
4.4.1.3.3			1
4.4.1.4	RHR loop operability	3.3.1 A(1)d	1
4.4.4.1	Pzr water level	No	3
4.4.4.2	Pzr heaters emergency power (TMI)	No	2
4.4.5.1	PORV Operability	4.1 (Table 4.1.2, Item 7)	1
4.4.5.2	Operability of block valve	No	1
4.4.5.3	Emergency power supply for PORV's block valves operability	No	1
4.4.7.1 a,b,c	Leak detection system operability	3.1.4 bases	2
4.4.7.2.1 a,b,c,d,e	Verification of leakage rate	3.1.4 A	2

Surveillance Item #	Comments	Applicable Technical Specification Requirement	Importance
4.4.7.2.2	Additional isolation valve leakage verification requirements	No	2
4.4.8	Reactor Coolant Chemistry verification	No	2
4.4.10.1.1	RCS Temp and press within limits verification	2.1(2) 3.1.3	2
4.4.10.1.2	Brittle Fracture Curve update	3.1.3 B	3
4.4.10.2	Pzr temp limitations	3.1.3 C	1
4.4.10.3.1	Pressure protection for RCS low Tav _g < 200 ^o F	No	3
4.4.11	RCP Flywheel Insp.	No	2
<u>Emergency Core Cooling System</u>			
4.5.2 a,b,c,d(2) g,h	ESF operability Tav _g > 350 ^o F	3.3.1 A	1
4.5.3.1	ESF operability Tav _g < 350 ^o F	3.3.1 A	1
4.5.3.2	ESF operability Tav _g < 350 ^o F	3.3.1 A	1
4.5.5a	Refueling Water Storage Tank Boron Concentration & level surveillance	3.3.1 A(1)a, 4.1 (Table 4.1.2, Item 2)	1
<u>Westinghouse Atmospheric Containment (Section A)</u>			
4.6.1.1 a,b	Verification of Containment Integrity	3.6 B	1
4.6.1.3 a,c	Airlock operability (Note: Licensee has had repeated problems with personnel access hatch. LER 79-15 and 81-10)	3.6 B, 1.0	1*
4.6.1.5	Containment Internal Pressure Band (Note: Licensee is presently evaluating proper band)	3.6 C	2
4.6.1.6	Containment Air Temp Limit	No	2
4.6.1.8	Ventilation System: Purge and Exhaust Valves Shut (Note: This item is pending.)	TMI Item II.E.4.1(6)	2

Surveillance Item #	Comments	Applicable Technical Specification Requirement	Importance
4.6.2.1 a,c(2)	Containment Spray System	3.3.1 A(2) and A(3), (4.2.1 I B)	
4.6.2.2 a,b1,c	Containment Spray Additive system	3.3.1 A(2)c, 3.3.4, 4.2.1.I.B,	
4.6.4.1	Containment Isolation Valves Operability (isolation times) (needs to be more specific)	4.3 II C	1*
4.6.4.2	Containment Isolation Valves Phase A, Phase B (needs to be more specific)	4.3 II C	1*
4.6.4.3	Containment Isolation Valves inservice test (isolation time)	4.7	2
4.6.4.4	Purge Valves	TMI Item II.E.4.2(6)	2
4.6.5.1	Containment Hydrogen Analyzers	No	2
4.6.5.3	Hydrogen Purge Cleanup System (see licensee letters dated 3/25/80 to NRR and NRR letter dtd 5/2/80)	TMI Item II.E.4.1	2
<u>Plant Systems</u>			
4.7.1.2	Operability of Aux. feed pumps: see licensee's proposed Amendment 97 (dated May 7, 1981)	3.4.1(2), 4.4 E	1
4.7.1.3.1	Condensate Storage Tank operability	3.4.1(3)	1
4.7.1.3.2	Alternate Water Source for Aux. feed	3.4.1(3)	
4.7.2	S/G Pressure/Temp Limitations (may not apply to Songs 1)	3.1.2 C(2)	2
4.7.3	Component Cooling Water System MOV-720A and MOV-720B	3.3.1 A(1)g	2
4.7.4	Salt Water Cooling System Operability	No	1*
4.7.11.4	Halon System (4KV room will have system 6/15/81)	License requirement FPSER	2

Surveillance Item #	Comments	Applicable Technical Specification Requirement	Importance
4.7.12	Fire Barrier Penetrations	License Requirement FPSE	2
	<u>Electrical Power Systems</u>		
4.8.1.1.1b	A.C. Sources demonstrate transfer capability	3.7.1.A	1
4.8.1.1.2d	Diesel Generator Operability (simultaneous start)	No	3
4.8.3.1	Electrical Equipment Protective Devices	No	2
4.8.3.2	MOV thermal overload or bypass	No	2
	<u>Refueling Operations</u>		
4.9.1.1	Reactivity condition prior to refueling	3.8 A.4	2
4.9.1.2	Boron Concentration during refueling (needs to be more specific)	3.8.A.4, 4.1 (Table 4.1.2, Item 1a.5)	2
4.9.2	Source Range Inst.	3.8.A.2	1
4.9.4	Verification of Containment Integrity during refueling	3.6 B(2) and (3)	2
4.9.5	Communications (refueling)	No	1*
4.9.6.1	Manipulator Crane operability	No	2
4.9.6.2	Auxiliary Hoist for RCC Handling	No	2
4.9.8.1	RHR Loop operability	3.8.A.3	2
4.9.9	Containment Purge and Exhaust Valve operability	3.6.B(2) and (3) 1.0 Defn	2
4.9.10	Refueling Pit minimum water level	3.8.A.6	2
4.9.11	Water level storage pool	3.8.B.2	1
4.9.12	Storage Pool Air Cleanup System	No	2

Note: Of approximately 150 surveillance requirements in standard Technical Specification which are applicable to San Onofre Unit 1, San Onofre has only 49. This means Songs is lacking approximately 67 percent of the applicable surveillance requirements in the standard technical specifications.

Note: Technical Specification beginning with "4" are surveillance requirements. All others are LCOs.

*These items are of particular concern.