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September 11, 1984

Director, Office of Nuclear Reactor Regulation
Attention: Mr. W. A. Paulson, Acting Chief
Operating Reactors Branch No. 5
Division of Licensing
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

Gentlemen:

Subject: Docket No. 50-206
Changes to In-Service Testing Program for Pumps and Valves
San Onofre Nuclear Generating Station
Unit 1

References: 1) Letter, M. O. Medford (SCE) to D. M. Crutchfield (NRC), January 24, 1984, In-Service Testing Program for Pumps and Valves

2) Letter, M. O. Medford (SCE) to D. M. Crutchfield (NRC), June 15, 1984, In-Service Testing of Valves Program

3) Letter, R. W. Krieger (SCE) to D. M. Crutchfield (NRC), September 1, 1983, NUREG-0737, Reactor Coolant System Vents

4) Letter D. M. Crutchfield (NRC) to R. Dietch (SCE), August 29, 1983, NUREG-0737, Reactor Coolant System Vents

By Reference 1, Southern California Edison Company submitted a revised In-Service Testing (IST) program for pumps and valves for the San Onofre Nuclear Generating Station, Unit 1. By Reference 2, we notified the NRC of a change in the IST program. This is to advise you of two further changes, as discussed below.

1. In fulfillment of our commitment in Reference 3, valves SV-2401 through SV-2404 and SV-3401 through SV-3404 in the reactor coolant gas vent system (RCVS) were included in IST Procedure SO1-V-2.15, to be full stroke tested and fail safe tested at cold shutdown. However, Note 15 to IST Procedure SO1-V-2.15 made this testing conditional as follows:

"The Reactor Coolant Gas Vent System has been installed in the plant. This valve will be included in the program once the NRC approves the use of the system."

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Based on the schedule outlined in 10 CFR 50.44(c)(3)(iii) and the NRC's clarification in Reference 4 as to the intent of this rule, we have now concluded that (1) it is not necessary to obtain NRC's approval for purpose of testing the RCVS valves during cold shutdown, and (2) such testing must be initiated prior to Unit 1 restart.

Therefore, Note 15 is not relevant and will be deleted.

2. Table 2 of IST Procedure SO1-V-2.14 requires a quarterly vibration test for spray chemical addition pumps G-200A and G-200B, in accordance with ASME Code, Section XI. However, these are low, variable speed positive displacement pumps and the existing vibration monitoring equipment cannot meet the ASME Code, Section XI requirement to measure the displacement vibration amplitude, due to low pump speed. Therefore, an alternate vibration test that measures units of velocity rather than displacement will be substituted.

Revised insert pages for Procedures SO1-V-2.14 and SO1-V-2.15, including a new Pump Relief Request No. 8, to reflect the two changes discussed above are enclosed herewith.

If you have any questions, please contact me.

Very truly yours,

M. O. Medford

M. O. Medford
Manager, Nuclear Licensing

Enclosure

cc: USNRC Document Control Desk, Washington, D.C. 20555
J. B. Martin (USNRC Regional Administrator, Region V)
A. E. Chaffee (USNRC Resident Inspector, Units 1, 2 and 3)

PUMP RELIEF REQUEST NO. 8

SYSTEM:	Containment Spray Hydrazine Addition
COMPONENT:	Spray Chemical Addition Pumps G-200A , G-200B
CLASS :	2
FUNCTION:	To provide hydrazine addition to containment spray
TEST REQUIREMENT:	IWP-4510, At least one displacement vibration amplitude (peak-to-peak composite) shall be read during each in-service test. IWP-4520(b), The frequency response range of the readout system, shall be from one-half minimum speed to at least maximum pump shaft rotational speed.
BASIS FOR RELIEF:	Existing vibration monitoring equipment cannot meet the Code requirement to measure the displacement vibration amplitude, due to a bandpass filter which deletes vibration input below 350 cycles per minute (350 rpm). Pump speed is 77.5-155 rpm (variable speed). Vibration probe sensitivity for available equipment is 120 to 9,000 rpm when measuring in units of velocity.
ALTERNATE TESTING:	Test in units of velocity using existing equipment at greater than or equal to 120 rpm. This will provide vibration monitoring at 1 times rpm where most rotating equipment malfunctions occur.

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IN-SERVICE TESTING PROGRAM
ASME-CLASS 1, 2, & 3 VALVES
SAN ONOFRE NUCLEAR GENERATING STATION
UNIT 1

VALVE NUMBER	COORD.	CLASS	VALVE CATEGORY	VALVE SIZE	VALVE TYPE	ACTR. TYPE	NORMAL POSITION	STROKE DIRECTION	TEST	TEST MODE	MAX. STROKE TIME (Sec.)	RELIEF REQUEST	REMARKS

EXPLANATION OF NOTES (Continued)

NOTES:

15. (Deleted)

16. This valve is a remotely operated hand control valve. A maximum stroke time is not required for this valve.

17 Per General Design Criteria (GDC)57, these valves are not required to be automtic and will not be seat. leak tested.

18 867 a, b, and c assume leak tightness of the Safety Injection System (Technical Specification 4.2.2). Therefore, these valves will not be seat leak tested.

EXPLANATION OF ABBREVIATIONS

GA			GATE
GL			GLOBE
CK			CHECK
SV			SAFETY
RV			RELIEF
BTF			BUTTERFLY
BALL			BALL
	SO		SOLENOID
	AO		AIR OPERATOR
	SA		SELF ACTUATED
	HY		HYDRAULIC
	MO		MOTOR OPERATOR
	M		MANUAL
		AT	SEAT LEAK TEST
		BT	FULL STROKE EXERCISE TEST
		BTP	PARTIAL STROKE EXERCISE TEST
		CVT	CHECK VALVE EXERCISE TEST

IN-SERVICE TESTING PROGRAM
ASME-CLASS 1, 2 & 3 VALVES
SAN ONOFRE NUCLEAR GENERATING STATION
UNIT 1

VALVE NUMBER	COORD.	CLASS	VALVE CATEGORY	VALVE SIZE (INCHES)	VALVE TYPE	ACTR. TYPE	NORMAL / FAIL POSITION	STROKE DIRECTION	TEST	TEST MODE	MAX. STOKE TIME (Sec.)	RELIEF REQUEST	REMARKS
REACTOR COOLANT SYSTEM P & ID # 568766-17 (includes CC #26)													
CV-530	C-2	1	B	2	GL	AO	O/O	O&C	BT FST PIT	OP CS RR	5-O 15-C	VRR-6	Notes 2, 9,
CV-531	B-2	1	B	2	GL	AO	O/O	O&C	BT FST PIT	OP CS RR	5-O 15-C	VRR-6	Notes 2, 9,
CV-532	C-11	2	A	3/4	BALL	AO	O/C	O&C	AT BT FST PIT	RR OP CS RR	5-O 5-C	VRR-6	Notes 2, 10
CV-533	C-11	2	A	2	BALL	AO	O/C	C	AT BT FST PIT	RR OP CS RR	20	VRR-6	Notes 2, 10
CV-534	C-11	2	A	2	BALL	AO	O/C	C	AT BT FST PIT	RR OP OP RR	10		Notes 2 & 10
CV-545	B-2	1	B	2	GL	AO	C/C	C	BT FST PIT	CS CS RR	5	*	Notes 2 & 9
CV-546	C-2	1	B	2	GL	AO	C/C	C	BT FST PIT	CS CS RR	5	*	Notes 2 & 9
RV-532	A-3	1	C	3x6	RV	SA	C	--	RVT PIT	RR RR	--		Note 7
RV-533	A-3	1	C	3x6	RV	SA	C	--	RVT PIT	RR RR	--		Note 7
1"-600-239	C-11	2	AC	1	CK	SA	C	O&C	AT CVT	RR CS	--	*	Note 10
REACTOR COOLANT GAS VENT P & ID # 568766-17 (includes CC #26)													
SV-2401	F-8	2	B	3/4	GA	SO	C/C	O	BT FST PIT	CS CS RR	2	*	Notes 2, 9,

* See Attachment 8.3

IN-SERVICE TESTING PROGRAM
ASME-CLASS 1, 2 & 3 VALVES
SAN ONOFRE NUCLEAR GENERATING STATION
UNIT 1

VALVE NUMBER	COORD.	CLASS	VALVE CATEGORY	VALVE SIZE (INCHES)	VALVE TYPE	ACTR. TYPE	NO. FA POSI...	STROKE DIRECTION	TEST	TEST MODE	MAX. STOKE TIME (Sec.)	RELIEF REQUEST	REMARKS
REACTOR COOLANT GAS VENT P & ID # 568766-17 (includes CC #26) (Continued)													
SV-2402	E-8	3	B	3/4	GA	SO	C/C	O	BT FST PIT	CS CS RR	2	*	Notes 2, 9,
SV-2403	A-7	2	B	3/4	GA	SO	C/C	O	BT FST PIT	CS CS RR	2	*	Notes 2, 9,
SV-2404	A-7	3	B	3/4	GA	SO	C/C	O	BT FST PIT	CS CS RR	2	*	Notes 2, 9,
SV-3401	F-8	2	B	3/4	GA	SO	C/C	O	BT FST PIT	CS CS RR	2	*	Notes 2, 9,
SV-3402	E-8	3	B	3/4	GA	SO	C/C	O	BT FST PIT	CS CS RR	2	*	Notes 2, 9,
SV-3403	B-7	2	B	3/4	GA	SO	C/C	O	BT FST PIT	CS CS RR	2	*	Notes 2, 9,
SV-3404	B-7	3	B	3/4	GA	SO	C/C	O	BT FST PIT	CS CS RR	2	*	Notes 2, 9,
CHEMICAL AND VOLUME CONTROL SYSTEM P & ID # 568767-21 (includes CC #18)													
CV-202	B-2	1	B	2	GL	AO	O&C/C	C	BT FST PIT	OP CS RR		VRR-6	Notes 5
CV-203	B-3	1	B	2	GL	AO	O&C/C	C	BT FST PIT	OP CS RR		VRR-6	Notes 5
CV-204	C-2	1	B	2	GL	AO	O&C/C	C	BT FST PIT	OP CS RR		VRR-6	Notes 5
CV-276	D-3	2	B	3/4	GL	AO	O/O	O&C	BT FST PIT	CS CS RR	20-O 20-C	*	Note 2
CV-304	C-2	1	B	2	GL	AO	O/C	O&C	BT FST PIT	CS CS RR	100-O 80-C	*	Note 2

TABLE 2

ASME-CLASS 1, 2 AND 3 PUMPS (UNIT 1)

PUMP NUMBER	PUMP NAME	CLASS	P & ID AND COORDINATES	TEST PARAMETERS								NOTES
				SPEED	INLET PRESS	DIFF PRESS	FLOW RATE	VIBRATION	BEARING TEMP	LUBE LEVEL	TEST FREQUENCY	
G10S	AUX. FEEDWATER PUMP (ELECT)	2	5159570 B-5	N/A	YES	YES	NO	YES	YES	YES	MONTHLY	3, PRR-6
G-10	AUX. FEEDWATER PUMP (STEAM)	2	5159570 D-5	YES	YES	YES	NO	YES	YES	YES	MONTHLY	3, PRR-6
G-15A	COMPONENT COOLING PUMP	3	568768 C-8	N/A	YES	YES	YES	YES	YES	YES	QUARTERLY	3
G-15B	COMPONENT COOLING PUMP	3	568768 C-8	N/A	YES	YES	YES	YES	YES	YES	QUARTERLY	3,6
G-15C	COMPONENT COOLING PUMP	3	568768 C-8	N/A	YES	YES	YES	YES	YES	YES	QUARTERLY	6
G-74A	DIESEL FUEL TRANSFER PUMP	3	5154026 H-5	N/A	YES	YES	YES	NO	NO	NO	QUARTERLY	6, PRR-2
G-74B	DIESEL FUEL TRANSFER PUMP	3	5154026 H-4	N/A	YES	YES	YES	NO	NO	NO	QUARTERLY	6, PRR-2
G-75A	DIESEL FUEL TRANSFER PUMP	3	5154031 H-7	N/A	YES	YES	YES	NO	NO	NO	QUARTERLY	6, PRR-2
G-75B	DIESEL FUEL TRANSFER PUMP	3	5154031 H-8	N/A	YES	YES	YES	NO	NO	NO	QUARTERLY	6, PRR-2
G-50A	SAFETY INJECTION PUMP	2	568769 B-11	N/A	YES	YES	NO	YES	YES	YES	QUARTERLY	3,6,PRR-6
G-50B	SAFETY INJECTION PUMP	2	568769 D-11	N/A	YES	YES	NO	YES	YES	YES	QUARTERLY	3,6,PRR-6
G-45A	SAFETY INJECTION RECIRCULATION PUMP	2	568769 H-2	MOTOR AMPS & VOLTS	NO	NO	NO	NO	NO	NO	QUARTERLY	4, PRR-3
G-45B	SAFETY INJECTION RECIRCULATION PUMP	2	568769 H-3	MOTOR AMPS & VOLTS	NO	NO	NO	NO	NO	NO	QUARTERLY	4, PRR-3
G-27N	REFUELING WATER PUMP	2	568776 H-5	N/A	YES	YES	NO	YES	YES	YES	QUARTERLY	3,6,PRR-6
G-27S	REFUELING WATER PUMP	2	568776 H-5	N/A	YES	YES	NO	YES	YES	YES	QUARTERLY	3,6,PRR-6
G-200A	SPRAY CHEMICAL ADDITION PUMP	2	568777 H-11	YES	YES	YES	YES	YES	YES	YES	QUARTERLY	3,6, PRR-8
G-200B	SPRAY CHEMICAL ADDITION PUMP	2	568777 G-11	YES	YES	YES	YES	YES	YES	YES	QUARTERLY	3,6, PRR-8
G-13A	SALT WATER COOLING PUMP	3	568775 B-6	N/A	YES	YES	YES	YES	YES	YES	MONTHLY	3,6,PRR-7
G-13B	SALT WATER COOLING PUMP	3	568775 C-6	N/A	YES	YES	YES	YES	YES	YES	MONTHLY	3,6,PRR-7