

57-206

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~~W.C. MOODY~~

MEMO TO Stan Nowicki

September 19, 1980
DATE PREPARED

U. S. Nuclear Regulatory Commission

Subject: Environmental Qualification

San Onofre Nuclear Generating Station

Unit 1

This forwards additional information regarding environmental qualification of the Residual Heat Removal System. Provided is a revised table indicating the values to which the RHR pumps were qualified and revised pages of References indicating the added Reference 33. Also provided is the Reference 33, Wyle Qualification Test Report, for the RHR pump motors. It should be pointed out that the motor seals and seal O-rings were irradiated to a value less than that indicated in the qualification table provided. The basis for this is that the seals and seal o-rings are qualified for 5 year operation only and will be replaced as part of a maintenance program every 5 years.

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A.C.Llorens:lw

Attachments

cc:

THIS DOCUMENT CONTAINS
POOR QUALITY PAGES

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From

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RESIDUAL HEAT REMOVAL SYSTEM

EQUIPMENT	MANUFACTURER	LOCATION	ENV.	QUAL.	METHOD	REFERENCE
G14A and B	Pacific Pumps 6" Type SVC	Area 1	T - 291 ⁰ F	265 ⁰ F	Test	33
Residual Heat Removal Pumps	Louis Allis Motor Model No. 7117636003 Type C3L6B	Containment	P - 64.1	61.2	Test	33
			H - 100%	100%	Test	33
			C - Yes	Yes	Test	33
			R - 2E6	4E6	Test	33
			S - Yes	Yes	Test	33
MOV 822A and B	Limitorque SMB	Area 1	T - 291 ⁰ F	329 ⁰ F	Similar	2, 3
RHR Ht Ex Inlet		Containment	P - 64.1	105	Similar	2, 3
			H - 100%	Steam	Similar	2, 3
			C - Yes	Yes	Similar	2, 3
			R - 2E6	2E6	Similar	2, 3
			S - Yes	-	-	-
HCV602	Black, Sivalls and Bryson Type 7610	Area 1	T - 291 ⁰ F	650 ⁰ F	Analysis	-
RHR Flow Control		Containment	P - 64.1	64	Analysis	-
			H - 100%	100%	Analysis	-
			C - Yes	Yes	Analysis	-
			R - 2E6	3.5E6	Analysis	-
			S - Yes	-	-	-
FT602	Foxboro E13DM	Area 1	T - 291 ⁰ F	300 ⁰ F	Test	10
RHR Flow		Containment	P - 64.1	75	Test	10
			H - 100%	100%	Test	10
			C - Yes	Yes	Test	10
			R - 2E6	2.2E8	Test	11, 26
			S - Yes	-	-	-
MOV 813 and 814	Crane Valves Limitorque SMA-1-25	Area 1	T - 291 ⁰ F	329 ⁰ F	Analysis	2, 3
RHR Inlet		Containment	P - 64.1	105	Analysis	2, 3
			H - 100%	Steam	Analysis	2, 3
			C - Yes	Yes	Analysis	2, 3
			R - 2E6	2E8	Analysis	2, 3
			S - Yes	-	-	-

REFERENCES

1. NUS 1854
2. Amendment 30 SONGS 1 FSAR
3. Amendment 47 SONGS 1 FSAR
4. Environmental Qualification of Safety Related Electrical Equipment dated February 24, 1978
5. Specification 82-9010, 6/6/75
6. General Electric Wire and Cable Product Data, Vulkene Industrial Control Cable, September 15, 1961
7. FIRL Test Report F-C3913-2A, May, 1975
8. FIRL Test Report F-C4033-1, January, 1975
9. The Rockbestos Company, Qualification of Firewall III Class 1E Electric Cables, February 1, 1977
10. Foxboro Test Report Nos. T3-1013 and T3-1013 (Supplementary)
11. Foxboro Test Report No. T3-1068
12. SCE Purchase Order H22J5004, 8/28/75
13. Weed Instrument Co. Inc. Certificate of Compliance
- 14.
15. EBV Systems Division, Certificate of Compliance
- 16.
17. Specification BSO-3042, 7/20/64
18. Specification BSO-3043, 5/6/64
19. Specification BSO-3280
20. SONGS 1 FSAR, Volume IV, Section 4.3.6.4

21. Amphenol Technical Report 123-1247
22. Amphenol Technical Report 123-1260
23. FIRL Test Report F-C4033-3, January, 1975
24. Specification SO 23-304-11
- 25.
26. Foxboro Test Report No. T3-1097
27. Amphenol letter from Paul T. Smith to SCE Att: D. Nanda dated August 31, 1977
28. Specification SEP-402, December, 1975
- 29.
30. IPS 525.1 Design Qualification Report for Low Voltage Power and Control Electric Penetration Assemblies, Conax Corporation
31. IPS 525.2 Design Qualification Report for Low Voltage Instrumentation Electric Penetration Assemblies, Conax Corporation
32. Qualification of NAMCO Controls Limit Switch Model EA 180 dated September 5, 1978
33. Qualification Testing of One 75 HP Submersible Electric Motor, dated June 27, 1980

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test REPORT