Florida Power
CORPORATION

June 18, 1979

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USNRC REGION II
ATLANTA, GEORGIA

Mr. J. P. O'Reilly
Director
U.S. Nuclear Regulatory Commission
Office of Inspection and Enforcement
Suite 3100
101 North Marietta Street
Atlanta, GA 30303

Subject: Docket No. 50-302
Operating License No. DPR-72
IE Bulletin 79-01

Dear Mr. O'Reilly:

In response to the subject NRC Bulletin concerning Environmental Qualification of Class IE Equipment the following information is being provided:

1. The re-review program for Crystal River Unit 3 has been completed. The review consisted of examining safety related electrical equipment installed inside containment to ensure appropriate documentation of its qualification to function under postulated accident conditions (LOCA). For all equipment identified, adequate and appropriate documentation is available. See attached list.

2. The types of limit switches described in the subject bulletin are neither being used nor planned for use for a safety related function on safety related valves located inside containment.

3. For the written evidence of the qualification of electrical equipment required to function under accident conditions, see the attached list. No items were found not having qualification data available for review.

4. No items were identified as not meeting qualification requirements for the service intended.

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Should you have any questions concerning our response, please contact this office.

Very truly yours,

FLORIDA POWER CORPORATION

W. P. Stewart

W. P. Stewart
Manager
Nuclear Operations

ETekcM03(D70)

Attachments

cc: U.S. Nuclear Regulatory Commission
Office of Inspection and Enforcement
Division of Reactor Operations Inspection
Washington, DC 20555

NRC Office of Inspection and Enforcement
Division of Reactor Construction Inspection
Washington, DC 20555

File Code: 3-0-3-a-3

PLANT NAME: Crystal River #3

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THIS IS NOT ORIGINAL

ITEM	EQUIPMENT DESCRIPTION	TIME REQ'D.	ENVIRONMENT (LOCATION) PARAMETER	SPEC.	QUAL.	QUAL. METHOD*	DOC. REF**	REMARKS
1	Power and Control Cable	Long Term				Seq.	1	
	(Kerite)		Temp. (^{o}F)		325			
			Press. (psig)		82			
			Rel. Hum.		100%			
			Radiation Rads		1.2×10^{8}			
			Chem.		Boric Acid Sol.			
2	Instrumentation Cable	Long Term				Seq.	2	
	(Continental Wire and		Temp. (^{o}F)		340			
	Cable Corp.)		Press. (psig)		100			
			Rel. Hum.		100%			
			Radiation (Rads		1×10^{8}			
			Chem.		---			
3	Control and Instrumentative	Long Term				Seq.	3	
	Cable		Temp. (^{o}F)		346			
	(Rockbestos)		Press. (psig)		113			
			Rel. Hum.		100%			
			Radiation Rads		2×10^{8}			
			Chem.		Boric Acid Sol.			
4	Instrumentation Cable	Long Term				Seq.	4	
	(Boston Insulated Wire		Temp. (^{o}F)		340			
	And Cable Co.)		Press. (psig)		105			
			Rel. Hum.		100%			
			Radiation Rads		2×10^{8}			
			Chem.		Boric Acid Sol.			

This list is a compilation of items by component. Do not list the same type of component more than once. Use limiting environment where more than one applies

*ie, separate effects, sequential, etc.
**Please attach typed lists of reference documents

PLANT NAME: Crystal River #3

ITEM	EQUIPMENT DESCRIPTION	TIME REQ'D.	ENVIRONMENT (LOCATION) PARAMETER	SPEC.	QUAL.	QUAL. METHOD*	DOC. REF**	REMARKS
2	Neutron Detector	15 sec.				Seq.	5	Not required for LOCA,
	(Westinghouse Type		Temp. (^{O}F) Sur. Temp	212	212			only SSLB & REA
	WL 23636 B)		Press. (psig)	150	150			
			Rel. Hum.	90%	100%			
			Radiation Rads	3×10^9	3×10^9			
			Chem.	---	---			
6	Differential Pressure	24 hrs.				Seq.	5	
	Transmitters		Temp. (^{O}F)	286	296			
	(Bailey Meter Model BY)		Press. (psig)	60	60			
			Rel. Hum.	100%	100%			
			Radiation Rads	2×10^4	5×10^4			
			Chem.	---	---			
7	Pressure Transmitter	24 hrs.				Seq.	5	
	(Foxboro Model E11GH)		Temp. (^{O}F)	286	318			
			Press. (psig)	60	90			
			Rel. Hum	100%	100%			
			Radi [illegible] Rads	2×10^4	2.4×10^4			
			Ch [illegible]	---	---			
8	Temperature Element	24 hrs				Seq.	5	
	Rosemount Model		Temp. (^{O}F)	600	600			
	177 HW		Press. (psig)	3125	3125			
			Rel. Hum.	100%	100%			
			Radiation Rads	2×10^4	1×10^8			
			Chem.	---	---			

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PLANT NAME: Crystal River #3

ITEM	EQUIPMENT DESCRIPTION	TIME REQ'D.	ENVIRONMENT (LOCATION) PARAMETER	SPEC.	QUAL.	QUAL. METHOD*	DOC. REF**	REMARKS
9	Pressure Transmitter	24 hrs.				Seq.	6	
	(Rosemont Model 1152)		Temp. (^{O}F)	286	286			
			Press. (psig)	59	59			
			Rel. Hum.	100%	100%			
			Radiation Rads	7×10^4	7×10^4			
			Chem.	---	Boric Acid Sol.			
10	Electrical Penetrations	Long Term				Seq.	7,8	Testing did not include
	(Conax)		Temp. (^{O}F)	281/325	325			radiation.
			Press. (psig)	55/825	85			
			Rel. Hum.	100%	100%			
			Radiation Rads	1.5×10^8	1.5×10^8			
			Chem.	---	---			
11	Terminal Blocks	Long Term				Seq.	9	Terminal blocks are
	(Kulka Type 5TB and 7TB -		Temp. (^{O}F)		300			physically mounted in a
	used on Elect. Penet.)		Press. (psig)		75			"vented enclosure." Separate
			Rel. Hum.		100%			thermal test was performed
			Radiation		--			to a temp. of 400^{O} F for
			Chem.		Boric Acid Sol.			20 secs.
12	Terminal Blocks (States	Long Term				Seq.	10	Type ZWM is similar to
	Co. type ZWM - used in		Temp. (^{O}F)		340			Type NT and is qualified
	sealed, Nema 4 equiv.,		Press. (psig)		103			by comparison.
	terminal boxes.)		Rel. Hum.		100%			
			Radiation		---			
			Chem.		---			

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ITEM	EQUIPMENT DESCRIPTION	TIME REQ'D.	ENVIRONMENT (LOCATION) PARAMETER	SPEC.	QUAL.	QUAL. METHOD*	DOC. REF**	REMARKS
13	Reactor Building Fan	24 hrs.				Seq.	11,12	
	Assemblies (Westinghouse)		Temp. (^{O}F)	281	320			
			Press. (psig)	70	80			
			Rel. Hum.	100%	100%			
			Radiation Rads	1×10^{7}	1.4×10^{8}			
			Chem.	---	---			
14	Electric Motor Operators	Long Term				Seq.	13	
	(Limitorque)		Temp. (^{O}F)		329			
			Press. (psig)		90			
			Rel. Hum.		100%			
			Radiation		---			
			Chem.		Boric Acid Sol.			
15	Triax Connectors	15 sec.						Not required for LOCA, only SSLB & REA. Connectors are installed inside Elect. Penet. enclosure.
	(Amphenol 53175/52975)		Temp. (^{O}F)					
			Press. (psig)					
			Rel. Hum.					
			Radiation					
			Chem.					
16	Electric Motor Operators	Long Term						
	(Limitorque)		Temp. (^{O}F)		300	Seq.	#14	
			Press. (psig)		70			
			Rel. Hum.		100%			
			Radiation Rads		2.04×10^{8}			
			Chem.		Boric Acid Sol.			

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DOCUMENTATION REFERENCES

1. Kerite Co. "Report on the Effects of Gamma Radiation and Autoclaving on Kerite Power and Control Cables" dated 4/30/70.

2. FIRL Report F-C2935 "Test of Electrical Cables Under Simulated Post-Accident Reactor Containment Service" dated Oct. 1970 and addendum dated Nov. 1970.

3. FIRL Report F-C3798 "Qualification Tests of Electrical Cables Under Simulated Reactor Containment Service Conditions Including Loss-of-Coolant Accident While Electrically Energized" dated March 1974.

4. BIW Report No. B910 "BIW Bostrad^{7e} Cables - Flame and Radiation Resistant Cables for Nuclear Power Plants" dated May 1975.

5. B&W Topical Report BAW-10003A, Rev. 4 dated January 1976.

6. B&W Report 58-0261-00.

7. Conax Test Report TR-17, "Prototype Test Report of Penetration Assemblies"

8. Conax Specification IPS-16, "Specification for Type Qualification of Electrical Penetration Sub-Assemblies"

9. FIRL Report F-C4927, "Steam and Chemical Spray Exposure Test of Electrical Terminal Blocks" dated February 1978.

10. GE letter dated 10/10/78; Electrical Terminal Block Testing.

11. Westinghouse Report WCAP-9003.

12. Westinghouse Report WCAP-7343-L

13. Philadelphia Gear Test Report #600168. "Test of Limitorque Valve Operator to Meet General Requirements of An Electric Valve Actuator in Nuclear Reactor Containment Environment: dated Jan. 2, 1969 and Addendum Number I dated April 29, 1969.

14. Philadelphia Gear Test Report #600456. "Nuclear Power Station Qualification Type Test Report on Limitorque Valve Actuator for LWR Service.", dated Sept.. 1976.