

CRYSTAL RIVER UNIT NO. 3

NRC DOCKET 50-302

ENVIRONMENTAL QUALIFICATION STATUS

(SUBMITTAL FOR 10CFR50.49, TER RESPONSE,
AND PROVISION OF CURRENT JUSTIFICATIONS
FOR CONTINUED OPERATION)

PREPARED FOR

FLORIDA POWER CORPORATION

MAY 20, 1983



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1.0 INTRODUCTION

1.1 Objectives

The objectives of this submittal are to:

1. Comply with 10 CFR 50.49(g) by: (a) identifying electric equipment important to safety within the scope of 10 CFR 50.49 that is already considered qualified; and (b) submitting corrective action schedules for the remaining electric equipment important to safety within the scope of 10 CFR 50.49;
2. Provide responses to the items of concern outlined in the Technical Evaluation Report as forwarded with the January 11, 1983 Safety Evaluation for Crystal River Unit 3 (TER Categories I.B, II.A, II.B and IV).
3. Provide current Justifications for Continued Operation for equipment whose qualification cannot be substantiated;
4. Present the level of compliance of previous submittals with 10 CFR 50.49 paragraphs (a) and (b), as requested by NRC letter dated March 23, 1983.
5. Provide a discussion of the methods used to identify the equipment covered by paragraph 10 CFR 50.49 (b)(2), as well as any qualification programs for such equipment as requested by NRC letter dated March 23, 1983.

1.2 Background

General Design Criterion 4 of Appendix A to 10 CFR 50 establishes the general requirement for environmental qualification of

safety-related equipment. It states in part that "structures, systems, and components important to safety shall be designed to accommodate the effects of and to be compatible with the environmental conditions associated with normal operation, maintenance, testing, and postulated accidents, including loss-of-coolant accidents". While the Crystal River Unit 3 Nuclear Plant (CR3) was designed to meet General Design Criterion 4, only recently has the NRC developed specific guidelines to implement this requirement for operating reactors.

IEEE 323-1974, "IEEE Standards for Qualifying Class 1E Equipment for Nuclear Power Generating Stations", is the current industry standard for environmental qualification of safety-related electrical equipment. This standard was first issued as a trial-use standard, IEEE 323-1971. After substantial revision, the current version was issued in 1974. Both versions of this standard set forth generic requirements for equipment qualification, but the 1974 standard includes specific requirements for aging, margins, and maintaining documentation records that were not included in the 1971 trial-use standard. The standard was endorsed by the NRC in Regulatory Guide 1.89 for new plants, i.e., existing construction permit applicants. However, no regulatory guide was ever issued adopting the 1971 IEEE 323 standard.

In 1978, the NRC issued IE Circular 78-08 requesting licensees to examine installed safety-related electrical equipment and assure appropriate documentation of its qualification to function under accident conditions. The following year, IE Bulletin 79-01 was issued requiring licensees to provide written evidence of electrical equipment qualification. Although these documents requested qualification reviews and information, neither provided specific guidelines for conducting detailed qualification reviews.

Subsequently, in late 1979 the NRC staff developed definitive criteria for reviewing the environmental qualification of safety-related electrical equipment. The Division of Operating Reactors' "Guidelines for Evaluating Environmental Qualification of Class 1E Electrical Equipment in Operating Reactors" (DOR Guidelines) was developed specifically for operating reactors. In addition, for reactors under licensing review, the NRC issued NUREG-0588, "Interim Staff Position on Environmental Qualification of Safety-Related Equipment".

The intent of the DOR guidelines is not to provide guidelines for implementing either version of IEEE 323 for operating reactors. The intent is rather to provide a basis for judgements required to confirm that operating reactors are in compliance with General Design Criterion 4. The intent of NUREG-0588 is to implement IEEE 323 for plants under licensing review. It provides a number of NRC staff positions on selected areas of the qualification issue. These positions are divided into two categories.

- (1) Category I positions apply to equipment qualified in accordance with IEEE 323-1974.
- (2) Category II positions apply to equipment qualified in accordance with IEEE 323-1971.

After the NRC staff completed their initial review of licensees' responses to IE Bulletin 79-01, IE Bulletin 79-01B was issued in January, 1980 requiring additional qualification information in a specified format for electrical equipment evaluated against the DOR Guidelines. NUREG-0588 was also referenced as a source of supplemental information to be used with the DOR Guidelines.

On May 23, 1980, the NRC Commissioners issued a Memorandum and Order (CLI-80-21) which endorsed the NRC staff's use of the DOR Guidelines to review operating plants and NUREG-0588 to review plants under licensing review. Additional administrative

requirements were mandated in amendments to this order (i.e., establishing an equipment qualification central file) and the governing criteria for procuring spare parts and replacement parts were established. Florida Power Corporation was not previously licensed to either IEEE-323-1971 OR IEEE-323-1974. In anticipation of the codification of the requirements for environmental qualification, FPC initiated steps to conform to the final rule. FPC chose to wait until the rule was implemented prior to initiating the required changes to the FPC Operating and Design Procedures due to the changes in the content of the proposed final rule.

As a result of the development of detailed environmental data for CR3, which will be required for future work, FPC obtained better specific zonal environmental information which resulted in significant changes to the list of equipment considered to be within the scope of 10 CFR 50.49(a). These changes, brought about by refinements in specified environmental parameters, revision of the radiation damage cutoff value, review of equipment safety functions, and plant modifications, could cause an inconsistency between previous submittals and that required by 10 CFR 50.49. The FPC approach in preparing this submittal is discussed briefly in Section 2.2 in an attempt to explain any inconsistency.

1.3 Summary

The equipment lists requested by 10 CFR 50.49(g) and the January 11, 1983 Safety Evaluation are included in Section 2.2. Appendix A provides an item by item response for equipment previously provided to the NRC via the 79-01B submittal (previously provided SCEW sheets).

Chapter 3 discusses the current scope of equipment and describes the methodology for identifying such equipment. The means of addressing associated equipment is also discussed in Chapter 3.

2.0 ONGOING QUALIFICATION EFFORTS

2.1 General Activities

FPC has performed an extensive reevaluation of electrical equipment used in the CR3 plant. The evaluation includes the establishment of zones in the plant and defining the environment in each of these zones. A matrix of equipment by zone has been developed and the zones and equipment have been identified as being in a harsh or mild environment.

Engineering design is in progress for those items which have been identified as not having adequate qualification documentation. Resolution for equipment having qualification documentation deficiencies is being handled in one of four ways; replacement, modification, relocation or elimination. The elimination alternative includes either eliminating the equipment or eliminating the equipment's safety function.

A procurement manual has been established for procurement of nuclear equipment which addresses the environmental qualification aspects of spare parts or their modification. Two day training sessions have been conducted in the use of the system described by the manual. Major contractor personnel have been trained in use of the manual.

FPC has developed a guide specification for the procurement of environmentally qualified equipment. The specification provides guidance for each section of a procurement specification.

Environmental zone maps have been developed for the CR-3 plant and environmental data sheets have been created for each zone. The zone maps, data sheets, and the guide specification have been provided to FPC and major contractor's engineers for use in procuring items in future purchases of equipment. Training in the use of these guidance documents is being developed.

A program has been initiated to determine the environmental qualification of spare parts presently in stock. Identification of spares which are presently specified for use in harsh environments will be expanded to assure that the existing spares are appropriate for the intended use.

A plant walkdown is being performed during the current outage to verify that the equipment in place is that which has been listed as being in the plant. The walkdown will provide verification of identification and location and will provide information on equipment orientation and proximity to high temperature or high radiation sources.

FPC has also developed a computerized data bank system which will retain current qualification status on equipment within the scope of 10 CFR 50.49. This system was initially loaded with information from the latest 79-01B submittal so it is currently "SCEW sheet" specific. Following this submittal the data bank will duplicate records for SCEW sheets having more than one piece of equipment listed thereon to become "equipment specific." The current long term goal is to integrate this data bank system with the Qualification Central File, as well as maintenance and installation activities.

Finally, FPC is evaluating the current surveillance and maintenance programs to determine the need for any changes as a result of electrical equipment qualification requirements or commitments.

2.2 Review Approach and Status for Specific Components

As pointed out earlier, Florida Power Corporation's ongoing qualification efforts would result in inconsistencies between previous submittals and the list of equipment now required by 10 CFR 50.49 if only a list was submitted. In an effort to

alleviate any inconsistencies or incomplete coverage of equipment, Florida Power Corporation has taken the steps outlined below.

First, coverage of the Technical Evaluation Report (TER) was determined by listing the equipment identified to the NRC which was not subsequently removed from consideration and yet not addressed in the TER.

These items (30) were reviewed to determine if they were considered to be in a mild environment or not. Those that were not in a mild environment were categorized using the categories described in the TER. Items added to a TER category contain the suffix "-A". For example, an item added to category I.B would be labeled as category I.B-A. It should be pointed out that the radiation damage threshold value used in the specification of a mild environment, has been increased from 1×10^4 to 1×10^5 R; this change is based on information developed over the past few years (EPRI Report No. NP-2129). The subject mild environment definition does not apply to components which contain electronic components, Teflon and a few other materials.

Next, all items in categories I.B, II.A, IIB, and IV, including items added, were reviewed and the TER concerns evaluated. If Florida Power Corporation concurred with the TER concerns, corrective action has been identified, and current JCOs submitted as appropriate. (Current JCOs are attached to the associated Qualification Status Summary sheet or referenced thereon). If the concerns could be resolved by documentation currently within our qualification files, there is a discussion sheet attached to the Qualification Status Summary sheets in Appendix A which provides such discussion. Numbers in parentheses are file code references.

The results of this review provide the list of equipment considered qualified (see Table 2-1) and the list of equipment requiring corrective action (see Table 2-2).

TABLE 2-1
 FLORIDA POWER CORPORATION
 CRYSTAL RIVER 3
 QUALIFIED EQUIPMENT LIST

RECORD NUMBER ----- 0001	ID NUMBER ----- AHF-1A	DESCRIPTION ----- FAN MOTOR	QUALIFICATION STATUS ----- QUALIFIED. TER CONCERNS RESOLVED.
PREV. PAGE NO. ----- 2-2	MANUFACTURER ----- WESTINGHOUSE	MODEL ----- LLA	
RECORD NUMBER ----- 0002	ID NUMBER ----- AHF-1B AHF-1C	DESCRIPTION ----- FAN MOTOR	QUALIFICATION STATUS ----- QUALIFIED. TER CONCERNS RESOLVED.
PREV. PAGE NO. ----- 2-3	MANUFACTURER ----- WESTINGHOUSE	MODEL ----- TYPE LLA	
RECORD NUMBER ----- 0008	ID NUMBER ----- MTMC-7	DESCRIPTION ----- WALL MOUNTED CONTACTOR	QUALIFICATION STATUS ----- QUALIFIED FOR CURRENT APPLICATION.
PREV. PAGE NO. ----- 2-9	MANUFACTURER ----- ALLEN BRADLEY	MODEL ----- SERIES K	
RECORD NUMBER ----- 0015	ID NUMBER ----- BSP-1A/1B	DESCRIPTION ----- PUMP MOTOR	QUALIFICATION STATUS ----- QUALIFIED FOR CURRENT APPLICATION.
PREV. PAGE NO. ----- 2-23	MANUFACTURER ----- WESTINGHOUSE	MODEL ----- TYPE LAC	
RECORD NUMBER ----- 0017	ID NUMBER ----- BSV 4	DESCRIPTION ----- VALVE MOTOR OPERATOR	QUALIFICATION STATUS ----- QUALIFIED FOR CURRENT APPLICATION.
PREV. PAGE NO. ----- 2-24	MANUFACTURER ----- LIMITORQUE	MODEL ----- SMB-040	

TABLE 2-1 (CONTINUED)
 FLORIDA POWER CORPORATION
 CRYSTAL RIVER 3
 QUALIFIED EQUIPMENT LIST

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0018	BSV-3	VALVE MOTOR OPERATOR	QUALIFIED FOR CURRENT APPLICATION.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-24A	LIMITORQUE	SMB-040

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0019	BSV-16/17	VALVE MOTOR OPERATOR	QUALIFIED FOR CURRENT APPLICATION.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-25	LIMITORQUE	SMB-00-25

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0020	BSV-36/37	VALVE MOTOR OPERATOR	QUALIFIED FOR CURRENT APPLICATION.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-26	LIMITORQUE	SMB-000-5

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0028	CAV-4/5	VALVE MOTOR OPERATOR	QUALIFIED FOR CURRENT APPLICATION.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-37	LIMITORQUE	SMB-000-2

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0030	CAV-2	SOLENOID VALVE	QUALIFIED FOR CURRENT APPLICATION.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-39	TARGET ROCK	77CC-001

TABLE 2-1 (CONTINUED)
 FLORIDA POWER CORPORATION
 CRYSTAL RIVER 3
 QUALIFIED EQUIPMENT LIST

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0035	CF-1,3,4	TERMINAL BOX	QUALIFIED FOR CURRENT APPLICATION.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-49	FIELD FABRICATED	STATES TYPE NT TERMINAL BLOCKS

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0042	DHP-1A/1B	PUMP MOTOR	QUALIFIED FOR CURRENT APPLICATION.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-55	WESTINGHOUSE	TYPE LAC

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0048	DH-43-FIS	FLOW INDICATING SWITCH	QUALIFIED FOR CURRENT APPLICATION.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-60	BARTON	288A

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0049	DH-44-FIS	FLOW INDICATING SWITCH	QUALIFIED FOR CURRENT APPLICATION.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-61	BARTON	288A

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0050	DH-DPT-3,4	DIFFERENTIAL PRESSURE TRANSMITTER	QUALIFIED FOR CURRENT APPLICATION.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-63A	ROSEMOUNT	1153B

TABLE 2-1 (CONTINUED)
 FLORIDA POWER CORPORATION
 CRYSTAL RIVER 3
 QUALIFIED EQUIPMENT LIST

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0053	EFP-1	PUMP MOTOR	QUALIFIED FOR CURRENT APPLICATION

PREV. PAGE NO.	MANUFACTURER	MODEL
2-66	ELECTRIC MACHINERY	2419-S

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0055	EFV-3/4	VALVE MOTOR OPERATOR	QUALIFIED FOR CURRENT APPLICATION.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-67	LIMITORQUE	SMB-000

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0056	EFV-7 & 8	VALVE MOTOR OPERATOR	QUALIFIED FOR CURRENT APPLICATION.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-68	LIMITORQUE	SMB-2

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0057	EFV-11/32	VALVE MOTOR OPERATOR	QUALIFIED FOR CURRENT APPLICATION.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-69	LIMITORQUE	SMB-0

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0058	EFV-14/33	VALVE MOTOR OPERATOR	QUALIFIED FOR CURRENT APPLICATION.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-70	LIMITORQUE	SMB-0

TABLE 2-1 (CONTINUED)
 FLORIDA POWER CORPORATION
 CRYSTAL RIVER 3
 QUALIFIED EQUIPMENT LIST

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0061	EF-3,4	TERMINAL BOX	QUALIFIED FOR CURRENT APPLICATION.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-73	FIELD FABRICATED	STATES TYPE NT TERMINAL BLOCKS

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0097		POWER AND CONTROL CABLE	QUALIFIED FOR CURRENT APPLICATION.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-122	KERITE	FR & HT

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0098		CONT. & THERMOCOUPLE EXTENSION CABLE	QUALIFIED FOR CURRENT APPLICATION.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-123	ROCKBESTOS	SILICONE RUBBER

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0099		INST. CABLE & THERMO- COUPLE EXTENSION CBL	QUALIFIED FOR CURRENT APPLICATION.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-124	CONTINENTAL WIRE & CABLE COMPANY	SILICONE RUBBER INS. #CC-2193

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0100		CONTROL & INSTRUMENT CABLE	QUALIFIED FOR CURRENT APPLICATION BY TEST AND ANALYSIS.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-124A	BOSTON INSULATED WIRE AND CABLE CO.	EPR INSULATION BOS- TRAD 7 CSPE JACKET

TABLE 2-1 (CONTINUED)
 FLORIDA POWER CORPORATION
 CRYSTAL RIVER 3
 QUALIFIED EQUIPMENT LIST

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0101		CABLE CONNECTORS	QUALIFIED FOR CURRENT APPLICATION.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-127	T & B	F1

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0103		TERMINAL LUGS	QUALIFIED FOR CURRENT APPLICATION. (COMPLETELY METALLIC)

PREV. PAGE NO.	MANUFACTURER	MODEL
2-129	BURNDY	CRIMP TYPE

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0062	FWV-14/15	VALVE MOTOR OPERATOR	QUALIFIED FOR CURRENT APPLICATION.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-74	LIMITORQUE	SMB-1

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0063	FWV-29/30	VALVE MOTOR OPERATOR	QUALIFIED FOR CURRENT APPLICATION.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-76	LIMITORQUE	SMB-4T

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0064	FWV-31/32	VALVE MOTOR OPERATOR	QUALIFIED FOR CURRENT APPLICATION.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-77	LIMITORQUE	SMB-1

TABLE 2-1 (CONTINUED)
 FLORIDA POWER CORPORATION
 CRYSTAL RIVER 3
 QUALIFIED EQUIPMENT LIST

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0073	FW-22	TERMINAL BOX	QUALIFIED FOR CURRENT APPLICATION.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-86	FIELD FABRICATED	STATES TYPE NT TERMINAL BLOCKS

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0079	MS-5 & 6	TERMINAL BOX	QUALIFIED FOR CURRENT APPLICATION.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-98	FIELD FABRICATED	STATES TYPE NT TERMINAL BLOCKS

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0082	MS-17	TERMINAL BOX	QUALIFIED FOR CURRENT APPLICATION.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-101	FIELD FABRICATED	STATES TYPE NT TERMINAL BLOCKS

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0083	MS-18	TERMINAL BOX	QUALIFIED FOR CURRENT APPLICATION.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-102	FIELD FABRICATED	STATES TYPE NT TERMINAL BLOCKS

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0085	MTMC-3	MOTOR CONTROL CENTER	QUALIFIED FOR CURRENT APPLICATION.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-104	ALLEN BRADLEY	BULLETIN 798

TABLE 2-1 (CONTINUED)
 FLORIDA POWER CORPORATION
 CRYSTAL RIVER 3
 QUALIFIED EQUIPMENT LIST

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0088	MTMC-7	MOTOR CONTROL CENTER	QUALIFIED FOR CURRENT APPLICATION.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-108	ALLEN BRADLEY	BULLETIN 798

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0089	MTBD-2A	ELECTRICAL PENETRATION ASSEMBLY	QUALIFIED FOR CURRENT APPLICATION.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-113	CONAX	CANISTER TYPE

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0090	MTBD-2B	ELECTRICAL PENETRATION ASSEMBLY	QUALIFIED FOR CURRENT APPLICATION.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-114	CONAX	CANISTER TYPE

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0091	MTBD-2C	ELECTRICAL PENETRATION ASSEMBLY	QUALIFIED FOR CURRENT APPLICATION.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-115	CONAX	CANISTER TYPE

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0092	MTBD-8A	ELECTRICAL PENETRATION ASSEMBLY	QUALIFIED FOR CURRENT APPLICATION.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-116	CONAX	CANISTER TYPE

TABLE 2-1 (CONTINUED)
 FLORIDA POWER CORPORATION
 CRYSTAL RIVER 3
 QUALIFIED EQUIPMENT LIST

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0093	MTBD-8B	ELECTRICAL PENETRATION ASSEMBLY	QUALIFIED FOR CURRENT APPLICATION.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-117	CONAX	CANISTER TYPE

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0094	MTBD-8C & 8D	ELECTRICAL PENETRATION ASSEMBLY	QUALIFIED FOR CURRENT APPLICATION.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-118	CONAX	CANISTER TYPE

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0095	MTBD-9A & 9B	ELECTRICAL PENETRATION ASSEMBLY	QUALIFIED FOR CURRENT APPLICATION.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-119	CONAX	CANISTER TYPE

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0096	MTBD-9C & 9D	ELECTRICAL PENETRATION ASSEMBLY	QUALIFIED FOR CURRENT APPLICATION.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-120	CONAX	CANISTER TYPE

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0106		TERMINATION PROCEDURE	QUALIFIED FOR CURRENT APPLICATION.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-132	KERITE	39-69

TABLE 2-1 (CONTINUED)
 FLORIDA POWER CORPORATION
 CRYSTAL RIVER 3
 QUALIFIED EQUIPMENT LIST

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0108	MUP-1A, 1B, 1C	PUMP MOTOR	QUALIFIED FOR CURRENT APPLICATION.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-141	WESTINGHOUSE	688.5"S"- "CSP"

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0111	MUV-23 & 24	VALVE MOTOR OPERATOR	QUALIFIED FOR CURRENT APPLICATION.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-143	LIMITORQUE	SMB-00-25

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0112	MUV-25 & 26	VALVE MOTOR OPERATOR	QUALIFIED FOR CURRENT APPLICATION.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-144	LIMITORQUE	SMB-00-25

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0113	MUV-27	VALVE MOTOR OPERATOR	QUALIFIED FOR CURRENT APPLICATION.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-145	LIMITORQUE	SMB-00-10

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0118	MUV-258 & 259 MUV-260 & 261	VALVE MOTOR OPERATOR	QUALIFIED FOR CURRENT APPLICATION.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-152	LIMITORQUE	SMB-000

TABLE 2-1 (CONTINUED)
 FLORIDA POWER CORPORATION
 CRYSTAL RIVER 3
 QUALIFIED EQUIPMENT LIST

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0123	MU-23/24 MU-25/26	MOTOR STARTER	QUALIFIED FOR CURRENT APPLICATION.
PREV. PAGE NO.	MANUFACTURER	MODEL	
2-157	GOULD I-T-E	SERIES 5600	

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0129	MU-21	TERMINAL BOX	QUALIFIED FOR CURRENT APPLICATION.
PREV. PAGE NO.	MANUFACTURER	MODEL	
2-163	FIELD FABRICATED	STATES TYPE NT TERMINAL BLOCKS	

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0130	MU-22	TERMINAL BOX	QUALIFIED FOR CURRENT APPLICATION.
PREV. PAGE NO.	MANUFACTURER	MODEL	
2-164	FIELD FABRICATED	STATES TYPE NT TERMINAL BLOCKS	

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0131	MU-23-DPT-5,6,7,8	DIFFERENTIAL PRESSURE TRANSMITTER	QUALIFIED FOR CURRENT APPLICATION.
PREV. PAGE NO.	MANUFACTURER	MODEL	
2-166A	ROSEMOUNT	1153B	

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0132	RCV-11	VALVE MOTOR OPERATOR	QUALIFIED FOR CURRENT APPLICATION.
PREV. PAGE NO.	MANUFACTURER	MODEL	
2-168	LIMITORQUE		

TABLE 2-1 (CONTINUED)
 FLORIDA POWER CORPORATION
 CRYSTAL RIVER 3
 QUALIFIED EQUIPMENT LIST

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0137	RC-4A; 4B TEL, 4 RC-5A; 5B TEL, 2, 3, 4	TEMP. ELEMENT	QUALIFIED FOR CURRENT APPLICATION.
PREV. PAGE NO.	MANUFACTURER	MODEL	
2-174	ROSEMOUNT	RTD-177HW	

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0167	SW-7	TERMINAL BOX	QUALIFIED FOR CURRENT APPLICATION.
PREV. PAGE NO.	MANUFACTURER	MODEL	
2-206	FIELD FABRICATED	STATES TYPE NT TERMINAL BLOCKS	

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0168	SW-8	TERMINAL BOX	QUALIFIED FOR CURRENT APPLICATION.
PREV. PAGE NO.	MANUFACTURER	MODEL	
2-207	FIELD FABRICATED	STATES TYPE NT TERMINAL BLOCKS	

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0169	SW-9	TERMINAL BOX	QUALIFIED FOR CURRENT APPLICATION.
PREV. PAGE NO.	MANUFACTURER	MODEL	
2-208	FIELD FABRICATED	STATES TYPE NT TERMINAL BLOCKS	

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0173	SW-15	TERMINAL BOX	QUALIFIED FOR CURRENT APPLICATION.
PREV. PAGE NO.	MANUFACTURER	MODEL	
2-212	FIELD FABRICATED	STATES TYPE NT TERMINAL BLOCKS	

TABLE 2-1 (CONTINUED)
 FLORIDA POWER CORPORATION
 CRYSTAL RIVER 3
 QUALIFIED EQUIPMENT LIST

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
-----	-----	-----	-----
0176	WDV-60	VALVE MOTOR OPERATOR	QUALIFIED FOR CURRENT APPLICATION.

PREV. PAGE NO.	MANUFACTURER	MODEL
-----	-----	-----
2-215	LIMITORQUE	SMB-000-5

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
-----	-----	-----	-----
0177	WDV-94	VALVE MOTOR OPERATOR	QUALIFIED FOR CURRENT APPLICATION.

PREV. PAGE NO.	MANUFACTURER	MODEL
-----	-----	-----
2-216	LIMITORQUE	SMB-000-2

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
-----	-----	-----	-----
0178	WDV-405	VALVE MOTOR OPERATOR	QUALIFIED FOR CURRENT APPLICATION.

PREV. PAGE NO.	MANUFACTURER	MODEL
-----	-----	-----
2-217	LIMITORQUE	SMB-000

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
-----	-----	-----	-----
0179	WDV-406	VALVE MOTOR OPERATOR	QUALIFIED FOR CURRENT APPLICATION

PREV. PAGE NO.	MANUFACTURER	MODEL
-----	-----	-----
2-218	LIMITORQUE	SMB-000

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
-----	-----	-----	-----
0180	WDV-407	VALVE MOTOR OPERATOR	QUALIFIED FOR CURRENT APPLICATION.

PREV. PAGE NO.	MANUFACTURER	MODEL
-----	-----	-----
2-219	LIMITORQUE	SMB-000

TABLE 2-1 (CONTINUED)
 FLORIDA POWER CORPORATION
 CRYSTAL RIVER 3
 QUALIFIED EQUIPMENT LIST

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0186	WS-2	TERMINAL BOX	QUALIFIED FOR CURRENT APPLICATION.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-227	FIELD FABRICATED	STATES TYPE NT TERMINAL BLOCKS

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS
0187	WS-3	TERMINAL BOX	QUALIFIED FOR CURRENT APPLICATION.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-228	FIELD FABRICATED	STATES TYPE NT TERMINAL BLOCKS

RECORD NUMBER	ID NUMBER	DESCRIPTION	QUALIFICATION STATUS

PREV. PAGE NO.	MANUFACTURER	MODEL

TABLE 2-2
 FLORIDA POWER CORPORATION
 CRYSTAL RIVER 3
 EQUIPMENT REQUIRING CORRECTIVE ACTION

RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0006	AHV-1B AHV-1C	VALVE MOTOR OPERATOR	REPLACE MOTOR; REMOVE BRAKES
PREV. PAGE NO. 2-5	MANUFACTURER LIMITORQUE	MODEL SMB-1-401H3BC	

RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0011	ASV-5	VALVE MOTOR OPERATOR	REPLACE MOTOR
PREV. PAGE NO. 2-19	MANUFACTURER LIMITORQUE	MODEL SMB-00	

RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0012	ASV-5	LOCAL MOTOR STARTER	RELOCATE
PREV. PAGE NO. 2-20	MANUFACTURER ALLEN BRADLEY	MODEL BULLETIN 205	

RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0013	AS-1	LOCAL CONTROL STATION	RELOCATE.
PREV. PAGE NO. 2-21	MANUFACTURER FIELD FABRICATED	MODEL G.E. TYPE UA202 SW. G.E. TYPE UC212 LIGHT	

RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0014	AS-1	TERMINAL BOX	RELOCATE
PREV. PAGE NO. 2-22	MANUFACTURER FIELD FABRICATED	MODEL STATES TYPE NT TERMINAL BLOCKS	

TABLE 2-2 (CONTINUED)
 FLORIDA POWER CORPORATION
 CRYSTAL RIVER 3
 EQUIPMENT REQUIRING CORRECTIVE ACTION

RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0016	BSP-1A & 1B	LUBRICANT	INCORPORATE LUBRICANT ANALYSES RESULTS INTO PM PROGRAM.
PREV. PAGE NO. 2-23A	MANUFACTURER GULF	MODEL GULF HARMONY 68	
0024	BS-PT-16,17	PRESSURE TRANSMITTER	REPLACE.
PREV. PAGE NO. 2-35	MANUFACTURER L & N	MODEL 1973-215-2	
0025	BS-90-PT BS-91-PT	PRESSURE TRANSMITTER	(INSTALLATION)
PREV. PAGE NO. 2-35A	MANUFACTURER ROSEMOUNT	MODEL 1153	
0026	BS-1-3PT 1&2	FLOW TRANSMITTER	REPLACE.
PREV. PAGE NO. 2-35B	MANUFACTURER BAILEY MOTOR CO.	MODEL BY-8240-A	
0027	CAV-1/3	VALVE MOTOR OPERATOR	REPLACE.
PREV. PAGE NO. 2-36	MANUFACTURER LIMITORQUE	MODEL SMB-000-2	

TABLE 2-2 (CONTINUED)
 FLORIDA POWER CORPORATION
 CRYSTAL RIVER 3
 EQUIPMENT REQUIRING CORRECTIVE ACTION

RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0029	CAV-126	VALVE MOTOR OPERATOR	REPLACE.
PREV. PAGE NO. 2-38	MANUFACTURER LIMITORQUE	MODEL SMB-000-5	
0188	CA 1,2,3	LOCAL CONTROL STATION	REMOVE.
PREV. PAGE NO. 2-40	MANUFACTURER GENERAL ELECTRIC CO.	MODEL G.E.TYPE UA202 SW. G.E.TYPE UC212 LIGHT	
0032	CFV-11/12	VALVE MOTOR OPERATION	REPLACE MOTOR WITH CLASS RH MOTOR. REPLACE LIMIT & TORQUE SWITCHES WITH CONTAINMENT TYPE SWITCHES; ADD GREASE RELIEF VALVE AND MOTOR "T" DRAINS.
PREV. PAGE NO. 2-43	MANUFACTURER LIMITORQUE	MODEL SMB-000-2	
0033	CFV-15/16	VALVE MOTOR OPERATION	REPLACE MOTOR WITH CLASS RH MOTOR. REPLACE LIMIT & TORQUE SWITCHES WITH CONTAINMENT TYPE SWITCHES; ADD GREASE RELIEF VALVE AND MOTOR "T" DRAINS.
PREV. PAGE NO. 2-44	MANUFACTURER LIMITORQUE	MODEL SMB-000-2	
0034	CFV-25,26,29,42	SOLENOID VALVE	REPLACE.
PREV. PAGE NO. 2-45	MANUFACTURER ASCO	MODEL THB 830281R	

TABLE 2-2 (CONTINUED)
 FLORIDA POWER CORPORATION
 CRYSTAL RIVER 3
 EQUIPMENT REQUIRING CORRECTIVE ACTION

RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0189	CF 1,5,6	LOCAL CONTROL STATION	REMOVE.
PREV. PAGE NO. 2-47	MANUFACTURER GENERAL ELECTRIC CO.	MODEL G.E. TYPE UA202 SW. G.E. TYPE UC212 LIGHT	
RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0043	DHP-1A & 1B	LUBRICANT	INCORPORATE LUBRICANT ANALYSES RESULTS INTO PM PROGRAM.
PREV. PAGE NO. 2-55A	MANUFACTURER GULF	MODEL GULF HARMONY 68	
RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0044	DHV-5/6	VALVE MOTOR OPERATOR	REPLACE MOTOR.
PREV. PAGE NO. 2-56	MANUFACTURER LIMITORQUE	MODEL SMB-3-100	
RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0046	DHV-34/35	VALVE MOTOR OPERATOR	REPLACE MOTOR.
PREV. PAGE NO. 2-58	MANUFACTURER LIMITORQUE	MODEL SMB-2-40	
RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0047	DHV-110/111	VALVE MOTOR OPERATOR	REPLACE MOTOR
PREV. PAGE NO. 2-59	MANUFACTURER LIMITORQUE	MODEL SMB-1-25	

TABLE 2-2 (CONTINUED)
 FLORIDA POWER CORPORATION
 CRYSTAL RIVER 3
 EQUIPMENT REQUIRING CORRECTIVE ACTION

RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0051	DH-DPT-38	DIFFERENTIAL PRESSURE TRANSMITTER	REPLACE.
PREV. PAGE NO. 2-64	MANUFACTURER BM CO.	MODEL BY8240X-A	
RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0054	EFP-1	LUBRICANT	INCORPORATE LUBRICANT ANALYSES RESULTS INTO PM PROGRAM.
PREV. PAGE NO. 2-66A	MANUFACTURER GULF	MODEL GULF HARMONY 68	
RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0059	EFV-11,14 32, & 33	MOTOR STARTER	RELOCATE.
PREV. PAGE NO. 2-71	MANUFACTURER ALLEN BRADLEY	MODEL BULLETIN 205	
RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0060	EF-3,4	LOCAL CONTROL STATION	RELOCATE.
PREV. PAGE NO. 2-72	MANUFACTURER FIELD FABRICATED	MODEL G.E. TYPE UA202 SW. G.E. TYPE UC212 LIGHT	
RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0102		TERMINAL BLOCKS	REPLACE.
PREV. PAGE NO. 2-128	MANUFACTURER KULKA	MODEL 7TB & 5TB	

TABLE 2-2 (CONTINUED)
 FLORIDA POWER CORPORATION
 CRYSTAL RIVER 3
 EQUIPMENT REQUIRING CORRECTIVE ACTION

RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0065	FWV-33,34,35 & 36	VALVE MOTOR OPERATOR	REPLACE MOTORS ON FWV-34 AND FWV-35.
PREV. PAGE NO. 2-78	MANUFACTURER LIMITORQUE	MODEL SMB-0	
RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0067	FWV-33,34,35,36	LOCAL MOTOR STARTER	DURING EPIC INSTALLATION REMOVE FWV 33 & FWV 36; RELOCATE FWV 34 & FWV 35.
PREV. PAGE NO. 2-80	MANUFACTURER ALLEN BRADLEY	MODEL BULLETIN 205	
RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0068	FWV-161,162	LOCAL MOTOR STARTER	REMOVE DURING EPIC INSTALLATION.
PREV. PAGE NO. 2-81	MANUFACTURER ALLEN BRADLEY	MODEL BULLETIN 205	
RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0069	FW-5,6	LOCAL CONTROL STATION	REMOVE.
PREV. PAGE NO. 2-82	MANUFACTURER FIELD FABRICATED	MODEL G.E.TYPE UA202 SW. G.E.TYPE UC212 LIGHT	
RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0070	FW-11,12	LOCAL CONTROL STATION	REMOVE DURING EPIC INSTALLATION.
PREV. PAGE NO. 2-83	MANUFACTURER FIELD FABRICATED	MODEL G.E.TYPE UA202 SW. G.E.TYPE UC212 LIGHT	

TABLE 2-2 (CONTINUED)
 FLORIDA POWER CORPORATION
 CRYSTAL RIVER 3
 EQUIPMENT REQUIRING CORRECTIVE ACTION

RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0071	FW-3 & 4	TERMINAL BOX	QUALIFIED FOR CURRENT APPLICATION.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-84	FIELD FABRICATED	STATES TYPE NT TERMINAL BLOCKS

RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0074	FW-312-FE FW-313-FE	FLOW ELEMENT	(INSTALLATION)

PREV. PAGE NO.	MANUFACTURER	MODEL
2-87A	CONTROLATION	

RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0075	MSV-55 & 56	VALVE MOTOR OPERATOR	REPLACE MOTOR.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-88	LIMITORQUE	SMB-0-15

RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0076	MSV-55 & 56	LOCAL MOTOR STARTER	RELOCATE.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-89	ALLEN BRADLEY	BULLETIN 205

RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0077	MSV-411, 412, 413, 414-SV1, 2, 3	SOLENOID VALVE	REPLACE VALVE PARTS

PREV. PAGE NO.	MANUFACTURER	MODEL
2-90	ASCO	HT8320A34V, A20V

TABLE 2-2 (CONTINUED)
 FLORIDA POWER CORPORATION
 CRYSTAL RIVER 3
 EQUIPMENT REQUIRING CORRECTIVE ACTION

RECORD NUMBER ----- 0078	ID NUMBER ----- MS-5 & 6	DESCRIPTION ----- LOCAL CONTROL STATION	CORRECTIVE ACTION REQUIRED ----- RELOCATE.
PREV. PAGE NO. ----- 2-93	MANUFACTURER ----- FIELD FABRICATED	MODEL ----- G.E. TYPE UA202 SW. G.E. TYPE UC212 LIGHT	
RECORD NUMBER ----- 0084	ID NUMBER ----- MS-92-PS1 & 2	DESCRIPTION ----- PRESSURE SWITCH	CORRECTIVE ACTION REQUIRED ----- REPLACE.
PREV. PAGE NO. ----- 2-103	MANUFACTURER ----- STATIC-O-RING	MODEL ----- 9R2YY5NCXJ	
RECORD NUMBER ----- 0104	ID NUMBER -----	DESCRIPTION ----- TERMINATION PROCEDURE	CORRECTIVE ACTION REQUIRED ----- REPLACE.
PREV. PAGE NO. ----- 2-130	MANUFACTURER ----- KERITE	MODEL ----- T-1NS-HT	
RECORD NUMBER ----- 0105	ID NUMBER -----	DESCRIPTION ----- TERMINATION PROCEDURE	CORRECTIVE ACTION REQUIRED ----- REPLACE.
PREV. PAGE NO. ----- 2-131	MANUFACTURER ----- KERITE	MODEL ----- T-5NS-HT	
RECORD NUMBER ----- 0107	ID NUMBER -----	DESCRIPTION ----- SPLICE TERMINAL	CORRECTIVE ACTION REQUIRED ----- REPLACE.
PREV. PAGE NO. ----- 2-138	MANUFACTURER ----- BURNDY	MODEL ----- INSULINK	

TABLE 2-2 (CONTINUED)
 FLORIDA POWER CORPORATION
 CRYSTAL RIVER 3
 EQUIPMENT REQUIRING CORRECTIVE ACTION

RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0109	MUP-1A, 1B & 1C	LUBRICANT	INCORPORATE LUBRICANT ANALYSES RESULTS INTO PM PROGRAM.
PREV. PAGE NO.	MANUFACTURER	MODEL	
2-141A	GULF	GULF CREST 32	

RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0110	MUV-18	VALVE MOTOR OPERATOR	REPLACE MOTOR.
PREV. PAGE NO.	MANUFACTURER	MODEL	
2-142	LIMITORQUE	SMB-00	

RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0114	MUV-40 & 41	VALVE MOTOR OPERATOR	REPLACE MOTOR.
PREV. PAGE NO.	MANUFACTURER	MODEL	
2-147	LIMITORQUE	SMB-00-5	

RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0120	MUV-64-SV1, 2, 3, 4, 5, 6	SOLENOID VALVE	REPLACE.
PREV. PAGE NO.	MANUFACTURER	MODEL	
2-154	ASCO	HT831657, HT8211B54 FT8211B33	

RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0121	MUV-253/SV1/SV2	SOLENOID VALVE	REPLACE.
PREV. PAGE NO.	MANUFACTURER	MODEL	
2-155	ASCO	HT831655 FOR SV1 8320A38 FOR SV2	

TABLE 2-2 (CONTINUED)
 FLORIDA POWER CORPORATION
 CRYSTAL RIVER 3
 EQUIPMENT REQUIRING CORRECTIVE ACTION

RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0122	MU-25-SV	SOLENOID VALVE	REPLACE.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-156	ASCO	8320 A 92

RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0124	MU-4 & MU-5	LOCAL CONTROL STATION	REPLACE.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-158	FIELD FABRICATED	G.E. TYPE UE202 SW. G.E. TYPE UC212 LIGHT

RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0126	MU-16	LOCAL CONTROL STATION	REMOVE.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-160	FIELD FABRICATED	G.E. TYPE UA202 SW. G.E. TYPE UC212 LIGHT

RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0133	RC-3A-PT2, RC-3A-PT1 RC-3B-PT1, RC-3B-PT2	PRESSURE TRANSMITTER	REPLACE.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-170	ROSEMOUNT	1152 GP

RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0134	RC-3A-PT3, RC-3A-PT4 RC-3B-PT3	PRESSURE TRANSMITTER	REPLACE.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-171	FOXBORO	ELLGHINM2

TABLE 2-2 (CONTINUED)
 FLORIDA POWER CORPORATION
 CRYSTAL RIVER 3
 EQUIPMENT REQUIRING CORRECTIVE ACTION

RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0135	RC-PT-132	PRESSURE TRANSMITTER	REPLACE.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-172	ROSEMOUNT	1152 GP

RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0136	RC-14A-DPT-1, DPT-2 RC-14B-DPT-1, DPT-2	FLOW TRANSMITTER	REPLACE.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-173	BM CO.	BY 3241-A

RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0138	RC-1-LT 1,2,3	LEVEL TRANSMITTER	REPLACE.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-175	ROSEMOUNT	1152 DP

RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0144	SP1A-LT1 SP1B-LT1	LEVEL TRANSMITTERS	REPLACE.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-183	BM CO.	BY8B41X-A

RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0145	SP1A-LT2,3 SP1B-LT2,3	LEVEL TRANSMITTERS	REPLACE.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-184	BM CO.	BY8B41X-A

TABLE 2-2 (CONTINUED)
 FLORIDA POWER CORPORATION
 CRYSTAL RIVER 3
 EQUIPMENT REQUIRING CORRECTIVE ACTION

RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0147	SP1A-LT4,5 SP1B-LT4,5	LEVEL TRANSMITTER	REPLACE.
PREV. PAGE NO.	MANUFACTURER	MODEL	
2-185	BM CO.	BY8B41X-A	

RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0149	SP-6A-PT3,4 SP-6B-PT3,4	PRESSURE TRANSMITTER	REPLACE.
PREV. PAGE NO.	MANUFACTURER	MODEL	
2-186A	FOXBORO	1153	

RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0150	SP-8A-DPT1, 2, & 3 SP-8B-DPT1, 2, & 3	DIFFERENTIAL PRESSURE TRANSMITTER	REPLACE.
PREV. PAGE NO.	MANUFACTURER	MODEL	
2-187	BM CO.	BY 6241-A	

RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0155	SWV-47,48,49 & 50	SOLENOID VALVE	REPLACE.
PREV. PAGE NO.	MANUFACTURER	MODEL	
2-191	ASCO	LB8321A8	

RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0156	SWV-79,80,81,82,83 84,85 & 86	SOLENOID VALVE	REPLACE.
PREV. PAGE NO.	MANUFACTURER	MODEL	
2-192	ASCO	LB8321A8	

TABLE 2-2 (CONTINUED)
 FLORIDA POWER CORPORATION
 CRYSTAL RIVER 3
 EQUIPMENT REQUIRING CORRECTIVE ACTION

RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0157	SWV-109 & 110-SV-3/4	SOLENOID VALVE	REPLACE.
PREV. PAGE NO.	MANUFACTURER	MODEL	
2-193	ASCO	HT831655	

RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0160	SW-7	LOCAL CONTROL STATION	RELOCATE.
PREV. PAGE NO.	MANUFACTURER	MODEL	
2-198	FIELD FABRICATED	G.E. TYPE UA202 SW. G.E. TYPE UC212 LIGHT	

RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0161	SW-9	LOCAL CONTROL STATION	RELOCATE.
PREV. PAGE NO.	MANUFACTURER	MODEL	
2-200	FIELD FABRICATED	G.E. TYPE UA202 SW. G.E. TYPE UC212 LIGHT	

RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0166	SW-6	TERMINAL BOX	REPLACE.
PREV. PAGE NO.	MANUFACTURER	MODEL	
2-205	FIELD FABRICATED	STATES TYPE NT TERMINAL BLOCKS	

RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0172	SW-14	TERMINAL BOX	REPLACE.
PREV. PAGE NO.	MANUFACTURER	MODEL	
2-211	FIELD FABRICATED	STATES TYPE NT TERMINAL BLOCKS	

TABLE 2-2 (CONTINUED)
 FLORIDA POWER CORPORATION
 CRYSTAL RIVER 3
 EQUIPMENT REQUIRING CORRECTIVE ACTION

RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0190	SW 6	LOCAL CONTROL STATION	RELOCATE.
PREV. PAGE NO.	MANUFACTURER	MODEL	
2-197	GENERAL ELECTRIC CO.	G.E. TYPE UA202 SW. G.E. TYPE UC212 LIGHT	
RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0175	WDV-3	VALVE MOTOR OPERATOR	REPLACE MOTOR.
PREV. PAGE NO.	MANUFACTURER	MODEL	
2-214	LIMITORQUE	SMB-000-2	
RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0181	WDV-4	SOLENOID VALVE	REPLACE.
PREV. PAGE NO.	MANUFACTURER	MODEL	
2-220	ASCO	8320A20	
RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0182	WDV-61 & 62	SOLENOID VALVE	REPLACE.
PREV. PAGE NO.	MANUFACTURER	MODEL	
2-221	ASCO	8320A20	
RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0183	WD-3	TERMINAL BOX	REPLACE.
PREV. PAGE NO.	MANUFACTURER	MODEL	
2-223	FIELD FABRICATED	STATES TYPE NT TERMINAL BLOCKS	

TABLE 2-2 (CONTINUED)
 FLORIDA POWER CORPORATION
 CRYSTAL RIVER 3
 EQUIPMENT REQUIRING CORRECTIVE ACTION

RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0184	WD-300-LT, WD-301-LT WD-302-LT, WD-303-LT	TRANSMITTER	(INSTALLATION)

PREV. PAGE NO.	MANUFACTURER	MODEL
2-224B	DELAVAL (GEMS) AND CABLE CO.	XM-54854 XM-54852

RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0192	WD 1	LOCAL CONTROL STATION	RELOCATE.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-222	GENERAL ELECTRIC CO.	G.E. TYPE UA202 SW. G.E. TYPE UC212 LIGHT

RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0185	WSV-3,4,5, & 6	SOLENOID VALVE	REPLACE.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-225	ASCO	8317A29

RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
0193	WS 1,2,3,4	LOCAL CONTROL STATION	REMOVE.

PREV. PAGE NO.	MANUFACTURER	MODEL
2-226	GENERAL ELECTRIC CO.	G.E. TYPE UA202 SW. G.E. TYPE UC212 LIGHT

RECORD NUMBER	ID NUMBER	DESCRIPTION	CORRECTIVE ACTION REQUIRED
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PREV. PAGE NO.	MANUFACTURER	MODEL
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3.0 EQUIPMENT REVIEWED FOR ENVIRONMENTAL QUALIFICATION

3.1 Procedure for Identifying Equipment in Scope 10CFR50.49(b)(1)

The safety-related electrical equipment required to safely achieve cold shutdown is based on the list of systems considered standard for B&W PWR reactors received from the NRC via telecopier on 10/17/80 (refer to Section I.5 of Volume 2 of the Environmental Qualification of Class IE Equipment Report for IEB 79-01B). Using the subject list, system flow diagrams and instrument drawings were reviewed to identify the actual flow loop components required to remain operational to assure proper system function for safe plant shutdown in the event of a LOCA or HELB. The identification of required electrical power distribution equipment was then based on the individual power requirements of the required system components. Electrical elementary and block diagrams were used to identify specific electrical components.

3.2 Electrical Equipment Addressed by 10CFR50.49(b)(2)

Non-safety-related electrical equipment whose failure could impact safe shutdown operation in the event of a LOCA or HELB was determined from the Plant Emergency Operating Procedures. These procedures were reviewed to identify components whose environmentally induced failure could result in providing misleading information to the plant operators; these components were then considered to be necessary to meet the qualification requirements of IE Bulletin 79-01B and the equipment was either removed from the Emergency Procedures, or clarifying notes were added to refer the operator to alternate safety grade measurements (see Section 3 of Volume 2 of the Environmental Qualification of Class IE Equipment Report for IEB 79-01B).

3.3 Compliance of Previous Submittals

By letter dated March 23, 1983, the NRC requested Florida Power Corporation to describe the level of compliance of previous submittals with 10 CFR 50.49.

All previous submittals comply with 10 CFR 50.49 except that those devices included in 10 CFR 50.49 paragraph (b)(2) were determined as requested by the original NRC SER (discussed in section 3.2). This submittal is based on previous submittals and hence carries the same level of compliance.

APPENDIX A

During the TER review, Qualification Status Summary Sheets were completed and are included herein. The results of the review provide:

1. The list of equipment considered qualified;
2. The list of equipment requiring corrective actions (hence requiring justification for continued operation); and
3. Identification of equipment no longer within the scope of 10 CFR 50.49.

Current justifications for continued operation are also provided herein for items requiring such.

Two "areas" are addressed throughout Appendix A by the generic discussions below.

LUBRICANTS

Title 10, Code of Federal Regulations, Part 50.49, provides the legal basis for the equipment to be considered as within the scope of the rule. In particular, paragraph (k) states that:

"Applicants for and holders of operating licenses are not required to requalify electrical equipment important to safety in accordance with the provisions of this section if the Commission has previously required qualification of that equipment in accordance with "Guidelines for Evaluating Environmental Qualification of Class IE Electrical Equipment in Operating Reactors," November 1979 (DOR Guidelines)"

Since Florida Power Corporation has been required to qualify the electrical equipment at CR3 in accordance with the referenced DOR Guidelines, and no explicit requirement for consideration of lubricants is specified therein, they are being addressed from two distinct approaches.

As part of the CR3 preventative maintenance program, Procedure PM-133 identifies the lubrication frequencies and the lubricants which are based on manufacturer's recommendations. Furthermore, lubricants, which are used in safety-related equipment, are purchased under the Safety-Related Catalog Purchase system using a Catalog Evaluation Sheet.

To supplement the above activity, an investigation of all lubricants used in Class 1E equipment is ongoing; the aim of this study is to determine if the lubricants are susceptible to the respective environmental conditions. The results of the investigation will be a documented analysis of lubricants acceptable for use in the specified environment and recommendations for replacement of those which are unacceptable for the specified conditions. The analysis results will be incorporated into the PM program.

In summary, it is the position of Florida Power Corporation that lubricants should be controlled as part of a preventative maintenance program which includes specifications based on electrical equipment vendor recommendations and documented evidence of acceptability for the specified environment.

STATES TYPE NT TERMINAL BLOCKS

Non-metallic materials used in the construction of Multi-Amp, States Co. terminal blocks are General Purpose Phenolic (Durez #791) and Polypropylene (RTP 150); these materials have been

evaluated for their suitability in the specified environment for a desired service life of 40 years, and the results of the evaluation are summarized below.

The Micro-switch Engineering Report No. LTR-15027-1 submitted by Hooker Chemical, Durez Division contains an evaluation of Durez #791 material temperature/life expectancy. Arrhenius methodology was used to describe the temperature dependence of the velocity coefficient of a chemical reaction to approximate the relationship between material life and temperature. It should be noted that parameters (time and temperature) were applied to establish failure criteria relative to flexural and impact strengths. Dielectric property of the material remained within acceptable levels without any failure. The approximate material life at ambient temperature is in excess of the 40 year plant life, and therefore the Durez #791 material exceeds performance requirements.

The Micro-switch Engineering Report LTR-15027-1 also provides radiation qualification test data for Phenolic materials. The materials tested were not exactly Durez #791, but they were of the same general purpose compounds. Durez #791 is a general purpose phenolic filled with wood flour as the main ingredient. The report demonstrated similarity of materials with respect to comparable reactions to radiation. It was concluded that a material exposure to a TID of 1.3×10^8 rads caused the Phenolic to be brittle, but did not affect the performance properties of the component. A qualification program of Multi-Amp, States Co. included a test for terminal blocks to TID values of 2.2×10^8 rads, but no documentation is available at this time.

Heat stable Polypropylene material has a U.L. temperature index of 115°C (Allen-Bradley Co., Bulletin 798 Control Center - Serial No. 967929 Non-Metallic Component List). The U.L. temperature index is considered the maximum temperature at which the material can be used continuously. An article ("A New Temperature Index:

Who Needs It"), published September 1970 in Modern Plastics discusses the index and how it was established. The temperature index is the point where the property of impact strength, tensile strength and dielectric strength is reduced to one half of its new value at the conclusion of 5×10^4 hours. Using the 10°C rule it was concluded that the approximate life of the Polypropylene material is in excess of 40 years.

Based on information provided in the document by J. F. Kirsher and R. E. Bowman, "Effects of Radiation on Materials and Components", Reinhold Publishing Corp. (1964), radiation threshold values for polyethylene, which are believed to be comparable or lower than those of Polypropylene, are in excess of 1.7×10^7 rads for the properties which may be of importance for the particular application in terminal blocks.

In summary, the non-metallic materials used in the construction of Multi-Amp, States Co. terminal blocks were evaluated for their suitability in the specified environment for a desired service life of 40 years. The States Co. conducted qualification tests to meet requirements of IEEE 323-1974, but no data or test results are known or published. Several independent analyses were conducted to determine the equipment qualification and it is expected that these results, when released, would only confirm the results of these analyses. Information provided by the manufacturer indicates that the terminal blocks were successfully tested under postulated environmental conditions of DBE.

Terminal blocks in several locations at CR3 (SW-6 & 14; WD-3) will be exposed to higher radiation doses during the equipment service life than the radiation threshold value of Polypropylene material. These terminal blocks are scheduled for relocation to a less hostile environment prior to November, 1985.

FLORIDA POWER CORPORATION

QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: AHF-1A	RECORD NUMBER: 0001
	SCEW PAGE NUMBER: 2-2
DESCRIPTION: FAN MOTOR	LOCATION: CONTAINMENT ELEV. 119
MANUFACTURER: WESTINGHOUSE	TER EQUIPMENT NO.: 62
MODEL: LLA	TER CATEGORY: II.A
SYSTEM: AH	ZONE LOCATION: 39
TER QUALIFICATION DEFICIENCIES NOTED:	
<ol style="list-style-type: none"> 1. DOCUMENTED EVIDENCE OF QUAL 2. EQUIP VS TEST SPECIMEN 3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED 	
QUALIFICATION STATUS:	
<p>QUALIFIED. TER CONCERNS RESOLVED.</p>	
CORRECTIVE ACTION:	
<p>NOT APPLICABLE.</p>	
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.	
MAR NUMBER:	NOT APPLICABLE.
JUSTIFICATION FOR CONTINUED OPERATION:	
<p>NOT REQUIRED.</p>	

DISCUSSION ON
AHF-1A, AHF-1B, AHF-1C
Records 0001, 0002

There is adequate documentation in the FPC Qualification File to resolve the concerns expressed in the TER.

By letter to FPC (W120-3VC-001), Westinghouse has indicated that the Reactor Containment fan coolers (RCFC) in use at Crystal River Unit 3 do include the motor heat exchanger. This correspondence also indicates the form wound motor insulation system is Class F (National Electric Manufacturing Association rated total temperature at 155°C) thermalastic epoxy. Furthermore the design of these units is such that the motor environment is essentially a "closed system" and will not mix with the containment ambient; this means that plateout of β emitters on stator insulation is not a concern. (Further, it should be noted that this concern is not covered by IEB 79-01B, i.e., FPC should not have been evaluated against this criteria during the TER evaluations). The Westinghouse correspondence also indicates WCAP 7829 is applicable to the thermalastic epoxy insulation in the RCFCs. This WCAP sufficiently documents preaging and no further aging analysis will be provided.

FLORIDA POWER CORPORATION

QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	AHF-1B AHF-1C	RECORD NUMBER:	0002
		SCEW PAGE NUMBER:	2-3
DESCRIPTION:	FAN MOTOR	LOCATION:	CONTAINMENT ELEV. 103'-9"
MANUFACTURER:	WESTINGHOUSE	TER EQUIPMENT NO.:	63
MODEL:	TYPE LLA	TER CATEGORY:	II.A
SYSTEM:	AH	ZONE LOCATION:	38
TER QUALIFICATION DEFICIENCIES NOTED:			
<ol style="list-style-type: none"> 1. DOCUMENTED EVIDENCE OF QUAL 2. EQUIP VS TEST SPECIMEN 3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED 			
QUALIFICATION STATUS:			
<p>QUALIFIED. TER CONCERNS RESOLVED. SEE DISCUSSION FOR AHF-1A, RECORD 0001.</p>			
CORRECTIVE ACTION:			
NOT APPLICABLE.			
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.			
MAR NUMBER: NOT APPLICABLE.			
JUSTIFICATION FOR CONTINUED OPERATION:			
NOT REQUIRED.			

FLORIDA POWER CORPORATION

QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	AHF-1A,1B & 1C	RECORD NUMBER:	0003
		SCEW PAGE NUMBER:	2-3A
DESCRIPTION:	LUBRICANT	LOCATION:	CONTAINMENT
		ELEV.	103'-9"
			AND 119'
MANUFACTURER:	GULF	TER EQUIPMENT NO.:	63
MODEL:	HIGH TEMPERATURE	TER CATEGORY:	II.A
SYSTEM:	AH	ZONE LOCATION:	38/39
TER QUALIFICATION DEFICIENCIES NOTED:			
<ol style="list-style-type: none"> 1. DOCUMENTED EVIDENCE OF QUAL 2. EQUIP VS TEST SPECIMEN 3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED 			
QUALIFICATION STATUS:			
ADDRESSED GENERICALLY VIA PM PROGRAM (PM-133). SEE APPENDIX A.			
CORRECTIVE ACTION:			
NOT APPLICABLE.			
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.			
MAR NUMBER: NOT APPLICABLE.			
JUSTIFICATION FOR CONTINUED OPERATION:			
NOT REQUIRED.			

FLORIDA POWER CORPORATION

QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	AHF-15A AHF-15B	RECORD NUMBER:	0004
		SCEW PAGE NUMBER:	2-4
DESCRIPTION:	FAN MOTOR	LOCATION:	AUXILIARY BLDG ELEV. 95
MANUFACTURER:	CENTURY ELECTRIC	TER EQUIPMENT NO.:	65
MODEL:	SC/80T	TER CATEGORY:	II.A
SYSTEM:	AH	ZONE LOCATION:	11
TER QUALIFICATION DEFICIENCIES NOTED:			
1. DOCUMENTED EVIDENCE OF QUAL			
QUALIFICATION STATUS:			
NOT IN SCOPE. SUBSEQUENT REVIEW SHOWS THESE ITEMS ARE LOCATED IN A MILD ENVIRONMENT. (ENVIRONMENTAL ZONE INDICATED ABOVE.) SEE SECTION 2.2 DISCUSSION.			
CORRECTIVE ACTION:			
NOT APPLICABLE.			
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.			
MAR NUMBER: NOT APPLICABLE.			
JUSTIFICATION FOR CONTINUED OPERATION:			
NOT REQUIRED.			

FLORIDA POWER CORPORATION

QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	AHF-15A & 15B	RECORD NUMBER:	0005
		SCEW PAGE NUMBER:	2-4A
DESCRIPTION:	LUBRICANT	LOCATION:	AUXILIARY BLDG ELEV. 95'
MANUFACTURER:	GULF	TER EQUIPMENT NO.:	65
MODEL:	HIGH TEMPERATURE	TER CATEGORY:	II.A
SYSTEM:	AH	ZONE LOCATION:	11
TER QUALIFICATION DEFICIENCIES NOTED:			
1. DOCUMENTED EVIDENCE OF QUAL			
QUALIFICATION STATUS:			
NOT IN SCOPE. SUBSEQUENT REVIEW SHOWS THESE ITEMS ARE LOCATED IN A MILD ENVIRONMENT. (ENVIRONMENTAL ZONE INDICATED ABOVE) SEE SECTION 2.2 DISCUSSION.			
CORRECTIVE ACTION:			
NOT APPLICABLE.			
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.			
MAR NUMBER: NOT APPLICABLE.			
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.			

FLORIDA POWER CORPORATION

QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	AHV-1B AHV-1C	RECORD NUMBER:	0006
		SCEW PAGE NUMBER:	2-5
DESCRIPTION:	VALVE MOTOR OPERATOR	LOCATION:	CONTAINMENT ELEV.119
MANUFACTURER:	LIMITORQUE	TER EQUIPMENT NO.:	06
MODEL:	SMB-1-401H3BC	TER CATEGORY:	II.A
SYSTEM:	AH	ZONE LOCATION:	39
TER QUALIFICATION DEFICIENCIES NOTED:			
<ol style="list-style-type: none"> 1. DOCUMENTED EVIDENCE OF QUAL 2. EQUIP VS TEST SPECIMEN 3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED 10. RADIATION EXPOSURE 			
QUALIFICATION STATUS:			
QUALIFICATION MODIFICATIONS IN PROGRESS. SEE DISCUSSION ATTACHED.			
CORRECTIVE ACTION:			
REPLACE MOTOR; REMOVE BRAKES			
CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER 1985			
MAR NUMBER:	82-05-24-06		
JUSTIFICATION FOR CONTINUED OPERATION:			
SEE ATTACHED.			

DISCUSSION ON
AHV-1B, AHV-1C
Record 0006

Correspondence from Limitorque (L200-3VC-007) indicated that Qualification Report 600198 plus Addendum (L200-3TR-005) apply to these actuators. A walkdown was conducted and the results (L200-WW-001) show these actuators have Reliance motors with insulation Class H. These are 3 phase, 460 volt motors. Because the radiation resistance of Class H insulation is uncertain, the vendor was again contacted and requested to identify activities required to upgrade these actuators such that Qualification Report 600456 (L200-3TR-001) would apply, thereby ensuring radiation would not be a concern. The vendor response (L200-3VC-010) indicates motor and brake assembly replacement with Reliance RH insulated motors without brakes will be required.

JUSTIFICATION FOR CONTINUED OPERATION
for
AHV-1B and AHV-1C
TER Item 6

References

- 1) Technical Specifications for Crystal River Unit 3
- 2) Final Safety Analysis Report, Volume 7, Appendix 14B
- 3) Air Handling Flow Diagram, FPC Drawing Number FD-302-751, Revision 16
- 4) Environmental and Seismic Qualification Guide Specifications and Data, Section 4 (draft)

In the interim between the present and scheduled upgrades, the following justifications for continued operation are given.

1. Radiation is the main item of concern. Table 3.6-1 of Reference 1 however, shows these valves would complete their safety function in less than one (1) minute. Reference 4 shows that the 40 year dose in the equipment's environmental zone (39) is only $2.8 \times 10^4 R$. Therefore, the only time radiation could affect operation is during post accident purging not initial containment isolation.
2. Reference 3 shows AHV-1B and AHV-1C are located in containment. It also shows there are redundant isolation valves (in series), AHV-1A and AHV-1D respectively, located outside containment. Hence, a single failure during post-accident purging will not compromise containment integrity.

Based on the discussions provided, continued operation with the subject equipment does not jeopardize the safe operation of CR3.

FLORIDA POWER CORPORATION

QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	MTMC-4,5	RECORD NUMBER:	0007
		SCEW PAGE NUMBER:	2-8
DESCRIPTION:	WALL MOUNTED CONTACTOR	LOCATION:	33,AHF-1B AUXILIARY BLDG. ELEV. 119
MANUFACTURER:	ALLEN BRADLEY	TER EQUIPMENT NO.:	92
MODEL:	SERIES K	TER CATEGORY:	I.B
SYSTEM:	AH	ZONE LOCATION:	25/24-RESP
TER QUALIFICATION DEFICIENCIES NOTED:			
1. DOCUMENTED EVIDENCE OF QUAL			
QUALIFICATION STATUS:			
NOT IN SCOPE. SUBSEQUENT REVIEW SHOWS THESE ITEMS ARE LOCATED IN A MILD ENVIRONMENT. (ENVIRONMENTAL ZONE INDICATED ABOVE) - SEE SECTION 2.2 DISCUSSION.			
CORRECTIVE ACTION:			
NOT APPLICABLE.			
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.			
MAR NUMBER: NOT APPLICABLE.			
JUSTIFICATION FOR CONTINUED OPERATION:			
NOT REQUIRED.			

FLORIDA POWER CORPORATION

QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	MTMC-7	RECORD NUMBER:	0008
		SCEW PAGE NUMBER:	2-9
DESCRIPTION:	WALL MOUNTED CONTACTOR	LOCATION:	AUXILIARY BLDG. ELEV. 119
MANUFACTURER:	ALLEN BRADLEY	TER EQUIPMENT NO.:	91
MODEL:	SERIES K	TER CATEGORY:	I.B
SYSTEM:	AH	ZONE LOCATION:	28
TER QUALIFICATION DEFICIENCIES NOTED:			
1. DOCUMENTED EVIDENCE OF QUAL			
QUALIFICATION STATUS:			
QUALIFIED BY ANALYSIS. SEE MTMC-3 (RECORD 0085).			
CORRECTIVE ACTION:			
NOT APPLICABLE.			
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.			
MAR NUMBER: NOT APPLICABLE.			
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.			

FLORIDA POWER CORPORATION

QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	AH-312-SV AH-313-SV	RECORD NUMBER:	0009
		SCEW PAGE NUMBER:	2-15
DESCRIPTION:	SOLENOID VALVE	LOCATION:	AUXILIARY BLDG. ELEV. 95'
MANUFACTURER:	JOHNSON CONTROL	TER EQUIPMENT NO.:	
MODEL:	V-24-2	TER CATEGORY:	N/A
SYSTEM:	AH	ZONE LOCATION:	11
TER QUALIFICATION DEFICIENCIES NOTED:			
NOT INCLUDED IN EVALUATION			
QUALIFICATION STATUS:			
NOT IN SCOPE. SUBSEQUENT REVIEW SHOWS THESE ITEMS ARE LOCATED IN A MILD ENVIRONMENT. (ENVIRONMENTAL ZONE INDICATED ABOVE) SEE SECTION 2.2 DISCUSSION.			
CORRECTIVE ACTION:			
NOT APPLICABLE.			
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.			
MAR NUMBER: NOT APPLICABLE.			
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.			

FLORIDA POWER CORPORATION

QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	AH-315-TS AH-410-TS	RECORD NUMBER:	0010
		SCEW PAGE NUMBER:	2-16
DESCRIPTION:	TEMPERATURE SWITCH	LOCATION:	AUXILIARY BLDG. ELEV. 95'
MANUFACTURER:	PENN CONTROLS	TER EQUIPMENT NO.:	
MODEL:	A70KA-I	TER CATEGORY:	N/A
SYSTEM:	AH	ZONE LOCATION:	11
TER QUALIFICATION DEFICIENCIES NOTED:			
NOT INCLUDED IN EVALUATION			
QUALIFICATION STATUS:			
NOT IN SCOPE. SUBSEQUENT REVIEW SHOWS THESE ITEMS ARE LOCATED IN A MILD ENVIRONMENT. (ENVIRONMENTAL ZONE INDICATED ABOVE) SEE SECTION 2.2 DISCUSSION.			
CORRECTIVE ACTION:			
NOT APPLICABLE.			
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.			
MAR NUMBER: NOT APPLICABLE.			
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.			

FLORIDA POWER CORPORATION

QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	ASV-5	RECORD NUMBER:	0011
		SCEW PAGE NUMBER:	2-19
DESCRIPTION:	VALVE MOTOR OPERATOR	LOCATION:	INTERMEDIATE BLDG. ELEV. 95'-0"
MANUFACTURER:	LIMITORQUE	TER EQUIPMENT NO.:	23
MODEL:	SMB-00	TER CATEGORY:	II.A
SYSTEM:	AS	ZONE LOCATION:	14
TER QUALIFICATION DEFICIENCIES NOTED:			
1. DOCUMENTED EVIDENCE OF QUAL			
QUALIFICATION STATUS:			
QUALIFICATION MODIFICATIONS IN PROGRESS.			
CORRECTIVE ACTION:			
REPLACE MOTOR			
CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER 1985			
MAR NUMBER: 82-05-24-06			
JUSTIFICATION FOR CONTINUED OPERATION:			
SEE ATTACHED.			

DISCUSSION ON
ASV-5
Record 0011

A walkdown was conducted for this valve and the results (L200-WW-001) show this actuator has a D.C. motor with Class B insulation. The vendor was contacted and requested to identify activities required to upgrade this actuator such that Qualification Report B0009 (L200-3TR-008) would apply, thereby encompassing the environmental specifications for Zone 14. The vendor response (L200-3VC-008) indicates a motor replacement with a Peerless D.C. motor with Class RH insulation will be required.

JUSTIFICATION FOR CONTINUED OPERATION
for
ASV-5
Limitorque Motor Operator
TER Item 23

References

- 1) Limitorque Test Report B0003, "Limitorque Valve Actuator Qualification Report for Class IE Service Outside Containment."
- 2) Environmental and Seismic Qualification Guide Specifications and Data, Section 4.

As stated in the discussion, walkdown results show these operators have class B insulated DC motors. Class B insulated motors were tested in reference 1 to 250°F. Reference 2 indicates all parameters are encompassed by testing with the exception of temperature. Temperature during the accident, however, returns to below 250°F within 10 seconds. This initial temperature peak is not of sufficient duration to effect motor internals. Therefore, reliability of this motor within the required 24 hour operating time is not expected to degrade. Hence, the safe operation of Crystal River Unit 3 is not jeopardized by interim operation with the current equipment configuration.

FLORIDA POWER CORPORATION

QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	ASV-5	RECORD NUMBER:	0012
		SCEW PAGE NUMBER:	2-20
DESCRIPTION:	LOCAL MOTOR STARTER	LOCATION:	INTERMEDIATE BLDG. ELEV. 95'-0"
MANUFACTURER:	ALLEN BRADLEY	TER EQUIPMENT NO.:	86
MODEL:	BULLETIN 205	TER CATEGORY:	II.A
SYSTEM:	AS	ZONE LOCATION:	14
TER QUALIFICATION DEFICIENCIES NOTED:			
1. DOCUMENTED EVIDENCE OF QUAL			
QUALIFICATION STATUS:			
QUALIFICATION MODIFICATIONS IN PROGRESS.			
CORRECTIVE ACTION:			
RELOCATE TO MILD ENVIRONMENT.			
CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER 1985			
MAR NUMBER:	82-05-24-02		
JUSTIFICATION FOR CONTINUED OPERATION:			
SEE ATTACHED.			

JUSTIFICATION FOR CONTINUED OPERATION
for
ASV-5; EFV-11, 14, 32, & 33; FWV-34, 35, 46, 37, 161, 162;
MSV-55 & 56
Allen Bradley Motor Starter
TER Item 86

Reference

- 1) FPC IE Bulletin 79-01B Response, Figure 4-4.

The motor starters will be removed from the Intermediate Building and relocated in a mild environment prior to November, 1985.

In the interim between the present time and scheduled relocation, the following justifications for continued operation are given:

1. Specification environment radiation values were compared to radiation values for the typical materials from the DOR Guidelines Appendix C for motor control centers. This comparison revealed that the specification environment radiation is at or below radiation susceptibility acceptance levels; thereby indicating radiation is not a restraint to the safety-related operation of the motor control centers.
2. The motor starters are used to position valves immediately after the occurrence of a HELB in the intermediate building. Although a failure analysis has shown that if repositioning of the valves is postulated, repositioning will occur subsequent to the maximum thermal and pressure conditions, allowing operator access to correct the repositioning should it occur.

FLORIDA POWER CORPORATION

QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	AS-1	RECORD NUMBER:	0013
		SCEW PAGE NUMBER:	2-21
DESCRIPTION:	LOCAL CONTROL STATION	LOCATION:	INTERMEDIATE BLDG. ELEV. 95'-0"
MANUFACTURER:	FIELD FABRICATED	TER EQUIPMENT NO.:	90
MODEL:	G.E.TYPE UA202 SW. G.E.TYPE UC212 LIGHT	TER CATEGORY:	I.B
SYSTEM:	AS	ZONE LOCATION:	14
TER QUALIFICATION DEFICIENCIES NOTED:			
1. DOCUMENTED EVIDENCE OF QUAL			
QUALIFICATION STATUS:			
QUALIFICATION MODIFICATIONS IN PROGRESS.			
CORRECTIVE ACTION:			
RELOCATE TO MILD ENVIRONMENT.			
CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER 1985			
MAR NUMBER:	82-05-24-02		
JUSTIFICATION FOR CONTINUED OPERATION: SEE ATTACHED.			

JUSTIFICATION FOR CONTINUED OPERATION

for

AS-1; CA-1, 2, & 3; CF-1, 5, & 6; EF-3 & 4; FW-5, 6, 11, & 12;
MS-5 & 6; MU-4 & 5; SW-6; SW-7 & 9; SW-8; WD-1; WS-1, 2, 3, & 4

GE Switches and Lights

TER Item 90

References

- 1) FPC IE Bulletin 79-01B Response, Figure 4-4.

The motor starters will be relocated in a mild environment prior to November, 1985.

In the interim between the present time and scheduled relocation, the following justifications for continued operation are given:

1. Specification environment radiation values were compared to radiation values for the typical materials from the DOR Guidelines Appendix C for motor control centers. This comparison revealed that the specification environment radiation is at or below radiation susceptibility acceptance levels; thereby indicating radiation is not a restraint to the safety-related operation of the motor control centers.
2. The motor starters are used to position valves immediately after the occurrence of a HELB in the intermediate building. Although a failure analysis has shown that if repositioning of the valves is postulated, repositioning will occur subsequent to the maximum thermal and pressure conditions, allowing operator access to correct the repositioning should it occur.

FLORIDA POWER CORPORATION

QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	AS-1	RECORD NUMBER:	0014
		SCEW PAGE NUMBER:	2-22
DESCRIPTION:	TERMINAL BOX	LOCATION:	INTERMEDIATE BLDG. ELEV. 95'-0"
MANUFACTURER:	FIELD FABRICATED	TER EQUIPMENT NO.:	75
MODEL:	STATES TYPE NT TERMINAL BLOCKS	TER CATEGORY:	I.B
SYSTEM:	AS	ZONE LOCATION:	14
TER QUALIFICATION DEFICIENCIES NOTED:			
3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED			
QUALIFICATION STATUS:			
QUALIFIED BY ANALYSIS.			
CORRECTIVE ACTION:			
NOT APPLICABLE.			
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.			
MAR NUMBER: NOT APPLICABLE.			
JUSTIFICATION FOR CONTINUED OPERATION:			
NOT REQUIRED.			

FLORIDA POWER CORPORATION

QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	BSP-1A/1B	RECORD NUMBER:	0015
		SCEW PAGE NUMBER:	2-23
DESCRIPTION:	PUMP MOTOR	LOCATION:	AUXILIARY BLDG. ELEV. 75'-0"
MANUFACTURER:	WESTINGHOUSE	TER EQUIPMENT NO.:	60
MODEL:	TYPE LAC	TER CATEGORY:	II.A
SYSTEM:	BS	ZONE LOCATION:	7
TER QUALIFICATION DEFICIENCIES NOTED:			
1. DOCUMENTED EVIDENCE OF QUAL			
QUALIFICATION STATUS:			
QUALIFIED FOR CURRENT APPLICATION. SEE DISCUSSION ATTACHED.			
CORRECTIVE ACTION:			
NOT APPLICABLE.			
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.			
MAR NUMBER: NOT APPLICABLE.			
JUSTIFICATION FOR CONTINUED OPERATION:			
NOT REQUIRED.			

DISCUSSION ON
BSP-1a & 1B
Westinghouse Motors Type LAC

References

- 1) WCAP 8754 "Environmental Qualification of Class 1E Motors for Nuclear Out-of-Containment Use" dated June, 1976.

Although these motors were purchased prior to the issuance of IEEE 323 1971, they are similar in design to motors tested in the reference indicated.

The function of the DHP motors is to provide decay heat removal in the auxiliary building. Harsh environment is limited to radiation since the motor need only operate for conditions inside containment, and its location is outside containment.

The total integrated dose for the motors is $5.1 \times 10^6 R$ (40 year TID of $4.9 \times 10^6 R$ plus one day post accident exposure of $1.2 \times 10^6 R$). Since the integrated dose for lifetime is significantly greater than the dose received during the accident, the radiation susceptibility of motor components if any, should be detectable via periodic surveillances.

Currently, the motors are tested and inspected annually (PM-105) for abnormalities. This equipment is functionally tested at 18 month intervals.

It is the FPC position that there is adequate surveillance on this equipment and it is considered qualified for its current application.

FLORIDA POWER CORPORATION

QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	BSP-1A & 1B	RECORD NUMBER:	0016
		SCEW PAGE NUMBER:	2-23A
DESCRIPTION:	LUBRICANT	LOCATION:	AUXILIARY BLDG. ELEV. 75'
MANUFACTURER:	GULF	TER EQUIPMENT NO.:	60
MODEL:	GULF HARMONY 68	TER CATEGORY:	II.A
SYSTEM:	BS	ZONE LOCATION:	7
TER QUALIFICATION DEFICIENCIES NOTED:			
1. DOCUMENTED EVIDENCE OF QUAL			
QUALIFICATION STATUS:			
LUBRICATION ANALYSIS AND DOCUMENTATION IN PROGRESS.			
CORRECTIVE ACTION:			
INCORPORATE RESULTS INTO PM PROGRAM.			
CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER, 1985.			
MAR NUMBER:	82-05-24-05		
JUSTIFICATION FOR CONTINUED OPERATION:			
SEE ATTACHED.			

JUSTIFICATION FOR CONTINUED OPERATION

for

BSP-1A & BSP-1B Lubricant

Gulf Harmony 68

TER Item 60

The lubricants are being investigated in regard to radiation resistance and appropriate action will be taken subsequent to this investigation. However, engineering judgement indicates that relative to the accident radiation, the required safety operability due to the lubricants will not be a restraint to the safety operation of the motors.

FLORIDA POWER CORPORATION

QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	BSV 4	RECORD NUMBER:	0017
		SCEW PAGE NUMBER:	2-24
DESCRIPTION:	VALVE MOTOR OPERATOR	LOCATION:	AUXILIARY BLDG. ELEV. 95'-0"
MANUFACTURER:	LIMITORQUE	TER EQUIPMENT NO.:	24
MODEL:	SMB-040	TER CATEGORY:	II.A-A
SYSTEM:	BS	ZONE LOCATION:	36
TER QUALIFICATION DEFICIENCIES NOTED: NOT INCLUDED IN EVALUATION			
QUALIFICATION STATUS: QUALIFIED FOR CURRENT APPLICATION. SEE DISCUSSION ATTACHED.			
CORRECTIVE ACTION: NOT APPLICABLE.			
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.			
MAR NUMBER: NOT APPLICABLE.			
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.			

DISCUSSION ON
BSV 4
Record 0017

Vendor correspondence (L200-3VC-004) indicates that Test Report B0003 (L200-3TR-003) is applicable to this valve motor operator. Although the radiation specification for zone 36 is greater than $1 \times 10^8 R$ a location specific calculation (GAI file code CR3.118[2]) shows Total Integrated Dose (40 year plus accident) is $1.9 \times 10^5 R$.

This equipment is considered qualified for its current application.

FLORIDA POWER CORPORATION

QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	BSV-3	RECORD NUMBER:	0018
		SCEW PAGE NUMBER:	2-24A
DESCRIPTION:	VALVE MOTOR OPERATOR	LOCATION:	AUXILIARY BLDG. ELEV. 95'-0"
MANUFACTURER:	LIMITORQUE	TER EQUIPMENT NO.:	24
MODEL:	SMB-0-40	TER CATEGORY:	II.A
SYSTEM:	BS	ZONE LOCATION:	36
TER QUALIFICATION DEFICIENCIES NOTED:			
2. EQUIP VS TEST SPECIMEN 3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED			
QUALIFICATION STATUS:			
QUALIFIED FOR CURRENT APPLICATION. SEE DISCUSSION ATTACHED.			
CORRECTIVE ACTION:			
NOT APPLICABLE.			
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.			
MAR NUMBER: NOT APPLICABLE.			
JUSTIFICATION FOR CONTINUED OPERATION:			
NOT REQUIRED.			

DISCUSSION ON
BSV 3
Record 0018

Vendor correspondence (L200-3VC-004) indicates that Test Report B0003 (L200-3TR-003) is applicable to this valve motor operator. Although the radiation specification for zone 36 is greater than 1×10^8 a location specific calculation (GAI file code CR3.118[2]) shows Total Integrated Dose (40 year plus accident) is 2.2×10^5 ^R.

This equipment is considered qualified for its current application.

FLORIDA POWER CORPORATION

QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	BSV-16/17	RECORD NUMBER:	0019
		SCEW PAGE NUMBER:	2-25
DESCRIPTION:	VALVE MOTOR OPERATOR	LOCATION:	AUXILIARY BLDG. ELEV. 75'-0"
MANUFACTURER:	LIMITORQUE	TER EQUIPMENT NO.:	11
MODEL:	SMB-00-25	TER CATEGORY:	II.A
SYSTEM:	BS	ZONE LOCATION:	7
TER QUALIFICATION DEFICIENCIES NOTED:			
2. EQUIP VS TEST SPECIMEN 3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED			
QUALIFICATION STATUS:			
QUALIFIED FOR CURRENT APPLICATION. SEE DISCUSSION ATTACHED.			
CORRECTIVE ACTION:			
NOT APPLICABLE.			
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.			
MAR NUMBER: NOT APPLICABLE.			
JUSTIFICATION FOR CONTINUED OPERATION:			
NOT REQUIRED.			

DISCUSSION ON

BSV-16/17

Record 0019

Vendor correspondence (L200-3VC-012) indicates that Test Report B0003 (L200-3TR-003) is applicable to this valve motor operator. Review of this report indicates all environmental parameters for zone 7 are enveloped by testing.

FLORIDA POWER CORPORATION

QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	BSV-36/37	RECORD NUMBER:	0020
		SCEW PAGE NUMBER:	2-26
DESCRIPTION:	VALVE MOTOR OPERATOR	LOCATION:	AUXILIARY BLDG. ELEV. 75'-0"
MANUFACTURER:	LIMITORQUE	TER EQUIPMENT NO.:	24
MODEL:	SMB-000-5	TER CATEGORY:	II.A
SYSTEM:	BS	ZONE LOCATION:	7
TER QUALIFICATION DEFICIENCIES NOTED:			
2. EQUIP VS TEST SPECIMEN 3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED			
QUALIFICATION STATUS:			
QUALIFIED FOR CURRENT APPLICATION. SEE DISCUSSION ATTACHED.			
CORRECTIVE ACTION:			
NOT APPLICABLE.			
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.			
MAR NUMBER: NOT APPLICABLE.			
JUSTIFICATION FOR CONTINUED OPERATION:			
NOT REQUIRED.			

DISCUSSION ON
BSV-36/37
Record 0020

Vendor correspondence (L200-3VC-007) indicates that Test Report B0003 (L200-3TR-003) is applicable to these valve motor operators. Review of this report indicates all environmental parameters for Zone 7 are enveloped by testing.

FLORIDA POWER CORPORATION

QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	BS-5/6	RECORD NUMBER:	0021
		SCEW PAGE NUMBER:	2-27
DESCRIPTION:	TERMINAL BOX	LOCATION:	AUXILIARY BLDG. ELEV. 95'-0"
MANUFACTURER:	FIELD FABRICATED	TER EQUIPMENT NO.:	NA
MODEL:	STATES TYPE NT TERMINAL BLOCKS	TER CATEGORY:	N/A
SYSTEM:	BS	ZONE LOCATION:	6
TER QUALIFICATION DEFICIENCIES NOTED:			
NOT INCLUDED IN EVALUATION			
QUALIFICATION STATUS:			
NOT IN SCOPE. SUBSEQUENT REVIEW SHOWS THESE ITEMS ARE LOCATED IN A MILD ENVIRONMENT. (ENVIRONMENTAL ZONE INDICATED ABOVE) SEE SECTION 2.2 DISCUSSION.			
CORRECTIVE ACTION:			
NOT APPLICABLE.			
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.			
MAR NUMBER: NOT APPLICABLE.			
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.			

FLORIDA POWER CORPORATION

QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	BS-79-FIS	RECORD NUMBER:	0022
		SCEW PAGE NUMBER:	2-33
DESCRIPTION:	FLOW INDICATOR SWITCH	LOCATION:	AUXILIARY BLDG. ELEV. 95'
MANUFACTURER:	BARTON	TER EQUIPMENT NO.:	
MODEL:	288A	TER CATEGORY:	N/A
SYSTEM:	BS	ZONE LOCATION:	6
TER QUALIFICATION DEFICIENCIES NOTED:			
NOT INCLUDED IN EVALUATION			
QUALIFICATION STATUS:			
NOT IN SCOPE. SUBSEQUENT REVIEW SHOWS THESE ITEMS ARE LOCATED IN A MILD ENVIRONMENT. (ENVIRONMENTAL ZONE INDICATED ABOVE) SEE SECTION 2.2 DISCUSSION.			
CORRECTIVE ACTION:			
NOT APPLICABLE.			
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.			
MAR NUMBER:	80-09-03		
JUSTIFICATION FOR CONTINUED OPERATION:			
NOT REQUIRED.			

FLORIDA POWER CORPORATION

QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	BS-80-FIS	RECORD NUMBER:	0023
		SCEW PAGE NUMBER:	2-34
DESCRIPTION:	FLOW INDICATOR SWITCH	LOCATION:	AUXILIARY BLDG. ELEV. 95'
MANUFACTURER:	BARTON	TER EQUIPMENT NO.:	
MODEL:	288A	TER CATEGORY:	N/A
SYSTEM:	BS	ZONE LOCATION:	6
TER QUALIFICATION DEFICIENCIES NOTED:			
NOT INCLUDED IN EVALUATION			
QUALIFICATION STATUS:			
NOT IN SCOPE. SUBSEQUENT REVIEW SHOWS THESE ITEMS ARE LOCATED IN A MILD ENVIRONMENT. (ENVIRONMENTAL ZONE INDICATED ABOVE) SEE SECTION 2.2 DISCUSSION.			
CORRECTIVE ACTION:			
NOT APPLICABLE.			
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.			
MAR NUMBER:	80-09-03		
JUSTIFICATION FOR CONTINUED OPERATION:			
NOT REQUIRED.			

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	BS-PT-16,17	RECORD NUMBER:	0024
		SCEW PAGE NUMBER:	2-35
DESCRIPTION:	PRESSURE TRANSMITTER	LOCATION:	AUXILIARY BLDG. ELEV. 95'
MANUFACTURER:	L & N	TER EQUIPMENT NO.:	40
MODEL:	1973-215-2	TER CATEGORY:	I.B
SYSTEM:	BS	ZONE LOCATION:	64/65-RESP
TER QUALIFICATION DEFICIENCIES NOTED:			
1. DOCUMENTED EVIDENCE OF QUAL			
QUALIFICATION STATUS:			
QUALIFICATION MODIFICATIONS IN PROGRESS.			
CORRECTIVE ACTION:			
REPLACE.			
CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER 1985			
MAR NUMBER:	80-07-04		
JUSTIFICATION FOR CONTINUED OPERATION: SEE ATTACHED.			

JUSTIFICATION FOR CONTINUED OPERATION

for

BS-PT-16, 17

L&N Transmitters

TER Item 40

References

- 1) B&W Topical Report BAW 10082 Rev. 1, "Environmental Qualification of Class 1E Control Instrumentation Equipment", Table 3-10, FPC File B014-3TR-001.
- 2) FPC Crystal River FSAR Section 14.2.2.5.

BS-PT-16 and BS-PT-17 L&N transmitters will be replaced prior to November, 1985. The replacement transmitters will be supplied with documented evidence of qualification.

In the interim between the present time and scheduled transmitter and replacement, the following justifications for continued operation are given:

1. The function of the reactor building pressure transmitters is to initiate ESFAS as a result of increased building pressure due to LOCA. The required operating time for the reactor building pressure transmitters is 10 seconds for a major LOCA and 15 minutes for small LOCA. The transmitters are located outside containment and are used to sense accidents inside containment. Therefore, all LOCA-caused harsh environments, except radiation, are not a consideration for this device.
2. The total integrated dose to the transmitter is caused by the sum of the operating dose and the accident dose. The accident dose is assumed to be negligible since it is caused

by degraded core fission products in recirculating lines and the recirculation phase begins at a time greater than the required operating time for the pressure transmitters. The ten year operating dose to the transmitters is 2.5×10^7 rads. Radiation effects are significant for these devices.

3. Failure of reactor building pressure transmitters can be tolerated because other signals (RC pressure and steam generator pressure) initiate ESFAS functions. Containment spray may be initiated manually if the transmitters fail.

FLORIDA POWER CORPORATION

QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	BS-90-PT BS-91-PT	RECORD NUMBER:	0025
		SCEW PAGE NUMBER:	2-35A
DESCRIPTION:	PRESSURE TRANSMITTER	LOCATION:	INTERMEDIATE BLDG. ELEV. 95'
MANUFACTURER:	ROSEMOUNT	TER EQUIPMENT NO.:	49
MODEL:	1153	TER CATEGORY:	I.B
SYSTEM:	BS	ZONE LOCATION:	64/65-RESP

TER QUALIFICATION DEFICIENCIES NOTED:

1. DOCUMENTED EVIDENCE OF QUAL

QUALIFICATION STATUS:

(NOT INSTALLED YET.)
SEE DISCUSSION ATTACHED.

CORRECTIVE ACTION:

(INSTALLATION)

CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER 1985

MAR NUMBER: 79-11-68

JUSTIFICATION FOR CONTINUED OPERATION:
NOT REQUIRED.

DISCUSSION ON
BS-90-PT; BS-91-PT
Record 0025

BS-90-PT and BS-91-PT are being added to the system to provide wide range pressure sensing. Their function is to detect containment building pressure. They are used for indication only. Items were in TER Category I.B because the equipment was in test at the time of submittal. Test Reports (results) have been received (R369-3TR-003) and indicate all environmental parameters for zones 64 and 65 are enveloped.

This equipment will be installed prior to November 30, 1985 by the Modification Approval Record indicated.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: BS-1-dPT 1&2	RECORD NUMBER: 0026
	SCEW PAGE NUMBER: 2-35B
DESCRIPTION: FLOW TRANSMITTER	LOCATION: AUXILIARY BLDG. ELEV. 95'
MANUFACTURER: BAILEY METER CO.	TER EQUIPMENT NO.: 45
MODEL: BY-8240-A	TER CATEGORY: II.A
SYSTEM: BS	ZONE LOCATION: 6
TER QUALIFICATION DEFICIENCIES NOTED:	
1. DOCUMENTED EVIDENCE OF QUAL	
QUALIFICATION STATUS:	
QUALIFICATION MODIFICATIONS IN PROGRESS.	
CORRECTIVE ACTION:	
REPLACE.	
CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER 1985	
MAR NUMBER:	82-05-24-04
JUSTIFICATION FOR CONTINUED OPERATION: SEE ATTACHED.	

JUSTIFICATION FOR CONTINUED OPERATION
for
BS-1-dPT 1 & 2
Bailey Meter Co. Flow Transmitters
TER Item 45

References

- 1) FPC IE Bulletin 79-01B Response, Figure 4-7.
- 2) B&W Proprietary Document 58-0081-00, "Type Test Report of Bailey Meter By Differential Pressure Transmitter", dated 3/12/73.

The building spray flow transmitters will be replaced prior to November, 1985. The units will be replaced with transmitters having documented evidence of qualification, or other methods will be specified to reduce the harsh environment to acceptable levels. SCEW sheets for the new transmitters will be completed upon the receipt of the new transmitters and associated test reports.

In the interim between the present time and corrective action, the following justification is given:

1. The only harsh environment for this transmitter is radiation at a level of 2.6×10^5 rads. Reference 2 indicates qualification to greater than 2×10^4 rads.
2. Since the building spray transmitters are required only to detect the onset of spray during the first few minutes of the accident, total integrated dose will be below the qualified radiation dose at the onset of building spray.
3. Failure of the transmitters can be tolerated later in the accident sequence since spray can be detected using other instruments, such as pump operating indicators, pump outlet/inlet pressure, etc.

FLORIDA POWER CORPORATION

QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	CAV-1/3	RECORD NUMBER:	0027
		SCEW PAGE NUMBER:	2-36
DESCRIPTION:	VALVE MOTOR OPERATOR	LOCATION:	INSIDE CONTAINMENT
MANUFACTURER:	LIMITORQUE	TER EQUIPMENT NO.:	16
MODEL:	SMB-000-2	TER CATEGORY:	II.A
SYSTEM:	CA	ZONE LOCATION:	38
TER QUALIFICATION DEFICIENCIES NOTED:			
<ol style="list-style-type: none"> 1. DOCUMENTED EVIDENCE OF QUAL 2. EQUIP VS TEST SPECIMEN 3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED 8. SPRAY 			
QUALIFICATION STATUS:			
TO BE REPLACED, OUTAGE IV WITH QUALIFIED UNITS.			
CORRECTIVE ACTION:			
REPLACE.			
CORRECTIVE ACTION SCHEDULE: REFUEL IV; JULY, 1983.			
MAR NUMBER:	80-1-11		
JUSTIFICATION FOR CONTINUED OPERATION:			
NOT REQUIRED.			

DISCUSSION ON
CAV 1 & 3; 126
Limitorque Motor Operators
Records 0027; 0029

These units are being replaced during the current outage for operational considerations with equipment tested to the environments specified in Test Report 600456. Modifications are being made via the modification approval record indicated on the Qualification Summary Sheet. The installation of the new qualified equipment will be verified during an equipment walkdown scheduled for the Refuel IV outage.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	CAV-4/5	RECORD NUMBER:	0028
		SCEW PAGE NUMBER:	2-37
DESCRIPTION:	VALVE MOTOR OPERATOR	LOCATION:	INSIDE CONTAINMENT
MANUFACTURER:	LIMITORQUE	TER EQUIPMENT NO.:	10
MODEL:	SMB-000-2	TER CATEGORY:	II.A
SYSTEM:	CA	ZONE LOCATION:	38
TER QUALIFICATION DEFICIENCIES NOTED:			
2. EQUIP VS TEST SPECIMEN 3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED			
QUALIFICATION STATUS:			
QUALIFIED FOR CURRENT APPLICATION.			
CORRECTIVE ACTION:			
NOT APPLICABLE.			
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.			
MAR NUMBER: NOT APPLICABLE.			
JUSTIFICATION FOR CONTINUED OPERATION:			
NOT REQUIRED.			

DISCUSSION ON
CAV-4/5
Limitorque Motor Operators
Record 0028

Initial discussions with the vendor using shop order numbers and serial numbers of originally installed equipment indicates Test Reports 600376 (L200-3TR-002), 600198 (L200-3TR-005) and Addendum 1 to 600198 (L200-3TR-006) apply to this equipment. This report envelops all environmental parameters for the required operating time of this equipment. Walkdowns are scheduled during the current outage to confirm and document qualification. From the current information available, Florida Power Corporation considers this equipment qualified for its current application.

FLORIDA POWER CORPORATION

QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: CAV-126	RECORD NUMBER: 0029
	SCEW PAGE NUMBER: 2-38
DESCRIPTION: VALVE MOTOR OPERATOR	LOCATION: INSIDE CONTAINMENT
MANUFACTURER: LIMITORQUE	TER EQUIPMENT NO.: 15
MODEL: SMB-000-5	TER CATEGORY: II.A
SYSTEM: CA	ZONE LOCATION: 38
TER QUALIFICATION DEFICIENCIES NOTED:	
2. EQUIP VS TEST SPECIMEN 3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED 8. SPRAY	
QUALIFICATION STATUS:	
TO BE REPLACED, OUTAGE IV WITH QUALIFIED UNITS. SEE DISCUSSION FOR CAV-1 & 3, RECORD 0027.	
CORRECTIVE ACTION:	
REPLACE.	
CORRECTIVE ACTION SCHEDULE: REFUEL IV; JULY, 1983.	
MAR NUMBER:	80-1-11
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.	

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	CAV-2	RECORD NUMBER:	0030
		SCEW PAGE NUMBER:	2-39
DESCRIPTION:	SOLENOID VALVE	LOCATION:	INTERMEDIATE BLDG. ELEV. 95'
MANUFACTURER:	TARGET ROCK	TER EQUIPMENT NO.:	34
MODEL:	77CC-001	TER CATEGORY:	I.A
SYSTEM:	CA	ZONE LOCATION:	65
TER QUALIFICATION DEFICIENCIES NOTED:			
NONE			
QUALIFICATION STATUS:			
QUALIFIED FOR CURRENT APPLICATION.			
CORRECTIVE ACTION:			
NOT APPLICABLE.			
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.			
MAR NUMBER: NOT APPLICABLE.			
JUSTIFICATION FOR CONTINUED OPERATION:			
NOT REQUIRED.			

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	CA-1,2, & 3	RECORD NUMBER:	0188
		SCEW PAGE NUMBER:	2-40
DESCRIPTION:	LOCAL CONTROL STATION	LOCATION:	INTERMEDIATE BLDG. ELEV. 95'-0"
MANUFACTURER:	FIELD FABRICATED	TER EQUIPMENT NO.:	
MODEL:	G.E.TYPE UA202 SW. G.E.TYPE UC212 LIGHT	TER CATEGORY:	I.B-A
SYSTEM:	CA	ZONE LOCATION:	
TER QUALIFICATION DEFICIENCIES NOTED: NOT INCLUDED IN EVALUATION.			
QUALIFICATION STATUS: QUALIFICATION MODIFICATIONS IN PROGRESS.			
CORRECTIVE ACTION: REMOVE. CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER, 1985. MAR NUMBER: 82-05-24-02			
JUSTIFICATION FOR CONTINUED OPERATION: SEE JCO FOR AS-1, RECORD 0013.			

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: CA-1,2,3	RECORD NUMBER: 0031	SCEW PAGE NUMBER: 2-41
DESCRIPTION: TERMINAL BOX	LOCATION: INTERMEDIATE BLDG. ELEV. 95'	
MANUFACTURER: FIELD FABRICATED	TER EQUIPMENT NO.: 74	
MODEL: STATES TYPE NT TERMINAL BLOCKS	TER CATEGORY: III.B	
SYSTEM: CA	ZONE LOCATION: 65	
TER QUALIFICATION DEFICIENCIES NOTED: NONE		
QUALIFICATION STATUS: NOT IN SCOPE AS STATED IN THE TER. SEE SECTION 2.2 DISCUSSION.		
CORRECTIVE ACTION: NOT APPLICABLE.		
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.		
MAR NUMBER: NOT APPLICABLE.		
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.		

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: CFV-11/12	RECORD NUMBER: 0032	
	SCEW PAGE NUMBER: 2-43	
DESCRIPTION: VALVE MOTOR OPERATOR		LOCATION: INSIDE CONTAINMENT ELEV. 119'
MANUFACTURER: LIMITORQUE		TER EQUIPMENT NO.: 07
MODEL: SMB-000-2		TER CATEGORY: II.A
SYSTEM: CF		ZONE LOCATION: 39
TER QUALIFICATION DEFICIENCIES NOTED: 1. DOCUMENTED EVIDENCE OF QUAL 2. EQUIP VS TEST SPECIMEN 3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED 7A. PEAK TEMPERATURE 7B. PEAK PRESSURE 8. SPRAY		
QUALIFICATION STATUS: QUALIFICATION MODIFICATIONS IN PROGRESS.		
CORRECTIVE ACTION: REPLACE MOTOR WITH CLASS RH MOTOR. REPLACE LIMIT & TORQUE SWITCHES WITH CONTAINMENT TYPE SWITCHES; ADD GREASE RELIEF VALVE AND MOTOR "T" DRAINS. CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER 1985. MAR NUMBER: 82-05-24-06		
JUSTIFICATION FOR CONTINUED OPERATION: SEE ATTACHED.		

DISCUSSION ON
CFV 11/12
Record 0032

Correspondence from Limitorque (L200-3VC-004) indicates that Qualification Report B0003 (L200-3TR-003) applies to the equipment listed. A walkdown was conducted and the results (L200-WW-001) show these actuators have Porter motors with insulation Class H. These are 3phase, 230/460 volt motors. The vendor was contacted with walkdown results and requested to identify activities required to upgrade these actuators such that Qualification Report 600456 (L200-3TR-001) would apply, thereby ensuring radiation would not be a concern and that all parameters for zone 39 would be encompassed by testing. The vendor response (L200-3VC-008) indicates it would be necessary to replace the motors with Class RH motors, the limit and torque switches with containment type switches, add a grease relief valve and motor "T" drains.

JUSTIFICATION FOR CONTINUED OPERATION
for
CFV-11 & 12
Limitorque Motorized Valve Operators
TER Item 7

References

- 1) NRC Technical Evaluation Report, January, 1983.
- 2) Limitorque Test Report #B0003, 5/28/76.
- 3) FPC IE Bulletin 79-01B Response, November, 1981, pg. 2-43.
- 4) Limitorque Letter, FPC #L200-3VC-004

In the interim between the present and scheduled corrective action, the following justification for continued operation is given:

CFV-11 and CFV-12 are normally closed containment isolation valves which are used to sample core flood tank contents. Since the valves are normally closed, no operation of the valves is required should an accident occur; therefore, failure of the valves can be tolerated. A normally-closed redundant valve outside containment (CFV-42) also provides backup containment isolation.

FLORIDA POWER CORPORATION

QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	CFV-15/16	RECORD NUMBER:	0033
		SCEW PAGE NUMBER:	2-44
DESCRIPTION:	VALVE MOTOR OPERATOR	LOCATION:	INSIDE CONTAINMENT ELEV. 119'-0"
MANUFACTURER:	LIMITORQUE	TER EQUIPMENT NO.:	07
MODEL:	SMB-000-2	TER CATEGORY:	II.A
SYSTEM:	CF	ZONE LOCATION:	39
TER QUALIFICATION DEFICIENCIES NOTED:			
<ol style="list-style-type: none"> 1. DOCUMENTED EVIDENCE OF QUAL 2. EQUIP VS TEST SPECIMEN 3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED 7A. PEAK TEMPERATURE 7B. PEAK PRESSURE 8. SPRAY 			
QUALIFICATION STATUS:			
QUALIFICATION MODIFICATIONS IN PROGRESS.			
CORRECTIVE ACTION:			
REPLACE MOTOR WITH CLASS RH MOTOR. REPLACE LIMIT & TORQUE SWITCHES WITH CONTAINMENT TYPE SWITCHES; ADD GREASE RELIEF VALVE AND MOTOR "T" DRAINS.			
CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER, 1985.			
MAR NUMBER:	82-05-24-06		
JUSTIFICATION FOR CONTINUED OPERATION:			
SEE ATTACHED.			

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: CFV-15/16	RECORD NUMBER: 0033
	SCEW PAGE NUMBER: 2-44
DESCRIPTION: VALVE MOTOR OPERATOR	LOCATION: INSIDE CONTAINMENT ELEV. 119'-0"
MANUFACTURER: LIMITORQUE	TER EQUIPMENT NO.: 07
MODEL: SMB-000-2	TER CATEGORY: II.A
SYSTEM: CF	ZONE LOCATION: 39
TER QUALIFICATION DEFICIENCIES NOTED:	
1. DOCUMENTED EVIDENCE OF QUAL 2. EQUIP VS TEST SPECIMEN 3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED 7A. PEAK TEMPERATURE 7B. PEAK PRESSURE 8. SPRAY	
QUALIFICATION STATUS:	
QUALIFICATION MODIFICATIONS IN PROGRESS.	
CORRECTIVE ACTION:	
REPLACE MOTOR WITH CLASS RH MOTOR. REPLACE LIMIT & TORQUE SWITCHES WITH CONTAINMENT TYPE SWITCHES; ADD GREASE RELIEF VALVE AND MOTOR "T" DRAINS.	
CORRECTIVE ACTION SCHEDULE:	
MAR NUMBER:	82-05-24-06
JUSTIFICATION FOR CONTINUED OPERATION:	
SEE ATTACHED.	

DISCUSSION ON
CFV 15/16
Record 0033

Correspondence from Limitorque (L200-3VC-004) indicates that Qualification Report B0003 (L200-3TR-003) applies to the equipment listed. A walkdown was conducted and the results (L200-WW-001) show these actuators have Porter motors with insulation Class H. These are 3 phase, 230/460 volt motors. The vendor was contacted with walkdown results and requested to identify activities required to upgrade these actuators such that Qualification Report 600456 (L200-3TR-001) would apply, thereby ensuring radiation would not be a concern and that all parameters for zone 39 would be encompassed by testing. The vendor response (L200-3VC-008) indicates it would be necessary to replace the motors with Class RH motors, the limit and torque switches with containment type switches, add a grease relief valve and motor "T" drains.

JUSTIFICATION FOR CONTINUED OPERATION
for
CFV-15 & 16
Limitorque Motorized Valve Operators
TER Item 7

References

- 1) NRC Technical Evaluation Report, January, 1983.
- 2) Limitorque Test Report #B0003, 5/28/76.
- 3) FPC IE Bulletin 79-01B Response, November, 1981, pg. 2-43.
- 4) Limitorque Letter, FPC #L200-3VC-004.

In the interim between the present and scheduled corrective action, the following justification for continued operation is given:

CFV-15 and CFV-16 are used as containment isolation valves for waste gas from the core flood tanks. Since the valves are normally closed, no operation of the valves is required should an accident occur; therefore, failure of the valves can be tolerated. Also a normally closed redundant valve outside containment (CFV-29) provides a backup containment isolation.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	CFV-25,26,29,42	RECORD NUMBER:	0034
		SCEW PAGE NUMBER:	2-45
DESCRIPTION:	SOLENOID VALVE	LOCATION:	AUXILIARY BLDG. ELEV. 119'
MANUFACTURER:	ASCO	TER EQUIPMENT NO.:	28
MODEL:	THB 830281R	TER CATEGORY:	I.B
SYSTEM:	CF	ZONE LOCATION:	22
TER QUALIFICATION DEFICIENCIES NOTED:			
1. DOCUMENTED EVIDENCE OF QUAL			
QUALIFICATION STATUS:			
QUALIFICATION MODIFICATIONS IN PROGRESS.			
CORRECTIVE ACTION:			
REPLACE.			
CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER 1985			
MAR NUMBER:	82-05-24-03		
JUSTIFICATION FOR CONTINUED OPERATION:			
SEE ATTACHED.			

JUSTIFICATION FOR CONTINUED OPERATION
for
CFV-25, 26, 29, 42
TER Item 28

References

- 1) FPC Environmental Qualification of Class 1E Equipment IE Bulletin 79-01B Qualification Summary.

In the interim between the present and scheduled corrective action, the following justification for continued operation, as previously provided in Reference 1, is given:

1. Investigations with the manufacturer indicate the solenoid valves are good for 10^5 rads. Accident conditions will not affect the components for the period of operability required. Also, due to the location of the component when required to perform its safety function, the accident environment has no impact.
2. Due to the period of operability required as per CR#3 Tech. Spec. Table 3.6-1 to perform their safety function, and the fact that the total radiation exposure per the SCEW sheets is conservative in regard to the 5-1/2 year operating life of the plant, these valves are not considered to be a restraint to the safe operation of CR#3.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	CF-1, 5, & 6	RECORD NUMBER: 0189
		SCEW PAGE NUMBER: 2-47
DESCRIPTION:	LOCAL CONTROL STATION	LOCATION: AUXILIARY BLDG. ELEV. 119'-0"
MANUFACTURER:	FIELD FABRICATED	TER EQUIPMENT NO.:
MODEL:	G.E.TYPE UA202 SW. G.E.TYPE UC212 LIGHT	TER CATEGORY: I.B-A
SYSTEM:	CF	ZONE LOCATION:
TER QUALIFICATION DEFICIENCIES NOTED: NOT INCLUDED IN EVALUATION.		
QUALIFICATION STATUS: QUALIFICATION MODIFICATIONS IN PROGRESS.		
CORRECTIVE ACTION: REMOVE. CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER 1985		
MAR NUMBER: 82-05-24-02		
JUSTIFICATION FOR CONTINUED OPERATION: SEE JCO FOR AS-1, RECORD 0013.		

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: CF-1,3,4	RECORD NUMBER: 0035
	SCEW PAGE NUMBER: 2-49
DESCRIPTION: TERMINAL BOX	LOCATION: AUXILIARY BLDG. ELEV. 119'-0"
MANUFACTURER: FIELD FABRICATED	TER EQUIPMENT NO.: 69
MODEL: STATES TYPE NT TERMINAL BLOCKS	TER CATEGORY: I.B
SYSTEM: CF	ZONE LOCATION: 22
TER QUALIFICATION DEFICIENCIES NOTED: 3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED	
QUALIFICATION STATUS: QUALIFIED FOR CURRENT APPLICATION. SEE APPENDIX A.	
CORRECTIVE ACTION: NOT APPLICABLE. CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE. MAR NUMBER: NOT APPLICABLE.	
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.	

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: CF-2	RECORD NUMBER: 0036
	SCEW PAGE NUMBER: 2-50
DESCRIPTION: TERMINAL BOX	LOCATION: INTERMEDIATE BLDG ELEV. 95'-0"
MANUFACTURER: FIELD FABRICATED	TER EQUIPMENT NO.: 74
MODEL: STATES TYPE NT TERMINAL BLOCKS	TER CATEGORY: III.B
SYSTEM: CF	ZONE LOCATION: 14
TER QUALIFICATION DEFICIENCIES NOTED: NONE	
QUALIFICATION STATUS: NOT IN SCOPE AS STATED IN THE TER. SEE SECTION 2.2 DISCUSSION.	
CORRECTIVE ACTION: NOT APPLICABLE.	
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.	
MAR NUMBER:	NOT APPLICABLE.
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.	

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	CIV-34,35,40,41	RECORD NUMBER:	0037
		SCEW PAGE NUMBER:	2-51
DESCRIPTION:	SOLENOID VALVE	LOCATION:	AUXILIARY BLDG. ELEV. 95'
MANUFACTURER:	ASCO	TER EQUIPMENT NO.:	
MODEL:	HT8320A38	TER CATEGORY:	N/A
SYSTEM:	CI	ZONE LOCATION:	64
TER QUALIFICATION DEFICIENCIES NOTED: NOT INCLUDED IN EVALUATION			
QUALIFICATION STATUS: NOT IN SCOPE. SUBSEQUENT REVIEW SHOWS THESE ITEMS ARE LOCATED IN A MILD ENVIRONMENT. (ENVIRONMENTAL ZONE INDICATED ABOVE) SEE SECTION 2.2 DISCUSSION.			
CORRECTIVE ACTION: NOT APPLICABLE.			
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.			
MAR NUMBER: NOT APPLICABLE.			
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.			

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	CI-3,4,5 & 6	RECORD NUMBER:	0038
		SCEW PAGE NUMBER:	2-52
DESCRIPTION:	LOCAL CONTROL STATION	LOCATION:	AUXILIARY BLDG. ELEV. 95'-0"
MANUFACTURER:	FIELD FABRICATED	TER EQUIPMENT NO.:	
MODEL:	G.E.TYPE UA202 SW.	TER CATEGORY:	N/A
SYSTEM:	CI	ZONE LOCATION:	64
TER QUALIFICATION DEFICIENCIES NOTED: NOT INCLUDED IN EVALUATION			
QUALIFICATION STATUS: NOT IN SCOPE. SUBSEQUENT REVIEW SHOWS THESE ITEMS ARE LOCATED IN A MILD ENVIRONMENT. (ENVIRONMENTAL ZONE INDICATED ABOVE) SEE SECTION 2.2 DISCUSSION.			
CORRECTIVE ACTION: NOT APPLICABLE.			
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.			
MAR NUMBER: NOT APPLICABLE.			
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.			

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: CI-2,3,4 & 9	RECORD NUMBER: 0039
	SCEW PAGE NUMBER: 2-53
DESCRIPTION: TERMINAL BOX	LOCATION: AUXILIARY BLDG ELEV. 95'-0"
MANUFACTURER: FIELD FABRICATED	TER EQUIPMENT NO.: NA
MODEL: STATES TYPE NT TERMINAL BLOCKS	TER CATEGORY: N/A
SYSTEM: CI	ZONE LOCATION: 64
TER QUALIFICATION DEFICIENCIES NOTED: NOT INCLUDED IN EVALUATION	
QUALIFICATION STATUS: NOT IN SCOPE. SUBSEQUENT REVIEW SHOWS THESE ITEMS ARE LOCATED IN A MILD ENVIRONMENT. (ENVIRONMENTAL ZONE INDICATED ABOVE) SEE SECTION 2.2 DISCUSSION.	
CORRECTIVE ACTION: NOT APPLICABLE. CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE. MAR NUMBER: NOT APPLICABLE.	
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.	

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: DCP-1A/1B	RECORD NUMBER: 0040
	SCEW PAGE NUMBER: 2-54
DESCRIPTION: PUMP MOTOR	LOCATION: AUXILIARY BLDG. ELEV. 95'-0"
MANUFACTURER: GENERAL ELECTRIC	TER EQUIPMENT NO.: 64
MODEL: 5K445AK364	TER CATEGORY: II.A
SYSTEM: DC	ZONE LOCATION: 11
TER QUALIFICATION DEFICIENCIES NOTED: 1. DOCUMENTED EVIDENCE OF QUAL	
QUALIFICATION STATUS: NOT IN SCOPE. SUBSEQUENT REVIEW SHOWS THESE ITEMS ARE LOCATED IN A MILD ENVIRONMENT. (ENVIRONMENTAL ZONE INDICATED ABOVE) SEE SECTION 2.2 DISCUSSION.	
CORRECTIVE ACTION: NOT APPLICABLE.	
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.	
MAR NUMBER: NOT APPLICABLE.	
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.	

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: DCP-1A & 1B	RECORD NUMBER: 0041
	SCEW PAGE NUMBER: 2-54A
DESCRIPTION: LUBRICANT	LOCATION: AUXILIARY BLDG. ELEV. 95'
MANUFACTURER: GULF	TER EQUIPMENT NO.: 64
MODEL: GULF HIGH TEMPERATURE	TER CATEGORY: II.A
SYSTEM: DC	ZONE LOCATION: 11
TER QUALIFICATION DEFICIENCIES NOTED:	
1. DOCUMENTED EVIDENCE OF QUAL	
QUALIFICATION STATUS:	
NOT IN SCOPE. SUBSEQUENT REVIEW SHOWS THESE ITEMS ARE LOCATED IN A MILD ENVIRONMENT. (ENVIRONMENTAL ZONE INDICATED ABOVE) SEE SECTION 2.2 DISCUSSION.	
CORRECTIVE ACTION:	
NOT APPLICABLE.	
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.	
MAR NUMBER: NOT APPLICABLE.	
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.	

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: DHP-1A/1B	RECORD NUMBER: 0042
	SCEW PAGE NUMBER: 2-55
DESCRIPTION: PUMP MOTOR	LOCATION: AUXILIARY BLDG. DECAY HEAT PIT ELEV. 75'0"
MANUFACTURER: WESTINGHOUSE	TER EQUIPMENT NO.: 61
MODEL: TYPE LAC	TER CATEGORY: II.A
SYSTEM: DH	ZONE LOCATION: 7
TER QUALIFICATION DEFICIENCIES NOTED: 1. DOCUMENTED EVIDENCE OF QUAL	
QUALIFICATION STATUS: QUALIFIED FOR CURRENT APPLICATION (SEE DISCUSSION ATTACHED).	
CORRECTIVE ACTION: NOT APPLICABLE.	
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.	
MAR NUMBER: NOT APPLICABLE.	
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.	

DISCUSSION ON
DHP-1A & 1B
Westinghouse Motors Type LAC
TER Item 61

References

- 1) WCAP 8754 "Environmental Qualification of Class 1E Motors for Nuclear Out-of-Containment Use" dated June, 1976.

Although these motors were purchased prior to the issuance of IEEE 323 1971, they are similar in design to motors tested in the reference indicated.

The function of the DHP motors is to provide decay heat removal in the auxiliary building. Harsh environment is limited to radiation since the motor need only operate for conditions inside containment, and its location is outside containment.

The total integrated dose for the motors is $6.1 \times 10^6 R$ (40 year TID of $4.9 \times 10^6 R$ plus six month post accident exposure of $1.2 \times 10^6 R$). Since the integrated dose for lifetime is significantly greater than the dose received during the accident, the radiation susceptibility of motor components if any, should be detectable via periodic surveillances.

Currently, the motors are tested and inspected annually (PM-105) for abnormalities. This equipment is functionally tested at 18 month intervals.

FPC feels there are adequate surveillances on this equipment and considers it qualified for its current application.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: DHP-1A & 1B	RECORD NUMBER: 0043
	SCEW PAGE NUMBER: 2-55A
DESCRIPTION: LUBRICANT	LOCATION: AUXILIARY BLDG. ELEV. 75'
MANUFACTURER: GULF	TER EQUIPMENT NO.: 61
MODEL: GULF HARMONY 68	TER CATEGORY: II.A
SYSTEM: DH	ZONE LOCATION: 7
TER QUALIFICATION DEFICIENCIES NOTED:	
1. DOCUMENTED EVIDENCE OF QUAL	
QUALIFICATION STATUS:	
LUBRICATION ANALYSIS AND DOCUMENTATION IN PROGRESS.	
CORRECTIVE ACTION:	
INCORPORATE RESULTS INTO PM PROGRAM.	
CORRECTIVE ACTION SCHEDULE: REFUEL V, NOVEMBER 1985.	
MAR NUMBER:	82-05-24-05
JUSTIFICATION FOR CONTINUED OPERATION:	
SEE JCO FOR BSP-1A & 1B RECORD 16.	

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	DHV-5/6	RECORD NUMBER:	0044
		SCEW PAGE NUMBER:	2-56
DESCRIPTION:	VALVE MOTOR OPERATOR	LOCATION:	AUXILIARY BLDG. ELEV. 95'-0"
MANUFACTURER:	LIMITORQUE	TER EQUIPMENT NO.:	09
MODEL:	SMB-3-100	TER CATEGORY:	II.A
SYSTEM:	DH	ZONE LOCATION:	36
TER QUALIFICATION DEFICIENCIES NOTED:			
1. DOCUMENTED EVIDENCE OF QUAL 2. EQUIP VS TEST SPECIMEN 3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED 10. RADIATION EXPOSURE			
QUALIFICATION STATUS:			
NOT QUALIFIED. SEE DISCUSSION ATTACHED.			
CORRECTIVE ACTION:			
REPLACE MOTOR.			
CORRECTIVE ACTION SCHEDULE: REFUEL IV; JULY 1983.			
MAR NUMBER:	82-05-24-08		
JUSTIFICATION FOR CONTINUED OPERATION:			
NOT REQUIRED.			

DISCUSSION ON
DHV 5 & 6; 34 & 35
Records 0044, 0046

Initial discussions with the vendor indicated that Test Report FC 3271 (L200-3TR-004) would apply to these actuators. However, during a plant walkdown scheduled for equipment verification, the insulation class of the motor on the actuator was determined to be class H. These motors are located in a zone that receives relatively high total integrated doses during plant life.

Class H insulation is designed for high temperature applications but not high radiation applications. Class RH insulation is designed for both high radiation and high temperature applications and has been tested to radiation exposures in excess of 2×10^8 rads. Florida Power Corporation has been unsuccessful in obtaining material breakdowns (composition) of class H insulation to conduct analyses or compare similarities.

Florida Power Corporation considers this equipment not qualified due to the insulation class of the motors. (The presence of teflon is suspected.) These motors will be replaced during the current outage; no justification for continued operation is required since the plant is currently in an outage.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: DHV-11/12	RECORD NUMBER: 0045	SCEW PAGE NUMBER: 2-57
DESCRIPTION: VALVE MOTOR OPERATOR	LOCATION: AUXILIARY BLDG. ELEV. 95'	TER EQUIPMENT NO.:
MANUFACTURER: LIMITORQUE	TER CATEGORY: N/A	ZONE LOCATION: 6
MODEL: SMB-000-5		
SYSTEM: DH		
TER QUALIFICATION DEFICIENCIES NOTED: NOT INCLUDED IN EVALUATION		
QUALIFICATION STATUS: NOT IN SCOPE. SUBSEQUENT REVIEW SHOWS THESE ITEMS ARE LOCATED IN A MILD ENVIRONMENT. (ENVIRONMENTAL ZONE INDICATED ABOVE) SEE SECTION 2.2 DISCUSSION.		
CORRECTIVE ACTION: NOT APPLICABLE.		
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.		
MAR NUMBER: NOT APPLICABLE.		
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.		

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: DHV-34/35	RECORD NUMBER: 0046	SCEW PAGE NUMBER: 2-58
DESCRIPTION: VALVE MOTOR OPERATOR	LOCATION: AUXILIARY BLDG. ELEV. 75'-0"	TER EQUIPMENT NO.: 02
MANUFACTURER: LIMITORQUE	TER CATEGORY: II.A	ZONE LOCATION: 7
MODEL: SMB-2-40		
SYSTEM: DH		
TER QUALIFICATION DEFICIENCIES NOTED:		
1. DOCUMENTED EVIDENCE OF QUAL 2. EQUIP VS TEST SPECIMEN 3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED 10. RADIATION EXPOSURE		
QUALIFICATION STATUS:		
NOT QUALIFIED. SEE DISCUSSION FOR DHV-5 & 6, RECORD 0044.		
CORRECTIVE ACTION:		
REPLACE MOTOR.		
CORRECTIVE ACTION SCHEDULE: REFUEL IV; JULY 1983.		
MAR NUMBER:	82-05-24-08	
JUSTIFICATION FOR CONTINUED OPERATION:		
NOT REQUIRED.		

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: DHV-110/111	RECORD NUMBER: 0047	SCEW PAGE NUMBER: 2-59
DESCRIPTION: VALVE MOTOR OPERATOR	LOCATION: AUXILIARY BLDG. 75'-0"	TER EQUIPMENT NO.: 03
MANUFACTURER: LIMITORQUE	TER CATEGORY: II.A	ZONE LOCATION: 7
MODEL: SMB-1-25		
SYSTEM: DH		
TER QUALIFICATION DEFICIENCIES NOTED:		
1. DOCUMENTED EVIDENCE OF QUAL 2. EQUIP VS TEST SPECIMEN 3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED 10. RADIATION EXPOSURE		
QUALIFICATION STATUS:		
QUALIFICATION MODIFICATIONS IN PROGRESS.		
SEE DISCUSSION ATTACHED.		
CORRECTIVE ACTION:		
REPLACE MOTOR		
CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER 1985		
MAR NUMBER:	82-05-24-06	
JUSTIFICATION FOR CONTINUED OPERATION: SEE ATTACHED.		

DISCUSSION ON
DHV-110/111
Record 0047

Correspondence from Limitorque (L200-3VC-007) indicates that Qualification Report 600198 plus Addendum 1 (L200-3TR-005) apply to the actuators for these valves. A walkdown was conducted and the results (L200-WW-001) show these actuators have Reliance motors with insulation class H. These are 3 phase, 220/440 volt motors. Walkdown results were provided to the vendor and they were requested to identify activities required to upgrade these actuators such that Qualification Report B0003 (L200-3TR-003) would apply, thereby ensuring radiation would not be a concern. The vendor response (L200-3VC-008) indicates motor replacement with Class B (or better) insulated motors will be required.

JUSTIFICATION FOR CONTINUED OPERATION
for
DHV-110 and 111
TER Item 3

References

- 1) NRC Technical Evaluation Report, January, 1983.
- 2) Limitorque Test Report No. 600198, January, 1969, and Addendum 1, April 1969.
- 3) FPC IE Bulletin 79-01B Response, November, 1981.
- 4) Limitorque Letter, FPC #L200-3VC-007
- 5) Field Inspection Report, L200-WW-001.
- 6) Limiturque Test Report 600456, Sepctember, 1976.

In the interim between the present and scheduled corrective action, the following justification for continued operation is given:

Operation of this equipment for an interim period can be justified on a functional and equipment basis. The functional reason is valves DHV-110 and 111 are used to align the Decay Heat System with the Makeup System if the Makeup Pumps are required. In the event of a LOCA, this alignment is not required. Since these valves are normally open and aligned for LOCA conditions, they are not required to move during or subsequent to a LOCA and failure can, therefore, be tolerated.

On an equipment basis, most of the operators parts can be qualified by material similarity.

Tests were performed on operators similar to DHV-110 and 111 and all aspects of the environmental conditions were covered except radiation and aging (Referencs 4 and 2). To resolve this issue, a field inspection (Reference 5) of the installed equipment was

performed to identify materials and parts in the operator that could be compared to materials and parts in similar qualified operators. The materials and parts susceptible to radiation degradation and aging are the torque and limit switches, the motor winding insulation, the seals, and grease.

Based on the field inspection report (Reference 5), the torque and limit switches are the standard Limitorque design and the material (identified by its color) is similar to valve operators which were tested to the conditions described in Test report 600456 (Reference 6). In this test, the operator was exposed to a radiation level of 2.04×10^8 rads and aged for an equivalent of 40 years. Therefore, by similarity, it can be concluded that the switches are qualified for the environment.

The other parts, such as the motor winding insulation, seals and grease will be maintained in accordance with with vendor recommendations and replaced as required.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: DH-43-FIS	RECORD NUMBER: 0048	
	SCEW PAGE NUMBER: 2-60	
DESCRIPTION: FLOW INDICATING SWITCH	LOCATION: AUXILIARY BLDG ELEV. 95'	
MANUFACTURER: BARTON	TER EQUIPMENT NO.: 46	
MODEL: 288A	TER CATEGORY: II.C	
SYSTEM: DH	ZONE LOCATION: 6	
TER QUALIFICATION DEFICIENCIES NOTED:		
3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED		
QUALIFICATION STATUS:		
QUALIFIED FOR CURRENT APPLICATION. SEE DISCUSSION ATTACHED.		
CORRECTIVE ACTION:		
NOT APPLICABLE.		
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.		
MAR NUMBER:	80-09-03	
JUSTIFICATION FOR CONTINUED OPERATION:		
NOT REQUIRED.		

DISCUSSION ON
DH-43-FIS, DH-44-FIS
Record 0048, 0049

This equipment is located in environmental zone 6. The only parameter considered harsh is radiation. The 40 year exposure at the equipment is 1×10^4 R. Total Integrated Dose (TID) does not exceed 1×10^5 R until greater than five (5) days after the accident. TID for 40 years plus six (6) months post accident exposure is only 2.6×10^5 R and is not expected to cause catastrophic failure of any insulating material. This equipment will be maintained in accordance with vendor recommendations. Any additional aging evaluations are not warranted at this time. This equipment is considered qualified for its current application and location. However, for operational considerations, this switch is being replaced with another qualified switch.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	DH-44-FIS	RECORD NUMBER:	0049
		SCEW PAGE NUMBER:	2-61
DESCRIPTION:	FLOW INDICATING SWITCH	LOCATION:	AUXILIARY BLDG. ELEV. 95'
MANUFACTURER:	BARTON	TER EQUIPMENT NO.:	46
MODEL:	288A	TER CATEGORY:	II.C
SYSTEM:	DH	ZONE LOCATION:	6
TER QUALIFICATION DEFICIENCIES NOTED:			
3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED			
QUALIFICATION STATUS:			
QUALIFIED FOR CURRENT APPLICATION. SEE DISCUSSION FOR DH-43-FIS (RECORD NUMBER 0048).			
CORRECTIVE ACTION:			
NOT APPLICABLE.			
CORRECTIVE ACTION SCHEDULE: 80-09-03			
MAR NUMBER: NOT APPLICABLE.			
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.			

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: DH-DPT-3,4	RECORD NUMBER: 0050
	SCEW PAGE NUMBER: 2-63A
DESCRIPTION: DP TRANSMITTER	LOCATION: AUXILIARY BLDG. ELEV. 98' 4"
MANUFACTURER: ROSEMOUNT	TER EQUIPMENT NO.: 42
MODEL: 1153B	TER CATEGORY: II.A
SYSTEM: DH	ZONE LOCATION: 6
TER QUALIFICATION DEFICIENCIES NOTED: 2. EQUIP VS TEST SPECIMEN 3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED	
QUALIFICATION STATUS: QUALIFIED FOR CURRENT APPLICATION. SEE DISCUSSION ATTACHED.	
CORRECTIVE ACTION: NOT APPLICABLE.	
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.	
MAR NUMBER: NOT APPLICABLE.	
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.	

DISCUSSION ON
DH-DPT-3, 4
Record 0050

References

- 1) Rosemount Test Report 108025 and 108026, "Rosemount Pressure Transmitter, Model 1153, Series B for Nuclear Service", dated 2/4/81.

The Rosemount transmitters have been installed. The transmitters are series 1153 B which are qualified to IEEE 323-1974, IEEE 344-1975, and NUREG-0588, Category 1 requirements in accordance with Reference 1. No justification for continued operation is required since the transmitter is qualified. All harsh environments are enveloped by the testing conditions. Walkdown during Refuel IV will verify installation.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	DH-DPT-38	RECORD NUMBER:	0051
		SCEW PAGE NUMBER:	2-64
DESCRIPTION:	DIFFERENTIAL PRESS. TRANSMITTER	LOCATION:	AUXILIARY BLDG. ELEV. 95'
MANUFACTURER:	BM CO.	TER EQUIPMENT NO.:	47
MODEL:	BY8240X-A	TER CATEGORY:	II.A
SYSTEM:	DH	ZONE LOCATION:	36
TER QUALIFICATION DEFICIENCIES NOTED:			
1. DOCUMENTED EVIDENCE OF QUAL			
QUALIFICATION STATUS:			
QUALIFICATION MODIFICATIONS IN PROGRESS.			
CORRECTIVE ACTION:			
REPLACE.			
CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER 1985			
MAR NUMBER:	82-05-24-04		
JUSTIFICATION FOR CONTINUED OPERATION:			
SEE ATTACHED.			

JUSTIFICATION FOR CONTINUED OPERATION

for

DH-DPT-38

Bailey Meter Transmitter

TER Item No. 47

The function of the DH-DPT-38 flow transmitters is to detect crossover flow from one decay heat system to the redundant system. The transmitter will be replaced or qualification deficiencies resolved by November, 1985.

In the interim between the present time and corrective action, the following justifications for continued operation are given:

1. The only harsh environment for this transmitter is radiation at a level of 1×10^8 rads. Pressure and temperature remain unchanged following an accident; therefore, it is not expected that this component is subject to failure as a result of pressure and temperature conditions.
2. Crossover function may be determined through use of DHS-3-DPT and DHS-4-DPT which are installed and qualified.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: DWV-160	RECORD NUMBER: 0052
	SCEW PAGE NUMBER: 2-65
DESCRIPTION: VALVE MOTOR OPERATOR	LOCATION: INTERMEDIATE BLDG. ELEV. 95'-0"
MANUFACTURER: LIMITORQUE	TER EQUIPMENT NO.: 05
MODEL: SMB-00-2	TER CATEGORY: II.A
SYSTEM: DW	ZONE LOCATION: 14
TER QUALIFICATION DEFICIENCIES NOTED: 1. DOCUMENTED EVIDENCE OF QUAL 2. EQUIP VS TEST SPECIMEN 3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED 7A. PEAK TEMPERATURE	
QUALIFICATION STATUS: NOT IN SCOPE, SEE DISCUSSION ATTACHED	
CORRECTIVE ACTION: NOT APPLICABLE.	
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.	
MAR NUMBER: NOT APPLICABLE.	
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.	

DISCUSSION ON
DWV-160
Record 0052

Vendor correspondence (L200-3VC-007) indicates Test Report B0003 (L200-3TR-003) is applicable to this valve motor operator.

This valve is located outside containment. Its only safety function is containment isolation in the event of a LOCA or HELB inside containment. While the valve must function during the accident, it is not exposed to accident environment. The environment at the equipment's location does not change during or following the accident for which it must function.

Therefore this equipment is not considered to be within the scope of 10 CFR 50.49. This equipment will be removed from the Master List.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: EFP-1	RECORD NUMBER: 0053
	SCEW PAGE NUMBER: 2-66
DESCRIPTION: PUMP MOTOR	LOCATION: INTERMEDIATE BLDG. ELEV. 95'-0"
MANUFACTURER: ELECTRIC MACHINERY	TER EQUIPMENT NO.: 58
MODEL: 2419-S	TER CATEGORY: II.A
SYSTEM: EF	ZONE LOCATION: 14
TER QUALIFICATION DEFICIENCIES NOTED:	
1. DOCUMENTED EVIDENCE OF QUAL	
QUALIFICATION STATUS:	
QUALIFIED FOR CURRENT APPLICATION	
CORRECTIVE ACTION:	
NOT APPLICABLE.	
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.	
MAR NUMBER:	NOT APPLICABLE.
JUSTIFICATION FOR CONTINUED OPERATION:	
NOT REQUIRED.	

DISCUSSION ON
EFP-1
Record 0053
Electric Machinery Pump Motor

As previously provided, these motors are totally encased, water-air cooled and designed for a temperature rise of 70°C rise over 40°C ambient. Walkdown results indicate these are Type 1C, continuous duty, 800 H.P., 4KV motors. (The electrical connection is hermetically sealed.) Due to the short duration of the accident temperatures (below 230°F in 16 seconds reaching 212°F in 40 seconds) and the relatively large mass of the equipment, motor internals will not sense accident temperatures in excess of 212°F (within design margin).

Although the motor is not located in a radiologically harsh environment, both the radiological and thermal susceptibilities of motor construction materials, have been investigated. Results do not show risk of failure.

Currently this motor is tested, inspected for abnormalities, cleaned and dried annually (PM 105). In addition, it is functionally tested (SP 349) monthly.

In light of the above, FPC considers this motor qualified for its current application. Further qualification efforts are not anticipated. Additional surveillances and testing are not deemed necessary.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: EFP-1	RECORD NUMBER: 0054
	SCEW PAGE NUMBER: 2-66A
DESCRIPTION: LUBRICANT	LOCATION: INTERMEDIATE BLDG. ELEV. 95'
MANUFACTURER: GULF	TER EQUIPMENT NO.: 58
MODEL: GULF HARMONY 68	TER CATEGORY: II.A
SYSTEM: EF	ZONE LOCATION: 14
TER QUALIFICATION DEFICIENCIES NOTED:	
1. DOCUMENTED EVIDENCE OF QUAL	
QUALIFICATION STATUS:	
ADDRESSED GENERICALLY VIA PM PROGRAM (PM-133).	
CORRECTIVE ACTION:	
NOT APPLICABLE.	
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.	
MAR NUMBER: NOT APPLICABLE.	
JUSTIFICATION FOR CONTINUED OPERATION:	
NOT REQUIRED.	

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: EFV-3/4	RECORD NUMBER: 0055	SCEW PAGE NUMBER: 2-67
DESCRIPTION: VALVE MOTOR OPERATOR	LOCATION: INTERMEDIATE BLDG. ELEV. 95'	
MANUFACTURER: LIMITORQUE	TER EQUIPMENT NO.: 01	
MODEL: SMB-000	TER CATEGORY: II.A	
SYSTEM: EF	ZONE LOCATION: 14	
TER QUALIFICATION DEFICIENCIES NOTED:		
1. DOCUMENTED EVIDENCE OF QUAL 2. EQUIP VS TEST SPECIMEN 3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED 7A. PEAK TEMPERATURE		
QUALIFICATION STATUS:		
QUALIFIED FOR CURRENT APPLICATION. SEE DISCUSSION ATTACHED.		
CORRECTIVE ACTION:		
NOT APPLICABLE.		
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.		
MAR NUMBER: NOT APPLICABLE.		
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.		

DISCUSSION ON
EFV-3/4; EFV-7 & 8
Records 0055; 0056

Vendor correspondence (L200-3VC-005) indicates that Test Report B0003 (L200-3TR-003) applies to the equipment listed. Thus, the only remaining concern is that testing does not completely envelop the required accident profile. The accident profile has an initial temperature spike that returns below the testing profile within 16 seconds. Because of the extremely short duration of this temperature peak, the equipment internals will not realize the higher initial temperatures. Thus the temperature peak is not an actual concern and the equipment is considered qualified for its current application.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: EFV-7 & 8	RECORD NUMBER: 0056 SCEW PAGE NUMBER: 2-68
DESCRIPTION: VALVE MOTOR OPERATOR	LOCATION: INTERMEDIATE BLDG. ELEV. 95'
MANUFACTURER: LIMITORQUE	TER EQUIPMENT NO.: 19
MODEL: SMB-2	TER CATEGORY: II.A
SYSTEM: EF	ZONE LOCATION: 14
TER QUALIFICATION DEFICIENCIES NOTED:	
<ul style="list-style-type: none">1. DOCUMENTED EVIDENCE OF QUAL2. EQUIP VS TEST SPECIMEN3. AGING DEGRADATION EVAL4. QUAL LIFE OR REPLACE SKED7A. PEAK TEMPERATURE	
QUALIFICATION STATUS:	
QUALIFIED FOR CURRENT APPLICATION. SEE DISCUSSION FOR EFV-3/4, RECORD 0055.	
CORRECTIVE ACTION:	
NOT APPLICABLE.	
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.	
MAR NUMBER: NOT APPLICABLE.	
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.	

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	EFV-11/32	RECORD NUMBER:	0057
		SCEW PAGE NUMBER:	2-69
DESCRIPTION:	VALVE MOTOR OPERATOR	LOCATION:	INTERMEDIATE BLDG. ELEV. 95'-0"
MANUFACTURER:	LIMITORQUE	TER EQUIPMENT NO.:	23
MODEL:	SMB-0	TER CATEGORY:	II.A
SYSTEM:	EF	ZONE LOCATION:	14
TER QUALIFICATION DEFICIENCIES NOTED:			
1. DOCUMENTED EVIDENCE OF QUAL			
QUALIFICATION STATUS:			
QUALIFIED FOR CURRENT APPLICATION. SEE DISCUSSION ATTACHED.			
CORRECTIVE ACTION:			
NOT APPLICABLE.			
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.			
MAR NUMBER: NOT APPLICABLE.			
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.			

DISCUSSION ON
EFV-11/32, 14/33
Records 0057, 0058

This equipment has been walked down to obtain information that would attest to its qualification. These units have 250 volt D.C. motors with Class B insulation. Similar motors have been tested in "Limitorque Valve Actuator Qualification Report for Class 1E Service Outside Containment", B0003 (L200-3TR-003). This testing envelopes the environmental requirements for equipment in Zone 14 with the exception of an initial temperature spike. This temperature spike however, returns below the testing profile within ten seconds, hence the equipment internals will not sense temperatures in excess of the tested profile. Since the only real item of concern is temperature for the current location, FPC considers this equipment qualified for its current application. Walkdown results (L200-WW-001) have been sent to the vendor to confirm our evaluation.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	EFV-14/33	RECORD NUMBER:	0058
		SCEW PAGE NUMBER:	2-70
DESCRIPTION:	VALVE MOTOR OPERATOR	LOCATION:	INTERMEDIATE BLDG. ELEV. 95' - 0"
MANUFACTURER:	LIMITORQUE	TER EQUIPMENT NO.:	23
MODEL:	SMB-0	TER CATEGORY:	II.A
SYSTEM:	EF	ZONE LOCATION:	14
TER QUALIFICATION DEFICIENCIES NOTED:			
1. DOCUMENTED EVIDENCE OF QUAL			
QUALIFICATION STATUS:			
QUALIFIED FOR CURRENT APPLICATION. SEE DISCUSSION ATTACHED.			
CORRECTIVE ACTION:			
NOT APPLICABLE.			
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.			
MAR NUMBER:		NOT APPLICABLE.	
JUSTIFICATION FOR CONTINUED OPERATION:			
NOT REQUIRED.			

DISCUSSION ON
EFV-11/32, 14/33
Records 0057, 0058

This equipment has been walked down to obtain information that would attest to its qualification. These units have 250 volt D.C. motors with Class B insulation. Similar motors have been tested in "Limitorque Valve Actuator Qualification Report for Class 1E Service Outside Containment", B0003 (L200-3TR-003). This testing envelopes the environmental requirements for equipment in Zone 14 with the exception of an initial temperature spike. This temperature spike however, returns below the testing profile within ten seconds, hence the equipment internals will not sense temperatures in excess of the tested profile. Since the only real item of concern is temperature for the current location, FPC considers this equipment qualified for its current application. Walkdown results (L200-WW-001) have been sent to the vendor to confirm our evaluation.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	EFV-11,14 32, & 33	RECORD NUMBER:	0059
		SCEW PAGE NUMBER:	2-71
DESCRIPTION:	MOTOR STARTER	LOCATION:	INTERMEDIATE BLDG. ELEV. 95'-0"
MANUFACTURER:	ALLEN BRADLEY	TER EQUIPMENT NO.:	86
MODEL:	BULLETIN 205	TER CATEGORY:	II.A
SYSTEM:	EF	ZONE LOCATION:	14
TER QUALIFICATION DEFICIENCIES NOTED:			
1. DOCUMENTED EVIDENCE OF QUAL			
QUALIFICATION STATUS:			
QUALIFICATION MODIFICATIONS IN PROGRESS.			
CORRECTIVE ACTION:			
RELOCATE TO MILD ENVIRONMENT.			
CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER 1985			
MAR NUMBER:	82-05-24-02		
JUSTIFICATION FOR CONTINUED OPERATION:			
SEE JCO FOR ASV-5 (RECORD 012)			

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: EF-3,4	RECORD NUMBER: 0060
	SCEW PAGE NUMBER: 2-72
DESCRIPTION: LOCAL CONTROL STATION	LOCATION: INTERMEDIATE BLDG. ELEV. 95'-0"
MANUFACTURER: FIELD FABRICATED	TER EQUIPMENT NO.: 90
MODEL: G.E.TYPE UA202 SW. G.E.TYPE UC212 LIGHT	TER CATEGORY: I.B
SYSTEM: EF	ZONE LOCATION: 14
TER QUALIFICATION DEFICIENCIES NOTED:	
1. DOCUMENTED EVIDENCE OF QUAL	
QUALIFICATION STATUS:	
QUALIFICATION MODIFICATIONS IN PROGRESS.	
CORRECTIVE ACTION:	
RELOCATE TO A MILD ENVIRONMENT.	
CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER 1985	
MAR NUMBER:	82-05-24-02
JUSTIFICATION FOR CONTINUED OPERATION: SEE JCO FOR AS-1 (RECORD 013)	

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: EF-3,4	RECORD NUMBER: 0061
	SCEW PAGE NUMBER: 2-73
DESCRIPTION: TERMINAL BOX	LOCATION: INTERMEDIATE BLDG. ELEV. 95'-0"
MANUFACTURER: FIELD FABRICATED	TER EQUIPMENT NO.: 75
MODEL: STATES TYPE NT TERMINAL BLOCKS	TER CATEGORY: I.B
SYSTEM: EF	ZONE LOCATION: 14
TER QUALIFICATION DEFICIENCIES NOTED: 3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED	
QUALIFICATION STATUS: QUALIFIED FOR CURRENT APPLICATION. SEE APPENDIX A.	
CORRECTIVE ACTION: NOT APPLICABLE. CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE. MAR NUMBER: NOT APPLICABLE.	
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.	

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	RECORD NUMBER: 0097
	SCEW PAGE NUMBER: 2-122
DESCRIPTION: POWER AND CONTROL CABLE	LOCATION: PLANT WIDE
MANUFACTURER: KERITE	TER EQUIPMENT NO.: 77
MODEL: FR & HT	TER CATEGORY: II.A
SYSTEM: ELECTRICAL DISTRIBUTION	ZONE LOCATION: N/A
TER QUALIFICATION DEFICIENCIES NOTED: 2. EQUIP VS TEST SPECIMEN	
QUALIFICATION STATUS: QUALIFIED FOR CURRENT APPLICATION. SEE ATTACHED DISCUSSION.	
CORRECTIVE ACTION: NOT APPLICABLE.	
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.	
MAR NUMBER:	NOT APPLICABLE.
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.	

DISCUSSION ON
Kerite Power and Control Cable
Record 0097

The Kerite cable in use at CR3 consists of 5 KV, 1 KV and 600 V power cable with HTK insulation and control cable with FR insulation.

Documentation from vendor exists in the file (K080-3VC-006) that indicates Report F-C4020-1 and F-C4020-2 (K080-3TR-002 and K080-3TR-003, respectively) apply to cable in use at CR3.

Production testing data shows that CR3 uses cables having FR and HTK insulation. This corresponds to samples A through J of FIRL reports F-C4020-1 and F-C4020-2. Conductor sizes and insulation thickness used at CR3 are standard with Kerite and the test samples address standard cables. Note that the FIRL report samples conform to IEEE 383 representative sizes. Kerite insulation is used only for power and control circuits.

Differences between the test specimen and the cables installed at CR3 are in the thickness of insulation and jackets. The CR3 cable primary insulation thickness is three mils less than the 50 mil test specimen and the jacket thickness is 2.5 mils less than the 62.5 mils of the test specimen. IEEE 383 evaluates the materials of construction of cables rather than insulation thickness. A difference of 2.5 mils will not compromise the ability of the cable to perform in an accident environment.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	RECORD NUMBER: 0098
	SCEW PAGE NUMBER: 2-123
DESCRIPTION: CONT. & THERMOCOUPLE EXTENSION CABLE	LOCATION: PLANT WIDE
MANUFACTURER: ROCKBESTOS	TER EQUIPMENT NO.: 78
MODEL: SILICONE RUBBER	TER CATEGORY: II.A
SYSTEM: ELECTRICAL DISTRIBUTION	ZONE LOCATION: N/A
TER QUALIFICATION DEFICIENCIES NOTED: 2. EQUIP VS TEST SPECIMEN	
QUALIFICATION STATUS: QUALIFIED BY FOR CURRENT APPLICATION. SEE ATTACHED DISCUSSION.	
CORRECTIVE ACTION: NOT APPLICABLE.	
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.	
MAR NUMBER: NOT APPLICABLE.	
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.	

DISCUSSION ON
ROCKBESTOS SILICONE RUBBER
Record 0098

Cable installed at CR3 is Rockbestos Firewall SR as determined by a review of factory production test records. Documentation from vendor exists in the file (attached to R352-3TR-002) that indicates Rockbestos report "Qualification of Firewall SR Class IE Electric Cables" (R352-3TR-002) applies to cable in use at CR3.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	RECORD NUMBER: 0099
	SCEW PAGE NUMBER: 2-124
DESCRIPTION: INST. CABLE&THERMO- COUPLE EXTENSION CBL	LOCATION: PLANT WIDE
MANUFACTURER: CONTINENTAL WIRE & CABLE COMPANY	TER EQUIPMENT NO.: 79
MODEL: SILICONE RUBBER INS. #CC-2193	TER CATEGORY: II.A
SYSTEM: ELECTRICAL DISTRIBUTION	ZONE LOCATION: N/A
TER QUALIFICATION DEFICIENCIES NOTED:	
2. EQUIP VS TEST SPECIMEN 7A. PEAK TEMPERATURE 7B. PEAK PRESSURE	
QUALIFICATION STATUS:	
QUALIFIED FOR CURRENT APPLICATION. SEE ATTACHED DISCUSSION.	
CORRECTIVE ACTION:	
NONE REQUIRED.	
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.	
MAR NUMBER: NOT APPLICABLE.	
JUSTIFICATION FOR CONTINUED OPERATION:	
NOT REQUIRED.	

DISCUSSION ON
Continental Wire & Cable Co.
Instrument and Thermocouple Extension Cables
Record 0099

A review of FPC Purchase Order No. PR3-2178 was conducted, along with referenced bills of materials and their cable descriptions, to identify type and insulation materials of instrument and thermocouple cables; as a result of this review it can be summarized that all cables have silicone rubber insulation type CC-2193. The outer jackets are either glass braid or silicone rubber type CC-2193. F-C2935 applies to cables having glass-braid outer coverings. Anaconda Co. No 79118 applies to cables with silicone rubber outer jackets. Available qualification test reports Anaconda Co. No 79118 and Franklin Institute No. F-C2935, and its addendum dated November 1970, provide qualification test data for previously mentioned materials on comparable test samples to specified cables. Individual test reports alone provide only partial qualification data. For this reason, the combination of both reports and their test results was used for evaluation of cable performance in the CR3 application; this approach can be justified, since the insulation material is the same for both tested samples and specified cables.

Since the CR3 cables have a specified operability time of six months, it is necessary to compute a post-accident time period, for which the cables are qualified, for comparison to the post-accident operability time required.

The approach used was to calculate from the post-LOCA time/temperature profile, an equivalent time/temperature combination with the temperature being of the postulated, CR3 post-accident environment. The transformation of a given time and temperature to a longer time period at ambient temperature was based on the slope of the Arrhenius plot provided by the

manufacturer; this approach necessitated certain assumptions, namely:

1. The Arrhenius line for the pre-accident thermal aging can be applied at a post-accident time/temperature combination. It is assumed that the slope of the line can be used anywhere on the log t vs. 1/T plot. The calculation of a slope was included.
2. The post-LOCA temperature remains constant at 150°F after 10⁵ seconds for the duration of the operating time of six months; this is a conservative assumption, since some decay of the temperature below 150°F is expected.
3. The post-accident environmental pressure decays close to atmospheric and does not affect the calculation.

The CR3 temperature peak during LOCA is above 280°F for less than one hour. The silicone rubber cable was tested to a temperature of 280°F for a total of three hours in the Anaconda test. A cable insulated with the identical silicone rubber insulation (CC-2193) was tested in F-C2935 to a level of 340°F for two hours. The only component which can be presumed to fail, therefore, is the outer jacket which was different in the two referenced tests. The jacket provides physical protection only and, therefore, can fail without compromising the safety-related function of the cable. Pressure differences will not affect the ability of cables to carry signals or current. In addition, F-C2935 indicates a pressure transient which is greater than CR3. The cable is considered qualified since its safety-related function has been demonstrated in environments which exceed LOCA environments at CR3.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	RECORD NUMBER: 0100
	SCEW PAGE NUMBER: 2-124A
DESCRIPTION: CONTROL & INSTRUMENT CABLE	LOCATION: PLANT WIDE
MANUFACTURER: BOSTON INSULATED WIRE AND CABLE CO.	TER EQUIPMENT NO.: 80
MODEL: EPR INSULATION BOS- TRAD 7 CSPE JACKET	TER CATEGORY: II.A
SYSTEM: ELECTRICAL DISTRIBUTION	ZONE LOCATION: N/A
TER QUALIFICATION DEFICIENCIES NOTED: 2. EQUIP VS TEST SPECIMEN	
QUALIFICATION STATUS: QUALIFIED FOR CURRENT APPLICATION. SEE ATTACHED DISCUSSION.	
CORRECTIVE ACTION: NONE REQUIRED.	
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.	
MAR NUMBER: NOT APPLICABLE.	
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.	

DISCUSSION ON
BIW Control and Instrument Cable
Record No. 0100

A review of CR3 purchase documents has shown that CR3 cable is Ethylene Propylene Rubber with a Bostrad 7 CSPE jacket. The insulation system was tested in accordance with IEEE 383 test sample requirements using a 7/C and 2/C cable. Differences in conductor size and numbers of conductors do not affect the validity of the testing since it is the insulation system which is being evaluated, not the inorganic materials or structural characteristics of the cables.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	RECORD NUMBER: 0101
	SCEW PAGE NUMBER: 2-127
DESCRIPTION: CABLE CONNECTORS	LOCATION: MTBD-2A, 2B & 2C
MANUFACTURER: T & B	TER EQUIPMENT NO.: 85
MODEL: F1	TER CATEGORY: IV
SYSTEM: ELECTRICAL DISTRIBUTION	ZONE LOCATION: 39
TER QUALIFICATION DEFICIENCIES NOTED:	
QUALIFICATION STATUS: QUALIFIED FOR CURRENT APPLICATION. (COMPLETELY METALLIC)	
CORRECTIVE ACTION: NOT APPLICABLE.	
CORRECTIVE ACTION SCHEDULE:	NOT APPLICABLE.
MAR NUMBER:	NOT APPLICABLE.
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.	

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	RECORD NUMBER: 0102
	SCEW PAGE NUMBER: 2-128
DESCRIPTION: TERMINAL BLOCKS	LOCATION: MTBD-8A,B,C & D MTBD-9A,B,C & D
MANUFACTURER: KULKA	TER EQUIPMENT NO.: 66
MODEL: 7TB & 5TB	TER CATEGORY: I.B
SYSTEM: ELECTRICAL DISTRIBUTION	ZONE LOCATION: 39
TER QUALIFICATION DEFICIENCIES NOTED: 2. EQUIP VS TEST SPECIMEN	
QUALIFICATION STATUS: QUALIFICATION MODIFICATIONS IN PROGRESS.	
CORRECTIVE ACTION: REPLACE.	
CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER 1985	
MAR NUMBER:	82-05-24-01
JUSTIFICATION FOR CONTINUED OPERATION: SEE ATTACHED.	

JUSTIFICATION FOR CONTINUED OPERATION
for
Kulka Terminal Blocks Inside Containment
TER Item No. 66

References

- 1) Franklin Institute Research Laboratories Test Report QL-C4927, "Quick Look Report for a Steam and Chemical Spray Exposure Test of Electrical Terminal Blocks".
- 2) Wyle Report 17436-15, "Final Report on Evaluation of Terminal Block Model EB-25", dated 12/1/80.
- 3) Wyle 58687, "Loss of Coolant Accident Testing of 5 Weidmuller Terminal Blocks", dated 6/29/82.

The terminal block terminations inside containment will be replaced with qualified in-line splices prior to November, 1985.

In the interim between the present and November, 1985, the following justification for continued operation is given:

Kulka terminal blocks are typically composed of metallic components insulated by phenolic compounds. The test reports noted above have shown that phenolic terminal blocks are capable of surviving harsh environments due to LOCA or HELB.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	RECORD NUMBER: 0103
	SCEW PAGE NUMBER: 2-129
DESCRIPTION: TERMINAL LUGS	LOCATION: PLANT WIDE
MANUFACTURER: BURNDY	TER EQUIPMENT NO.: 83
MODEL: CRIMP TYPE	TER CATEGORY: II.A
SYSTEM: ELECTRICAL DISTRIBUTION	ZONE LOCATION: N/A
TER QUALIFICATION DEFICIENCIES NOTED: 1. DOCUMENTED EVIDENCE OF QUAL	
QUALIFICATION STATUS: QUALIFIED FOR CURRENT APPLICATION. (COMPLETELY METALLIC)	
CORRECTIVE ACTION: NOT APPLICABLE.	
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.	
MAR NUMBER:	NOT APPLICABLE.
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.	

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	RECORD NUMBER: 0104
	SCEW PAGE NUMBER: 2-130
DESCRIPTION: TERMINATION PROCEDURE	LOCATION: OUTSIDE CONTAINMENT
MANUFACTURER: KERITE	TER EQUIPMENT NO.: 82
MODEL: T-1NS-HT	TER CATEGORY: I.B
SYSTEM: MT ELECTRICAL DISTRIBUTION	ZONE LOCATION: N/A
TER QUALIFICATION DEFICIENCIES NOTED: 2. EQUIP VS TEST SPECIMEN	
QUALIFICATION STATUS: QUALIFICATION MODIFICATIONS IN PROGRESS.	
CORRECTIVE ACTION: REPLACE.	
CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER 1985	
MAR NUMBER:	82-05-24-01
JUSTIFICATION FOR CONTINUED OPERATION: SEE ATTACHED.	

JUSTIFICATION FOR CONTINUED OPERATION
for
Kerite Cable Splice Outside Containment
TER Item 82

Cable terminations subjected to harsh environments due to MSLB on recirculating fluids after LOCA will be replaced prior to November, 1985. Replacement terminations will be supplied with documented evidence of qualification. New SCEW sheets will be completed for the replacement terminations upon receipt of the terminations and associated test reports.

In the interim between the present time and scheduled replacement, the following justification for continued operation is given:

Cable termination splices are generally provided for personnel protection and do not provide electrical insulation to maintain equipment function. Spacing of terminals for both power and control functions is sufficient to maintain the electrical integrity necessary for proper equipment operation. The air space between termination points is sufficient to maintain integrity. Failure of the splices, therefore, may result in personnel hazard but will not compromise significantly the ability of the equipment to perform its safety-related function.

Where termination splices are required to maintain electrical integrity, the splices should provide adequate insulation if not moved from their original position. Dielectric strength is not reduced to an unacceptable value even if termination material is degraded physically. Maintenance activities will monitor the condition of the splices and replacement will be indicated if visible degradation occurs. Common mode failure is not postulated since locations of redundant equipment, distances from damage mechanisms, and times of refurbishment vary.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	RECORD NUMBER: 0105
	SCEW PAGE NUMBER: 2-131
DESCRIPTION: TERMINATION PROCEDURE	LOCATION: OUTSIDE CONTAINMENT
MANUFACTURER: KERITE	TER EQUIPMENT NO.: 82
MODEL: T-5NS-HT	TER CATEGORY: I.B
SYSTEM: MT ELECTRICAL DISTRIBUTION	ZONE LOCATION: N/A
TER QUALIFICATION DEFICIENCIES NOTED: 2. EQUIP VS TEST SPECIMEN	
QUALIFICATION STATUS: QUALIFICATION MODIFICATIONS IN PROGRESS.	
CORRECTIVE ACTION: REPLACE.	
CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER 1985	
MAR NUMBER:	82-05-24-01
JUSTIFICATION FOR CONTINUED OPERATION: SEE DISCUSSION FOLLOWING RECORD NO. 0104.	

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	RECORD NUMBER: 0106
	SCEW PAGE NUMBER: 2-132
DESCRIPTION: TERMINATION PROCEDURE	LOCATION: CONTAINMENT
MANUFACTURER: KERITE	TER EQUIPMENT NO.: 81
MODEL: 39-69	TER CATEGORY: II.A
SYSTEM: MT ELECTRICAL DISTRIBUTION	ZONE LOCATION: 38/39/40
TER QUALIFICATION DEFICIENCIES NOTED:	
10. RADIATION EXPOSURE	
QUALIFICATION STATUS:	
QUALIFIED FOR CURRENT APPLICATION. SEE ATTACHED DISCUSSION.	
CORRECTIVE ACTION:	
NOT APPLICABLE.	
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.	
MAR NUMBER:	NOT APPLICABLE.
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.	

DISCUSSION ON
Kerite Co. Termination Procedure #39-69
Record No. 0106

A letter from the Kerite Co. in the FPC files states that the FIRL Report F-C4020-2 applies to termination procedure #39-69. According to the vendor:

"Kerite Tape Type Terminals are qualified by comparison with qualified splices using similar designs and identical materials. The 39-69 terminal corresponds to Splice 38-69 covered in FIRL Report F-C4020-2...

"The following is a listing of Kerite Kit materials and corresponding manufacturer designations:

<u>Kerite Kit</u>	<u>Manufacturer Designation</u>
Bishop Bi-Seal 3	Bishop Bi-Seal 3 (see Section 1 for comments on this tape)
Bishop W962	Bishop W962
Kerite Friction Tape	Kerite Friction Tape
Glass Electrical Tape	Permacel P212 Glass Electrical Tape (not Scotch 27)
Silicone Rubber Tape	Scotch 70 Silicone Tape

"The Bishop Bi-Seal 3 tape has been subjected to radiation and maintains its physical properties up to 0.1 megarads of exposure.

"The purpose of both terminals is to provide a lug seal to prevent the cable from breathing during normal thermal cycling allowing moisture to collect in the conductor strands. The Bishop W962 tape will maintain its integrity during 40 years of normal service (both thermal and radiation aging) and a LOCA accident. The Bishop Bi-Seal 3, as stated in earlier conversations, starts to revert at radiation levels above 1 megarad (0.1 includes safety factor). Therefore, its performance cannot be guaranteed at levels above this, but our judgement is that it will still adequately seal the end of the cable."

Based on the above information, it is the position of FPC that the subject equipment is qualified for its current application.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	RECORD NUMBER: 0107
	SCEW PAGE NUMBER: 2-138
DESCRIPTION: SPLICE TERMINAL	LOCATION: PLANT WIDE
MANUFACTURER: BURNDY	TER EQUIPMENT NO.: 84
MODEL: INSULINK	TER CATEGORY: I.B
SYSTEM: MT ELECTRICAL DISTRIBUTION	ZONE LOCATION: N/A
TER QUALIFICATION DEFICIENCIES NOTED:	
1. DOCUMENTED EVIDENCE OF QUAL	
QUALIFICATION STATUS:	
QUALIFICATION MODIFICATIONS IN PROGRESS.	
CORRECTIVE ACTION:	
REPLACE.	
CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER 1985	
MAR NUMBER:	82-05-24-01
JUSTIFICATION FOR CONTINUED OPERATION: SEE DISCUSSION FOLLOWING RECORD NO. 0104.	

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	FWV-14/15	RECORD NUMBER:	0062
		SCEW PAGE NUMBER:	2-74
DESCRIPTION:	VALVE MOTOR OPERATOR	LOCATION:	TURBINE BLDG. ELEV. 119'-0"
MANUFACTURER:	LIMITORQUE	TER EQUIPMENT NO.:	08
MODEL:	SMB-1	TER CATEGORY:	II.A
SYSTEM:	FW	ZONE LOCATION:	N/A
TER QUALIFICATION DEFICIENCIES NOTED:			
2. EQUIP VS TEST SPECIMEN 3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED			
QUALIFICATION STATUS:			
QUALIFIED FOR CURRENT APPLICATION. SEE DISCUSSION ATTACHED.			
CORRECTIVE ACTION:			
NOT APPLICABLE.			
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.			
MAR NUMBER: NOT APPLICABLE.			
JUSTIFICATION FOR CONTINUED OPERATION:			
NOT REQUIRED.			

DISCUSSION ON

FWV 14/15

RECORD 0062

Vendor correspondence (L200-3VC-007) indicates that Test Report B0003 (L200-3TR-003) applies to the equipment listed. As such, all environmental parameters are enveloped by testing and this valve is considered qualified for its current application.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	FWV-29/30	RECORD NUMBER:	0063
		SCEW PAGE NUMBER:	2-76
DESCRIPTION:	VALVE MOTOR OPERATOR	LOCATION:	INTERMEDIATE BLDG. ELEV. 119'-0"
MANUFACTURER:	LIMITORQUE	TER EQUIPMENT NO.:	05
MODEL:	SMB-4T	TER CATEGORY:	II.A
SYSTEM:	FW	ZONE LOCATION:	17
TER QUALIFICATION DEFICIENCIES NOTED:			
1. DOCUMENTED EVIDENCE OF QUAL 2. EQUIP VS TEST SPECIMEN 3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED 7A. PEAK TEMPERATURE			
QUALIFICATION STATUS:			
QUALIFIED FOR CURRENT APPLICATION. SEE DISCUSSION ATTACHED.			
CORRECTIVE ACTION:			
NOT APPLICABLE.			
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.			
MAR NUMBER: NOT APPLICABLE.			
JUSTIFICATION FOR CONTINUED OPERATION:			
NOT REQUIRED.			

DISCUSSION ON
FWV-29, 30; FWV-31, 32
RECORD 0063; 0064

Vendor correspondence (L200-3VC-007) indicates that Test Report B0003 (L200-3TR-003) applies to the equipment listed. Thus, the only remaining concern is that testing does not completely envelop the required accident profile. The accident profile has an initial temperature spike that returns below the testing profile within 16 seconds. Because of the extremely short duration of this temperature peak, the equipment internals will not realize the higher initial temperatures. Thus the temperature peak is not an actual concern and the equipment is considered qualified for its current application.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	FWV-31/32	RECORD NUMBER:	0064
		SCEW PAGE NUMBER:	2-77
DESCRIPTION:	VALVE MOTOR OPERATOR	LOCATION:	INTERMEDIATE BLDG. ELEV. 119' - 0"
MANUFACTURER:	LIMITORQUE	TER EQUIPMENT NO.:	05
MODEL:	SMB-1	TER CATEGORY:	II.A
SYSTEM:	FW	ZONE LOCATION:	17
TER QUALIFICATION DEFICIENCIES NOTED:			
<ol style="list-style-type: none">1. DOCUMENTED EVIDENCE OF QUAL2. EQUIP VS TEST SPECIMEN3. AGING DEGRADATION EVAL4. QUAL LIFE OR REPLACE SKED7A. PEAK TEMPERATURE			
QUALIFICATION STATUS:			
QUALIFIED FOR CURRENT APPLICATION. SEE DISCUSSION FOR FWV 29 & 30, RECORD 0063.			
CORRECTIVE ACTION:			
NOT APPLICABLE.			
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.			
MAR NUMBER: NOT APPLICABLE.			
JUSTIFICATION FOR CONTINUED OPERATION:			
NOT REQUIRED.			

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	FWV-33,34,35 & 36	RECORD NUMBER:	0065
		SCEW PAGE NUMBER:	2-78
DESCRIPTION:	VALVE MOTOR OPERATOR	LOCATION:	INTERMEDIATE BLDG. ELEV. 119'-0"
MANUFACTURER:	LIMITORQUE	TER EQUIPMENT NO.:	25
MODEL:	SMB-0	TER CATEGORY:	II.A
SYSTEM:	FW	ZONE LOCATION:	17
TER QUALIFICATION DEFICIENCIES NOTED:			
1. DOCUMENTED EVIDENCE OF QUAL			
QUALIFICATION STATUS:			
QUALIFICATION MODIFICATIONS IN PROGRESS.			
CORRECTIVE ACTION:			
REPLACE MOTOR (34,35)			
CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER 1985			
MAR NUMBER:	82-05-24-06		
JUSTIFICATION FOR CONTINUED OPERATION:			
SEE ATTACHED.			

JUSTIFICATION FOR CONTINUED OPERATION
for
FWV-33, 34, 35, & 36
Limitorque Motorized Valve Operators
TER Item 25

References

- 1) NRC Technical Evaluation Report, January, 1983.
- 2) FPC IE Bulletin 79-01B Response, November, 1981.
- 3) Field Inspection Report L200-WW-001.
- 4) Limitorque Test Report B0003.

Although no tests were performed on Limitorque operators with type BG insulation and red limit switches, the following justification for continued operation is provided:

1. A Limitorque Class B operator was tested for operability during HELB. Test conditions were a maximum 250^oF, 25 psig, and 2×10^7 rads (Reference 4). This valve operator was similar in construction to the operator on the feedwater valves.
2. Temperature rise calculations have shown that the Class B Limitorque is operable for the one minute requirement after HELB. Radiation is not considered since the total integrated dose is equal to 1×10^4 rads which is considered mild.
3. The auxiliary feedwater inlet valves are required to mitigate the consequences of main steam line break. If the auxiliary feedwater system is inoperable, feed and bleed techniques can be used to remove decay heat from the reactor or main feedwater can be used to remove decay heat, if the main feedwater is available. Therefore, failure of these valves can, in the interim, be tolerated.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	FWV-161/162	RECORD NUMBER:	0066
		SCEW PAGE NUMBER:	2-79
DESCRIPTION:	VALVE MOTOR OPERATOR	LOCATION:	INTERMEDIATE BLDG. ELEV. 95'-0"
MANUFACTURER:	LIMITORQUE	TER EQUIPMENT NO.:	23
MODEL:	SMB-00	TER CATEGORY:	II.A
SYSTEM:	FW	ZONE LOCATION:	56
TER QUALIFICATION DEFICIENCIES NOTED:			
1. DOCUMENTED EVIDENCE OF QUAL			
QUALIFICATION STATUS:			
QUALIFICATION MODIFICATIONS IN PROGRESS.			
CORRECTIVE ACTION:			
REPLACE MOTOR.			
CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER 1985			
MAR NUMBER:	82-05-24-06		
JUSTIFICATION FOR CONTINUED OPERATION:			
SEE ATTACHED.			

JUSTIFICATION FOR CONTINUED OPERATION
for
FWV-161 and FWV-162
TER Item 23

References

1. Technical Specifications for Crystal River Unit 3.
2. Feedwater System Flow Diagram, FPC Drawing Number FD-302-081, Revision 28.
3. Environmental and Seismic Qualification Guide Specifications and Data, Section 4.
4. Limitorque Test Report B0003, "Limitorque Valve Actuator Qualification Report for Class 1E Service Outside Containment".

In the interim between the present and the scheduled corrective action, the following justification for continued operation is provided:

1. These units have been walked down to obtain nameplate data and installation orientation. The motors are Reliance, Class B insulated, 125 volt D.C. motors; the electrical connections are hermetically sealed. Similar operators with similar insulation were satisfactorily tested in Reference 4.
2. Reference 2 shows there are redundant paths to provide secondary feedwater to both steam generators and control level in each.
3. Reference 1, Table 3.6-1 indicates closure time is not critical for these valves; they are not considered isolation valves.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	FWV-33,34,35,36	RECORD NUMBER:	0067
		SCEW PAGE NUMBER:	2-80
DESCRIPTION:	LOCAL MOTOR STARTER	LOCATION:	INTERMEDIATE BLDG. ELEV. 119'-0"
MANUFACTURER:	ALLEN BRADLEY	TER EQUIPMENT NO.:	86
MODEL:	BULLETIN 205	TER CATEGORY:	II.A
SYSTEM:	FW	ZONE LOCATION:	17
TER QUALIFICATION DEFICIENCIES NOTED:			
1. DOCUMENTED EVIDENCE OF QUAL			
QUALIFICATION STATUS:			
QUALIFICATION MODIFICATIONS IN PROGRESS.			
CORRECTIVE ACTION:			
DURING EFIC INSTALLATION REMOVE FWV-33 & 36; RELOCATE FWV-34 & 35.			
CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER 1985			
MAR NUMBER:	82-05-24-02		
JUSTIFICATION FOR CONTINUED OPERATION: SEE JCO FOR ASV-5 (RECORD 012)			

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	FWV-161,162	RECORD NUMBER:	0068
		SCEW PAGE NUMBER:	2-81
DESCRIPTION:	LOCAL MOTOR STARTER	LOCATION:	INTERMEDIATE BLDG. ELEV. 95'-0"
MANUFACTURER:	ALLEN BRADLEY	TER EQUIPMENT NO.:	86
MODEL:	BULLETIN 205	TER CATEGORY:	II.A
SYSTEM:	FW	ZONE LOCATION:	56
TER QUALIFICATION DEFICIENCIES NOTED:			
1. DOCUMENTED EVIDENCE OF QUAL			
QUALIFICATION STATUS:			
QUALIFICATION MODIFICATIONS IN PROGRESS.			
CORRECTIVE ACTION:			
REMOVE DURING EFIC INSTALLATION.			
CORRECTIVE ACTION SCHEDULE: REFUEL V, NOVEMBER 1985.			
MAR NUMBER:	82-05-24-02		
JUSTIFICATION FOR CONTINUED OPERATION:			
SEE JCO FOR ASV-5 (RECORD 012).			

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	FW-5,6	RECORD NUMBER:	0069
		SCEW PAGE NUMBER:	2-82
DESCRIPTION:	LOCAL CONTROL STATION	LOCATION:	INTERMEDIATE BLDG. ELEV. 119'-0"
MANUFACTURER:	FIELD FABRICATED	TER EQUIPMENT NO.:	90
MODEL:	G.E.TYPE UA202 SW. G.E.TYPE UC212 LIGHT	TER CATEGORY:	I.B
SYSTEM:	FW	ZONE LOCATION:	17
TER QUALIFICATION DEFICIENCIES NOTED:			
1. DOCUMENTED EVIDENCE OF QUAL			
QUALIFICATION STATUS:			
QUALIFICATION MODIFICATIONS IN PROGRESS.			
CORRECTIVE ACTION:			
REMOVE.			
CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER 1985			
MAR NUMBER:	82-05-24-02		
JUSTIFICATION FOR CONTINUED OPERATION:			
SEE JCO FOR AS-1 (RECORD 013)			

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	FW-11,12	RECORD NUMBER:	0070
		SCEW PAGE NUMBER:	2-83
DESCRIPTION:	LOCAL CONTROL STATION	LOCATION:	INTERMEDIATE BLDG. ELEV. 95'-0"
MANUFACTURER:	FIELD FABRICATED	TER EQUIPMENT NO.:	90
MODEL:	G.E.TYPE UA202 SW. G.E.TYPE UC212 LIGHT	TER CATEGORY:	I.B
SYSTEM:	FW	ZONE LOCATION:	56
TER QUALIFICATION DEFICIENCIES NOTED:			
1. DOCUMENTED EVIDENCE OF QUAL			
QUALIFICATION STATUS:			
QUALIFICATION MODIFICATIONS IN PROGRESS.			
CORRECTIVE ACTION:			
REMOVE DURING EFIC INSTALLATION.			
CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER 1985			
MAR NUMBER:	80-10-66		
JUSTIFICATION FOR CONTINUED OPERATION:			
SEE JCO FOR AS-1 (RECORD 013)			

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: FW-3 & 4	RECORD NUMBER: 0071
	SCEW PAGE NUMBER: 2-84
DESCRIPTION: TERMINAL BOX	LOCATION: INTERMEDIATE BLDG. ELEV. 119'
MANUFACTURER: FIELD FABRICATED	TER EQUIPMENT NO.: 72
MODEL: STATES TYPE NT TERMINAL BLOCKS	TER CATEGORY: I.B
SYSTEM: FW	ZONE LOCATION: 17
TER QUALIFICATION DEFICIENCIES NOTED:	
3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED	
QUALIFICATION STATUS:	
QUALIFIED FOR CURRENT APPLICATION. SEE APPENDIX A.	
CORRECTIVE ACTION:	
NOT APPLICABLE.	
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.	
MAR NUMBER:	NOT APPLICABLE.
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.	

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: FW-11 & 20	RECORD NUMBER: 0072
	SCEW PAGE NUMBER: 2-85
DESCRIPTION: TERMINAL BOX	LOCATION: INTERMEDIATE BLDG. ELEV. 95'
MANUFACTURER: FIELD FABRICATED	TER EQUIPMENT NO.: 75
MODEL: STATES TYPE NT TERMINAL BLOCKS	TER CATEGORY: I.B
SYSTEM: FW	ZONE LOCATION: 55
TER QUALIFICATION DEFICIENCIES NOTED:	
3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED	
QUALIFICATION STATUS:	
NOT IN SCOPE. SUBSEQUENT REVIEW SHOWS THESE ITEMS ARE LOCATED IN A MILD ENVIRONMENT. (ENVIRONMENTAL ZONE INDICATED ABOVE). SEE SECTION 2.2 DISCUSSION.	
CORRECTIVE ACTION:	
NOT APPLICABLE.	
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.	
MAR NUMBER: NOT APPLICABLE.	
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.	

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	FW-22	RECORD NUMBER:	0073
		SCEW PAGE NUMBER:	2-86
DESCRIPTION:	TERMINAL BOX	LOCATION:	INTERMEDIATE BLDG. ELEV. 119'
MANUFACTURER:	FIELD FABRICATED	TER EQUIPMENT NO.:	72
MODEL:	STATES TYPE NT TERMINAL BLOCKS	TER CATEGORY:	I.B
SYSTEM:	FW	ZONE LOCATION:	16

TER QUALIFICATION DEFICIENCIES NOTED:

3. AGING DEGRADATION EVAL
4. QUAL LIFE OR REPLACE SKED

QUALIFICATION STATUS:

QUALIFIED FOR CURRENT APPLICATION. SEE APPENDIX A.

CORRECTIVE ACTION:

NOT APPLICABLE.

CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.

MAR NUMBER: NOT APPLICABLE.

JUSTIFICATION FOR CONTINUED OPERATION:
NOT REQUIRED.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	FW-312-FE FW-313-FE	RECORD NUMBER:	0074
		SCEW PAGE NUMBER:	2-87A
DESCRIPTION:	FLOW ELEMENT	LOCATION:	INTERMEDIATE BLDG. ELEV. 119'
MANUFACTURER:	CONTROLATION	TER EQUIPMENT NO.:	43
MODEL:		TER CATEGORY:	I.B
SYSTEM:	FW	ZONE LOCATION:	19/20-RESP
TER QUALIFICATION DEFICIENCIES NOTED:			
1. DOCUMENTED EVIDENCE OF QUAL			
QUALIFICATION STATUS:			
(NOT INSTALLED YET.)			
CORRECTIVE ACTION:			
(INSTALLATION.)			
CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER 1985			
MAR NUMBER:	80-10-66-05		
JUSTIFICATION FOR CONTINUED OPERATION:			
NOT REQUIRED.			

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	MSV-55 & 56	RECORD NUMBER:	0075
		SCEW PAGE NUMBER:	2-88
DESCRIPTION:	VALVE MOTOR OPERATOR	LOCATION:	INTERMEDIATE BLDG. ELEV. 119'
MANUFACTURER:	LIMITORQUE	TER EQUIPMENT NO.:	23
MODEL:	SMB-0-15	TER CATEGORY:	II.A
SYSTEM:	MS	ZONE LOCATION:	16
TER QUALIFICATION DEFICIENCIES NOTED:			
1. DOCUMENTED EVIDENCE OF QUAL			
QUALIFICATION STATUS:			
QUALIFICATION MODIFICATIONS IN PROGRESS.			
CORRECTIVE ACTION:			
REPLACE MCTOR.			
CORRECTIVE ACTION SCHEDULE: REFUEL V, NOVEMBER 1985			
MAR NUMBER:	82-05-24-06		
JUSTIFICATION FOR CONTINUED OPERATION:			
SEE ATTACHED.			

DISCUSSION ON
MSV 55 & 56
Record 0075

A walkdown was conducted for this valve and the results (L200-WW-001) show this actuator has a D.C. motor with Class B insulation. The vendor was contacted and requested to identify activities required to upgrade this actuator such that Qualification Report B0009 (L200-3TR-008) would apply, thereby encompassing the environmental specifications for Zone 14. The vendor response (L200-3VC-008) indicates a motor replacement with a Peerless D.C. motor with Class RH insulation will be required.

JUSTIFICATION FOR CONTINUED OPERATION

for

MSV-55 & 56

Limiterque Motor Operator

TER Item 23

References

- 1) Limitorque Report No. B0003, dated 5/76.

Qualification deficiencies will be resolved by November, 1985.

In the interim between the present time and corrective action, the following justification for continued operation is given:

1. Walkdown data has shown that these valve operators have Class B, D.C. motors, gray limit switches, and red torque switches. Reference 1 indicates qualification of 10^7 rads. Specified radiation and pressure are below tested values and capability is, therefore, demonstrated. Equipment temperature rise calculations have shown that the equipment temperature will remain at or below qualification temperature for the required valve operating time.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: MSV-55 & 56	RECORD NUMBER: 0076	
	SCEW PAGE NUMBER: 2-89	
DESCRIPTION: LOCAL MOTOR STARTER		LOCATION: INTERMEDIATE BLDG. ELEV. 119'
MANUFACTURER: ALLEN BRADLEY		TER EQUIPMENT NO.: 86
MODEL: BULLETIN 205		TER CATEGORY: II.A
SYSTEM: MS		ZONE LOCATION: 16
TER QUALIFICATION DEFICIENCIES NOTED: 1. DOCUMENTED EVIDENCE OF QUAL.		
QUALIFICATION STATUS: QUALIFICATION MODIFICATIONS IN PROGRESS.		
CORRECTIVE ACTION: RELOCATE STARTERS TO MILD ENVIRONMENT. CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER 1985 MAR NUMBER: 82-05-24-02		
JUSTIFICATION FOR CONTINUED OPERATION: SEE JCO FOR ASV-5 (RECORD 012)		

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	MSV-411,412, 413,414-SV1,2,3, 5,6	RECORD NUMBER: 0077	SCEW PAGE NUMBER: 2-90
DESCRIPTION:	SOLENOID VALVE	LOCATION:	INTERMEDIATE BLDG. ELEV. 119'
MANUFACTURER:	ASCO	TER EQUIPMENT NO.:	35
MODEL:	HT8320A34V,A20V	TER CATEGORY:	I.B
SYSTEM:	MS	ZONE LOCATION:	17/16-RESP
TER QUALIFICATION DEFICIENCIES NOTED:			
1. DOCUMENTED EVIDENCE OF QUAL			
QUALIFICATION STATUS:			
QUALIFICATION MODIFICATIONS IN PROGRESS.			
CORRECTIVE ACTION:			
REPLACE VALVE PARTS			
CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER 1985			
MAR NUMBER:	82-05-24-03		
JUSTIFICATION FOR CONTINUED OPERATION: SEE ATTACHED.			

JUSTIFICATION FOR CONTINUED OPERATION
for
MSV-411, 412, 413, 414-SV1, 2, 3
TER Item 35

References

- 1) FPC Environmental Qualification of Class 1E Equipment IE Bulletin 79-01B Qualification Summary.

In the interim between the present and scheduled corrective action, the following justification for continued operation, as previously provided in Reference 1, is given:

1. Investigations with the manufacturer indicate the solenoid valves are good for 10^5 rads. Accident conditions will not affect the components for the period of operability required. Also, due to the location of the component when required to perform its safety function, the accident environment has no impact.
2. Due to the period of operability required as per CR#3 Tech. Spec. Table 3.6-1 to perform their safety function, and the fact that the total radiation exposure per the SCEW sheets is conservative in regard to the 5-1/2 year operating life of the plant, these valves are not considered to be a restraint to the safe operation of CR#3.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: MS-5 & 6	RECORD NUMBER: 0078	SCEW PAGE NUMBER: 2-93
DESCRIPTION: LOCAL CONTROL STATION	LOCATION: INTERMEDIATE BLDG. ELEV. 119'	
MANUFACTURER: FIELD FABRICATED	TER EQUIPMENT NO.: 90	
MODEL: G.E.TYPE UA202 SW. G.E.TYPE UC212 LIGHT	TER CATEGORY: I.B	
SYSTEM: MS	ZONE LOCATION: 16/17-RESP	
TER QUALIFICATION DEFICIENCIES NOTED:		
1. DOCUMENTED EVIDENCE OF QUAL		
QUALIFICATION STATUS:		
QUALIFICATION MODIFICATIONS IN PROGRESS.		
CORRECTIVE ACTION:		
RELOCATE TO MILD ENVIRONMENT.		
CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER 1985		
MAR NUMBER:	82-05-24-02	
JUSTIFICATION FOR CONTINUED OPERATION: SEE JCO FOR AS-1 (RECORD 013)		

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: MS-5 & 6	RECORD NUMBER: 0079	SCEW PAGE NUMBER: 2-98
DESCRIPTION: TERMINAL BOX	LOCATION: INTERMEDIATE BLDG. ELEV. 119'	
MANUFACTURER: FIELD FABRICATED	TER EQUIPMENT NO.: 67	
MODEL: STATES TYPE NT TERMINAL BLOCKS	TER CATEGORY: I.B	
SYSTEM: MS	ZONE LOCATION: 16	
TER QUALIFICATION DEFICIENCIES NOTED:		
3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED		
QUALIFICATION STATUS:		
QUALIFIED FOR CURRENT APPLICATION. SEE APPENDIX A.		
CORRECTIVE ACTION:		
NOT APPLICABLE.		
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.		
MAR NUMBER: NOT APPLICABLE.		
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.		

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: MS-7	RECORD NUMBER: 0080	SCEW PAGE NUMBER: 2-99
DESCRIPTION: TERMINAL BOX	LOCATION: INTERMEDIATE BLDG. ELEV. 95'	
MANUFACTURER: FIELD FABRICATED	TER EQUIPMENT NO.: 72	
MODEL: STATES TYPE NT TERMINAL BLOCKS	TER CATEGORY: I.B	
SYSTEM: MS	ZONE LOCATION: 21	
TER QUALIFICATION DEFICIENCIES NOTED:		
3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED		
QUALIFICATION STATUS:		
NOT IN SCOPE. ASSOCIATED EQUIPMENT (MSV 130) REMOVED FROM MASTER LIST.		
CORRECTIVE ACTION:		
NOT APPLICABLE.		
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.		
MAR NUMBER: NOT APPLICABLE.		
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.		

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: MS-8	RECORD NUMBER: 0081
	SCEW PAGE NUMBER: 2-100
DESCRIPTION: TERMINAL BOX	LOCATION: AUXILIARY BLDG. ELEV. 119'
MANUFACTURER: FIELD FABRICATED	TER EQUIPMENT NO.: NA
MODEL: STATES TYPE NT TERMINAL BLOCKS	TER CATEGORY: N/A
SYSTEM: MS	ZONE LOCATION: 21
TER QUALIFICATION DEFICIENCIES NOTED: NOT INCLUDED IN EVALUATION	
QUALIFICATION STATUS: QUALIFIED FOR CURRENT APPLICATION. SEE APPENDIX A.	
CORRECTIVE ACTION: NOT APPLICABLE. CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE. MAR NUMBER: NOT APPLICABLE.	
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.	

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: MS-17	RECORD NUMBER: 0082	
	SCEW PAGE NUMBER: 2-101	
DESCRIPTION: TERMINAL BOX	LOCATION: INTERMEDIATE BLDG. ELEV. 119'	
MANUFACTURER: FIELD FABRICATED	TER EQUIPMENT NO.: 72	
MODEL: STATES TYPE NT TERMINAL BLOCKS	TER CATEGORY: I.B	
SYSTEM: MS	ZONE LOCATION: 17	
TER QUALIFICATION DEFICIENCIES NOTED:		
3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED		
QUALIFICATION STATUS:		
QUALIFIED FOR CURRENT APPLICATION. SEE APPENDIX A.		
CORRECTIVE ACTION:		
NOT APPLICABLE.		
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.		
MAR NUMBER: NOT APPLICABLE.		
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.		

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: MS-18	RECORD NUMBER: 0083	
	SCEW PAGE NUMBER: 2-102	
DESCRIPTION: TERMINAL BOX	LOCATION: INTERMEDIATE BLDG. ELEV. 119'	
MANUFACTURER: FIELD FABRICATED	TER EQUIPMENT NO.: 72	
MODEL: STATES TYPE NT TERMINAL BLOCKS	TER CATEGORY: I.B	
SYSTEM: MS	ZONE LOCATION: 16	
TER QUALIFICATION DEFICIENCIES NOTED:		
3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED		
QUALIFICATION STATUS:		
QUALIFIED FOR CURRENT APPLICATION. SEE APPENDIX A.		
CORRECTIVE ACTION:		
NOT APPLICABLE.		
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.		
MAR NUMBER: NOT APPLICABLE.		
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.		

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: MS-92-PS1 & 2 (SEE NOTE 3)	RECORD NUMBER: 0084
	SCEW PAGE NUMBER: 2-103
DESCRIPTION: PRESS SWITCH	LOCATION: INTERMEDIATE BLDG. ELEV. 119'
MANUFACTURER: STATIC-O-RING	TER EQUIPMENT NO.: 39
MODEL: 9R2YY5NCXJ	TER CATEGORY: I.B
SYSTEM: MS	ZONE LOCATION: 16
TER QUALIFICATION DEFICIENCIES NOTED: 1. DOCUMENTED EVIDENCE OF QUAL	
QUALIFICATION STATUS: QUALIFICATION MODIFICATIONS IN PROGRESS.	
CORRECTIVE ACTION: REPLACE.	
CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER 1985	
MAR NUMBER:	80-10-66-05
JUSTIFICATION FOR CONTINUED OPERATION: SEE ATTACHED.	

JUSTIFICATION FOR CONTINUED OPERATION
for
MS-92-PS1 & 2
Static-O-Ring Pressure Switches
TER Item 39

References

- 1) FPC 79-01B Response, pg. 2-103
- 2) FPC 79-01B Response, Figure 4-4
- 3) FPC Crystal River FSAR, Table 14-19a
- 4) Wyle Test Report No. 44296-2, "Qualification Report for Two (2) Static-O-Ring Pressure Switches Model 7828-100...", dated November, 1978.
- 5) FPC Crystal River FSAR, Section 10.2.1.4 & 14.2.2.1

The main steam pressure switches will be replaced during the emergency feedwater upgrade prior to November, 1985 or their function will be performed by qualified equipment which will be installed by November, 1985.

In the interim between the present and November, 1985, the following justifications for continued operation are given:

1. The main steam line pressure switches operate in a relatively mild radiation environment during accident conditions. The 1.0×10^4 radiation level will not contribute to failure of the switches.
2. References 3 and 5 indicate main steam stop and isolation valves closing times of approximately 7.0 seconds or less. Main feedwater valves close in 34 seconds. The valves close on receipt of a signal from the pressure switches. Feedwater isolation is also initiated by reactor trip which

occurs at 6.5 seconds into the transient. The pressure switches must, therefore, operate for a period of less than 7.0 seconds into the transient.

Temperature (Reference 1) increases to 350°F then decreases to 250°F within 7 seconds following the transient. Maximum pressure is 19.15 psig. Reference 4 indicates operability to 14 seconds at 285°F and 37 psig after the testing transient. Due to the short duration of the transient and the evidence presented in the pressure switch test report, there is reasonable assurance that the pressure switches will perform as specified during a main steam line break.

3. Failure of the pressure switches can be tolerated since turbine stop valves will close on reactor trip in addition to low steam line pressure. The accident analysis (Reference 5) is based on turbine stop valve closure to terminate the transient. As mentioned above, feedwater isolation is redundant because a reactor trip signal will also close the feedwater valves in addition to the main steam low pressure signal.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: MTMC-3	RECORD NUMBER: 085
	SCEW PAGE NUMBER: 2-104
DESCRIPTION: MOTOR CONTROL CENTER	LOCATION: AUXILIARY BLDG. ELEV. 95'
MANUFACTURER: ALLEN BRADLEY	TER EQUIPMENT NO.: 95
MODEL: BULLETIN 798	TER CATEGORY: I.B
SYSTEM: MT	ZONE LOCATION: 15/35
TER QUALIFICATION DEFICIENCIES NOTED:	
1. DOCUMENTED EVIDENCE OF QUAL	
QUALIFICATION STATUS:	
QUALIFIED FOR CURRENT APPLICATION. SEE DISCUSSION ATTACHED.	
CORRECTIVE ACTION:	
NOT APPLICABLE.	
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.	
MAR NUMBER:	NOT APPLICABLE.
JUSTIFICATION FOR CONTINUED OPERATION:	
NOT REQUIRED.	

DISCUSSION ON
MTMC 3; MTMC 7
Allen Bradley Motor Control Centers
Records 0085; 0088

The materials of construction were analyzed to determine their susceptibility to radiation and thermal degradation. This evaluation concluded that various subcomponents were not qualified for the entire plant life. However, these subcomponents are suitable for plant service in their current location for a minimum of 20 years. Therefore, the components identified in the evaluation (summarized below) will be replaced or the entire MCC relocated (whichever is most cost effective at the time of modification) prior to the 20th year of plant service. Florida Power Corporation considers this equipment qualified for its current application for a period of 20 years.

The evaluation concluded that nylon materials are not suitable for 40 years in the specified environmental conditions. These materials under various trade names are:

Fosta 523 - Manufacturer's Codes - R, QQ, WW
Nylatron GSHS - Manufacturer's Codes - S
Celanese 1000-2 - Manufacturer's Codes - RR
Fosta 512 - Manufacturer's Codes - SS

Other material susceptible to the radiation age related degradation are paper and fibre products designated as:

Kraft Paper - Manufacturer's Codes - CC
3M #4 - Manufacturer's Code - EE, DD
Fish Paper -
Rag Insulating Paper - Manufacturer's Code - BB
Vulcanized Fibre - Manufacturer's Code - A, TT

The following is a summary of parts of the motor control centers with a potential to radiation age related degradation:

- Cover reset assembly, Part No. Z20174
- Sizes 1 & 2 starters operating coils, Part No. 71A86 and 72A86 (if not replaced with the motor starter)
- Size 3 starters operating coils, Part No. 73A86 (if not replaced with the motor starter)
- 2 pole, open type "C" relay, Part No. 700-C0202A1
- 8 pole, type "N" relay, Part No. 700-N800A1
- #84AB86 operating coil for relay - Components 40099-302-02 (if not replaced with the entire relay)

The following is a summary of parts of the motor control centers with a potential to radiation and thermal related degradation:

- Size 3 coil cover with interlock, Part No. X230933
- Size 1 motor starter, Part No. X234345
- Size 2 motor starter, Part No. X234516
- Size 3 motor starter, Part No. X234579
- Size 4 motor starter, Part No. X266926
- Motor starters, Part No. X266949
- Adj. overload reset button, Part No. Z20811
- Auxiliary switch operating lever, Part No. F24524
- Operating lever, Part No. F24523
- Operating lever, Part No. F24306
- Bussman fuses, Part No X276124, X276127, X276132, X276126, E276120

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	MTMC-5	RECORD NUMBER:	0086
		SCEW PAGE NUMBER:	2-106
DESCRIPTION:	MOTOR CONTROL CENTER	LOCATION:	AUXILIARY BLDG. ELEV. 119'
MANUFACTURER:	ALLEN BRADLEY	TER EQUIPMENT NO.:	
MODEL:	BULLETIN 798	TER CATEGORY:	N/A
SYSTEM:	MT	ZONE LOCATION:	24
TER QUALIFICATION DEFICIENCIES NOTED: NOT INCLUDED IN EVALUATION			
QUALIFICATION STATUS: NOT IN SCOPE. SUBSEQUENT REVIEW SHOWS THESE ITEMS ARE LOCATED IN A MILD ENVIRONMENT. (ENVIRONMENTAL ZONE INDICATED ABOVE.) SEE SECTION 2.2 DISCUSSION.			
CORRECTIVE ACTION: NOT APPLICABLE. CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE. MAR NUMBER: NOT APPLICABLE.			
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.			

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: MTMC-6	RECORD NUMBER: 0087
	SCEW PAGE NUMBER: 2-107
DESCRIPTION: MOTOR CONTROL CENTER	LOCATION: AUXILIARY BLDG. ELEV. 95'
MANUFACTURER: ALLEN BRADLEY	TER EQUIPMENT NO.: 94
MODEL: BULLETIN 798	TER CATEGORY: I.B
SYSTEM: MT	ZONE LOCATION: 5
TER QUALIFICATION DEFICIENCIES NOTED:	
1. DOCUMENTED EVIDENCE OF QUAL	
QUALIFICATION STATUS:	
NOT IN SCOPE. SUBSEQUENT REVIEW SHOWS THESE ITEMS ARE LOCATED IN A MILD ENVIRONMENT. (ENVIRONMENTAL ZONE INDICATED ABOVE.) SEE SECTION 2.2 DISCUSSION.	
CORRECTIVE ACTION:	
NOT APPLICABLE.	
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.	
MAR NUMBER: NOT APPLICABLE.	
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.	

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: MTMC-7	RECORD NUMBER: 0088	
	SCEW PAGE NUMBER: 2-108	
DESCRIPTION: MOTOR CONTROL CENTER	LOCATION: AUXILIARY BLDG. ELEV. 119'	
MANUFACTURER: ALLEN BRADLEY	TER EQUIPMENT NO.: 95	
MODEL: BULLETIN 798	TER CATEGORY: I.B	
SYSTEM: MT	ZONE LOCATION: 28	
TER QUALIFICATION DEFICIENCIES NOTED:		
1. DOCUMENTED EVIDENCE OF QUAL		
QUALIFICATION STATUS:		
QUALIFIED FOR CURRENT APPLICATION. SEE DISCUSSION FOR MTMC-3, RECORD 0085.		
CORRECTIVE ACTION:		
NOT APPLICABLE.		
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.		
MAR NUMBER: NOT APPLICABLE.		
JUSTIFICATION FOR CONTINUED OPERATION:		
NOT REQUIRED.		

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: MTBD-2A	RECORD NUMBER: 0089
	SCEW PAGE NUMBER: 2-113
DESCRIPTION: ELECTRICAL PENETRATION ASSEMBLY	LOCATION: R.B. WALL QUAD 1 ELEV. 136'
MANUFACTURER: CONAX	TER EQUIPMENT NO.: 76
MODEL: CANISTER TYPE	TER CATEGORY: IV
SYSTEM: MT	ZONE LOCATION: 39
TER QUALIFICATION DEFICIENCIES NOTED:	
QUALIFICATION STATUS:	
QUALIFIED FOR CURRENT APPLICATION. SEE DISCUSSION ATTACHED.	
CORRECTIVE ACTION:	
NOT APPLICABLE.	
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.	
MAR NUMBER:	NOT APPLICABLE.
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.	

DISCUSSION ON
Conax Canister Type
Electric Penetration Assemblies

References

- 1) Conax Report IPS-769, "Feasibility Study Electric Penetration Qualification Crystal River - Unit 3".
- 2) Conax Report, IPS-499.2, "Design Qualification Report for Kulka Terminal Blocks, Type 7TB, Glass Fiber Filled Alkyd Materials".
- 3) Conax Report, IPS-585.1, "Test Report - Qualification of Medium Voltage Power Service Classification Electric Penetration (BF-11)".
- 4) Conax Report, IPS-16, "Specification for Type Qualification of Electric Penetration Sub-Assemblies for Crystal River Plant - Unit No. 3, Florida Power Corporation".
- 5) Conax Report, IPS-353.2, "Design Qualification Report for a Conax Low Voltage Control Feedthrough Assembly".

FPC has reviewed the references indicated and concludes that the electric penetration assemblies in use at Crystal River Unit 3 are qualified for their current application.

Walkdowns are being completed to confirm compliance with recommendations listed in Reference 1.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	MTBD-2B	RECORD NUMBER:	0090
		SCEW PAGE NUMBER:	2-114
DESCRIPTION:	ELECTRICAL PENETRA- TION ASSEMBLY	LOCATION:	R.B. WALL QUAD 4 ELEV. 137'
MANUFACTURER:	CONAX	TER EQUIPMENT NO.:	76
MODEL:	CANISTER TYPE	TER CATEGORY:	IV
SYSTEM:	MT	ZONE LOCATION:	39
TER QUALIFICATION DEFICIENCIES NOTED:			
QUALIFICATION STATUS:			
QUALIFIED FOR CURRENT APPLICATION. SEE DISCUSSION FOR MTBD-2A, RECORD 0089.			
CORRECTIVE ACTION:			
NOT APPLICABLE.			
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.			
MAR NUMBER: NOT APPLICABLE.			
JUSTIFICATION FOR CONTINUED OPERATION:			
NOT REQUIRED.			

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	MTBD-2C	RECORD NUMBER:	0091
		SCEW PAGE NUMBER:	2-115
DESCRIPTION:	ELECTRICAL PENETRATION ASSEMBLY	LOCATION:	R.B. WALL QUAD 3 ELEV. 146'
MANUFACTURER:	CONAX	TER EQUIPMENT NO.:	76
MODEL:	CANISTER TYPE	TER CATEGORY:	IV
SYSTEM:	MT	ZONE LOCATION:	39
TER QUALIFICATION DEFICIENCIES NOTED:			
QUALIFICATION STATUS:			
SEE DISCUSSION FOR MTBD-2A, RECORD 0089.			
CORRECTIVE ACTION:			
NOT APPLICABLE.			
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.			
MAR NUMBER: NOT APPLICABLE.			
JUSTIFICATION FOR CONTINUED OPERATION:			
NOT REQUIRED.			

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	MTBD-8A	RECORD NUMBER:	0092
		SCEW PAGE NUMBER:	2-116
DESCRIPTION:	ELECTRICAL PENETRA- TION ASSEMBLY	LOCATION:	R.B. WALL QUAD 1 ELEV. 136'
MANUFACTURER:	CONAX	TER EQUIPMENT NO.:	76
MODEL:	CANISTER TYPE	TER CATEGORY:	IV
SYSTEM:	MT	ZONE LOCATION:	39
TER QUALIFICATION DEFICIENCIES NOTED:			
QUALIFICATION STATUS:			
SEE DISCUSSION FOR MTBD-2A, RECORD 0089.			
CORRECTIVE ACTION:			
NOT APPLICABLE.			
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.			
MAR NUMBER: NOT APPLICABLE.			
JUSTIFICATION FOR CONTINUED OPERATION:			
NOT REQUIRED.			

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: MTBD-8B	RECORD NUMBER: 0093	SCEW PAGE NUMBER: 2-117
DESCRIPTION: ELECTRICAL PENETRATION ASSEMBLY	LOCATION: R.B. WALL QUAD 3 ELEV. 146'	
MANUFACTURER: CONAX	TER EQUIPMENT NO.: 76	
MODEL: CANISTER TYPE	TER CATEGORY: IV	
SYSTEM: MT	ZONE LOCATION: 39	
TER QUALIFICATION DEFICIENCIES NOTED:		
QUALIFICATION STATUS: SEE DISCUSSION FOR MTBD-2A, RECORD 0089.		
CORRECTIVE ACTION: NOT APPLICABLE.		
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.		
MAR NUMBER: NOT APPLICABLE.		
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.		

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	MTBD-8C & 8D	RECORD NUMBER:	0094
		SCEW PAGE NUMBER:	2-118
DESCRIPTION:	ELECTRICAL PENETRA- TION ASSEMBLY	LOCATION:	R.B. WALL QUAD 4 ELEV. 137'
MANUFACTURER:	CONAX	TER EQUIPMENT NO.:	76
MODEL:	CANISTER TYPE	TER CATEGORY:	IV
SYSTEM:	MT	ZONE LOCATION:	39
TER QUALIFICATION DEFICIENCIES NOTED:			
QUALIFICATION STATUS:			
SEE DISCUSSION FOR MTBD-2A, RECORD 0089.			
CORRECTIVE ACTION:			
NOT APPLICABLE.			
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.			
MAR NUMBER: NOT APPLICABLE.			
JUSTIFICATION FOR CONTINUED OPERATION:			
NOT REQUIRED.			

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	MTBD-9A & 9B	RECORD NUMBER:	0095
		SCEW PAGE NUMBER:	2-119
DESCRIPTION:	ELECTRICAL PENETRATION ASSEMBLY	LOCATION:	R.B. WALL QUAD 1 ELEV. 133'
MANUFACTURER:	CONAX	TER EQUIPMENT NO.:	76
MODEL:	CANISTER TYPE	TER CATEGORY:	IV
SYSTEM:	MT	ZONE LOCATION:	39
TER QUALIFICATION DEFICIENCIES NOTED:			
QUALIFICATION STATUS:			
SEE DISCUSSION FOR MTBD-2A, RECORD 0089.			
CORRECTIVE ACTION:			
NOT APPLICABLE.			
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.			
MAR NUMBER: NOT APPLICABLE.			
JUSTIFICATION FOR CONTINUED OPERATION:			
NOT REQUIRED.			

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	MTBD-9C & 9D	RECORD NUMBER:	0096
		SCEW PAGE NUMBER:	2-120
DESCRIPTION:	ELECTRICAL PENETRA- TION ASSEMBLY	LOCATION:	R.B. WALL QUAD 1 ELEV. 129'
MANUFACTURER:	CONAX	TER EQUIPMENT NO.:	76
MODEL:	CANISTER TYPE	TER CATEGORY:	IV
SYSTEM:	MT	ZONE LOCATION:	39
TER QUALIFICATION DEFICIENCIES NOTED:			
QUALIFICATION STATUS:			
SEE DISCUSSION FOR MTBD-2A, RECORD 0089.			
CORRECTIVE ACTION:			
NOT APPLICABLE.			
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.			
MAR NUMBER: NOT APPLICABLE.			
JUSTIFICATION FOR CONTINUED OPERATION:			
NOT REQUIRED.			

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: MUP-1A,1B,1C	RECORD NUMBER: 0108	SCEW PAGE NUMBER: 2-141
DESCRIPTION: PUMP MOTOR	LOCATION: AUXILIARY BLDG. ELEV. 95'	
MANUFACTURER: WESTINGHOUSE	TER EQUIPMENT NO.: 59	
MODEL: 688.5"S"- "CSP"	TER CATEGORY: II.A	
SYSTEM: MU	ZONE LOCATION: 1	
TER QUALIFICATION DEFICIENCIES NOTED: 1. DOCUMENTED EVIDENCE OF QUAL		
QUALIFICATION STATUS: QUALIFIED FOR CURRENT APPLICATION.		
CORRECTIVE ACTION: NOT APPLICABLE.		
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.		
MAR NUMBER: NOT APPLICABLE.		
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.		

DISCUSSION ON
MUP 1A, 1B, 1C
Westinghouse Motors
Record 0108

References

- 1) WCAP 8754 "Environmental Qualification of Class 1E Motors for Nuclear Out-of-Containment Use" dated June, 1976.

Although these motors were purchased prior to the issuance of IEEE 323 1971, they are similar in design to motors tested in the reference indicated.

The harsh environment is limited to radiation since the motor need only operate for conditions inside containment, and its location is outside containment.

The total integrated dose for these motors is $1.2 \times 10^6 R$ (40 year TID of $1.2 \times 10^6 R$ plus five day post accident exposure of $3.7 \times 10^4 R$). Since the integrated dose for lifetime is significantly greater than the dose received during the accident, the radiation susceptibility of motor components if any, should be detectable via periodic surveillances.

Currently, the motors are tested and inspected annually (PM-105) for abnormalities. This equipment is also tested quarterly in the ISI program (SP-340) and is periodically (18 month intervals) functionally tested.

FPC feels there are adequate surveillances on this equipment and considers it qualified for its current application.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: MUP-1A,1B & 1C	RECORD NUMBER: 0109
	SCEW PAGE NUMBER: 2-141A
DESCRIPTION: LUBRICANT	LOCATION: AUXILIARY BLDG. ELEV. 95'
MANUFACTURER: GULF	TER EQUIPMENT NO.: 59
MODEL: GULF CREST 32	TER CATEGORY: II.A
SYSTEM: MU	ZONE LOCATION: 1
TER QUALIFICATION DEFICIENCIES NOTED:	
1. DOCUMENTED EVIDENCE OF QUAL	
QUALIFICATION STATUS:	
ADDRESSED GENERICALLY VIA PM PROGRAM (PM-133). SEE APPENDIX A.	
CORRECTIVE ACTION:	
NOT APPLICABLE.	
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.	
MAR NUMBER:	NOT APPLICABLE.
JUSTIFICATION FOR CONTINUED OPERATION:	
NOT REQUIRED.	

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: MUV-18	RECORD NUMBER: 0110
	SCEW PAGE NUMBER: 2-142
DESCRIPTION: VALVE MOTOR OPERATOR	LOCATION: AUXILIARY BLDG. ELEV. 119'
MANUFACTURER: LIMITORQUE	TER EQUIPMENT NO.: 21
MODEL: SMB-00	TER CATEGORY: II.A
SYSTEM: MU	ZONE LOCATION: 22
TER QUALIFICATION DEFICIENCIES NOTED:	
1. DOCUMENTED EVIDENCE OF QUAL 2. EQUIP VS TEST SPECIMEN 3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED 10. RADIATION EXPOSURE	
QUALIFICATION STATUS:	
QUALIFICATION MODIFICATIONS IN PROGRESS. SEE DISCUSSION ATTACHED.	
CORRECTIVE ACTION:	
REPLACE MOTOR.	
CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER, 1985.	
MAR NUMBER:	82-05-24-06
JUSTIFICATION FOR CONTINUED OPERATION:	
SEE ATTACHED.	

DISCUSSION ON
MUV 18
Record 0110

Vendor correspondence (L200-3VC-005) indicates that Test Report 600198 plus Addendum 1 are applicable to this valve motor operator. A walkdown was conducted and the results (L200-WW-001) show these actuators have Reliance motors with Class H insulation. The vendor was contacted with walkdown results and requested to identify activities required to upgrade these actuators such that Qualification Report B0003 (L200-3TR-003) would apply, thereby ensuring radiation would not be a concern. The vendor response (L200-3VC-008) indicates it would be necessary to replace the motors with Class RH insulated motors.

JUSTIFICATION FOR CONTINUED OPERATION
for
MUV 18
TER Item 21

References

- 1) Technical Specifications for Crystal River Unit 3.
- 2) Make up and Purification Flow Diagram, FPC Drawing Number FD-302-661, Revision 33.
- 3) Environmental and Seismic Qualification Guide Specifications and Data, Section 4 (draft).

In the interim between the present and scheduled upgrades, the following justification for continued operation is given.

This valve isolates Reactor Coolant Pump seal injection. There are manually operated valves upstream that can be used to serve the same function. Reference 1 indicates that closure time is not critical. Therefore, the safe operation of CR3 is not jeopardized in the interim.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	MUV-23 & 24	RECORD NUMBER:	0111
		SCEW PAGE NUMBER:	2-143
DESCRIPTION:	VALVE MOTOR OPERATOR	LOCATION:	AUXILIARY BLDG. ELEV. 95'
MANUFACTURER:	LIMITORQUE	TER EQUIPMENT NO.:	20
MODEL:	SMB-00-25	TER CATEGORY:	II.A
SYSTEM:	MU	ZONE LOCATION:	3
TER QUALIFICATION DEFICIENCIES NOTED:			
2. EQUIP VS TEST SPECIMEN 3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED			
QUALIFICATION STATUS:			
QUALIFIED FOR CURRENT APPLICATION. SEE DISCUSSION ATTACHED.			
CORRECTIVE ACTION:			
NOT APPLICABLE.			
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.			
MAR NUMBER: NOT APPLICABLE.			
JUSTIFICATION FOR CONTINUED OPERATION:			
NOT REQUIRED.			

DISCUSSION ON
MUV 23 & 24
Record 0111

Correspondence from Limitorque (L200-3VC-007) indicates that Qualification Report B0003 (L200-3TR-003) applies to these actuators. Review of this report indicates all environmental parameters for Zone 3 are encompassed by testing. This equipment is considered qualified for its current application.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	MUV-25 & 26	RECORD NUMBER:	0112
		SCEW PAGE NUMBER:	2-144
DESCRIPTION:	VALVE MOTOR OPERATOR	LOCATION:	AUXILIARY BLDG. ELEV. 95'
MANUFACTURER:	LIMITORQUE	TER EQUIPMENT NO.:	20
MODEL:	SMB-00-25	TER CATEGORY:	II.A
SYSTEM:	MU	ZONE LOCATION:	3
TER QUALIFICATION DEFICIENCIES NOTED:			
2. EQUIP VS TEST SPECIMEN 3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED			
QUALIFICATION STATUS:			
QUALIFIED FOR CURRENT APPLICATION. SEE DISCUSSION ATTACHED.			
CORRECTIVE ACTION:			
NOT APPLICABLE.			
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.			
MAR NUMBER: NOT APPLICABLE.			
JUSTIFICATION FOR CONTINUED OPERATION:			
NOT REQUIRED.			

DISCUSSION ON
MUV 25 & 26
Record 0112

Correspondence from Limitorque (L200-3VC-007) indicates that Qualification Report B0003 (L200-3TR-003) applies to these actuators. Review of this report indicates all environmental parameters for Zone 3 are encompassed by testing. This equipment is considered qualified for its current application.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	MUV-27	RECORD NUMBER:	0113
		SCEW PAGE NUMBER:	2-145
DESCRIPTION:	VALVE MOTOR OPERATOR	LOCATION:	AUXILIARY BLDG. ELEV. 95'
MANUFACTURER:	LIMITORQUE	TER EQUIPMENT NO.:	20
MODEL:	SMB-00-10	TER CATEGORY:	II.A
SYSTEM:	MU	ZONE LOCATION:	3
TER QUALIFICATION DEFICIENCIES NOTED:			
2. EQUIP VS TEST SPECIMEN 3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED			
QUALIFICATION STATUS:			
QUALIFIED FOR CURRENT APPLICATION. SEE DISCUSSION ATTACHED.			
CORRECTIVE ACTION:			
NOT APPLICABLE.			
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.			
MAR NUMBER: NOT APPLICABLE.			
JUSTIFICATION FOR CONTINUED OPERATION:			
NOT REQUIRED.			

DISCUSSION ON
MUV 27
Record 0113

Correspondence from Limitorque (L200-3VC-007) indicates that Qualification Report B0003 (L200-3TR-003) applies to these actuators. Review of this report indicates all environmental parameters for Zone 3 are encompassed by testing. This equipment is considered qualified for its current application.

FLORIDA POWER CORPORATION

QUALIFICATION STATUS SUMMARY SHEET

ID NUMBER:	MUV-40 & 41	RECORD NUMBER:	0114
		SCEW PAGE NUMBER:	2-147
DESCRIPTION:	VALVE MOTOR OPERATOR	LOCATION:	CONTAINMENT ELEV. 102.3'
MANUFACTURER:	LIMITORQUE	TER EQUIPMENT NO.:	13
MODEL:	SMB-00-5	TER CATEGORY:	II.A
SYSTEM:	MU	ZONE LOCATION:	38
TER QUALIFICATION DEFICIENCIES NOTED:			
<ol style="list-style-type: none"> 1. DOCUMENTED EVIDENCE OF QUAL 2. EQUIP VS TEST SPECIMEN 3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED 10. RADIATION EXPOSURE 			
QUALIFICATION STATUS:			
QUALIFICATION MODIFICATIONS IN PROGRESS. SEE DISCUSSION ATTACHED.			
CORRECTIVE ACTION:			
REPLACE MOTOR.			
CORRECTIVE ACTION SCHEDULE: REFUEL V, NOVEMBER 1985.			
MAR NUMBER:	82-05-24-06		
JUSTIFICATION FOR CONTINUED OPERATION:			
SEE ATTACHED.			

DISCUSSION ON
MUV 40 & 41
Record 0114

A walkdown was conducted for this equipment to obtain nameplate data and shop order data to attest to the equipments' qualification. The vendor was contacted with walkdown results and requested to identify activities required to upgrade these actuators such that Qualification Report 600456 (L200-3TR-001) would apply, thereby ensuring all environmental parameters for Zone 38 are encompassed by testing. The vendor response (L200-3VC-008) indicates it would be necessary to replace the motors with Class RH motors and add a grease relief valve.

JUSTIFICATION FOR CONTINUED OPERATION
for
MUV 40 & 41
TER Item 13

References

- 1) Technical Specifications for Crystal River Unit 3.
- 2) Makeup and Purification Flow Diagram, FPC Drawing Number FD-302-661, Revision 33.
- 3) Environmental and Seismic Qualification Guide Specifications and Data, Section 4 (draft).

In the interim between the present and scheduled upgrade, the following justification for continued operation is given.

MUV 40 and 41 are isolation valves for letdown coolers 3A and 3B, respectively. They are located inside containment and their function is containment isolation. The letdown lines join downstream of MUV 40 and 41 and penetrate containment via penetration #333. Outside containment the line is isolable via MUV 49.

Since there is a redundant means of isolation for this line, interim operation does not jeopardize the safe operation of Crystal River Unit 3.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: MUV-53 & 257	RECORD NUMBER: 0115	SCEW PAGE NUMBER: 2-148
DESCRIPTION: VALVE MOTOR OPERATOR	LOCATION: AUXILIARY BLDG. ELEV. 95'	
MANUFACTURER: LIMITORQUE	TER EQUIPMENT NO.: 22	
MODEL: SMB-00-15	TER CATEGORY: II.A	
SYSTEM: MU	ZONE LOCATION: 15	
TER QUALIFICATION DEFICIENCIES NOTED:		
1. DOCUMENTED EVIDENCE OF QUAL 2. EQUIP VS TEST SPECIMEN 3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED 10. RADIATION EXPOSURE		
QUALIFICATION STATUS:		
NOT IN SCOPE. SUBSEQUENT REVIEW SHOWS THESE ITEMS ARE LOCATED IN A MILD ENVIRONMENT. (ENVIRONMENTAL ZONE INDICATED ABOVE) SEE SECTION 2.2 DISCUSSION.		
CORRECTIVE ACTION:		
NOT APPLICABLE.		
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.		
MAR NUMBER: NOT APPLICABLE.		
JUSTIFICATION FOR CONTINUED OPERATION:		
NOT REQUIRED.		

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	MUV-58	RECORD NUMBER:	0116
		SCEW PAGE NUMBER:	2-149
DESCRIPTION:	VALVE MOTOR OPERATOR	LOCATION:	AUXILIARY BLDG. ELEV. 95'
MANUFACTURER:	LIMITORQUE	TER EQUIPMENT NO.:	
MODEL:	SMB-000-10	TER CATEGORY:	N/A
SYSTEM:	MU	ZONE LOCATION:	6
TER QUALIFICATION DEFICIENCIES NOTED:			
NOT INCLUDED IN EVALUATION			
QUALIFICATION STATUS:			
NOT IN SCOPE. SUBSEQUENT REVIEW SHOWS THESE ITEMS ARE LOCATED IN A MILD ENVIRONMENT. (ENVIRONMENTAL ZONE INDICATED ABOVE) SEE SECTION 2.2 DISCUSSION.			
CORRECTIVE ACTION:			
NOT APPLICABLE.			
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.			
MAR NUMBER: NOT APPLICABLE.			
JUSTIFICATION FOR CONTINUED OPERATION:			
NOT REQUIRED.			

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: MUV-73	RECORD NUMBER: 0117	SCEW PAGE NUMBER: 2-150
DESCRIPTION: VALVE MOTOR OPERATOR	LOCATION: AUXILIARY BLDG. ELEV. 95'	TER EQUIPMENT NO.:
MANUFACTURER: LIMITORQUE	TER CATEGORY: N/A	ZONE LOCATION: 6
MODEL: SMB-000-10		
SYSTEM: MU		
TER QUALIFICATION DEFICIENCIES NOTED: NOT INCLUDED IN EVALUATION		
QUALIFICATION STATUS: NOT IN SCOPE. SUBSEQUENT REVIEW SHOWS THESE ITEMS ARE LOCATED IN A MILD ENVIRONMENT. (ENVIRONMENTAL ZONE INDICATED ABOVE) SEE SECTION 2.2 DISCUSSION.		
CORRECTIVE ACTION: NOT APPLICABLE.		
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.		
MAR NUMBER: NOT APPLICABLE.		
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.		

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: MUV-258 & 259 MUV-260 & 261	RECORD NUMBER: 0118 SCEW PAGE NUMBER: 2-152
DESCRIPTION: VALVE MOTOR OPERATOR	LOCATION: CONTAINMENT ELEV.. 119'
MANUFACTURER: LIMITORQUE	TER EQUIPMENT NO.: 06
MODEL: SMB-000	TER CATEGORY: II.A
SYSTEM: MU	ZONE LOCATION: 39
TER QUALIFICATION DEFICIENCIES NOTED: 1. DOCUMENTED EVIDENCE OF QUAL 2. EQUIP VS TEST SPECIMEN 3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED 10. RADIATION EXPOSURE	
QUALIFICATION STATUS: QUALIFIED FOR CURRENT APPLICATION. SEE DISCUSSION ATTACHED.	
CORRECTIVE ACTION: NOT APPLICABLE. CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE. MAR NUMBER: NOT APPLICABLE.	
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.	

DISCUSSION ON
MUV 258, 259, 260 & 261
Record 0118

Vendor correspondence (L200-3VC-008) indicates that Test Report 600456 (L200-3TR-001) would apply if the motors were replaced with Class RH insulated motors. Walkdown results (L200-WW-001) indicate these units have Reliance motors with HR insulation. These motors are 3 phase, 230/460 volt Reliance motors. Although the walkdown worksheets indicate HR insulation, it is believed there was an error in data collection since we are not familiar with any HR insulation in existence. Another walkdown is scheduled for the current outage to confirm our belief that the motors have Class RH insulation. This equipment is considered qualified for its current application.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: MUV-49-SV	RECORD NUMBER: 0119
	SCEW PAGE NUMBER: 2-153
DESCRIPTION: SOLENOID VALVE	LOCATION: AUXILIARY BLDG. ELEV. 95'
MANUFACTURER: ASCO	TER EQUIPMENT NO.:
MODEL: 831657	TER CATEGORY: N/A
SYSTEM: MU	ZONE LOCATION: 3
TER QUALIFICATION DEFICIENCIES NOTED: NOT INCLUDED IN EVALUATION	
QUALIFICATION STATUS: NOT IN SCOPE. SUBSEQUENT REVIEW SHOWS THESE ITEMS ARE LOCATED IN A MILD ENVIRONMENT. (ENVIRONMENTAL ZONE INDICATED ABOVE) SEE SECTION 2.2 DISCUSSION.	
CORRECTIVE ACTION: NOT APPLICABLE. CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE. MAR NUMBER: NOT APPLICABLE.	
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.	

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	MUV-64-SV1,2,3,4,5,6	RECORD NUMBER:	0120
		SCEW PAGE NUMBER:	2-154
DESCRIPTION:	SOLENOID VALVE	LOCATION:	AUXILIARY BLDG. ELEV. 95'
MANUFACTURER:	ASCO	TER EQUIPMENT NO.:	31
MODEL:	HT831657,HT8211B54 FT8211B33	TER CATEGORY:	I.B
SYSTEM:	MU	ZONE LOCATION:	15
TER QUALIFICATION DEFICIENCIES NOTED:			
1. DOCUMENTED EVIDENCE OF QUAL			
QUALIFICATION STATUS:			
QUALIFICATION MODIFICATIONS IN PROGRESS.			
CORRECTIVE ACTION:			
REPLACE.			
CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER 1985			
MAR NUMBER:	82-05-24-03		
JUSTIFICATION FOR CONTINUED OPERATION: SEE ATTACHED.			

JUSTIFICATION FOR CONTINUED OPERATION
for
MUV-64-SV1, 2, 3, 4, 5, 6
TER Item 31

References

- 1) FPC Environmental Qualification of Class 1E Equipment IE Bulletin 79-01B Qualification Summary.

In the interim between the present and scheduled corrective action, the following justification for continued operation, as previously provided in Reference 1, is given:

1. Investigations with the manufacturer indicate the solenoid valves are good for 10^5 rads. Accident conditions will not affect the components for the period of operability required. Also, due to the location of the component when required to perform its safety function, the accident environment has no impact.
2. Due to the period of operability required as per CR#3 Tech. Spec. Table 3.6-1 to perform their safety function, and the fact that the total radiation exposure per the SCEW sheets is conservative in regard to the 5-1/2 year operating life of the plant, these valves are not considered to be a restraint to the safe operation of CR#3.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	MUV-253-SV1/SV2	RECORD NUMBER:	0121
		SCEW PAGE NUMBER:	2-155
DESCRIPTION:	SOLENOID VALVE	LOCATION:	AUXILIARY BLDG. ELEV. 119'
MANUFACTURER:	ASCC	TER EQUIPMENT NO.:	30
MODEL:	HT831655 FOR SV1 8320A38 FOR SV2	TER CATEGORY:	I.B
SYSTEM:	MU	ZONE LOCATION:	22
TER QUALIFICATION DEFICIENCIES NOTED:			
1. DOCUMENTED EVIDENCE OF QUAL			
QUALIFICATION STATUS:			
QUALIFICATION MODIFICATIONS IN PROGRESS.			
CORRECTIVE ACTION:			
REPLACE.			
CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER 1985			
MAR NUMBER:	82-05-24-03		
JUSTIFICATION FOR CONTINUED OPERATION: SEE ATTACHED.			

JUSTIFICATION FOR CONTINUED OPERATION

for

MUV-253/SV1/SV2

TER Item 30

References

- 1) FPC Environmental Qualification of Class 1E Equipment IE Bulletin 79-01B Qualification Summary.

In the interim between the present and scheduled corrective action, the following justification for continued operation, as previously provided in Reference 1, is given:

1. Investigations with the manufacturer indicate the solenoid valves are good for 10^5 rads. Accident conditions will not affect the components for the period of operability required. Also, due to the location of the component when required to perform its safety function, the accident environment has no impact.
2. Due to the period of operability required as per CR3 Tech. Spec. Table 3.6-1 to perform their safety function, and the fact that the total radiation exposure per the SCEW sheets is conservative in regard to the 5-1/2 year operating life of the plant, these valves are not considered to be a restraint to the safe operation of CR3.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: MU-25-SV	RECORD NUMBER: 0122
	SCEW PAGE NUMBER: 2-156
DESCRIPTION: SOLENOID VALVE	LOCATION: AUXILIARY BLDG. ELEV. 95'
MANUFACTURER: ASCO	TER EQUIPMENT NO.: 32
MODEL: 8320 A 92	TER CATEGORY: I.B
SYSTEM: MU	ZONE LOCATION: 2
TER QUALIFICATION DEFICIENCIES NOTED: 1. DOCUMENTED EVIDENCE OF QUAL	
QUALIFICATION STATUS: QUALIFICATION MODIFICATIONS IN PROGRESS.	
CORRECTIVE ACTION: REPLACE. CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER 1985	
MAR NUMBER: 82-05-24-03	
JUSTIFICATION FOR CONTINUED OPERATION: SEE ATTACHED.	

JUSTIFICATION FOR CONTINUED OPERATION

for

MU-25-SV

TER Item 32

References

- 1) FPC Environmental Qualification of Class 1E Equipment IE Bulletin 79-01B Qualification Summary.

In the interim between the present and scheduled corrective action, the following justification for continued operation, as previously provided in Reference 1, is given:

1. Investigations with the manufacturer indicate the solenoid valves are good for 10^5 rads. Accident conditions will not affect the components for the period of operability required. Also, due to the location of the component when required to perform its safety function, the accident environment has no impact.
2. Due to the period of operability required as per CR#3 Tech. Spec. Table 3.6-1 to perform their safety function, and the fact that the total radiation exposure per the SCEW sheets is conservative in regard to the 5-1/2 year operating life of the plant, these valves are not considered to be a restraint to the safe operation of CR#3.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: MU-23/24 MU-25/26	RECORD NUMBER: 0123 SCEW PAGE NUMBER: 2-157
DESCRIPTION: MOTOR STARTER	LOCATION: AUXILIARY BLDG. ELEV. 95'
MANUFACTURER: GOULD I-T-E	TER EQUIPMENT NO.: 93
MODEL: SERIES 5600	TER CATEGORY: II.C
SYSTEM: MU	ZONE LOCATION: 3
TER QUALIFICATION DEFICIENCIES NOTED: 3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED	
QUALIFICATION STATUS: QUALIFIED FOR CURRENT APPLICATION. SEE DISCUSSION ATTACHED.	
CORRECTIVE ACTION: NOT APPLICABLE. CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE. MAR NUMBER: NOT APPLICABLE.	
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.	

DISCUSSION ON
MU 23, 24, 25 & 26
Gould Motor Starters
RECORD 0123

Reference

- 1) Qualification Summary Report for Class 1E Equipment,
Revision 1 Gould SO #84-66702 (FPC I212-3TR-001).

The reference indicated above demonstrates qualified life for equipment components for both 40°C and 50°C environments. Surveillance and maintenance recommendations are also identified therein. Florida Power Corporation considers this equipment to be qualified for its current application.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: MU-4 & MU-5	RECORD NUMBER: 0124	SCEW PAGE NUMBER: 2-158
DESCRIPTION: LOCAL CONTROL STATION	LOCATION: AUXILIARY BLDG. ELEV. 95'	
MANUFACTURER: FIELD FABRICATED	TER EQUIPMENT NO.: 87	
MODEL: G.E.TYPE UE202 SW. G.E.TYPE UC212 LIGHT	TER CATEGORY: I.B	
SYSTEM: MU	ZONE LOCATION: 15	
TER QUALIFICATION DEFICIENCIES NOTED:		
1. DOCUMENTED EVIDENCE OF QUAL		
QUALIFICATION STATUS:		
QUALIFICATION MODIFICATIONS IN PROGRESS.		
CORRECTIVE ACTION:		
REPLACE.		
CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER 1985		
MAR NUMBER:	82-05-24-02	
JUSTIFICATION FOR CONTINUED OPERATION: SEE JCO FOR AS-1 (RECORD 013)		

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: MU-7	RECORD NUMBER: 0125	SCEW PAGE NUMBER: 2-159
DESCRIPTION: LOCAL CONTROL STATION	LOCATION: AUXILIARY BLDG. ELEV. 95'	TER EQUIPMENT NO.:
MANUFACTURER: FIELD FABRICATED	TER CATEGORY: N/A	ZONE LOCATION: 3
MODEL: G.E.TYPE UA202 SW. G.E.TYPE UC212 LIGHT		
SYSTEM: MU		
TER QUALIFICATION DEFICIENCIES NOTED: NOT INCLUDED IN EVALUATION		
QUALIFICATION STATUS: NOT IN SCOPE. SUBSEQUENT REVIEW SHOWS THESE ITEMS ARE LOCATED IN A MILD ENVIRONMENT. (ENVIRONMENTAL ZONE INDICATED ABOVE) SEE SECTION 2.2 DISCUSSION.		
CORRECTIVE ACTION: NOT APPLICABLE.		
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.		
MAR NUMBER: NOT APPLICABLE.		
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.		

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: MU-16	RECORD NUMBER: 0126	SCEW PAGE NUMBER: 2-160
DESCRIPTION: LOCAL CONTROL STATION	LOCATION: AUXILIARY BLDG. ELEV. 119'	
MANUFACTURER: FIELD FABRICATED	TER EQUIPMENT NO.: 88	
MODEL: G.E.TYPE UA202 SW. G.E.TYPE UC212 LIGHT	TER CATEGORY: I.B	
SYSTEM: MU	ZONE LOCATION: 22	
TER QUALIFICATION DEFICIENCIES NOTED:		
1. DOCUMENTED EVIDENCE OF QUAL		
QUALIFICATION STATUS:		
QUALIFICATION MODIFICATIONS IN PROGRESS.		
CORRECTIVE ACTION:		
REMOVE.		
CORRECTIVE ACTION SCHEDULE: REF"EL V; NOVEMBER 1985		
MAR NUMBER:	82-05-24-02	
JUSTIFICATION FOR CONTINUED OPERATION: SEE ATTACHED.		

JUSTIFICATION FOR CONTINUED OPERATION
for
MU-16
GE Switches and Lights
TER Item 88

References

- 1) FPC IE Bulletin 79-01B Response, Figure 4-4.

(The motor starters will be relocated in a mild environment prior to November, 1985.)

In the interim between the present time and scheduled relocation, the following justifications for continued operation are given:

1. Specification environment radiation values were compared to radiation values for the typical materials from the DOR Guidelines Appendix C for motor control centers. This comparison revealed that the specification environment radiation is at or below radiation susceptibility acceptance levels; thereby indicating radiation is not a restraint to the safety-related operation of the motor control centers.
2. The motor starters are used to position valves immediately after the occurrence of a HELB in the intermediate building. Although a failure analysis has shown that if repositioning of the valves is postulated, repositioning will occur subsequent to the maximum thermal and pressure conditions, allowing operator access to correct the repositioning should it occur.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: MU-4 & 5	RECORD NUMBER: 0127
	SCEW PAGE NUMBER: 2-161
DESCRIPTION: TERMINAL BOX	LOCATION: AUXILIARY BLDG. ELEV. 95'
MANUFACTURER: FIELD FABRICATED	TER EQUIPMENT NO.: 70
MODEL: STATES TYPE NT TERMINAL BLOCKS	TER CATEGORY: I.B
SYSTEM: MU	ZONE LOCATION: 15
TER QUALIFICATION DEFICIENCIES NOTED: 3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED	
QUALIFICATION STATUS: NOT IN SCOPE. SUBSEQUENT REVIEW SHOWS THESE ITEMS ARE LOCATED IN A MILD ENVIRONMENT. (ENVIRONMENTAL ZONE INDICATED ABOVE) SEE SECTION 2.2 DISCUSSION.	
CORRECTIVE ACTION: NOT APPLICABLE. CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE. MAR NUMBER: NOT APPLICABLE.	
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.	

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: MU-11	RECORD NUMBER: 0128	SCEW PAGE NUMBER: 2-162
DESCRIPTION: TERMINAL BOX	LOCATION: AUXILIARY BLDG. ELEV. 95'	
MANUFACTURER: FIELD FABRICATED	TER EQUIPMENT NO.: NA	
MODEL: STATES TYPE NT TERMINAL BLOCKS	TER CATEGORY: N/A	
SYSTEM: MU	ZONE LOCATION: 3	
TER QUALIFICATION DEFICIENCIES NOTED: NOT INCLUDED IN EVALUATION		
QUALIFICATION STATUS: NOT IN SCOPE. SUBSEQUENT REVIEW SHOWS THESE ITEMS ARE LOCATED IN A MILD ENVIRONMENT. (ENVIRONMENTAL ZONE INDICATED ABOVE) SEE SECTION 2.2 DISCUSSION.		
CORRECTIVE ACTION: NOT APPLICABLE.		
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.		
MAR NUMBER: NOT APPLICABLE.		
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.		

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: MU-21	RECORD NUMBER: 0129
	SCEW PAGE NUMBER: 2-163
DESCRIPTION: TERMINAL BOX	LOCATION: AUXILIARY BLDG. ELEV. 119
MANUFACTURER: FIELD FABRICATED	TER EQUIPMENT NO.: 68
MODEL: STATES TYPE NT TERMINAL BLOCKS	TER CATEGORY: I.B
SYSTEM: MU	ZONE LOCATION: 22
TER QUALIFICATION DEFICIENCIES NOTED: 3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED	
QUALIFICATION STATUS: QUALIFIED FOR CURRENT APPLICATION. SEE APPENDIX A.	
CORRECTIVE ACTION: NOT APPLICABLE. CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE. MAR NUMBER: NOT APPLICABLE.	
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.	

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: MU-22	RECORD NUMBER: 0130
	SCEW PAGE NUMBER: 2-164
DESCRIPTION: TERMINAL BOX	LOCATION: AUXILIARY BLDG. ELEV. 95'
MANUFACTURER: FIELD FABRICATED	TER EQUIPMENT NO.: 71
MODEL: STATES TYPE NT TERMINAL BLOCKS	TER CATEGORY: I.B
SYSTEM: MU	ZONE LOCATION: 2
TER QUALIFICATION DEFICIENCIES NOTED: 3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED	
QUALIFICATION STATUS: QUALIFIED FOR CURRENT APPLICATION. SEE APPENDIX A.	
CORRECTIVE ACTION: NOT APPLICABLE. CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE. MAR NUMBER: NOT APPLICABLE.	
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.	

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	MU-23-DPT-5,6,7,8	RECORD NUMBER:	0131
		SCEW PAGE NUMBER:	2-166A
DESCRIPTION:	DP TRANSMITTER	LOCATION:	AUXILIARY BLDG. ELEV. 95'
MANUFACTURER:	ROSEMOUNT	TER EQUIPMENT NO.:	41
MODEL:	1153B	TER CATEGORY:	II.A
SYSTEM:	MU	ZONE LOCATION:	2
TER QUALIFICATION DEFICIENCIES NOTED:			
2. EQUIP VS TEST SPECIMEN 3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED			
QUALIFICATION STATUS:			
QUALIFIED FOR CURRENT APPLICATION. SEE DISCUSSION ATTACHED.			
CORRECTIVE ACTION:			
NOT APPLICABLE.			
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.			
MAR NUMBER: NOT APPLICABLE.			
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.			

DISCUSSION ON
Rosemount Transmitters
Record 0131

Reference

- 1) Rosemount Test Report 108025 and 108026, "Rosemount Pressure Transmitter Model 1153 Series B for Nuclear Service", dated February 4, 1981.

The Rosemount transmitters have been installed. The transmitters are Series 1153B which are qualified to IEEE 323-1974, IEEE 344-1975, and NUREG-0588, Category I requirements in accordance with Reference 1. No justification for continued operation is required since the transmitter is qualified. All harsh environments are enveloped by the testing conditions.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	RCV-11	RECORD NUMBER:	0132
		SCEW PAGE NUMBER:	2-168
DESCRIPTION:	VALVE MOTOR OPERATOR	LOCATION:	CONTAINMENT ELEV. 160'
MANUFACTURER:	LIMITORQUE	TER EQUIPMENT NO.:	17
MODEL:		TER CATEGORY:	II.A
SYSTEM:	RC	ZONE LOCATION:	40
TER QUALIFICATION DEFICIENCIES NOTED:			
2. EQUIP VS TEST SPECIMEN 3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED			
QUALIFICATION STATUS:			
QUALIFIED FOR CURRENT APPLICATION.			
CORRECTIVE ACTION:			
NOT APPLICABLE.			
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.			
MAR NUMBER: NOT APPLICABLE.			
JUSTIFICATION FOR CONTINUED OPERATION:			
NOT REQUIRED.			

DISCUSSION ON
RCV-11
Limitorque Motor Operator
Record 0132

This equipment (PORV block valve) was replaced in October, 1982 via Work Request 036866 (FCA 04 3376 00). The associated QA package indicates the replacement is qualified to the environmental parameters specified in Test Report 600456. Florida Power Corporation considers this equipment qualified for its current application.

FLORIDA POWER CORPORATION

QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	RC-3A-PT2,RC-3A-FT1 RC-3B-PT1,RC-3B-PT2	RECORD NUMBER:	0133
		SCEW PAGE NUMBER:	2-170
DESCRIPTION:	PRESSURE TRANSMITTER	LOCATION:	CONTAINMENT ELEV. 99'-11"
MANUFACTURER:	ROSEMOUNT	TER EQUIPMENT NO.:	37
MODEL:	1152 GP	TER CATEGORY:	II.A
SYSTEM:	RC	ZONE LOCATION:	38
TER QUALIFICATION DEFICIENCIES NOTED:			
2. EQUIP VS TEST SPECIMEN 3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED 5. PROGRAM FOR AGE DEGRAD 6. AGING SIMULATION 10. RADIATION EXPOSURE			
QUALIFICATION STATUS:			
QUALIFICATION MODIFICATIONS IN PROGRESS.			
CORRECTIVE ACTION:			
REPLACE.			
CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER 1985			
MAR NUMBER:	82-05-24-04		
JUSTIFICATION FOR CONTINUED OPERATION:			
SEE ATTACHED.			

JUSTIFICATION FOR CONTINUED OPERATION
for
RC-3A-PT 1 & 2 and RC-3B-PT-1 & 2
Rosemount Transmitter
TER Item 37

References

- 1) FPC IE Bulletin 79-01B Response, Figure 4-6.
- 2) B&W Proprietary Document 58-0261-001, "Qualification Report for Pressure Transmitter, Rosemount Model 1152GP9A92PB for Reactor Coolant Pressure Measurement", dated 2/17/77, FPC File R369-3TR-001.
- 3) B&W Proprietary Document 58-0157-014, "Qualification Test Report, Rosemount, Inc., Model 1152 Alphaline, Pressure Transmitter", Rev. 1, dated 2/10/77, FPC File R369-3TR-001.
- 4) B&W Topical Report BAW 10082, Rev. 1, "Environmental Qualification of Class 1E Control and Instrumentation Equipment", Table 3-9, FPC File B014-3TR-001.
- 5) FPC IE Bulletin 79-01B Response, Figure 4-5, "Reactor Building Pressure vs. Time".
- 6) FPC IE Bulletin 79-01B Response, Tables 4-1 and 4-2.

The RC-3A-PT 1 & 2 and RC-3B-PT 1 & 2 Rosemount transmitters will be replaced with new Rosemount transmitters prior to November, 1985. The replacement Rosemount transmitters will be provided with documented evidence of qualification. New SCEW sheets will be completed for the replacement transmitters upon receipt of the transmitters and associated test reports.

In the interim between the present time and scheduled replacement, the following justifications for continued operation is provided:

1. FPC 79-01B Response, Figure 4-6 (test conditions) has been developed from Reference 3. FPC Report F-C4432-6, Figure 4 (included in Reference 3) is the test condition figure used to develop Figure 4-6. Output deviation was incorporated into FPC Figure 4 to produce Figure 4-6. The test conditions envelope the high temperature and pressure conditions for the first five (5) minutes of the LOCA test conditions. During this time, accuracy deviation was equal to or less than 3.3%. Output deviation in the test performed in Reference 3 was 10% of span during subsequent DBE exposure. During the tests performed in Reference 2, a maximum accuracy deviation of less than 4% occurred.

The function of the RC-3A-PT 1 & 2 and RC-3B-PT1 & 2 pressure transmitters is to sense reactor coolant pressure and actuate safety systems on low pressure. Low pressure sensing occurs during the first few seconds after LOCA during which the transmitters will remain within the required accuracy deviation bounds.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	RC-3A-PT3,RC-3A-PT4 RC-3B-PT3	RECORD NUMBER:	0134
		SCEW PAGE NUMBER:	2-171
DESCRIPTION:	PRESSURE TRANSMITTER	LOCATION:	CONTAINMENT ELEV. 99'-11"
MANUFACTURER:	FOXBORO	TER EQUIPMENT NO.:	38
MODEL:	E11GHINM2	TER CATEGORY:	II.A
SYSTEM:	RC	ZONE LOCATION:	38
TER QUALIFICATION DEFICIENCIES NOTED:			
1. DOCUMENTED EVIDENCE OF QUAL 10. RADIATION EXPOSURE			
QUALIFICATION STATUS:			
QUALIFICATION MODIFICATIONS IN PROGRESS.			
CORRECTIVE ACTION:			
REPLACE.			
CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER 1985			
MAR NUMBER:	82-05-24-04		
JUSTIFICATION FOR CONTINUED OPERATION: SEE ATTACHED.			

JUSTIFICATION FOR CONTINUED OPERATION
for
RC-3A-PT3,4 and RC-3B-PT3
Foxboro Pressure Transmitters
TER Item 38

References

- 1) FPC 79-01B Response, Figure 4-8.
- 2) B&W Proprietary Document 58-0079-001, "Test Data for Nuclear Transmitters" (Foxboro) FPC File F180-3TR-002.
- 3) Foxboro Test Report T2-1057, "Radiation Test of E-10 Series Differential Pressure Transmitter" (August, 1973).
- 4) Foxboro Test Report T3-1097, "Radiation Test of E-10 Series Amplifiers - Standard and Radiation Resistant Types".
- 5) FPC IE Bulletin 79-01B Response, Figure 4-5, "Reactor Building Pressure vs. Time".

RC-3A-PT3,4 and RC-3B-PT3 will be replaced prior to November, 1985. The replacement transmitters will be provided with documented evidence of qualification. New SCEW sheets will be completed for the replacement transmitters upon receipt of the transmitters and associated test reports.

In the interim between the present and scheduled replacement, the following justifications for continued operation are given:

1. Figure 4-8 of the FPC 79-01B Response (Reference 1) has been reproduced from Reference 2, "Test Data for Nuclear Transmitters". The test conditions shown in Figure 4-8 completely envelope the conditions specified (Reference 5) for Crystal River for high temperature and pressure conditions. Radiation conditions are discussed below.

2. Subsequent to the qualification tests performed for B&W (Reference 2), Foxboro performed tests on E10 Series Transmitters and Amplifiers (Reference 3 and 4) to levels of 1.0×10^7 rads or greater. Maximum error was 5.7% in zero shift for an amplifier irradiated to 2.2×10^8 rads (a factor of 37 above the 5.9×10^6 rads specified for Crystal River). Maximum error at 1×10^7 rads was 4.2%. Due to the fact that accuracy was better than specified for Crystal River (5%) for transmitters and amplifiers at 1.0×10^7 rads and the fact that maximum error at 2.2×10^8 was only 0.7% greater than specified, the transmitters should operate at the Crystal River specified radiation dose of 5.9×10^6 rads including margin.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: RC-PT-132	RECORD NUMBER: 0135	SCEW PAGE NUMBER: 2-172
DESCRIPTION: PRESSURE TRANSMITTER	LOCATION: CONTAINMENT ELEV. 99'-9.75"	
MANUFACTURER: ROSEMOUNT	TER EQUIPMENT NO.: 37	
MODEL: 1152 GP	TER CATEGORY: II.A	
SYSTEM: RC	ZONE LOCATION: 38	
TER QUALIFICATION DEFICIENCIES NOTED:		
2. EQUIP VS TEST SPECIMEN 3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED 5. PROGRAM FOR AGE DEGRAD 6. AGING SIMULATION 10. RADIATION EXPOSURE		
QUALIFICATION STATUS:		
QUALIFICATION MODIFICATIONS IN PROGRESS.		
CORRECTIVE ACTION:		
REPLACE.		
CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER 1985		
MAR NUMBER:	82-05-24-04	
JUSTIFICATION FOR CONTINUED OPERATION: SEE ATTACHED.		

JUSTIFICATION FOR CONTINUED OPERATION

for

RC-PT-132

Rosemount Transmitter

TER Item 37

References

- 1) FPC IE Bulletin 79-01B Response, Figure 4-6.
- 2) B&W Proprietary Document 58-0261-001, "Qualification Report for Pressure Transmitter, Rosemount Model 1152GP9A92PB for Reactor Coolant Pressure Measurement", dated 2/17/77, FPC File R369-3TR-001.
- 3) B&W Proprietary Document 58-0157-014, "Qualification Test Report, Rosemount, Inc., Model 1152 Alphaline, Pressure Transmitter", Rev. 1, dated 2/10/77, FPC File R369-3TR-001.
- 4) B&W Topical Report BAW 10082, Rev. 1, "Environmental Qualification of Class 1E Control and Instrumentation Equipment", Table 3-9, FPC File B014-3TR-001.
- 5) FPC IE Bulletin 79-01B Response, Figure 4-5, "Reactor Building Pressure vs. Time".
- 6) FPC IE Bulletin 79-01B Response, Tables 4-1 and 4-2.

The RC-PT-132 Rosemount transmitter will be replaced with new Rosemount transmitters prior to November, 1985. The replacement Rosemount transmitters will be provided with documented evidence of qualification. New SCEW sheets will be completed for the replacement transmitters upon receipt of the transmitters and associated test reports.

In the interim between the present time and scheduled replacement, the following justifications for continued operation are provided:

1. FPC 79-01B Response, Figure 4-6 (test conditions) has been developed from Reference 3. FPC Report F-C4432-6, Figure 4

(included in Reference 3) is the test condition figure used to develop Figure 4-6. Output deviation was incorporated into FPC Figure 4 to produce Figure 4-6. The test conditions envelope the high temperature and pressure conditions for the first five (5) minutes of the LOCA test conditions. During this time, accuracy deviation was equal to or less than 3.3%. Output deviation in the test performed in Reference 3 was 10% of span during subsequent DBE exposure. During the tests performed in Reference 2, a maximum accuracy deviation of less than 4% occurred.

The function of the RC-PT-132 pressure transmitter is to prevent opening of the DH letdown valve when reactor coolant system pressure is too high. Deviation from a specified value of 10% or less can be tolerated since there are more than four (4) redundant pressure measurements on the same reactor coolant loops which can be used to cross check the reactor coolant system pressure.

2. The total dose to the transmitters is dependent on the amount of time needed for the depressurization of the reactor coolant system. For the 24 hour operating time required, total integrated dose at the transmitter is the sum of a ten (10) year plant life plus the accident dose. The transmitters may receive a total dose of 3.5×10^6 rads (ten (10) year operating dose) plus 9.2×10^7 rads (accident dose). Since the transmitters have been tested to less than total postulated dose, long-term operation is not assured subsequent to LOCA. Other RC pressure transmitters may be used (see above) to ensure that the RC system pressure is low enough to allow decay heat removal in the long term.

FLORIDA POWER CORPORATION

QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	RC-14A-DPT-1, DPT-2 RC-14B-DPT-1, DPT-2	RECORD NUMBER:	0136
		SCEW PAGE NUMBER:	2-173
DESCRIPTION:	FLOW TRANSMITTER	LOCATION:	CONTAINMENT ELEV. 100'-4.5"
MANUFACTURER:	BM CO.	TER EQUIPMENT NO.:	44
MODEL:	BY 3241-A	TER CATEGORY:	II.A
SYSTEM:	RC	ZONE LOCATION:	38
TER QUALIFICATION DEFICIENCIES NOTED:			
2. EQUIP VS TEST SPECIMEN 3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED 5. PROGRAM FOR AGE DEGRAD 6. AGING SIMULATION 8. SPRAY 10. RADIATION EXPOSURE			
QUALIFICATION STATUS:			
QUALIFICATION MODIFICATIONS IN PROGRESS.			
CORRECTIVE ACTION:			
REPLACE.			
CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER 1985			
MAR NUMBER:	82-05-24-04		
JUSTIFICATION FOR CONTINUED OPERATION:			
SEE ATTACHED.			

JUSTIFICATION FOR CONTINUED OPERATION
for
RC-14A-DPT1 & 2 and RC-14B-DPT1 & 2
Bailey Transmitters
TER Item 44

References

- 1) FPC IE Bulletin 79-01B Response, Figure 4-7.
- 2) B&W Proprietary Document 58-0081-00, "Type Test Report of Bailey Meter BY Differential Pressure Transmitter", dated 3/12/73.

RC-14A-DPT 1&2 and RC-14B-DPT 1&2 will be replaced prior to November, 1985. The replacement transmitters will be supplied with documented evidence of qualification. New SCEW sheets will be completed for the replacement transmitters upon receipt of the transmitters and associated test reports.

In the interim between the present time and scheduled transmitter replacement, the following justification for continued operation is given:

1. The function of the transmitters is to provide indication of reactor coolant flow to plant operators. The transmitters have no other safety functions. Reactor coolant flow measurement is not needed by the operators to perform any safety functions. Although flow measurements may not be directly available to the operators, flow can be inferred from reactor pressure and temperature measurements as well as from RC pump running indications. Therefore, failure of these transmitters can be tolerated.

FLORIDA POWER CORPORATION

QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	RC-4A-TE4 RC-4A-TEL,4;RC-4B-TEL,4 RC-5A-TEL,2,3,4 RC-5B-TEL,2,3,4	RECORD NUMBER: 0137 SCEW PAGE NUMBER: 2-174
DESCRIPTION:	TEMP. ELEMENT	LOCATION: CONTAINMENT ELEV. 119'
MANUFACTURER:	ROSEMOUNT	TER EQUIPMENT NO.: 96
MODEL:	RTD-177HW	TER CATEGORY: II.A
SYSTEM:	RC	ZONE LOCATION: 40
TER QUALIFICATION DEFICIENCIES NOTED:		
<ul style="list-style-type: none"> 3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED 6. AGING SIMULATION 7D. ENVELOP REQUIRED PROFILE 7E. STEAM EXPOSURE 8. SPRAY 13. FUNCTIONAL TESTING 		
QUALIFICATION STATUS:		
QUALIFIED FOR CURRENT APPLICATION. SEE DISCUSSION ATTACHED.		
CORRECTIVE ACTION:		
NOT APPLICABLE.		
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.		
MAR NUMBER:	82-05-24-04	
JUSTIFICATION FOR CONTINUED OPERATION:		
NOT REQUIRED.		

DISCUSSION ON
RC-4A-TEL & 4; RC-4B-TEL & 4; RC-5A-TEL, 2, 3 & 4;
RC-5B-TEL, 2, 3 & 4
Rosemount RTDs

References

- 1) B&W Report Number 58-0372-01, "Qualification Test Report - Rosemount 177HW Sensor, Temperature, Resistance Type", dated January 19, 1978.
- 2) FPC IE Bulletin 79-01B Response, Figure 4-6.

Florida Power Corporation disagrees with the Franklin Research Center (FRC) evaluation of the Rosemount RTD reactor coolant temperature sensors.

The sensor, thermowell, mounting nuts and gaskets are subjected to temperature and pressure conditions during normal operation which exceed harsh environment parameters. Reactor coolant temperature exceeds 500°F and pressure exceeds 2000 psi during normal operation. Testing of these components at levels of approximately 300°F and 65 psig is unnecessary, since normal operating conditions far exceed accident conditions. It should be noted that pressure testing to 3750 psig was performed on the thermowell, and calibration at 610°F was performed on the sensor as pre-qualification for the RTD showing capability at environments which are more severe than accident environments.

Two RTDs with connection heads attached were subjected to 3.8×10^8 rads and 3.0×10^8 rads without failure. Connection head capability during LOCA conditions was demonstrated by similarity to a unit tested to a maximum 350°F, 67 psia environment. The tested unit had a painted outer surface versus a bare surface for the analyzed Model 177 series. Although the qualification tests

were performed on the 177 HW model, the differences between the 177 HW and 177 GY were analyzed to show applicability of the test reports to the 177 HW model used at Crystal River.

Based on the above evidence of qualification, FPC has concluded that the Rosemount RTDs are qualified for their current application.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: RC-1-LT 1,2,3	RECORD NUMBER: 0138
	SCEW PAGE NUMBER: 2-175
DESCRIPTION: LEVEL TRANSMITTER	LOCATION: CONTAINMENT ELEV. 99'-9.5"
MANUFACTURER: ROSEMOUNT	TER EQUIPMENT NO.: 53
MODEL: 1152 DP	TER CATEGORY: II.A
SYSTEM: RC	ZONE LOCATION: 38
TER QUALIFICATION DEFICIENCIES NOTED:	
<ul style="list-style-type: none">2. EQUIP VS TEST SPECIMEN3. AGING DEGRADATION EVAL4. QUAL LIFE OR REPLACE SKED5. PROGRAM FOR AGE DEGRAD6. AGING SIMULATION10. RADIATION EXPOSURE	
QUALIFICATION STATUS:	
QUALIFICATION MODIFICATIONS IN PROGRESS.	
CORRECTIVE ACTION:	
REPLACE.	
CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER 1985	
MAR NUMBER:	82-05-24-04
JUSTIFICATION FOR CONTINUED OPERATION: SEE ATTACHED.	

JUSTIFICATION FOR CONTINUED OPERATION

for

RC-LT-1,2,3

Rosemount Level Transmitter

TER Item No. 53

The reactor coolant level transmitters will be replaced prior to November, 1985. Replacement transmitters will be provided with documented evidence of qualification.

In the interim between the present time and scheduled replacement, the following justification for continued operation is provided:

The function of the reactor coolant level transmitters is to provide indication to plant operators of the amount of water in the pressurizer. No other safety function is performed by these level transmitters. The level of water in the pressurizer may also be inferred from other reactor coolant system parameters, such as pressurizer level and reactor coolant temperature/pressure. Failure of these transmitters, therefore, can be tolerated.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	RECORD NUMBER: 0139
	SCEW PAGE NUMBER: 2-175A
DESCRIPTION: ACCELEROMETER	LOCATION: CONTAINMENT ELEV. 168'
MANUFACTURER: ENDEVCO	TER EQUIPMENT NO.: 54
MODEL: 2273AM20	TER CATEGORY: II.A
SYSTEM: RC	ZONE LOCATION: 40
TER QUALIFICATION DEFICIENCIES NOTED:	
1. DOCUMENTED EVIDENCE OF QUAL	
QUALIFICATION STATUS:	
NOT IN SCOPE. SEE DISCUSSION ATTACHED.	
CORRECTIVE ACTION:	
REMOVE EMERGENCY PROCEDURE REFERENCE	
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.	
MAR NUMBER: NOT APPLICABLE.	
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.	

DISCUSSION ON
Endevco Accelerometer
Record 0139

The Endevco accelerometer is placed on the PORV piping to sense flow acoustically. Since the system is presently undergoing qualification, its function has been removed from emergency procedures.

Since NUREG 0737 Item II.D.3 requires a direct indication of flow in the discharge pipe, the function of the accelerometer will be maintained. The system is not Class 1E and is not presently safety related.

The B & W Owner's Group is presently working on a fully qualified method of providing the direct indication of flow or a positive indication of valve position. This fully qualified modification will be installed during Refuel V prior to November, 1985. This system will be classified as an environmentally qualified important to safety system.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	RWP-2A,2B	RECORD NUMBER:	0140
		SCEW PAGE NUMBER:	2-181
DESCRIPTION:	PUMP MOTOR	LOCATION:	AUXILIARY BLDG. ELEV. 95'
MANUFACTURER:	ELECTRIC MACHINERY	TER EQUIPMENT NO.:	57
MODEL:	FRAME SIZE 3317-V	TER CATEGORY:	II.A
SYSTEM:	RW	ZONE LOCATION:	11

TER QUALIFICATION DEFICIENCIES NOTED:

1. DOCUMENTED EVIDENCE OF QUAL

QUALIFICATION STATUS:

NOT IN SCOPE. SUBSEQUENT REVIEW SHOWS THESE ITEMS ARE LOCATED IN A MILD ENVIRONMENT. (ENVIRONMENTAL ZONE INDICATED ABOVE) SEE SECTION 2.2 DISCUSSION.

CORRECTIVE ACTION:

NOT APPLICABLE.

CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.

MAR NUMBER: NOT APPLICABLE.

JUSTIFICATION FOR CONTINUED OPERATION:
NOT REQUIRED.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	RWP-2A & 2B	RECORD NUMBER:	0141
		SCEW PAGE NUMBER:	2-181A
DESCRIPTION:	LUBRICANT	LOCATION:	AUXILIARY BLDG. ELEV. 95'
MANUFACTURER:	GULF	TER EQUIPMENT NO.:	57
MODEL:	GULF HARMONY 46	TER CATEGORY:	II.A
SYSTEM:	RW	ZONE LOCATION:	11
TER QUALIFICATION DEFICIENCIES NOTED:			
1. DOCUMENTED EVIDENCE OF QUAL			
QUALIFICATION STATUS:			
NOT IN SCOPE. SUBSEQUENT REVIEW SHOWS THESE ITEMS ARE LOCATED IN A MILD ENVIRONMENT. (ENVIRONMENTAL ZONE INDICATED ABOVE) SEE SECTION 2.2 DISCUSSION.			
CORRECTIVE ACTION:			
NOT APPLICABLE.			
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.			
MAR NUMBER: NOT APPLICABLE.			
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.			

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	RWP-3A, 3B	RECORD NUMBER:	0142
		SCEW PAGE NUMBER:	2-182
DESCRIPTION:	PUMP MOTOR	LOCATION:	AUXILIARY BLDG. ELEV. 95'
MANUFACTURER:	ELECTRIC MACHINERY	TER EQUIPMENT NO.:	56
MODEL:	FRAME SIZE 2315-V	TER CATEGORY:	II.A
SYSTEM:	RW	ZONE LOCATION:	11

TER QUALIFICATION DEFICIENCIES NOTED:

1. DOCUMENTED EVIDENCE OF QUAL

QUALIFICATION STATUS:

NOT IN SCOPE. SUBSEQUENT REVIEW SHOWS THESE ITEMS ARE LOCATED IN A MILD ENVIRONMENT. (ENVIRONMENTAL ZONE INDICATED ABOVE) SEE SECTION 2.2 DISCUSSION.

CORRECTIVE ACTION:

NOT APPLICABLE.

CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.

MAR NUMBER: NOT APPLICABLE.

JUSTIFICATION FOR CONTINUED OPERATION:
NOT REQUIRED.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	RWP-3A & 3B	RECORD NUMBER:	0143
		SCEW PAGE NUMBER:	2-182A
DESCRIPTION:	LUBRICANT	LOCATION:	AUXILIARY BLDG. ELEV. 95'
MANUFACTURER:	GULF	TER EQUIPMENT NO.:	56
MODEL:	GULF HARMONY 46	TER CATEGORY:	II.A
SYSTEM:	RW	ZONE LOCATION:	11
TER QUALIFICATION DEFICIENCIES NOTED:			
1. DOCUMENTED EVIDENCE OF QUAL			
QUALIFICATION STATUS:			
NOT IN SCOPE. SUBSEQUENT REVIEW SHOWS THESE ITEMS ARE LOCATED IN A MILD ENVIRONMENT. (ENVIRONMENTAL ZONE INDICATED ABOVE) SEE SECTION 2.2 DISCUSSION.			
CORRECTIVE ACTION:			
NOT APPLICABLE.			
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.			
MAR NUMBER: NOT APPLICABLE.			
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.			

FLORIDA POWER CORPORATION

QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	SP1A-LT1 SP1B-LT1	RECORD NUMBER:	0144
		SCEW PAGE NUMBER:	2-183
DESCRIPTION:	LEVEL TRANSMITTERS	LOCATION:	CONTAINMENT ELEV. 99'-11.5"
MANUFACTURER:	BM CO.	TER EQUIPMENT NO.:	51
MODEL:	BY8B41X-A	TER CATEGORY:	I.B
SYSTEM:	SP	ZONE LOCATION:	38
TER QUALIFICATION DEFICIENCIES NOTED:			
2. EQUIP VS TEST SPECIMEN 3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED 5. PROGRAM FOR AGE DEGRAD 6. AGING SIMULATION 8. SPRAY 10. RADIATION EXPOSURE			
QUALIFICATION STATUS:			
QUALIFICATION MODIFICATIONS IN PROGRESS.			
CORRECTIVE ACTION:			
REPLACE.			
CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER 1985			
MAR NUMBER:	80-10-66-05		
JUSTIFICATION FOR CONTINUED OPERATION:			
SEE ATTACHED.			

JUSTIFICATION FOR CONTINUED OPERATION
for
SP1A-LT 1, 2, 3, 4 & 5
Bailey Transmitters
TER Item No. 51

References

- 1) FPC IE Bulletin 79-01B Response, Figure 4-7.
- 2) B&W Proprietary Document 58-0081-00, "Type Test Report of Bailey Meter BY Differential Pressure Transmitter", dated 3/12/73.
- 3) B&W Topical Report BAW-10082, Rev. 2, "Environmental Qualification of Class 1E Control and Instrumentation", dated 10/80.

SP-1A-LT 1, 2, 3, 4 & 5 will be replaced prior to November, 1985, by qualified equipment.

In the interim between the present and November, 1985, the following justification for continued operation is given:

1. The function of the steam generator level transmitters is to start auxiliary feedwater flow and to give indication of reactor heat removal to the plant operator. The transmitters will function within a few seconds after MSLB to supply auxiliary feedwater. During the first few seconds of required operation, temperature, pressure, radiation and other MSLB-caused harsh environments will be less severe than the environments during testing of the transmitters. Steam generator level, in the long term, may be inferred by the operator from other instruments such as steam generator pressure, auxiliary feedwater flow and pressure, etc.

FLORIDA POWER CORPORATION

QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	SP1A-LT2,3 SP1B-LT2,3	RECORD NUMBER:	0145
		SCEW PAGE NUMBER:	2-184
DESCRIPTION:	LEVEL TRANSMITTERS	LOCATION:	CONTAINMENT ELEV. 100'-4"
MANUFACTURER:	BM CO.	TER EQUIPMENT NO.:	51
MODEL:	BY8B41X-A	TER CATEGORY:	I.B
SYSTEM:	SP	ZONE LOCATION:	38
TER QUALIFICATION DEFICIENCIES NOTED:			
2. EQUIP VS TEST SPECIMEN 3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED 5. PROGRAM FOR AGE DEGRAD 6. AGING SIMULATION 8. SPRAY 10. RADIATION EXPOSURE			
QUALIFICATION STATUS:			
QUALIFICATION MODIFICATIONS IN PROGRESS.			
CORRECTIVE ACTION:			
REPLACE.			
CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER 1985			
MAR NUMBER:	80-10-66-05		
JUSTIFICATION FOR CONTINUED OPERATION: SEE JCO FOR SP1A-LT1 (RECORD 144)			

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	SP-17,18,21,22	RECORD NUMBER:	0146
		SCEW PAGE NUMBER:	2-184A
DESCRIPTION:	LEVEL TRANSMITTERS	LOCATION:	CONTAINMENT ELEV. 100.5'
MANUFACTURER:	ROSEMOUNT	TER EQUIPMENT NO.:	52
MODEL:	1153	TER CATEGORY:	II.A
SYSTEM:	SP	ZONE LOCATION:	38
TER QUALIFICATION DEFICIENCIES NOTED:			
1. DOCUMENTED EVIDENCE OF QUAL			
QUALIFICATION STATUS:			
NOT INSTALLED YET (REPLACEMENTS FOR SP-1A-LT2,3 AND SP-1B-LT2,3). (TAG NUMBERS CHANGED SINCE PREVIOUS SUBMITTAL.)			
CORRECTIVE ACTION:			
(INSTALLATION)			
CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER, 1985			
MAR NUMBER: 80-10-66-05			
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.			

FLORIDA POWER CORPORATION

QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	SP1A-LT4,5 SP1B-LT4,5	RECORD NUMBER:	0147
		SCEW PAGE NUMBER:	2-185
DESCRIPTION:	LEVEL TRANSMITTER	LOCATION:	CONTAINMENT ELEV. 99'-9.5"
MANUFACTURER:	BM CO.	TER EQUIPMENT NO.:	51
MODEL:	BY8B41X-A	TER CATEGORY:	I.B
SYSTEM:	SP	ZONE LOCATION:	38
TER QUALIFICATION DEFICIENCIES NOTED:			
<ul style="list-style-type: none"> 2. EQUIP VS TEST SPECIMEN 3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED 5. PROGRAM FOR AGE DEGRAD 6. AGING SIMULATION 8. SPRAY 10. RADIATION EXPOSURE 			
QUALIFICATION STATUS:			
QUALIFICATION MODIFICATIONS IN PROGRESS.			
CORRECTIVE ACTION:			
REPLACE.			
CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER 1985			
MAR NUMBER: 80-10-66-05			
JUSTIFICATION FOR CONTINUED OPERATION: SEE JCO FOR SP1A-LT1 (RECORD 144)			

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	SP-25,26,29,30	RECORD NUMBER:	0148
		SCEW PAGE NUMBER:	2-185A
DESCRIPTION:	LEVEL TRANSMITTERS	LOCATION:	CONTAINMENT ELEV. 100.5'
MANUFACTURER:	ROSEMOUNT	TER EQUIPMENT NO.:	52
MODEL:	1153	TER CATEGORY:	II.A
SYSTEM:	SP	ZONE LOCATION:	38
TER QUALIFICATION DEFICIENCIES NOTED:			
1. DOCUMENTED EVIDENCE OF QUAL			
QUALIFICATION STATUS:			
NOT INSTALLED YET (REPLACEMENTS FOR SP-1A-LT4,5 AND SP-1B-LT4,5). (TAG NUMBERS CHANGED SINCE PREVIOUS SUBMITTAL.)			
CORRECTIVE ACTION:			
(INSTALLATION)			
CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER 1985			
MAR NUMBER:	80-10-66-05		
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.			

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	SP-6A-PT3,4 SP-6B-PT3,4	RECORD NUMBER:	0149
		SCEW PAGE NUMBER:	2-186A
DESCRIPTION:	PRESSURE TRANSMITTER	LOCATION:	CONTAINMENT ELEV. 119'
MANUFACTURER:	FOXBORO	TER EQUIPMENT NO.:	36
MODEL:	E11GH	TER CATEGORY:	II.A
SYSTEM:	SP	ZONE LOCATION:	39
TER QUALIFICATION DEFICIENCIES NOTED:			
1. DOCUMENTED EVIDENCE OF QUAL			
QUALIFICATION STATUS:			
QUALIFICATION MODIFICATIONS IN PROGRESS.			
CORRECTIVE ACTION:			
REPLACE.			
CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER 1985			
MAR NUMBER:	80-10-66-05		
JUSTIFICATION FOR CONTINUED OPERATION: SEE ATTACHED.			

JUSTIFICATION FOR CONTINUED OPERATION
for
SP-6A-PT3, 4 and SP-6B-PT3, 4
Foxboro Transmitter
TER Item 36

References

- 1) FPC 79-01B Response, Figure 4-8.
- 2) B&W Proprietary Document 58-0079-001, "Test Data for Nuclear Transmitters" (Foxboro) FPC File F180-3TR-002.
- 3) Foxboro Test Report T2-1057, "Radiation Test of E-10 Series Differential Pressure Transmitter" (August, 1973).
- 4) Foxboro Test Report T3-1097, "Radiation Test of E-10 Series Amplifiers - Standard and Radiation Resistant Types".
- 5) FPC IE Bulletin 79-01B Response, Figure 4-5, "Reactor Building Pressure vs. Time".

SP-6A-PT3, 4 and SP-6B-PT3, 4 Foxboro transmitters will be replaced prior to November, 1985. The units will be replaced with Rosemount transmitters, and will have documented evidence of qualification. The safety function of providing post accident monitoring information will be accomplished by pressure transmitters installed for the emergency feedwater change.

In the interim between the present and scheduled replacement, the following justifications for continued operation are given:

1. Figure 4-8 of the FPC 79-01B Response (Reference 1) has been reproduced from Reference 2, "Test Data for Nuclear Transmitters". The test conditions shown in Figure 4-8 completely envelope the conditions specified (Reference 5) for Crystal River for high temperature and pressure conditions. Radiation conditions are discussed below.

2. Subsequent to the qualification tests performed for B&W (Reference 2), Foxboro performed tests on E10 Series Transmitters and Amplifiers (Reference 3 and 4) to levels of 1.0×10^7 rads or greater. Maximum error was 5.7% in zero shift for an amplifier irradiated to 2.2×10^8 rads (a factor of 37 above the 5.9×10^6 rads specified for Crystal River). Maximum error at 1×10^7 rads was 4.2%. Due to the fact that accuracy was better than specified for Crystal River (5%) for transmitters and amplifiers at 1.0×10^7 rads and the fact that maximum error at 2.2×10^8 was only 0.7% greater than specified, the transmitters should operate at the Crystal River specified radiation dose of 5.9×10^6 rads including margin.

FLORIDA POWER CORPORATION

QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	SP-8A-DPT1, 2, & 3 SP-8B-DPT1, 2, & 3	RECORD NUMBER:	0150
		SCEW PAGE NUMBER:	2-187
DESCRIPTION:	DIFFERENTIAL PRESSURE TRANSMITTER	LOCATION:	TURBINE BLDG. ELEV. 100'
MANUFACTURER:	BM CO.	TER EQUIPMENT NO.:	48
MODEL:	BY 6241-A	TER CATEGORY:	I.B
SYSTEM:	SP	ZONE LOCATION:	N/A

TER QUALIFICATION DEFICIENCIES NOTED:

1. DOCUMENTED EVIDENCE OF QUAL

QUALIFICATION STATUS:

QUALIFICATION MODIFICATIONS IN PROGRESS.

CORRECTIVE ACTION:

REPLACE.

CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER 1985

MAR NUMBER: 82-05-24-04

JUSTIFICATION FOR CONTINUED OPERATION:
SEE ATTACHED.

JUSTIFICATION FOR CONTINUED OPERATION
for
SP-8A-DPT 1,2,3 and SP-8B-DPT 1,2,3
Bailey Transmitters
TER Item No. 48

References

- 1) FPC I&E Bulletin 79-01B Response, p. 2-187.

The feedwater flow pressure transmitters will be replaced by qualified equipment which will be installed by November, 1985.

In the interim between the present and November, 1985, the following justifications for continued operation are given:

1. The feedwater flow pressure transmitters have no radiation qualification requirement since their location is in the turbine building.
2. The function of the flow transmitters is to determine the availability of the main feedwater system to provide reactor heat removal for LOCA or MSLB. The availability of main feedwater can be determined by alternate means such as steam generator level and main feedwater system pressure. Also the auxiliary feedwater system will provide the same function during accident conditions and can be relied on to remove heat from the reactor upon main feedwater unavailability.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	SWP-1A SWF-1B	RECORD NUMBER:	0151
		SCEW PAGE NUMBER:	2-188
DESCRIPTION:	PUMP MOTOR	LOCATION:	AUXILIARY BLDG. ELEV. 95'
MANUFACTURER:	ELECTRIC MACHINERY	TER EQUIPMENT NO.:	55
MODEL:	FRAME SIZE 2525-S	TER CATEGORY:	II.A
SYSTEM:	SW	ZONE LOCATION:	11

TER QUALIFICATION DEFICIENCIES NOTED:

1. DOCUMENTED EVIDENCE OF QUAL

QUALIFICATION STATUS:

NOT IN SCOPE. SUBSEQUENT REVIEW SHOWS THESE ITEMS ARE LOCATED IN A MILD ENVIRONMENT. (ENVIRONMENTAL ZONE INDICATED ABOVE) SEE SECTION 2.2 DISCUSSION.

CORRECTIVE ACTION:

NOT APPLICABLE.

CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.

MAR NUMBER: NOT APPLICABLE.

JUSTIFICATION FOR CONTINUED OPERATION:
NOT REQUIRED.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: SWP-1A & 1B	RECORD NUMBER: 0152
	SCEW PAGE NUMBER: 2-188A
DESCRIPTION: LUBRICANT	LOCATION: AUXILIARY BLDG. ELEV. 95'
MANUFACTURER: GULF	TER EQUIPMENT NO.:
MODEL: GULF HARMONY 46	TER CATEGORY: N/A
SYSTEM: SW	ZONE LOCATION: 11

TER QUALIFICATION DEFICIENCIES NOTED:
NOT INCLUDED IN EVALUATION

QUALIFICATION STATUS:

NOT IN SCOPE. SUBSEQUENT REVIEW
SHOWS THESE ITEMS ARE LOCATED IN A MILD
ENVIRONMENT. (ENVIRONMENTAL ZONE
INDICATED ABOVE) SEE SECTION 2.2
DISCUSSION.

CORRECTIVE ACTION:

NOT APPLICABLE.

CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.

MAR NUMBER: NOT APPLICABLE.

JUSTIFICATION FOR CONTINUED OPERATION:
NOT REQUIRED.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	SWV-12	RECORD NUMBER:	0153
		SCEW PAGE NUMBER:	2-189
DESCRIPTION:	SOLENOID VALVE	LOCATION:	AUXILIARY BLDG. ELEV. 119'
MANUFACTURER:	ASCO	TER EQUIPMENT NO.:	
MODEL:	LB8321A8	TER CATEGORY:	N/A
SYSTEM:	SW	ZONE LOCATION:	28
TER QUALIFICATION DEFICIENCIES NOTED: NOT INCLUDED IN EVALUATION			
QUALIFICATION STATUS: NOT IN SCOPE. SUBSEQUENT REVIEW SHOWS THESE ITEMS ARE LOCATED IN A MILD ENVIRONMENT. (ENVIRONMENTAL ZONE INDICATED ABOVE) SEE SECTION 2.2 DISCUSSION.			
CORRECTIVE ACTION: NOT APPLICABLE. CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE. MAR NUMBER: NOT APPLICABLE.			
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.			

FLORIDA POWER CORPORATION

QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	SWV-35,37,39 41,43,45	RECORD NUMBER:	0154
		SCEW PAGE NUMBER:	2-190
DESCRIPTION:	SOLENOID VALVE	LOCATION:	AUXILIARY BLDG. ELEV. 95'
MANUFACTURER:	ASCO	TER EQUIPMENT NO.:	
MODEL:	LB8344A5	TER CATEGORY:	N/A
SYSTEM:	SW	ZONE LOCATION:	36
TER QUALIFICATION DEFICIENCIES NOTED:			
NOT INCLUDED IN EVALUATION			
QUALIFICATION STATUS:			
NOT IN SCOPE. SUBSEQUENT REVIEW SHOWS THESE ITEMS ARE LOCATED IN A MILD ENVIRONMENT. (ENVIRONMENTAL ZONE INDICATED ABOVE) SEE SECTION 2.2 DISCUSSION.			
CORRECTIVE ACTION:			
NOT APPLICABLE.			
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.			
MAR NUMBER: NOT APPLICABLE.			
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.			

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	SWV-47,48,49 & 50	RECORD NUMBER:	0155
		SCEW PAGE NUMBER:	2-191
DESCRIPTION:	SOLENOID VALVE	LOCATION:	AUXILIARY BLDG. ELEV. 95'
MANUFACTURER:	ASCO	TER EQUIPMENT NO.:	26
MODEL:	LB8321A8	TER CATEGORY:	I.B
SYSTEM:	SW	ZONE LOCATION:	36
TER QUALIFICATION DEFICIENCIES NOTED:			
1. DOCUMENTED EVIDENCE OF QUAL			
QUALIFICATION STATUS:			
QUALIFICATION MODIFICATIONS IN PROGRESS.			
CORRECTIVE ACTION:			
REPLACE.			
CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER 1985			
MAR NUMBER:	82-05-24-03		
JUSTIFICATION FOR CONTINUED OPERATION:			
SEE ATTACHED.			

JUSTIFICATION FOR CONTINUED OPERATION
for
SWV-47, 48, 49 & 50
TER Item 26

References

- 1) FPC Environmental Qualification of Class 1E Equipment IE Bulletin 79-01B Qualification Summary.

In the interim between the present and scheduled corrective action, the following justification for continued operation, as previously provided in Reference 1, is given:

1. Investigations with the manufacturer indicate the solenoid valves are good for 10^5 rads. Accident conditions will not affect the components for the period of operability required. Also, due to the location of the component when required to perform its safety function, the accident environment has no impact.
2. Due to the period of operability required as per CR#3 Tech. Spec. Table 3.6-1 to perform their safety function, and the fact that the total radiation exposure per the SCEW sheets is conservative in regard to the 5-1/2 year operating life of the plant, these valves are not considered to be a restraint to the safe operation of CR#3.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	SWV-79,80,81,82,83 84,85 & 86	RECORD NUMBER:	0156
		SCEW PAGE NUMBER:	2-192
DESCRIPTION:	SOLENOID VALVE	LOCATION:	AUXILIARY BLDG. ELEV. 119'
MANUFACTURER:	ASCO	TER EQUIPMENT NO.:	27
MODEL:	LB8321A8	TER CATEGORY:	I.B
SYSTEM:	SW	ZONE LOCATION:	22
TER QUALIFICATION DEFICIENCIES NOTED:			
1. DOCUMENTED EVIDENCE OF QUAL			
QUALIFICATION STATUS:			
QUALIFICATION MODIFICATIONS IN PROGRESS.			
CORRECTIVE ACTION:			
REPLACE.			
CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER 1985			
MAR NUMBER:	82-05-24-03		
JUSTIFICATION FOR CONTINUED OPERATION:			
SEE ATTACHED.			

JUSTIFICATION FOR CONTINUED OPERATION
for
SWV-79, 80, 81, 82, 83, 84, 85 & 86
TER Item 27

References

- 1) FPC Environmental Qualification of Class 1E Equipment IE Bulletin 79-01B Qualification Summary.

In the interim between the present and scheduled corrective action, the following justification for continued operation, as previously provided in Reference 1, is given:

1. Investigations with the manufacturer indicate the solenoid valves are good for 10^5 rads. Accident conditions will not affect the components for the period of operability required. Also, due to the location of the component when required to perform its safety function, the accident environment has no impact.
2. Due to the period of operability required as per CR#3 Tech. Spec. Table 3.6-1 to perform their safety function, and the fact that the total radiation exposure per the SCEW sheets is conservative in regard to the 5-1/2 year operating life of the plant, these valves are not considered to be a restraint to the safe operation of CR#3.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	SWV-109 & 110-SV-3/4	RECORD NUMBER:	0157
		SCEW PAGE NUMBER:	2-193
DESCRIPTION:	SOLENOID VALVE	LOCATION:	AUXILIARY BLDG. ELEV. 119'
MANUFACTURER:	ASCO	TER EQUIPMENT NO.:	30
MODEL:	HT831655	TER CATEGORY:	I.B
SYSTEM:	SW	ZONE LOCATION:	22
TER QUALIFICATION DEFICIENCIES NOTED:			
1. DOCUMENTED EVIDENCE OF QUAL			
QUALIFICATION STATUS:			
QUALIFICATION MODIFICATIONS IN PROGRESS.			
CORRECTIVE ACTION:			
REPLACE.			
CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER 1985			
MAR NUMBER:	82-05-24-03		
JUSTIFICATION FOR CONTINUED OPERATION: SEE ATTACHED.			

JUSTIFICATION FOR CONTINUED OPERATION
for
SWV-109 & 110-SV3/4
TER Item 30

References

- 1) FPC Environmental Qualification of Class 1E Equipment IE Bulletin 79-01B Qualification Summary.

In the interim between the present and scheduled corrective action, the following justification for continued operation, as previously provided in Reference 1, is given:

1. Investigations with the manufacturer indicate the solenoid valves are good for 10^5 rads. Accident conditions will not affect the components for the period of operability required. Also, due to the location of the component when required to perform its safety function, the accident environment has no impact.
2. Due to the period of operability required as per CR3 Tech. Spec. Table 3.6-1 to perform their safety function, and the fact that the total radiation exposure per the SCEW sheets is conservative in regard to the 5-1/2 year operating life of the plant, these valves are not considered to be a restraint to the safe operation of CR3.

FLORIDA POWER CORPORATION

QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	SWV-151,152,353 354,355	RECORD NUMBER:	0158
		SCEW PAGE NUMBER:	2-194
DESCRIPTION:	SOLENOID VALVE	LOCATION:	AUXILIARY BLDG. ELEV. 95'
MANUFACTURER:	ASCO	TER EQUIPMENT NO.:	
MODEL:	LB8321A6	TER CATEGORY:	N/A
SYSTEM:	SW	ZONE LOCATION:	64
TER QUALIFICATION DEFICIENCIES NOTED:			
NOT INCLUDED IN EVALUATION			
QUALIFICATION STATUS:			
NOT IN SCOPE. SUBSEQUENT REVIEW SHOWS THESE ITEMS ARE LOCATED IN A MILD ENVIRONMENT. (ENVIRONMENTAL ZONE INDICATED ABOVE) SEE SECTION 2.2 DISCUSSION.			
CORRECTIVE ACTION:			
NOT APPLICABLE.			
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.			
MAR NUMBER: NOT APPLICABLE.			
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.			

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: SW-3	RECORD NUMBER: 0159	SCEW PAGE NUMBER: 2-195
DESCRIPTION: LOCAL CONTROL STATION	LOCATION: AUXILIARY BLDG. ELEV. 119'	TER EQUIPMENT NO.:
MANUFACTURER: FIELD FABRICATED	TER CATEGORY: N/A	ZONE LOCATION: 28
MODEL: G.E.TYPE UA202 SW. G.E.TYPE UC212 LIGHT		
SYSTEM: SW		
TER QUALIFICATION DEFICIENCIES NOTED: NOT INCLUDED IN EVALUATION		
QUALIFICATION STATUS: NOT IN SCOPE. SUBSEQUENT REVIEW SHOWS THESE ITEMS ARE LOCATED IN A MILD ENVIRONMENT. (ENVIRONMENTAL ZONE INDICATED ABOVE) SEE SECTION 2.2 DISCUSSION.		
CORRECTIVE ACTION: NOT APPLICABLE. CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE. MAR NUMBER: NOT APPLICABLE.		
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.		

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	SW-6	RECORD NUMBER:	0190
		SCEW PAGE NUMBER:	2-197
DESCRIPTION:	LOCAL CONTROL STATION	LOCATION:	AUXILIARY BLDG. ELEV. 95'-0"
MANUFACTURER:	FIELD FABRICATED	TER EQUIPMENT NO.:	
MODEL:	G.E.TYPE UA202 SW. G.E.TYPE UC212 LIGHT	TER CATEGORY:	I.B-A
SYSTEM:	SW	ZONE LOCATION:	
TER QUALIFICATION DEFICIENCIES NOTED: NOT INCLUDED IN EVALUATION.			
QUALIFICATION STATUS: QUALIFICATION MODIFICATIONS IN PROGRESS.			
CORRECTIVE ACTION: RELOCATE. CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER 1985 MAR NUMBER: 82-05-24-02			
JUSTIFICATION FOR CONTINUED OPERATION: SEE JCO FOR AS-1, RECORD 0013.			

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: SW-7	RECORD NUMBER: 0160	SCEW PAGE NUMBER: 2-198
DESCRIPTION: LOCAL CONTROL STATION	LOCATION: AUXILIARY BLDG. ELEV. 119'	
MANUFACTURER: FIELD FABRICATED	TER EQUIPMENT NO.: 89	
MODEL: G.E.TYPE UA202 SW. G.E.TYPE UC212 LIGHT	TER CATEGORY: I.B	
SYSTEM: SW	ZONE LOCATION: 22	
TER QUALIFICATION DEFICIENCIES NOTED:		
1. DOCUMENTED EVIDENCE OF QUAL		
QUALIFICATION STATUS:		
QUALIFICATION MODIFICATIONS IN PROGRESS.		
CORRECTIVE ACTION:		
RELOCATE TO MILD ENVIRONMENT.		
CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER 1985		
MAR NUMBER:	82-05-24-02	
JUSTIFICATION FOR CONTINUED OPERATION: SEE JCO FOR AS-1 (RECORD 013)		

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	SW-8	RECORD NUMBER:	0191
		SCEW PAGE NUMBER:	2-199
DESCRIPTION:	LOCAL CONTROL STATION	LOCATION:	AUXILIARY BLDG. ELEV. 119'-0"
MANUFACTURER:	FIELD FABRICATED	TER EQUIPMENT NO.:	90
MODEL:	G.E.TYPE UA202 SW. G.E.TYPE UC212 LIGHT	TER CATEGORY:	I.B
SYSTEM:	SW	ZONE LOCATION:	14
TER QUALIFICATION DEFICIENCIES NOTED: NOT INCLUDED IN EVALUATION.			
QUALIFICATION STATUS: QUALIFICATION MODIFICATIONS IN PROGRESS.			
CORRECTIVE ACTION: RELOCATE TO MILD ENVIRONMENT. CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER 1985			
MAR NUMBER:		82-05-24-02	
JUSTIFICATION FOR CONTINUED OPERATION: SEE JCO FOR AS-1, RECORD 0013.			

FLORIDA POWER CORPORATION

QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	SW-9	RECORD NUMBER:	0161
		SCEW PAGE NUMBER:	2-200
DESCRIPTION:	LOCAL CONTROL STATION	LOCATION:	AUXILIARY BLDG. ELEV. 119'
MANUFACTURER:	FIELD FABRICATED	TER EQUIPMENT NO.:	89
MODEL:	G.E.TYPE UA202 SW. G.E.TYPE UC212 LIGHT	TER CATEGORY:	I.B
SYSTEM:	SW	ZONE LOCATION:	22

TER QUALIFICATION DEFICIENCIES NOTED:

1. DOCUMENTED EVIDENCE OF QUAL

QUALIFICATION STATUS:

QUALIFICATION MODIFICATIONS IN PROGRESS.

CORRECTIVE ACTION:

RELOCATE TO A MILD ENVIRONMENT.

CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER 1985

MAR NUMBER: 82-05-24-02

JUSTIFICATION FOR CONTINUED OPERATION:

SEE JCO FOR AS-1 (RECORD 013)

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	SW-10	RECORD NUMBER:	0162
		SCEW PAGE NUMBER:	2-201
DESCRIPTION:	LOCAL CONTROL STATION	LOCATION:	AUXILIARY BLDG. ELEV. 95'
MANUFACTURER:	FIELD FABRICATED	TER EQUIPMENT NO.:	
MODEL:	G.E.TYPE UA202 SW. G.E.TYPE UC212 LIGHT	TER CATEGORY:	N/A
SYSTEM:	SW	ZONE LOCATION:	11
TER QUALIFICATION DEFICIENCIES NOTED: NOT INCLUDED IN EVALUATION			
QUALIFICATION STATUS: NOT IN SCOPE. SUBSEQUENT REVIEW SHOWS THESE ITEMS ARE LOCATED IN A MILD ENVIRONMENT. (ENVIRONMENTAL ZONE INDICATED ABOVE) SEE SECTION 2.2 DISCUSSION.			
CORRECTIVE ACTION: NOT APPLICABLE. CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE. MAR NUMBER: NOT APPLICABLE.			
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.			

FLORIDA POWER CORPORATION

QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	SW-11,13 & 14	RECORD NUMBER:	0163
		SCEW PAGE NUMBER:	2-202
DESCRIPTION:	LOCAL CONTROL STATION	LOCATION:	AUXILIARY BLDG. ELEV. 95'
MANUFACTURER:	FIELD FABRICATED	TER EQUIPMENT NO.:	
MODEL:	G.E.TYPE UA202 SW. G.E.TYPE UC212 LIGHT	TER CATEGORY:	N/A
SYSTEM:	SW	ZONE LOCATION:	11
TER QUALIFICATION DEFICIENCIES NOTED:			
NOT INCLUDED IN EVALUATION			
QUALIFICATION STATUS:			
NOT IN SCOPE. SUBSEQUENT REVIEW SHOWS THESE ITEMS ARE LOCATED IN A MILD ENVIRONMENT. (ENVIRONMENTAL ZONE INDICATED ABOVE) SEE SECTION 2.2 DISCUSSION.			
CORRECTIVE ACTION:			
NOT APPLICABLE.			
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.			
MAR NUMBER: NOT APPLICABLE.			
JUSTIFICATION FOR CONTINUED OPERATION:			
NOT REQUIRED.			

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: SW-3	RECORD NUMBER: 0164
	SCEW PAGE NUMBER: 2-203
DESCRIPTION: TERMINAL BOX	LOCATION: AUXILIARY BLDG. ELEV. 119'
MANUFACTURER: FIELD FABRICATED	TER EQUIPMENT NO.: NA
MODEL: STATES TYPE NT TERMINAL BLOCKS	TER CATEGORY: N/A
SYSTEM: SW	ZONE LOCATION: 28
TER QUALIFICATION DEFICIENCIES NOTED: NOT INCLUDED IN EVALUATION	
QUALIFICATION STATUS: NOT IN SCOPE. SUBSEQUENT REVIEW SHOWS THESE ITEMS ARE LOCATED IN A MILD ENVIRONMENT. (ENVIRONMENTAL ZONE INDICATED ABOVE) SEE SECTION 2.2 DISCUSSION.	
CORRECTIVE ACTION: NOT APPLICABLE.	
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.	
MAR NUMBER: NOT APPLICABLE.	
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.	

FLORIDA POWER CORPORATION

QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	SW-4,5,19	RECORD NUMBER:	0165
		SCEW PAGE NUMBER:	2-204
DESCRIPTION:	TERMINAL BOX	LOCATION:	AUXILIARY BLDG. ELEV. 95'
MANUFACTURER:	FIELD FABRICATED	TER EQUIPMENT NO.:	NA
MODEL:	STATES TYPE NT TERMINAL BLOCKS	TER CATEGORY:	N/A
SYSTEM:	SW	ZONE LOCATION:	64
TER QUALIFICATION DEFICIENCIES NOTED:			
NOT INCLUDED IN EVALUATION			
QUALIFICATION STATUS:			
NOT IN SCOPE. SUBSEQUENT REVIEW SHOWS THESE ITEMS ARE LOCATED IN A MILD ENVIRONMENT. (ENVIRONMENTAL ZONE INDICATED ABOVE) SEE SECTION 2.2 DISCUSSION.			
CORRECTIVE ACTION:			
NOT APPLICABLE.			
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.			
MAR NUMBER: NOT APPLICABLE.			
JUSTIFICATION FOR CONTINUED OPERATION:			
NOT REQUIRED.			

FLORIDA POWER CORPORATION

QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	SW-6	RECORD NUMBER:	0166
		SCEW PAGE NUMBER:	2-205
DESCRIPTION:	TERMINAL BOX	LOCATION:	AUXILIARY BLDG. ELEV. 95'
MANUFACTURER:	FIELD FABRICATED	TER EQUIPMENT NO.:	73
MODEL:	STATES TYPE NT TERMINAL BLOCKS	TER CATEGORY:	I.B
SYSTEM:	SW	ZONE LOCATION:	36
TER QUALIFICATION DEFICIENCIES NOTED:			
<p>3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED 10. RADIATION EXPOSURE</p>			
QUALIFICATION STATUS:			
QUALIFICATION MODIFICATIONS IN PROGRESS.			
CORRECTIVE ACTION:			
RELOCATE.			
CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER, 1985.			
MAR NUMBER:	82-05-24-07		
JUSTIFICATION FOR CONTINUED OPERATION:			
SEE ATTACHED.			

JUSTIFICATION FOR CONTINUED OPERATION
for
SW 6 & 14, WD-3
States Terminal Blocks in Auxiliary Building
TER Item 73

References

- 1) Franklin Institute Research Laboratories Test Report QL-C4927, "Quick Look Report for a Steam and Chemical Spray Exposure Test of Electrical Terminal Blocks".
- 2) Wyle Report 17436-15, "Final Report on Evaluation of Terminal Block Model EB-25", dated 12/1/80.
- 3) Wyle 58687, "Loss of Coolant Accident Testing of 5 Weidmuller Terminal Blocks", dated 6/29/82.
- 4) Fink, D. G. and Beaty, H. W., "Standard Handbook for Electrical Engineers", Eleventh Edition, Table 4-71.

In the interim between the present time and scheduled qualification completion and installation, the following justifications for continued operation are given:

1. The above referenced test reports indicate that phenolic terminal blocks can survive the relatively mild environment in the auxiliary building.
2. Reference 4 indicates that the maximum use temperature for phenolics is 350^oF, which is greater than the maximum temperature during normal environments in the auxiliary building. Radiation, pressure and moisture conditions were addressed in the other referenced test reports.
3. The most sensitive organic material, Polypropylene, is used for terminal barriers and their failure is not expected to affect the Class 1E function of the terminal block.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: SW-7	RECORD NUMBER: 0167	
	SCEW PAGE NUMBER: 2-206	
DESCRIPTION: TERMINAL BOX	LOCATION: AUXILIARY BLDG. ELEV. 119'	
MANUFACTURER: FIELD FABRICATED	TER EQUIPMENT NO.: 69	
MODEL: STATES TYPE NT TERMINAL BLOCKS	TER CATEGORY: I.B	
SYSTEM: SW	ZONE LOCATION: 22	
TER QUALIFICATION DEFICIENCIES NOTED:		
3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED		
QUALIFICATION STATUS:		
QUALIFIED FOR CURRENT APPLICATION. SEE APPENDIX A.		
CORRECTIVE ACTION:		
NOT APPLICABLE.		
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.		
MAR NUMBER: NOT APPLICABLE.		
JUSTIFICATION FOR CONTINUED OPERATION:		
NOT REQUIRED.		

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: SW-8	RECORD NUMBER: 0168
	SCEW PAGE NUMBER: 2-207
DESCRIPTION: TERMINAL BOX	LOCATION: AUXILIARY BLDG. ELEV. 119'
MANUFACTURER: FIELD FABRICATED	TER EQUIPMENT NO.: 69
MODEL: STATES TYPE NT TERMINAL BLOCKS	TER CATEGORY: I.B
SYSTEM: SW	ZONE LOCATION: 22
TER QUALIFICATION DEFICIENCIES NOTED: 3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED	
QUALIFICATION STATUS: QUALIFIED FOR CURRENT APPLICATION. SEE APPENDIX A.	
CORRECTIVE ACTION: NOT APPLICABLE. CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE. MAR NUMBER: NOT APPLICABLE.	
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.	

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: SW-9	RECORD NUMBER: 0169
	SCEW PAGE NUMBER: 2-208
DESCRIPTION: TERMINAL BOX	LOCATION: AUXILIARY BLDG. ELEV. 119'
MANUFACTURER: FIELD FABRICATED	TER EQUIPMENT NO.: 69
MODEL: STATES TYPE NT TERMINAL BLOCKS	TER CATEGORY: I.B
SYSTEM: SW	ZONE LOCATION: 22
TER QUALIFICATION DEFICIENCIES NOTED: 3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED	
QUALIFICATION STATUS: QUALIFIED FOR CURRENT APPLICATION. SEE APPENDIX A.	
CORRECTIVE ACTION: NOT APPLICABLE. CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE. MAR NUMBER: NOT APPLICABLE.	
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.	

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: SW-10	RECORD NUMBER: 0170
	SCEW PAGE NUMBER: 2-209
DESCRIPTION: TERMINAL BOX	LOCATION: AUXILIARY BLDG. ELEV. 95'
MANUFACTURER: FIELD FABRICATED	TER EQUIPMENT NO.: NA
MODEL: STATES TYPE NT TERMINAL BLOCKS	TER CATEGORY: N/A
SYSTEM: SW	ZONE LOCATION: 11
TER QUALIFICATION DEFICIENCIES NOTED: NOT INCLUDED IN EVALUATION	
QUALIFICATION STATUS: NOT IN SCOPE. SUBSEQUENT REVIEW SHOWS THESE ITEMS ARE LOCATED IN A MILD ENVIRONMENT. (ENVIRONMENTAL ZONE INDICATED ABOVE) SEE SECTION 2.2 DISCUSSION.	
CORRECTIVE ACTION: NOT APPLICABLE. CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE. MAR NUMBER: NOT APPLICABLE.	
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.	

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	SW-11,12 & 13	RECORD NUMBER:	0171
		SCEW PAGE NUMBER:	2-210
DESCRIPTION:	TERMINAL BOX	LOCATION:	AUXILIARY BLDG. ELEV. 95'
MANUFACTURER:	FIELD FABRICATED	TER EQUIPMENT NO.:	NA
MODEL:	STATES TYPE NT TERMINAL BLOCKS	TER CATEGORY:	N/A
SYSTEM:	SW	ZONE LOCATION:	11
TER QUALIFICATION DEFICIENCIES NOTED: NOT INCLUDED IN EVALUATION			
QUALIFICATION STATUS: NOT IN SCOPE. SUBSEQUENT REVIEW SHOWS THESE ITEMS ARE LOCATED IN A MILD ENVIRONMENT. (ENVIRONMENTAL ZONE INDICATED ABOVE) SEE SECTION 2.2 DISCUSSION.			
CORRECTIVE ACTION: NOT APPLICABLE. CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE. MAR NUMBER: NOT APPLICABLE.			
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.			

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	SW-14	RECORD NUMBER:	0172
		SCEW PAGE NUMBER:	2-211
DESCRIPTION:	TERMINAL BOX	LOCATION:	AUXILIARY BLDG. ELEV. 95'
MANUFACTURER:	FIELD FABRICATED	TER EQUIPMENT NO.:	73
MODEL:	STATES TYPE NT TERMINAL BLOCKS	TER CATEGORY:	I.B
SYSTEM:	SW	ZONE LOCATION:	36
TER QUALIFICATION DEFICIENCIES NOTED:			
3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED 10. RADIATION EXPOSURE			
QUALIFICATION STATUS:			
QUALIFICATION MODIFICATIONS IN PROGRESS.			
CORRECTIVE ACTION:			
RELOCATE.			
CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER, 1985.			
MAR NUMBER:	82-05-24-07		
JUSTIFICATION FOR CONTINUED OPERATION:			
SEE JCO FOR SW-6 (RECORD 166).			

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: SW-15	RECORD NUMBER: 0173
	SCEW PAGE NUMBER: 2-212
DESCRIPTION: TERMINAL BOX	LOCATION: AUXILIARY BLDG. ELEV. 119'
MANUFACTURER: FIELD FABRICATED	TER EQUIPMENT NO.: 69
MODEL: STATES TYPE NT TERMINAL BLOCKS	TER CATEGORY: I.B
SYSTEM: SW	ZONE LOCATION: 22
TER QUALIFICATION DEFICIENCIES NOTED: 3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED	
QUALIFICATION STATUS: QUALIFIED FOR CURRENT APPLICATION. SEE APPENDIX A.	
CORRECTIVE ACTION: NOT APPLICABLE. CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE. MAR NUMBER: NOT APPLICABLE.	
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.	

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: SW-18	RECORD NUMBER: 0174
	SCEW PAGE NUMBER: 2-213
DESCRIPTION: TERMINAL BOX	LOCATION: AUXILIARY BLDG. ELEV. 95'
MANUFACTURER: FIELD FABRICATED	TER EQUIPMENT NO.: NA
MODEL: STATES TYPE NT TERMINAL BLOCKS	TER CATEGORY: N/A
SYSTEM: SW	ZONE LOCATION: 11
TER QUALIFICATION DEFICIENCIES NOTED: NOT INCLUDED IN EVALUATION	
QUALIFICATION STATUS: NOT IN SCOPE. SUBSEQUENT REVIEW SHOWS THESE ITEMS ARE LOCATED IN A MILD ENVIRONMENT. (ENVIRONMENTAL ZONE INDICATED ABOVE) SEE SECTION 2.2 DISCUSSION.	
CORRECTIVE ACTION: NOT APPLICABLE.	
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.	
MAR NUMEER: NOT APPLICABLE.	
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.	

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: WDV-3	RECORD NUMBER: 0175
	SCEW PAGE NUMBER: 2-214
DESCRIPTION: VALVE MOTOR OPERATOR	LOCATION: INSIDE CONTAINMENT ELEV. 112'
MANUFACTURER: LIMITORQUE	TER EQUIPMENT NO.: 12
MODEL: SMB-000-2	TER CATEGORY: II.A
SYSTEM: WD	ZONE LOCATION: 38
TER QUALIFICATION DEFICIENCIES NOTED:	
1. DOCUMENTED EVIDENCE OF QUAL 2. EQUIP VS TEST SPECIMEN 3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED 10. RADIATION EXPOSURE	
QUALIFICATION STATUS:	
QUALIFICATION MODIFICATIONS IN PROGRESS. SEE DISCUSSION ATTACHED.	
CORRECTIVE ACTION:	
REPLACE MOTOR.	
CORRECTIVE ACTION SCHEDULE: REFUEL V, NOVEMBER 1985.	
MAR NUMBER:	82-05-24-06
JUSTIFICATION FOR CONTINUED OPERATION:	
SEE ATTACHED.	

DISCUSSION ON
WDV 3
Record 0175

Correspondence from Limitorque (L200-3VC-007) indicates that Test Report 600198 plus Addendum 1 apply to this actuator. A walkdown was conducted and the results (L200-WW-001) were discussed with the vendor. The vendor was requested to identify activities required to upgrade this actuator such that Qualification Report 600456 (L200-3TR-001) would apply, thereby ensuring all environmental parameters for Zone 38 would be encompassed by testing. The vendor response (L200-3VC-008) indicates motor replacement with a Class RH insulated motor will be required.

JUSTIFICATION FOR CONTINUED OPERATION
for
WDV-3
Limitorque Motor Operator
TER Item 12

In the interim between the present and corrective action, the following justification for continued operation is given:

1. WDV-3 is a normally closed valve which is used to drain the RB sump. During an accident, the valve has no active function to perform and will fail as is. Therefore, failure of the valve operator can be tolerated.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: WDV-60	RECORD NUMBER: 0176	SCEW PAGE NUMBER: 2-215
DESCRIPTION: VALVE MOTOR OPERATOR	LOCATION: INSIDE CONTAINMENT ELEV. 112'	
MANUFACTURER: LIMITORQUE	TER EQUIPMENT NO.: 04	
MODEL: SMB-000-5	TER CATEGORY: II.A	
SYSTEM: WD	ZONE LOCATION: 38	
TER QUALIFICATION DEFICIENCIES NOTED:		
2. EQUIP VS TEST SPECIMEN 3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED		
QUALIFICATION STATUS:		
QUALIFIED FOR CURRENT APPLICATION. SEE DISCUSSION ATTACHED.		
CORRECTIVE ACTION:		
NOT APPLICABLE.		
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.		
MAR NUMBER: NOT APPLICABLE.		
JUSTIFICATION FOR CONTINUED OPERATION:		
NOT REQUIRED.		

DISCUSSION ON
WDV-60; 94; 406
Limitorque Motor Operators
Records 0176, 0177, 0179

Initial discussions with the vendor using shop order numbers and serial numbers of originally installed equipment indicates Test Report 600456 (L200-3TR-001) applies to this equipment. This report encompasses all environmental parameters for the required operating time of this equipment. Walkdowns are scheduled during the current outage to confirm and document qualification. From the current information available, Florida Power Corporation considers this equipment qualified for its current application.

FLORIDA POWER CORPORATION

QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	WDV-94	RECORD NUMBER:	0177
		SCEW PAGE NUMBER:	2-216
DESCRIPTION:	VALVE MOTOR OPERATOR	LOCATION:	INSIDE CONTAINMENT ELEV. 112'
MANUFACTURER:	LIMITORQUE	TER EQUIPMENT NO.:	04
MODEL:	SMB-000-2	TER CATEGORY:	II.A
SYSTEM:	WD	ZONE LOCATION:	38

TER QUALIFICATION DEFICIENCIES NOTED:

2. EQUIP VS TEST SPECIMEN
3. AGING DEGRADATION EVAL
4. QUAL LIFE OR REPLACE SKED

QUALIFICATION STATUS:

QUALIFIED FOR CURRENT APPLICATION.
SEE DISCUSSION FOR WDV-60,
RECORD 0176.

CORRECTIVE ACTION:

NOT APPLICABLE.

CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.

MAR NUMBER: NOT APPLICABLE.

JUSTIFICATION FOR CONTINUED OPERATION:

NOT REQUIRED.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: WDV-405	RECORD NUMBER: 0178
	SCEW PAGE NUMBER: 2-217
DESCRIPTION: VALVE MOTOR OPERATOR	LOCATION: AUXILIARY BLDG. ELEV. 119' -0"
MANUFACTURER: LIMITORQUE	TER EQUIPMENT NO.: 18
MODEL: SMB000	TER CATEGORY: II.A
SYSTEM: WD	ZONE LOCATION: 22
TER QUALIFICATION DEFICIENCIES NOTED: 2. EQUIP VS TEST SPECIMEN 3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED	
QUALIFICATION STATUS: QUALIFIED FOR CURRENT APPLICATION. SEE DISCUSSION ATTACHED.	
CORRECTIVE ACTION: NOT APPLICABLE. CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE. MAR NUMBER: NOT APPLICABLE.	
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.	

DISCUSSION ON
WDV 407
Record 0178

Vendor correspondence (L200-3VC-005) indicates Test Report 600456 (L200-3TR-001) applies to this actuator. Hence, all environmental parameters for Zone 38 are encompassed by testing and this equipment is considered qualified for its current application.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: WDV-406	RECORD NUMBER: 0179
	SCEW PAGE NUMBER: 2-218
DESCRIPTION: VALVE MOTOR OPERATOR	LOCATION: IN CONT.ELEV. 119' OUTSIDE SHIELD WALL
MANUFACTURER: LIMITORQUE	TER EQUIPMENT NO.: 14
MODEL: SMB-000	TER CATEGORY: II.A
SYSTEM: WD	ZONE LOCATION: 39
TER QUALIFICATION DEFICIENCIES NOTED: 2. EQUIP VS TEST SPECIMEN 3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED	
QUALIFICATION STATUS: QUALIFIED FOR CURRENT APPLICATION. SEE DISCUSSION FOR WDV-60, RECORD 0176.	
CORRECTIVE ACTION: NOT APPLICABLE.	
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.	
MAR NUMBER:	NOT APPLICABLE.
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.	

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: WDV-407	RECORD NUMBER: 0180
	SCEW PAGE NUMBER: 2-219
DESCRIPTION: VALVE MOTOR OPERATOR	LOCATION: CONTAINMENT ELEV. 112'
MANUFACTURER: LIMITORQUE	TER EQUIPMENT NO.: 15
MODEL: SMB-000	TER CATEGORY: II.A
SYSTEM: WD	ZONE LOCATION: 38
TER QUALIFICATION DEFICIENCIES NOTED:	
2. EQUIP VS TEST SPECIMEN 3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED 8. SPRAY	
QUALIFICATION STATUS:	
QUALIFIED FOR CURRENT APPLICATION. SEE DISCUSSION ATTACHED.	
CORRECTIVE ACTION:	
NOT APPLICABLE.	
CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE.	
MAR NUMBER: NOT APPLICABLE.	
JUSTIFICATION FOR CONTINUED OPERATION:	
NOT REQUIRED.	

DISCUSSION ON

WDV 407

Record 0180

Vendor correspondence (L200-3VC-012) indicates Test Report B0003 (L200-3TR-001) applies to this actuator. Review of this report indicates all environmental parameters from Zone 22 are encompassed. This equipment is considered qualified for its current application.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: WDV-4	RECORD NUMBER: 0181
	SCEW PAGE NUMBER: 2-220
DESCRIPTION: SOLENOID VALVE	LOCATION: AUXILIARY BLDG. ELEV. 95'
MANUFACTURER: ASCO	TER EQUIPMENT NO.: 35
MODEL: 8320A20	TER CATEGORY: I.B
SYSTEM: WD	ZONE LOCATION: 36
TER QUALIFICATION DEFICIENCIES NOTED:	
1. DOCUMENTED EVIDENCE OF QUAL	
QUALIFICATION STATUS:	
QUALIFICATION MODIFICATIONS IN PROGRESS.	
CORRECTIVE ACTION:	
REPLACE.	
CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER 1985	
MAR NUMBER:	82-05-24-03
JUSTIFICATION FOR CONTINUED OPERATION: SEE ATTACHED.	

JUSTIFICATION FOR CONTINUED OPERATION
for
WDV-4
TER Item 35

References

- 1) FPC Environmental Qualification of Class 1E Equipment IE Bulletin 79-01B Qualification Summary.

In the interim between the present and scheduled corrective action, the following justification for continued operation, as previously provided in Reference 1, is given:

1. Investigations with the manufacturer indicate the solenoid valves are good for 10^5 rads. Accident conditions will not affect the components for the period of operability required. Also, due to the location of the component when required to perform its safety function, the accident environment has no impact.
2. Due to the period of operability required as per CR#3 Tech. Spec. Table 3.6-1 to perform their safety function, and the fact that the total radiation exposure per the SCEW sheets is conservative in regard to the 5-1/2 year operating life of the plant, these valves are not considered to be a restraint to the safe operation of CR#3.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: WDV-61 & 62	RECORD NUMBER: 0182
	SCEW PAGE NUMBER: 2-221
DESCRIPTION: SOLENOID VALVE	LOCATION: AUXILIARY BLDG. ELEV. 95'
MANUFACTURER: ASCO	TER EQUIPMENT NO.: 35
MODEL: 8320A20	TER CATEGORY: I.B
SYSTEM: WD	ZONE LOCATION: 36
TER QUALIFICATION DEFICIENCIES NOTED:	
1. DOCUMENTED EVIDENCE OF QUAL	
QUALIFICATION STATUS:	
QUALIFICATION MODIFICATIONS IN PROGRESS.	
CORRECTIVE ACTION:	
REPLACE.	
CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER 1985	
MAR NUMBER:	82-05-24-03
JUSTIFICATION FOR CONTINUED OPERATION: SEE ATTACHED.	

JUSTIFICATION FOR CONTINUED OPERATION
for
WDV-61 & 62
TER Item 35

References

- 1) FPC Environmental Qualification of Class 1E Equipment IE Bulletin 79-01B Qualification Summary.

In the interim between the present and scheduled corrective action, the following justification for continued operation, as previously provided in Reference 1, is given:

1. Investigations with the manufacturer indicate the solenoid valves are good for 10^5 rads. Accident conditions will not affect the components for the period of operability required. Also, due to the location of the component when required to perform its safety function, the accident environment has no impact.
2. Due to the period of operability required as per CR#3 Tech. Spec. Table 3.6-1 to perform their safety function, and the fact that the total radiation exposure per the SCEW sheets is conservative in regard to the 5-1/2 year operating life of the plant, these valves are not considered to be a restraint to the safe operation of CR#3.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	WD-1	RECORD NUMBER:	0192
		SCEW PAGE NUMBER:	2-222
DESCRIPTION:	LOCAL CONTROL STATION	LOCATION:	AUXILIARY BLDG. ELEV. 95'-0"
MANUFACTURER:	FIELD FABRICATED	TER EQUIPMENT NO.:	
MODEL:	G.E.TYPE UA202 SW. G.E.TYPE UC212 LIGHT	TER CATEGORY:	I.B-A
SYSTEM:	WD	ZONE LOCATION:	
TER QUALIFICATION DEFICIENCIES NOTED: NOT INCLUDED IN EVALUATION.			
QUALIFICATION STATUS: QUALIFICATION MODIFICATIONS IN PROGRESS.			
CORRECTIVE ACTION: RELOCATE TO A MILD ENVIRONMENT. CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER 1985 MAR NUMBER: 82-05-24-02			
JUSTIFICATION FOR CONTINUED OPERATION: SEE JCO FOR AS-1, RECORD 0013.			

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: WD-3	RECORD NUMBER: 0185
	SCEW PAGE NUMBER: 2-223
DESCRIPTION: TERMINAL BOX	LOCATION: AUXILIARY BLDG. ELEV. 95'
MANUFACTURER: FIELD FABRICATED	TER EQUIPMENT NO.: 73
MODEL: STATES TYPE NT TERMINAL BLOCKS	TER CATEGORY: I.B
SYSTEM: WD	ZONE LOCATION: 36
TER QUALIFICATION DEFICIENCIES NOTED: 3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED 10. RADIATION EXPOSURE	
QUALIFICATION STATUS: QUALIFICATION MODIFICATIONS IN PROGRESS.	
CORRECTIVE ACTION: RELOCATE. CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER, 1985.	
MAR NUMBER: 82-05-24-07	
JUSTIFICATION FOR CONTINUED OPERATION: SEE JCO FOR SW-6 (RECORD 166).	

FLORIDA POWER CORPORATION

QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	WD-300-LT, WD-301-LT WD-302-LT, WD-303-LT	RECORD NUMBER:	0184
		SCEW PAGE NUMBER:	2-224B
DESCRIPTION:	TRANSMITTER	LOCATION:	CONF. R.B. SUMP ELEV. 92' R.B. WTR BL. 115'
MANUFACTURER:	DELAVAL (GEMS) AND CABLE CO.	TER EQUIPMENT NO.:	50
MODEL:	XM-54854 XM-54852	TER CATEGORY:	I.B.
SYSTEM:	WD	ZONE LOCATION:	38
TER QUALIFICATION DEFICIENCIES NOTED:			
1. DOCUMENTED EVIDENCE OF QUAL			
QUALIFICATION STATUS:			
(NOT INSTALLED YET.)			
CORRECTIVE ACTION:			
(INSTALLATION)			
CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER 1985			
MAR NUMBER: 79-11-69			
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.			

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	WSV-3,4,5, & 6	RECORD NUMBER:	0185
		SCEW PAGE NUMBER:	2-225
DESCRIPTION:	SOLENOID VALVE	LOCATION:	AUXILIARY BLDG. ELEV. 119'
MANUFACTURER:	ASCO	TER EQUIPMENT NO.:	33
MODEL:	8317A29	TER CATEGORY:	I.B
SYSTEM:	WS	ZONE LOCATION:	22
TER QUALIFICATION DEFICIENCIES NOTED:			
1. DOCUMENTED EVIDENCE OF QUAL			
QUALIFICATION STATUS:			
QUALIFICATION MODIFICATIONS IN PROGRESS.			
CORRECTIVE ACTION:			
REPLACE.			
CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER 1985			
MAR NUMBER:	82-05-24-03		
JUSTIFICATION FOR CONTINUED OPERATION:			
SEE ATTACHED.			

JUSTIFICATION FOR CONTINUED OPERATION

for

WSV-3, 4, 5 & 6

TER Item 33

References

- 1) FPC Environmental Qualification of Class 1E Equipment IE Bulletin 79-01B Qualification Summary.

In the interim between the present and scheduled corrective action, the following justification for continued operation, as previously provided in Reference 1, is given:

1. Investigations with the manufacturer indicate the solenoid valves are good for 10^5 rads. Accident conditions will not affect the components for the period of operability required. Also, due to the location of the component when required to perform its safety function, the accident environment has no impact.
2. Due to the period of operability required as per CR#3 Tech. Spec. Table 3.6-1 to perform their safety function, and the fact that the total radiation exposure per the SCEW sheets is conservative in regard to the 5-1/2 year operating life of the plant, these valves are not considered to be a restraint to the safe operation of CR#3.

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER:	WS-1,2,3, & 4	RECORD NUMBER:	0193
		SCEW PAGE NUMBER:	2-226
DESCRIPTION:	LOCAL CONTROL STATION	LOCATION:	AUXILIARY BLDG. ELEV. 119'-0"
MANUFACTURER:	FIELD FABRICATED	TER EQUIPMENT NO.:	
MODEL:	G.E.TYPE UA202 SW. G.E.TYPE UC212 LIGHT	TER CATEGORY:	I.B-A
SYSTEM:	WS	ZONE LOCATION:	
TER QUALIFICATION DEFICIENCIES NOTED: NOT INCLUDED IN EVALUATION.			
QUALIFICATION STATUS: QUALIFICATION MODIFICATIONS IN PROGRESS.			
CORRECTIVE ACTION: REMOVE. CORRECTIVE ACTION SCHEDULE: REFUEL V; NOVEMBER 1985			
MAR NUMBER:		82-05-24-02	
JUSTIFICATION FOR CONTINUED OPERATION: SEE JCO FOR AS-1, RECORD 0013.			

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: WS-2	RECORD NUMBER: 0186
	SCEW PAGE NUMBER: 2-227
DESCRIPTION: TERMINAL BOX	LOCATION: AUXILIARY BLDG. ELEV. 119'
MANUFACTURER: FIELD FABRICATED	TER EQUIPMENT NO.: 69
MODEL: STATES TYPE NT TERMINAL BLOCKS	TER CATEGORY: I.B
SYSTEM: WS	ZONE LOCATION: 22
TER QUALIFICATION DEFICIENCIES NOTED: 3. AGING DEGRADATION EVAL 4. QUAL LIFE OR REPLACE SKED	
QUALIFICATION STATUS: QUALIFIED FOR CURRENT APPLICATION. SEE APPENDIX A.	
CORRECTIVE ACTION: NOT APPLICABLE. CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE. MAR NUMBER: NOT APPLICABLE.	
JUSTIFICATION FOR CONTINUED OPERATION: NOT REQUIRED.	

FLORIDA POWER CORPORATION
QUALIFICATION STATUS SUMMARY SHEETS

ID NUMBER: WS-3	RECORD NUMBER: 0187
	SCEW PAGE NUMBER: 2-228
DESCRIPTION: TERMINAL BOX	LOCATION: AUXILIARY BLDG. ELEV. 119'
MANUFACTURER: FIELD FABRICATED	TER EQUIPMENT NO.: NA
MODEL: STATES TYPE NT TERMINAL BLOCKS	TER CATEGORY: I.B-A
SYSTEM: WS	ZONE LOCATION: 22
TER QUALIFICATION DEFICIENCIES NOTED: NOT INCLUDED IN EVALUATION	
QUALIFICATION STATUS: QUALIFIED FOR CURRENT APPLICATION. SEE APPENDIX A.	
CORRECTIVE ACTION: NOT APPLICABLE. CORRECTIVE ACTION SCHEDULE: NOT APPLICABLE. MAR NUMBER: NOT APPLICABLE.	
JUSTIFICATION FOR CONTINUED OPERATION: NCT REQUIRED.	

FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 1

Zone Environmental Data

Revision 1

Date 4/83

DESCRIPTION: Elev. 95' - Auxiliary Building, Makeup and Purification Pump Room

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)	
	<u>Hours/Year</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>
Temperature (°F)	189 4959 3464 148 Note 1	93 to 97 85 to 92 70 to 84 55 to 69	N/A		N/A	
Pressure (PSIG)	Atmospheric		<u>Time</u> N/A	<u>Press.</u>	<u>Time</u> N/A	<u>Press.</u>
Relative Humidity (%)	20 to 90		N/A		N/A	
Chemical Spray (pH)	N/A		N/A		N/A	
Radiation (Rads)	<u>40 Year Dose</u> 1.2 x 10 ⁶		<u>Time Post Accident</u> 1 Hr 1 Day 5 Days 30 Days 6 Months 40 Yr. Total + 6 Mo. = 1.4 x 10 ⁶ Total	<u>Dose</u> 5.6 x 10 ³ 2.0 x 10 ⁴ 3.7 x 10 ⁴ 7.4 x 10 ⁴ 1.5 x 10 ⁵	N/A	
Submergence (Flood Level)	N/A		N/A		N/A	

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES: (1) Allow 24 hours per year at 115°F for postulated HVAC system failures.

FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 2

Zone Environmental Data

Revision 1

Date 4/83

DESCRIPTION: Elev. 95' - Auxiliary Building, Hall Outside Makeup Pump Room

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)	
Temperature (°F)	<u>Hours/Year</u> 189 4959 3464 148 Note 1	<u>Temp.</u> 93 to 97 85 to 92 70 to 84 55 to 69	<u>Time</u>	<u>Temp.</u> N/A	<u>Time</u>	<u>Temp.</u> N/A
Pressure (PSIG)	Atmospheric		<u>Time</u> N/A	<u>Press.</u>	<u>Time</u> N/A	<u>Press.</u>
Relative Humidity (%)	20 to 90		N/A		N/A	
Chemical Spray (pH)	N/A		N/A		N/A	
Radiation (Rads)	<u>40 Year Dose</u> 1.2 x 10 ⁶		<u>Time Post Accident</u> 1 Hr 1 Day 5 Days 30 Days 6 Months 40 Yr. Total + 6 Mo. = 4.4 x 10 ⁶ Total	<u>Dose</u> 1.5 x 10 ⁵ 4.9 x 10 ⁵ 8.8 x 10 ⁵ 1.7 x 10 ⁶ 3.2 x 10 ⁶	N/A	
Submergence (Flood Level)	N/A		N/A		N/A	

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES: (1) Allow 24 hours per year at 115°F for postulated HVAC system failures.

FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 3

Zone Environmental Data

Revision 1

Date 4/83

DESCRIPTION: Elev. 95' - Auxiliary Building, Hall Outside Reactor Building

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)	
	<u>Hours/Year</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>
Temperature (°F)	189 4959 3464 148 Note 1	93 to 97 85 to 92 70 to 84 55 to 69		N/A		N/A
Pressure (PSIG)	Atmospheric		<u>Time</u> N/A	<u>Press.</u>	<u>Time</u> N/A	<u>Press.</u>
Relative Humidity (%)	20 to 90		N/A		N/A	
Chemical Spray (pH)	N/A		N/A		N/A	
Radiation (Rads)	<u>40 Year Dose</u> 1.0 x 10 ⁴		<u>Time Post Accident</u> 1 Hr 1 Day 5 Days 30 Days 6 Months 40 Yr. Total + 6 Mo. = 4.0 x 10 ⁵ Total	<u>Dose</u> 1.8 x 10 ⁴ 5.8 x 10 ⁴ 1.0 x 10 ⁵ 2.0 x 10 ⁵ 3.9 x 10 ⁵	N/A	
Submergence (Flood Level)	N/A		N/A		N/A	

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES: (1) Allow 24 hours per year at 115°F for postulated HVAC system failures

FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 4

Zone Environmental Data

Revision 1

Date 4/83

DESCRIPTION: Elev. 95' - Auxiliary Building, Equipment Hatch Area Outside Rad Waste Tank Room

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)	
	Hours/Year	Temp.	Time	Temp.	Time	Temp.
Temperature (°F)	189 4959 3464 148 Note 1	93 to 97 85 to 92 70 to 84 55 to 69		N/A		N/A
Pressure (PSiG)	Atmospheric		Time N/A	Press.	Time N/A	Press.
Relative Humidity (%)	20 to 90		N/A		N/A	
Chemical Spray (pH)	N/A		N/A		N/A	
Radiation (Rads)	40 Year Dose 1.0 x 10 ⁴		Time Post Accident 1 Hr 1 Day 7 Days 30 Days 6 Months 40 Yr. Total + 6 Mo. = 5.6 x 10 ⁵ Total	Dose 2.5 x 10 ⁴ 8.0 x 10 ⁴ 1.5 x 10 ⁵ 2.8 x 10 ⁵ 5.5 x 10 ⁵	N/A	
Submergence (Flood Level)	N/A		N/A		N/A	

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES: (1) Allow 24 hours per year at 115°F for postulated HVAC system failures

FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 5

Zone Environmental Data

Revision 1

Date 4/83

DESCRIPTION: Elev. 95' - Auxiliary Building, Waste Removal System Control Board Area

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)	
	<u>Hours/Year</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>
Temperature (°F)	189 4253 4489 148 Note 1	90 to 97 85 to 89 70 to 84 55 to 69		N/A		N/A
Pressure (PSIG)	Atmospheric		<u>Time</u> N/A	<u>Press.</u>	<u>Time</u> N/A	<u>Press.</u>
Relative Humidity (%)	20 to 90		N/A		N/A	
Chemical Spray (pH)	N/A		N/A		N/A	
Radiation (Rads)	<u>40 Year Dose</u> 1.0 x 10 ⁴		<u>Time Post Accident</u> 1 Hr 1 Day 5 Days 30 Days 6 Months 40 Yr. Total + 6 Mo. = 6.1 x 10 ⁴ Total	<u>Dose</u> 2.3 x 10 ³ 7.5 x 10 ³ 1.4 x 10 ⁴ 2.6 x 10 ⁴ 5.1 x 10 ⁴	N/A	
Submergence (Flood Level)	N/A		N/A		N/A	

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES: (1) Allow 24 hours per year at 115°F for postulated HVAC system failures

FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 6

Zone Environmental Data

Revision 1

Date 4/83

DESCRIPTION: Elev. 95' - Auxiliary Building, Nuclear Services Booster Pump Area

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)	
	Hours/Year	Temp.	Time	Temp.	Time	Temp.
Temperature (°F)	189 4959 3464 148 Note 1	93 to 97 85 to 92 70 to 84 55 to 69		N/A		N/A
Pressure (PSIG)	Atmospheric		Time N/A	Press.	Time N/A	Press.
Relative Humidity (%)	20 to 90		N/A		N/A	
Chemical Spray (pH)	N/A		N/A		N/A	
Radiation (Rads)	<u>40 Year Dose</u> 1.0 x 10 ⁴		Time Post Accident 1 Hr 1 Day 5 Days 30 Days 6 Months 40 Yr. Total + 6 Mo. = 2.6 x 10 ⁵ Total	<u>Dose</u> 1.1 x 10 ⁴ 3.5 x 10 ⁴ 6.4 x 10 ⁴ 1.3 x 10 ⁵ 2.5 x 10 ⁵	N/A	
Submergence (Flood Level)	N/A		N/A		N/A	

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES: (1) Allow 24 hours per year at 115°F for postulated HVAC system failures

FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 7

Zone Environmental Data

Revision 1

Date 4/83

DESCRIPTION: Elev. 95' - Auxiliary Building, Decay Heat Pump Room

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)	
	Hours/Year	Temp.	Time	Temp.	Time	Temp.
Temperature (°F)	189 4959 3464 148 Note 1	93 to 97 85 to 92 70 to 84 55 to 69		N/A		N/A
Pressure (PSIG)	Atmospheric		N/A		N/A	
Relative Humidity (%)	20 to 90		N/A		N/A	
Chemical Spray (pH)	N/A		N/A		N/A	
Radiation (Rads)	40 Year Dose 4.9 x 10 ⁶		Time Post Accident	Dose	N/A	
			1 Hr	5.5 x 10 ⁴		
			1 Day	1.7 x 10 ⁵		
			5 Days	3.2 x 10 ⁵		
			30 Days	6.1 x 10 ⁵		
			6 Months	1.2 x 10 ⁶		
			40 Yr. Total + 6 Mo. =			
			6.1 x 10 ⁶ Total			
Submergence (Flood Level)	N/A		N/A		N/A	

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES: (1) Allow 24 hours per year at 115°F for postulated HVAC system failures

FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 8

Zone Environmental Data

Revision 1

Date 4/83

DESCRIPTION: Elev. 119' - Auxiliary Building, Hallway Outside Deborating Demineralizer

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)	
Temperature (°F)	<u>Hours/Year</u> 189 6041 2382 148 Note 1	<u>Temp.</u> 90 to 100 80 to 89 70 to 79 65 to 69	<u>Time</u> N/A	<u>Temp.</u> N/A	<u>Time</u> N/A	<u>Temp.</u> N/A
Pressure (PSIG)	Atmospheric		<u>Time</u> N/A	<u>Press.</u>	<u>Time</u> N/A	<u>Press.</u>
Relative Humidity (%)	20 to 90		N/A		N/A	
Chemical Spray (pH)	N/A		N/A		N/A	
Radiation (Rads)	<u>40 Year Dose</u> 1.0 x 10 ⁴		<u>Time Post Accident</u>	<u>Dose</u>	N/A	
			1 Hr	3.5 x 10 ⁴		
			1 Day	1.1 x 10 ⁵		
			5 Days	2.0 x 10 ⁵		
			30 Days	4.0 x 10 ⁵		
			6 Months	7.8 x 10 ⁵		
			40 Yr. Total + 6 Mo. = 7.9 x 10 ⁵ Total			
Submergence (Flood Level)	N/A		N/A		N/A	

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES: (1) Allow 24 hours per year at 115°F for postulated HVAC system failures

FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 9

Zone Environmental Data

Revision 1

Date 4/83

DESCRIPTION: Elev. 119' - Auxiliary Building, Hallway Outside Demineralizer Room

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)	
Temperature (°F)	<u>Hours/Year</u> 189 6041 2382 148 Note 1	<u>Temp.</u> 90 to 100 80 to 89 70 to 79 65 to 69	<u>Time</u>	<u>Temp.</u> N/A	<u>Time</u>	<u>Temp.</u> N/A
Pressure (PSIG)	Atmospheric		<u>Time</u> N/A	<u>Press.</u>	<u>Time</u> N/A	<u>Press.</u>
Relative Humidity (%)	20 to 90		N/A		N/A	
Chemical Spray (pH)	N/A		N/A		N/A	
Radiation (Rads)	<u>40 Year Dose</u> 1.0 × 10 ⁴		<u>Time Post Accident</u>	<u>Dose</u>	N/A	
			1 Hr	7.5 × 10 ⁴		
			1 Day	2.5 × 10 ⁵		
			5 Days	4.5 × 10 ⁵		
			30 Days	8.8 × 10 ⁵		
			6 Months	1.7 × 10 ⁶		
			40 Yr. Total + 6 Mo. = 1.7 × 10 ⁶ Total			
Submergence (Flood Level)	N/A		N/A		N/A	

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES: (1) Allow 24 hours per year at 115°F for postulated HVAC system failures

FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 10

Zone Environmental Data

Revision 1

Date 4/83

DESCRIPTION: Elev. 95' - Intermediate Building, Nuclear Sample Room

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)	
Temperature (°F)	<u>Hours/Year</u> 189 4959 3464 148 Note 1	<u>Temp.</u> 90 to 97 85 to 89 70 to 84 55 to 69	<u>Time</u>	<u>Temp.</u> N/A	<u>Time</u>	<u>Temp.</u> N/A
Pressure (PSIG)	Atmospheric		<u>Time</u> N/A	<u>Press.</u>	<u>Time</u> N/A	<u>Press.</u>
Relative Humidity (%)	20 to 90		N/A		N/A	
Chemical Spray (pH)	N/A		N/A		N/A	
Radiation (Rads)	<u>40 Year Dose</u> 1.0 × 10 ⁴		<u>Time Post Accident</u> 1 Hr 1 Day 5 Days 30 Days 6 Months	<u>Dose</u> 1.6 × 10 ² 5.2 × 10 ² 9.5 × 10 ² 1.8 × 10 ³ 3.5 × 10 ³	N/A	
			40 Yr. Total + 6 Mo. = 1.4 × 10 ⁴ Total			
Submergence (Flood Level)	N/A		N/A		N/A	

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES: (1) Allow 24 hours per year at 110°F for postulated HVAC system failures

FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 11

Zone Environmental Data

Revision 1

Date 4/83

DESCRIPTION: Elev. 95' - Auxiliary Building, Emergency Pump Room

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)	
	<u>Hours/Year</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>
Temperature (°F)	189 4959 3464 148 Note 1	90 to 97 85 to 89 70 to 84 55 to 69		N/A		N/A
Pressure (PSIG)	Atmospheric		<u>Time</u> N/A	<u>Press.</u>	<u>Time</u> N/A	<u>Press.</u>
Relative Humidity (%)	20 to 90		N/A		N/A	
Chemical Spray (pH)	N/A		N/A		N/A	
Radiation (Rads)	<u>40 Year Dose</u> 1.0 x 10 ⁴		<u>Time Post Accident</u> 1 Hr 1 Day 5 Days 30 Days 6 Months 40 Yr. Total + 6 Mo. = 5.6 x 10 ⁴ Total	<u>Dose</u> 2.2 x 10 ³ 7.0 x 10 ³ 1.3 x 10 ⁴ 2.4 x 10 ⁴ 4.6 x 10 ⁴	N/A	
Submergence (Flood Level)	N/A		N/A		N/A	

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES: (1) Allow 24 hours per year at 115°F for postulated HVAC system failures

FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 12

Zone Environmental Data

Revision 1

Date 4/83

DESCRIPTION: Elev. 95' - Auxiliary Building, Heat Exchanger Room

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)	
	<u>Hours/Year</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>
Temperature (°F)	189 1817 4224 2382 148 Note 1	93 to 97 85 to 92 75 to 84 70 to 75 65 to 69		N/A		N/A
Pressure (PSIG)	Atmospheric		<u>Time</u> N/A	<u>Press.</u>	<u>Time</u> N/A	<u>Press.</u>
Relative Humidity (%)	20 to 90		N/A		N/A	
Chemical Spray (pH)	N/A		N/A		N/A	
Radiation (Rads)	<u>40 Year Dose</u> 1.0 x 10 ⁴		<u>Time Post Accident</u> 1 Hr 1 Day 5 Days 30 Days 6 Months 40 Yr. Total + 6 Mo. = 1.0 x 10 ⁴ Total	<u>Dose</u> N/A	N/A	
Submergence (Flood Level)	N/A		N/A		N/A	

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES: (1) Allow 24 hours per year at 115°F for postulated HVAC system failures

FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 13

Zone Environmental Data

Revision 1

Date 4/83

DESCRIPTION: Elev. 145' - Control Complex, Between Columns 301 and 303

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)	
	<u>Hours/Year</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>
Temperature (°F)	8760	70 to 80	N/A		N/A	
Pressure (PSIG)	Atmospheric		N/A		N/A	
Relative Humidity (%)			N/A		N/A	
Chemical Spray (pH)	N/A		N/A		N/A	
Radiation (Rads)	<u>40 Year Dose</u> 1.0 x 10 ⁴		<u>Time Post Accident</u> 1 Hr 1 Day 5 Days 30 Days 6 Months 40 Yr. Total + 6 Mo. = 1.0 x 10 ⁴ Total	<u>Dose</u> N/A	N/A	
Submergence (Flood Level)	N/A		N/A		N/A	

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES:

FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 14

Zone Environmental Data

Revision 1

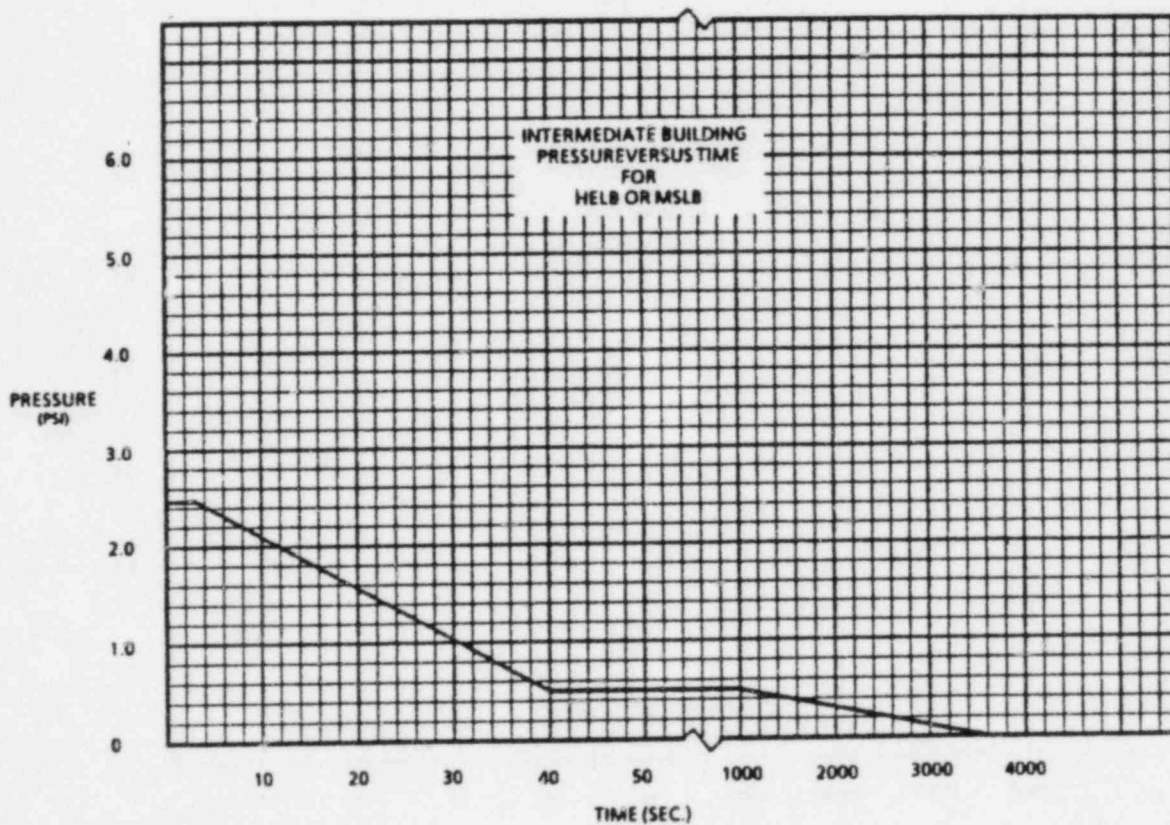
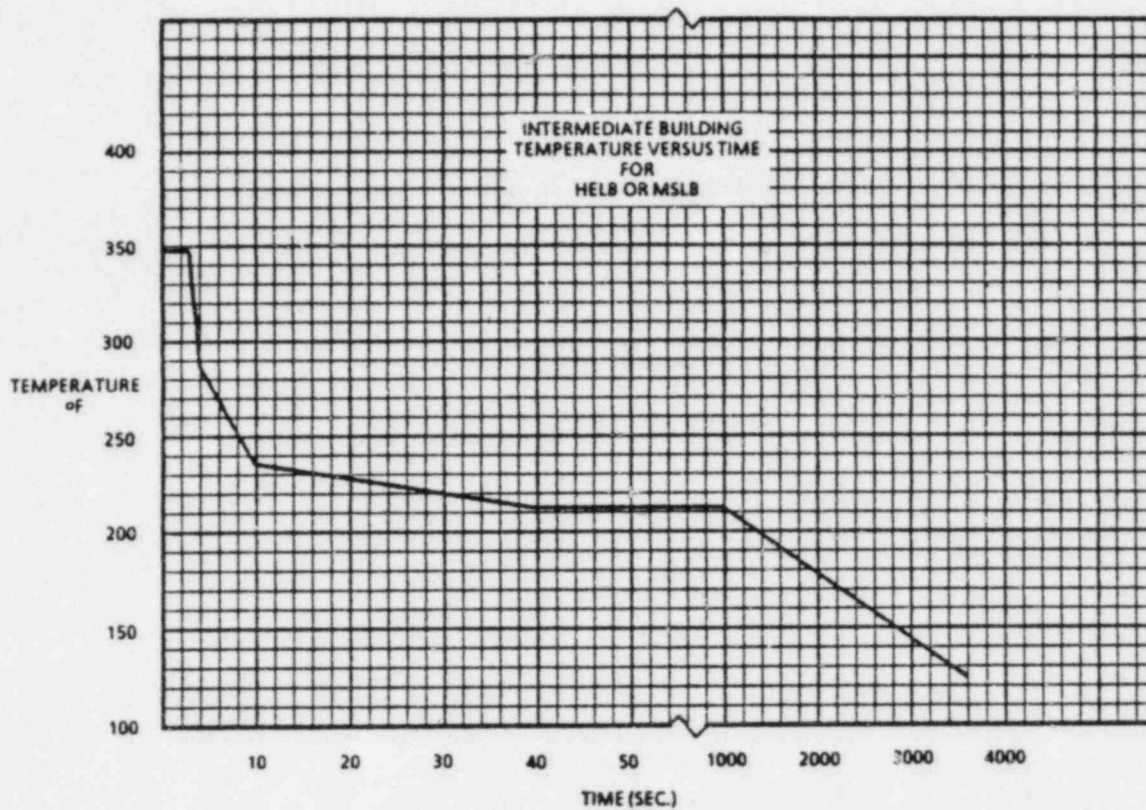
Date 4/83

DESCRIPTION: Elev. 95' - Intermediate Building, Motor Driven Emergency Feedwater Pump Room

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)		
Temperature (°F)	<u>Hours/Year</u> 5 890 4253 3464 148 Note 1	<u>Temp.</u> 95 to 99 90 to 94 80 to 89 70 to 79 55 to 69	<u>Time</u> N/A	<u>Temp.</u>	<u>Time</u> 0-2 2-4 4-10 10-40 40-1000 1000-3600 1 Hr-6 Mo	<u>Sec</u> Sec Sec	<u>Temp.</u> 345 345-287 287-240 240-212 212 212 - Amb. Ambient
Pressure (PSIG)	Atmospheric		<u>Time</u> N/A	<u>Press.</u>	<u>Time</u> 0-2 2-40 40-1000 1000-3600 1 Hr-6 Mo	<u>Sec</u> Sec Sec Sec	<u>Press.</u> 2.43 2.43-0.5 0.5 0.5-0 0
Relative Humidity (%)	20 to 90		N/A		<u>Time</u> 0-1 Hr 1-2 Hr 2 Hr-6 Mo		<u>%</u> 100 100-90 90
Chemical Spray (pH)	N/A		N/A		N/A		
Radiation (Rads)	<u>40 Year Dose</u> 1.0 x 10 ⁴		<u>Time Post Accident</u> 1 Hr 1 Day 5 Days 30 Days 6 Months	<u>Dose</u> N/A	N/A		
Submergence (Flood Level)	N/A		N/A		N/A		

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES: (1) Allow 24 hours per year at 110°F for postulated HVAC system failures



FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 15

Zone Environmental Data

Revision 1

DESCRIPTION: Elev. 95' - Auxiliary Building, Hall Between Make-up Pump Room and Neutralizer Pump Room

Date 4/83

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)	
	<u>Hours/Year</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>
Temperature (°F)	895 7243 474 148 Note 1	85 to 97 75 to 84 70 to 74 65 to 69		N/A		N/A
Pressure (PSIG)	Atmospheric		<u>Time</u> N/A	<u>Press.</u>	<u>Time</u> N/A	<u>Press.</u>
Relative Humidity (%)	20 to 90		N/A		N/A	
Chemical Spray (pH)	N/A		N/A		N/A	
Radiation (Rads)	<u>40 Year Dose</u> 1.0 x 10 ⁴		<u>Time Post Accident</u> 1 Hr 1 Day 5 Days 30 Days 6 Months 40 Yr. Total + 6 Mo. = 4.7 x 10 ⁵ Total	<u>Dose</u> 2.2 x 10 ⁴ 7.0 x 10 ⁴ 1.3 x 10 ⁵ 2.4 x 10 ⁵ 4.6 x 10 ⁵	N/A	
Submergence (Flood Level)	N/A		N/A		N/A	

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES: (1) Allow 24 hours per year at 115°F for postulated HVAC system failures

FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 16

Zone Environmental Data

Revision 1

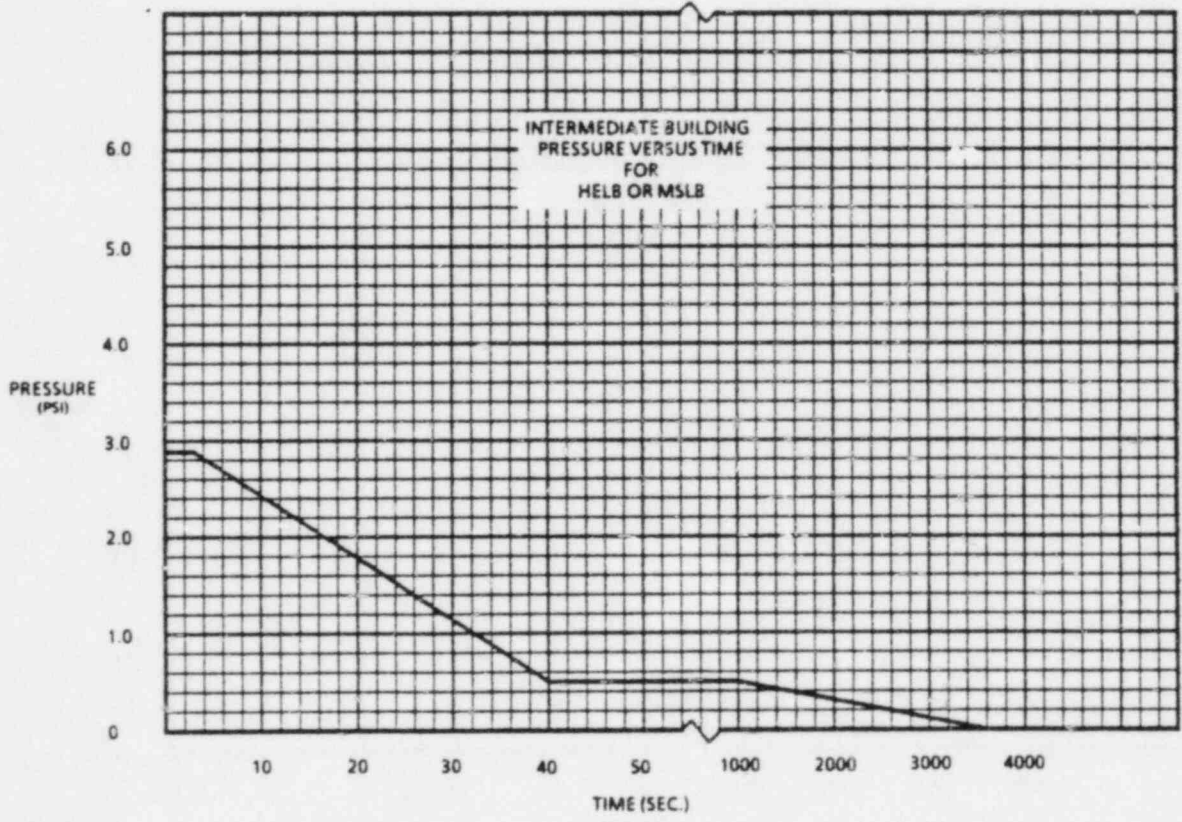
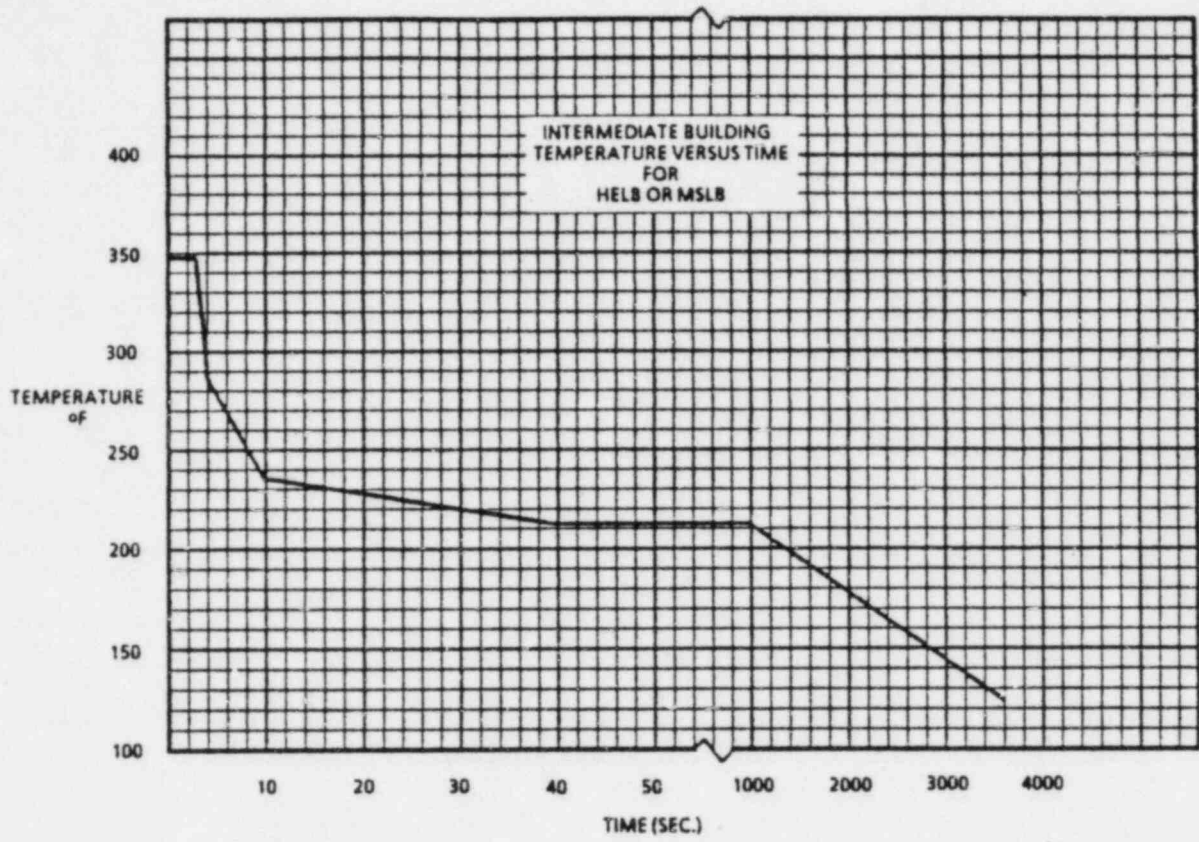
Date 4/83

DESCRIPTION: Elev. 119' - Intermediate Building, Leak Rate Test Area

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)		
Temperature (°F)	<u>Hours/Year</u> 5 890 2828 1425 2990 474 148	<u>Temp.</u> 129 to 135 125 to 128 120 to 124 100 to 119 95 to 99 90 to 94 80 to 89	<u>Time</u> N/A	<u>Temp.</u>	<u>Time</u> 0-2 2-4 4-10 10-40 40-1000 1000-3600 1 Hr-6 Mo	<u>Sec</u> 345 345-287 287-240 240-212 212 212 - Amb. Ambient	<u>Temp.</u>
Pressure (PSIG)	Atmospheric		<u>Time</u> N/A	<u>Press.</u>	<u>Time</u> 0-2 2-40 40-1000 1000-3600 1 Hr-6 Mo	<u>Press.</u> Sec 2.85 2.85-0.5 0.5 0.5-0 0	
Relative Humidity (%)	20 to 80		N/A		<u>Time</u> 0-1 Hr 1-2 Hr 2 Hr-6 Mo	<u>%</u> 100 100-90 90	
Chemical Spray (pH)	N/A		N/A		N/A		
Radiation (Rads)	<u>40 Year Dose</u> 1.0 x 10 ⁴		<u>Time Post Accident</u> 1 Hr 1 Day 5 Days 30 Days 6 Months 40 Yr. Total + 6 Mo. = 1.0 x 10 ⁴ Total	<u>Dose</u> Note 1	N/A		
Submergence (Flood Level)	N/A		N/A		N/A		

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES: (1) Total 6 Month Integrated Accident Dose < 100 RADS.



FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 17

Zone Environmental Data

Revision 1

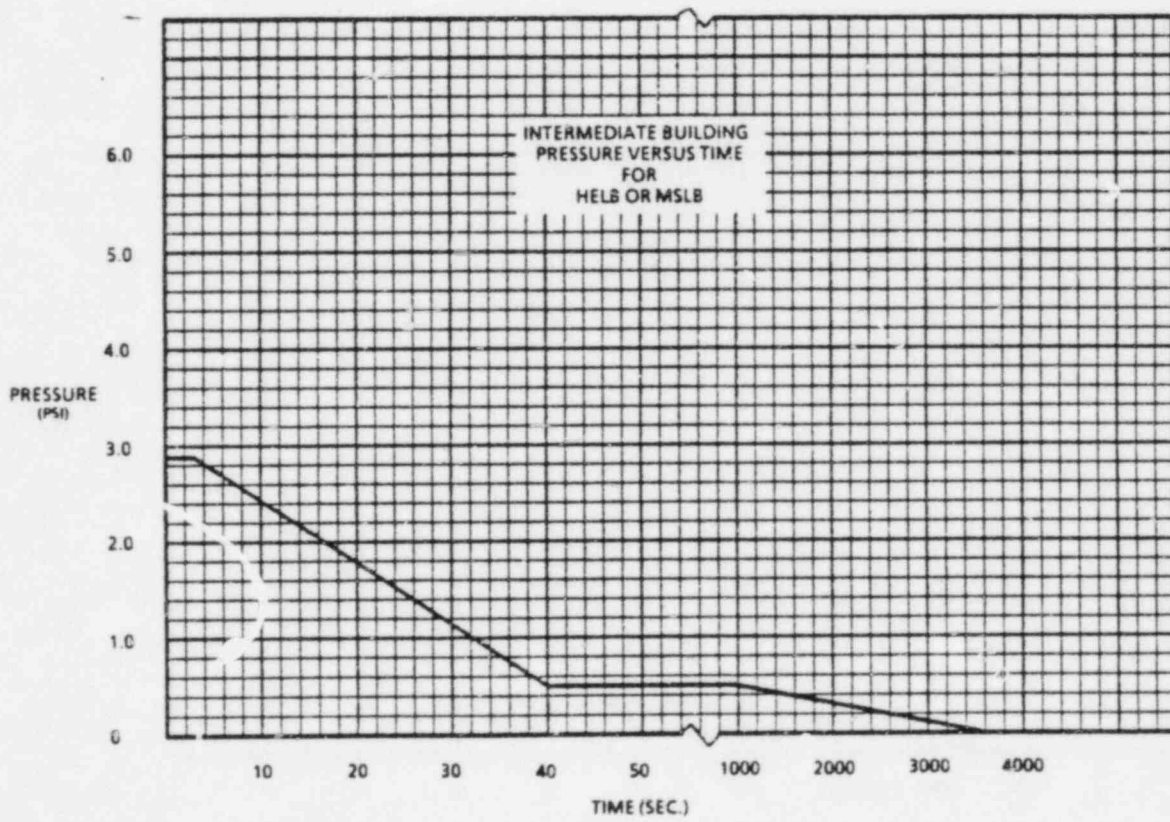
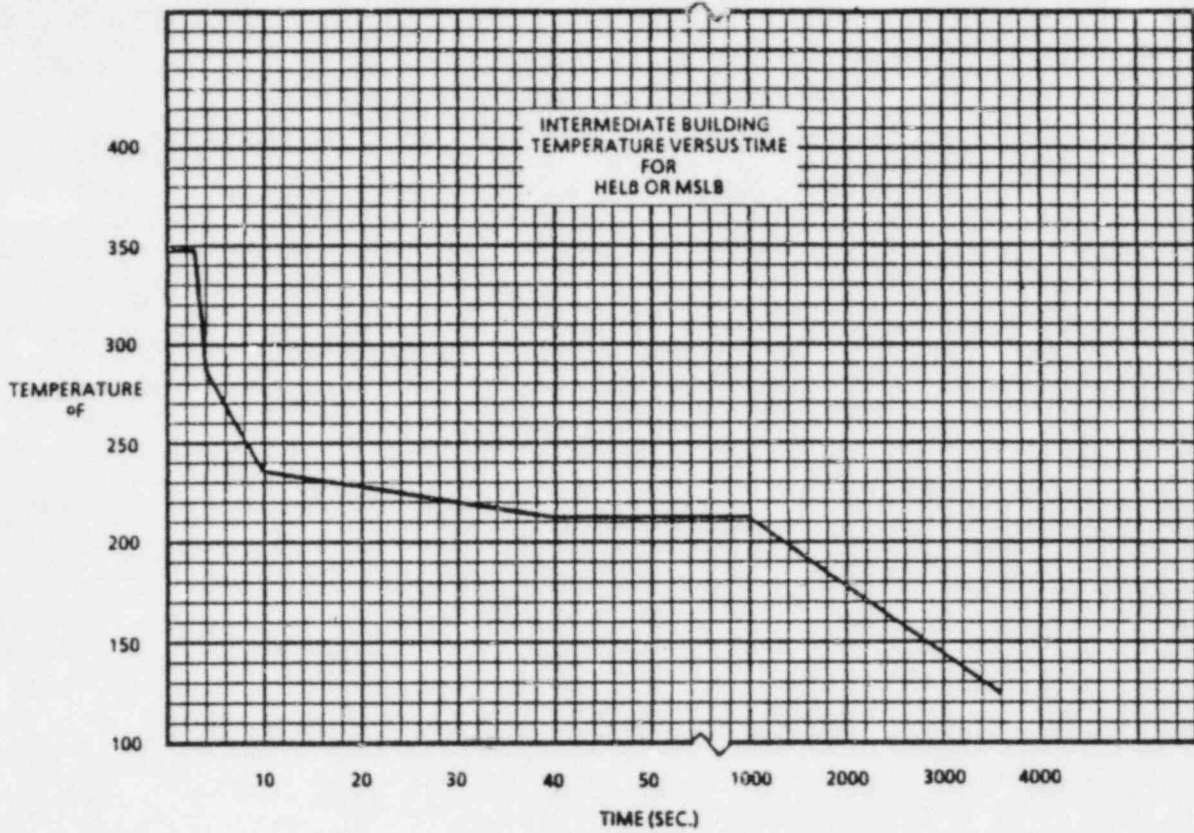
Date 4/83

DESCRIPTION: Elev. 119' - Intermediate Building, Pressurizer Cabinet Area, To Column 308

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)		
	<u>Hours/Year</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>	<u>Time</u>		<u>Temp.</u>
Temperature (°F)	3723 3368 1521 148	100 to 140 85 to 99 85 to 94 70 to 84	N/A		0-2 2-4 4-10 10-40 40-1000 1000-3600 1 Hr-6 Mo	Sec Sec Sec Sec Sec Sec	345 345-287 287-240 240-212 212 212 - Amb. Ambient
Pressure (PSIG)	Atmospheric		<u>Time</u> N/A	<u>Press.</u>	<u>Time</u> 0-2 2-40 40-1000 1000-3600 1 Hr-6 Mo	Sec Sec Sec Sec	<u>Press.</u> 2.85 2.85-0.5 0.5 0.5-0 0
Relative Humidity (%)	20 to 80		N/A		<u>Time</u> 0-1 Hr 1-2 Hr 2 Hr-6 Mo		<u>%</u> 100 100-90 90
Chemical Spray (pH)	N/A		N/A		N/A		
Radiation (Rads)	<u>40 Year Dose</u> 1.0 x 10 ⁴		<u>Time Post Accident</u> 1 Hr 1 Day 5 Days 30 Days 6 Months	<u>Dose</u> 1.1 x 10 ¹ 3.5 x 10 ¹ 6.4 x 10 ¹ 1.3 x 10 ² 2.5 x 10 ²	N/A		
Submergence (Flood Level)	N/A		N/A	40 Yr. Total + 6 Mo. = 1.0 x 10 ⁴ Total	N/A		

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES:



FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 18

Zone Environmental Data

Revision 1

Date 4/83

DESCRIPTION: Elev. 95' - Intermediate Building, Area Adjacent To Nuclear Sample Room

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)	
	<u>Hours/Year</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>
Temperature (°F)	189 4959 3464 148 Note 1	90 to 95 80 to 89 70 to 79 65 to 69	N/A		N/A	
Pressure (PSIG)	Atmospheric		<u>Time</u> N/A	<u>Press.</u>	<u>Time</u> N/A	<u>Press.</u>
Relative Humidity (%)	20 to 90		N/A		N/A	
Chemical Spray (pH)	N/A		N/A		N/A	
Radiation (Rads)	<u>40 Year Dose</u> 1.0 x 10 ⁴		<u>Time Post Accident</u> 1 Hr 1 Day 5 Days 30 Days 6 Months 40 Yr. Total + 6 Mo. = 5.6 x 10 ⁴ Total	<u>Dose</u> 2.2 x 10 ³ 7.0 x 10 ³ 1.3 x 10 ⁴ 2.4 x 10 ⁴ 4.6 x 10 ⁴	N/A	
Submergence (Flood Level)	N/A		N/A		N/A	

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES: (1) Allow 24 hours per year at 110°F for postulated HVAC system failures

FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 19

Zone Environmental Data

Revision 1

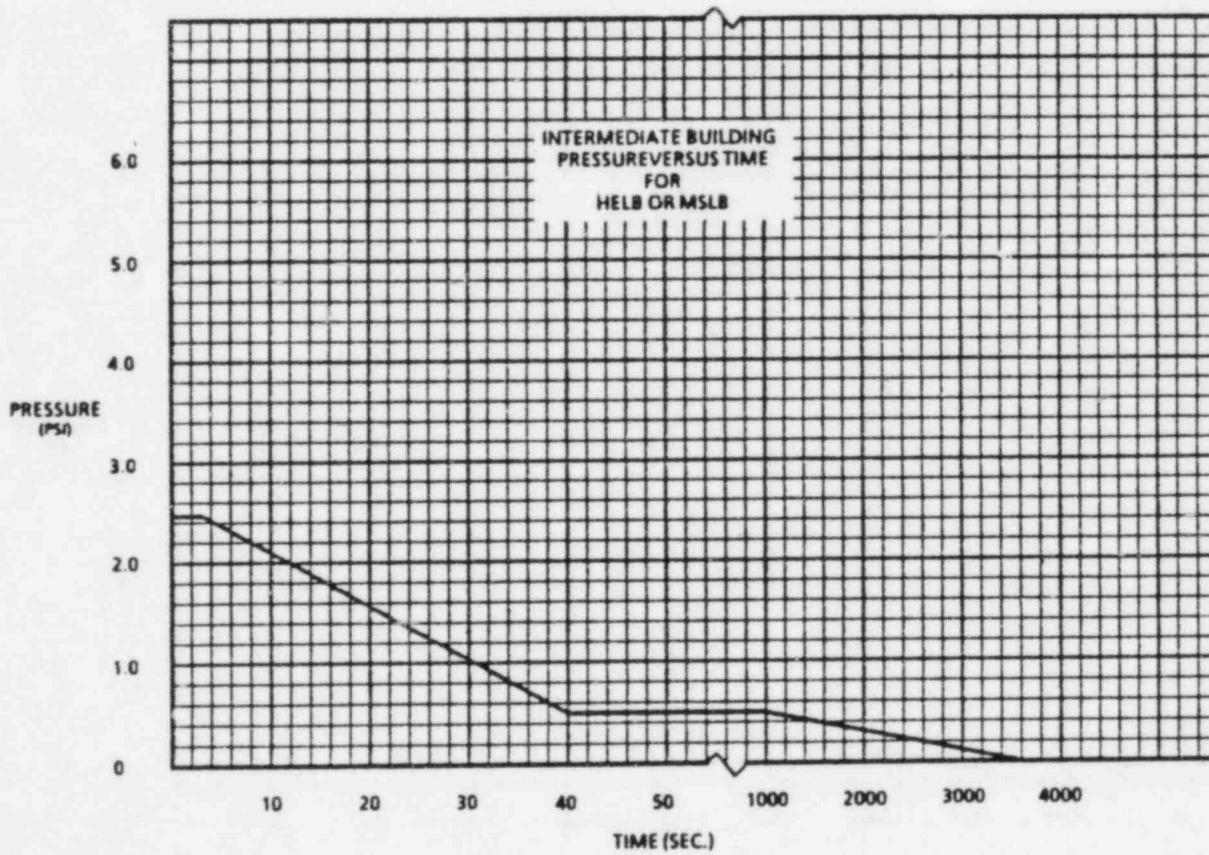
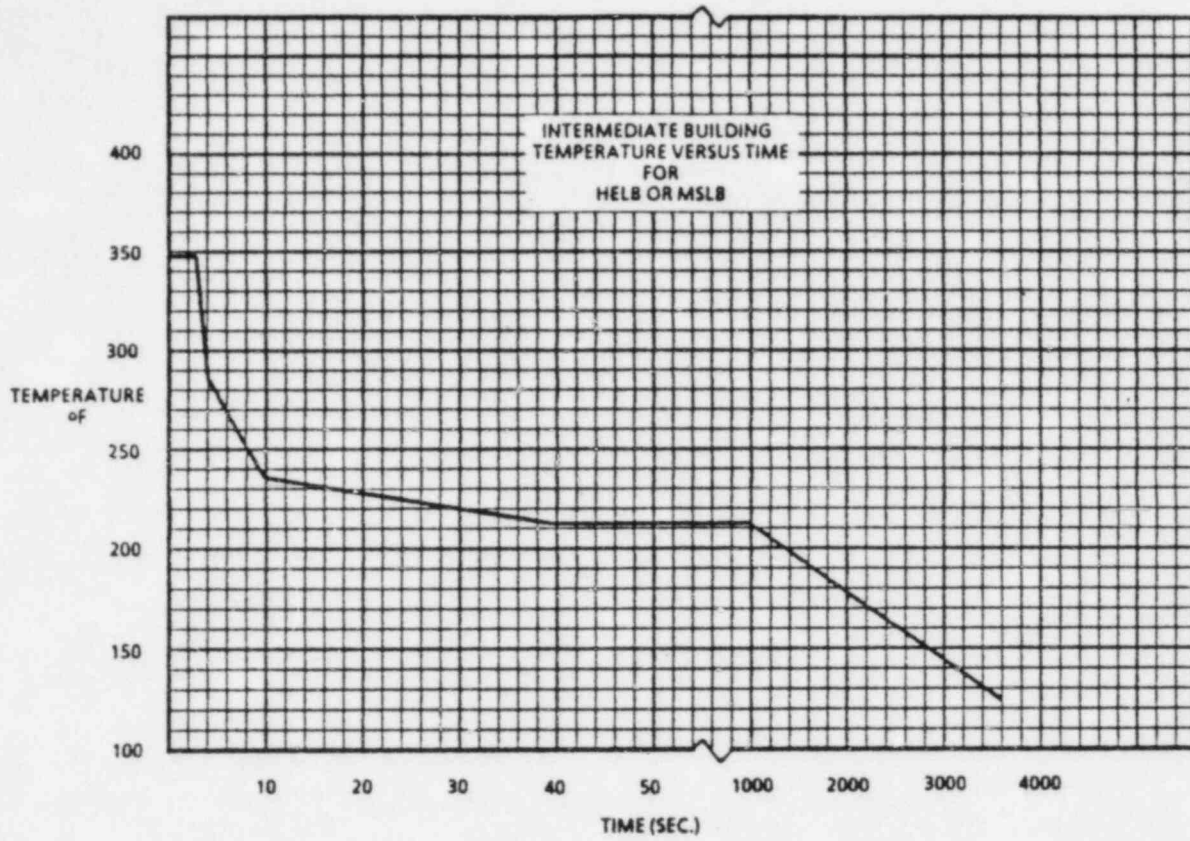
Date 4/83

DESCRIPTION: Elev. 95' - Intermediate Building, Supply Fan Area

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)		
Temperature (°F)	<u>Hours/Year</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>	<u>Time</u>		<u>Temp.</u>
	189	90 to 99	N/A		0-2	Sec	345
	4959	80 to 89			2-4	Sec	345-287
	3464	70 to 79			4-10	Sec	287-240
	148	55 to 69			10-40	Sec	240-212
Note 1				40-1000	Sec	212	
				1000-3600	Sec	212 - Amb.	
				1 Hr-6 Mo		Ambient	
Pressure (PSIG)	Atmospheric		<u>Time</u>	<u>Press.</u>	<u>Time</u>		<u>Press.</u>
			N/A		0-2	Sec	2.43
					2-40	Sec	2.43-0.5
					40-1000	Sec	0.5
					1000-3600	Sec	0.5-0
		1 Hr-6 Mo		0			
Relative Humidity (%)	20 to 90		N/A		<u>Time</u>		<u>%</u>
					0-1 Hr		100
					1-2 Hr		100-90
					2 Hr-6 Mo		90
Chemical Spray (pH)	N/A		N/A				N/A
Radiation (Rads)	<u>40 Year Dose</u>		<u>Time Post Accident</u>	<u>Dose</u>	N/A		
			1 Hr	1.2×10^2			
			1 Day	3.8×10^2			
			5 Days	6.9×10^2			
			30 Days	1.3×10^3			
			6 Months	2.6×10^3			
			40 Yr. Total + 6 Mo. =	1.3×10^4 Total			
Submergence (Flood Level)	N/A		N/A				N/A

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES: (1) Allow 24 hours per year at 110°F for postulated HVAC system failures



FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 20

Zone Environmental Data

Revision 1

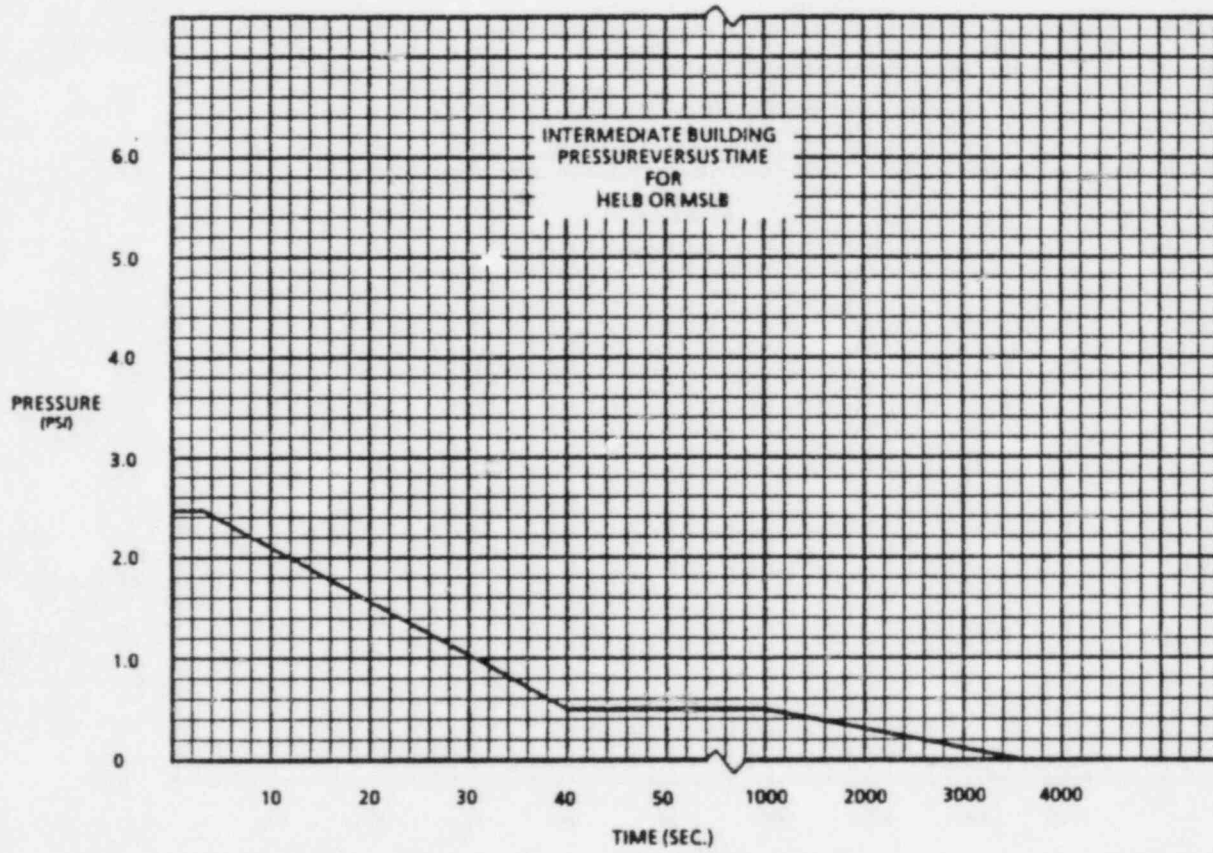
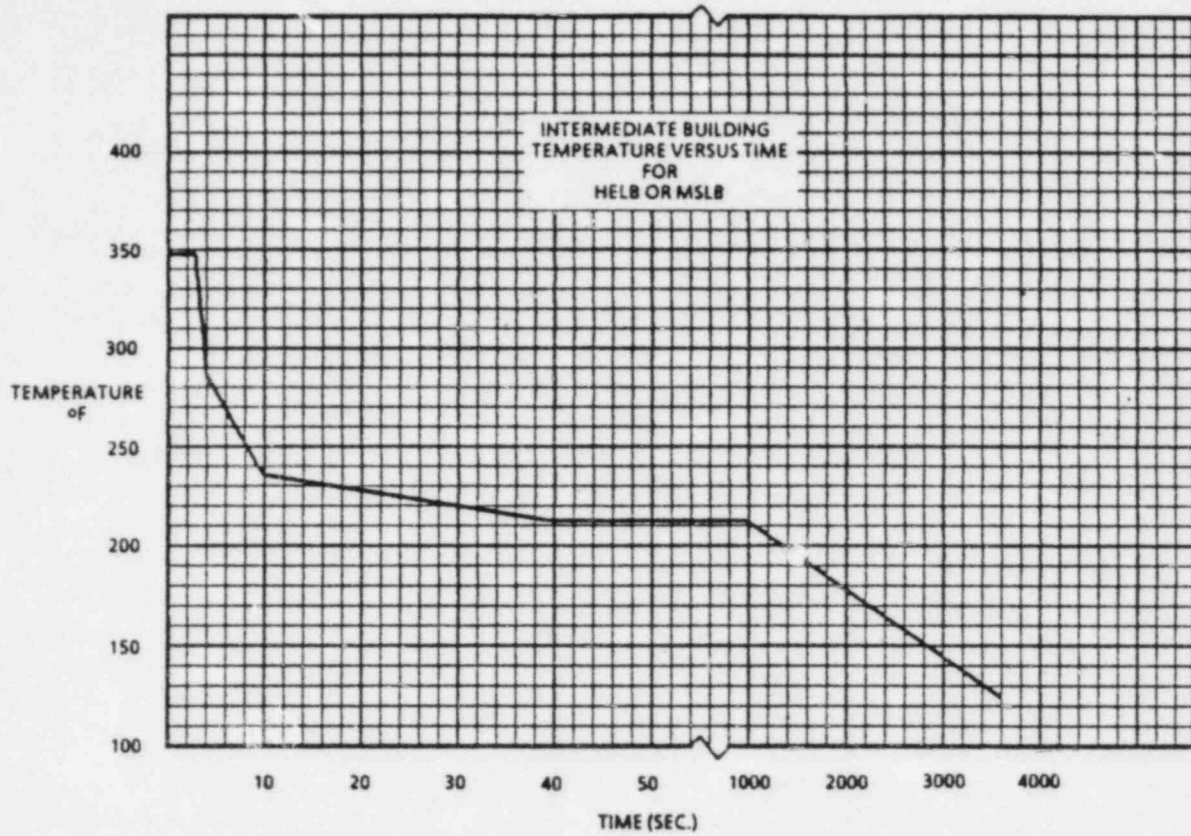
Date 4/83

DESCRIPTION: Elev. 95' - Intermediate Building, Adjacent To Column 306

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)		
	Hours/Year	Temp.	Time	Temp.	Time	Sec	Temp.
Temperature (°F)	5 890 4253 3464 148 Note 1	95 to 99 85 to 94 80 to 84 70 to 79 55 to 69	N/A		0-2 2-4 4-10 10-40 40-1000 1000-3600 1 Hr-6 Mo	Sec	345 345-287 287-240 240-212 212 212 - Amb. Ambient
Pressure (PSIG)	Atmospheric		Time N/A	Press.	Time	Sec	Press.
					0-2 2-40 40-1000 1000-3600 1 Hr-6 Mo		2.43 2.43-0.5 0.5 0.5-0 0
Relative Humidity (%)	20 to 90		N/A		Time		%
					0-1 Hr 1-2 Hr 2 Hr-6 Mo		100 100-90 90
Chemical Spray (pH)	N/A		N/A		N/A		
Radiation (Rads)	<u>40 Year Dose</u> 3.5 x 10 ³		Time Post Accident	Dose	N/A		
			1 Hr 1 Day 5 Days 30 Days 6 Months	3.0 x 10 ² 6.3 x 10 ² 1.8 x 10 ³ 3.5 x 10 ³ 6.5 x 10 ³			
			40 Yr. Total + 6 Mo. = 1.0 x 10 ⁴ Total				
Submergence (Flood Level)	N/A		N/A		N/A		

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES: (1) Allow 24 hours per year at 110°F for postulated HVAC system failures



FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 21

Zone Environmental Data

Revision 1

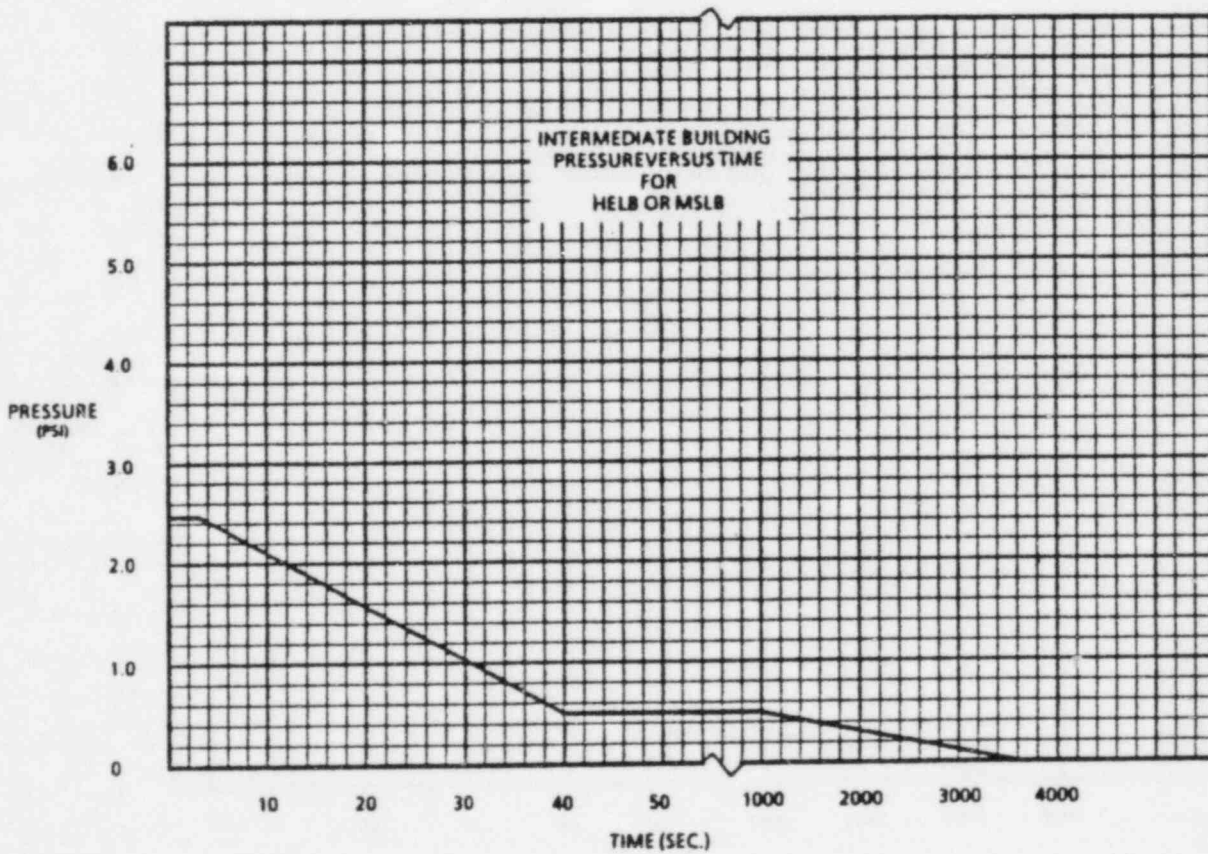
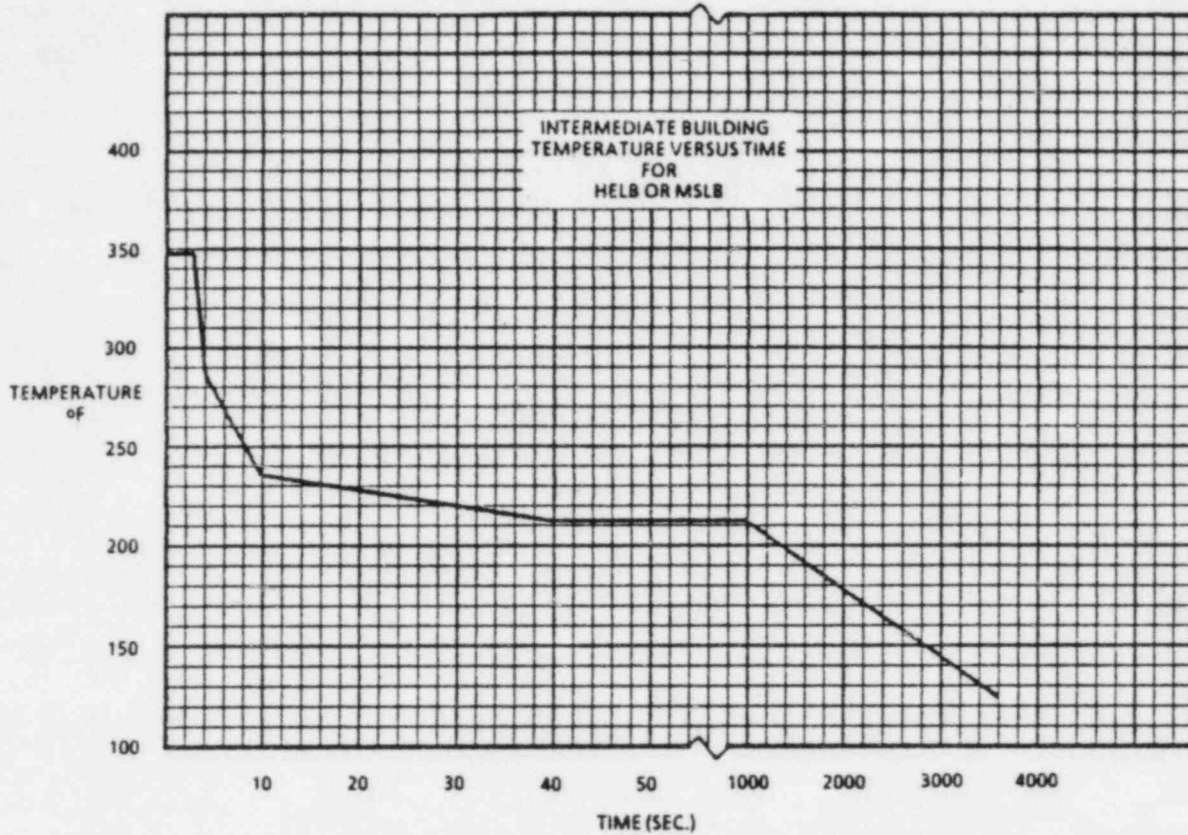
Date 4/83

DESCRIPTION: Elev. 119' - Intermediate Building, H & V MCC Area, Adjacent To Column 306

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)		
Temperature (°F)	<u>Hours/Year</u> 5 3718 4415 622	<u>Temp.</u> 105 to 115 95 to 104 85 to 94 75 to 84	<u>Time</u> N/A	<u>Temp.</u>	<u>Time</u> 0-2 2-4 4-10 10-40 40-1000 1000-3600 1 Hr-6 Mo	<u>Sec</u>	<u>Temp.</u> 345 345-287 287-240 240-212 212 212 - Amb. Ambient
Pressure (PSIG)	Atmospheric		<u>Time</u> N/A	<u>Press.</u>	<u>Time</u> 0-2 2-40 40-1000 1000-3600 1 Hr-6 Mo	<u>Sec</u>	<u>Press.</u> 3.18 3.18-0.5 0.5 0.5-0 0
Relative Humidity (%)	20 to 80		N/A		<u>Time</u> 0-1 Hr 1-2 Hr 2 Hr-6 Mo		<u>%</u> 100 100-90 90
Chemical Spray (pH)	N/A		N/A		N/A		
Radiation (Rads)	<u>40 Year Dose</u> 1.0 x 10 ⁴		<u>Time Post Accident</u> 1 Hr 1 Day 5 Days 30 Days 6 Months 40 Yr. Total + 6 Mo. = 1.0 x 10 ⁴ Total	<u>Dose</u> Note 1	N/A		
Submergence (Flood Level)	N/A		N/A		N/A		

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES: (1) Total 6 Month Integrated Accident Dose < 100 RADS



FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 22

Zone Environmental Data

Revision 1

Date 4/83

DESCRIPTION: Elev. 119' - Auxiliary Building, Penetration Area

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)	
	<u>Hours/Year</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>
Temperature (°F)	189 4959 1943 1521 148 Note 1	90 to 100 85 to 89 75 to 84 70 to 75 65 to 70	N/A		N/A	
Pressure (PSIG)	Atmospheric		<u>Time</u> N/A	<u>Press.</u>	<u>Time</u> N/A	<u>Press.</u>
Relative Humidity (%)	20 to 90		N/A		N/A	
Chemical Spray (pH)	N/A		N/A		N/A	
Radiation (Rads)	<u>40 Year Dose</u> 1.2 x 10 ⁶		<u>Time Post Accident</u> 1 Hr 1 Day 5 Days 30 Days 6 Months 40 Yr. Total + 6 Mo. = 2.4 x 10 ⁶ Total	<u>Dose</u> 5.5 x 10 ⁴ 1.7 x 10 ⁵ 3.2 x 10 ⁵ 6.1 x 10 ⁵ 1.2 x 10 ⁶	N/A	
Submergence (Flood Level)	N/A		N/A		N/A	

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES: (1) Allow 24 hours per year at 115°F for postulated HVAC system failures

FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 23

Zone Environmental Data

Revision 1

Date 4/83

DESCRIPTION: Elev. 119' - Auxiliary Building, Boric Acid Storage Tank Room

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)	
	<u>Hours/Year</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>
Temperature (°F)	189 3535 4415 622 Note 1	90 to 95 80 to 89 70 to 79 65 to 70	N/A		N/A	
Pressure (PSIG)	Atmospheric		<u>Time</u> N/A	<u>Press.</u>	<u>Time</u> N/A	<u>Press.</u>
Relative Humidity (%)	20 to 80		N/A		N/A	
Chemical Spray (pH)	N/A		N/A		N/A	
Radiation (Rads)	<u>40 Year Dose</u> 1.0 × 10 ⁴		<u>Time Post Accident</u> 1 Hr 1 Day 5 Days 30 Days 6 Months	<u>Dose</u> 5.5 × 10 ² 1.9 × 10 ³ 3.4 × 10 ³ 6.8 × 10 ³ 1.4 × 10 ⁴	N/A	
Submergence (Flood Level)	N/A			40 Yr. Total + 6 Mo. = 2.4 × 10 ⁴ Total		N/A

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES: (1) Allow 24 hours per year at 115°F for postulated HVAC system failures

FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 24

Zone Environmental Data

Revision 1

Date 4/83

DESCRIPTION: Elev. 119' - Auxiliary Building, Boric Acid Storage Tank Room (East of Column 302)

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)	
	Hours/Year	Temp.	Time	Temp.	Time	Temp.
Temperature (°F)	189 3534 4415 622 Note 1	90 to 95 80 to 89 70 to 79 65 to 70	N/A		N/A	
Pressure (PSIG)	Atmospheric		Time N/A	Press.	Time N/A	Press.
Relative Humidity (%)	20 to 90		N/A		N/A	
Chemical Spray (pH)	N/A		N/A		N/A	
Radiation (Rads)	<u>40 Year Dose</u> 1.0 x 10 ⁴		Time Post Accident 1 Hr 1 Day 5 Days 30 Days 6 Months 40 Yr. Total + 6 Mo. = 2.6 x 10 ⁴ Total	Dose 7.8 x 10 ² 2.4 x 10 ³ 4.3 x 10 ³ 8.3 x 10 ³ 1.6 x 10 ⁴	N/A	
Submergence (Flood Level)	N/A		N/A		N/A	

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES: (1) Allow 24 hours per year at 115°F for postulated HVAC system failures

FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 25

Zone Environmental Data

Revision 1

Date 4/83

DESCRIPTION: Elev. 119' - Auxiliary Building, Hallway Outside Make-up Tank Room

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)	
Temperature (°F)	<u>Hours/Year</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>
	189	90 to 95	N/A		N/A	
	3534	80 to 89				
	4415	70 to 79				
	622	65 to 70				
	Note 1					
Pressure (PSIG)	Atmospheric		<u>Time</u>	<u>Press.</u>	<u>Time</u>	<u>Press.</u>
			N/A		N/A	
Relative Humidity (%)	20 to 90		N/A		N/A	
Chemical Spray (pH)	N/A		N/A		N/A	
Radiation (Rads)	<u>40 Year Dose</u>		<u>Time Post Accident</u>		<u>Dose</u>	
	1.0 × 10 ⁴		1 Hr	6.8 × 10 ⁰		
			1 Day	2.2 × 10 ¹		
			5 Days	3.9 × 10 ¹		
			30 Days	7.6 × 10 ¹		
			6 Months	1.5 × 10 ²		
			40 Yr. Total + 6 Mo. = 1.0 × 10 ⁴ Total			
Submergence (Flood Level)	N/A		N/A		N/A	

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES: (1) Allow 24 hours per year at 115°F for postulated HVAC system failures

FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 26

Zone Environmental Data

Revision 1

Date 4/83

DESCRIPTION: Elev. 119' - Auxiliary Building, Boric Acid Storage Tank Room By Waste Press

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)	
Temperature (°F)	<u>Hours/Year</u> 189 3534 4415 622 Note 1	<u>Temp.</u> 90 to 99 80 to 89 70 to 79 65 to 70	<u>Time</u> N/A	<u>Temp.</u>	<u>Time</u> N/A	<u>Temp.</u>
Pressure (PSIG)	Atmospheric		<u>Time</u> N/A	<u>Press.</u>	<u>Time</u> N/A	<u>Press.</u>
Relative Humidity (%)	20 to 90		N/A		N/A	
Chemical Spray (pH)	N/A		N/A		N/A	
Radiation (Rads)	<u>40 Year Dose</u> 1.0 × 10 ⁴		<u>Time Post Accident</u>	<u>Dose</u>	N/A	
			1 Hr	1.8 × 10 ¹		
			1 Day	5.8 × 10 ¹		
			5 Days	1.0 × 10 ²		
			30 Days	2.0 × 10 ²		
			6 Months	3.9 × 10 ²		
			40 Yr. Total + 6 Mo. = 1.0 × 10 ⁴ Total			
Submergence (Flood Level)	N/A		N/A		N/A	

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES: (1) Allow 24 hours per year at 115°F for postulated HVAC system failures

FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 27

Zone Environmental Data

Revision 1

Date 4/83

DESCR. V: Elev. 119' - Diesel Generator Building

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)	
	<u>Hours/Year</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>
Temperature (°F)	189 6041 1908 622	100 to 105 90 to 99 80 to 89 70 to 79	N/A		N/A	
Pressure (PSIG)	Atmospheric		<u>Time</u> N/A	<u>Press.</u>	<u>Time</u> N/A	<u>Press.</u>
Relative Humidity (%)	20 to 90		N/A		N/A	
Chemical Spray (pH)	N/A		N/A		N/A	
Radiation (Rads)	<u>40 Year Dose</u> 1.0 x 10 ⁴		<u>Time Post Accident</u> 1 Hr 1 Day 5 Days 30 Days 6 Months 40 Yr. Total + 6 Mo. = 1.0 x 10 ⁴ Total	<u>Dose</u> N/A	N/A	
Submergence (Flood Level)	N/A		N/A		N/A	

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES:

FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 28

Zone Environmental Data

Revision 1

Date 4/83

DESCRIPTION: Elev. 119' - Auxiliary Building, Makeup And Purification Prefilter Area

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)	
	<u>Hours/Year</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>
Temperature (°F)	189 4959 2990 622 Note 1	90 to 99 80 to 89 70 to 79 65 to 70	N/A		N/A	
Pressure (PSIG)	Atmospheric		<u>Time</u> N/A	<u>Press.</u>	<u>Time</u> N/A	<u>Press.</u>
Relative Humidity (%)	20 to 90		N/A		N/A	
Chemical Spray (pH)	N/A		N/A		N/A	
Radiation (Rads)	<u>40 Year Dose</u> 1.0 × 10 ⁴		<u>Time Post Accident</u> 1 Hr 1 Day 5 Days 30 Days 6 Months	<u>Dose</u> 6.8 × 10 ³ 2.2 × 10 ⁴ 3.9 × 10 ⁴ 7.6 × 10 ⁴ 1.5 × 10 ⁵	N/A	
			40 Yr. Total + 6 Mo. = 1.6 × 10 ⁵ Total			
Submergence (Flood Level)	N/A		N/A		N/A	

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES: (1) Allow 24 hours per year at 115°F for postulated HVAC system failures

FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 29

Zone Environmental Data

Revision 1

Date 4/83

DESCRIPTION: Elev. 119' - Auxiliary Building, Boric Acid Recirc Pump Room & Radioactive Waste Packaging Area

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)	
	<u>Hours/Year</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>
Temperature (°F)	189 4959 1943 1047 622 Note 2	90 to 99 80 to 89 70 to 79 65 to 69 60 to 65	N/A		N/A	
Pressure (PSIG)	Atmospheric		N/A		N/A	
Relative Humidity (%)	20 to 90		N/A		N/A	
Chemical Spray (pH)	N/A		N/A		N/A	
Radiation (Rads)	<u>40 Year Dose</u> 1.0 x 10 ⁴		Time Post Accident 1 Hr 1 Day 5 Days 30 Days 6 Months 40 Yr. Total + 6 Mo. = 1.0 x 10 ⁴ Total	<u>Dose</u> Note 1	N/A	
Submergence (Flood Level)	N/A		N/A		N/A	

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES: (1) Total 6 Months Integrated Accident Dose \leq 100RADS.

(2) Allow 24 hours per year at 115°F for postulated HVAC system failures

FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 30

Zone Environmental Data

Revision 1

Date 4/83

DESCRIPTION: Elev. 119' - Auxiliary Building, Makeup Annd Purification Filter Area

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)	
Temperature (°F)	<u>Hours/Year</u> 189 4959 2990 622 Note 2	<u>Temp.</u> 90 to 99 80 to 89 71 to 79 65 to 70	<u>Time</u> N/A	<u>Temp.</u>	<u>Time</u> N/A	<u>Temp.</u>
Pressure (PSiG)	Atmospheric		<u>Time</u> N/A	<u>Press.</u>	<u>Time</u> N/A	<u>Press.</u>
Relative Humidity (%)	20 to 90		N/A		N/A	
Chemical Spray (pH)	N/A		N/A		N/A	
Radiation (Rads)	<u>40 Year Dose</u> 3.5 x 10 ⁸		<u>Time Post Accident</u> 1 Hr 1 Day 5 Days 30 Days 6 Months 40 Yr. Total + 6 Mo. = 3.5 x 10 ⁸ Total	<u>Dose</u> Note 1	N/A	
Submergence (Flood Level)	N/A		N/A		N/A	

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES: (1) Total 6 Month Integrated Accident Dose ≤ 100RADS.

(2) Allow 24 hours per year at 115°F for postulated HVAC system failures

FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 31

Zone Environmental Data

Revision 1

Date 4/83

DESCRIPTION: Elev. 143' - Auxiliary Building, Exhaust Fan Room

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)	
Temperature (°F)	<u>Hours/Year</u> 895 2828 4889 148 Note 2	<u>Temp.</u> 85 to 95 75 to 84 60 to 74 55 to 59	<u>Time</u> N/A	<u>Temp.</u>	<u>Time</u> N/A	<u>Temp.</u>
Pressure (PSIG)	Atmospheric		<u>Time</u> N/A	<u>Press.</u>	<u>Time</u> N/A	<u>Press.</u>
Relative Humidity (%)	20 to 90		N/A		N/A	
Chemical Spray (pH)	N/A		N/A		N/A	
Radiation (Rads)	<u>40 Year Dose</u> 1.0 x 10 ⁴		<u>Time Post Accident</u> 1 Hr 1 Day 5 Days 30 Days 6 Months 40 Yr. Total + 6 Mo. = 1.0 x 10 ⁴ Total	<u>Dose</u> Note 1	N/A	
Submergence (Flood Level)	N/A		N/A		N/A	

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES: (1) Total 6 Month Integrated Accident Dose ≤ 100RADS

(2) Allow 24 hours per year at 115°F for postulated HVAC system failures

FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 32

Zone Environmental Data

Revision 1

DESCRIPTION: Elev. 143' - Auxiliary Building, Demin. Water Pump
And Evap. Condensate Tank Room

Date 4/83

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)	
Temperature (°F)	<u>Hours/Year</u> 189 1817 5085 1669 Note 2	<u>Temp.</u> 95 to 99 80 to 94 70 to 79 55 to 69	<u>Time</u> N/A	<u>Temp.</u>	<u>Time</u> N/A	<u>Temp.</u>
Pressure (PSIG)	Atmospheric		<u>Time</u> N/A	<u>Press.</u>	<u>Time</u> N/A	<u>Press.</u>
Relative Humidity (%)	20 to 90		N/A		N/A	
Chemical Spray (pH)	N/A		N/A		N/A	
Radiation (Rads)	<u>40 Year Dose</u> 1.0 × 10 ⁴		<u>Time Post Accident</u> 1 Hr 1 Day 5 Days 30 Days 6 Months 40 Yr. Total + 6 Mo. = 1.0 × 10 ⁴ Total	<u>Dose</u> Note 1	N/A	
Submergence (Flood Level)	N/A		N/A		N/A	

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES: (1) Total 6 Month Integrated Accident Dose ≤ 100RADS.

(2) Allow 24 hours per year at 115°F for postulated HVAC system failures

FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 33

Zone Environmental Data

Revision 1

Date 4/83

DESCRIPTION: Elev. 143' - Auxiliary Building, Spent Fuel Cooler Area

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)	
Temperature (°F)	<u>Hours/Year</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>
	189	95 to 99	N/A		N/A	
	1817	85 to 94				
	5085	70 to 84				
	1669	55 to 69				
	Note 2					
Pressure (PSIG)	Atmospheric		<u>Time</u>	<u>Press.</u>	<u>Time</u>	<u>Press.</u>
			N/A		N/A	
Relative Humidity (%)	20 to 90		N/A		N/A	
Chemical Spray (pH)	N/A		N/A		N/A	
Radiation (Rads)	<u>40 Year Dose</u>		<u>Time Post Accident</u>	<u>Dose</u>	N/A	
	1.0 x 10 ⁴		1 Hr	Note 1		
			1 Day			
			5 Days			
			30 Days			
			6 Months			
			40 Yr. Total + 6 Mo. =			
			1.0 x 10 ⁴ Total			
Submergence (Flood Level)	N/A		N/A		N/A	

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES: (1) Total 6 Month Integrated Accident Dose \leq 100RADS.

(2) Allow 24 hours per year at 115°F for postulated HVAC system failures

FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 34

Zone Environmental Data

Revision 1

DESCRIPTION: Elev. 95' - Auxiliary Building, Hallway Outside Make-up Pump Rooms,
Between Columns J and K

Date 4/83

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)	
	<u>Hours/Year</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>
Temperature (°F)	189 7517 906 148 Note 1	90 to 97 75 to 89 70 to 75 65 to 69	N/A		N/A	
Pressure (PSIG)	Atmospheric		<u>Time</u> N/A	<u>Press.</u>	<u>Time</u> N/A	<u>Press.</u>
Relative Humidity (%)	20 to 90		N/A		N/A	
Chemical Spray (pH)	N/A		N/A		N/A	
Radiation (Rads)	<u>40 Year Dose</u> 1.0 x 10 ⁴		<u>Time Post Accident</u> 1 Hr 1 Day 5 Days 30 Days 6 Months	<u>Dose</u> 1.5 x 10 ³ 5.0 x 10 ³ 9.0 x 10 ³ 1.8 x 10 ⁴ 3.4 x 10 ⁴	N/A	
Submergence (Flood Level)	N/A		N/A		N/A	
			40 Yr. Total + 6 Mo. = 4.4 x 10 ⁴ Total			

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES: (1) Allow 24 hours per year at 115°F for Postulated HVAC system failures

FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 35

Zone Environmental Data

Revision 1

Date 4/83

DESCRIPTION: Elev. 95' - Auxiliary Building, Hall Outside Waste Evaporator Room

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)	
	<u>Hours/Year</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>
Temperature (°F)	189 6902 1521 148 Note 1	90 to 95 75 to 89 70 to 74 65 to 69	N/A		N/A	
Pressure (PSIG)	Atmospheric		<u>Time</u> N/A	<u>Press.</u>	<u>Time</u> N/A	<u>Press.</u>
Relative Humidity (%)	20 to 90		N/A		N/A	
Chemical Spray (pH)	N/A		N/A		N/A	
Radiation (Rads)	<u>40 Year Dose</u> 1.0 × 10 ⁴		<u>Time Post Accident</u> 1 Hr 1 Day 5 Days 30 Days 6 Months	<u>Dose</u> 5.1 × 10 ³ 1.7 × 10 ⁴ 3.0 × 10 ⁴ 5.9 × 10 ⁴ 1.1 × 10 ⁵	N/A	
Submergence (Flood Level)	N/A		N/A		N/A	
			40 Yr. Total + 6 Mo. = 1.2 × 10 ⁵ Total			

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES: (1) Allow 24 hours per year at 115°F for Postulated HVAC system failures

FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 36

Zone Environmental Data

Revision 1

Date 4/83

DESCRIPTION: Elev. 95' - Auxiliary Building, RC Coolant Pump Seal Injection Filter Area

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)	
Temperature (°F)	<u>Hours/Year</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>
	189	90 to 95	N/A		N/A	
	6902	75 to 89				
	1521	70 to 74				
	148	65 to 69				
	Note 1					
Pressure (PSIG)	Atmospheric		<u>Time</u>	<u>Press.</u>	<u>Time</u>	<u>Press.</u>
			N/A		N/A	
Relative Humidity (%)	20 to 90		N/A		N/A	
Chemical Spray (pH)	N/A		N/A		N/A	
Radiation (Rads)	<u>40 Year Dose</u>		<u>Time Post Accident</u>		<u>Dose</u>	
	1.0 × 10 ⁸		1 Hr	8.3 × 10 ³		
			1 Day	2.6 × 10 ⁴		
			5 Days	4.7 × 10 ⁴		
			30 Days	8.9 × 10 ⁴		
			6 Months	1.7 × 10 ⁵		
			40 Yr. Total + 6 Mo. = 1.0 × 10 ⁸ Total			
Submergence (Flood Level)	N/A		N/A		N/A	

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES: (1) Allow 24 hours per year at 115°F for Postulated HVAC system failures

FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 37

Zone Environmental Data

Revision 1

Date 4/83

DESCRIPTION: Elev. 143' - Auxiliary Building, Containment Penetration Area

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)	
Temperature (°F)	<u>Hours/Year</u> 189 1817 5085 1669 Note 1	<u>Temp.</u> 95 to 99 85 to 94 70 to 84 55 to 69	<u>Time</u> N/A	<u>Temp.</u>	<u>Time</u> N/A	<u>Temp.</u>
Pressure (PSIG)	Atmospheric		<u>Time</u> N/A	<u>Press.</u>	<u>Time</u> N/A	<u>Fress.</u>
Relative Humidity (%)	20 to 90		N/A		N/A	
Chemical Spray (pH)	N/A		N/A		N/A	
Radiation (Rads)	<u>40 Year Dose</u> 1.0 x 10 ⁴		<u>Time Post Accident</u>	<u>Dose</u>	N/A	
			1 Hr	7.4 x 10 ⁰		
			1 Day	2.4 x 10 ¹		
			5 Days	4.3 x 10 ¹		
			30 Days	8.2 x 10 ¹		
			6 Months	1.6 x 10 ²		
			40 Yr. Total + 6 Mo. = 1.0 x 10 ⁴ Total			
Submergence (Flood Level)	N/A		N/A		N/A	

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES: (1) Allow 24 hours per year at 115°F for postulated HVAC system failures

FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 38

Zone Environmental Data

Revision 1

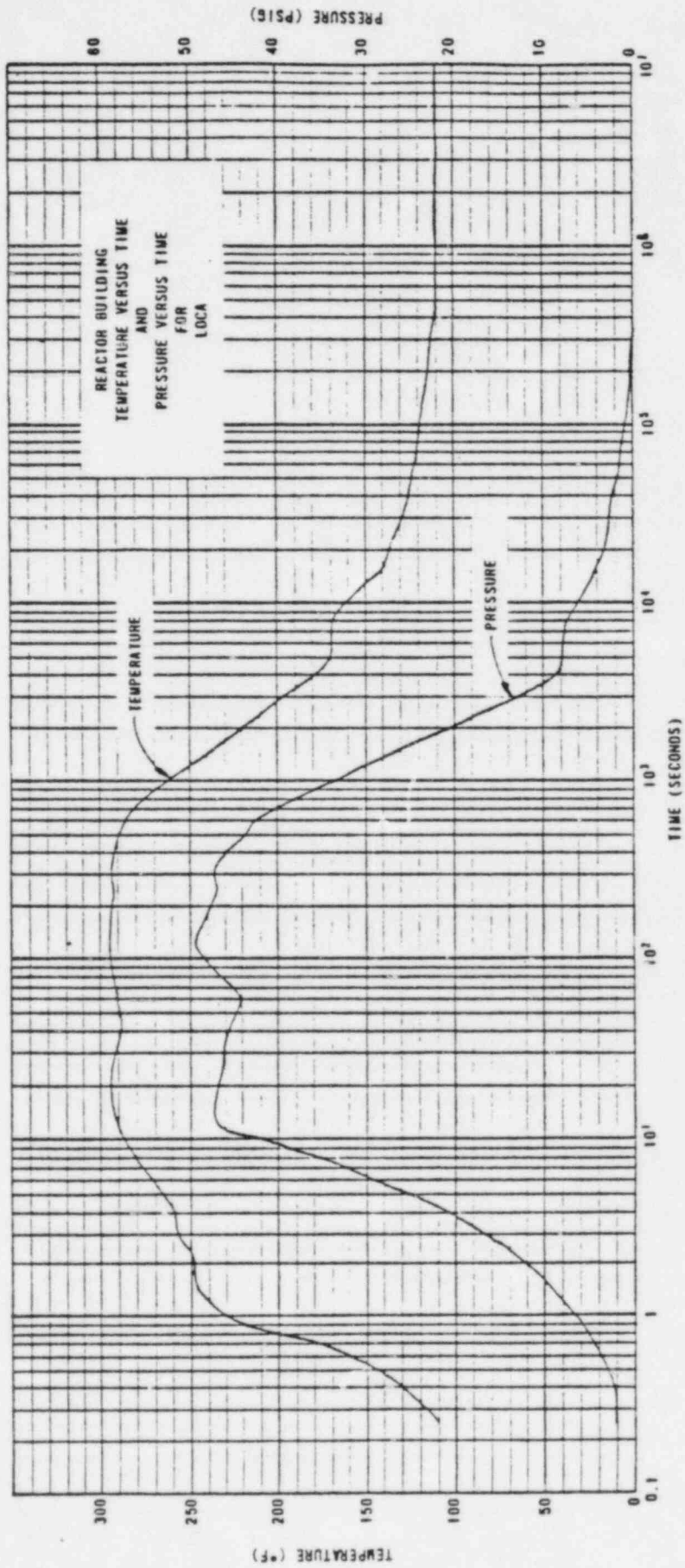
Date 4/83

DESCRIPTION: Elev. 95' - Reactor Building

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)	
	<u>Hours/Year</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>
Temperature (°F)	5129 2663 424 30 60	100 to 109 90 to 99 80 to 89 70 to 79 Below 70	0-10 sec 10-150 sec 150-400 sec 400-5000 sec 5000-8000 sec 8000 sec - 24 hr	110-298 298 298-294 294-171 171 171-110	N/A	
Pressure (PSIG)	Atmospheric		<u>Time</u> 0-10 sec 10-150 sec 150-400 sec 400-5000 sec 5000-8000 sec 8000 sec-24 hr	<u>Press.</u> 0-49.6 49.6 49.6-46.5 46.5-7.7 7.7 7.7-0	<u>Time</u> N/A	<u>Press.</u>
Relative Humidity (%)	(Data not available)		100		N/A	
Chemical Spray (pH)	N/A		2200 to 2450 ppm boron, 105,000 to 120,000 ppm NaOH, pH 7.4 to 11.0		N/A	
Radiation (Rads)	<u>40 Year Dose</u> 1.4 x 10 ⁷		<u>Time Post Accident:</u> 1 Hr 1 Day 5 Days 30 Days 6 Months 40 Yr. Total + 6 Mo. = 1.9 x 10 ⁸ Total	<u>Dose</u> 1.4 x 10 ⁷ 5.5 x 10 ⁷ 7.3 x 10 ⁷ 9.2 x 10 ⁷ 1.8 x 10 ⁸	N/A	
Submergence (Flood Level)	N/A		Below 100' elevation immersed in water containing boron and NaOH. pH 8.0 to 11.0		N/A	

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES:



FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 39

Zone Environmental Data

Revision 1

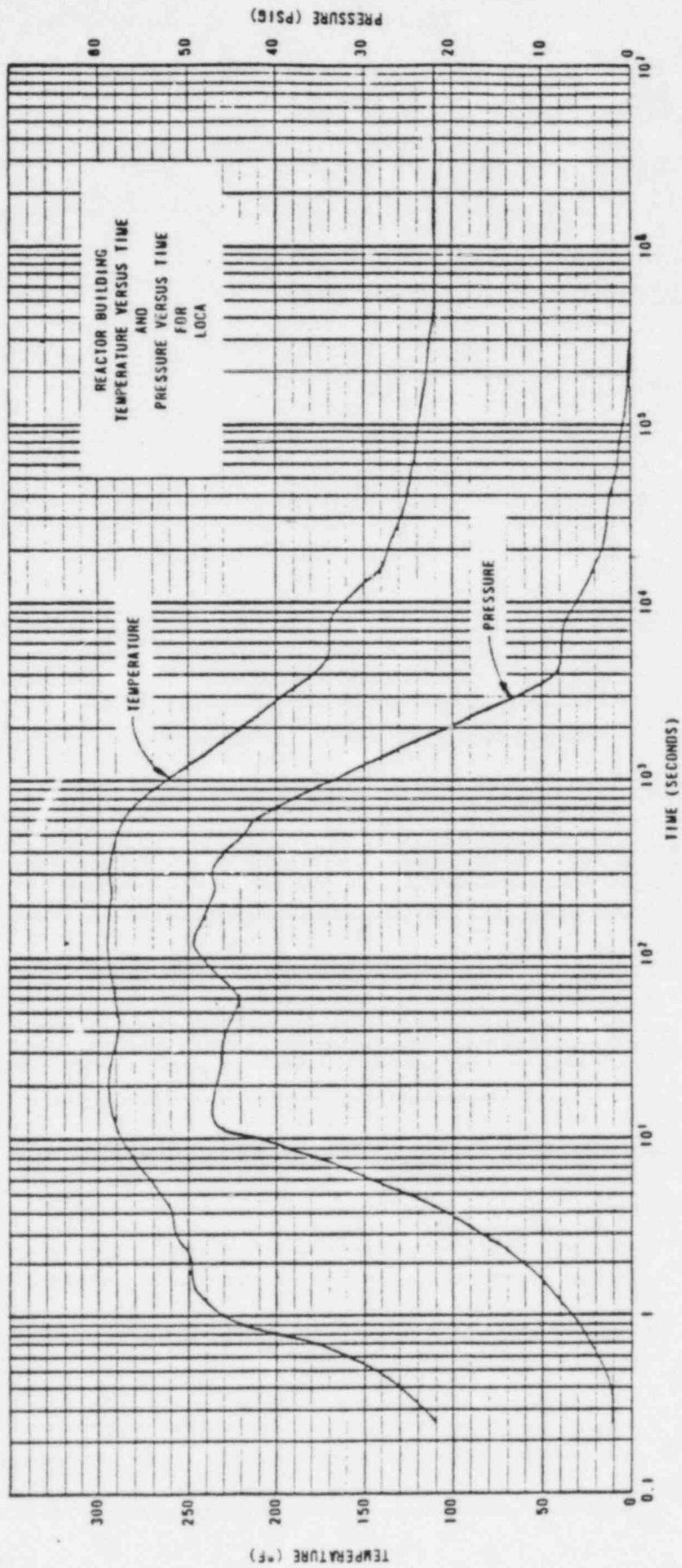
Date 4/83

DESCRIPTION: Elev. 119' & 143 - Reactor Building Outside "D" Rings

Parameters	Normal Environment	Environment For Loss Of Coolant Accident	Environment For High Energy Line Break (Inside AB & IB)																																										
Temperature (°F)	<table border="1"> <thead> <tr> <th>Hours/Year</th> <th>Temp.</th> </tr> </thead> <tbody> <tr><td>72</td><td>135 to 139</td></tr> <tr><td>29</td><td>130 to 134</td></tr> <tr><td>29</td><td>125 to 129</td></tr> <tr><td>666</td><td>120 to 124</td></tr> <tr><td>101</td><td>115 to 119</td></tr> <tr><td>1984</td><td>110 to 114</td></tr> <tr><td>4561</td><td>100 to 109</td></tr> <tr><td>608</td><td>90 to 99</td></tr> <tr><td>29</td><td>80 to 89</td></tr> <tr><td>43</td><td>70 to 79</td></tr> <tr><td>116</td><td>Below 69</td></tr> </tbody> </table>	Hours/Year	Temp.	72	135 to 139	29	130 to 134	29	125 to 129	666	120 to 124	101	115 to 119	1984	110 to 114	4561	100 to 109	608	90 to 99	29	80 to 89	43	70 to 79	116	Below 69	<table border="1"> <thead> <tr> <th>Time</th> <th>Temp.</th> </tr> </thead> <tbody> <tr><td>0-10 sec</td><td>110-298</td></tr> <tr><td>10-150 sec</td><td>298</td></tr> <tr><td>150-400 sec</td><td>298-294</td></tr> <tr><td>400-5000 sec</td><td>294-171</td></tr> <tr><td>5000-8000 sec</td><td>171</td></tr> <tr><td>8000 sec-24 hr</td><td>171-110</td></tr> </tbody> </table>	Time	Temp.	0-10 sec	110-298	10-150 sec	298	150-400 sec	298-294	400-5000 sec	294-171	5000-8000 sec	171	8000 sec-24 hr	171-110	<table border="1"> <thead> <tr> <th>Time</th> <th>Temp.</th> </tr> </thead> <tbody> <tr><td>N/A</td><td></td></tr> </tbody> </table>	Time	Temp.	N/A	
Hours/Year	Temp.																																												
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Pressure (PSIG)	Atmospheric	<table border="1"> <thead> <tr> <th>Time</th> <th>Press.</th> </tr> </thead> <tbody> <tr><td>0-10 sec</td><td>0-49.6</td></tr> <tr><td>10-150 sec</td><td>49.6</td></tr> <tr><td>150-400 sec</td><td>49.6-46.5</td></tr> <tr><td>400-5000 sec</td><td>46.5-7.7</td></tr> <tr><td>5000-8000 sec</td><td>7.7</td></tr> <tr><td>8000 sec-24 hr</td><td>7.7-0</td></tr> </tbody> </table>	Time	Press.	0-10 sec	0-49.6	10-150 sec	49.6	150-400 sec	49.6-46.5	400-5000 sec	46.5-7.7	5000-8000 sec	7.7	8000 sec-24 hr	7.7-0	<table border="1"> <thead> <tr> <th>Time</th> <th>Press.</th> </tr> </thead> <tbody> <tr><td>N/A</td><td></td></tr> </tbody> </table>	Time	Press.	N/A																									
Time	Press.																																												
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400-5000 sec	46.5-7.7																																												
5000-8000 sec	7.7																																												
8000 sec-24 hr	7.7-0																																												
Time	Press.																																												
N/A																																													
Relative Humidity (%)	(Data not available)	N/A	N/A																																										
Chemical Spray (pH)	N/A	2200 to 2450 ppm boron, 105,000 to 120,000 ppm NaOH, pH 7.4 to 11.0	N/A																																										
Radiation (Rads)	<u>40 Year Dose</u> 2.8 x 10 ⁴	<u>Time Post Accident</u> <table border="1"> <thead> <tr> <th>Time Post Accident</th> <th>Dose</th> </tr> </thead> <tbody> <tr><td>1 Hr</td><td>1.5 x 10⁶</td></tr> <tr><td>1 Day</td><td>5.9 x 10⁶</td></tr> <tr><td>5 Days</td><td>7.9 x 10⁶</td></tr> <tr><td>30 Days</td><td>9.9 x 10⁶</td></tr> <tr><td>6 Months</td><td>2.0 x 10⁷</td></tr> </tbody> </table> 40 Yr. Total + 6 Mo. = 2.0 x 10 ⁷ Total	Time Post Accident	Dose	1 Hr	1.5 x 10 ⁶	1 Day	5.9 x 10 ⁶	5 Days	7.9 x 10 ⁶	30 Days	9.9 x 10 ⁶	6 Months	2.0 x 10 ⁷	N/A																														
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30 Days	9.9 x 10 ⁶																																												
6 Months	2.0 x 10 ⁷																																												
Submergence (Flood Level)	N/A	N/A	N/A																																										

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES:



FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 40

Zone Environmental Data

Revision 1

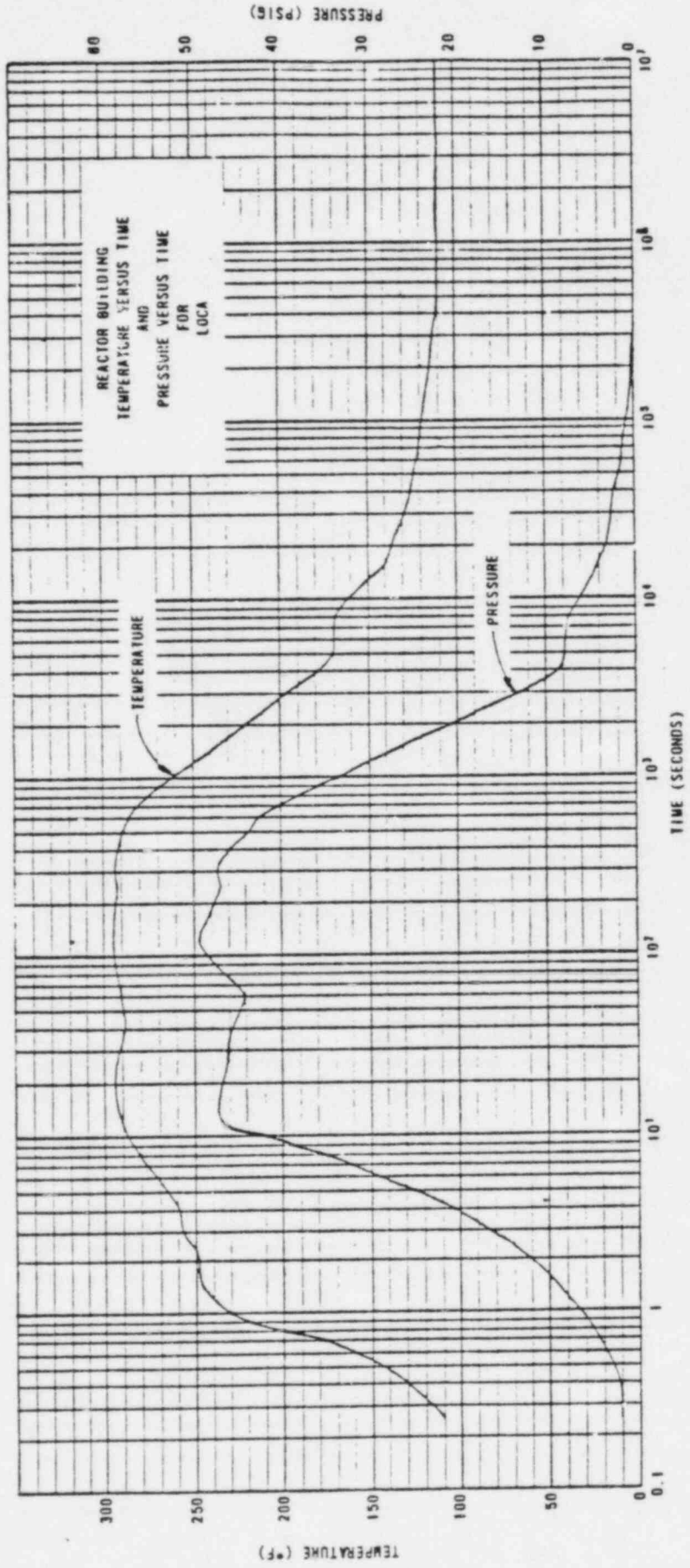
Date 4/83

DESCRIPTION: Elev. 119 & 143' - Reactor Building Inside "D" Rings

Parameters	Normal Environment	Environment For Loss Of Coolant Accident	Environment For High Energy Line Break (Inside AB & IB)
Temperature (°F)	<u>Hours/Year</u> (Data not available) <u>Temp.</u>	<u>Time</u> 0-10 sec 110-298 10-150 sec 298 150-400 sec 298-294 400-5000 sec 294-171 5000-8000 sec 171 8000 sec-24 hr 171-110	<u>Time</u> N/A <u>Temp.</u>
Pressure (PSIG)	Atmospheric	<u>Time</u> 0-10 sec 0-49.6 10-150 sec 49.6 150-400 sec 49.6-46.5 400-5000 sec 46.5-7.7 5000-8000 sec 7.7 8000 sec-24 hr 7.7-0	<u>Time</u> N/A <u>Press.</u>
Relative Humidity (%)	(Data not available)	100	N/A
Chemical Spray (pH)	N/A	2200 to 2450 ppm boron, 105,000 to 120,000 ppm NaOH, pH 7.4 to 11.0	N/A
Radiation (Rads)	<u>40 Year Dose</u> 3.3 x 10 ⁷	<u>Time Post Accident</u> <u>Dose</u> 1 Hr 2.6 x 10 ⁶ 1 Day 1.0 x 10 ⁷ 5 Days 1.4 x 10 ⁷ 30 Days 1.7 x 10 ⁷ 6 Months 3.4 x 10 ⁷ 40 Yr. Total + 6 Mo. = 6.7 x 10 ⁷ Total	N/A
Submergence (Flood Level)	N/A	N/A	N/A

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES:



FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 41

Zone Environmental Data

Revision 1

Date 4/83

DESCRIPTION: Elev. 95' - Auxiliary Building, Neutralizer Tank Room

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)	
Temperature (°F)	<u>Hours/Year</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>
	189	90 to 97	N/A		N/A	
	7949	75 to 89				
	474	70 to 74				
	148	65 to 69				
	Note 2					
Pressure (PSIG)	Atmospheric		<u>Time</u>	<u>Press.</u>	<u>Time</u>	<u>Press.</u>
			N/A		N/A	
Relative Humidity (%)	20 to 90		N/A		N/A	
Chemical Spray (pH)	N/A		N/A,		N/A	
Radiation (Rads)	<u>40 Year Dose</u>		<u>Time Post Accident</u>	<u>Dose</u>	N/A	
	1.0 x 10 ⁴		1 Hr	Note 1		
			1 Day			
			5 Days			
			30 Days			
			6 Months			
			40 Yr. Total + 6 Mo. =			
			1.0 x 10 ⁴ Total			
Submergence (Flood Level)	N/A		N/A		N/A	

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES: (1) Total 6 Month Integrated Accident Dose \leq 100RADS

(2) Allow 24 hours per year at 115°F for Postulated HVAC system failures

FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 42

Zone Environmental Data

Revision 1

Date 4/83

DESCRIPTION: Elev. 95' - Auxiliary Building, Neutralizer Pump Room

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)	
Temperature (°F)	<u>Hours/Year</u> 189 6902 1521 148 Note 2	<u>Temp.</u> 90 to 99 75 to 89 70 to 74 65 to 69	<u>Time</u> N/A	<u>Temp.</u>	<u>Time</u> N/A	<u>Temp.</u>
Pressure (PSiG)	Atmospheric		<u>Time</u> N/A	<u>Press.</u>	<u>Time</u> N/A	<u>Press.</u>
Relative Humidity (%)	20 to 90		N/A		N/A	
Chemical Spray (pH)	N/A		N/A,		N/A	
Radiation (Rads)	<u>40 Year Dose</u> 1.0 x 10 ⁴		<u>Time Post Accident</u> 1 Hr 1 Day 5 Days 30 Days 6 Months 40 Yr. Total + 6 Mo. = 1.0 x 10 ⁴ Total	<u>Dose</u> Note 1	N/A	
Submergence (Flood Level)	N/A		N/A		N/A	

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES: (1) Total 6 Month Integrated Accident Dose ≤ 100RADS

(2) Allow 24 hours per year at 115°F for Postulated HVAC system failures

FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 43

Zone Environmental Data

Revision 1

Date 4/83

DESCRIPTION: Elev. 95' and 108' - Control Complex

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)	
Temperature (°F)	<u>Hours/Year</u> 8760	<u>Temp.</u> 70 to 80	<u>Time</u> N/A	<u>Temp.</u>	<u>Time</u> N/A	<u>Temp.</u>
Pressure (PSIG)	Atmospheric		<u>Time</u> N/A	<u>Press.</u>	<u>Time</u> N/A	<u>Press.</u>
Relative Humidity (%)	40 to 60		N/A		N/A	
Chemical Spray (pH)	N/A		N/A,		N/A	
Radiation (Rads)	<u>40 Year Dose</u> 1.0 x 10 ⁴		<u>Time Post Accident</u> 1 Hr 1 Day 5 Days 30 Days 6 Months 40 Yr. Total + 6 Mo. = 1.0 x 10 ⁴ Total	<u>Dose</u> Note 1	N/A	
Submergence (Flood Level)	N/A		N/A		N/A	

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES: (1) Total 6 Month Integrated Accident Dose \leq 100RADS

FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 44

Zone Environmental Data

Revision 1

Date 4/83

DESCRIPTION: Elev. 145' - Control Complex, Between Columns 304 And 303

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)	
Temperature (°F)	<u>Hours/Year</u> 8760	<u>Temp.</u> 70 to 80	<u>Time</u> N/A	<u>Temp.</u>	<u>Time</u> N/A	<u>Temp.</u>
Pressure (PSIG)	Atmospheric		<u>Time</u> N/A	<u>Press.</u>	<u>Time</u> N/A	<u>Press.</u>
Relative Humidity (%)	40 to 60		N/A		N/A	
Chemical Spray (pH)	N/A		N/A,		N/A	
Radiation (Rads)	<u>40 Year Dose</u> 1.0 x 10 ⁴		<u>Time Post Accident</u> 1 Hr 1 Day 5 Days 30 Days 6 Months 40 Yr. Total + 6 Mo. = 1.0 x 10 ⁴ Total	<u>Dose</u> N/A	N/A	
Submergence (Flood Level)	N/A		N/A		N/A	

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES:

FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 45

Zone Environmental Data

Revision 1

Date 4/83

DESCRIPTION: Elev. 143' - Auxiliary Building, Exhaust Fan Area From Columns M To O.

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)	
Temperature (°F)	<u>Hours/Year</u> 5 3723 4889 148 Note 1	<u>Temp.</u> 95 to 99 85 to 94 65 to 84 55 to 64	<u>Time</u> N/A	<u>Temp.</u>	<u>Time</u> N/A	<u>Temp.</u>
Pressure (PSIG)	Atmospheric		<u>Time</u> N/A	<u>Press.</u>	<u>Time</u> N/A	<u>Press.</u>
Relative Humidity (%)	20 to 90		N/A		N/A	
Chemical Spray (pH)	N/A		N/A,		N/A	
Radiation (Rads)	<u>40 Year Dose</u> 1.0 x 10 ⁴		<u>Time Post Accident</u> 1 Hr 1 Day 5 Days 30 Days 6 Months 40 Yr. Total + 6 Mo. = 1.0 x 10 ⁴ Total	<u>Dose</u> N/C	N/A	
Submergence (Flood Level)	N/A		N/A		N/A	

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES: (1) Allow 24 hours per year at 115°F for Postulated HVAC system failures

FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 46

Zone Environmental Data

Revision 1

Date 4/83

DESCRIPTION: Elev. 143' - Auxiliary Building, New Fuel Storage Rack

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)	
	<u>Hours/Year</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>
Temperature (°F)	189 7517 906 148 Note 1	90 to 95 75 to 89 70 to 74 65 to 69	N/A		N/A	
Pressure (PSIG)	Atmospheric		<u>Time</u> N/A	<u>Press.</u>	<u>Time</u> N/A	<u>Press.</u>
Relative Humidity (%)	20 to 90		N/A		N/A	
Chemical Spray (pH)	N/A		N/A,		N/A	
Radiation (Rads)	<u>40 Year Dose</u> 1.0 x 10 ⁴		<u>Time Post Accident</u> 1 Hr 1 Day 5 Days 30 Days 6 Months 40 Yr. Total + 6 Mo. = 1.0 x 10 ⁴ Total	<u>Dose</u> N/A	N/A	
Submergence (Flood Level)	N/A		N/A		N/A	

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES: (1) Allow 24 hours per year at 115°F for Postulated HVAC system failures

FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 47

Zone Environmental Data

Revision 1

Date 4/83

DESCRIPTION: Elev. 143' - Auxiliary Building, Spent Fuel Supply Fan Area

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)	
Temperature (°F)	<u>Hours/Year</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>
	5	95 to 99	N/A		N/A	
	890	85 to 94				
	7717	65 to 84				
	148	55 to 64				
	Note 1					
Pressure (PSIG)	Atmospheric		<u>Time</u>	<u>Press.</u>	<u>Time</u>	<u>Press.</u>
			N/A		N/A	
Relative Humidity (%)	20 to 90		N/A		N/A	
Chemical Spray (pH)	N/A		N/A,		N/A	
Radiation (Rads)	<u>40 Year Dose</u>		<u>Time Post Accident</u>	<u>Dose</u>	N/A	
	1.0 x 10 ⁴		1 Hr	N/A		
			1 Day			
			5 Days			
			30 Days			
			6 Months			
			40 Yr. Total + 6 Mo. =			
			1.0 x 10 ⁴ Total			
Submergence (Flood Level)	N/A		N/A		N/A	

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES: (1) Allow 24 hours per year at 115°F for Postulated HVAC system failures

FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 48

Zone Environmental Data

Revision 1

Date 4/83

DESCRIPTION: Elev. 143' - Auxiliary Building, Hall Between Columns 303 & 304 And I & J

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)	
Temperature (°F)	<u>Hours/Year</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>
	895	90 to 95	N/A		N/A	
	2828	80 to 89				
	3983	70 to 79				
	1054	55 to 69				
	Note 1					
Pressure (PSIG)	Atmospheric		<u>Time</u>	<u>Press.</u>	<u>Time</u>	<u>Press.</u>
			N/A		N/A	
Relative Humidity (%)	20 to 90		N/A		N/A	
Chemical Spray (pH)	N/A		N/A,		N/A	
Radiation (Rads)	<u>40 Year Dose</u>		<u>Time Post Accident</u>	<u>Dose</u>	N/A	
	1.0 x 10 ⁴		1 Hr	N/A		
			1 Day			
			5 Days			
			30 Days			
			6 Months			
			40 Yr. Total + 6 Mo. =			
			1.0 x 10 ⁴ Total			
Submergence (Flood Level)	N/A		N/A		N/A	

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES: (1) Allow 24 hours per year at 115°F for Postulated HVAC system failures

FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 49

Zone Environmental Data

Revision 1

Date 4/83

DESCRIPTION: Elev. 119' - Auxiliary Building, Stairway By RC Bleed Tanks

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)	
	<u>Hours/Year</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>
Temperature (°F)	189 4959 3464 148 Note 1	90 to 99 80 to 89 70 to 79 65 to 69	N/A		N/A	
Pressure (PSiG)	Atmospheric		<u>Time</u> N/A	<u>Press.</u>	<u>Time</u> N/A	<u>Press.</u>
Relative Humidity (%)	20 to 90		N/A		N/A	
Chemical Spray (pH)	N/A		N/A,		N/A	
Radiation (Rads)	<u>40 Year Dose</u> 1.0 x 10 ⁵		<u>Time Post Accident</u> 1 Hr 1 Day 5 Days 30 Days 6 Months 40 Yr. Total + 6 Mo. = 1.0 x 10 ⁵ Total	<u>Dose</u> N/A	N/A	
Submergence (Flood Level)	N/A		N/A		N/A	

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES: (1) Allow 24 hours per year at 115°F for Postulated HVAC system failures

FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 50

Zone Environmental Data

Revision 1

Date 4/83

DESCRIPTION: Elev. 119' - Auxiliary Building, Valve Gallery By Cation Demineralizer

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)	
	<u>Hours/Year</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>
Temperature (°F)	189 6902 1521 148 Note 1	90 to 95 75 to 89 70 to 74 65 to 70	N/A		N/A	
Pressure (PSIG)	Atmospheric		<u>Time</u> N/A	<u>Press.</u>	<u>Time</u> N/A	<u>Press.</u>
Relative Humidity (%)	20 to 90		N/A		N/A	
Chemical Spray (pH)	N/A		N/A,		N/A	
Radiation (Rads)	<u>40 Year Dose</u> 1.6 x 10 ⁴		<u>Time Post Accident</u> 1 Hr 1 Day 5 Days 30 Days 6 Months 40 Yr. Total + 6 Mo. = 1.6 x 10 ⁴ Total	<u>Dose</u> N/A	N/A	
Submergence (Flood Level)	N/A		N/A		N/A	

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES: (1) Allow 24 hours per year at 115°F for Postulated HVAC system failures

FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 51

Zone Environmental Data

Revision 1

Date 4/83

DESCRIPTION: Elev. 119' - Auxiliary Building, Hall Outside Control Complex

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)	
	<u>Hours/Year</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>
Temperature (°F)	189 6041 2382 148 Note 1	90 to 99 80 to 89 70 to 79 65 to 69	N/A		N/A	
Pressure (PSIG)	Atmospheric		<u>Time</u> N/A	<u>Press.</u>	<u>Time</u> N/A	<u>Press.</u>
Relative Humidity (%)	20 to 90		N/A		N/A	
Chemical Spray (pH)	N/A		N/A,		N/A	
Radiation (Rads)	<u>40 Year Dose</u> 1.0 x 10 ⁴		<u>Time Post Accident</u> 1 Hr 1 Day 5 Days 30 Days 6 Months 40 Yr. Total + 6 Mo. = 1.0 x 10 ⁴ Total	<u>Dose</u> N/A	N/A	
Submergence (Flood Level)	N/A		N/A		N/A	

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES: (1) Allow 24 hours per year at 115°F for Postulated HVAC system failures

FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 52

Zone Environmental Data

Revision 1

DESCRIPTION: Elev. 119' - Auxiliary Building, Hall Between Columns L & I
And Adjacent to Column 301

Date 4/83

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)	
Temperature (°F)	<u>Hours/Year</u> 189 3534 4415 622 Note 1	<u>Temp.</u> 90 to 99 80 to 89 65 to 79 55 to 64	<u>Time</u> N/A	<u>Temp.</u>	<u>Time</u> N/A	<u>Temp.</u>
Pressure (PSIG)	Atmospheric		<u>Time</u> N/A	<u>Press.</u>	<u>Time</u> N/A	<u>Press.</u>
Relative Humidity (%)	20 to 90		N/A		N/A	
Chemical Spray (pH)	N/A		N/A,		N/A	
Radiation (Rads)	<u>40 Year Dose</u> 1.0 x 10 ⁴		<u>Time Post Accident</u> 1 Hr 1 Day 5 Days 30 Days 6 Months 40 Yr. Total + 6 Mo. = 1.0 x 10 ⁴ Total	<u>Dose</u> N/A	N/A	
Submergence (Flood Level)	N/A		N/A		N/A	

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES: (1) Allow 24 hours per year at 115°F for Postulated HVAC system failures

FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 53

Zone Environmental Data

Revision 1

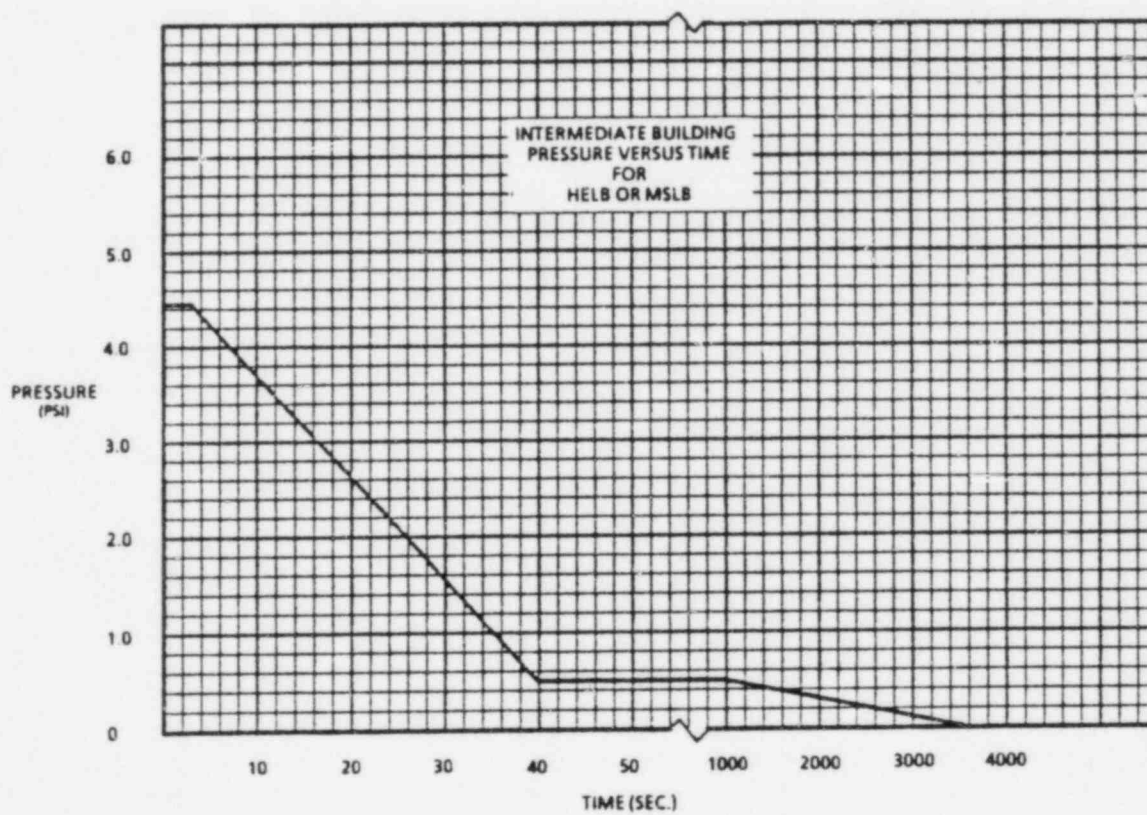
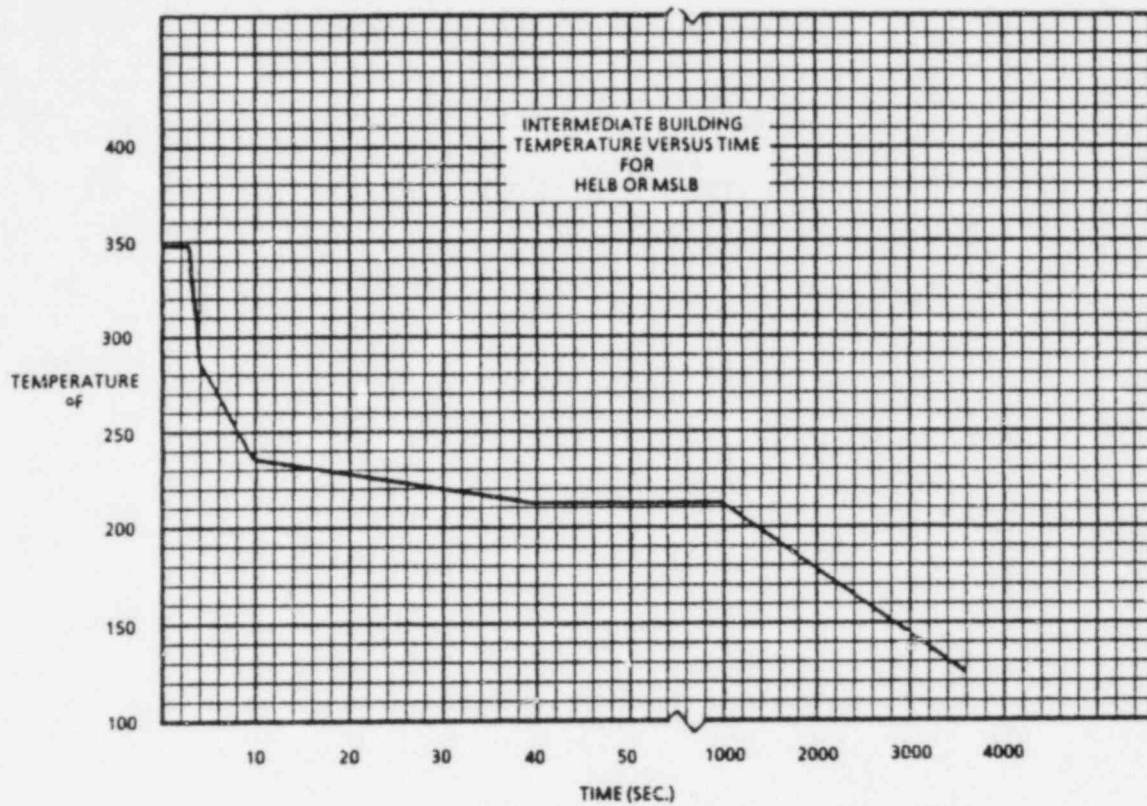
Date 4/83

DESCRIPTION: Elev. 119' - Intermediate Building, West Penetration Area

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)		
Temperature (°F)	<u>Hours/Year</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>	<u>Time</u>		<u>Temp.</u>
	5	129 to 135	N/A		0-2	Sec	345
	890	125 to 128			2-4	Sec	345-287
	2828	120 to 124			4-10	Sec	287-240
	1425	100 to 119			10-40	Sec	240-212
	2990	95 to 99			40-1000	Sec	212
	474	90 to 94			1000-3600	Sec	212 - Amb.
148	80 to 89			1 Hr-6 Mo		Ambient	
Pressure (PSIG)	Atmospheric		<u>Time</u>	<u>Press.</u>	<u>Time</u>		<u>Press.</u>
			N/A		0-2	Sec	4.45
					2-40	Sec	4.45-0.5
					40-1000	Sec	0.5
					1000-3600	Sec	0.5-0
				1 Hr-6 Mo		0	
Relative Humidity (%)	20 to 90		N/A		<u>Time</u>		<u>%</u>
					0-1 Hr		100
					1-2 Hr		100-90
				2 Hr-6 Mo		90	
Chemical Spray (pH)	N/A		N/A		N/A		
Radiation (Rads)	<u>40 Year Dose</u>		<u>Time Post Accident</u>	<u>Dose</u>	N/A		
	1.0 x 10 ⁴		1 Hr	1.1 x 10 ¹			
			1 Day	3.5 x 10 ¹			
			5 Days	6.4 x 10 ¹			
			30 Days	1.3 x 10 ²			
			6 Months	2.5 x 10 ²			
			40 Yr. Total + 6 Mo. = 1.0 x 10 ⁴ Total				
Submergence (Flood Level)	N/A		N/A		N/A		

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES:



FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 54

Zone Environmental Data

Revision 1

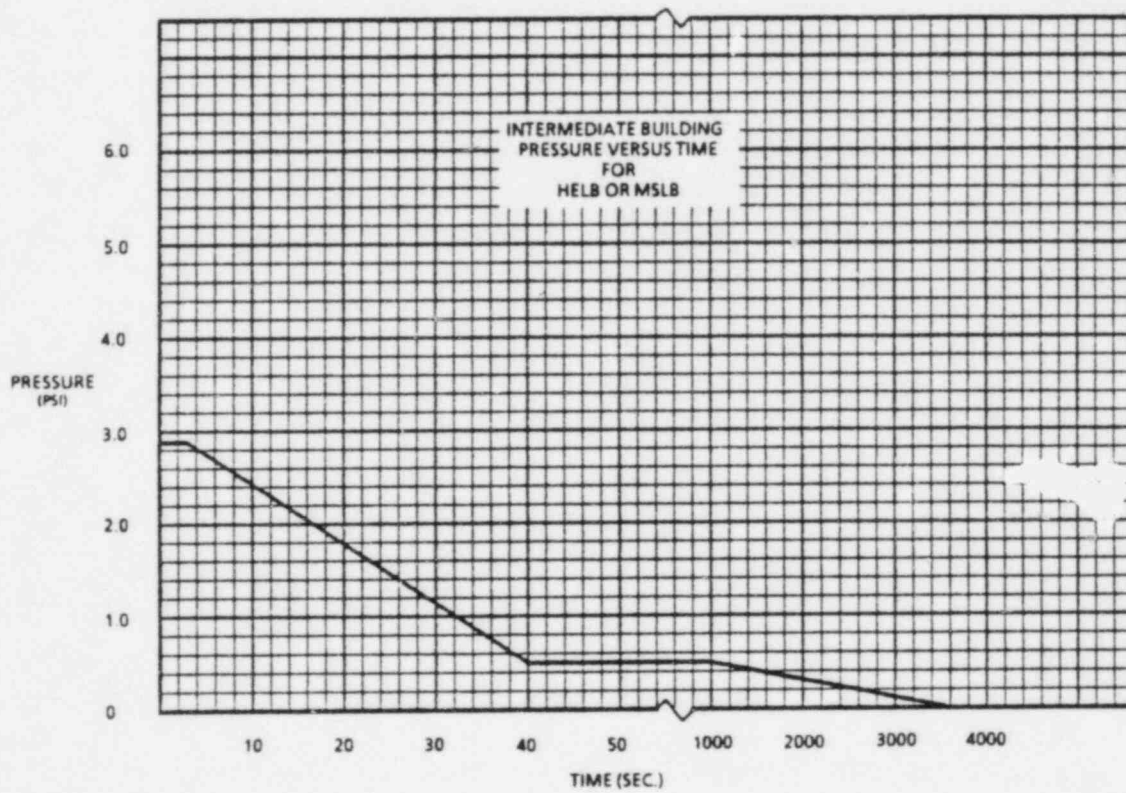
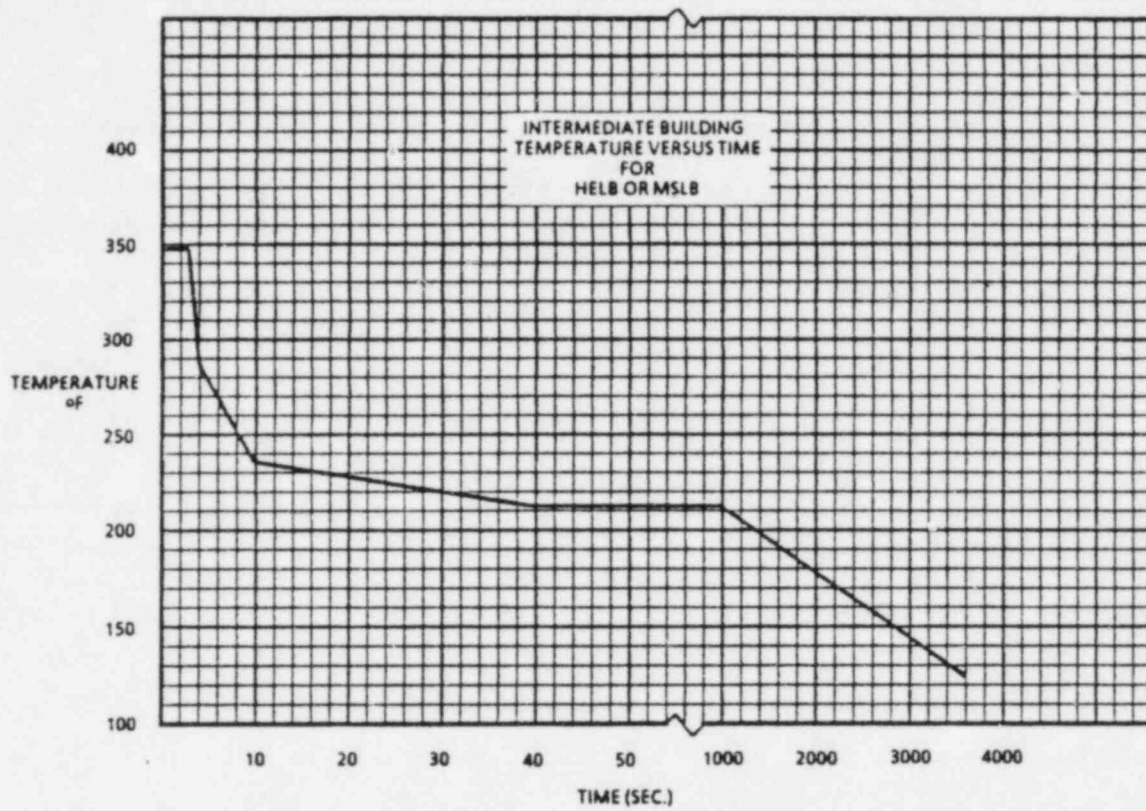
Date 4/83

DESCRIPTION: Elev. 119' - Intermediate Building, Between Columns G & H And 310 & 311

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)		
Temperature (°F)	<u>Hours/Year</u> 189 4959 2990 622	<u>Temp.</u> 123 to 128 95 to 122 85 to 94 70 to 84	<u>Time</u> N/A	<u>Temp.</u>	<u>Time</u> 0-2 2-4 4-10 10-40 40-1000 1000-3600 1 Hr-6 Mo	Sec Sec Sec Sec Sec Sec	<u>Temp.</u> 345 345-287 287-240 240-212 212 212 - Amb. Ambient
Pressure (PSIG)	Atmospheric		<u>Time</u> N/A	<u>Press.</u>	<u>Time</u> 0-2 2-40 40-1000 1000-3600 1 Hr-6 Mo	Sec Sec Sec Sec	<u>Press.</u> 2.85 2.85-0.5 0.5 0.5-0 0
Relative Humidity (%)	20 to 90		N/A		<u>Time</u> 0-1 Hr 1-2 Hr 2 Hr-6 Mo		<u>%</u> 100 100-90 90
Chemical Spray (pH)	N/A		N/A		N/A		
Radiation (Rads)	<u>40 Year Dose</u> 1.0 x 10 ⁴		<u>Time Post Accident</u> 1 Hr 1 Day 5 Days 30 Days 6 Months 40 Yr. Total + 6 Mo. = 1.0 x 10 ⁴ Total	<u>Dose</u> N/A	N/A		
Submergence (Flood Level)	N/A		N/A		N/A		

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES:



FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 55

Zone Environmental Data

Revision 1

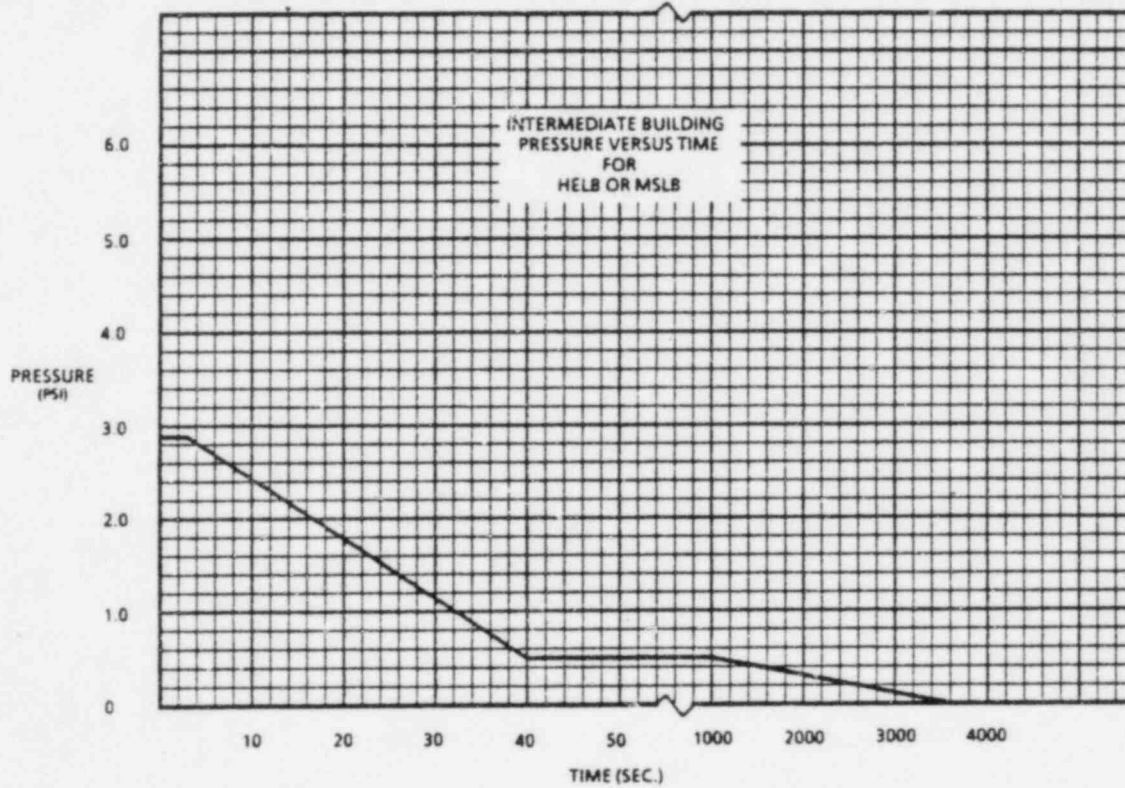
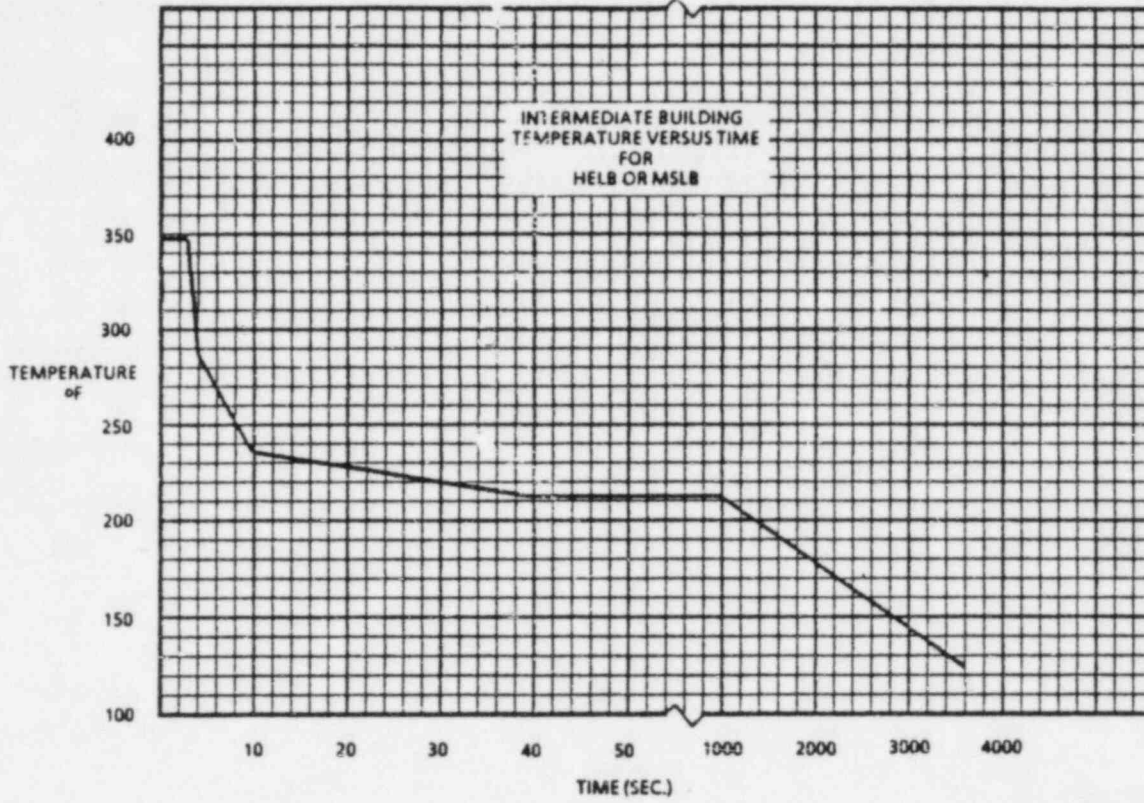
Date 4/83

DESCRIPTION: Elev. 119' - Intermediate Building, Pressurizer Cabinet Area, Columns 307 to 308

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)				
Temperature (°F)	<u>Hours/Year</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>	<u>Time</u>		<u>Temp.</u>		
	5	105 to 110	N/A		0-2	Sec	345		
	5143	90 to 104			2-4	Sec	345-287		
	2990	80 to 89			4-10	Sec	287-240		
	622	70 to 79			10-40	Sec	240-212		
				40-1000	Sec	212			
				1000-3600	Sec	212 - Amb.			
				1 Hr-6 Mo		Ambient			
Pressure (PSIG)	Atmospheric		<u>Time</u>	<u>Press.</u>	<u>Time</u>		<u>Press.</u>		
			N/A		0-2	Sec	2.85		
					2-40	Sec	2.85-0.5		
					40-1000	Sec	0.5		
					1000-3600	Sec	0.5-0		
		1 Hr-6 Mo		0					
Relative Humidity (%)	20 to 80		N/A		<u>Time</u>		<u>%</u>		
					0-1 Hr		100		
					1-2 Hr		100-90		
					2 Hr-6 Mo		90		
Chemical Spray (pH)	N/A		N/A		N/A				
Radiation (Rads)	<u>40 Year Dose</u>		<u>Time Post Accident</u>				<u>Dose</u>		
								1 Hr	N/A
								1 Day	
								5 Days	
								30 Days	
								6 Months	
								40 Yr. Total + 6 Mo. = 1.0 x 10 ⁴ Total	
Submergence (Flood Level)	N/A		N/A		N/A				

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES:



FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 56

Zone Environmental Data

Revision 1

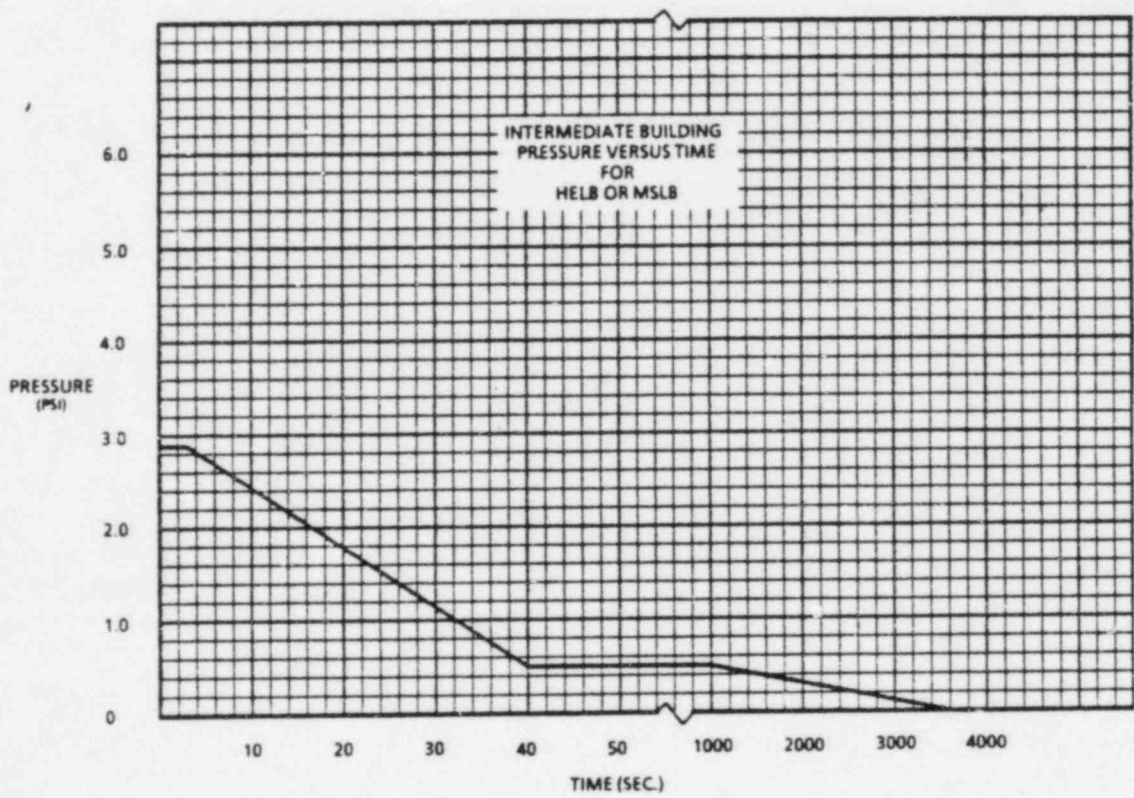
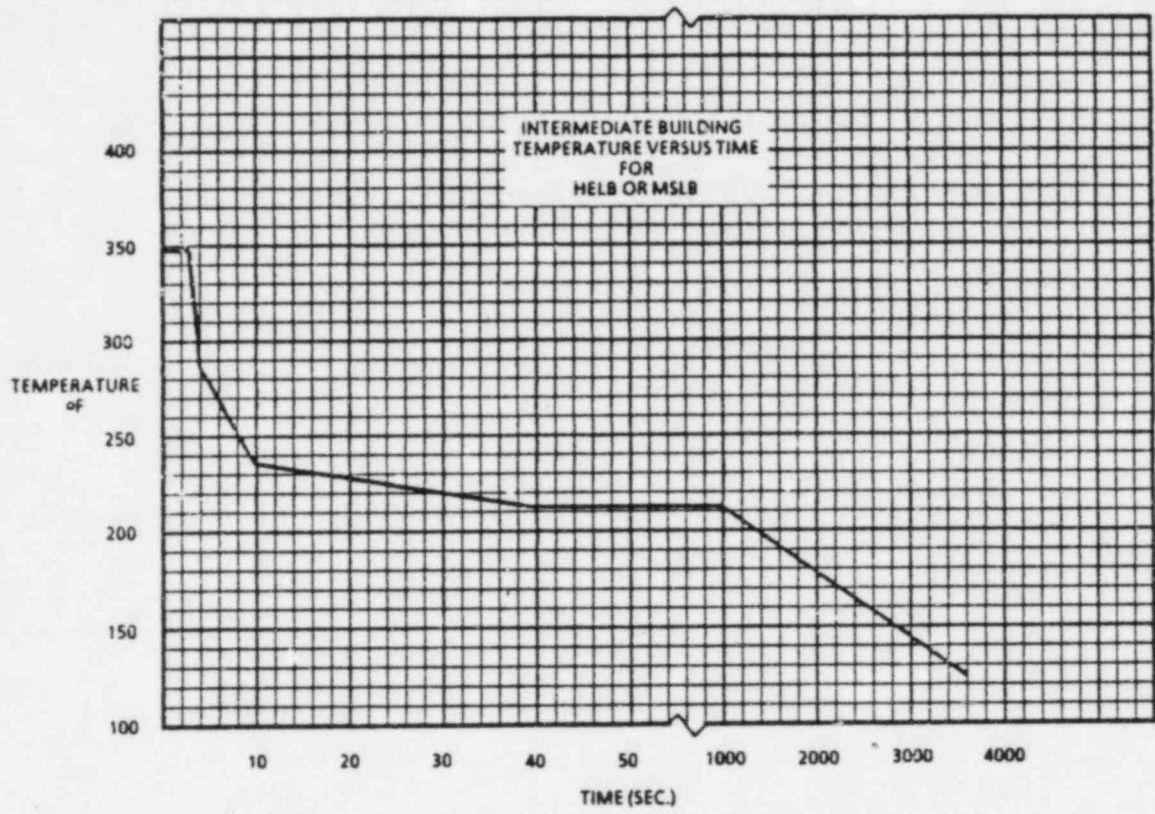
Date 4/83

DESCRIPTION: Elev. 119' - Intermediate Building, H & V MCC Area, Adjacent to Column 307

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)		
	<u>Hours/Year</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>	<u>Time</u>	<u>Sec</u>	<u>Temp.</u>
Temperature (°F)	5 5143 2990 622	105 to 110 90 to 104 80 to 89 70 to 79	N/A		0-2 2-4 4-10 10-40 40-1000 1000-3600 1 Hr-6 Mo	Sec Sec Sec Sec Sec Sec	345 345-287 287-240 240-212 212 212 - Amb. Ambient
Pressure (PSIG)	Atmospheric		<u>Time</u> N/A	<u>Press.</u>	<u>Time</u>		<u>Press.</u>
					0-2 2-40 40-1000 1000-3600 1 Hr-6 Mo	Sec Sec Sec Sec	2.85 2.85-0.5 0.5 0.5-0 0
Relative Humidity (%)	20 to 90		N/A		<u>Time</u>		<u>%</u>
					0-1 Hr 1-2 Hr 2 Hr-6 Mo		100 100-90 90
Chemical Spray (pH)	N/A		N/A		N/A		
Radiation (Rads)	<u>40 Year Dose</u> 1.0 x 10 ⁴		<u>Time Post Accident</u> 1 Hr 1 Day 5 Days 30 Days 6 Months 40 Yr. Total + 6 Mo. = 1.0 x 10 ⁴ Total	<u>Dose</u> N/A	N/A		
Submergence (Flood Level)	N/A		N/A		N/A		

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES:



FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 57

Zone Environmental Data

Revision 1

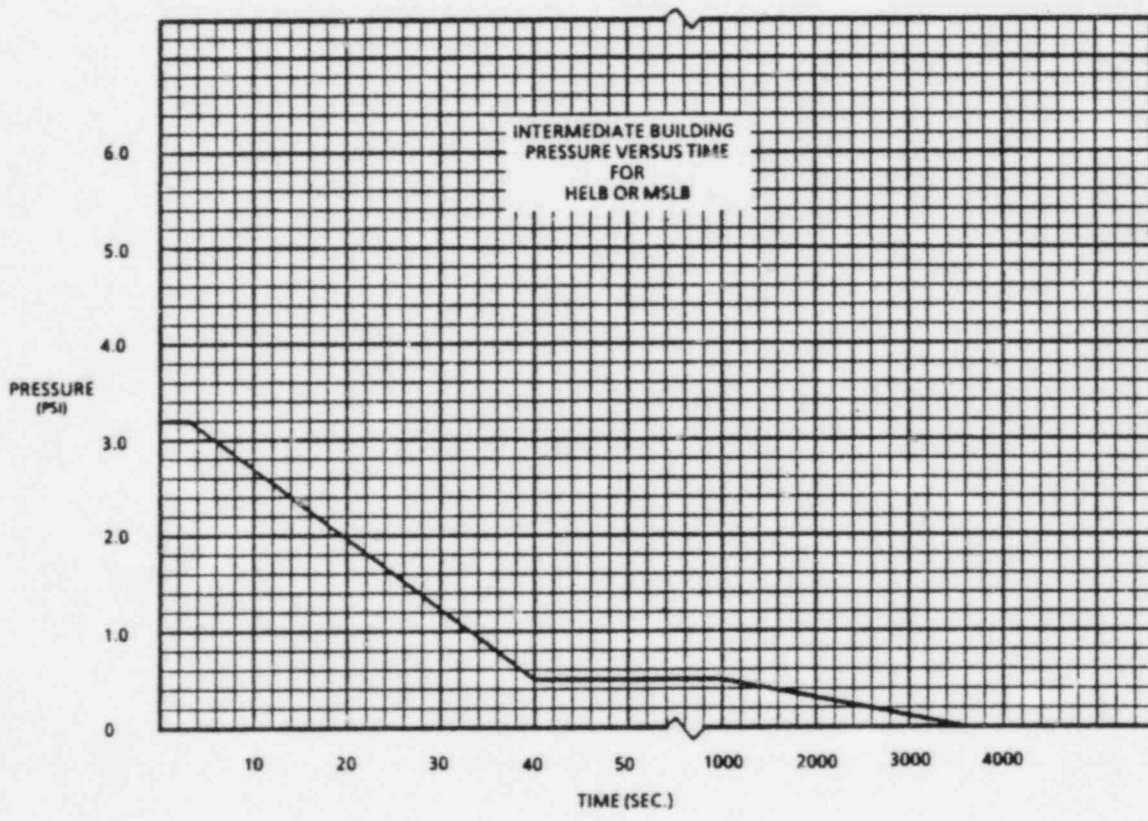
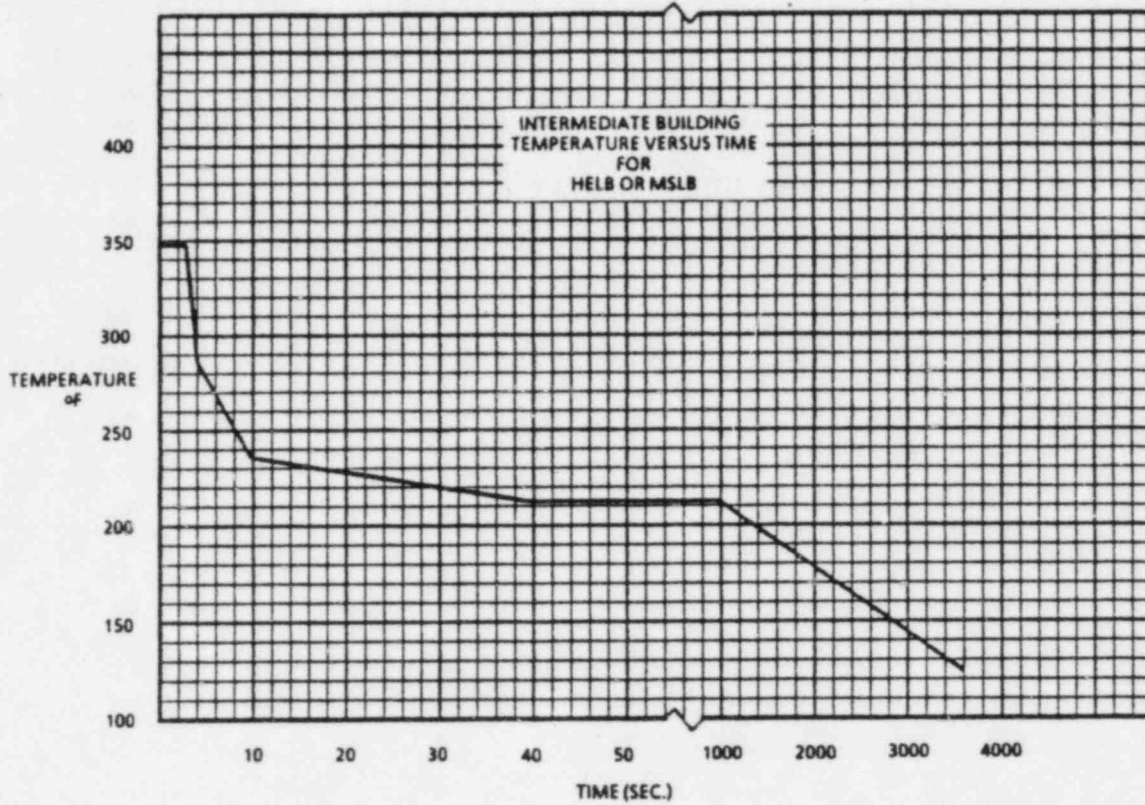
Date 4/83

DESCRIPTION: Elev. 119' - Intermediate Building, By Personnel Access Hatch

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)		
Temperature (°F)	<u>Hours/Year</u> 895 2828 4889 148	<u>Temp.</u> 90 to 99 80 to 89 65 to 79 55 to 64	<u>Time</u> N/A	<u>Temp.</u>	<u>Time</u> 0-2 2-4 4-10 10-40 40-1000 1000-3600 1 Hr-6 Mo	<u>Sec</u>	<u>Temp.</u> 345 345-287 287-240 240-212 212 212 - Amb. Ambient
Pressure (PSIG)	Atmospheric		<u>Time</u> N/A	<u>Press.</u>	<u>Time</u> 0-2 2-40 40-1000 1000-3600 1 Hr-6 Mo	<u>Sec</u>	<u>Press.</u> 3.18 3.18-0.5 0.5 0.5-0 0
Relative Humidity (%)	20 to 80		N/A		<u>Time</u> 0-1 Hr 1-2 Hr 2 Hr-6 Mo		<u>%</u> 100 100-90 90
Chemical Spray (pH)	N/A		N/A		N/A		
Radiation (Rads)	<u>40 Year Dose</u> 1.0 x 10 ⁴		<u>Time Post Accident</u> 1 Hr 1 Day 5 Days 30 Days 6 Months 40 Yr. Total + 6 Mo. = 1.0 x 10 ⁴ Total	<u>Dose</u> Note 1	N/A		
Submergence (Flood Level)	N/A		N/A		N/A		

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES: (1) Total 6 Month Integrated Accident Dose < 100 RADS



FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 58

Zone Environmental Data

Revision 1

Date 4/83

DESCRIPTION: Elev. 124' & 134' - Control Complex

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)	
Temperature (°F)	<u>Hours/Year</u> 8760	<u>Temp.</u> 70 to 80	<u>Time</u> N/A	<u>Temp.</u>	<u>Time</u> N/A	<u>Temp.</u>
Pressure (PSIG)	Atmospheric		<u>Time</u> N/A	<u>Press.</u>	<u>Time</u> N/A	<u>Press.</u>
Relative Humidity (%)	40 to 60		N/A		N/A	
Chemical Spray (pH)	N/A		N/A,		N/A	
Radiation (Rads)	<u>40 Year Dose</u> 1.0 x 10 ⁴		<u>Time Post Accident</u> 1 Hr 1 Day 5 Days 30 Days 6 Months 40 Yr. Total + 6 Mo. = 1.0 x 10 ⁴ Total	<u>Dose</u> N/A	N/A	
Submergence (Flood Level)	N/A		N/A		N/A	

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES:

FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 59

Zone Environmental Data

Revision 1

DESCRIPTION: Elev. 95' - Auxiliary Building, Adjacent To Control Complex
Between Columns 301 and 303

Date 4/83

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)	
	<u>Hours/Year</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>
Temperature (°F)	189 6902 1521 148 Note 1	90 to 95 75 to 89 70 to 74 65 to 70	N/A		N/A	
Pressure (PSIG)	Atmospheric		N/A		N/A	
Relative Humidity (%)	20 to 90		N/A		N/A	
Chemical Spray (pH)	N/A		N/A		N/A	
Radiation (Rads)	<u>40 Year Dose</u> 1.0 x 10 ⁴		Time Post Accident 1 Hr 1 Day 5 Days 30 Days 6 Months 40 Yr. Total + 6 Mo. = 1.0 x 10 ⁴ Total	<u>Dose</u> N/A	N/A	
Submergence (Flood Level)	N/A		N/A		N/A	

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES: (1) Allow 24 hours per year at 115°F for Postulated HVAC system failures

FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 60

Zone Environmental Data

Revision 1

DESCRIPTION: Elev. 95' - Auxiliary Building, Hall Adjacent to Control Complex
Between Columns 303 And 304

Date 4/83

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)	
Temperature (°F)	<u>Hours/Year</u> 189 6902 1521 148 Note 1	<u>Temp.</u> 90 to 95 75 to 89 70 to 74 65 to 69	<u>Time</u> N/A	<u>Temp.</u>	<u>Time</u> N/A	<u>Temp.</u>
Pressure (PSIG)	Atmospheric		<u>Time</u> N/A	<u>Press.</u>	<u>Time</u> N/A	<u>Press.</u>
Relative Humidity (%)	20 to 90		N/A		N/A	
Chemical Spray (pH)	N/A		N/A,		N/A	
Radiation (Rads)	<u>40 Year Dose</u> 1.0 x 10 ⁴		<u>Time Post Accident</u> 1 Hr 1 Day 5 Days 30 Days 6 Months 40 Yr. Total + 6 Mo. = 1.0 x 10 ⁴ Total	<u>Dose</u> N/A	N/A	
Submergence (Flood Level)	N/A		N/A		N/A	

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES: (1) Allow 24 hours per year at 115°F for Postulated HVAC system failures

FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 61

Zone Environmental Data

Revision 1

Date 4/83

DESCRIPTION: Elev. 95' - Auxiliary Building, Hall Between Columns I & K Adjacent to Column 301

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)	
Temperature (°F)	<u>Hours/Year</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>
	189	90 to 95	N/A		N/A	
	3534	80 to 89				
	4889	70 to 79				
	148	65 to 69				
	Note 1					
Pressure (PSIG)	Atmospheric		<u>Time</u>	<u>Press.</u>	<u>Time</u>	<u>Press.</u>
			N/A		N/A	
Relative Humidity (%)	20 to 90		N/A		N/A	
Chemical Spray (pH)	N/A		N/A,		N/A	
Radiation (Rads)	<u>40 Year Dose</u>		<u>Time Post Accident</u>	<u>Dose</u>	N/A	
	1.0 x 10 ⁴		1 Hr	N/A		
			1 Day			
		5 Days				
		30 Days				
		6 Months				
			40 Yr. Total + 6 Mo. =			
			1.0 x 10 ⁴ Total			
Submergence (Flood Level)	N/A		N/A		N/A	

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES: (1) Allow 24 hours per year at 115°F for Postulated HVAC system failures

FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 62

Zone Environmental Data

Revision 1

Date 4/83

DESCRIPTION: Elev. 95' - Auxiliary Building, Area Below Equipment Hatch

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)	
Temperature (°F)	<u>Hours/Year</u> 189 3534 4889 148 Note 1	<u>Temp.</u> 90 to 99 80 to 89 70 to 79 65 to 69	<u>Time</u> N/A	<u>Temp.</u>	<u>Time</u> N/A	<u>Temp.</u>
Pressure (PSIG)	Atmospheric		<u>Time</u> N/A	<u>Press.</u>	<u>Time</u> N/A	<u>Press.</u>
Relative Humidity (%)	20 to 90		N/A		N/A	
Chemical Spray (pH)	N/A		N/A,		N/A	
Radiation (Rads)	<u>40 Year Dose</u> 1.0 x 10 ⁴		<u>Time Post Accident</u> 1 Hr 1 Day 5 Days 30 Days 6 Months 40 Yr. Total + 6 Mo. = 1.0 x 10 ⁴ Total	<u>Dose</u> N/A	N/A	
Submergence (Flood Level)	N/A		N/A		N/A	

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES: (1) Allow 24 hours per year at 115°F for Postulated HVAC system failures

FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 63

Zone Environmental Data

Revision 1

Date 4/83

DESCRIPTION: Elev. 164' - Control Complex

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)	
Temperature (°F)	<u>Hours/Year</u> 8760	<u>Temp.</u> 70 to 80	<u>Time</u> N/A	<u>Temp.</u>	<u>Time</u> N/A	<u>Temp.</u>
Pressure (PSIG)	Atmospheric		<u>Time</u> N/A	<u>Press.</u>	<u>Time</u> N/A	<u>Press.</u>
Relative Humidity (%)	40' to 60		N/A		N/A	
Chemical Spray (pH)	N/A		N/A,		N/A	
Radiation (Rads)	<u>40 Year Dose</u> 1.0 x 10 ⁴		<u>Time Post Accident</u> 1 Hr 1 Day 5 Days 30 Days 6 Months 40 Yr. Total + 6 Mo. = 1.0 x 10 ⁴ Total	<u>Dose</u> N/A	N/A	
Submergence (Flood Level)	N/A		N/A		N/A	

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES:

FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 64

Zone Environmental Data

Revision 1

Date 4/83

DESCRIPTION: Elev. 95' - Auxiliary Building, Penetration Area, North of Emergency Pump Room

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)	
Temperature (°F)	<u>Hours/Year</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>
	189	90 to 99	N/A		N/A	
	4959	80 to 89				
	3464	70 to 79				
	148	55 to 69				
	Note 1					
Pressure (PSIG)	Atmospheric		<u>Time</u>	<u>Press.</u>	<u>Time</u>	<u>Press.</u>
			N/A		N/A	
Relative Humidity (%)	20 to 90		N/A		N/A	
Chemical Spray (pH)	N/A		N/A		N/A	
Radiation (Rads)	<u>40 Year Dose</u>		<u>Time Post Accident</u>		<u>Dose</u>	
	4.5 x 10 ⁴		1 Hr	8.3 x 10 ³		
			1 Day	2.6 x 10 ⁴		
			5 Days	4.7 x 10 ⁴		
			30 Days	8.9 x 10 ⁴		
			6 Months	1.7 x 10 ⁵		
			40 Yr. Total + 6 Mo. = 2.2 x 10 ⁵ Total			
Submergence (Flood Level)	N/A		N/A		N/A	

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES: (1) Allow 24 hours per year at 115°F for postulated HVAC system failures

FLORIDA POWER CORPORATION
Crystal River Unit 3

ZONE # 65

Zone Environmental Data

Revision 1

Date 4/83

DESCRIPTION: Elev. 95' - Intermediate Building, Penetration and Sample Cooler Area

Parameters	Normal Environment		Environment For Loss Of Coolant Accident		Environment For High Energy Line Break (Inside AB & IB)			
Temperature (°F)	<u>Hours/Year</u>	<u>Temp.</u>	<u>Time</u>	<u>Temp.</u>	<u>Time</u>		<u>Temp.</u>	
	189	90 to 99	N/A		0-2	Sec	345	
	4959	85 to 89			2-4	Sec	345-287	
	3464	70 to 84			4-10	Sec	287-240	
	148	55 to 69			10-40	Sec	240-212	
	Note 1			40-1000	Sec	212		
				1000-3600	Sec	212 - Amb.		
				1 Hr-6 Mo		Ambient		
Pressure (PSIG)	Atmospheric		<u>Time</u>	<u>Press.</u>	<u>Time</u>		<u>Press.</u>	
			N/A		0-2	Sec	2.43	
					2-40	Sec	2.43-0.5	
					40-1000	Sec	0.5	
					1000-3600	Sec	0.5-0	
		1 Hr-6 Mo		0				
Relative Humidity (%)	20 to 90		N/A		<u>Time</u>		<u>%</u>	
					0-1 Hr		100	
					1-2 Hr		100-90	
					2 Hr-6 Mo		90	
Chemical Spray (pH)	N/A		N/A		N/A			
Radiation (Rads)	<u>40 Year Dose</u>		<u>Time Post Accident</u>				<u>Dose</u>	
							1 Hr	4.1×10^3
							1 Day	1.4×10^4
							5 Days	2.5×10^4
							30 Days	4.9×10^4
							6 Months	9.0×10^4
							40 Yr. Total + 6 Mo. =	
							1.1 x 10 ⁵ Total	
Submergence (Flood Level)	N/A		N/A		N/A			

LEGEND: N/A = Not Applicable, N/C = Not Calculated

NOTES: (1) Allow 24 hours per year at 110°F for postulated HVAC system failures