

ENVIRONMENTAL QUALIFICATION OF SAFETY-RELATED
ELECTRICAL EQUIPMENT
IEB 79-01B

TECHNICAL EVALUATION REPORT
DOCKET NO. 50-302
PLANT: Crystal River 3
DATED: December 11, 1980

Licensee: Florida Power Corporation

Type Reactor: Babcock and Wilcox PWR

Prepared by: M. D. Hunt

M. D. Hunt
12/15/80

Engineering Support Section
Reactor Construction and Engineering
Support Branch, RII

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1. INTRODUCTION

1.1 General

The NRC Office of Inspection and Enforcement (I/E) issued Bulletin 79-01B, "Environmental Qualification of Class 1E Equipment" in January 1980. This bulletin required the licensee to perform a detailed evaluation of the environmental qualification on Class 1E electrical equipment required to function under postulated accident conditions and to submit a report on this action.

This document is a report on the evaluation of the licensee's response to this bulletin.

2. BACKGROUND AND DISCUSSION

2.1 General

The evaluation of the licensee's response was accomplished by performing an on-site inspection of selected class 1E equipment and by examining the licensee's report for completeness and technical accuracy. The licensee's report used in this evaluation is dated October 30, 1980, and therefore, does not include the response to the bulletin supplement No. 3 which was issued on 10/24/80.

2.2 On-Site Inspections

The on-site inspection, made on selected IE equipment, verified proper installation of equipment, overall interface integrity, location with respect to flood level for equipment inside the containment, and manufacturers nameplate data. The manufacturer and model number from the nameplate data was compared to information given in the Component Evaluation Work Sheets (CES) of the licensee's report.

Components that were examined during the field inspection are identified by an asterisk (*) in Attachment 1. If any discrepancies were noted between the installed equipment and the correspondent equipment addressed in the licensee's report, they are discussed in Section 4 of this report. The site inspection is documented by report number 50-302/80-21 of May 5, 1980.

2.3 Evaluation of Licensee's Report

Each component as addressed on the Component Evaluation Work Sheets (CES) of the licensee's report was examined for completeness and accuracy to the criteria given in the bulletin. This examination assumed qualification documents (analysis, test reports, etc.) referenced by the licensee in their submittal are acceptable.

The results of this examination are documented in Attachment 1. The CES page numbers in column 1 of Attachment 1 is the same CES page found in the licensee's report.

3. GENERAL INFORMATION

3.1 Identification Of Class 1E Electrical Equipment

The licensee's list of systems was compared to the systems listed on Attachment 2 and is cross referenced to the standard list for Babcock and Wilcox, NSSS, PWR reactors.

3.2 Service Conditions

The service condition accident environment, HELB/LOCA inside containment and HELB outside containment are indicated or discussed in the licensee's report and are based on the FSAR accident analysis.

3.3 Qualification Documentation

Attachment 3 is list of documents (test reports, analysis, letters, etc.) used by the licensee in determining the environmental qualification of plant equipment for Crystal River 3. These references have been tabulated and are indicated on the applicable CES of their report.

4. EQUIPMENT DATA REVIEW

4.1 Equipment that is considered to meet IEB 79-01B requirements are categorized as 1 in the last column of Attachment 1.

- 4.5 Equipment that the licensee has identified as not being qualified required an LER with justification for continued plant operation.

The following LER was received in Region, II:

Subject: Valve operators for Chemical Addition Valves CAV 1, 3, 4, 5
not qualified for reactor building environment.

Date: July 18, 1979

These valve operators were replaced during an outage August 1979

- 4.6 Equipment whose qualification (Aging exempted to a certain degree - see DOR guideline Section 4) is unresolved, as identified by the licensee is listed in Attachment 4 as Outstanding Items.

The licensee has provided justification for continued plant operation for many, if not all, of these outstanding items in their report. In many cases, this is provided on their CES or in a special section of the report. In some cases the licensee states that this justification is by Engineering Analysis that are available at their office.

- 4.7 On-site inspection data agrees with the licensee's CES information. Asterisked items in Attachment 1 are components examined during the on-site inspection.

5. CONCLUSIONS

Due to the time constraints imposed by the Commission Memo and Order of 5/23/80 this evaluation is based on the licensee submittal dated October 30, 1980. This licensee's report does not address all items that may be pertinent to Crystal River 3 plant as a result of bulletin supplements 2 and 3 issued on 9/30/80 and 10/24/80 respectively. Specifically information on cold shutdown and TMI Lesson Learned related equipment which is received subsequent to 11/1/80 will be evaluated by the EQB of NRR.

The licensee's actions meet the requirements of the Commission Memo and Order of 5/23/80 and justification for continued plant operation with many of the components that have unresolved qualification items is indicated in Section 4.6. Based on the information available, the Region II reviewer considers that the justification is commensurate for the areas identified, that the proposed corrective action meets requirements for the Commission Memo and Order of 5/23/80 and, therefore, plant operation can continue until these items are resolved as committed to by the licensee.

This evaluation is based on the on-site inspections, the information supplied by the licensee in their submittal, telephone conversations with the licensee's representatives, their FSAR, and the assumption that the Qualification Documents (Test Reports, Analysis, Letter, etc.) are acceptable.

The results of this evaluation does not necessarily imply that the equipment is unreliable, unsafe or represents a significant safety issue; it does imply that additional information is required. This is indicated by the applicable categorization indicated in the last column of Attachment 1.

FACILITY Crystal River 3
 SYSTEM Air Handling, Vent & cooling

ATTACHMENT 1
 FOR IEB 79-01B
 TER

CES Page No.	Equip. I. D. #	Generic Name	Accid. Profile	Qual. Profile	Radiation Qual. Containment		Qual. Method	Chem. Spray	Accur.	Subm.	Licensee Action		Outstanding Items Identified	Category of Items
					Inside	Outside					Replace	Relocate		
2-2	AHF-1A	MTR	✓	4C	✓	-	4B	4C	-	-	-	-	L, R	4C, 4B
2-3	AHF-1B	MTR	✓	4C	✓	-	4B	4C	-	-	-	-	L, R	4C, 4B
2-3	AHF-1C	MTR	✓	4C	✓	-	4B	4C	-	-	-	-	L, R	4C, 4B
2-4	AHF-15A	MTR	✓	4C	-	4C	4C	-	-	-	-	-	L	4C
2-4	AHF-15B	MTR	✓	4C	-	4C	4C	-	-	-	-	-	L	4C
2-5	AHV-1B	MOV	✓	3	3	3	3	✓	-	-	yes	-	L	3
2-5	AHV-1C	MOV	✓	3	3	3	3	✓	-	-	yes	-	L	3
2-6	AHV-1A	SV	✓	3	-	3	3	-	-	-	yes	-	L	3
2-7	AHV-1D	SV	✓	3	-	3	3	-	-	-	yes	-	L	3
2-8	MTMC-4	MTR STR												
2-8	MTMC-5	MTR STR												
2-9	MTMC-7	MTR STR												

Code: 3 = Equipment requires modification (resolution, shielding, etc.)
 4 = Qualification of equipment unresolved
 a) Testing schedule but not complete
 b) Reviewer needs additional information
 c) Qual. Record search still in process
 5 = Equipment not qualified
 6 = Item identified to EQB for resolution

REVIEWER V. B. ... DATE 12/9/80

FACILITY Crystal River 3
 SYSTEM Air Handling, Vent & cooling

ATTACHMENT 1
 FOR IEM 79-018
 TER

CES. Page No.	Equip. I. D.	Generic Name	Accid. Profile	Qual. Profile	Radiation Qual. Containment		Qual. Method	Chem. Spray	Accur.	Subm.	Licensee Action		Outstanding Items Identified by	Category of Items
					Inside	Outside					Replace	Relocate		
2-10	AH-5	LCS									yes		L	3
2-10	AH-6	LCS									yes		L	3
2-11	AH-8	LCS									yes		L	3
2-12	AH-29	LCS									yes		L	3
2-13	AH-23	TER BOX	✓	42	✓	✓			-	-			L	4a
2-14	AH-24	TER BOX	✓	45	✓	✓			-	-			R, L	4b, 4a
2-15	CAB-10A	CC	✓	4C	✓	4C			-	-			L	4C
2-15	CAB-10B	CC	✓	4C	✓	4C			-	-			L	4C
2-16	AH-7S	TEMP SW									yes		L	3
2-16	AH-410-TS	TEMP SW									yes		L	3
2-17	AH-552-APS	FS									yes		L	3
2-18	AH-551-APS	FS									yes		L	3

Code:

- ✓ or S - Indicates the item is below the flood level
- or N - Indicates the item is Satisfactory
- UL - Indicates the item is Unresolved, Licensee identified
- P - Proprietary
- L - Licensee identified
- R - Reviewer identified
- 1 - Equipment is qualified
- 2 - Aging is less than life of plant with licensee indicating periodic replacement
- 3 - Equipment requires modification (resolution, shielding, etc.)
- 4 - Qualification of equipment unresolved
 - a) Testing schedule but not complete
 - b) Reviewer needs additional information
 - c) Qual. Record search still in process
- 5 - Equipment not qualified
- 6 - Item identified to EQB for resolution

REVIEWER U Brown DATE 12/19/80

FACILITY Crystal River 3
 SYSTEM Auxiliary Steam

ATTACHMENT 1
 FOR IES 79-01B
 TER

PAGE 1 OF 1

CES. Page No.	Equip. I. D. #	Generic Name	Accid. Profile	Qual. Profile	Radiation Qual. Containment		Qual. Method	Chem. Spray	Accur.	Subm.	Licensee Action		Outstanding Items Identified by	Category of Items	
					Inside	Outside					Replace	Relocate			
2-19	ASV-5	MOV										YES		2	3
2-20	ASV-5	MTR STR										YES		2	3
2-21	AS-1	LCS										YES		2	3
2-22	AS-1	TER BOX	✓	4a	-	✓	4a	-	-	-	-	-	-	2	4a

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3 = Equipment requires modification (resolution, shielding, etc.)
 4 = Qualification of equipment unresolved
 a) Testing schedule but not complete
 b) Reviewer needs additional information
 c) Qual. Record search still in process
 5 = Equipment not qualified
 6 = Item identified to EQB for resolution

REVIEWER V. Brown DATE 12/19/80

FACILITY Crystal River 3
 SYSTEM Reactor Building Spray

ATTACHMENT I
 FOR IEB 79-01B
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PAGE 1 OF 2

CES. Page No.	Equip. I. D. #	Generic Name	Accid. Profile	Qual. Profile	Radiation Qual. Containment		Qual. Method	Chem. Spray	Accur.	Subm.	Licensee Action		Outstanding Items Identified by	Category of Items
					Inside	Outside					Replace	Relocate		
2-23	BSP-1A	MTR										yes	L	3
2-23	BSP-1B	MTR										yes	L	3
2-24	BSV-4	MOV	L	L	-	L	1/2	-	-	-	-	-	R	1
2-24A	BSV-3	MOV										yes	L	3
2-25	BSU-10	MOV	L	L	-	L	1/2	-	-	-	-	-	-	1
2-25	BSU-17	MOV	L	L	-	L	L	-	-	-	-	-	-	1
2-26	BSU-30	MOV	L	L	-	L	L	-	-	-	-	-	-	1
2-26	BSU-37	MOV	L	L	-	L	L	-	-	-	-	-	-	1
2-27	BS-5	TER BOX	L	42	-	42	42	-	-	-	-	-	L	42
2-27	BS-6	TER BOX	L	42	-	42	42	-	-	-	-	-	L	42
2-28	BS-PS-18	PS										yes	L	3
2-29	BS-PS-25	PS										yes	L	3

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- 3 = Equipment requires modification (resolution, shielding, etc.)
- 4 = Qualification of equipment unresolved
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 - b) Reviewer needs additional information
 - c) Qual. Record search still in process
- 5 = Equipment not qualified
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REVIEWER VLBrounler DATE 12/9/80

CES. Page No.	Equip. I. D.	Generic Name	Accid. Profile	Qual. Profile	Radiation Qual. Containment		Qual. Method	Chem. Spray	Accur.	Subm.	Licensee Action		Outstanding Items Identified by	Category of Items
					Inside	Outside					Replace	Relocate		
2-30	BS-PS-62	PS										YES	L	3
2-31	3A1	PSC										YES	L	3
2-31	3A2	PSC										YES	L	3
2-32	3A4	PS	✓	4C	-	4C	4C	-	-	-	-	-	L	4C
2-33	BS-79-FIS	FIS										YES	L	3
2-34	BS-80-FIS	FIS										YES	L	3
2-35	BS-PT-16	PT										YES	L	3
2-35	BS-PT-17	PT										YES	L	3

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REVIEWER J. Brantley DATE 12/9/80

CES. Page No.	Equip. I. D.	Generic Name	Accid. Profile	Qual. Profile	Radiation Qual. Containment		Qual. Method	Chem. Spray	Accur.	Subm.	Licensee Action		Outstanding Item Identified by	Category of Items
					Inside	Outside					Replace	Relocate		
* 2-36	CAV-1	MOV	✓	✓	✓	-	46	-	-	-	-	-	R	45
* 2-36	CAV-3	MOV	✓	✓	✓	-	46	-	-	-	-	-	R	46
* 2-37	CAV-4	MOV	✓	✓	✓	-	45	-	-	-	-	-	R	46
* 2-37	CAV-5	MOV	✓	✓	✓	-	46	-	-	-	-	-	R	46
2-38	CAV-126	MOV	✓	✓	✓	-	46	-	-	-	-	-	R	46
2-39	CAV-2	SV	✓	✓	✓	-	46	-	-	-	-	-	R	46
2-39A	CAV-6	SV										YES	L	3
2-39A	CAV-7	SV										YES	L	3
2-40	CA-1	LCS										YES	L	3
2-40	CA-2	LCS										YES	L	3
2-40	CA-3	LCS										YES	L	3
2-41	CA-1	TER BOX	✓	4E	-	✓	4E	-	-	-	-	-	L	4E

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REVIEWER V. Brundage DATE 12/19/80

FACILITY
SYSTEM

Crystal River 3
Chemical Addition and Sampling - Reactor

ATTACHMENT 1
FOR IEM 79-01B
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CES. Page No.	Equip. I. D. #	Generic Name	Accid. Profile	Qual. Profile	Radiation Qual. Containment		Qual. Method	Chem. Spray	Accur.	Subm.	Licensee Action		Outstanding Items Identified by	Category of Items
					Inside	Outside					Replace	Relocate		
2-41	CA-2	TER BOX	L	4a	-	L	4a	-	-	-	-	-	2	4a
2-41	CA-3	TER BOX	L	4a	-	L	4a	-	-	-	-	-	2	4a

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REVIEWER V.L. Brownlee DATE 12/9/80

FACILITY

Crystal River 3

SYSTEM

Condensate

ATTACHMENT 1
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CES. Page No.	Equip. I. D.	Generic Name	Accid. Profile	Qual. Profile	Radiation Qual. Containment		Qual. Method	Chem. Spray	Accur.	Subm.	Licensee Action		Outstanding Items Identified by	Category of Items
					Inside	Outside					Replace	Relocate		
2-42	CDV-43	MAK												
2-42	CDV-44	MAK												

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- 3 = Equipment requires modification (resolution, shielding, etc.)
- 4 = Qualification of equipment unresolved
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 - b) Reviewer needs additional information
 - c) Qual. Record search still in process
- 5 = Equipment not qualified
- 6 = Item identified to EQB for resolution

REVIEWER

V. Brunker

DATE

12/9/80

FACILITY Crystal River 3
 SYSTEM Cond Flooding

ATTACHMENT I
 FOR IEM 79-01B
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PAGE 1 OF 2

CES. Page No.	Equip. I. D. #	Generic Name	Accid. Profile	Qual. Profile	Radiation Qual. Containment		Qual. Method	Chem. Spray	Accur.	Subm.	Licensee Action		Outstanding Items Identified by	Category of Items
					Inside	Outside					Replace	Relocate		
2-43	CFV-11	MOV									YES		L	3
2-43	CFV-12	MOV									YES		L	3
2-44	CFV-15	MOV									YES		L	3
2-44	CFV-16	MOV									YES		L	3
2-45	CFV-25	SU									YES		L	3
2-45	CFV-26	SU									YES		L	3
2-45	CFV-29	SU									YES		L	3
2-45	CFV-42	SU									YES		L	3
2-46	CFV-27	SU									YES		L	3
2-46	CFV-28	SU									YES		L	3
2-47	CF-1	LCS									YES		L	3
2-47	CF-5	LCS									YES		L	3

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 b) Reviewer needs additional information
 c) Qual. Record search still in process
 5 = Equipment not qualified
 6 = Item identified to EQB for resolution

REVIEWER V. Brunker DATE 12/9/80

FACILITY Crystal River 3
 SYSTEM Core Flooding

ATTACHMENT 1
 FOR IEB 79-01B
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CES. Page No.	Equip. I. D.	Generic Name	Accid. Profile	Qual. Profile	Radiation Qual. Containment		Qual. Method	Chem. Spray	Accur.	Subm.	Licensee Action		Outstanding Items Identified by	Category of Items
					Inside	Outside					Replace	Relocate		
2-47	CF-6	LCS										YES	L	3
2-48	CF-3	LCS										YES	L	3
2-49	CF-1	TER BOX	L	42	-	L	42	-	-	-	-	-	L	42
2-49	CF-3	TER BOX	L	42	-	L	42	-	-	-	-	-	L	42
2-49	CF-4	TER BOX	L	42	-	L	42	-	-	-	-	-	L	42
2-50	CF-2	TER BOX	L	42	-	L	42	-	-	-	-	-	L	42

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 - R = Reviewer identified
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 - 3 = Equipment requires modification (resolution, shielding, etc.)
 - 4 = Qualification of equipment unresolved
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 - b) Reviewer needs additional information
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 - 5 = Equipment not qualified
 - 6 = Item identified to EQB for resolution

REVIEWER: JL Brumlee DATE 12/9/80

CES. Page No.	Equip. I. D.	Generic Name	Accid. Profile	Qual. Profile	Radiation Qual. Containment		Qual. Method	Chem. Spray	Accur.	Subs.	Licensee Action		Outstanding Items Identified by	Category of Items
					Inside	Outside					Replace	Relocate		
2-51	CIV-34	SU										YES	L	3
2-51	CIV-35	SU										YES	L	3
2-51	CIV-40	SU										YES	L	3
2-51	CIV-41	SU										YES	L	3
2-52	CI-3	LCS										YES	L	3
2-52	CI-4	LCS										YES	L	3
2-52	CI-5	LCS										YES	L	3
2-52	CI-6	LCS										YES	L	3
2-53	CI-2	TER BOX	L	42	-	L	42	-	-	-	-	-	L	42
2-53	CI-3	TER BOX	L	42	-	L	42	-	-	-	-	-	L	42
2-53	CI-4	TER BOX	-	42	-	L	42	-	-	-	-	-	L	42
2-53	CI-9	TER BOX	L	42	-	L	42	-	-	-	-	-	L	42

Code:

B - Indicates the item is below the flood level

S - Indicates the item is Satisfactory

N - Indicates the item is Not Applicable

U - Indicates the item is Unresolved, Licensee identified

P - Proprietary

L - Licensee identified

R - Reviewer identified

1 - Equipment is qualified

2 - Aging is less than life of plant with licensee indicating periodic-replacement

3 - Equipment requires modification (resolution, shielding, etc.)

4 - Qualification of equipment unresolved

a) Testing schedule but not complete

b) Reviewer needs additional information

c) Qual. Record search still in process

5 - Equipment not qualified

6 - Item identified to EQ3 for resolution

REVIEWER *V. Brunk* DATE *12/9/80*

FACILITY Crystal River 3
SYSTEM Delay Neut closed cycle

ATTACHMENT 1
FOR IEB 79-01B
TER

PAGE 1 OF 1

CES. Page No.	Equip. I. D. #	Generic Name	Accid. Profile	Qual. Profile	Radiation Qual. Containment		Qual. Method	Chem. Spray	Accur.	Subm.	Licensee Action		Outstanding Items Identified by	Category of Items
					Inside	Outside					Replace	Relocate		
2-54	DCP-1A	MTR	✓	4C	-	4C	4C	-	-	-	-	-	2	4C
2-54	DCP-1B	MTR	✓	4C	-	4C	4C	-	-	-	-	-	2	4C

- Code:
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REVIEWER V. Brumley DATE 12/9/80

CES. Page No.	Equip. I. D. #	Generic Name	Accid. Profile	Qual. Profile	Radiation Qual. Containment		Qual. Method	Chem. Spray	Accur.	Subst.	Licensee Action		Outstanding Items Identified by	Category of Items
					Inside	Outside					Replace	Relocate		
2-55	DHP-1A	MTR										yes	2	3
2-55	DHP-1B	MTR										yes	4	3
2-56	DHV-5	MOV										yes	4	3
2-56	DHV-6	MOV										yes	4	3
2-57	DHV-11	MOV	L	L	-	L	L	-	-	-	-	-	-	1
2-57	DHV-12	MOV	L	L	-	L	L	-	-	-	-	-	-	1
2-58	DHV-34	MOV										yes	4	3
2-58	DHV-35	MOV										yes	4	3
2-59	DHV-110	MOV										yes	4	3
2-59	DHV-111	MOV										yes	4	3
2-60	AM-43	FIS										yes	4	3
2-61	AM-44	FIS										yes	4	3

Code:

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- UL - Indicates the item is Unresolved, Licensee Identified
- P - Proprietary
- L - Licensee Identified
- R - Reviewer Identified
- 1 - Equipment is qualified
- 2 - Aging is less than life of plant with licensee indicating periodic replacement

- 3 - Equipment requires modification (resolution, shielding, etc.)
- 4 - Qualification of equipment unresolved
 - a) Testing schedule but not complete
 - b) Reviewer needs additional information
 - c) Qual. Record search still in process
- 5 - Equipment not qualified
- 6 - Item identified to EQB for resolution

REVIEWER VL Brown DATE 12/9/80

*Crystal River 3
Decay Heat Removal*

ATTACHMENT 1
FOR IEB 79-01B
TER

PAGE 2 OF 3

FACILITY
SYSTEM

CES Page No.	Equip. I. D. #	Generic Name	Accid. Profile	Qual. Profile	Radiation Qual. Containment		Qual. Method	Chem. Spray	Accur.	Subm.	Licensee Action		Outstanding Items Identified by	Category of Items
					Inside	Outside					Relocate	Replace		
2-62	DH-2-TE-1	TE										YES	L	3
2-62	DH-2-TE-2	TE										YES	L	3
2-62	DH-6-TE-1	TE										YES	L	3
2-62	DH-6-TE-2	TG										YES	L	3
2-63	DH-DPT-1	PT										YES	L	3
2-63	DH-DPT-2	PT										YES	L	3
2-64	DH-DPT-38	DPT										YES	L	3

Code:

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- BL - Indicates the item is Unresolved, Licensee Identified
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- L - Licensee Identified
- R - Reviewer Identified
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 4 - Qualification of equipment unresolved
 a) Testing schedule but not complete
 b) Reviewer needs additional information
 c) Qual. Record search still in process
 5 - Equipment not qualified
 6 - Item identified to EQB for resolution

REVIEWER V. Brown, dcl DATE 12/19/60

FACILITY
SYSTEM

*Crystal River 3
Demineralized Water*

ATTACHMENT 1
FOR IEB 79-01B
TER

PAGE 1 OF 1

CES. Page No.	Equip. I. D. #	Generic Name	Accid. Profile	Qual. Profile	Radiation Qu. l. Containment		Qual. Method	Chem. Spray	Accur.	Subs.	Licensee Action		Outstanding Items Identified by	Category of Items
					Inside	Outside					Replace	Relocate		
2-125	DWV-160	MOV	L	L	-	L	46	-	-	-	-	-	R	45

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- P - Proprietary
- L - Licensee Identified
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 - c) Qual. Record search still in process
- 5 - Equipment not qualified
- 6 - Item identified to EQB for resolution

REVIEWER V. Brando DATE 12/9/80

FACILITY *Crystal River 3*
 SYSTEM *Emergency Feedwater*

ATTACHMENT 1
 FOR IEB 79-01B
 TER

CES. Page No.	Equip. I. D.	Generic Name	Accid. Profile	Qual. Profile	Radiation Qual. Containment		Qual. Method	Chem. Spray	Accur.	Subm.	Licensee Action		Outstanding Items Identified by	Category of Items
					Inside	Outside					Replace	Relocate		
2-66	EFV-1	MTR	L	4C	-	4C	-	-	-	-	-	-	L	4C
2-67	EFV-3	MOV	L	6	-	6	-	-	-	-	-	-	R	4
2-67	EFV-4	MOV	L	1	-	6	-	-	-	-	-	-	R	6
2-68	EFV-7	MOV	L	L	-	L	-	-	-	-	-	-	R	4B
2-68	EFV-8	MOV	L	L	-	L	-	-	-	-	-	-	R	4B
2-69	EFV-11	MOV										YES		3
2-69	EFV-32	MOV										YES		3
2-70	EFV-14	MOV										YES		3
2-70	EFV-33	MOV										YES		3
2-71	EFV-11	MTR STR										YES		3
2-71	EFV-14	MTR STR										YES		3
2-71	EFV-32	MTR STR										YES		3

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 - R - Reviewer identified
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 - 3 - Equipment requires modification (resolution, shielding, etc.)
 - 4 - Qualification or equipment unresolved
 - a) Testing schedule but not complete
 - b) Reviewer needs additional information
 - c) Qual. Record search still in process
 - 5 - Equipment not qualified
 - 6 - Item identified to EQB for resolution

REVIEWER *W. Brown* DATE *12/9/80*

*Crystal River 3
Emergency Feedwater*

CES. Page No.	Equip. I. D. #	Generic Name	Accid. Profile	Qual. Profile	Radiation Qual. Containment		Qual. Method	Chem. Spray	Accur.	Subm.	Licensee Action		Outstanding Items Identified by	Category of Items
					Inside	Outside					Replace	Relocate		
2-71	EFV-33	MTR STR										YES	L	3
2-72	EF-3	LCS										YES	L	3
2-72	EF-4	LCS										YES	L	3
2-73	EF-3	TER BOX	L	42	-	L	42	-	-	-	-	-	L	42
2-73	EF-4	TER BOX	L	42	-	L	42	-	-	-	-	-	L	42

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REVIEWER W. Brundage DATE 12/9/80

FACILITY

Crystal River 3

SYSTEM

Feedwater

ATTACHMENT 1
FOR IEB 79-01B
TEX

PAGE 1 OF 3

CES. Page No.	Equip. I. D. #	Generic Name	Accid. Profile	Qual. Profile	Radiation Qual. Containment		Qual. Method	Chem. Spray	Accur.	Subm.	Licensee Action		Outstanding Items Identified by	Category of Items
					Inside	Outside					Replace	Relocate		
2-74	FWV-14	MOV	L	L	-	L	2L	-	-	-	-	-	L	1
2-74	FWV-15	MOV	L	L	-	L	2L	-	-	-	-	-	L	1
2-75	FWV-28	MOV	L	4c	-	V	4c	-	-	-	-	-	L	4c
2-76	FWV-29	MOV	L	L	-	L	4b	-	-	-	-	-	R	4b
2-76	FWV-30	MOV	L	L	-	L	4b	-	-	-	-	-	R	4b
2-77	FWV-31	MOV	L	L	-	L	4b	-	-	-	-	-	R	4b
2-77	FWV-32	MOV	L	L	-	L	4b	-	-	-	-	-	R	4b
2-78	FWV-33	MOV										yes	L	3
2-78	FWV-34	MOV										yes	L	3
2-78	FWV-35	MOV										yes	L	3
2-78	FWV-36	MOV										yes	L	3
2-79	FWV-101	MOV										yes	L	3

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 - c) Qual. Record search still in process
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- 6 - Item identified to EQB for resolution

REVIEWER W. Brown DATE 12/9/80

FACILITY Crystal River 3
 SYSTEM Federated

ATTACHMENT 1
 FOR IEB 79-01B
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PAGE 2 OF 3

CES. Page No.	Equip. I. D. #	Generic Name	Accid. Profile	Qual. Profile	Radiation Qual. Containment		Qual. Method	Chem. Spray	Accur.	Subm.	License: Action		Outstanding Items Identified by	Category of Items
					Inside	Outside					Replace	Relocate		
2-79	FWV-102	MOV										yes	L	3
2-79A	FWV-39	LS										yes	L	3
2-79A	FWV-40	LS										yes	L	3
2-80	FWV-33	LMS										yes	L	3
2-80	FWV-34	LMS										yes	L	3
2-80	FWV-35	LMS										yes	L	3
2-80	FWV-36	LMS										yes	L	3
2-81	FWV-101	LMS										yes	L	3
2-81	FWV-102	LMS										yes	L	3
2-82	FW-5	LCS										yes	L	3
2-82	FW-6	LCS										yes	L	3
2-83	FW-11	LCS										yes	L	3

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- 3 - Equipment requires modification (resolution, shielding, etc.)
- 4 - Qualification of equipment unresolved
 - a) Testing schedule but not complete
 - b) Reviewer needs additional information
 - c) Qual. Record search still in process
- 5 - Equipment not qualified
- 6 - Item identified to EQB for resolution

REVIEWER W. L. Brown DATE 12/9/80

FACILITY Crystal River 3
SYSTEM Feedwater

ATTACHMENT 1
FOR IEB 79-01B
TER

CES. Page No.	Equip. I. D. #	Generic Name	Accid. Profile	Qual. Profile	Radiation Qual. Containment		Qual. Method	Chem. Spray	Accur.	Subm.	Licensee Action		Outstanding Items Identified by	Category of Items
					Inside	Outside					Replace	Relocate		
2-83	FW-12	LCS										yes	L	3
2-84	FW-3	TER BOX	L	4a	-	L	4a	-	-	-	-	-	L	4a
2-84	FW-4	TER BOX	L	4a	-	L	4a	-	-	-	-	-	L	4a
2-85	FW-11	TER BOX	L	4a	-	L	4a	-	-	-	-	-	L	4a
2-85	FW-20	TER BOX	L	4a	-	L	4a	-	-	-	-	-	L	4a
2-86	FW-22	TER BOX	L	4a	-	L	4a	-	-	-	-	-	L	4a
2-87	FW-38	PT												
2-87	FW-39	PT												

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- 3 - Equipment requires modification (resolution, shielding, etc.)
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 - a) Testing schedule but not complete
 - b) Reviewer needs additional information
 - c) Qual. Record search still in process
- 5 - Equipment not qualified
- 6 - Item identified to EQB for resolution

REVIEWER VLS Brunko DATE 12/9/80

Facility Crystal River 3
System Main Steam

Attachment 1
FOR FEB 79-01B
TER

CES. Page No.	Equip. I. D. #	Generic Name	Accid. Profile	Qual. Profile	Radiation Containment		Qual. Method	Chem. Spray	Accur.	Subm.	Licensee Action		Outstanding Items Identified by	Category of Items
					Inside	Outside					Replace	Relocate		
2-88	MSV-55	MNOV									YES		L	3
2-88	MSV-56	MNOV									YES		L	3
2-89	MSV-55	LMS									YES		L	3
2-89	MSV-56	LMS									YES		L	3
2-90	MSV-111	SU												
2-90	MSV-112	SU												
2-90	MSV-413	SU												
2-90	MSV-414	SU												
2-91	MSV-130	SU												
2-92	MSV-81	SU												
2-93	MS-5	LCS												
2-93	MS-6	LCS												

Code:

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 NL - Indicates the item is Unresolved, Licensee Identified
 P - Proprietary
 L - Licensee Identified
 R - Reviewer Identified
 1 - Equipment is qualified
 2 - Aging is less than life of plant with Licensee indicating periodic replacement
 3 - Equipment requires modification (resolution, shielding, etc.)
 4 - Qualification of equipment unresolved
 a) Testing schedule but no. complete
 b) Reviewer needs additional information
 c) Qual. Record search still in process
 5 - Equipment not qualified
 6 - Item identified to EQB for resolution

REVIEWER W. S. ... DATE 12/9/80

Crystal River 3
main steam

FACILITY: *Crystal River 3*
SYSTEM: *main steam*
A. EQUIPMENT 1
FOR FEB 79-01B
TLR

Cls. Page No.	Equip. I.D.	Generic Name	Accid. Profile	Qual. Prefix	Radiation Contamination		Qual. Method	Chem. Spray	Accur.	Subm.	Licensee Action		Outstanding Items Identified by	Category of Items
					Inside	Outside					Replace	Relocate		
2-94	MS-7	LCS									yes		2	3
2-95	MS-8	LCS											↓	
2-96	MS-9	LCS											↓	
2-97	MS-10	LCS											↓	
2-98	MS-5	TER Box	✓	H2	✓								↓	H2
2-98	MS-6	TER Box	✓	H2	✓								↓	H2
2-99	MS-7	TER Box	✓		✓								↓	
2-100	MS-8	TER Box	✓		✓								↓	
2-101	MS-17	TER Box	✓		✓								↓	
2-102	MS-18	TER Box	✓		✓								↓	
2-103	MS-92-PS1	PS									yes		2	3

Code:

8 - Indicates the item is below the flood level
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 L - Licensee identified
 R - Reviewer identified
 1 - Equipment is qualified
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3 - Equipment requires modification (resolution, shielding, etc.)
 4 - Qualification of equipment unresolved
 a) Testing schedule but not complete
 b) Reviewer needs additional information
 c) Qual. Record search still in process
 5 - Equipment not qualified
 6 - Item identified to EQB for resolution

REVIEWER *W. B. ...* DATE *12/9/80*

FACILITY

Crystal River 3

SYSTEM

Electrical Power Distribution

ATTACHMENT 1
FOR IEB 79-01B
TER

PAGE 1 OF 2

CES. Page No.	Equip. I. D. #	Generic Name	Accid. Profile	Qual. Profile	Radiation Qual. Containment		Qual. Method	Chem. Spray	Accur.	Subm.	Licensee Action		Outstanding Items Identified by	Category of Items
					Inside	Outside					Replace	Relocate		
2-104	MTMC-3	MCC										yes	L	3
2-105	MTMC-4	MCC												
2-106	MTMC-5	MCC												
2-107	MTMC-6	MCC												
2-108	MTMC-7	MCC												
2-109	MTMC-1	MCC												
2-109	MTMC-2	MCC												
2-110	MTMC-12	MCC												
2-110	MTMC-13	MCC												
2-111	MTMC-14	MCC												
2-112	MTMC-15	MCC												
2-113	MTSD-2A	EPA										yes	L	3

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- R - Reviewer identified
- 1 - Equipment is qualified
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- 3 - Equipment requires modification (resolution, shielding, etc.)
- 4 - Qualification of equipment unresolved
 - a) Testing schedule but not complete
 - b) Reviewer needs additional information
 - c) Qual. Record search still in process
- 5 - Equipment not qualified
- 6 - Item identified to EQB for resolution

REVIEWER

V. Brundage
DATE *12/9/80*

FACILITY Crystal River 3
 SYSTEM Electrical Power Distribution

ATTACHMENT 1
 FOR IEB 79-01B
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PAGE 2 OF 2

CES. Page No.	Equip. I. D. #	Generic Name	Accid. Profile	Qual. Profile	Radiation Qual. Containment		Qual. Method	Chem. Spray	Accur.	Subm.	Licensee Action		Outstanding Items Identified by	Category of Items
					Inside	Outside					Replace	Relocate		
2-114	MTBD-2B	EPA										yes	L	3
2-115	MTBD-2C	EPA										↓	↓	↓
2-116	MTBD-8A	EPA												
2-117	MTBD-8B	EPA												
2-118	MTBD-8C	EPA												
2-118	MTBD-8D	EPA												
2-119	MTBD-9A	EPA												
2-119	MTBD-9B	EPA												
2-120	MTBD-9C	EPA												
2-120	MTBD-9D	EPA												
2-121	MTBD-11A	EPA												
2-121	MTBD-11B	EPA												

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 4 - Qualification of equipment unresolved
 a) Testing schedule but not complete
 b) Reviewer needs additional information
 c) Qual. Record search still in process
 5 - Equipment not qualified
 6 - Item identified to EQB for resolution

REVIEWER V. Browder DATE 12/9/80

Crystal River 3
Electrical Distribution

PAC-1111
SYSTEM

CES. Page No.	Equip. I. D.	Generic Name	Accid. Profile	Qual. Profile	Radiation Qual. Compliance		Qual. Method	Chem. Spray	Accur.	Subm.	Licensee Action		Outstanding Items Identified by	Category of Items
					Inside	Outside					Replace	Relocate		
2-122	PWR Control Cable	CBL	✓	✓	✓	✓	46	✓	✓	✓	-	-	R	46
2-123	Thermocouple	CBL	✓	✓	✓	✓	46	✓	✓	✓	-	-	R	46
2-124	Inst. Thermocouple	CBL	✓	✓	✓	✓	46	✓	✓	✓	-	-	R	46
2-125	NI Detector	CBL												
2-126	NI Cable													
2-127	Terminal Block	TB											✓	3
2-128	Terminal Block	TB											✓	3
2-129	Terminal Wires	TL											✓	3
2-130	TERM. PROC.	TERM. PROC.											✓	3
2-131	TERM. PROC.	TERM. PROC.											✓	3
2-132	TERM. PROC.	TERM. PROC.	✓	✓	✓	✓	46	✓	✓	✓	-	-	R	46
2-133	Tape	TAPE											✓	3

Relocated
Relocated

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 - c) Qual. Record search still in process
 - 5 - Equipment not qualified
 - 6 - Item identified to EQB for resolution

REVIEWER V. Brumby DATE 12/19/80

FACILITY Crystal River 3
SYSTEM Electrical Distribution

ATTACHMENT 1
FOR IEB 79-01B
TER

CES. Page No.	Equip. I. D. #	Generic Name	Accid. Profile	Qual. Profile	Radiation Qual. Containment		Qual. Method	Chem. Spray	Accur.	Subm.	Licensee Action		Outstanding Items Identified by	Category of Items
					Inside	Outside					Replace	Relocate		
2-134	TAPE	TAPE			Deleted									
2-134A	TAPE	TAPE									yes		4	3
2-134B	TAPE	TAPE									↓		↓	↓
2-135	TAPE	TAPE												
2-136	TAPE	TAPE												
2-137	TAPE	TAPE												
2-138	SPLICE TERM.	SPLICE												
2-139	Tubing	Tubing			Deleted									
2-140	Tubing	Tubing			Deleted									

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REVIEWER V. Brown DATE 12/9/50

CES. Page No.	Equip. I. D.	Generic Name	Accid. Profile	Qual. Profile	Radiation Qual. Containment		Qual. Method	Chem. Spray	Accur.	Subm.	Licensee Action		Outstanding Items Identified by	Category of Items
					inside	Outside					Replace	Relocate		
2-141	MUP-1A	MTR										YES	L	3
2-141	MUP-1B	MTR										↓	↓	↓
2-141	MUP-1C	MTR										↓	↓	↓
2-142	MUV-18	MOV										↓	↓	↓
2-143	MUV-23	MOV	L	L	-	L	L	-	L	-	-	-	-	1
2-143	MUV-24	MOV	L	L	-	L	L	-	L	-	-	-	-	1
2-144	MUV-25	MOV	L	L	-	L	L	-	L	-	-	-	-	1
2-144	MUV-26	MOV	L	L	-	L	L	-	L	-	-	-	-	1
2-145	MUV-27	MOV	L	L	-	L	L	-	L	-	-	-	-	1
2-146	MUV-38	MOV										YES	L	3
2-146	MUV-39	MOV										↓	↓	↓
2-147	MUV-40	MOV										↓	↓	↓

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- R - Reviewer Identified
- 1 - Equipment is qualified
- 2 - Aging is less than life of plant with licensee indicating periodic replacement

- 3 - Equipment requires modification (resolution, shielding, etc.)
- 4 - Qualification of equipment unresolved
 - a) Testing schedule but not complete
 - b) Reviewer needs additional information
 - c) Qual. Record search still in process
- 5 - Equipment not qualified
- 6 - Item identified to EQB for resolution

REVIEWER

DATE 12/9/80

FACILITY

Crystal River 3

SYSTEM

Makeup and Purification

ATTACHMENT 1
FOR IEB 79-01B
TER

PAGE 2 OF 4

CES. Page No.	Equip. I. D.	Generic Name	Accid. Profile	Qual. Profile	Radiation Qual. Containment		Qual. Method	Chem. Spray	Accur.	Subm.	Licensee Action		Outstanding Items Identified by	Category of Items
					Inside	Outside					Replace	Relocate		
2-147	MUV-41	MOV										yes	L	3
2-148	MUV-53	MOV										↓	↓	↓
2-148	MUV-257	MOV										↓	↓	↓
2-149	MUV-58	MOV										↓	↓	↓
2-150	MUV-73	MOV										↓	↓	↓
2-151	MUV-112	MOV	L	L	-	L	L	L	L	-	-	-	-	1
* 2-152	MUV-258	MOV										yes	L	3
* 2-152	MUV-259	MOV										↓	↓	↓
* 2-152	MUV-260	MOV										↓	↓	↓
* 2-152	MUV-261	MOV										↓	↓	↓
2-153	MUV-49	SU										↓	↓	↓
2-154	MUV-64	SV										↓	↓	↓

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- ✓ or S - Indicates the item is Satisfactory
- or N - Indicates the item is Not Applicable
- UL - Indicates the item is Unresolved, Licensee identified
- P - Proprietary
- L - Licensee identified
- R - Reviewer identified
- 1 - Equipment is qualified
- 2 - Aging is less than life of plant with licensee indicating periodic replacement

- 3 - Equipment requires modification (resolution, shielding, etc.)
- 4 - Qualification of equipment unresolved
 - a) Testing schedule but not complete
 - b) Reviewer needs additional information
 - c) Qual. Record search still in process
- 5 - Equipment not qualified
- 6 - Item identified to EQB for resolution

REVIEWER W. Brander DATE 12/9/80

Crystal River 3 Wastewater and Purification

ATTACHMENT 1
FOR IEB 79-01B
TER

CES. Page No.	Equip. I. D. #	Generic Name	Accid. Profile	Qual. Profile	Rad. Containment		Qual. Method	Chem. Spray	Accur.	Subm.	Licensee Action		Outstanding Items Identified by	Category of Items
					Inside	Outside					Replace	Relocate		
2-151	MUV-253-SV1	SU									YES		L	3
2-155	MUV-253-SV2	SU									↓			
2-156	MU-25	SU												
2-157	MUV-23	MTR STR	L	2									L	2
2-157	MUV-24	MTR STR	L	2									L	2
2-157	MUV-25	MTR STR	L	2									L	2
2-157	MUV-26	MTR STR	L	2									L	2
2-158	MU-4	LCS											L	3
2-158	MU-5	LCS									YES		L	3
2-159	MU-7	LCS											↓	
2-160	MU-10	LCS											↓	
2-161	MU-11	TER BOX	L	42									L	42

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 - 3 - Equipment requires modification (resolution, shielding, etc.)
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 - a) Testing schedule but not complete
 - b) Reviewer needs additional information
 - c) Qual. Record search still in process
 - 5 - Equipment not qualified
 - 6 - Item identified to EQB for resolution

REVIEWER V. Brundel DATE 12/9/80

FACILITY Crystal River 3
SYSTEM Makeup and Purification

ATTACHMENT 1
FOR IEB 79-01B
TER

CLS. Page No.	Equip. I. D. #	Generic Name	Accid. Profile	Qual. Profile	Radiation Qual. Containment		Qual. Method	Chem. Spray	Accur.	Subm.	Licensee Action		Outstanding Items Identified by	Category of Items
					Inside	Outside					Replace	Relocate		
2-161	MU-5	TER BOX	L	42	-	L	42	-	-	-	-	-	L	42
2-162	MU-11	TER BOX	L	42	-	L	42	-	-	-	-	-	L	42
2-163	MU-21	TER BOX	L	42	-	L	42	-	-	-	-	-	L	42
2-164	MU-22	TER BOX	L	42	-	42	42	-	-	-	-	-	L	42
2-165	MU-14-LT 1	LT	L										L	3
2-165	MU-14-LT 2	LT	L										L	3
2-166	MU-23-DPT 1	DPT										yes	L	
2-166	MU-23-DPT 2	DPT											L	
2-166	MU-23-DPT 3	DPT											L	
2-166	MU-23-DPT 4	DPT											L	
2-167	MU-24-DPT	DPT											L	

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 - c) Qual. Record search still in process
- 5 - Equipment not qualified
- 6 - Item identified to EQB for resolution

REVIEWER *V. Brown* DATE *12/2/60*

FACILITY Crystal River 3
SYSTEM Reactor Coolant

ATTACHMENT 1
FOR IEB 79-01B
TER

CES. Page No.	Equip. I. D. #	Generic Name	Accid. Profile	Qual. Profile	Radiation Qual. Containment		Qual. Method	Chem. Spray	Accur.	Subm.	Licensee Action		Outstanding Items Identified by	Category of Items
					Inside	Outside					Replace	Relocate		
2-107A	RCV-10	SV									YES		L	3
2-108	RCV-11	MOV									YES		L	3
2-109	RC-8	TER AX	L	4E									L	4E
* 2-170	RC-3A-PT2	PT	L	4E				L	4B				L R	4E, 4B
2-170	RC-3A-PT1	PT	L	4E				L	4B				L R	4E, 4B
2-170	RC-3B-PT1	PT	L	4E				L	4B				L R	4E, 4B
2-170	RC-3B-PT2	PT	L	4E				L	4B				L R	4E, 4B
* 2-171	RC-3A-PT3	PT	L	4E				L	4B				L	3
2-171	RC-3A-PT4	PT	L	4E				L	4B				L	3
2-171	RC-3B-PT3	PT	L	4E				L	4B		YES		L	3
2-172	RC-PT-132	PT	L	2				L			YES		L	2
* 2-173	RC-14A-DPT-1	FT									YES		L	3

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- 2 - Aging is less than life of plant with licensee indicating periodic replacement
- 3 - Equipment requires modification (resolution, shielding, etc.)
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 - a) Testing schedule but not complete
 - b) Reviewer needs additional information
 - c) Qual. Record search still in process
- 5 - Equipment not qualified
- 6 - Item identified to EQB for resolution

REVIEWER VBrown DATE 12/9/80

CES. Page No.	Equip. I. D. #	Generic Name	Accid. Profile	Qual. Profile	Radiation Qual. Containment		Qual. Method	Chem. Spray	Accur.	Subm.	Licensee Action		Outstanding Items Identified by	Category of Items
					Inside	Outside					Replace	Relocate		
2-173	RC-14A-DPT-2	FT										YES	L	3
2-173	RC-14B-DPT-1	FT										YES	L	3
2-173	RC-14B-DPT-2	FT										YES	L	3
2-174	RC-4A-TE4	TE												
2-174	RC-4A-TE1	TE												
2-174	RC-4B-TE1	TE												
2-174	RC-4B-TE4	TE												
2-174	RC-5A-TE1	TE												
2-174	RC-5A-TE2	TE												
2-174	RC-5A-TE3	TE												
2-174	RC-5A-TE4	TE												
2-174	RC-5B-TE1	TE												

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- 3 - Equipment requires modification (resolution, shielding, etc.)
- 4 - Qualification of equipment unresolved
 - a) Testing schedule but not complete
 - b) Reviewer needs additional information
 - c) Qual. Record search still in process
- 5 - Equipment not qualified
- 6 - Item identified to EQE for resolution

REVIEWER V. Brown DATE 12/19/80

Crystal River 3
 Reactor Coolant

ATTACHMENT 1
 FOR IEB 79-01B
 TER

CES. Page No.	Equip. I. D. #	Generic Name	Accid. Profile	Qual. Profile	No. of Qual. Statement		Qual. Method	Chem. Spray	Accur.	Subm.	Licensee Action		Outstanding Items Identified by	Category of Items
					Inside	Outside					Replace	Relocate		
2-174	RC-58-TE2	TE									YES		L	3
2-174	RC-58-TE3	TE									↓		↓	↓
2-174	RC-58-TE4	TE									↓		↓	↓
2-175	RC-001-1	LT	✓	2	✓	-	2	-	-	-	-	-	L	2
2-175	RC-001-2	LT	✓	2	✓	-	2	-	-	-	-	-	L	2
2-175	RC-001-3	LT	✓	2	✓	-	2	-	-	-	-	-	L	2
2-176	NI-005-A13	NFD												
2-176	NI-004-A13	NFD												
2-176	NI-007-A13	NFD												
2-176	NI-008-A13	NFD												

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 - a) Testing schedule but not complete
 - b) Reviewer needs additional information
 - c) Qual. Record search still in process
- 5 - Equipment not qualified
- 6 - Item identified to EQB for resolution.

REVIEWER VBowen DATE 12/9/80

FACILITY: Crystal River 3
SYSTEM: Radiation Monitoring

ATTACHMENT 1
FOR IEB 79-01B
TER

CES. Page No.	Equip. I. D.	Generic Name	Accid. Profile	Qual. Profile	Radiation Qual. Containment		Qual. Method	Chem. Spray	Accur.	Subm.	Licensee Action		Outstanding Items Identified by	Category of Items
					Inside	Outside					Replace	Relocate		
2-177	Rm- A1	RM												
2-178	Rm- A6	RM												
2-179	Rm- A12	RM												
2-180	LR-7- TR	TR												

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 - c) Qual. Record search still in process
- 5 - Equipment not qualified
- 6 - Item identified to EQB for resolution

REVIEWER V. Brantley DATE 12/9/80

Crystal River 3
Nuclear Services of Duval Heat Sea water

FACILITY ATTACHMENT 1
 SYSTEM FOR FEB 79-01B
 TER

PAGE 1 OF 1

CES Page No.	Equip. I. D. #	Generic Name	Accid. Profile	Qual. Profile	Radiation Qual. Confinement		Qual. Method	Chem. Spray	Accur.	Subm.	Licensee Action		Outstanding Items Identified by	Category of Items
					Inside	Outside					Replace	Relocate		
2-181	RWP-2A	MTR	✓	4C	-	4C	4C	-	-	-	-	-	L	4C
2-181	RWP-2B	MTR	✓	4C	-	4C	4C	-	-	-	-	-	L	4C
2-182	RWP-3A	MTR	✓	4C	-	4C	4C	-	-	-	-	-	L	4C
2-182	RWP-3B	MTR	✓	4C	-	4C	4C	-	-	-	-	-	L	4C

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 R - Reviewer Identified
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 2 - Aging is less than life of plant with license indicating periodic replacement
 3 - Equipment requires modification (resolution, shielding, etc.)
 4 - Qualification of equipment unresolved
 a) Testing schedule but not complete
 b) Reviewer needs additional information
 c) Qual. Record search still in process
 5 - Equipment not qualified
 6 - Item identified to EQB for resolution

REVIEWER *V. Brumfield* DATE *12/2/80*

CES. Page No.	Equip. I. D.	Generic Name	Accid. Profile	Qual. Profile	Radiation Qual. Containment		Qual. Method	Chem. Spray	Accur.	Subm.	Licensee Action		Outstanding Items Identified by	Category of Items
					Inside	Outside					Replace	Relocate		
2-183	SPMA-LT1	LT									yes		2	3
2-183	SP1B-LT1	LT												
2-184	SP1A-2	LT												
2-184	SP1A-3	LT												
2-184	SP1B-2	LT												
2-184	SP1B-3	LT												
2-185	SP1A-4	LT												
2-185	SP1A-5	LT												
2-185	SP1B-4	LT												
2-185	SP1B-5	LT												
2-186	SP-6A-PT-1	PT												
2-186	SP-6A-PT-2	PT												

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 - 2 - Aging is less than life of plant with licensee indicating periodic replacement

- 3 - Equipment requires modification (resolution, shielding, etc.)
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 - a) Testing schedule but not complete
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 - c) Qual. Record search still in process
- 5 - Equipment not qualified
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REVIEWER V. Brumley DATE 12/9/80

CES. Page No.	Equip. I. D. #	Generic Name	Accid. Profile	Qual. Profile	Radiation Qual. Containment		Qual. Method	Chem. Spray	Accur.	Subm.	Licensee Action		Outstanding Items Identified by	Category of Items
					Inside	Outside					Replace	Relocate		
2-186	SP-6B-PT-1	PT										YES	L	3
2-186	SP-6B-PT-2	PT										YES	L	3
2-187	SP-8A-DPT-1	DPT												
2-187	SP-8A-DPT-2	DPT												
2-187	SP-8A-DPT-3	DPT												
2-187	SP-8B-DPT-1	DPT												
2-187	SP-8B-DPT-2	DPT												
2-187	SP-8B-DPT-3	DPT												

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- 5 - Equipment not qualified
- 6 - Item identified to EQB for resolution

REVIEWER V. Browder DATE 12/9/80

FACILITY Crystal River 3
 SYSTEM Nuclear Services Closed and Corrosion

ATTACHMENT 1
 FOR IEB 79-01B
 TER

CES. Page No.	Equip. I. D. #	Generic Name	Accid. Profile	Qual. Profile	Rad. Containment		Qual. Method	Chem. Spray	Accur.	Subm.	Licensee Action		Outstanding Items Identified by	Category of Items
					Inside	Outside					Replace	Relocate		
2-188	SWV-1A	MTR	L	4C	-	4C	-	-	-	-	-	-	6	4C
2-188	SWV-1B	MTR	L	4C	-	4C	-	-	-	-	-	-	6	4C
2-189	SWV-12	SU									yes		2	3
2-190	SWV-35	SU												
2-190	SWV-37	SU												
2-190	SWV-39	SU												
2-190	SWV-41	SU												
2-190	SWV-43	SU												
2-190	SWV-45	SU												
2-191	SWV-47	SU												
2-191	SWV-48	SU												
2-191	SWV-49	SU												

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- 3 - Equipment requires modification (resolution, shielding, etc.)
- 4 - Qualification of equipment unresolved
- a) Testing schedule but not complete
- b) Reviewer needs additional information
- c) Qual. Record search still in process
- 5 - Equipment not qualified
- 6 - Item identified to EQB for resolution

REVIEWER V. Brundage DATE 12/1/80

Facility: Crystal River 3
 System: Nuclear Services closed cycle cooling
 Attachment: 1
 Date: Feb 79-01B
 Title: TER

CES. Page No.	Equip. I. D. #	Generic Name	Accid. Profile	Qual. Profile	Radiation Qual. Containment		Qual. Method	Chem. Spray	Accur.	Subm.	Licensee Action		Outstanding Items Identified by	Category of Items
					Inside	Outside					Replace	Relocate		
2-191	SWV-50	SU									yes		L	3
2-191A	SWV-47	LS												
2-191A	SWV-48	LS												
2-191A	SWV-49	LS												
2-191A	SWV-50	LS												
2-192	SWV-79	SU												
2-192	SWV-80	SU												
2-192	SWV-81	SU												
2-192	SWV-82	SU												
2-192	SWV-83	SU												
2-192	SWV-84	SU												
2-192	SWV-85	SU												

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 - or N - Indicates the item is not applicable
 UL - Indicates the item is unresolved, licensee identified
 P - Proprietary
 L - Licensee identified
 R - Reviewer identified
 1 - Equipment is qualified
 2 - Aging is less than life of plant with licensee indicating periodic replacement
 3 - Equipment requires modification (resolution, shielding, etc.)
 4 - Qualification of equipment unresolved
 a) Testing schedule but not complete
 b) Reviewer needs additional information
 c) Qual. Record search still in process
 5 - Equipment not qualified
 6 - Item identified to EQB for resolution

REVIEWER: V.B. [Signature] DATE: 12/9/80

CES. Page No.	Equip. I. D. #	Generic Name	Accid. Profile	Qual. Profile	Radiation Qual. Containment		Qual. Method	Chem. Spray	Accur.	Subm.	Licensee Action		Outstanding Items Identified by	Category of Items
					Inside	Outside					Replace	Relocate		
2-192	SWV-86	SU									Yes		2	3
2-193	SWV-109	SU												
2-193	SWV-110	SU												
2-194	SWV-151	SU												
2-194	SWV-152	SU												
2-194	SWV-353	SU												
2-194	SWV-354	SU												
2-194	SWV-355	SU												
2-195	SW-3	LCS												
2-196	SW-4	LCS												
2-196	SW-5	LCS												
2-196	SW-16	LCS												

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- 3 - Equipment requires modification (resolution, shielding, etc.)
- 4 - Qualification of equipment unresolved
 - a) Testing schedule but not complete
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 - c) Qual. Record search still in process
- 5 - Equipment not qualified
- 6 - Item identified to EQB for resolution

REVIEWER VL Brunker DATE 12/9/80

FACILITY Crystal River 3
 SYSTEM Nuclear Services closed cycle cooling

ATTACHMENT 1
 FOR IEB 79-01B
 TER

CES. Page No.	Equip. I. D. #	Generic Name	Accid. Profile	Qual. Profile	Radiation Qual. Containment		Qual. Method	Chem. Spray	Accur.	Subm.	Licensee Action		Outstanding Items Identified by	Category of Items
					Inside	Outside					Replace	Relocate		
2-197	SW-6	LCS									YES		2	3
2-198	SW-7	LCS												
2-199	SW-8	LCS												
2-200	SW-9	LCS												
2-201	SW-10	LCS												
2-202	SW-11	LCS												
2-202	SW-13	LCS												
2-202	SW-14	LCS												
2-203	SW-3	TER BOX	L	42	-	L	42	-	-	-	-	-	L	42
2-204	SW-4	TER BOX	L		-	L		-	-	-	-			
2-204	SW-5	TER BOX	L		-	L		-	-	-	-			
2-204	SW-19	TER BOX	L		-	L		-	-	-	-			

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- 4 - Qualification of equipment unresolved
 - a) Testing schedule but not complete
 - b) Reviewer needs additional information
 - c) Qual. Record search still in process
- 5 - Equipment not qualified
- 6 - Item identified to EQB for resolution

REVIEWER JL Brunker DATE 12/9/80

FACILITY Crystal River 3
 SYSTEM Nuclear Service Island Cycle Cooling

ATTACHMENT 1
 FOR IEB 79-01B
 TER

CES. Page No.	Equip. I. D. #	Generic Name	Accid. Profile	Qual. Profile	Radiat Ion. Containment		Qual. Method	Chim. Spray	Accur.	Subm.	Licensee Action		Outstanding Items Identified by	Category of Items
					Inside	Outside					Replace	Relocate		
2-205	SW-6	TER BOX	✓	42	-	✓	42	-	-	-	-	-	✓	42
2-206	SW-7	TER BOX	42	42	-	42	42	-	-	-	-	-	✓	42
2-207	SW-8	TER BOX	42	42	-	42	42	-	-	-	-	-	✓	42
2-208	SW-9	TER BOX	42	42	-	42	42	-	-	-	-	-	✓	42
2-209	SW-10	TER BOX	✓	42	-	✓	42	-	-	-	-	-	✓	42
2-210	SW-11	TER BOX	✓	42	-	✓	42	-	-	-	-	-	✓	42
2-210	SW-12	TER BOX	✓	42	-	✓	42	-	-	-	-	-	✓	42
2-210	SW-13	TER BOX	✓	42	-	✓	42	-	-	-	-	-	✓	42
2-211	SW-14	TER BOX	✓	42	-	42	42	-	-	-	-	-	✓	42
2-212	SW-15	TER BOX	✓	42	-	42	42	-	-	-	-	-	✓	42
2-213	SW-18	TER BOX	✓	42	-	✓	42	-	-	-	-	-	✓	42

Code:
 B - Indicates the item is below the flood level
 ✓ or S - Indicates the item is Satisfactory
 - or N - Indicates the item is Not Applicable
 U - Indicates the item is Unresolved, Licensee Identified
 P - Proprietary
 L - Licensee Identified
 R - Reviewer Identified
 1 - Equipment is qualified
 2 - Aging is less than life of plant with license indicating periodic replacement
 3 - Equipment requires modification (resolution, shielding, etc.)
 4 - Qualification of equipment unresolved
 a) Testing schedule but not complete
 b) Reviewer needs additional information
 c) Qual. Record search still in process
 5 - Equipment not qualified
 6 - Item identified to EQB for resolution

REVIEWER V. Browder DATE 12/19/80

Cigarette Run 3
Waste Disposal

FACILITY
SYSTEM
TEL

PAGE 1 OF 2

CES. Page No.	Equip. I. D. #	Generic Name	Accid. Profile	Qual. Profile	Radiation Qual. Containment		Qual. Method	Chem. Spray	Accur.	Subm.	Licensee Action		Outstanding Items Identified by	Category of Items
					Inside	Outside					Replace	Relocate		
2-214	WDV-3	MOV									yes		L	3
2-215	WDV-60	MOV	✓	✓		✓	4b	L	-	-	-		R	4b
2-216	WDV-94	MOV	✓	✓		✓	4b	L	-	-	-		R	4b
2-217	WDV-405	MOV	✓	✓		✓	✓	L	-	-	-		-	1
2-218	WDV-406	MOV	✓	✓		✓	4b	L	-	-	-		R	4b
2-219	WDV-407	MOV					<i>Deleted</i>							
2-220	WDV-4	SU									yes		L	3
2-221	WDV-61	SU									yes		L	3
2-221	WDV-62	SU									yes		L	3
2-222	WD-1	LOS									yes		L	3
2-223	WD-3	TER BOX	L	4b			4b	-	-	-	-		L	4b
2-224	WD-17	LT									yes		L	3

- 3 - Equipment requires modification (resolution, shielding, etc.)
- 4 - Qualification of equipment unresolved
 - a) Testing schedule but not complete
 - b) Reviewer needs additional information
 - c) Qual. Record search still in process
- 5 - Equipment not qualified
- 6 - Item identified to EQB for resolution

- B - Indicates the item is below the flood level
- ✓ or S - Indicates the item is Satisfactory
- or N - Indicates the item is Not Applicable
- UL - Indicates the item is Unresolved, Licensee Identified
- P - Proprietary
- L - Licensee Identified
- R - Reviewer Identified
- 1 - Equipment is qualified
- 2 - Aging is less than life of plant with licensee indicating periodic replacement

REVIEWER V. Brown DATE 12/9/80

CES. Page No.	Equip. I. D. #	Generic Name	Accid. Profile	Qual. Profile	Radiation Qual. Containment		Qual. Method	Chem. Spray	Accur.	Subm.	Licensee Action		Outstanding Items Identified by	Category of Items
					Inside	Outside					Replace	Relocate		
2-225	WSU-3	SU										YES	L	3
2-225	WSU-4	SU										↓	↓	↓
2-225	WSU-5	SU										↓	↓	↓
2-225	WSU-6	SU										↓	↓	↓
2-226	WS-1	LCS										↓	↓	↓
2-226	WS-2	LCS										↓	↓	↓
2-226	WS-3	LCS										↓	↓	↓
2-226	WS-4	LCS										↓	↓	↓
2-227	WS-2	TER BOX	✓	42	-	42	42	-	-	-	-	-	L	42
2-228	WS-3	TER BOX	✓	42	-	42	42	-	-	-	-	-	L	42

- Code:
- ✓ or S - Indicates the item is Satisfactory
 - or N - Indicates the item is Not Applicable
 - UL - Indicates the item is Unresolved, Licensee identified
 - P - Proprietary
 - 1 - Licensee identified
 - R - Reviewer identified
 - 1 - Equipment is qualified
 - 2 - Aging is less than life of plant with licensee indicating periodic replacement

- 3 - Equipment requires modification (resolution, shielding, etc.)
- 4 - Qualification of equipment unresolved
 - a) Testing schedule but not complete
 - b) Reviewer needs additional information
 - c) Qual. Record search still in process
- 5 - Equipment not qualified
- 6 - Item identified to EQB for resolution

REVIEWER *J. Brundage* DATE *12/9/80*

1.4 FUNCTIONS/SYSTEMS LIST

The following list contains those systems considered standard for B&W PWR reactors in accordance with information received from the NRC via telecopier on October 17, 1980. The column on the left are those referred to on the standard list. The column on the right are the corresponding system designations for the Crystal River Unit 3 plant. The system designations listed in the column on the right may be part of a system or the entire system. Individual "Component Evaluation Sheets" found in Section 2 should be consulted for individual components and their functions. Please note, an N/A indicates that the standard system designation in the column on the left is not applicable to Crystal River Unit 3, or that a system, such as the Engineered Safeguards, is a part of the Crystal River Unit 3 systems however there is no component from this system located in the harsh environment of the postulated accidents. Components controlled by this system (the Engineered Safeguards) have been included in this report.

B&W Standard SystemsCrystal River 3 Systems

Reactor Protection	RC
Engineered Safeguard	N/A
Containment Isolation	Many Systems
Main & Auxiliary Steam Iso.	AS, MS
Main & Auxiliary Feedwater Iso.	FW
Feedwater Control	FW
Containment Spray	BS
Containment Air Purification/Cleanup	AH
Containment Combustible Gas Control	H ₂ Purge System
High Pressure Injection	MU
Low Pressure Injection	DH
Accumulators	CF
Residual Heat Removal	DH
Chemical Volume & Control	MU, CA

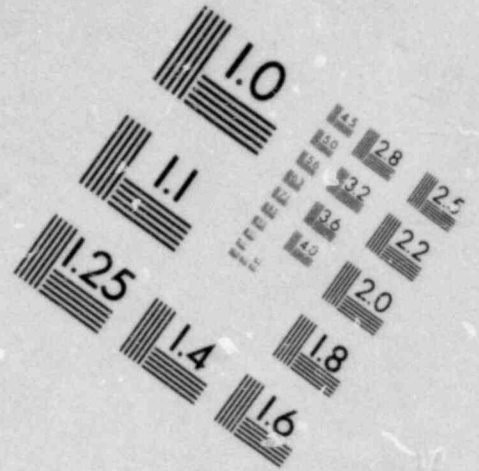
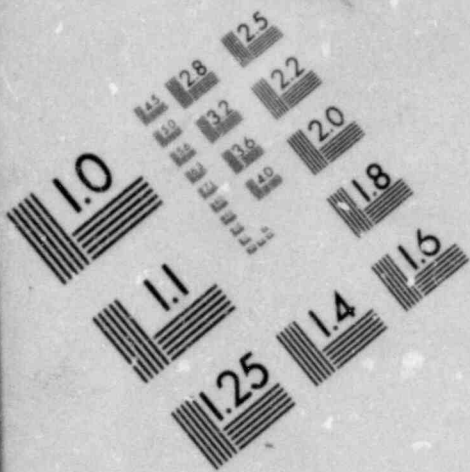
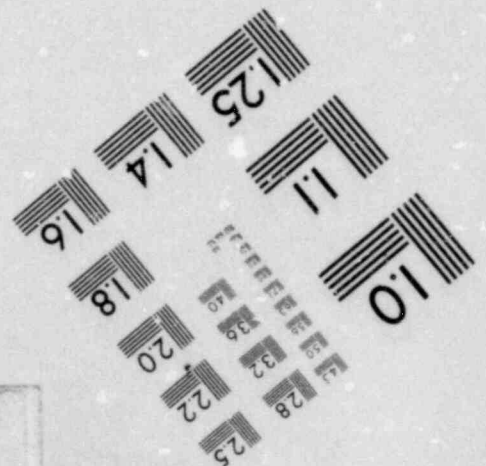
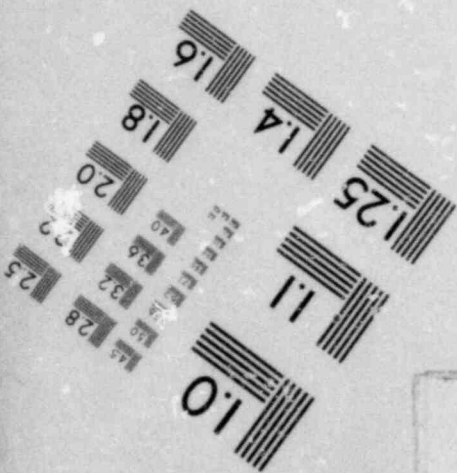
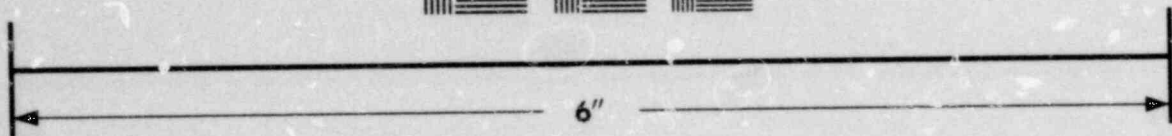
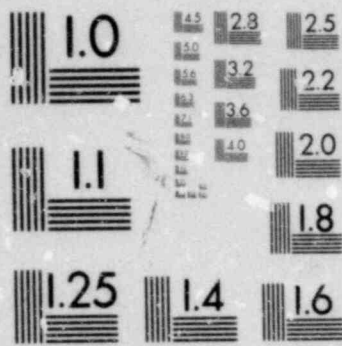


IMAGE EVALUATION
TEST TARGET (MT-3)



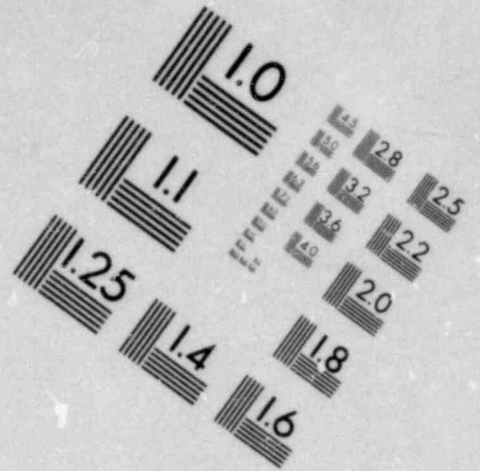
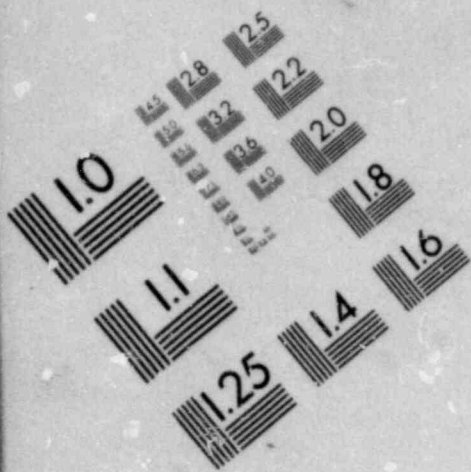
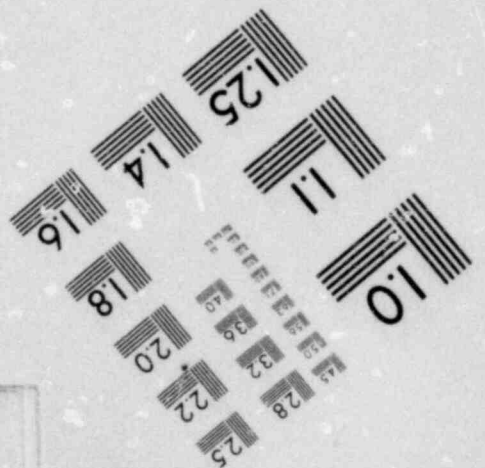
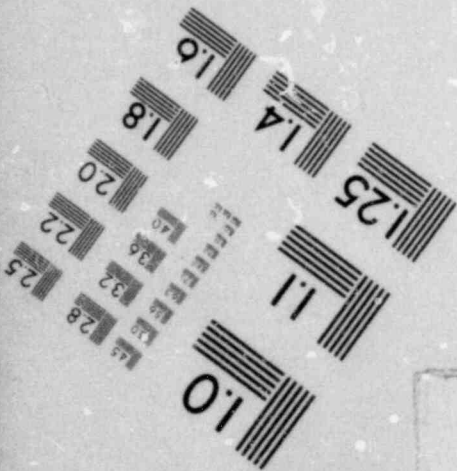
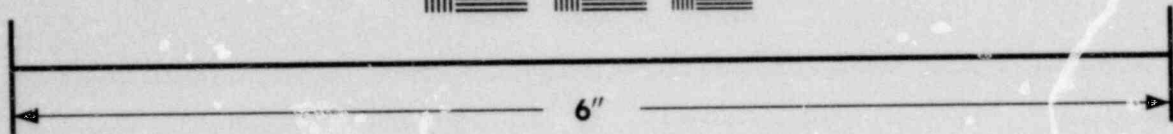
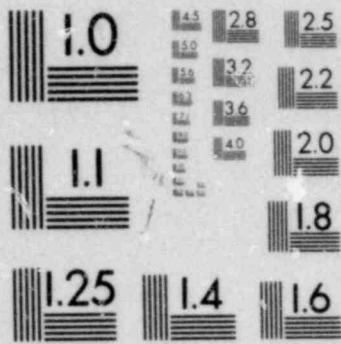


IMAGE EVALUATION
TEST TARGET (MT-3)



B&W Standard Systems

Crystal River 3 Systems

Pressurizer Spray	BS
Power Operated Relief Valves	RC
Steam Dump	MS
Containment Radiation/Monitor	RM
Containment Radiation/Sampling	WD
Component Cooling Water	DC
Service Water	RW
Emergency Power	SW
Containment Sump	MT
Control Room Habitability	DH
Safety Equipment Area Ventilation	N/A
Auxiliary Feedwater	AH
Reactor Coolant	EF
	RC

Crystal River 3

Attachment 3 - Documentation References

1. Westinghouse Report Nos. WCAP-7343-L and WCAP-9003
2. Tech. Spec. pg. 3/4 5-7; 3/4 6-12
3. FSAR Fig. 14-72G, 14-17G
4. Dose Maps, Figs. 4-1, 4-2, 4-3
5. FSAR Chapter 7, para. 7.1.1.7
6. Tech. Spec. Table 3.6-1
7. Philadelphia Gear Test Report #600198, dated January 2, 1969 and addendum No. 1, dated April 29, 1969
8. GAI Report No. 1811, dated 10/1/73
9. GE letter of 10/10/78; Electrical Terminal Block Testing
10. Limitorque Test Report #B0003, dated 5/28/76.
11. Vendor Certifications
12. Philadelphia Gear Test Report #600376A, dated 5/13/76
13. Philadelphia Gear Test Report #600456, dated 9/76
14. Target Rock Corp. Test Report No. 2375, dated 9/26/79
15. Tech. Spec. Table 6.3-1
16. Limitorque Report No. F-C3271, dated February 1972
17. Conax Test Report TR-17, "Prototype Test Report of Penetration Assemblies".
18. Conax Spec. IPS-16, "Specification for Type Qualification of Electrical Penetration Sub-Assemblies".
19. Kerite Co., "Report on the Effects of Gamma Radiation and Autoclaving on Kerite Power and Control Cable", dated 4/30/70.
20. FSAR Table 8-2
21. Rockbestos Report, "Qualification of Firewall SR Class IE Electric Cables", dated 3/2/78

Attachment 3 - Documentation References

22. Anaconda Report No. 79118, dated April 1979
23. FIRL Report F-C4927, "Steam and Chemical Spray Exposure Test of Electrical Terminal Blocks", dated February 1978
24. Gould Qualification Summary Report for Class IE Equipment CC-323, 74-79, Rev. 1, dated 1/17/80
25. FSAR Chapter 5, paragraph 5.2.1
26. FSAR Chapter 5, Section 6.2.2
27. B&W Report 58-0261-00 (Feb. 1977) and 58-0220-00 (Sept. 1975)
28. Gilbert Assoc., Inc., "BWST Drawdown Transient Analyses Report"
29. B&W Report 58-0079-00 (Dec. 1977)
30. B&W Report BAW 10003 + Rev. 1, 2, 3, 4
31. B&W Report 58-0081-00 (March 1973)
32. FSAR Chapter 6, Section 6.2.2
33. B&W Report 58-0372-00 (January 1978)

Attachment 4
OUTSTANDING ITEMS

As Identified By *Crystal River 3*
Licensee

C E S Page No.	ITEM (See Code)	DISPOSITION				Disposition Schedule, Notes
		Replace	Modify	Ongoing Analysis	Other	
2-2	MTR			✓		2
2-3	(2) MTR			✓		2
2-4	(2) MTR			✓		2
2-5	(2) MOV	✓				1
2-6	SV	✓				1
2-7	SV	✓				1
2-8	(2) MTR SPR	✓				1
2-9	MTR SPR	✓				1
2-10	(2) LCS	✓				1
2-11	LCS	✓				1
2-12	LCS	✓				1
2-13	TERI BOX			✓		2
2-14	TERI BOX			✓		2
2-15	(2) CC			✓		2
2-16	(2) Temp SW	✓				1
2-17	FS	✓				1
2-18	FS	✓				1

Attachment 4

OUTSTANDING ITEMS

As Identified By

Licensee *Crystal River 3*

C E S Page No.	ITEM (See Code)	DISPOSITION				Disposition Schedule, Notes
		Replace	Modify	Ongoing Analysis	Other	
2-19	MOV	✓				1
2-20	MTR STR	✓				1
2-21	LCS	✓				1
2-22	TER BOX			✓		2
2-23	(2) MTR	✓				1
2-29A	MOV	✓				1
2-27	(A) TER BOX			✓		2
2-28	PS	✓				1
2-29	PS	✓				1
2-30	PS	✓				1
2-31	(2) PSC	✓				1
2-32	PS			✓		2
2-33	FIS	✓				1
2-34	(1) FIS	✓				1
2-35	(2) PT	✓				1
2-39	(3) SV	✓				1
2-40	(3) LCS	✓				1

Attachment 4

OUTSTANDING ITEMS

As Identified By

Licensee *Crystal River*

C E S Page No.	ITEM (See Code)	DISPOSITION				Disposition Schedule, Notes
		Replace	Modify	Ongoing Analysis	Other	
2-41	TER. (2) Box			✓		2
2-43	(2) MOV	✓				1
2-44	(2) MOV	✓				1
2-45	(5) SV	✓				1
2-46	(2) SV	✓				1
2-47	(3) LCS	✓				1
2-48	LCS	✓				1
2-49	(3) TER. BOX			✓		2
2-50	TER. BOX			✓		2
2-51	(4) SV	✓				1
2-52	(4) LCS	✓				1
2-53	(4) TER. BOX			✓		2
2-54	(2) MTR			✓		2
2-55	(2) MTR	✓				1
2-56	(2) MOV	✓				1
2-58	(2) MOV	✓				1
2-59	(2) MOV	✓				1

Attachment 4

OUTSTANDING ITEMS

As Identified By

Licensee

CRYSTAL RIVER 3

C E S Page No.	ITEM (See Code)	DISPOSITION				Disposition Schedule, Notes
		Replace	Modify	Ongoing Analysis	Other	
2-60	FIS	✓				1
2-61	FIS	✓				1
2-62	(4) TE	✓				1
2-63	(2) PT	✓				1
2-64	DPT	✓				1
2-66	MTR			✓		2
2-69	(2) MOV	✓				1
2-70	(2) MOV	✓				1
2-71	(4) MTR STR	✓				1
2-72	(2) LCS	✓				1
2-73	(2) TER. BOX			✓		2
2-75	MOV			✓		2
2-78	(4) MOV	✓				1
2-79	(2) MOV	✓				1
2-79A	(2) LS	✓				1
2-80	(4) LMS	✓				1
2-81	(3) LMS	✓				1

Attachment 4

OUTSTANDING ITEMS

As Identified By *Crystal River 3*
Licensee

C E S Page No.	ITEM (See Code)	DISPOSITION				Disposition Schedule, Notes
		Replace	Modify	Ongoing Analysis	Other	
2-82	(2) LCS	✓				1
2-83	(2) LCS	✓				1
2-84	(2) TER BOX			✓		2
2-85	(2) TER BOX			✓		2
2-86	TER BOX			✓		2
2-88	(2) MOV	✓				1
2-89	(2) LMS	✓				1
2-90	(4) SV	✓				1
2-91	SV	✓				1
2-92	SV	✓				1
2-93	(2) LCS	✓				1
2-94	LCS	✓				1
2-95	LCS	✓				1
2-96	LCS	✓				1
2-97	LCS	✓				1
2-98	(2) TER BOX			✓		2
2-99	TER BOX			✓		2

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OUTSTANDING ITEMS

As Identified By

Licensee **CRYSTAL RIVER 3**

C E S Page No.	ITEM (See Code)	DISPOSITION				Disposition Schedule, Notes
		Replace	Modify	Ongoing Analysis	Other	
2-100	TER BOX			✓		2
2-101	TER BOX			✓		2
2-102	TER BOX			✓		2
2-103	PS	✓				1
2-104	MCC	✓				1
2-105	MCC	✓				1
2-106	MCC	✓				1
2-107	MCC	✓				1
2-108	MCC	✓				1
2-109	(2) MCC	✓				1
2-110	(2) MCC	✓				1
2-113	EPA	✓				1
2-114	EPA	✓				1
2-115	EPA	✓				1
2-116	EPA	✓				1
2-117	EPA	✓				1
2-118	EPA	✓				1

Attachment 4

OUTSTANDING ITEMS

As Identified By

Licensee CRYSTAL RIVER 3

C E S Page No.	ITEM (See Code)	DISPOSITION				Disposition Schedule, Notes
		Replace	Modify	Ongoing Analysis	Other	
2-119	(2) EPA	✓				1
2-120	(3) EPA	✓				1
2-121	(2) EPA	✓				1
2-122	Cable			✓		2
2-123	Cable			✓		2
2-124	Cable			✓		2
2-127	TER BIR	✓				1
2-128	TER BLK	✓				1
2-129	TER Lug	✓				1
2-130	TER PROC	✓				1
2-131	TER PROC	✓				1
2-133	Tape	✓				1
1-134A	Tape	✓				1
2-134B	Tape	✓				1
2-135	Tape	✓				1
2-136	Tape	✓				1
2-137	Tape	✓				1

Attachment 4

OUTSTANDING ITEMS

As Identified By

Licensee **CRYSTAL RIVER 3**

C E S Page No.	ITEM (See Code)	DISPOSITION				Disposition Schedule, Notes
		Replace	Modify	Ongoing Analysis	Other	
2-138	splice	✓				1
2-141	(3) MTR	✓				1
2-142	MOV	✓				1
2-146	(2) MOV	✓				1
2-147	(2) MOV	✓				1
2-148	(2) MOV	✓				1
2-149	MOV	✓				1
2-150	MOV	✓				1
2-152	(4) MOV	✓				1
2-153	SV	✓				1
2-154	SV	✓				1
2-155	(2) SV	✓				1
2-156	SV	✓				1
2-158	(2) LCS	✓				1
2-159	LCS	✓				1
2-160	LCS	✓				1
2-141	(2) TER. Box			✓		2

Attachment 4

OUTSTANDING ITEMS

As Identified By

Licensee **CRYSTAL RIVER 3**

C E S Page No.	ITEM (See Code)	DISPOSITION				Disposition Schedule, Notes
		Replace	Modify	Ongoing Analysis	Other	
2-162	TER BOX			✓		2
2-163	TER BOX			✓		2
2-164	TER BOX			✓		2
2-165	(2) LT	✓				1
2-166	(4) DPT	✓				1
2-167	DPT	✓				1
2-167A	SV	✓				1
2-168	MDV	✓				1
2-169	TER BOX			✓		2
2-170	(4) PT			✓		2
2-171	(3) PT	✓				1
2-173	(4) LT	✓				1
2-174	(12) TE	✓				1
2-181	(2) MTR			✓		2
2-182	(2) MTR			✓		2
2-183	(2) LT	✓				1
2-184	(4) LT	✓				1

Attachment 4

OUTSTANDING ITEMS

As Identified By

License **CRYSTAL RIVER**

C E S Page No.	ITEM (See Code)	DISPOSITION				Disposition Schedule, Notes
		Replace	Modify	Ongoing Analysis	Other	
2-185	(4) LT	✓				1
2-186	(4) PT	✓				1
2-188	(2) MTR			✓		2
2-189	SV	✓				1
2-190	(6) SV	✓				1
2-191	(4) SV	✓				1
2-191A	(4) LS	✓				1
2-192	(8) SV	✓				1
2-193	(2) SV	✓				1
2-194	(5) SV	✓				1
2-195	LCS	✓				1
2-196	(3) LCS	✓				1
2-197	LCS	✓				1
2-198	LCS	✓				1
2-199	LCS	✓				1
2-200	LCS	✓				1
2-201	LCS	✓				1

Attachment 4

OUTSTANDING ITEMS

As Identified By

Licensee **CRYSTAL RIVER 3**

C E S Page No.	ITEM (See Code)	DISPOSITION				Disposition Schedule, Notes
		Replace	Modify	Ongoing Analysis	Other	
2-202	(2) LCS	✓				1
2-203	TER. BOX			✓		2
2-204	(3) TER. BOX			✓		2
2-205	TER. BOX			✓		2
2-206	TER. BOX			✓		2
2-207	TER. BOX			✓		2
2-208	TER. BOX			✓		2
2-209	TER. BOX			✓		2
2-210	(3) TER. BOX			✓		2
2-211	TER. BOX			✓		2
2-212	TER. BOX			✓		2
2-213	TER. BOX			✓		2
2-214	MOV	✓				1
2-220	SV	✓		✓		1
2-221	(2) SV	✓				1
2-222	LCS	✓				1
2-224	(2) LT					1

1. Item to be replaced (if available) as soon as possible and no later than June 30, 1982, unless information is received or obtained that allows the equipment to remain in - situ.
2. Testing scheduled but not complete, or qualification record search is still in progress; licensee identified.

Codes:

Cable - Electrical Cable
CC - Control Cabinet
DPT - Differential Pressure Transmitter
EPA - Electrical Penetration Assembly
FIS - Flow Indicating Switch
FS - Flow Switch
LCS - Local Control Switch
LMS - Local Motor Starter
LS - Limit Switch
LT - Level Transmitter
MCC - Motor Control Center
MOV - Motor Operated Valve
MTR - Motor
MTR STR - Motor Starter
PS - Pressure Switch
PT - Pressure Transmitter
PSC - Pressure Switch Cabinet
SPLICE - Splice Material
SV - Solenoid Valve
TAPE - Electrical Tape
TE - Temperature Element
TEMP SW - Temperature Switch
TER BLK - Terminal Block
TER BOX - Terminal Box
TER LUG - Termination Lug
TER PROC - Termination Procedure