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the southern electric system

June 23, 1982

Docket No. 50-364

Director, Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Attention: Mr. S. A. Varga

Joseph M. Farley Nuclear Plant - Unit 2
Environmental Qualification of
Safety Related Electrical Equipment

Gentlemen:

Alabama Power Company provides herewith the additional qualification information for TMI Action Plan equipment in accordance with the commitments of letter dated April 23, 1982. This information completes the response to the NRC letter dated March 26, 1982.

This information demonstrates Alabama Power Company's continuing efforts to assure electrical equipment necessary to protect the public health and safety is capable of performing its intended function if subject to a harsh environment.

If you have any questions, please advise.

Yours very truly,

F. L. Clayton, Jr.

A048

FLCJr/MAL:lsh-D15

cc: Mr. R. A. Thomas
Mr. G. F. Trowbridge
Mr. J. P. O'Reilly
Mr. E. A. Reeves
Mr. W. H. Bradford
Office of I&E
Division of Reactor Operations Inspection
Washington, D. C. 20555

Manual Insertion Instructions

Appendix 6 - IEB 79-01B Response For TMI Action Plan Equipment. This appendix is intended to be inserted into the Alabama Power Company NUREG-0588 Response.

APPENDICES | A 6

1. NUREG-0588 Review Implementation Procedure
2. Emergency Operating Procedures Review and Results
3. Procedures for Maintaining Equipment Qualification
4. Response to NRC Equipment Qualification Safety Evaluation
5. Summary of Aging Evaluations
6. TMI Action Plan Equipment |

NUREG-0588 Response - Appendix 6

TMI Action Plant Equipment

NUREG-0588 Response - Appendix 6

TMI Action Plan Equipment

Table of Contents

In order to complete the response to NRC letter, dated March 26, 1982, Alabama Power Company committed to provide additional qualification information for TMI Action Plan equipment in letter date April 23, 1982. These commitments are intended to provide the following:

1) Identification of TMI Action Plan equipment requiring environmental qualification.

2) System Component Evaluation Work Sheets for equipment identified in Item 1.

3) Correlation of equipment items with specific parts of NUREG-0737.

4) Installation dates of TMI Action Plan equipment identified in Item 1.

5) Identification of qualification documents used as evidence of qualification.

6) Standard Owner's Group positions and previously requested extensions to implementation dates regarding NUREG-0737.

To satisfy these commitments, Alabama Power Company has performed a review correlating the specific Farley Nuclear Plant areas of a possible harsh environment with the locations of equipment needed to satisfy the requirements of NUREG-0737, "Clarification of TMI Action Plan Requirements." The results of this review indicate the following parts of NUREG-0737 address equipment requiring environmental qualification:

II.B.1 - Reactor Coolant System Vents

II.D.1 - Pressurizer Relief and Safety Valves

II.D.3 - Valve Position Indication

II.E.1.2 - Auxiliary Feedwater System Indication and Flow

II.E.4.1 - Dedicated Hydrogen Penetrations

II.E.4.2 - Containment Isolation Dependability

II.F.1.3 - Containment High-Range Radiation Monitor

II.F.1.5 - Containment Water Level

II.F.2 - Instrumentation for Detection of Inadequate Core Cooling

II.K.3.1 - Automatic PORV Isolation System

II.K.3.5 - Automatic Trip of Reactor Coolant Pumps

Only the above parts of NUREG-0737 address equipment requiring environmental qualification. All other parts of NUREG-0737 address equipment that: (1) is not located in a harsh environment; (2) is not electrical equipment; (3) is not applicable to Farley Nuclear Plant as discussed in Alabama Power Company letter dated January 14, 1981, "NUREG-0737 Response;" or (4) does not require environmental qualification in accordance with associated licensing requirements.

Chapter 2 of this appendix provides the Master Lists and System Component Evaluation Work Sheets (SCEWS) for all TMI Action Plan equipment requiring environmental qualification. Chapter 2 provides the response to commitments 1, 2, 3 and 5 by:

A) Identifying the TMI Action Plan equipment requiring environmental qualification by plant ID number, generic name, manufacturer, and model number via the Master Lists,

B) Providing SCEWS to demonstrate the status of qualification for equipment identified in Item A,

C) Dividing Chapter 2 into sections each of which addresses and correlates by title an individual part of NUREG-0737,

D) Identifying in the Document Reference section of each SCEWS the qualification documents cited as evidence of qualification.

Chapter 3 of this appendix provides the installation dates of the TMI Action Plan equipment requiring environmental qualification, as well as the standard Westinghouse Owners Group positions and previously requested extensions to implementation dates associated with the aforementioned NUREG-0737 parts. In certain cases, references are made to previous Alabama Power Company letters that discuss these matters. Chapter 3 therefore addresses commitments 4 and 6.

The environmental qualification of TMI equipment does not necessarily imply that such equipment is safety related nor that such equipment is essential to achieve a safe shutdown condition. The environmental qualification of all equipment that is located in a possible harsh environment and essential to achieve a safe shutdown condition is verified in previous responses to NUREG-0588.

Chapter 2

Equipment Qualification Status

Table of Contents

I. Discussion

Alabama Power Company has performed a review of the location of all TMI Action plan equipment and has identified the equipment requiring environmental qualification. The accompanying Master Lists and System Component Evaluation Work Sheets to this chapter identify this equipment and verify its qualified status. Below is a discussion of each of the sections provided in this chapter.

Inadequate Core Cooling; NUREG-0737, II.F.2

Instrumentation and equipment associated with inadequate core cooling is addressed by R.G. 1.97. In accordance with letter dated November 16, 1981, Alabama Power Company committed to respond to the Regulatory Guide upon the promulation of the associated draft licensing documents that would affect the design (e.g., NUREG-0801, -0799, -0814, -0835). Following the preparation and implementation of a design for an integrated system to satisfy the various licensing requirements in this regard, Master Lists and SCEWS will be prepared.

Reactor Coolant System (Head Vent); NUREG-0737, II.B.1

Four (4) solenoid valves, Target Rock model 79AB001, are undergoing qualification testing and, upon completion of the test and subsequent evaluation, the associated SCEWS will be updated. All other equipment located in a possible harsh environment have adequate documentation to demonstrate their capability to function in the most limiting post-accident environment postulated for Farley Nuclear Plant - Unit 2.

Pressurizer Safety and Relief Valve; NUREG-0737, II.D.1

Master lists and SCEWS are provided, herein, to verify the status of qualification of all equipment located in a possible harsh environment. Four (4) solenoid valves, ASCO model HTX8302A22V, lack adequate qualification documentation. The solenoids are scheduled to be replaced at the next outage of sufficient duration to complete the planned modification. All other equipment located in a possible harsh environment have adequate documentation to demonstrate their capability to function in the most limiting post-accident environment postulated for Farley Nuclear Plant - Unit 2.

Pressurizer Safety Valve Position Indication; NUREG-0737, II.D.3

Master lists and SCEWS are provided, herein, to verify the full qualification of all equipment located in a possible harsh environment.

High Range Containment Radiation; NUREG-0737, II.F.1.3

A test report regarding the Victoreen Radiation Detectors was recently completed and evaluated by Alabama Power Company subsequent to their installation. The review of the test report indicates the installation of a water-tight fitting is necessary to protect the cable connection and to establish similarity with the test specimen. The design of the water-tight fitting has been initiated and will be implemented at the next outage of sufficient duration to complete the modifications. All other equipment located in a possible harsh environment have adequate documentation to demonstrate their capability to function in the most limiting post-accident environment postulated for Farley Nuclear Plant - Unit 2.

Hydrogen Recombiner System: NUREG-0737, II.E.4.1

As stated in Alabama Power Company letter dated January 14, 1981, Farley Nuclear Plant does not utilize external hydrogen recombiners. Dedicated hydrogen penetrations are therefore not applicable to Farley Nuclear Plant. The qualified status of equipment associated with the hydrogen recombiner system located in the containment or Farley Nuclear Plant is verified in a previous NUREG-0588 response, Section C.2.7, dated July 1, 1981.

Containment Water Level; NUREG-0737, II.F.1.5

Master Lists and SCEWS are provided, herein, to verify the status of qualification of all equipment located in a possible harsh environment. Two (2) level transmitters, GEMS-Delaval model XM54854-323, are undergoing qualification testing and, upon completion of the test and subsequent evaluation, the associated SCEWS will be revised. All other equipment located in a possible harsh environment have documentation to demonstrate their capability to function in the most limiting post-accident environment postulated for Farley Nuclear Plant - Unit 2.

Auxiliary Feedwater System; NUREG-0737, II.E.1.2

The status of qualification for equipment associated with the auxiliary feedwater system is verified in a previous NUREG-0588 response, Section C.2.16, dated July 1, 1981.

Containment Isolation Dependability; NUREG-0737, II.E.4.2

The qualified status of equipment associated with containment isolation is verified in previous NUREG-0588 responses, dated July 1 and December 28, 1981, Sections C.2.3, C.2.4, C.2.6, C.2.9, and C.2.11 through C.2.20. Chapter 3 of the December 28, 1981 response identified two (2) solenoids located in the containment that lack adquate qualification documents and are scheduled for replacement during the first refueling outage. The solenoids are utilized to provide isolation of a cooling duct that is wholly enclosed within the containment and does not penetrate the containment boundary. The solenoids are not necessary to provide containment isolation or to satisfy the requirements of NUREG-0737, and are not considered an outstanding item in this regard.

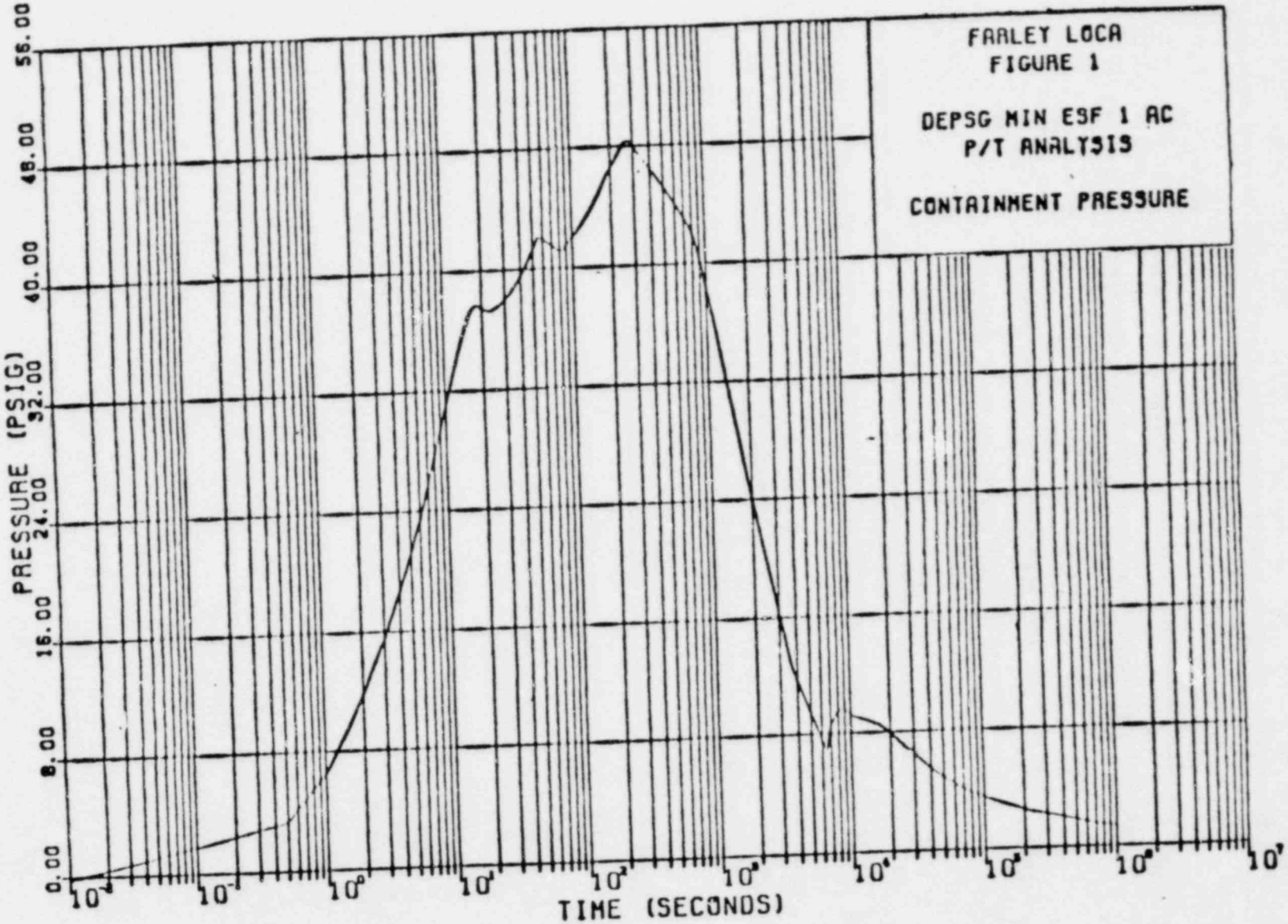
Automatic PORV Isolation System; NUREG-0737, II.K.3.1

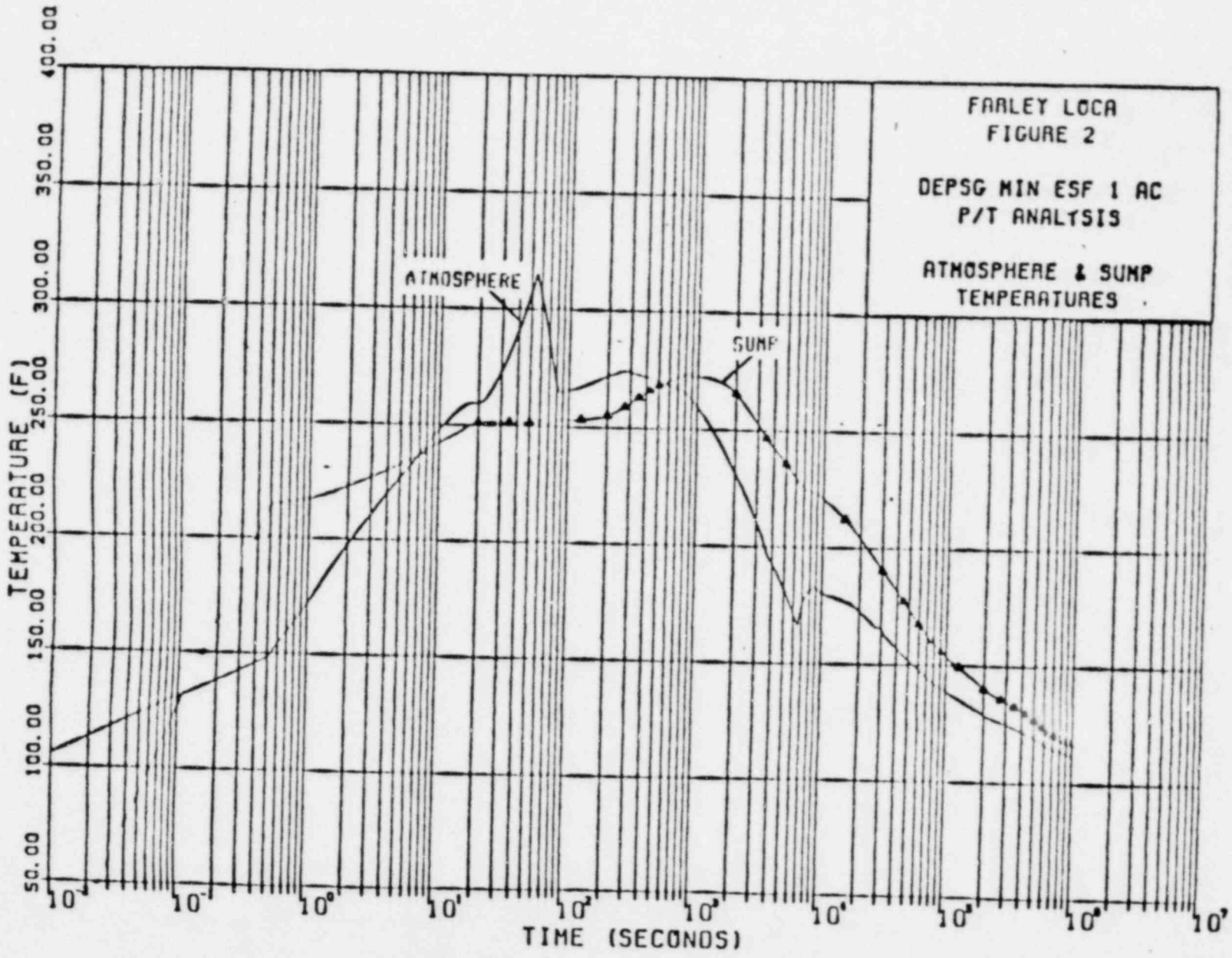
As stated in Alabama Power Company letter dated May 26, 1981, Alabama Power Company has reviewed the Westinghouse Owners Group report regarding this issue and has determined that an automatic PORV isolation system would not appreciably enhance protection against a PORV LOCA and no modifications are necessary. Consequently, no environmental qualification documentation is necessary.

Automatic Trip of RCP's; NUREG-0737, II.K.3.5

As stated in letter dated January 14, 1981, it is the opinion of Alabama Power Company that resolution of this issue will be achieved without any design modifications. The Westinghouse Owners Group has provided the NRC Staff the results of model analyses regarding this issue. In the event that an automatic system to trip the reactor coolant pumps is required after the NRC determination of model acceptability, environmental qualification of associated electrical equipment will be prepared upon system installation, as necessary.

The SCEWS provided for TMI Action Plan equipment reflect the most recent peak containment temperature and pressure postualted to result for a LOCA or HELB. The analyses of the pressure/temperature response were performed in association with Technical Specification 3.6.2.3, Containment Cooling System. The Safety Evaluation Report in Alabama Power Company's letter dated August 17, 1982 provides the basis that environmental qualification of Unit 2 containment equipment is not invalidated as a result of this analysis, and this matter is not an unreviewed safety question. The most recent containment temperature and pressure responses are attached as Figures 1 and 2. SCEWS of containment equipment addressed in previous NUREG-0588 submittals will not be revised.


FARLEY LOCA
FIGURE 1
DEPSG MIN ESF 1 AC
P/T ANALYSIS
CONTAINMENT PRESSURE
PRESSURE (PSIG)
0.00
8.00
16.00
24.00
32.00
40.00
48.00
56.00
TIME (SECONDS)
10⁻²
10⁻¹
10⁰
10¹
10²
10³
10⁴
10⁵
10⁶
10⁷


FARLEY LOCA
FIGURE 2
DEPSG MIN ESF 1 AC
P/T ANALYSIS
ATMOSPHERE & SUMP
TEMPERATURES
ATMOSPHERE
SUMP
TEMPERATURE (F)
400.00
350.00
300.00
250.00
200.00
150.00
100.00
50.00
10⁻¹
10⁰
10¹
10²
10³
10⁴
10⁵
10⁶
10⁷
TIME (SECONDS)

Master Lists for TMI Action Plan Equipment Requiring Environmental Qualification

MASTER LIST

Section 1
Sheet 1

Joseph M. Farley Nuclear Plant Unit 2

(CLASS 1E ELECTRICAL EQUIPMENT REQUIRED TO FUNCTION UNDER POSTULATED ACCIDENT CONDITIONS)

SYSTEM: B11 - Inadequate Core Cooling; NUREG-0737, II.F.2

As discussed in Chapter 2 to this appendix, Master Lists and SCEWS will be prepared following the preparation and implementation of a design for an integrated system to satisfy the various licensing requirements.

MASTER LIST

Joseph M. Farley Nuclear Plant Unit 2

(CLASS 1E ELECTRICAL EQUIPMENT REQUIRED TO FUNCTION UNDER POSTULATED ACCIDENT CONDITIONS)

SYSTEM: Reactor Coolant System (Head Vent) NUREG-0737, II.B.1

COMPONENTS					
PLANT ID NUMBER	GENERIC NAME	MANUFACTURER	MODEL	LOCATION BLDG.	LOCATION ELEV.
Q2B13SV2213A	Solenoid Valve	Target	79AB001	CTMT	> 115'-0"
Q2B13SV2213B	Solenoid Valve	Target	79AB001	CTMT	> 115'-0"
Q2B13SV2214A	Solenoid Valve	Target	79AB001	CTMT	> 115'-0"
Q2B13SV2214B	Solenoid Valve	Target	79AB001	CTMT	> 115'-0"
Q2T52B014-A	Control Penetration	General Electric	100 Series	CTMT	> 115'-0"
2VAL5145B	Control Cable	Okonite	None	CTMT	> 115'-0"
2VAL5145C	Control Cable	Okonite	None	CTMT	> 115'-0"
A2TB007	Terminal Block	States	Type ZWM	CTMT	> 115'-0"
Q2B13SV2213A-A/JB	Terminal Block	States	Type ZWM	CTMT	> 115'-0"
2VAL5146B	Control Cable	Okonite	None	CTMT	> 115'-0"
2VAL5146C	Control Cable	Okonite	None	CTMT	> 115'-0"
Q2B13SV2214A/JB	Terminal Block	States	Type ZWM	CTMT	> 115'-0"
Q2T52B016-B	Control Penetration	General Electric	100 Series	CTMT	> 115'-0"
2VBL5145B	Control Cable	Okonite	None	CTMT	> 115'-0"
2VBL5145C	Control Cable	Okonite	None	CTMT	> 115'-0"
[illegible]025	Terminal Block	States	Type ZWM	CTMT	> 115'-0"
Q2B13SV2213B-B/JB	Terminal Block	States	Type ZWM	CTMT	> 115'-0"
2VBL5146B	Control Cable	Okonite	None	CTMT	> 115'-0"
2VBL5146C	Control Cable	Okonite	None	CTMT	> 115'-0"
Q2B13SV2214B-B/JB	Terminal Block	States	Type ZWM	CTMT	> 115'-0"

Joseph M. Farley Nuclear Plant Unit 2

MASTER LIST

Section 3
Sheet 1 of 5

(CLASS 1E ELECTRICAL EQUIPMENT REQUIRED TO FUNCTION UNDER POSTULATED ACCIDENT CONDITIONS)

SYSTEM: B31- Pressurizer Relief and Safety Valves NUREG-0737, II.D.1

COMPONENTS					
PLANT ID NUMBER	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	
				BLDG	ELEV
N2B31SV0444BA	Solenoid Valve	ASCO	HTX8320A22V	CTMI	>115'-0"
N2B31SV0444BB	Solenoid Valve	ASCO	HTX8320A22V	CTMT	>115'-0"
N2B31SV04445AA	Solenoid Valve	ASCO	HTX8320A22V	CTMT	>115'-"
N1B31SV0445AB	Solenoid Valve	ASCO	HTX8320A22V	CTMT	>115'-0"
2VAL5020D	Cable	Okonite	None	CTMT	>115'-0"
2VAL5035D	Cable	Okonite	None	CTMT	>115'-0"
N2B31SV0444BA-B/JD	Junction Box	States Company	Type ZWM	CTMT	>115'-0"
N2B31SV0445AA-A/JB	Junction Box	States Company	Type ZWM	CTMT	>115'-0"
Q2T52B038-B	CTMT. Penetrn.	General Electric	100 Series	CTMT	>115'-0"
Q2T52B019-A	CTMT. Penetrn.	General Electric	100 Series	CTMT	>115'-0"
9-J02 Field routed	Cable	Okonite	None	CTMT	>115'-0"

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MASTER LIST

Joseph M. Farley Nuclear Plant Unit 2

(CLASS IE ELECTRICAL EQUIPMENT REQUIRED TO FUNCTION UNDER POSTULATED ACCIDENT CONDITIONS)

SYSTEM: B13/B31 Pressurizer Safety Valve Position Indication NUREG-0737, II.D.3

COMPONENTS					
PLANT ID NUMBER	GENERIC NAME	MANUFACTURER	MODEL	LOCATION BLDG.	LOCATION ELEV.
2VYKH174A	Cable	Okonite	None	CTMT	>115'-0"
Q2B13G001-B	Terminal Box	States Company	Type ZWM	CTMT	>115'-0"
2VBL5099G	Cable	Okonite	None	CTMT	>115'-0"
2VBL5099H	Cable	Okonite	None	CTMT	>115'-0"
2VBL5099J	Cable	Okonite	None	CTMT	>115'-0"
Q2T52B025-B	Ctmt. Penet.	General Electric	100 Series	CTMT	>115'-0"
Q2T52B022-B	Ctmt. Penet.	General Electric	100 Series	CTMT	>115'-0"
Q2B13ZS2034	Position switch	NAMCO	EA-180	CTMT	>115'-0"
Q2B13ZS2035	Position switch	NAMCO	EA-180	CTMT	>115'-0"
Q2B13ZS2036	Position switch	NAMCO	EA-180	CTMT	>115'-0"
N2B31ZS0444B	Limit switch	NAMCO	EA-180	CTMT	>115'-0"
N2B31ZS0445A	Limit switth	NAMCO	EA-180	CTMT	>115'-0"
N2B31SV0444BA-B/JB	Junction Box	States Company	Type ZWM	CTMT	>115'-0"
N2B31SV0445AA-A/JB	Junction Box	States Company	Type ZWM	CTMT	>115'-0"
Q2T52B019-A	Control Pentrn.	General Electric	100 Series	CTMT	>115'-0"
Q2T52B038-B	Control Pentrn.	General Electric	100 Series	CTMT	>115'-0"
2VBL5035D	Control Cable	Okonite	None	CTMT	>115'-0"
2VBL5020D	Control Cable	Okonite	None	CTMT	>115'-0"
QAT352B007A	Control Penetra.	General Electric	100 Series	CTMT	>115'-0"
1VXKH174A	Cable	Okonite	None	CTMT	>115'-0"

MASTER LIST

Section 5
Sheet 1 of 3

Joseph M. Farley Nuclear Plant Unit 2

(CLASS IE ELECTRICAL EQUIPMENT REQUIRED TO FUNCTION UNDER POSTULATED ACCIDENT CONDITIONS)

SYSTEM: D21 - High Range Containment Radiation ; NUREG-0737, II.F.1.3

COMPONENTS					
PLANT ID NUMBER	GENERIC NAME	MANUFACTURER	MODEL	LOCATION BLDG.	LOCATION ELEV.
2VA15011E	Cable	Victoreen	Note 1	CTMT	>115'-0"
2VA15011G	Cable	Victoreen	Note 1	CTMT	>115'-0"
Q2D21RE0027A-A	Radiation Detector	Victoreen	877-1	CTMT	>115'-0"
2VB15009E	Cable	Victoreen	Note 1	CTMT	>115'-0"
2VB15009G	Cable	Victoreen	Note 1	CTMT	>115'-0"
Q2D21RE0027B-B	Radiation Detector	Victoreen	877-1	CTMT	>115'-0"
Q2T52B009-A	CTMT Penet.	General Electric	100 Series	CTMT	>115'-0"
Q2T52B011-B	CTMT Penet.	General Electric	100 Series	CTMT	>115'-0"
Note 1 - Cables have been qualified along with detector.					

(CLASS 1E ELECTRICAL EQUIPMENT REQUIRED TO FUNCTION UNDER POSTULATED ACCIDENT CONDITIONS)

SYSTEM: E17 - Hydrogen Recombiner System NUREG-0737, II.E.4.1

As discussed in Chapter 2 to this appendix, dedicated hydrogen penetrations are not applicable to Farley Nuclear Plant. The qualified status of electrical equipment associated with the hydrogen recombiner system has been verified in a previous NUREG-0588 response, Section C.2.7, dated July 1, 1981.

MASTER LIST

Joseph M. Farley Nuclear Plant Unit 2

Section 7
Sheet 1

(CLASS IE ELECTRICAL EQUIPMENT REQUIRED TO FUNCTION UNDER POSTULATED ACCIDENT CONDITIONS)

SYSTEM: G-21 Liquid Waste Disposal (Narrow Range Containment Sump Level); NUREG-0737 II.F.1.5

COMPONENTS					
PLANT ID NUMBER	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	
				BLDG.	ELEV.
Q2G21LT3282A-A	Level Sensor	Gems-Delaval	XM54854	CTMT	80'-0"
Q2G21LT3282B-B	Level Sensor	Gems-Delaval	XM54854	CTMT	80'-0"
2VAI5023A	Control Cable	Okonite	None	CTMT	Various
2VBI5023A	Control Cable	Okonite	None	CTMT	Various
Q2T52B007-A	Control Penetration	General Electric	100 Series	CTMT	> 115'-0"
Q2T52B022-B	Control Penetration	General Electric	100 Series	CTMT	> 115'-0"

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MASTER LIST

Joseph M. Farley Nuclear Plant Unit 2

Section 8
Sheet 1 of

(CLASS 1E ELECTRICAL EQUIPMENT REQUIRED TO FUNCTION UNDER POSTULATED ACCIDENT CONDITIONS)

SYSTEM: N23 - Auxiliary Feedwater System NUREG-0737, II.E.1.2

As discussed in Chapter 2 to this appendix, the qualified status of electrical equipme associated with the auxiliary feedwater system has been verified in a previous NUREG-0588 response dated July 1, 1981.

(CLASS 1E ELECTRICAL EQUIPMENT REQUIRED TO FUNCTION UNDER POSTULATED ACCIDENT CONDITIONS)

SYSTEM: Various - Containment Isolation Dependability NUREG-0737, II.E.4.2

As discussed in Chapter 2 to this appendix, the qualified status of this equipment is addressed by a previous NUREG-0588 response dated August 25 and December 28, 1981, Sections C.2.3, C.2.4, C.2.6, C.2,9 and C.2,11 through C.2.20.

(CLASS 1E ELECTRICAL EQUIPMENT REQUIRED TO FUNCTION UNDER POSTULATED ACCIDENT CONDITIONS)

SYSTEM Various - Automatic PORV Isolation System; NUREG-0737, II.K.3.1

As discussed in Chapter 2 to this appendix, Alabama Power Company has determined that an automatic PORV isolation system could not appreciably enhance protection against a PORV LOCA and no modifications are necessary.

(CLASS 1E ELECTRICAL EQUIPMENT REQUIRED TO FUNCTION UNDER POSTULATED ACCIDENT CONDITIONS)

SYSTEM: Various - Automatic Trip of RCP's; NUREG-0737, II.K.3.5

As discussed in Chapter 2 to this appendix, it is the opinion of Alabama Power Company that the resolution of this issue will be achieved without design modifications.

System Component Evaluation Work Sheets For TMI Action Plan
Equipment Requiring Environmental Qualifiction

Joseph M. Farley Nuclear Plant Unit 2

(CLASS 1E ELECTRICAL EQUIPMENT REQUIRED TO FUNCTION UNDER POSTULATED ACCIDENT CONDITIONS)

SYSTEM: B11 - Inadequate Core Cooling; NUREG-0737, II.F.2

As discussed in Chapter 2 to this appendix, Master Lists and SCEWS will be prepared following the preparation and implementation of a design for an integrated system to satisfy the various licensing requirements.

MASTER LIST

Joseph M. Farley Nuclear Plant Unit 2

Section 2
Sheet 1 of 5

(CLASS IE ELECTRICAL EQUIPMENT REQUIRED TO FUNCTION UNDER POSTULATED ACCIDENT CONDITIONS)

SYSTEM: Reactor Coolant System (Head Vent) NUREG-0737, II.B.1

COMPONENTS					
PLANT ID NUMBER	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	
				BLDG.	ELEV.
Q2B13SV2213A	Solenoid Valve	Target	79AB001	CTMT	> 115'-0"
Q2B13SV2213B	Solenoid Valve	Target	79AB001	CTMT	> 115'-0"
Q2B13SV2214A	Solenoid Valve	Target	79AB001	CTMT	> 115'-0"
Q2B13SV2214B	Solenoid Valve	Target	79AB001	CTMT	> 115'-0"
Q2T52B014-A	Control Penetration	General Electric	100 Series	CTMT	> 115'-0"
2VAL5145B	Control Cable	Okonite	None	CTMT	> 115'-0"
2VAL5145C	Control Cable	Okonite	None	CTMT	> 115'-0"
A2TB007	Terminal Block	States	Type ZWM	CTMT	> 115'-0"
Q2B13SV2213A-A/JB	Terminal Block	States	Type ZWM	CTMT	> 115'-0"
2VAL5146B	Control Cable	Okonite	None	CTMT	> 115'-0"
2VAL5146C	Control Cable	Okonite	None	CTMT	> 115'-0"
Q2B13SV2214A/JB	Terminal Block	States	Type ZWM	CTMT	> 115'-0"
Q2T52B016-B	Control Penetration	General Electric	100 Series	CTMT	> 115'-0"
2VBL5145B	Control Cable	Okonite	None	CTMT	> 115'-0"
2VBL5145C	Control Cable	Okonite	None	CTMT	> 115'-0"
B2TB025	Terminal Block	States	Type ZWM	CTMT	> 115'-0"
Q2B13SV2213B-B/JB	Terminal Block	States	Type ZWM	CTMT	> 115'-0"
2VBL5146B	Control Cable	Okonite	None	CTMT	> 115'-0"
2VBL5146C	Control Cable	Okonite	None	CTMT	> 115'-0"
Q2B13SV2214B-B/JB	Terminal Block	States	Type ZWM	CTMT	> 115'-0"

SYSTEM COMPONENT EVALUATION WORK SHEET

Joseph M. Farley Nuclear Plant Unit 2

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUAL. METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: Reactor Coolant System PLANT ID NO.	OPERATING TIME	Note 5	Note 4	Note 5	Note 4	Note 4	
COMPONENT: Solenoid Valve	TEMP. (^{o}F)	316 Note 1	Note 4	1	Note 4	Note 4	
MANUFACTURER: Target Rock	PRESSURE (PSIA)	63.1 Note 2	Note 4	2	Note 4	Note 4	
MODEL NUMBER: 79AB-001	RELATIVE HUMIDITY (%)	100	Note 4	3	Note 4	Note 4	
FUNCTION: Reactor Vessel Head Vent	CHEMICAL SPRAY	H_3BO_3 + NaOH	Note 4	3	Note 4	Note 4	
ACCURACY: SPEC: N/A DEMON:	RADIATION	5×10^7 Rads.	Note 4	3	Note 4	Note 4	
SERVICE: Reactor Vessel Head Vent LOCATION: Containment	AGING	Note 3	Note 4	Note 3	Note 4	Note 4	
FLOOD LEVEL ELEV: 115'-0" ABOVE FLOOD LEVEL: yes	SUBMER-GENCE	None	N/A	N/A	N/A	N/A	

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***DOCUMENTATION REFERENCES:**

1. J. M. Farley FSAR Figure 6.2-6
2. J. M. Farley FSAR Figure 6.2-4
3. J. M. Farley FSAR Table 3.11-1

NOTES:

1. LOCA temperature profile from Figure 2 attached at the end of this chapter. FSAR Figure 6.2-40 will be updated in the July 22, 1982 FSAR revision.
2. LOCA pressure profile from Figure 1 attached at the end of this chapter. FSAR Figure 6.2-39 will be updated in the July 22, 1982 FSAR revision.
3. Enclosure 4 to IE Bulletin 79-01B.
4. Qualification testing is scheduled to be completed by the fourth quarter of 1982
5. This equipment is not essential to achieve a safe shutdown condition for any licensed DBE, and, therefore, no operating time is specified.

SYSTEM COMPONENT EVALUATION WORK SHEET

Joseph M. Farley Nuclear Plant Unit 2

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUAL. METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: Reactor Coolant System PLANT ID NO.	OPERATING TIME	Note 4	30 Days	Note 4	4	Simultaneous Test	None
COMPONENT: Electrical Penetration (Low Voltage)	TEMP. (^{o}F)	316 Note 1	340	1	4	Simultaneous Test	None
MANUFACTURER: General Electric	PRESSURE (PSIA)	63.1 Note 2	118	2	4	Simultaneous Test	None
MODEL NUMBER: 100 Series	RELATIVE HUMIDITY (%)	100	100	3	4	Simultaneous Test	None
FUNCTION: Containment Isolation	CHEMICAL SPRAY	H_3BO_3 + NaOH	H_3BO_3 + NaOH	3	4	Simultaneous Test	None
ACCURACY: SPEC: N/A DEMON:	RADIATION	5×10^7 Rads.	1×10^8 Rads.	3	4	Sequential	None
SERVICE: Electrical Penetration LOCATION: Containment	AGING	Note 3	40 yrs.	None	4	Sequential	None
FLOOD LEVEL ELEV: 115'-0" ABOVE FLOOD LEVEL: yes	SUBMERGENCE	None	N/A	N/A	N/A	N/A	None

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***DOCUMENTATION REFERENCES:**

1. J. M. Farley FSAR Figure 6.2-6
2. J. M. Farley FSAR Figure 6.2-4
3. J. M. Farley FSAR Table 3.11-1
4. General Electric Co. Report Low Voltage Electrical Containment Penetration Qualification Test Report (Bechtel File E22-98)

NOTES:

1. LOCA temperature profile from Figure 2 attached at the end of this chapter. FSAR Figure 6.2-40 will be updated in the July 22, 1982 FSAR revision.
2. LOCA pressure profile from Figure 1 attached at the end of this chapter. FSAR Figure 6.2-39 will be updated in the July 22, 1982 FSAR revision.
3. Enclosure 4 to IE Bulletin 79-01B.
4. This equipment is not essential to achieve a safe shutdown condition for any licensed DBE and, therefore, no operating time is specified.

SYSTEM COMPONENT EVALUATION WORK SHEET

Section 2
Sheet 4 of 5

Joseph M. Farley Nuclear Plant Unit 2

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUAL. METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: Reactor Coolant System PLANT ID NO.	OPERATING TIME	Note 4	30 Days	Note 4	4	Simultaneous Test	None
COMPONENT: Cable Power and Control	TEMP. (°F)	316 Note 1	346	1	4	Simultaneous Test	None
MANUFACTURER: The Okonite Company	PRESSURE (PSIA)	63.1 Note 2	113	2	4	Simultaneous Test	None
MODEL NUMBER: None	RELATIVE HUMIDITY (%)	100	100	3	4	Simultaneous Test	None
FUNCTION: Electrical Power and Control	CHEMICAL SPRAY	H_3BO_3 + NaOH	H_3BO_3 + NaOH	3	4	Simultaneous Test	None
ACCURACY: SPEC: N/A DEMON:	RADIATION	5×10^7 Rads.	2×10^8 Rads.	3	4	Sequential	None
SERVICE: Electrical Safety Systems LOCATION: Containment	AGING	Note 3	40 yrs.	Note 3	4	Sequential	None
FLOOD LEVEL ELEV: 115'-0" ABOVE FLOOD LEVEL: yes	SUBMERGENCE	None	N/A	N/A	N/A	N/A	None

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***DOCUMENTATION REFERENCES:**

1. J. M. Farley FSAR Figure 6.2-6
2. J. M. Farley FSAR Figure 6.2-4
3. J. M. Farley FSAR Table 3.11-1
4. The Okonite Company Engineering Reports No. 141 dated 2-29-72 & Okonite Report No. N-1 dated July 3, 1978.

NOTES:

1. LOCA temperature profile from Figure 2 attached at the end of this chapter. FSAR Figure 6.2-40 will be updated in the July 22, 1982 FSAR revision.
2. LOCA pressure profile from Figure 1 attached at the end of this chapter. FSAR Figure 6.2-39 will be updated in the July 22, 1982 FSAR revision.
3. Enclosure 4 to IE Bulletin 79-01B.
4. This equipment is not essential to achieve a safe shutdown condition for any licensed DBE and, therefore, no operating time is specified.

SYSTEM COMPONENT EVALUATION WORK SHEET

Joseph M. Farley Nuclear Plant Unit 2

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUAL. METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: Reactor Coolant System PLANT ID NO.	OPERATING TIME	Note 5	7 Days	Note 5	4	Simultaneous Test	None
COMPONENT: Terminal Block with NEMA 4 Enclosure	TEMP. (^{o}F)	316 Note 1	307 Note 4	1	4	Simultaneous Test	None
MANUFACTURER: States Company	PRESSURE (PSIA)	63.1 Note 2	80	2	4	Simultaneous Test	None
MODEL NUMBER: Type ZWM Catalog M-25012	RELATIVE HUMIDITY (%)	100	100	3	4	Simultaneous Test	None
FUNCTION: Conductor Termination	CHEMICAL SPRAY	H_3BO_3 + NaOH	H_3BO_3 + NaOH	3	4	Simultaneous Test	None
ACCURACY: SPEC: N/A DEMON:	RADIATION	5×10^7 Rads.	1×10^8 Rads.	3	4	Sequential	None
SERVICE: Electrical Safety Systems LOCATION: Containment	AGING	Note 3	40 yrs.	Note 3	4	Sequential	None
FLOOD LEVEL ELEV: 115'-0" ABOVE FLOOD LEVEL: yes	SUBMERGENCE	None	N/A	N/A	N/A	N/A	None

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***DOCUMENTATION REFERENCES:**

1. J. M. Farley FSAR Figure 6.2-6
2. J. M. Farley FSAR Figure 6.2-4
3. J. M. Farley FSAR Table 3.11-1
4. Wyle Laboratories NEQ Test Report 44354-1 dated 3-8-79

NOTES:

1. LOCA temperature profile from Figure 2 attached at the end of this chapter. FSAR Figure 6.2-40 will be updated in the July 22, 1982 FSAR revision.
2. LOCA pressure profile from Figure 1 attached at the end of this chapter. FSAR Figure 6.2-39 will be updated in the July 22, 1982 FSAR revision.
3. Enclosure 4 to IE Bulletin 79-01B.
4. Equipment surface temperature during LOCA does not exceed qualification temperature.
5. This equipment is not essential to achieve a safe shutdown condition for any licensed DBE and, therefore, no operating time is specified.

Joseph M. Farley Nuclear Plant Unit 2

MASTER LIST

Section 3
Sheet 1 of 5

(CLASS IE ELECTRICAL EQUIPMENT REQUIRED TO FUNCTION UNDER POSTULATED ACCIDENT CONDITIONS)

SYSTEM: B31- Pressurizer Relief and Safety Valves NUREG-0737, II.D.1

COMPONENTS					
PLANT ID NUMBER	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	
				BLDG	ELEV
N2B31SV0444BA	Solenoid Valve	ASCO	HTX8320A22V	CTMI	>115'-0"
N2B31SV0444BB	Solenoid Valve	ASCO	HTX8320A22V	CTMT	>115'-0"
N2B31SV04445AA	Solenoid Valve	ASCO	HTX8320A22V	CTMT	>115'-"
N1B31SV0445AB	Solenoid Valve	ASCO	HTX8320A22V	CTMT	>115'-0"
2VAL5020D	Cable	Okonite	None	CTMT	>115'-0"
2VAL5035D	Cable	Okonite	None	CTMT	>115'-0"
N2B31SV0444BA-B/JD	Junction Box	States Company	Type ZWM	CTMT	>115'-0"
N2B31SV0445AA-A/JB	Junction Box	States Company	Type ZWM	CTMT	>115'-0"
Q2T52B038-B	CTMT. Penetrn.	General Electric	100 Series	CTMT	>115'-0"
Q2T52B019-A	CTMT. Penetrn.	General Electric	100 Series	CTMT	>115'-0"
9-J02 Field routed	Cable	Okonite	None	CTMT	>115'-0"

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SYSTEM COMPONENT EVALUATION WORK SHEET

Joseph M. Farley Nuclear Plant Unit 2 Appendix 5 Section 1

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUAL. METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: PZR Relief and System Valves PLANT ID NO.	OPERATING TIME	Note 5	Note 4	Note 5	Note 4	Note 4	
COMPONENT: Solenoid Valve	TEMP. (°F)	316 Note 1	Note 4	2	Note 4	Note 4	
MANUFACTURER: Automatic Switch Company	PRESSURE (PSIA)	63.1 Note 2	Note 4	1	Note 4	Note 4	
MODEL NUMBER: HTX8320A22V	RELATIVE HUMIDITY (%)	100	Note 4	3	Note 4	Note 4	
FUNCTION: Pilot for Air Operated Valve	CHEMICAL SPRAY	H_3BO_3 + NaOH	Note 4	3	Note 4	Note 4	
ACCURACY: SPEC: DEMON: N/A	RADIATION	5×10^7 Rads	Note 4	3	Note 4	Note 4	
SERVICE: PORV LOCATION: Containment	AGING	Note 3	Note 4	Note 3	Note 4	Note 4	
FLOOD LEVEL ELEV: 115' ABOVE FLOOD LEVEL: yes	SUBMER-GENCE	N/A	N/A	N/A	N/A	Note 4	

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*DOCUMENTATION REFERENCES:

1. J. M. Farley FSAR Figure 6.2-6
2. J. M. Farley FSAR Figure 6.2-4
3. J. M. Farley FSAR Table 3.11-1

NOTES:

1. LOCA temperature profile from Figure 2 attached at the end of this Appendix. FSAR Figure 6.2-6 will be updated in the July 22, 1982 FSAR revision.
2. LOCA pressure profile from Figure 1 attached at the end of this Appendix. FSAR Figure 6.2-4 will be updated in the July 22, 1982 FSAR revision.
3. Aging requirements in accordance with NUREG-0588, Section 4, Category II.
4. Qualification for this instrument has not been documented. It will be replaced during the next refueling outage.
5. This equipment is not essential to achieve a safe shutdown condition under any licensed DBE and, therefore, no operating time is specified.

SYSTEM COMPONENT EVALUATION WORK SHEET

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Joseph M. Farley Nuclear Plant Unit 2

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUAL. METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: Pressurizer Relief and Safety Valves PLANT ID NO.	OPERATING TIME	Note 5	7 Days	Note 5	4	Simultaneous Test	None
COMPONENT: Terminal Block with NEMA 4 Enclosure	TEMP. (°F)	316 Note 1	307 Note 4	1	4	Simultaneous Test	None
MANUFACTURER: States Company	PRESSURE (PSIA)	63.1 Note 2	80	2	4	Simultaneous Test	None
MODEL NUMBER: Type ZWM Catalog M-25012	RELATIVE HUMIDITY (%)	100	100	3	4	Simultaneous Test	None
FUNCTION: Conductor Termination	CHEMICAL SPRAY	H_3BO_3 + NaOH	H_3BO_3 + NaOH	3	4	Simultaneous Test	None
ACCURACY: SPEC: DEMON: N/A	RADIATION	5×10^7 Rads	1×10^8 Rads	3	4	Sequential	None
SERVICE: Electrical Safety System LOCATION: Containment	AGING	Note 3	40 yrs.	Note 3	4	Sequential	None
FLOOD LEVEL ELEV: 115' ABOVE FLOOD LEVEL: yes	SUBMERGENCE	None	None	None	None	None	None

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***DOCUMENTATION REFERENCES:**

1. J. M. Farley FSAR Figure 6.2-6
2. J. M. Farley FSAR Figure 6.2-4
3. J. M. Farley FSAR Table 3.11-1
4. Wyle Laboratories NEQ Test Report 44354-1 dated 3-8-79

NOTES:

1. LOCA temperature profile from Figure 2 attached at the end of this chapter. FSAR Figure 6.2-40 will be updated in the July 22, 1982 FSAR revision.
2. LOCA pressure profile from Figure 1 attached at the end of this chapter. FSAR Figure 6.2-39 will be updated in the July 22, 1982 FSAR revision.
3. Aging requirements in accordance with NUREG-0588, Section 4, Category II.
4. Equipment surface temperature during LOCA does not exceed qualification temperature.
5. This equipment is not essential to achieve a safe shutdown condition for any

SYSTEM COMPONENT EVALUATION WORK SHEET

Joseph M. Farley Nuclear Plant, Unit 2

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUAL. METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: Pressurizer Safety and Relief Valves PLANT ID NO.	OPERATING TIME	Note 4	30 Days	Note 4	4	Simultaneous Test	None
COMPONENT: Electrical Penetration (Low Voltage)	TEMP. (^{o}F)	316 Note 1	340	1	4	Simultaneous Test	None
MANUFACTURER: General Electric	PRESSURE (PSIA)	63.1 Note 2	118	2	4	Simultaneous Test	None
MODEL NUMBER: 100 Series	RELATIVE HUMIDITY (%)	100	100	3	4	Simultaneous Test	None
FUNCTION: Containment Isolation	CHEMICAL SPRAY	H_3BO_3 + NaOH	H_3BO_3 + NaOH	3	4	Simultaneous Test	None
ACCURACY: SPEC: DEMON: N/A	RADIATION	5×10^7 Rads	1×10^8 Rads	3	4	Sequential	None
SERVICE: Electrical Penetration LOCATION: Containment	AGING	Note 3	40 yrs.	None	4	Sequential	None
FLOOD LEVEL ELEV: 115' ABOVE FLOOD LEVEL: yes	SUBMERGENCE	N/A	N/A	N/A	N/A	N/A	None

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***DOCUMENTATION REFERENCES:**

1. J. M. Farley FSAR Figure 6.2-6
2. J. M. Farley FSAR Figure 6.2-4
3. J. M. Farley FSAR Table 3.11-1
4. General Electric Co. Report Low Voltage Electrical Containment Penetration Qualification Test Report (Bechtel File E22-98)

NOTES:

1. LOCA temperature profile from Figure 2 attached at the end of this chapter. FSAR Figure 6.2-40 will be updated in the July 22, 1982 FSAR revision.
2. LOCA pressure profile from Figure 1 attached at the end of this chapter. FSAR Figure 6.2-39 will be updated in the July 22, 1982 FSAR revision.
3. Aging requirements in accordance with NUREG-0588, Section 4, Category II.
4. This equipment is not essential to achieve a safe shutdown condition for any licensed DBE and, therefore, no operating time is specified.

SYSTEM COMPONENT EVALUATION WORK SHEET

Joseph M. Farley Nuclear Plant Unit 2

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUAL. METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: Pressurizer Safety and PLANT ID NO. Relief Valves	OPERATING TIME	Note 4	30 Days	Note 4	4	Simultaneous Test	None
COMPONENT: Cable Power and Control	TEMP. (^{o}F)	316 Note 1	346	1	4	Simultaneous Test	None
MANUFACTURER: The Okonite Company	PRESSURE (PSIA)	63.1 Note 2	113	2	4	Simultaneous Test	None
MODEL NUMBER: None	RELATIVE HUMIDITY (%)	100	100	3	4	Simultaneous Test	None
FUNCTION: Electrical Power and Control	CHEMICAL SPRAY	H_3BO_3 + NaOH	H_3BO_3 + NaOH	3	4	Simultaneous Test	None
ACCURACY: SPEC: N/A DEMON:	RADIATION	5×10^7 Rads.	2×10^8 Rads.	3	4	Sequential	None
SERVICE: Electrical Safety Systems LOCATION: Containment	AGING	Note 3	40 yrs.	Note 3	4	Sequential	None
FLOOD LEVEL ELEV: 115'-0" ABOVE FLOOD LEVEL: yes	SUBMERGENCE	None	N/A	N/A	N/A	N/A	None

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***DOCUMENTATION REFERENCES:**

1. J. M. Farley FSAR Figure 6.2-6
2. J. M. Farley FSAR Figure 6.2-4
3. J. M. Farley FSAR Table 3.11-1
4. The Okonite Company Engineering Reports No. 141 dated 2-29-72 & Okonite Report No. N-1 dated July 3, 1978.

NOTES:

1. LOCA temperature profile from Figure 2 attached at the end of this chapter. FSAR Figure 6.2-40 will be updated in the July 22, 1982 FSAR revision.
2. LOCA pressure profile from Figure 1 attached at the end of this chapter. FSAR Figure 6.2-39 will be updated in the July 22, 1982 FSAR revision.
3. Enclosure 4 to IE Bulletin 79-01B.
4. This equipment is not essential to achieve a safe shutdown condition for any licensed DBE and, therefore, no operating time is specified.

MASTER LIST

Joseph M. Farley Nuclear Plant Unit 2

(CLASS IE ELECTRICAL EQUIPMENT REQUIRED TO FUNCTION UNDER POSTULATED ACCIDENT CONDITIONS)

SYSTEM: B13/B31 Pressurizer Safety Valve Position Indication NUREG-0737, II.D.3

COMPONENTS					
PLANT ID NUMBER	GENERIC NAME	MANUFACTURER	MODEL	LOCATION BLDG.	LOCATION ELEV.
2VYKH174A	Cable	Okonite	None	CTMT	>115'-0"
Q2B13G001-B	Terminal Box	States Company	Type ZWM	CTMT	>115'-0"
2VBL5099G	Cable	Okonite	None	CTMT	>115'-0"
2VBL5099H	Cable	Okonite	None	CTMT	>115'-0"
2VBL5099J	Cable	Okonite	None	CTMT	>115'-0"
Q2T52B025-B	Ctmt. Penet.	General Electric	100 Series	CTMT	>115'-0"
Q2T52B022-B	Ctmt. Penet.	General Electric	100 Series	CTMT	>115'-0"
Q2B13ZS2034	Position switch	NAMCO	EA-180	CTMT	>115'-0"
Q2B13ZS2035	Position switch	NAMCO	EA-180	CTMT	>115'-0"
Q2B13ZS2036	Position switch	NAMCO	EA-180	CTMT	>115'-0"
N2B31ZS0444B	Limit switch	NAMCO	EA-180	CTMT	>115'-0"
N2B31ZS0445A	Limit switch	NAMCO	EA-180	CTMT	>115'-0"
N2B31SV0444BA-B/JB	Junction Box	States Company	Type ZWM	CTMT	>115'-0"
N2B31SV0445AA-A/JB	Junction Box	States Company	Type ZWM	CTMT	>115'-0"
Q2T52B019-A	Control Pentrn.	General Electric	100 Series	CTMT	>115'-0"
Q2T52B038-B	Control Pentrn.	General Electric	100 Series	CTMT	>115'-0"
2VAL5035D	Control Cable	Okonite	None	CTMT	>115'-0"
2VBL5020D	Control Cable	Okonite	None	CTMT	>115'-0"
QAT352B007A	Control Penetra.	General Electric	100 Series	CTMT	>115'-0"
1VXKH174A	Cable	Okonite	None	CTMT	>115'-0"

SYSTEM COMPONENT EVALUATION WORK SHEET

Joseph M. Farley Nuclear Plant Unit 2

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUAL. METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: System-Pressurizer Safety Valve Position Indication PLANT ID NO.	OPERATING TIME	Note 4	30 Days	Note 4	4	Simultaneous Test	None
COMPONENT: Cable Power and Control	TEMP. (^{o}F)	316 Note 1	346	1	4	Simultaneous Test	None
MANUFACTURER: The Okonite Company	PRESSURE (PSIA)	63.1 Note 2	113	2	4	Simultaneous Test	None
MODEL NUMBER: None	RELATIVE HUMIDITY (%)	100	100	3	4	Simultaneous Test	None
FUNCTION: Electrical Power and Control	CHEMICAL SPRAY	H_3BO_3 + NaOH	H_3BO_3 + NaOH	3	4	Simultaneous Test	None
ACCURACY: SPEC: N/A DEMON:	RADIATION	5×10^7 Rads.	2×10^8 Rads.	3	4	Sequential	None
SERVICE: Electrical Safety Systems LOCATION: Containment	AGING	Note 3	40 yrs.	Note 3	4	Sequential	None
FLOOD LEVEL ELEV: 115'-0" ABOVE FLOOD LEVEL: yes	SUBMERGENCE	None	N/A	N/A	N/A	N/A	None

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***DOCUMENTATION REFERENCES:**

1. J. M. Farley FSAR Figure 6.2-6
2. J. M. Farley FSAR Figure 6.2-4
3. J. M. Farley FSAR Table 3.11-1
4. The Okonite Company Engineering Reports No. 141 dated 2-29-72 & Okonite Report No. N-1 dated July 3, 1978.

NOTES:

1. LOCA temperature profile from Figure 2 attached at the end of this chapter. FSAR Figure 6.2-40 will be updated in the July 22, 1982 FSAR revision.
2. LOCA pressure profile from Figure 1 attached at the end of this chapter. FSAR Figure 6.2-39 will be updated in the July 22, 1982 FSAR revision.
3. Enclosure 4 to IE Bulletin 79-01B.
4. This equipment is not essential to achieve a safe shutdown condition for any licensed DBE and, therefore, no operating time is specified.

SYSTEM COMPONENT EVALUATION WORK SHEET

Joseph M. Farley Nuclear Plant - Unit 2

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUAL. METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: System-Pressurizer Safety Valve Position Indication PLANT ID NO.	OPERATING TIME	Note 5	7 Days	Note 5	4	Simultaneous Test	None
COMPONENT: Terminal Block with NEMA 4 Enclosure	TEMP. (°F)	316 Note 1	307 Note 4	1	4	Simultaneous Test	None
MANUFACTURER: States Company	PRESSURE (PSIA)	63.1 Note 2	80	2	4	Simultaneous Test	None
MODEL NUMBER: Type ZWM Catalog M-25012	RELATIVE HUMIDITY (%)	100	100	3	4	Simultaneous Test	None
FUNCTION: Conductor Termination	CHEMICAL SPRAY	H_3BO_3 + NaOH	H_3BO_3 + NaOH	3	4	Simultaneous Test	None
ACCURACY SPEC: N/A DEMON:	RADIATION	5×10^7 Rads.	1×10^8 Rads.	3	4	Sequential	None
SERVICE: Electrical Safety Systems LOCATION: Containment	AGING	Note 3	40 yrs.	Note 3	4	Sequential	None
FLOOD LEVEL ELEV: 115'-0" ABOVE FLOOD LEVEL: yes	SUBMER-GENCE	None	N/A	N/A	N/A	N/A	None

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***DOCUMENTATION REFERENCES:**

1. J. M. Farley FSAR Figure 6.2-6
2. J. M. Farley FSAR Figure 6.2-4
3. J. M. Farley FSAR Table 3.11-1
4. Wyle Laboratories NEQ Test Report 44354-1 dated 3-8-79

NOTES:

1. LOCA temperature profile from Figure 2 attached at the end of this chapter. FSAR Figure 6.2-40 will be updated in the July 22, 1982 FSAR revision.
2. LOCA pressure profile from Figure 1 attached at the end of this chapter. FSAR Figure 6.239 will be updated in the July 22, 1982 FSAR revision.
3. Enclosure 4 to IE Bulletin 79-01B.
4. Equipment surface temperature during LOCA does not exceed qualification temperature.
5. This equipment is not essential to achieve a safe shutdown condition for any licensed DBE and, therefore, no operating time is specified.

SYSTEM COMPONENT EVALUATION WORK SHEET

Joseph M. Farley Nuclear Plant Unit 2

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUAL. METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: System-Pressurizer Safety Valve Position Indication PLANT ID NO. COMPONENT: Electrical Penetration (Low Voltage) MANUFACTURER: General Electric MODEL NUMBER: 100 Series FUNCTION: Containment Isolation ACCURACY: SPEC: N/A DEMON: SERVICE: Electrical Penetration LOCATION: Containment	OPERATING TIME	Note 4	30 Days	Note 4	4	Simultaneous Test	None
	TEMP. (°F)	316 Note 1	340	1	4	Simultaneous Test	None
	PRESSURE (PSIA)	63.1 Note 2	118	2	4	Simultaneous Test	None
	RELATIVE HUMIDITY (%)	100	100	3	4	Simultaneous Test	None
	CHEMICAL SPRAY	H_3BO_3 + NaOH	H_3BO_3 + NaOH	3	4	Simultaneous Test	None
	RADIATION	5×10^7 Rads.	1×10^8 Rads.	3	4	Sequential	None
	AGING	Note 3	40 yrs.	None	4	Sequential	None
FLOOD LEVEL ELEV: 115'-0" ABOVE FLOOD LEVEL: yes	SUBMERGENCE	None	N/A	N/A	N/A	N/A	None

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***DOCUMENTATION REFERENCES:**

1. J. M. Farley FSAR Figure 6.2-6
2. J. M. Farley FSAR Figure 6.2-4
3. J. M. Farley FSAR Table 3.11-1
4. General Electric Co. Report Low Voltage Electrical Containment Penetration Qualification Test Report (Bechtel File E22-98)

NOTES:

1. LOCA temperature profile from Figure 2 attached at the end of this chapter. FSAR Figure 6.2-40 will be updated in the July 22, 1982 FSAR revision.
2. LOCA pressure profile from Figure 1 attached at the end of this chapter. FSAR Figure 6.2-39 will be updated in the July 22, 1982 FSAR revision.
3. Enclosure 4 to IE Bulletin 79-01B.
4. This equipment is not essential to achieve a safe shutdown condition for any licensed DBE and, therefore, no operating time is specified.

SYSTEM COMPONENT EVALUATION WORK SHEET

Joseph M. Farley Nuclear Plant Unit 2

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUAL. METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: System-Pressurizer Safety Valve Position Indication PLANT ID NO.	OPERATING TIME	Note 5	30 Days	Note 5	4	Simultaneous Test	None
COMPONENT: Limit Switch	TEMP. (°F)	316 Note 1	340	1	4	Simultaneous Test	None
MANUFACTURER: Namco Controls	PRESSURE (PSIA)	63.1 Note 2	84.7	2	4	Simultaneous Test	None
MODEL NUMBER: EA-180	RELATIVE HUMIDITY (%)	100	100	3	4	Simultaneous Test	None
FUNCTION: Valve Position Indication	CHEMICAL SPRAY	H_3BO_3 + NaOH	H_3BO_3 + NaOH	3	4	Simultaneous Test	None
ACCURACY: SPEC: N/A DEMON:	RADIATION	5×10^7 Rads.	2×10^8 Rads.	3	4	Sequential	None
SERVICE: LOCATION: Containment	AGING	Note 3	Note 4	Note 3	4	Sequential	None
FLOOD LEVEL ELEV: 115'-0" ABOVE FLOOD LEVEL: yes	SUBMER-GENCE	None	N/A	N/A	N/A	N/A	None

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***DOCUMENTATION REFERENCES:**

1. J. M. Farley FSAR Figure 6.2-6
2. J. M. Farley FSAR Figure 6.2-4
3. J. M. Farley FSAR Table 3.11-1
4. Acme-Cleveland Development Co Qualification Report for NAMCO Controls Limit Switch Model EA-180 dated 11-21-77 & QTR105 dated 8-28-80.

NOTES:

1. LOCA temperature profile from Figure 2 attached at the end of this chapter. FSAR Figure 6.2-40 will be updated in the July 22, 1982 FSAR revision.
2. LOCA pressure profile from Figure 1 attached at the end of this chapter. FSAR Figure 6.2-39 will be updated in the July 22, 1982 FSAR revision.
3. Enclosure 4 to IE Bulletin 79-01B.
4. The Qualified life is being determinad and will be reflected in surveillance & maintenance procedure.
5. This equipment is not essential to achieve a safe shutdown condition for any licensed DBE and, therefore, no operating time is specified.

MASTER LIST

Joseph M. Farley Nuclear Plant Unit 2

(CLASS 1E ELECTRICAL EQUIPMENT REQUIRED TO FUNCTION UNDER POSTULATED ACCIDENT CONDITIONS)

SYSTEM: D21 - High Range Containment Radiation ; NUREG-0737, II.F.1.3

COMPONENTS					
PLANT ID NUMBER	GENERIC NAME	MANUFACTURER	MODEL	LOCATION BLDG.	LOCATION ELEV.
2VAI5011E	Cable	Victoreen	Note 1	CTMT	>115'-0"
2VAI5011G	Cable	Victoreen	Note 1	CTMT	>115'-0"
Q2D21RE0027A-A	Radiation Detector	Victoreen	877-1	CTMT	>115'-0"
2VBI5009E	Cable	Victoreen	Note 1	CTMT	>115'-0"
2VBI5009G	Cable	Victoreen	Note 1	CTMT	>115'-0"
Q2D21RE0027B-B	Radiation Detector	Victoreen	877-1	CTMT	>115'-0"
Q2T52B009-A	CTMT Penet.	General Electric	100 Series	CTMT	>115'-0"
Q2T52B011-B	CTMT Penet.	General Electric	100 Series	CTMT	>115'-0"
Note 1 - Cables have been qualified along with detector.					

SYSTEM COMPONENT EVALUATION WORKSHEET

Joseph M. Farley Nuclear Plant Unit 2

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUAL. METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: High Range Containment Radiation PLANT ID NO.	OPERATING TIME	Note 4	30 Days	Note 4	4	Simultaneous Test	None
COMPONENT: Radiation Detectors	TEMP. (°F)	316 Note 1	360	1	4	Simultaneous Test	None
MANUFACTURER: Victoreen	PRESSURE (PSIA)	63.1 Note 2	133	2	4	Simultaneous Test	None
MODEL NUMBER: 877-1	RELATIVE HUMIDITY (%)	100	100	3	4	Simultaneous Test	None
FUNCTION: Radiation Monitor	CHEMICAL SPRAY	H_3BO_3 + NaOH	H_3BO_3 + NaOH	3	4	Simultaneous Test	None
ACCURACY: SPEC: N/A DEMON:	RADIATION	5×10^7 Rads.	2.2×10^8 Rads.	3	4	Sequential	None
SERVICE: Post Accident Monitor LOCATION: Containment El. 155'	AGING	Note 3	40 yrs.	Note 3	4	Sequential	None
FLOOD LEVEL ELEV: 115'-0" ABOVE FLOOD LEVEL: yes	SUBMERGENCE	None	N/A	N/A	N/A	N/A	None

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***DOCUMENTATION REFERENCES:**

1. J. M. Farley FSAR Figure 6.2-6
2. J. M. Farley FSAR Figure 6.2-4
3. J. M. Farley FSAR Table 3.11-1
4. Victoreen Test Report 950.301 dated 6-19-81

NOTES:

1. LOCA temperature profile from Figure 2 attached at the end of this chapter. FSAR Figure 6.2-40 will be updated in the July 22, 1982 FSAR revision.
2. LOCA pressure profile from Figure 1 attached at the end of this chapter. FSAR Figure 6.2-39 will be updated in the July 22, 1982 FSAR revision.
3. Enclosure 4 to IE Bulletin 79-01B.
4. This equipment is not essential to achieve a safe shutdown condition for any licensed DBE and, therefore, no operating time is specified.

SYSTEM COMPONENT EVALUATION WORK SHEET

Section 5
Sheet 3 of 3

Joseph M. Farley Nuclear Plant Unit 2

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUAL. METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: High Range Containment Radiation PLANT ID NO.	OPERATING TIME	Note 4	30 Days	Note 4	4	Simultaneous Test	None
COMPONENT: Electrical Penetration (Low Voltage)	TEMP. (^{o}F)	316 Note 1	340	1	4	Simultaneous Test	None
MANUFACTURER: General Electric	PRESSURE (PSIA)	63.1 Note 2	118	2	4	Simultaneous Test	None
MODEL NUMBER: 100 Series	RELATIVE HUMIDITY (%)	100	100	3	4	Simultaneous Test	None
FUNCTION: Containment Isolation	CHEMICAL SPRAY	H_3BO_3 + NaOH	H_3BO_3 + NaOH	3	4	Simultaneous Test	None
ACCURACY: SPEC: N/A DEMON:	RADIATION	5×10^7 Rads.	1×10^8 Rads.	3	4	Sequential	None
SERVICE: Electrical Penetration LOCATION: Containment	AGING	Note 3	40 yrs.	None	4	Sequential	None
FLOOD LEVEL ELEV: 115'-0" ABOVE FLOOD LEVEL: yes	SUBMERGENCE	None	N/A	N/A	N/A	N/A	None

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***DOCUMENTATION REFERENCES:**

1. J. M. Farley FSAR Figure 6.2-6
2. J. M. Farley FSAR Figure 6.2-4
3. J. M. Farley FSAR Table 3.11-1
4. General Electric Co. Report Low Voltage Electrical Containment Penetration Qualification Test Report (Bechtel File E22-98)

NOTES:

1. LOCA temperature profile from Figure 2 attached at the end of this chapter. FSAR Figure 6.2-40 will be updated in the July 22, 1982 FSAR revision.
2. LOCA pressure profile from Figure 1 attached at the end of this chapter. FSAR Figure 6.2-39 will be updated in the July 22, 1982 FSAR revision.
3. Enclosure 4 to IE Bulletin 79-01B.
4. This equipment is not essential to achieve a safe shutdown condition for any licensed DBE and, therefore, no operating time is specified.

(CLASS 1E ELECTRICAL EQUIPMENT REQUIRED TO FUNCTION UNDER POSTULATED ACCIDENT CONDITIONS)

SYSTEM: E17 - Hydrogen Recombiner System NUREG-0737, II.E.4.1

As discussed in Chapter 2 to this appendix, dedicated hydrogen penetrations are not applicable to Farley Nuclear Plant. The qualified status of electrical equipment associated with the hydrogen recombiner system has been verified in a previous NUREG-0588 response, Section C.2.7, dated July 1, 1981.

MASTER LIST

Joseph M. Farley Nuclear Plant Unit 2

Section 7
Sheet 1

(CLASS IE ELECTRICAL EQUIPMENT REQUIRED TO FUNCTION UNDER POSTULATED ACCIDENT CONDITIONS)

SYSTEM: G-21 Liquid Waste Disposal (Narrow Range Containment Sump Level); NUREG-0737,II.F.1

COMPONENTS					
PLANT ID NUMBER	GENERIC NAME	MANUFACTURER	MODEL	LOCATION	
				BLDG.	ELEV.
Q2G21LT3282A-A	Level Sensor	Gems-Delaval	XM54854	CTMT	80'-0"
Q2G21LT3282B-B	Level Sensor	Gems-Delaval	XM54854	CTMT	80'-0"
2VAI5023A	Control Cable	Okonite	None	CTMT	Various
2VBI5023A	Control Cable	Okonite	None	CTMT	Various
Q2T52B007-A	Control Penetration	General Electric	100 Series	CTMT	> 115'-0"
Q2T52B022-B	Control Penetration	General Electric	100 Series	CTMT	> 115'-0"

SYSTEM COMPONENT EVALUATION WORK SHEET

Joseph M. Farley Nuclear Plant Unit 2

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUAL. METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: Liquid Waste Disposal PLANT ID NO.	OPERATING TIME	Note 5	Note 4	Note 5	Note 4	Note 4	
COMPONENT: Level Sensor	TEMP. (°F)	316 Note 1	Note 4	1	Note 4	Note 4	
MANUFACTURER: TransAmerica Delaval Gems Sensor Div.	PRESSURE (PSIA)	63.1 Note 2	Note 4	2	Note 4	Note 4	
MODEL NUMBER: XM54854-323	RELATIVE HUMIDITY (%)	100	Note 4	3	Note 4	Note 4	
FUNCTION: Level Indication	CHEMICAL SPRAY	H_3BO_3 + NaOH	Note 4	3	Note 4	Note 4	
ACCURACY: SPEC: N/A DEMON:	RADIATION	5×10^7 Rads.	Note 4	3	Note 4	Note 4	
SERVICE: Containment Sump LOCATION: Containment	AGING	Note 3	Note 4	Note 3	Note 4	Note 4	
FLOOD LEVEL ELEV: 115'-0" ABOVE FLOOD LEVEL: No	SUBMER-GENCE	Note 4	N/A	N/A	N/A	N/A	

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***DOCUMENTATION REFERENCES:**

1. J. M. Farley FSAR Figure 6.2-6
2. J. M. Farley FSAR Figure 6.2-4
3. J. M. Farley FSAR Table 3.11-1

NOTES:

1. LOCA temperature profile from Figure 2 attached at the end of this chapter. FSAR Figure 6.2-40 will be updated in the July 22, 1982 FSAR revision.
2. LOCA pressure profile from Figure 1 attached at the end of this chapter. FSAR Figure 6.2-39 will be updated in the July 22, 1982 FSAR revision.
3. Enclosure 4 to IE Bulletin 79-01B.
4. Qualification testing is scheduled to be completed 3rd quarter 1982 by Wyle Labs for Gems.
5. This equipment is not essential to achieve a safe shutdown condition for any licensed DBE and, therefore, no operating time is specified.

SYSTEM COMPONENT EVALUATION WORK SHEET

Joseph M. Farley Nuclear Plant Unit 2

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUAL. METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: Liquid Waste Disposal PLANT ID NO.	OPERATING TIME	Note 4	30 Days	Note 4	4	Simultaneous Test	None
COMPONENT: Cable Power and Control	TEMP. (^{o}F)	316 Note 1	346	1	4	Simultaneous Test	None
MANUFACTURER: The Okonite Company	PRESSURE (PSIA)	63.1 Note 2	113	2	4	Simultaneous Test	None
MODEL NUMBER: None	RELATIVE HUMIDITY (%)	100	100	3	4	Simultaneous Test	None
FUNCTION: Electrical Power and Control	CHEMICAL SPRAY	H_3BO_3 + NaOH	H_3BO_3 + NaOH	3	4	Simultaneous Test	None
ACCURACY: SPEC: N/A DEMON:	RADIATION	5×10^7 Rads.	2×10^8 Rads.	3	4	Sequential	None
SERVICE: Electrical Safety Systems LOCATION: Containment	AGING	Note 3	40 yrs.	Note 3	4	Sequential	None
FLOOD LEVEL ELEV: 115'-0" ABOVE FLOOD LEVEL: yes	SUBMERGENCE	None	N/A	N/A	N/A	N/A	None

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***DOCUMENTATION REFERENCES:**

1. J. M. Farley FSAR Figure 6.2-6
2. J. M. Farley FSAR Figure 6.2-4
3. J. M. Farley FSAR Table 3.11-1
4. The Okonite Company Engineering Reports No. 141 dated 2-29-72 & Okonite Report No. N-1 dated July 3, 1978.

NOTES:

1. LOCA temperature profile from Figure 2 attached at the end of this chapter. FSAR Figure 6.2-40 will be updated in the July 22, 1982 FSAR revision.
2. LOCA pressure profile from Figure 1 attached at the end of this chapter. FSAR Figure 6.2-39 will be updated in the July 22, 1982 FSAR revision.
3. Enclosure 4 to IE Bulletin 79-01B.
4. This equipment is not essential to achieve a safe shutdown condition for any licensed DBE and, therefore, no operating time is specified.

SYSTEM COMPONENT EVALUATION WORK SHEET

Joseph M. Farley Nuclear Plant Unit 2

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUAL. METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: Liquid Waste Disposal PLANT ID NO.	OPERATING TIME	Note 4	30 Days	Note 4	4	Simultaneous Test	None
COMPONENT: Electrical Penetration (Low Voltage)	TEMP. (°F)	316 Note 1	340	1	4	Simultaneous Test	None
MANUFACTURER: General Electric	PRESSURE (PSIA)	63.1 Note 2	118	2	4	Simultaneous Test	None
MODEL NUMBER: 100 Series	RELATIVE HUMIDITY (%)	100	100	3	4	Simultaneous Test	None
FUNCTION: Containment Isolation	CHEMICAL SPRAY	H_3BO_3 + NaOH	H_3BO_3 + NaOH	3	4	Simultaneous Test	None
ACCURACY: SPEC: N/A DEMON:	RADIATION	5×10^7 Rads.	1×10^8 Rads.	3	4	Sequential	None
SERVICE: Electrical Penetration LOCATION: Containment	AGING	Note 3	40 yrs.	None	4	Sequential	None
FLOOD LEVEL ELEV: 115'-0" ABOVE FLOOD LEVEL: yes	SUBMERGENCE	None	N/A	N/A	N/A	N/A	None

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***DOCUMENTATION REFERENCES:**

1. J. M. Farley FSAR Figure 6.2-6
2. J. M. Farley FSAR Figure 6.2-4
3. J. M. Farley FSAR Table 3.11-1
4. General Electric Co. Report Low Voltage Electrical Containment Penetration Qualification Test Report (Bechtel File E22-98)

NOTES:

1. LOCA temperature profile from Figure 2 attached at the end of this chapter. FSAR Figure 6.2-40 will be updated in the July 22, 1982 FSAR revision.
2. LOCA pressure profile from Figure 1 attached at the end of this chapter. FSAR Figure 6.2-39 will be updated in the July 22, 1982 FSAR revision.
3. Enclosure 4 to IE Bulletin 79-01B.
4. This equipment is not essential to achieve a safe shutdown condition for any licensed DBE and, therefore, no operating time is specified.

Joseph M. Farley Nuclear Plant Unit 2

(CLASS 1E ELECTRICAL EQUIPMENT REQUIRED TO FUNCTION UNDER POSTULATED ACCIDENT CONDITIONS)

SYSTEM: N23 - Auxiliary Feedwater System NUREG-0737, II.E.1.2

As discussed in Chapter 2 to this appendix, the qualified status of electrical equipm associated with the auxiliary feedwater system has been verified in a previous NUREG-0588 response dated July 1, 1981.

(CLASS 1E ELECTRICAL EQUIPMENT REQUIRED TO FUNCTION UNDER POSTULATED ACCIDENT CONDITIONS)

SYSTEM: Various - Containment Isolation Dependability NUREG-0737, II.E.4.2

As discussed in Chapter 2 to this appendix, the qualified status of this equipment is addressed by a previous NUREG-0588 response dated August 25 and December 28, 1981, Sections C.2.3, C.2.4, C.2.6, C.2,9 and C.2,11 through C.2.20.

(CLASS 1E ELECTRICAL EQUIPMENT REQUIRED TO FUNCTION UNDER POSTULATED ACCIDENT CONDITIONS)

SYSTEM: Various - Automatic PORV Isolation System; NUREG-0737, II.K.3.1

As discussed in Chapter 2 to this appendix, Alabama Power Company has determined that an automatic PORV isolation system could not appreciably enhance protection against a PORV LOCA and no modifications are necessary.

(CLASS 1E ELECTRICAL EQUIPMENT REQUIRED TO FUNCTION UNDER POSTULATED ACCIDENT CONDITIONS)

SYSTEM: Various - Automatic Trip of RCP's; NUREG-0737, II.K.3.5

As discussed in Chapter 2 to this appendix, it is the opinion of Alabama Power Company that the resolution of this issue will be achieved without design modifications.

Chapter 3

Table of Contents

I. Discussion

In letter dated April 23, 1982, Alabama Power Company committed to provide installation dates of TMI Action Plan equipment requiring environmental qualification as well as standard Westinghouse Owner's Group positions and previously requested extensions to implementation dates. This information is provided in the accompanying Table 1 with appropriate references to previous Alabama Power Company letters.

NUREG-0737, Part #	Installation	Extension to Implementation Dates	Westinghouse Owners Group Positions
II.B.1	The reactor coolant vents were installed prior to exceeding 5% power in May 1981. Alabama Power Company has notified the NRC of the completion of the installation in letter dated December 22, 1981.	No extensions were requested to satisfy NUREG-0737.	N/A
II.D.1	As discussed in Chapter 2, installation of the fully qualified electrical equipment will be completed at the next refueling outage.	No extensions were requested to satisfy NUREG-0737. Upgrading the qualification of this equipment is addressed by the requirements or NUREG-0588.	N/A
II.D.3	Modifications to provide positive indication of pressurizer relief and safety valve position were installed prior to fuel load in March 1981 as discussed in Alabama Power Company letter dated January 14, 1981.	No extensions were requested to satisfy NUREG-0737.	N/A
II.E.1.2	In letter dated June 4, 1982, Alabama Power Company stated that all modifications to satisfy this part of NUREG-0737 were implemented. The installation of these modifiations were completed prior to exceeding 5% power in May 1981.	No extensions were requested to satisfy NUREG-0737.	N/A

NUREG-0737, Part #	Installation	Extension to Implementation Dates	Westinghouse Owners Group Positions
II.E.4.1	No modifications were made to satisfy this part of NUREG-0737. Alabma Power Company has stated that this modification is not applicable to Farley Nuclear Plant in letter dated January 14, 1981.	N/A	N/A
II.E.4.2	The identity of the equipment and its qualified status associated with this NUREG-0737 part is described in Chapter 2 to this appendix. The last modifications to upgrade the qualification of this equipment were completed prior to exceeding 5% power in May 1981 and is discussed in Alabama Power Company letter dated December 28, 1981.	No extensions were required to satisfy NUREG-0737. The schedule to upgrade the qualification of this equipment is addressed by Alabama Power Company in letter dated December 28, 1981, to satisfy the requirements of NUREG-0588.	N/A
II.F.1.3	As discussed in Alabama Power Company letter dated January 14, 1981, the modifications to satisfy this NUREG-0737 part were completed prior to exceeding 5% power in May 1981.	No extensions were required to satisfy NUREG-0737. The schedule to install the water tight fitting, as a result of recent test completion as discussed in Chapter 2, is scheduled for the next refueling outage to satisfy NUREG-0588.	N/A

NUREG-0737, Part #	Installation	Extensions to Implementation Dates	Westinghouse Owners Group Positions
II.F.1.5	As discussed in Alabama Power company letter dated January 14, 1981, the modifications to satisfy this NUREG-0737 part were completed prior to exceeding 5% power in May 1981.	No extensions were required to satisfy NUREG-0737.	N/A
II.F.2	As discussed in Chapter 2 to this appendix, the response to address this part of NUREG-0737 is deferred until the promulgation of the associated draft licensing documents.	As stated in letter dated November 16, 1981, Alabama Power Company will provide a schedule to implement an integrated system to satisfy this part of NUREG-0737 following the promulgation of the associatied draft licensing document.	N/A
II.K.3.1	As discussed in Chapter 2 to this appendix, Alabama Power Company does not propose any modifications to resolve this issue.	N/A	WCAP-9804 was transmitted to the NRC Staff by owners group letter OG-52, dated March 13, 1981.

NUREG-0737, Part #	Installation	Extensions to Implementation Dates	Westinghouse Owners Group Positions
II.K.3.5	As discussed in Chapter 2 to this Appendix, Alabama Power Company does not propose any modificaions to resolve this issue.	N/A	Model analyses were submitted to the NRC Staff in owners group letter OG-45, dated December 3, 1980, and owners group letter OG-50, dated March 23, 1981.

Chapter 4 - Summary of Outstanding Items

As discussed in Chapter 2, the following three types of equipment were installed without complete qualification documentation.

Manufacturer	Generic Name	Model	No of Items	Chapter 2 Reference
Target Rock	Solenoid valve	79AB001	4	Section 2
ASCO	Solenoid valve	HTX8320A22V	4	Section 3
Victoreen	Radiation detector	877-1	2	Section 4
GEMS-Delaval	Level sensor	XM-54854	2	Section 7

The Target Rock solenoid valves and GEMS-Delaval level transmitters are presently undergoing qualification testing, which is expected to be completed during the fourth and third quarter of 1982, respectively. The test report for the Victoreen radiation detectors was recently evaluated. As discussed in Chapter 2, the evaluation of the test report indicates a water-tight fitting is necessary to protect the cable connection and to establish similarity with the test specimen. This modification will be completed during the next refueling outage. The ASCO solenoid valves lack adequate qualification documentation and are scheduled to be replaced at the next refueling outage.

Other than the ASCO solenoid valves, all of the above equipment were installed prior to the completion of the qualification test program and the evaluation of the associated test reports. Alabama Power Company installed this equipment in order to provide the state-of-the-art coincident with the implementation dates required by NUREG-0737. Alabama Power Company will continue to monitor the progress of these ongoing qualification test programs. The ASCO solenoid valves will be installed to satisfy NUREG-0588.