

UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20556

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'92 JN -4 P1 58

G. Paul Bollwerk, III Chairman Board U.S. Nuclear Regulatory Commission washington, D.C. 20555

Atomic Safety and Licensing

DOUKETING & SERVICE BRANCH Dr. James H. Carpenter Administrative Judge Atomic Safety and Licensing Board U.S. Nuclear Regulatory Commission Washington, D.C. 20555

Dr. Peter A. Morris Administrative Judge 10825 South Glen Road Potomac, Maryland 20854

> In the Matter of ALABAMA POWER COMPANY (Joseph M. Farley Nuclear Plant, Units 1 and 2) Docket Nos.: 50-348-CivP; 50-364-CivP ASLBP No. 91-626-02-CivP

Dear Administrative Judges:

Pursuant to the Atomic Safety and Licensing Board's June 1, 1992 Memorandum and Order (Closing Evidertiary Record; Establishing Schedule and Guidelines for Proposed Findings and Conclusions), the NRC Staff herein submits an updated exhibit list incorporating the exhibits used during the rebuttal/surrebuttal portion of the evidentiary hearing.

Sincerely,

Eugene Holler

Counsel for NRC Staff

Enclosure: As stated

cc: Service List

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STAFF EXHIBITS (Cross-referencing APCo exhibits)

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1 STAFF	PROFESSIONAL	QUALIFICATION	(RESUMES)
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NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVLA PENALTY

Cover letter dated August 15, 1988 - signed by J. Nelson Grace, Regional Adminstrator (RII)

NOV dated August 15, 1988 - signed by Grace

APCO Exh. #33 REFER TO AS STAFF EXH. #2

ORDER IMPOSING CIVIL MONETARY PENALTY

Cover letter dated August 21, 1990 - signed by James H.

Sniezek

Order dated August 21, 1990 - signed by Sniezek

APCO Exh. #34 REFER TO AS STAFF EXH. #3

MODIFIED ENFORCEMENT POLICY RELATING TO 10 C.F.R. 50.49
"ENVIRONMENTAL QUALIFICATION OF ELECTRICAL EQUIPMENT
IMPORTANT TO SAFETY FOR NUCLEAR POWER PLANTS" (GENERIC
LETTER 88-07)
Memorandum to: All Power Reactor Licensees and Applicants
From: NRC
Dated: April 7, 1988

APCO Exh. #2 REFER TO AS STAFF EXH. #4

- 5 SECY PAPER SECY-87-255
 PROPOSED MODIFICATION OF POLICY ON
 ENFORCEMENT. . .
 Dated: October 13, 1987
- SECY PAPER SECY-85-220
 ENVIRONMENTAL QUALIFICATION PROGRAM ACTIONS
 RESULTING FROM APRIL 2, 1985 COMMISSION
 MEETING
 Dated: June 18, 1985
- INFORMATION RELATING TO THE DEADLINES FOR COMPLIANCE WITH 10 C.F.R. 50.49, "ENVIRONMENTAL QUALIFICATION OF ELECTRIC EQUIPMENT IMPORTANT TO SAFETY FOR NUCLEAR POWER PLANTS" (GENERIC LETTER 85-15)

 Memorandum to: To All Licenses of Operating Reactors From: Hugh L. Thompson Dated: August 6, 1985
- 8 SECY PAPER SECY-86-122
 POLICY FOR ENFORCEMENT OF ENVIRONMENTAL
 QUALIFICATION REQUIREMENTS
 Dated: April 21, 1986

INFORMATION RELATING TO COMPLIANCE WITH 10 C.F.R. 50.49,
"ENVIRONMENTAL QUALIFICATION OF ELECTRIC EQUIPMENT
IMPORTANT TO SAFETY FOR NUCLEAR POWER PLANTS" (GENERIC
LETTER 86-1) WITH ENCLOSURE
Memorandum to: To All Licensees and Holders of an

Application for an Operating License

From: Harold Denton

Dated: September 22, 1986

APCO Exh. #28 REFER TO AS STAFF EXH. #9

- 10 SECY PAPER SECY-88-63
 PROPOSED GENERIC LETTER ON MODIFIED
 ENFORCEMENT POLICY RELATED TO 10 CFR 50.49
 Dated: March 2, 1988
- NRC INSPECTION REPORT NOS. 50-348/87-25 AND 50-364/87-25 WITH ENCLOSURE

 Memorandum to: R.P. McDonaid From: Alan R. Fordt
 Dated: October 19, 1987
- NRC INSPECTION REPORT NOS. 50-348/87-30 AND 50-364/87-30 WITH ENCLOSURE

 Memorandum to: R.P. McDonald From: J. Nelson Grace
 Dated: February 4, 1988

APCO Exh. #55 REFER TO AS STAFF EXH. #12

- 13 ENFORCEMENT CONFERENCE SUMMARY

 (NRC INSPECTION REPORT NOS. 50-348/87-30 & 50-364/87-30)

 Dated: April 13, 1988
- 14 SECY PAPER SECY-88-213
 NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF
 CIVIL PENALTY FOR EQ VIOLATIONS AT FARLEY
 NUCLEAR PLANT (EA 88-40)
- RESPONSE OF ALABAMA POWER COMPANY TO THE NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTY DATED AUGUST 15, 1988

 Cover letter dated November 14, 1988 signed by W.G. Hairston, III
- LICENSEE EVENT REPORT NO. LER 87-012-00 WITH ENCLOSURE
 Ltr. to: NRC From: R.P. McDonald
 Dated: July 30, 1987
 APCO Exh. #26 REFER TO AS APCO Exh #26

- INSPECTION REPORT NOS. 50-348/87-17 AND 50-364/87-17 INSPECTION AT FARLEY SITE NEAR DOTHAN, ALABAMA Inspection Conducted: July 10 August 18, 1987
- 18 EQ SOLENOID VALVE SPLICES JUSTIFICATION FOR CONTINUED OPERATION BECHETL FILE E-91 AP-13169 WITH ENCLOSURES Ltr. to: W.G. Hairston From: K.C. Gandhi Dated: July 21, 1987
- JUSTIFICATION FOR CONTINUED OPERATION-ENERGIZED SOLENOID VALVES IN ENVIRONMENTAL QUALIFICATION SCOPE

 Memorandum to: J.D. Woodard From: W.G. Hairston, III Dated: July 21, 1987
- 20 CECO SPLICE QUALIFICATION TEST INFORMATION WITH ATTACHMENTS Memorandum to: Nuclear Utility Group on Equipment Qualification From: Phil Holzman Dated: January 9, 1987
- NUCLEAR ENVIRONMENTAL QUALIFICATION REPORT FOR OKOGUARD INSULATED CABLES T-95 & NO. 35 SPLICING TAPES OKONITE REPORT NO. NQRN-3

 The Okonite Company

APCO Exh. #25 REFER TO AS STAFF EXH. #21

- 22 ENVIRONMENTAL QUALIFICATION MEETING OF SEPTEMBER 24, 1987
 Ltr. to: J.N. Grace From: R.P. McDonald
 Dated: September 30, 1987
- NUREG-0588 Rev. 1
 INTERIM STAFF POSITION C. ENVIRONMENTAL
 QUALIFICATION OF SAFETY-RELATED ELECTRICAL
 EQUIPMENT
 Nuclear Regulatory Commission

APCC Exh. #42 REFER TO AS STAFF Exh. #23

IE BULLETIN NO. 79-01B
ENVIRONMENTAL QUALIFICATION OF CLASS IE EQUIPMENT
with supplemental information
January 14, 1980

APCo Exh. #8 REFER TO AS APCO Exh. #8

25 NUCLEAR ENVIRONMENTAL QUALIFICATION TEST REPORT
Wyle Laboratories
October 1987 RE: Qualification Test Program on Splices

APCo. Exh. #39 NOTE: APCo Exh. #39 has Addendum I dated 11/19/88, which Staff Exh. #25 does not have.

QUALIFICATION OF TAPED SPLICES FOR USE IN INSTRUMENT CIRCUITS SUBJECT TO HARSH ENVIRONMENTS, WATERFORD STEAM ELECTRIC STATION, UNIT 3 (TAC NO. M7.5348) WITH ENCLOSURE Memorandum to: Samuel J. Collins and Leonard J. Callan From: Gary M. Holahan Dated: May 16, 1990

APCO Exh. #40 REFER TO AS STAFF Exh. #26

27 IE BULLETIN 79-01A (DOR GUIDELINES AT ENCLS. 4)
U.S. NRC
Dated: June 6, 1979

APCO Exh. #7 REFER TO AS STAFF Exh. #27

- EVALUATION FOR CONTINUED OPERATION-LIMITORQUE MCV MOTOR POWER LEAD SPLICES IN ENVIRONMENTAL QUALIFICATION SCOPE WITH ENCLOSURE

 Memorandum to: J.D. Woodard From: W.G. Hairston, III Dated: July 30, 1987
- 29 ELECTRIC HYDROGEN RECOMBINER SPLICES JUSTIFICATION FOR CONTINUED OPERATION (PCR 870-4441) BECHTEL FILE A-78, E-91 AP-13541 WITH
 ENCLOSURE 09/17/87

APCo Exh. #45

ELECTRIC HYDROGEN RECOMBINER SPLICES - JUSTIFICATION FOR CONTINUED OPERATION (PCR 87-0-4441) BECHTEL FILE A-78, E-91 AP-13541 WITH ENCLOSURE 09/23/87

Bechtel Eastern Power Company
Ltr. to: W.G. Hairston From: K.C. Gandhi
Dated: September 23, 1987

APCO Exh. #43 REFER TO AS STAFF Exh. #30

31 WCAP-9347
QUALIFICATION TESTING FOR MODEL B ELECTRIC
HYDROGEN RECOMBINER

Westinghouse Electric Corp. J.F. Wilson Dated: July 1978

APCO Exh. 47 REFER TO AS STAFF Exh. #31

WCAP-7709-L
ELECTRICAL HYDROGEN RECOMBINER FOR WATER
REACTOR CONTAINMENTS
Westinghouse Electric Corp.
J.F. Wilson
Dated: July 1971

APCO Exh. #44 REFER TO AS STAFF Exh. #32

QUALIFICATION TESTING OF RAYCHEM ENVIRONMENTAL SEALS FOR ALABAMA POWER COMPANY JOSEPH M. FARLEY NUCLEAR PLANT Approved: J.E. Love Dated: December 30, 1981

APCO Exh #62 REFER TO AS STAFF Exh. #33

- WYLE LABORATORIES TEST REPORT NO. 58730

 EQ TEST REPORT OF RAYCHEM NEIS NUCLEAR ENVIRONMENTAL

 INTERFACE SEAL KITS FOR RAYCHEM CORP. MENLO PARK,

 CALIFORNIA

 Dated: June 22, 1982
- EQ TEST REPORT OF RAYCHEM NEIS ENVIRONMENTAL INTERFACE SEAL KITS ON STAINLESS STEEL PIPE (EDR-6063)

 RAYCHEM ENERGY DIVISION Bechtel Power Corp. Job No. 15026

 Dated: November 20, 1985

APCO Exh. #65 REFER TO AS STAFF Exh. #35

- 26 EQ PACKAGE NO. 29G RAYCHEM NCB WITH CHICO-A SEAL Table of Contents
 Dated: N/A
- 37 SYSTEM COMPONENT EVALUATION WORKSHEET SCEW NO. 29G Sheet 1 of 6 Approved by: James Sundergill Dated: November 30, 1987
- Raychem/CHICO Equipment Entrance Seal Revised by: Robert A. Frink Dated: September 8, 1987

EQ TEST REPORT OF RAYCHEM NUCLEAR CABLE BREAKOUT AND END SEALING KITS FOR RAYCHEM CORP. MENLO PARK, CALIFORNIA Wyle Laboratories No. 58442-2
Dated: N/A

APCO Exh. #60 REFER TO AS STAFF Exh. #39

40 TESTING AND IRRADIATION OF FOUR INCH EYS COMDULET
Ltr. to: Gene Pettit From: Jesse I. Ramon with
Enclosures
Reference: Bechtel Purchase Order No. 9645
SWRI Project No. 03-4974-001
Dated: February 1, 1979

APCO Exh. #63 REFER TO AS STAFF Exh. #40

- ANALYSIS OF HEAT AGING DATA ON -52 MOLDING MATERIAL TO DETERMINE PRE-AGING CONDITIONS FOR NUCLEAR QUALIFICATION TESTING
 Raychem Energy Division Report EDR-5040
 Dated: October 15, 1981
- CHICO-A4 SEALING COMPOUND ENVIRONMENTAL QUALIFICATION (ES-86-769) BECHTEL FILE A.88/E-91 AP-12696 BECHTEL JOB 7597-042
 Ltr. to: W.G. Hairston From: K.C. Gandhi Dated: March 11, 1987
- TRAY AND CONDUIT GENERAL DETAILS AND NOTES

 Bechtel Drawing No. A-177541

 Bechtel Corp. Job: 7597-03

 Dated: N/A

APCO Exh. #66 REFER TO AS STAFF Exh. #43

- INFORMATION NOTICE NO. 84-57: OPERATING EXPERIENCE RELATED TO MOISTURE INTRUSION IN SAFETY-RELATED ELECTRICAL EQUIPMENT AT COMMERCIAL POWER PLANTS Dated: July 24, 1984
- CASE STUDY REPORT OPERATING EXPERIENCE RELATED MOISTURE INTRUSION IN ENVIRONMENTALLY QUALIFIED ELECTRICAL EQUIPMENT AT COMMERCIAL POWER PLANTS (AEOF-C402)

 Memorandum to: Harold Denton and Others
 From: CJ. Heltemes, Jr.
 Dated: September 19, 1983
- APCO 3 PAGE ANALYSIS November 25, 1987

47	EQ C	F RA	YCHEM/	CHIC	O SEA	LANT	AND	TEF	RMINAL	BLOCKS
	Ltr.	to:	D.M.	Veri	elli	From	: R.	P.	McDona	ald
	Date	d: J	anuary	8,	1988					

APCO Exh. #64 REFER TO AS STAFF Exh. #47

48 IE INFORMATION NOTICE NO. 84-47
EQ TESTS OF ELECTRICAL TERMINAL BLOCKS
U.S. NRC
Dated: June 15, 1984

APCO Exh. #51 REFER TO AS STAFF Exh. #48

- TERMINAL BLOCK INSULATION Vs. TEMPERATURE
 GRAPH 11/25
 Figure A1-21, Page 210
 Source: SNL Report SAND 83-1617
 Dated: N/A
- INSULATION RESISTANCE Vs. TEMPERATURE
 CHART #1 (Medium Bold Title)
 Data based on SAND83-1617
 Dated: N/A
- 51 INCULATION RESISTANCE Vs. TEMPERATURE
 CHART #2 (Large Bold Title)
 Data based on SAND83-1617
 Dated: N/A
- 52 LIMITORQUE REPORT 600198
 LIMITORQUE VALVE CONTROL TEST REPORT
 Dated: January 2, 1969

APCO Exh. #68 REFER TO AS STAFF Exh. #52

53 LIMITORQUE REPORT 600456
QUALIFICATION TYPE TEST REPORT
Dated: December 9, 1975
Performed: June 7 - Nov. 22, 1974

APCO Exh. #69 REFER TO AS STAFF Exh. #53

54 LIMITORQUE TEST REPORT B0058
NUCLEAR QUALIFICATION
Dated: N/A

APCO Exh. #67 REFER TO AS STAFF Exh. #54

55 IE INFORMATION NOTICE 83-72
ENVIRONMENTAL QUALIFICATION TESTING EXPERIENCE
U.S. NRC
Dated: October 28, 1983

APCO Exh. #72 REFER TO AS STAFF Exh. #55

- 56 SECY PAPER SECY-90-093
 STATUS OF ENFORCEMENT ACTIONS TAKEN UNDER THE
 "MODIFIED ENFORCEMENT POLICY RELATING TO
 10 CFR '50.49 (MODIFIED POLICY)
 Dated: March 12, 1990
- 57 EVALUATION LICENSEE'S PROGRAM FOR QUALIFICATION OF ELECTRICAL EQUIPMENT LOCATED IN HARSH ENVIRONMENT FRC Report No. 5896-05-1 Dated: April 4, 1985 Comments: April 16, 1991
- INCLUDING CHARTS AND DIAGRAMS Submission by prices to Staff request
 Dated: January 16, 1991
- Any and all inspector training manuals or seminar materials provided to NRC inspectors in preparation for conducting EQ inspections.
 - a) Equipment Qualification Seminar Notes, 2/6-8/85, Presented by NRC and Sandia, (319 pages)
 - b) Equipment Qualification Seminar Notes, 8/26-28/87, Presented by NRC and Sandia, (93 pages)
 - c) Equipment Qualification Seminar Notes with handwritten annotations, undated, (6 pages)
 - d) Typed outline with handwritt≥n annotations, undated, regarding EQ Inspection Program, (28 pages)
 - e) Typed outline with handwritten annotations, undated, "Qualified Equipment Specific Examples" (48 pages)
 - f) Equipment Qualification Seminar Notes with handwritten annotations, 8/26-28/87, Presented by NRC and Sandia, (70 pages)
 - g) Memo, Brach to Grimes, 6/8/88, "Environmental Qualification Meeting With Regional Counterparts" (3 pages)

- h) A genda with handwritten annotations, 6/1/88, "EQ Technical Counterpart Meeting" (4 pages)
- i) Attendance list, undated, (1 page)
- j) Memo, Partlow to Shao, et al., 8/6/87, "Equipment Qualification Seminar" (4 pages)
- k) Typed outline, undated, "EQ Inspection Slides" (16 pages)
- Agenda, 8/26-28/87, regarding EQ seminar at Sandia, (3 pages)
- m) Franklin Research Center Report No. 5896-005-2, 7/3/85, "Reference Information For Environmental Qualification Inspections" (47 pages)
- n) Draft of document 39 m, 5/85, (46 pages)
- 60 IE INFORMATION NOTICE 84-47
 APCo Memo. to File From: M.D. Freeman
 Dated: May 27, 1986
- 61 FEDERAL REGISTER 49 Fed. Reg. 8422 10 C.F.R. Part 50 EQ of Electrical Equipment Dated: March 7, 1984
- GENERIC LETTER 84-24

 Certification of Compliance to 10 C.F.R.,

 EQ of Electric Equipment Important to

 Safety for Nuclear Power Plants

 Dated: December 27, 1984
- INSPECTION NO. 50-317/84-27
 Docket No. 50-317
 ATTN: A.E. Lundvall, Jr.
 Dated: January 29, 1985
- Ocket No. 50-285/85-09
 Docket No. 50-285
 ATTN: R.L. Andrews
 Dated: July 26, 1985
- Docket No. 50-302/85-09
 Docket No. 50-302
 ATTN: Walter S. Wilgus
 Dated: June 10, 1985

66 INSPECTION NO. 50-266/85013; 50-31/85013 Docket No. 50-266; 50-301 ATTN: C.W. Fay Dated: November 1, 1985

From: C.J. Crane
Subject: MLEA Project 90009
Thermal Behavior of T-95
& Scotch 33
Serial no. 90-159
Dated: July 12, 1990

68 MEMO. TO: FILE FROM: J.A. MURPHY
Subj: ANO Tape Splice Test, Info.
Received from Okonite Regarding
Thermal Properties of Okonite
T-95 Splicing Tape
Dated: June 19, 1990

69 SYSTEM COMPONENT EVALUATION WORKSHEET
Farley Nuclear Plant
Component: Terminal Block
Dated: 6/16,87

70 SYSTEM COMPONENT EVALUATION WORKSHEET
Farley Nuclear Plant
Component: Electrical Penetration
Dated: 6/16/87

71 EQ INSPECTION TRACKING SHEET
Farley Nuclear Plant EQ Ques. #026
Inspector: D. Brosseau
Component: States Term. Block
Dated: 11/17/87

72 EQ INSPECTION TRACKING SHEET
Farley Nuclear Plant EQ Ques. #027
Inspector: D. Erosseau
Component: States Term. Block
Dated: 11/17/87

73 NRC NUREG/CR-3418 San83-1617 RV

Title: Screening Tests of Terminal

Block Performance in a Simulated

LOCA Environment

Dated: August 1984

74 NRC NUREG/CR-3691 San84-0422 RV

Title: An Assessment of Terminal Blocks in the Nuclear Power

Industry

Dated: September 1984

75 TABLE 1: REGULATORY GUIDE VARIABLE CROSS REFERENCE TO VARIABLE NO.

Type A - Type E Variables

Tables 1-12

Dated: None available

76

IEEE TRANSACTIONS ON NUCLEAR SCIENCE
Vol. 33, No. 1
Westinghouse Setpoint Methodology for
Control and Protection Systems
C.R. Tuley R.B. Miller
Dated: February 1986

77 IE INFORMATION NOTICE 85-39
Auditability of Electrical Equipment
Qualification Records at Licensees'
Facilities
Dated: May 22, 1985

78 INSTALLATION & MAINTENANCE MANUEL
Series 800/1000/2000/3000
Axivane Fans Adjustable Pitch
Direct Connected Single and Two
Stage Axial Flow Fans

79 LUBRICATION GUIDE
EPRI NP-4916
Final Report (2 pages)
Dated: January 1987

80 IEEE STD 382-1980
IEEE Standard for Qualification of Safety-Related Valve Actuators (Rev. of IEEE Std 382-1972)
Dated: Copyright 1980

81 IE INFORMATION NOTICE 79-03
Limitorque Valve Geared Limit
Switch Lubricant
Dated: February 9, 1979

SAER File: A35.94.1 Log: 83-417
Dated: December 2, 1983

83	STAFF	IR	V.	TEMPERAT	URE DATA	
	3 Sem	i-pi	lots	s of IR v	. Temperature	with
	Descr	ipt:	ion	of Data	Source	

84 STAFF IR V. TEMPERATURE DATA FROM FIGURE 26
Plot of IR v. Temperature From Figure 26 of
SAND 83-1617 Scmi-Log

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)
ALABAMA POWER COMPANY	Docket Nos. 50-348-CivP 50-364-CivP
(Joseph M. Farley Nuclear Plant, Units 1 and 2)) (ASLBP No. 91-626-02-CivP)

CERTIFICATE OF SERVICE

I hereby certify that copies of "LETTER TO ADMINISTRATIVE JUDGES DATED JUNE 3, 1992" in the above-captioned proceeding have been served on the following by deposit in the United States mail, first class, or as indicated by an asterisk through deposit in the Nuclear Regulatory Commission's internal mail system, this 3rd day of June, 1992:

G. Paul Bollwerk, III*
Chairman
Atomic Safety and Licensing Board
U.S. Nuclea: Regulatory Commission
Washington, D.C. 20555

Dr. Peter A. Morris Administrative Judge 10825 South Glen Road Potomac, MD 20854

Office of the Secretary*
U.S. Nuclear Regulatory Commission
Washington, DC 20555
Attn: Docketing and Service Section

James H. Miller, III, Esq. Balch & Bingham P.O. Box 306 Birmingham, AL 35201 Dr. James H. Carpenter*
Administrative Judge
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Nicholas S. Reynolds, Esq. David A. Repka, Esq. Winston & Strawn 1400 L Street, N.W. Washington, D.C. 20005

Office of Commission Appellate*
Adjudication
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Atomic Safety and Licensing Board Panel* U.S. Nuclear Regulatory Commission Washington, D.C. 20555 Adjudicatory File (2)*
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Eugen DHoller

Counsel for NRC Staff