

12678

S. EASON BALCH
JOHN BINGHAM
M. ROLAND NACHMAN, JR.
FRANK H. HAWTHORNE
HAROLD WILLIAMS
MAURY D. SMITH
WILLIAM J. WARD
ROBERT M. COLLINS
HAROLD A. BOWMAN, JR.
CAREY J. CHITWOOD
A. KLY FOSTER, JR.
JOHN S. BOWMAN
THOMAS W. THAGARD, JR.
CHARLES M. CROOK
STERLING G. CULPEPPER, JR.
JOHN DAVID SNOODGRASS
EDWARD S. ALLEN
WARREN H. GOODWYN
ROBERT A. BUETTNER
JAMES G. BRENCER, JR.
H. HAMPTON BOLES
C. WILLIAM GLADDEN
MICHAEL L. EDWARDS
MARSHALL TIMBERLAKE
WALTER M. BEALE, JR.
RODNEY D. MUNDY
JAMES P. HUGHES, JR.
S. EASON BALCH, JR.
JOHN P. SCOTT, JR.

S. ALLEN BAKER, JR.
J. FOSTER CLARK
STANLEY M. BROCK
BANDOLPH H. LANIER
DAVID R. BOTS
JOHN RICHARD CARRIGAN
WILLIAM E. SHANKS, JR.
T. DWIGHT GILMAN
S. REVELLE GWIN
JAMES H. MILLER, III
WILLIAM H. BATTENFIELD
STEVEN G. MCKINNEY
STEVEN F. CASEY
MALCOLM N. CARMICHAEL
MARK J. REDDY
RICHARD L. PEARSON
JAMES A. BRADFORD
DAN H. NICHAIR
WILLIAM R. COBB, II
ALAN T. ROODERS
JAMES A. BYRAM, JR.
WILLIAM S. WRIGHT
SUSAN B. BEVILL
JOHN J. COLEMAN, III
JOHN F. MANDT
M. STANFORD BLANTON
T. KURT MILLER
J. THOMAS FRANCIS, JR.
TIMOTHY J. TRACY

BALCH & BINGHAM

ATTORNEYS AND COUNSELORS AT LAW

POST OFFICE BOX 306

BIRMINGHAM, ALABAMA 35201

(205) 251-8100

WRITER'S OFFICE
1710 SIXTH AVENUE NORTH
BIRMINGHAM, ALABAMA 35203
FACSIMILE (205) 258-0820
DIRECT DIAL TELEPHONE

(205) 226-3422

March 5, 1992

REMAINE S. SCOTT, II
ALAN R. HAMMOND
VIOLETTA S. BOLIK
W. JOSEPH MCDONNELL, JR.
KARL R. MOOR
WILL RILL TANKERBLEY, JR.
SUZANNE ABLE
BARRON D. WHITE
ANDREW S. SMITH, JR.
LEONARDO C. TILMAN
J. DORRAN WALKER, JR.
ALEX B. LATH, II
CAYLOR C. KIMBLE
DANIEL W. WILSON
JILLIAN M. MINTYRE
JOSE S. WOODWARD
DAVID B. CHAMPLIN
MICHAEL C. FREEMAN
PATRICIA A. HAMILTON
JAMES H. HANCOCK, JR.
ROBIN C. LAURIE
JESSE S. MOOTLE, JR.
DONALD R. JONES, JR.
CHRISTIE C. MORGAN
JOHN S. BOWMAN, JR.
GREGORY S. CURRAN
KELLY KING KELLEY
DANA L. THRASHER
JOHN J. BUCHANAN

DIANA B. COX
VICTORIA J. FRANKLIN
NANCY K. LADD
PERRY D. SHUTTLESWORTH, JR.
FELTON W. SMITH
GLENN G. WAGDELL
STEPHEN E. WHITEHEAD
JOHN W. WOOD
SUZANNE ALLOREDGE
LESLIE M. ALLEN
JAMES E. BRIDGES, III
DEBRA R. CARTER
GREGORY C. COOK
MARCEL L. DEBRIGE
DAVID L. DENSON
LYLE D. LARSON
COLIN LUKE
PHILLIP A. NICHOLS

COUNSEL
EDWARD M. ROGERS, JR.

SCHULTER A. BAKER
1985-1990

* ADMITTED TO PRACTICE
1982 ONLY

G. Paul Bollwerk, III
Administrative Judge
Atomic Safety and Licensing Board
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

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

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

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:

Please find enclosed the following: (1) Alabama Power Company's vertical timeline as requested by Judge Carpenter; (2) a revised version of the Alabama Power Company List of Duplicated Pre-Marked Exhibits filed March 2, 1992, and a description of the four revisions made to that list; (3) proposed corrections to the transcripts for the February 11-14, 1992 and February 18-21, 1992, hearing sessions; (4) report outlining the nature and results of Alabama Power Company's efforts to ascertain the status on November 30, 1985 of the silicone oil in the GEMS level transmitters and the lubricant used in the containment fan motors and room coolers outside containment; and (5) duplicate samples of Alabama Power Company Exhibits 103 and 107.

9203110048 920305
PDR ADOCK 05000348
G PDR

D508

Messrs. Bollwerk, Carpenter and Morris
March 5, 1992
Page 2

Items 1-4 above are being distributed to the attached service list by copy of this letter;
Alabama Power Company Exhibits 103 and 107 are being sent only to Judge Bollwerk.

Respectfully yours,



James H. Miller, III

COUNSEL FOR ALABAMA POWER COMPANY

Enclosure

cc: Certificate of Service

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

ASLBP No. 91-626-02-CivP

Atomic Safety and Licensing Board
Panel
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555


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

Mr. W. G. Hairston, III
Southern Nuclear Operating Company,
Inc.
Post Office Box 1295
Birmingham, Alabama 35201

James Lieberman, Director
Office of Enforcement
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

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

Regional Administrator
U. S. Nuclear Regulatory Commission-
Region II
101 Marietta Street
Suite 2900
Atlanta, Georgia 30323


James H. Miller, III
Counsel for Alabama Power Company

ENVIRONMENTAL QUALIFICATION CHRONOLOGY
(Vertical timeline)

1977 - Union of Concerned Scientists petitions the NRC to address environmental qualification concerns

May 31, 1978 - Issuance of Circular 78-08 (APCo Ex. 4)

January 17, 1980 - Issuance of IN 79-01B (APCo Ex. 8)

August 29, 1980 - Order modifying license for Unit 1 (APCo Ex. 85)

February 5, 1980 - Issuance of NUREG 0588 (Staff Ex. 23)

April, 1980 - EQ Branch is organized

September, 1980 - Inspection and audit for Unit 2 for purposes of issuing a full power license (Trip report is APCo Ex. 10)

December, 1980 - Gibbons inspection of Unit 1 and Unit 2, which found "no violations or deviations" (Report is APCo Ex. 11)

December, 1980 - Norm Merriweather Technical Evaluation Report (APCo Ex. 12)

February, 1981 - Unit 1 equipment evaluation report by NRR (APCo Ex. 13)

March, 1981 - SER issued for Unit 2 saying Master List is "complete and acceptable" (APCo Ex. 15)

March, 1981 - Full power license issued for Unit 2

May, 1981 - SER issued for Unit 1 saying Master List is "complete and acceptable" (APCo Ex. 14)

Late 1981 - APCo hires Mike Lalor to assist in EQ compliance effort

1982 - APCo submits documentation to Franklin Research Center

January, 1983 - Franklin issues Technical Evaluation Reports (APCo Ex. 16 & 17)

March 31, 1981 - Unit 2 license condition (APCo Ex. 83)

EQ Chronology
Page 2

February, 1983 - Staff issues Safety Evaluation Report transmitting to APCo the Franklin TER (APCo Ex. 18 and 19)

February, 1983 - Issuance of EQ rule (10 CFR 50.49)

January 11, 1984 - APCo has meeting with Staff to discuss resolutions to Franklin TER

February 29, 1984 - APCo sends letter to Staff documenting discussions at January 11, 1984 meeting (APCo Ex. 20)

1984 - Staff begins conducting first round EQ inspections

December 13, 1984 - Staff issues SER concluding that Alabama Power's EQ program is in compliance with 10 CFR 50.49 (APCo Ex. 21)

January, 1985 - APCo submits to the Staff a letter certifying that Farley Nuclear Plant is in compliance with 10 CFR 50.49 (APCo Ex. 22)

May 1985 - EQ License condition for Unit 2 is met (APCo Ex. 84)

November 30, 1985 - Deadline for EQ compliance and for what licensees "clearly knew or should have known"

1985 - Issuance of Generic Letter 85-15 (Staff Ex. 7) and SECY 85-220 (Staff Ex. 6)

1986 - Issuance of Generic Letter 86-15 (Staff Ex. 9) and SECY 86-122 (Staff Ex. 8)

March 27, 1986 - Issuance of inspection module (APCo Ex. 93)

July, 1987 - APCo submits voluntary licensee evaluation report on V-type taped splices (Staff Ex. 16)

August, 1987 - Seminar for EQ inspectors conducted at Sandia National Laboratories (APCo Ex. 1)

September, 1987 - Staff conducts "reactive" inspection at Farley Nuclear Plant

September 24, 1987 - APCo has meeting with Staff to discuss V-taped splices (APCo Ex. 108)

October, 1987 - Issuance of Wyle test report on V-taped splices (Staff Ex. 25)

November, 1987 - Staff conducts second inspection of Farley Nuclear Plant (Staff Ex. 12)

EQ Chronology

Page 3

August, 1988 - Staff issues Notice of Violation (Staff Ex. 2)

October, 1988 - APCo responds to Notice of Violation (Staff Ex. 15)

November, 1990 - Staff issues Order Imposing Civil Penalty against APCo (Staff Ex. 3)

November 16, 1990 - APCo requests hearing

APCO LIST OF DUPLICATED PRE-MARKED EXHIBITS

(Supplemental List)

(Cross-referenced with corresponding staff exhibits)

APCO#/STAFF#

1. Agenda, 8/26-28/87, regarding EQ seminar at Sandia
APCO exhibit received into evidence, p. 947
2. 4. Generic Letter to All Power Reactor Licensees and Applicants from Frank J. Miraglia - NRC, dated 04/07/88, regarding Modified Enforcement Policy Relating to 10 CFR 50.49, "Environmental Qualification of Electrical Equipment Important to Safety for Nuclear Power Plants" (Generic Letter 88-07); List of Recently Issued Generic Letters attached
Staff Exhibit received into evidence, p. 304
3. 04/13/78 Petition for Emergency and Remedial Action; CLI-78-6; 7 NRC 400, 420
APCO exhibit received into evidence, p. 947
4. IE Circular 78-08 to F. L. Clayton, Jr. - APCo from James P. O'Reilly - NRC, dated 05/31/78, regarding Environmental Qualification of Safety-Related Electrical Equipment of Nuclear Power Plants; List of I.E. Circulars Issued in 1978 attached
APCO exhibit received into evidence, p. 947
5. 10/11/78 letter to James P. O'Reilly transmitting Farley response to IE Circular 78-08: Qualification of Electrical Terminal Blocks; Unavailability of Test Report Due to Terminal Blocks Inside Containment Associates with Containment Isolation Valves, Wide Range and Narrow Range Temperature Monitoring, and Power Operated Relief Valves
APCO exhibit received into evidence, p. 947
6. Letter to F. L. Clayton, Jr. - Alabama Power Co. from James P. O'Reilly dated 02/08/79 regarding I.E. Bulletin No. 79-01: Environmental Qualification of Class IE Equipment; attachments: 1) IE Bulletin No. 79-01 2) List of IE Bulletins Issued in the Past 12 Months 3) List of SEP Plants.
APCO exhibit received into evidence, 947
7. 27. Bulletin to F. L. Clayton, Jr. - APCo from James P. O'Reilly -NRC, dated 06/06/79 regarding Supplement I.E. Bulletin 79-01A; attachments: 1) I.E. Bulletin No. 79-01A 2) List of I.E. Bulletins Issued in the Past 12 Months 3) List of SEP Plants
Staff exhibit received into evidence, p. 889
8. Bulletin to F. L. Clayton, Jr. - APCo from James P. O'Reilly -NRC, dated 01/17/80 transmitting I.E. Bulletin No. 79-01B Regarding Environmental Qualification of Class I.E. Equipment; Enclosures dated 01/14/80
APCO exhibit received into evidence, p. 1194
9. CLI-80-21 dated 05/27/80
APCO exhibit received into evidence, p. 947

Pre-marked exhibits

Page 2

10. Memo to Z. R. Rosztoczy from Frank Ashe, Joel Paige, William Boothe, and Marilee Slosson, dated 05/27/81, transmitting Trip Report - Audit of Alabama Power Company's Test Data and/or Documentation Concerning Environmental Qualification of Electrical Equipment Per NUREG-0588 for Farley 2 Nuclear Station
APCO exhibit received into evidence, p. 947
11. Letter to R. P. McDonald - APCo from C. E. Murphy - NRC dated 01/15/81 transmitting Report Nos. 50-348/80-38 and 50-364/80-49; Special Inspection Conducted By T. D. Gibbons on 12/02/80 to 12/05/80
APCO exhibit received into evidence, p. 947
12. Technical Evaluation Report entitled Environmental Qualification of Safety Related Electrical Equipment IEB 79-01B Farley Unit No. 1 prepared by N. Merriweather on 12/10/80
APCO exhibit received into evidence, p. 947
13. Letter to F. L. Clayton, Jr. - APCo from Thomas M. Novak -NRC dated 02/13/81 regarding Preliminary Results of NRC Review of EQ's of Safety-Related Electrical Equipment at Farley Plant, Unit No. 1; attachment: Environmental Qualification Report
APCO exhibit received into evidence, p. 947
14. Letter to F. L. Clayton, Jr. - APCo from Steven A. Varga - NRC dated 05/21/81 transmitting NRC Safety Evaluation for the Environmental Qualification of Safety Related Electrical Equipment at Farley Unit No. 1; attachments: Safety Evaluation Report and Technical Evaluation Report dated 11/14/80
APCO exhibit received into evidence, p. 947
15. March 1981 Safety Evaluation Report - Unit 2, Docket No. 50-364, APCo, Supplement No. 6 to NUREG-75/034
APCO exhibit received into evidence, p. 947
16. 01/14/83 Technical Evaluation Report: Review of Licensees' Resolution of Outstanding Issues From NRC Equipment Environmental Qualification Safety Evaluation Reports (F-11 and B-60); Farley Unit 1; prepared by The Franklin Institute
APCO exhibit received into evidence, p. 947
17. 01/17/83 Technical Evaluation Report: Review of Licensees' Resolution of Outstanding Issues from NRC Equipment Environmental Qualification Safety Evaluation Reports (F-11 and B-60); Farley Unit 2; prepared by The Franklin Research Center
APCO exhibit received into evidence, p. 947
18. Letter to F. L. Clayton, Jr. - APCo from Steven A. Varga - NRC dated 02/04/83 transmitting Safety Evaluation Report for Environmental Qualification of Safety Related Electrical Equipment - Farley Unit No. 1
APCO exhibit received into evidence, p. 947
19. Letter to F. L. Clayton, Jr. - APCo from Steven A. Varga - NRC dated 02/04/83 transmitting Safety Evaluation Report for Environmental Qualification of Safety Related Electrical Equipment - Farley Unit No. 2
APCO exhibit received into evidence, p. 947

Pre-marked exhibits

Page 3

20. Letter to S. A. Varga - NRC from F. L. Clayton, Jr. - APCo dated 02/29/84 concerning Safety Evaluation Reports and Technical Evaluation Reports Noting Deficiencies Concerning Documentation of Qualification for Several Safety Related Items at FNP; attachments: 1) Summary of Each Deficiency Identified in the TER's for Units 1 and 2; 2) Resolutions to Specific NRC Staff Comments Identified at the 01/11/84 Meeting; 3) Westinghouse Affidavit Requesting Information in Supplements 1, 2, 3 and 4 To Be Withheld from Public Disclosure APCO exhibit received into evidence, p. 947
21. Safety Evaluations dated 12/13/84 for Units 1 and 2; proposed resolutions for deficiencies identified in Safety Evaluations dated 01/31/83 and in the 01/14/83 and 01/17/83 Franklin TER's and to your proposed that JCO's are not necessary APCO exhibit received into evidence, p. 947
22. Letter to S. A. Varga - NRC from R. P. McDonald - APCo dated 01/28/85 transmitting Units 1 and 2 Response to Generic Letter 84-24; Sworn Statement that an EQ program is in place, the plant has at least one path to safe shutdown, and equipment is qualified or operating under JCO. APCO exhibit received into evidence, p. 947
23. FNP Environmental Qualification Program Implementation; FNP-0-ETP-4108, Revision 0 APCO exhibit received into evidence, p. 1060
24. Excerpt from of The Lineman's and Cableman's Handbook, section 33, entitled, "Splicing Cable" APCO exhibit received into evidence, p. 962
25. 21. Okonite Report No. NQRN-3, Rev. 1, June 30, 1982, entitled, "Nuclear Environmental Qualification Report for Okoguard Insulated Cables and T-95 and No. 35 Splicing Tape" Staff exhibit received into evidence, p. 442
26. 16. 07/30/87 letter to NRC Document Control Desk from R. P. McDonald transmitting Farley Unit 1 Licensee Event Report No. LER 87-012-00 Staff exhibit received into evidence, p. 442
27. NEQ Test Report 17859-02P performed by Wyle Laboratories: Qualification Test Program on Ray Chem Nuclear Cable Splices, Okonite Tape Splices, Kerite Tape Splices, Scotch Tape Splices and Amp Butt Splices as Installed on Various Wire Insulations at Commonwealth Edison Companies LaSalle Dresden and Quad Cities Generating Stations, volumes 1 and 2 (March 11, 1987) APCO exhibit received into evidence, p. 962
28. 9. Generic Letter 86-15 entitled "Environmental Qualification of Electric Equipment Important to Safety for Nuclear Power Plants," dated 09/22/86 Staff exhibit received into evidence, p. 304
29. Jesse E. Love resume APCO exhibit received into evidence, p. 1191
30. James E. Sundergill resume APCO exhibit received into evidence, p. 1191

Pre-marked exhibits

Page 4

31. General Design Criterion 4, 10 CFR Part 50, Appendix A
APCO exhibit received into evidence, p. 1191
32. Regulatory Guide 1.97, Rev. 2.
APCO exhibit received into evidence, p. 1191
33. 2. 08/15/88 Notice of Violation and Proposed Imposition of Civil Penalty (NRC Inspection Report Nos. 50-348, 364/8725 and 50-348, 364/87) transmitted to Alabama Power Company from NRC
34. 3. 08/21/90 Order Imposing a Civil Monetary Penalty at Farley
Staff exhibit received into evidence, p. 304
35. Regulatory Guide 1.89, Rev. 1
APCO exhibit received into evidence, p. 1191
36. IEEE Standard 323-1974, Standard for Qualifying Class IE Electric Equipment for Nuclear Power Generating Stations
APCO exhibit received into evidence, p. 1191
37. IEEE 323-1971, Standard for Qualifying Class IE Electric Equipment for Nuclear Power Generating Stations
APCO exhibit received into evidence, p. 1191
38. APCO Detail Nos. A-172389-172398: generic design details regarding terminations
APCO exhibit received into evidence, p. 1191
39. 25 Wyle Test Report 17947-01 dated 10/1/87 with Addendum I dated 11/19/88
Staff exhibit received into evidence, p. 442
APCO exhibit received into evidence, p. 947.
40. 26. 05/16/90 Qualification of taped splices for use in instrument circuits subject to harsh environments, Waterford Steam Electric Station, Unit 3
Staff exhibit received into evidence, p. 442
41. Circular 80-10 regarding Failure to Maintain Environmental Qualification of Equipment, dated 04/29/80
APCO exhibit received into evidence, p. 1191
42. 23. NUREG-0588, Rev. 1: Interim Staff Position on Environmental Qualification of Safety-Related Electrical Equipment
Staff exhibit received into evidence, p. 442
43. 30. 09/23/87 Electric Hydrogen Recombiner Splices -- Justification for Continued Operation
Staff exhibit received into evidence, p. 304
44. 32. WCAP-7709-L: Electrical Hydrogen Recombiner for Water Reactor Containments, produced by Westinghouse Electric Corp.
Staff exhibit received into evidence, p. 529

Pre-marked exhibits

Page 5

- 45. 29. 09/17/87 Electric Hydrogen Recombiner Splices - Justification for Continued Operation
Staff exhibits received into evidence, p. 529
- 46. Letter to APCO from Westinghouse regarding 5-to-1 terminations, dated 09/22/87
APCO exhibit received into evidence, p. 1191
- 47. 31. WCAP-9347: Qualification Testing for Model B Electric Hydrogen Recombiner, produced
by Westinghouse Electric Corp.
Staff exhibits received into evidence, p. 529
- 48. Letter to Thomas Anderson - Westinghouse from John F. Stolz - NRC dated 06/22/78
transmitting evaluation of WCAP 7709L Re: Hydrogen Recombiners
APCO exhibit received into evidence, p. 1191
- 49. Westinghouse Electric Hydrogen Recombiner Technical Manual
APCO exhibit received into evidence, p. 1191
- 50. Wyle Test Report 44354-1, dated 03/08/79
APCO exhibit received into evidence, p. 1191
- 51. 48. 06/15/84 I.E. Information Notice No. 84-47: Environmental Qualification Tests of Electrical
Terminal Blocks
APCO exhibit received into evidence, p. 1191
Staff exhibit received into evidence, p. 779
- 52. APCO response to Circular 78-08 and Notice 84-47 regarding terminal blocks and loop
accuracy
APCO exhibit received into evidence, p. 1191
- 53. Excerpt from IPS-107/Conax Test Report IPS-107 Connection NSS3 Terminal Blocks
APCO exhibit received into evidence, p. 1191
- 54. Picture of CR151B terminal block taken from vendor's catalogue
APCO exhibit received into evidence, p. 1191
- 55. 12. Letter to R. P. McDonald - APCo from J. Nelson Grace - NRC dated 02/04/88 transmitting
NRC Inspection Report Nos. 50-348/87-30 and 50-364/87-30
Staff exhibit received into evidence, p. 304
- 56. Graph representing terminal block Connectron Nss3/#16 AWG Wires, Conax Test Report
IPS-107; representation of IR values over time.
APCO exhibit received into evidence, p. 1191
- 57. One-page illustration of Connectron terminal block taken from vendor's catalogue
APCO exhibit received into evidence, p. 1191
- 58. Qualification test reports for GE CR151B terminal blocks
- 59. 11/24/87 Justification for Continued Operation Unit 1 - Terminal Blocks Used in Instrument
Circuits

Pre-marked exhibits
Page 6

60. 39. Raychem Report EDR 5033/Wyle report 52442-2, dated 04/81
Staff exhibit received into evidence, p. 889
61. Test Report 2BE-1049-3: submergence testing of Chico A/Raychem seal.
APCO exhibit received into evidence, p. 1191
62. 33. Bechtel qualification testing of Raychem seals
Staff exhibit received into evidence, p. 889
63. 40. 02/01/79 Testing and Irradiation of Four Inch Eys Condulet, performed by Southwest
Research Institute
Staff exhibit received into evidence, p. 889
64. 47. Letter to D. M. Verrelli - NRC from R. P. McDonald - APCo dated 01/08/88 transmitting
Additional Documentation Supporting Environmental Qualification of Ray Chem/CHICO
Sealant and Terminal Blocks at Farley; attachments: 1) Correspondence from Bechtel Eastern
Power Co. to APCo Regarding Ray Chem/CHICO sealant Environmental Qualification
Evaluation; 2) Correspondence from DiBenedetto Associates, Inc. to APCo Regarding
Qualification of GE and States Terminal Blocks
Staff exhibit received into evidence, p. 779
65. 35. 11/20/85 EQ Test Report of Raychem NEIS Environmental Interface Seal Kits on Stainless
Steel Pipe (EDR-6063)
Staff exhibit received into evidence, p. 889
66. 43. Bechtel Drawing No. A-177541: Tray and Conduit General Details and Notes.
Staff exhibit received into evidence, p. 889
67. 54. Limitorque Corporation Nuclear Qualification B0058, Parts 1 and 2
Staff exhibits received into evidence, p. 643
68. 52. Limitorque Report 600198: Limitorque Valve Control Test Report
Staff exhibits received into evidence, p. 643
69. 53. Limitorque Report 600456: Qualification Type Test Report
Staff exhibits received into evidence, p. 643
70. (Withdrawn)
71. Limitorque Report B00119, Rev. 1 dated 11/15/82: "Qualification Type Test Report of Multi-
Point Terminal Strips for Use in Limitorque Valve Actuators for PWR Service"
APCO exhibit received into evidence, p. 1191
72. 55. 10/28/83 I.E. Information Notice 83-72: Environmental Qualification Testing Experience
Staff exhibits received into evidence, p. 643
73. 01/14/86 I.E. Information No. 86-03: Potential Deficiencies in Environmental Qualification
of Limitorque Motor Valve Operator Wiring
APCO exhibit received into evidence, p. 1191

Pre-marked exhibits

Page 7

- 74. excerpt from Texaco's 1988 "Lubricating Oil, Grease and Antifreeze Coolant Digest"
APCO exhibit received into evidence, p. 1191
- 75. Telecopy to Frank Watford from Thomas P. Gregory dated 06/10/76 regarding Texaco
Lubricant Recommendations Per Equipment Lists
APCO exhibit received into evidence, p. 574
- 76. Wyle Test Report No. 40196-1: Radiation Exposure and Accident Simulation Test Program
on Texaco Greases and Oils dated 12/05/88
APCO exhibit received into evidence, p. 1191
- 77. Chevron SRI-2 telecopy from Bolt/Bechtel
APCO exhibit received into evidence, p. 1191
- 77a. Robert O. Bolt resume
- 78. Letter to W. G. Hairston, III - APCo from Caudle A. Julian - NRC dated 10/31/89
transmitting NRC Inspection Report Nos. 50-348/89-23 and 50-364/89-23; Inspection to
Review APCo's Corrective Actions in Response to Previous Inspection Findings (Bates
#57180)
APCO exhibit received into evidence, p. 1297
- 79. Philip A. DiBenedetto resume
APCO exhibit received into evidence, p. 1297
- 80. NRC Order dated 03/30/90: EQ civil penalty at H. B. Robinson
APCO exhibit received into evidence, p. 1297
- 81. NUGEQ Report "Clarification of Information Related to the Environmental Qualification
of Limitorque Motorized Valve Operators," dated August 1989.
APCO exhibit received into evidence, p. 1297
- 82. Vincent S. Noonan resume
APCO exhibit received into evidence, p. 1297
- 83. License Condition for Farley Unit 2
APCO exhibit received into evidence, p. 305
- 84. 05/23/85 Evaluation and Status of License Conditions for Joseph M. Farley Unit 2;
transmitted from Mr. Steven A. Varga to Mr. R. P. McDonald
APCO exhibit received into evidence, p. 305
- 85. 08/29/80 correspondence from NRC to APCO transmitting Order for Modification of License
APCO exhibit received into evidence, p. 305
- 86. Memo to NRC Regional Administrators Regions 1-5 from James Liberman dated 06/21/88
transmitting Guidance for the Preparation of Enforcement Cases Related to EQ Violations;
follow-up to Generic Letter 88-07 describing modified enforcement policy for environmental
qualification actions
APCO exhibit received into evidence, p. 305

Pre-marked exhibits

Page 8

87. Notice of violation for Indian Point Unit 2, dated 11/03/88
APCO exhibit received into evidence, p. 305
88. Notice of violation for Indian Point Unit 3, dated 09/21/88
APCO exhibit received into evidence, p. 305
89. Notice of violation for Susquehanna Units 1 and 2, dated 09/19/88
APCO exhibit received into evidence, p. 305
90. "EQ Scoreboard"
APCO exhibit received into evidence, p. 305
91. Notice of violation for Consumers Power Company's Palisades Nuclear Plant, dated 11/23/88
APCO exhibit received into evidence, p. 305
92. Timeline prepared by Alabama Power Company
APCO exhibit received into evidence, p. 791
93. TI 2515/76 Inspection Module, entitled, "Evaluation of Licensee's Program for Qualification of Electrical Equipment Located in Harsh Environments"
APCO exhibit received into evidence, p. 336
94. Correspondence from NRC to APCO regarding "Summary of Meeting Held on September 24, 1987, Between NRC Staff and APCO Representatives to Discuss Recent Problems Related to Qualification of V-Type Electrical Splices at Farley Site" dated 11/05/87.
APCO exhibit received into evidence, p. 442
95. 09/28/87 correspondence from Wyle Laboratories to APCO regarding Environmental Qualification Test Results on Okonite and 3M Tape Splice Assemblies for the Farley Nuclear Generating Station.
APCO exhibit received into evidence, p. 443
96. Correspondence from Jackie Graham of Southern Company Services to APCO dated 10/29/87, transmitting assessment of V-type tape splices.
APCO exhibit received into evidence, p. 451
97. excerpt from Reliance Manual B-3620-8
APCO exhibit received into evidence, p. 574
98. excerpt from Reliance Manual B-3620-19
APCO exhibit received into evidence, p. 574
99. Installation and Maintenance Manual for Joy Series 1000 Axivane Direct Connected Single and Two Stage Axial Flow Fans
APCO exhibit received into evidence, p. 574
100. excerpt from Reliance Manual B-3628-Rev. 9
APCO exhibit received into evidence, p. 574

Pre-marked exhibits

Page 9

101. excerpt from Reliance Manual B-3628-Rev. 10
APCO exhibit received into evidence, p. 574
102. Physical specimen: EA-180 Seal (Cross-section of Raychem boot)
APCO exhibit received into evidence, p. 1192
103. Physical specimen: EA-180 Namco Limit Switch (Full version)
APCO exhibit received into evidence, p. 1192
104. Drawing A-177541 Rev. 0, dated 07/16/82: Procedure for Applying Chico-A4 Compound to the Nipple of Namco's EA-180 Limit Switch Where Raychem Break-Out is Attached
APCO exhibit received into evidence, p. 890
105. Physical specimen: V-type splice
APCO exhibit received into evidence, p. 1192
106. Physical specimen: 5-to-1 splice
APCO exhibit received into evidence, p. 1192
107. Physical specimen: T-drain
APCO exhibit received into evidence, p. 1192
108. 09/30/87 correspondence from APCO to NRC regarding 09/24/87 meeting
APCO exhibit received into evidence, p. 947
109. NUGEQ Report "Clarification of Information Related to the Environmental Qualification of Limitorque Motorized Valve Operators," dated April 1986.
110. J. E. Love markup of Beard Exhibit 1
APCO exhibit received into evidence, p. 1223
111. 1 page excerpt from Sae'dia report: Figure 2, Phase II Environmental Temperature Profile, Jesse Love markup.
APCO exhibit received into evidence, p. 1223

=====

NOTES

- APCO 39 and Staff 25 have been received into evidence; APCO 39 includes Addendum 1.
- Staff 32, which has been received into evidence, is missing pages; refer to APCO 44.
- Staff 27, which has been received into evidence, is missing pages; refer to APCO 7.

DESCRIPTION OF CHANGES TO THE ALABAMA POWER COMPANY
LIST OF DUPLICATED PRE-MARKED EXHIBITS

- (a) The description of APCo Exhibit 27 has been changed to reflect that the appropriate test report number is Test Report 17859-02P, rather than Test Report 17859-02B.
- (b) Revised list indicates that APCo Exhibit 70 has been withdrawn and was not admitted into evidence.
- (c) The description of APCo Exhibit 81 has been changed to reflect that the document date is August 1989, rather than August 1986.
- (d) The description of APCo Exhibit 109 has been changed to correctly identify the document.

Proposed Corrections to the transcripts
for the February 11-14, 1992, and February 18-21, 1992,
Hearing Sessions

<u>WITNESS</u>	<u>PAGE</u>	<u>LINE</u>	<u>CHANGE FROM</u>	<u>TO</u>
McKinney	900	21	"original"	"reasonable"
Jones	911	10	"modes"	"notes"
	921	7	"how did Ben close"	"had it been closed"
Jones	921	25	"him"	"them"
	928	4	"Kinney"	"McKinney"
McKinney	937	9	"set"	"sat"
Shipman	955	14	"V-type"	"VTIP"
Shipman	958	22	"V-type"	"VTIP"
	979	6	"limiter"	"Limitorque"
Love	982	16	"that"	"there"
Love	982	16	"greater than"	"greater voltage drop than"
Love	987	4	"with the"	"with thread"
Love	987	16	"break-in"	"Raychem"
Love	988	22	"break-in"	"Raychem"
Love	988	25	"break-out in"	"break-out and"
Love	1005	16	"power"	"powder"
Sundergill	1012	24	"spliced"	"specified"

Proposed Corrections
Page 2

<u>WITNESS</u>	<u>PAGE</u>	<u>LINE</u>	<u>CHANGE FROM</u>	<u>TO</u>
Jones	1018	23	"links"	"lengths"
Sundergill	1022	23	"as we moved fittings that were used before"	"as we used fittings that weren't used before"
Sundergill	1030	9	"Section III.9.5"	"Section 3.9.5"
Sundergill	1033	2	"type of what"	"type is what"
Sundergill	1033	13	"end-line"	"in-line"
Love	1044	18	"past"	"shorts"
Love	1044	19	"past"	"shorts"
Jones	1046	25	"39"	"30"
Love	1053	20	"over"	"of our"
	1054	19	"MR. MILLER"	"MR. BACHMAN"
Love	1066	14	"EB"	"2BE"
Sundergill	1081	3	"table"	"cable"
	1083	8	"table"	"cable"
Love	1084	19	"tables"	"cables"
Love	1095	22	"is it"	"it is"
	1102	20	"84-437"	"84-47"
Jones	1105	11	"50.59"	"50.49"
Jones	1108	13	"acceptable"	"unacceptable"

Proposed Corrections
Page 3

<u>WITNESS</u>	<u>PAGE</u>	<u>LINE</u>	<u>CHANGE FROM</u>	<u>TO</u>
Jones	1128	22	"IEO's"	"IEN's"
Love	1149	14	"increasing as"	"increasing or"
Love	1165	5	"punching"	"quenching"
Love	1165	8	"pull-down"	"cool down"
Sundergill	1176	5	"a Arrhenius"	"Arrhenius"
Love	1214	21	"hour"	"IR"
Love	1215	20	"195"	"95"
Love	1216	9	"excessive"	"extensive"
Love	1217	10	"S&L"	"SNL"
Jones	1217	15	"WITNESS JOHNSON"	"WITNESS JONES"
Jones	1219	6	"JUDGE CARPENTER"	"WITNESS JONES"
Jones	1220	5	"JUDGE CARPENTER"	"WITNESS JONES"
Jones	1221	24	"JUDGE CARPENTER"	"WITNESS JONES"
Love	1222	13	"the"	"then"
Noonan	1224	20	"'rather' it was"	"'rather it was"
Noonan	1224	21	"opinion, the"	"opinion,' the"
	1232	4	"Fed Red"	"Fed Reg"
Noonan	1236	2	"conclusion"	"concluding"

Proposed Corrections
Page 4

<u>WITNESS</u>	<u>PAGE</u>	<u>LINE</u>	<u>CHANGE FROM</u>	<u>TO</u>
Noonan	1239	1	"this was plant to safe"	"this plant was safe"
Noonan	1247	24	"said"	"say"
Noonan	1248	15	"have went to that"	"have taken that"
Noonan	1249	7	"document"	"equipment"
Noonan	1259	12	"2206"	"2.206"
Noonan	1262	14	"plan"	"plant"
DiBenedetto	1267	20	"ask me every phrase"	"or may I rephrase"
DiBenedetto	1270	24	"after the"	"after leaving the"
Noonan	1277	2	"I can state"	"I cannot state"
Noonan	1278	1	"II"	"2"
Noonan	1278	4	"II"	"2"
Noonan	1278	6	"II"	"2"
Noonan	1278	14	"thinking"	"think"
Noonan	1279	10	"on"	"of"
Noonan	1279	25	"particular"	"particularly"
DiBenedetto	1281	20	"Noonan as"	"Noonan was"
Noonan	1290	24	"that in"	"that is"
DiBenedetto	1291	20	"different on that"	"different than that"
Woodard	1302	16	"vice-presidente"	"vice-president"

Proposed Corrections
Page 5

<u>WITNESS</u>	<u>PAGE</u>	<u>LINE</u>	<u>CHANGE FROM</u>	<u>TO</u>
Woodard	1304	16	"goes"	"gets"