

*WITHDRAWN (REJECTED)
per CB 3/5/92 Ltr 2/20/92

0063946

APCo Exhibit 70

A-70

50-348/364-CIVP

DOCKETED
USNRC

2/20/92

EQ ACTION ITEM
RELATED CORRESPONDENCE

IDENTIFIED BY: W. LEE

DATE IDENTIFIED: 11-5-87

ASSIGNED TO: J. Darlington

DATE ASSIGNED: 92 MAR 13 12:58

OFFICE OF SECRETARY
DOCKETING & SERVICE
BRANCH

1. DESCRIPTION OF PROBLEM

IEW 83-72 (Notice #24) ^{item A} identifying Marathon 300 terminal blocks as being derated. Derated terminal blocks have been qualified by limit torque testing as addressed in the Nuclear Utility Group on EQ report dated May 12, 1986 for use in MOV's. Seven MOV's within the EQ scope have been identified to have some type of Marathon terminal block. Recommend further evaluation of these terminal blocks. (Q2P16 MOV 3131, 3134; Q2P17 MOV 3046, 3052, 3182, 3238, and 3239)

2. RESOLUTION STATUS

Closed based on MOV Walkdown
Summary evaluation of as left condition

Closed RPB

CHR 11/25/90

DEC EQ-001/20

9204070059 920220
PDR ADOCK 05000348
PDR

NUCLEAR REGULATORY COMMISSION

Docket No. SP-348/364 Official Exh. No. 70
 In the matter of ALABAMA POWER CO.
 Staff _____ IDENTIFIED 2-14-92
 Applicant APCO RECEIVED _____
 Intervenor _____ REJECTED 2/20/92
 Cont'g Off'r _____ DATE _____
 Contractor _____ Witness _____
 Other _____
 Reporter L. C. C. C.

NUCLEAR UTILITY GROUP
ON EQUIPMENT QUALIFICATION

0063947

SUITE 700
1200 SEVENTEENTH STREET, N.W.
WASHINGTON, D. C. 20036
TELEPHONE (202) 857-9817

May 12, 1986

PM04
EM43586-030

MEMORANDUM

TO: Nuclear Utility Group on Equipment Qualification
FROM: Philip M. Holzman *PMH*
SUBJECT: Issuance of the NUGEQ Report on Limitorque EQ Clarifications

Attached please find a NUGEQ report titled, "Clarification of Information Related to the Environmental Qualification of Limitorque Motorized Valve Operators" which documents the meeting and discussions held on behalf of the Group during March and April with Limitorque. The clarifications presented in this report address actual test configurations and other analysis and experience which Limitorque uses to support environmental qualification of its actuators. Limitorque and the Group members agreed that case-by-case considerations, other qualification test data, and utility specific analysis are used in combination with the referenced Limitorque reports to support actuator environmental qualification. Therefore, clarifications contained in this document do not fully reflect the final qualification evaluations which apply to installed Limitorque actuators.

If additional information is required, please contact Limitorque or the NUGEQ subcommittee involved in the Limitorque discussions.

PMH/ak

Attachment: Clarification of Information Related to the Environmental Qualification of Limitorque Motorized Valve Operators

1/The NUGEQ subcommittee involved in the Limitorque discussions included: Paul Conner - VEPCO; Pedro Salas - CP&L; John Nicosia - NEU; Phil Holzman - EPM; and Bob Phillips - Westinghouse for CP&L.

It was noted that the Marathon 300 series blocks were derated by UL from 600V to 300V. This resulted in Limitorque's decision to use every other terminal point, e.g., alternate vs. adjacent, for power wiring in subsequent Limitorque tests. Both Limitorque and the discussion group members present agreed that the use of alternate vs. adjacent wiring does not affect the performance or level of qualification provided for the Marathon 300 blocks based on the B0119 testing.

Finally, Limitorque stated that the use of environmentally qualified spllices in lieu of terminal blocks, in both power and control circuits, was an acceptable configuration.

Terminal Block Data

- | | | | |
|-----|----------|---|---------------------------|
| (1) | 600198: | - | Buchanan 0524 (adjacent) |
| (2) | 600376A: | - | Buchanan 0524 (adjacent) |
| (3) | 600456: | - | Marathon 300 (alternate) |
| (4) | B0009: | - | Marathon 300 (alternate) |
| (5) | B0003: | - | Marathon 300 (alternate) |
| (6) | F-C3271: | - | Buchanan 0524 (adjacent) |
| (7) | B0027: | - | N/A |
| (8) | B0212: | - | Marathon 300 (alternate) |
| (9) | B0119: | - | Marathon 300 (adjacent) |
| | | - | Marathon 300 (alternate) |
| | | - | Buchanan 0524 (alternate) |
| | | - | Buchanan 0222 (adjacent) |
| | | - | GE EB-5 (adjacent) |
| | | - | Marathon 1600 (adjacent) |
| | | - | Curtis Type L (adjacent) |

EQ ACTION ITEM

107

0063949

IDENTIFIED BY: W. LEEDATE IDENTIFIED: 11-5-87

ASSIGNED TO: _____

DATE ASSIGNED: _____

1. DESCRIPTION OF PROBLEM

ITEM 83-92 (Notice #24) ^{Item A} identify Marathon 300 terminal blocks
are being identified. Identified terminal blocks have been qualified
by lim torque testing as addressed in the Nuclear Utility Group
on EQ report dated May 12, 1986 for use in Mark Series
MOV's within the EQ scope have been identified to have
same type of Marathon terminal blocks. Recommend further
evaluation of these terminal blocks (Q2P16 MOV 3131, 3134;
Q2P17 MOV 3046, 3052, 3132, 3238, and 3239)

2. RESOLUTION STATUS

As per previous direction from APSC, Marathon
Terminal blocks in Unit #2 E.Q. Scope MOV's
should be replaced by qualified Raychem
splices.

Vernon P. Sunder ^{11/11/87}
Jewell ^{11/11/87}

Motor operator valve numbers Q2P16 MOV 3134,
Q2P17 MOV 3132, 3052, Q2P23 MOV 3238 and 3239
are not required to be environmentally qualified.
The limit switch integral to these lim torque operators
is environmentally qualified. (Ref: Note 2 to Environmental
Qualification Master List U416798). Therefore, if the
Marathon 300 terminal blocks are not used in the
limit switch circuitry for these MOVs, there is no
question of qualification. (Continued on Att. 1 to Action

DEC EQ-001/30

11/07 10128

7887327 017 Item #107

ATTACHMENT 1 To Action Item # 107

Terminal blocks for Q2P16 MOV3131 and Q2P17 MOV3046 should be replaced as discussed in the Bechtel resolution status or with environmentally qualified terminal blocks supply by another manufacturer.

DZ [Signature]
11/13/87

IDENTIFIED BY: W. LEEDATE IDENTIFIED: 11-5-87

ASSIGNED TO: _____

DATE ASSIGNED: _____

1. DESCRIPTION OF PROBLEM

Item A
 IEN 83-72 (Note #24) identifies Marathon 300 terminal blocks
 as being defective. Located terminal blocks have been qualified
 by technique testing as addressed in the Nuclear Utility Group
 EQ report dated May 12, 1986 for use in MOVs. Some
 MOVs within the EQ scope have been identified to have
 same type of Marathon terminal blocks. Request further
 evaluation of these terminal blocks (Q2P16 MOV 3131, 3134;
 Q2P17 MOV 3046, 3052, 3136, 3238, and 3239)

2. RESOLUTION STATUS

As per previous direction from APEO, Marathon
 Terminal blocks in Unit #2 E.Q. Scope MOVs
 should be replaced by qualified Raychem
 splices.

Vivian E. Sunderjil 11/11/87
 Jewelina 11/11/87

Motor operator valve numbers Q2P16 MOV 3134,
 Q2P17 MOV 3132, 3052, Q2P23 MOV 3238 and 3239
 are not required to be environmentally qualified.
 The limit switch internal to these limit torque operators
 is environmentally qualified. (Ref: Note 2 to Environmental
 Qualification Master List U416799). Therefore, if the
 Marathon 300 terminal blocks are not used in the
 limit switch circuitry for these MOVs, there is no
 question of qualification. (Continued on Att. 1 to Action

DEC EQ-001/30

11/07 10135

7885 017 Item #107

ATTACHMENT 1 To Action Item # 107

Terminal blocks for Q2 P16 MOV 3131 and Q2 P17 MOV 3046 should be replaced as discussed in the Bechtel resolution status or with environmentally qualified terminal blocks - supply by another manufacturer.

DZJ
11/13/87

Maintenance Work Requests Have Been Written To Replace The ~~Following~~ Marathon Terminal Blocks In The Following Valves. QC will Review Replacement Status To Ensure Environmental Qualification Of Valve:

<u>TPNS</u>	<u>MWR</u>
Q2 P16 MOV 3131	159201
Q2 P16 MOV 3046	161203

W.H. La

11-15-87

0063953

87. 11/11 11:47 PO1 *
624 91E2022

12:11 01/11

**NUCLEAR UTILITY GROUP
ON EQUIPMENT QUALIFICATION**

107
page 2

SUITE 700
1200 SEVENTEENTH STREET, N.W.
WASHINGTON, D.C. 20036
TELEPHONE (202) 657-0017

May 12, 1986

P004
EM3586-030

MEMORANDUM

TO: Nuclear Utility Group on Equipment Qualification
FROM: Philip M. Holman *PMH*
SUBJECT: Issuance of the NUQEQ Report on Limitorque EQ
Clarifications

Attached please find a NUQEQ report titled, "Clarification of Information Related to the Environmental Qualification of Limitorque Motorized Valve Operators," which documents the meeting and discussions held on behalf of the Group during March and April with Limitorque. The clarifications presented in this report address actual test configurations and other analysis and experience which Limitorque uses to support environmental qualification of its actuators. Limitorque and the Group members agreed that case-by-case considerations, other qualification test data, and utility specific analysis are used in combination with the referenced Limitorque reports to support actuator environmental qualification. Therefore, clarifications contained in this document do not fully reflect the final qualification evaluations which apply to installed Limitorque actuators.

If additional information is required, please contact Limitorque or the NUQEQ subcommittee involved in the Limitorque discussions.

PMH/ah

Attachment: Clarification of Information Related to the
Environmental Qualification of Limitorque Motorized
Valve Operators

1/The NUQEQ subcommittee involved in the Limitorque discussions included: Paul Conner - VEPCO; Pedro Salas - CP&L; John Micosia - NEU; Phil Holman - EPM; and Bob Phillips - Westinghouse for CP&L.

LIMITORQUE

#107 page 3

It was noted that the Marathon 300 series blocks were de-rated by UL from 600V to 300V. This resulted in Limatorque's decision to use every other terminal point, e.g., alternate vs. adjacent, for power wiring in subsequent Limatorque tests. Both Limatorque and the discussion group members present agreed that the use of alternate vs. adjacent wiring does not affect the performance or level of qualification provided for the Marathon 300 blocks based on the B0119 testing.

Finally, Limatorque stated that the use of environmentally qualified splices in lieu of terminal blocks, in both power and control circuits, was an acceptable configuration.

Terminal Block Data

- (1) 600198: - Buchanan 0524 (adjacent)
- (2) 600376A: - Buchanan 0524 (adjacent)
- (3) 600456: - Marathon 300 (alternate)
- (4) B0009: - Marathon 300 (alternate)
- (5) B0003: - Marathon 300 (alternate)
- (6) F-C3271: - Buchanan 0524 (adjacent)
- (7) B0027: - N/A
- (8) B0212: - Marathon 300 (alternate)
- (9) B0119: - Marathon 300 (adjacent)
- Marathon 300 (alternate)
- Buchanan 0524 (alternate)
- Buchanan 0222 (adjacent)
- GE EB-5 (adjacent)
- Marathon 1600 (adjacent)
- Curtis Type L (adjacent)