

\*WITHDRAWN (REJECTED)  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

0063946

APCo Exhibit 70

A-70

50-348/364-CIVP

DUCKETED  
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 P12:58

OFFICE OF SECRETARY  
DUCKETING & SERVICE  
BRANCH

1. DESCRIPTION OF PROBLEM

IEN 83-72 (Notice #24) <sup>item A</sup> identify 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 R/B

CRS 11/25/87

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. Cates

0063947

NUCLEAR UTILITY GROUP  
ON EQUIPMENT QUALIFICATION

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

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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 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 splites 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)

IDENTIFIED BY: W. LEE

DATE IDENTIFIED: 11-5-87

ASSIGNED TO: \_\_\_\_\_

DATE ASSIGNED: \_\_\_\_\_

1. DESCRIPTION OF PROBLEM

Item A  
 JEN 83-92 (Notice #24) identify Marathon 300 terminal blocks  
 or being derated. Derated terminal blocks have been qualified  
 by lightning testing as addressed in the Nuclear Utility Group  
 EQ report dated May 12, 1986 for use in MOA's. Several  
 MOA's within the EQ scope have been identified to have  
 some type of Marathon terminal blocks. Recommend further  
 evaluation of these terminal blocks. (Q2P16 MOV 3131, 3134;  
 Q2P17 MOV 3046, 3052, 3192, 3238, and 3239)

2. RESOLUTION STATUS

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

Vivian P. Sunder 11/11/87  
 Joubert 11/11/87

Motor operator valve numbers Q2P16 MOV 3134,  
 Q2P17 MOV 3192, 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 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

## ATTACHMENT 1 To Action Item # 107

Terminal blocks for Q2P16MOV3131 and Q2P17MOV3046 should be replaced as discussed in the Bechtel resolution status or with environmentally qualified terminal blocks supply by another manufacturer.

DZ  
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 derated. Located terminal blocks have been qualified  
 by life cycle testing as addressed in the Nuclear Utility Group  
 EQ report dated May 12, 1986 for use in MOV's. Some  
 MOV's within the EQ scope have been identified to have  
 some type of Marathon terminal blocks. Request further  
 evaluation of these terminal blocks (Q2P16 MOV 3131, 3134;  
 Q2P17 MOV 3046, 3052, 3126, 3238, and 3239)

## 2. RESOLUTION STATUS

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

Vivian E. Sunders jll 11/11/87  
 Jennifer jll 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

## ATTACHMENT 1 To Action Item # 107

Terminal blocks for Q2P16MOV3131 and Q2P17MOV3046 should be replaced as discussed in the Bechtel resolution status or with environmentally qualified terminal blocks - supply by another manufacturer.

DZ  
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>
Q2P16MOV3131	169201
Q2P16MOV3046	169202

W.H. La

11-15-87



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87. 11/11 11:47 PO1 \*  
62# 91E202Z

12111 01/11

NUCLEAR UTILITY GROUP  
ON EQUIPMENT QUALIFICATION

# 107  
page 2

SUITE 700  
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WASHINGTON, D. C. 20006  
TELEPHONE (202) 657-0017

May 12, 1986

P004  
EM3586-030

MEMORANDUM

TO: Nuclear Utility Group on Equipment Qualification  
FROM: Philip M. Kolman *PKM*  
SUBJECT: Issuance of the NUQEG Report on Limitorque EQ Clarifications

Attached please find a NUQEG 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 NUQEG subcommittee involved in the Limitorque discussions.

PKM/ak

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

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

LIMITORQUE

# 107 page 3

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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

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