

REQUEST FOR ADDITIONAL INFORMATION

EQUIPMENT ENVIRONMENTAL QUALIFICATION (EEQ)
REVIEW OF LICENSEES' RESOLUTION OF OUTSTANDING ISSUES
FROM NRC EQUIPMENT ENVIRONMENTAL QUALIFICATION SAFETY
EVALUATION REPORTS (SER) AND TMI ACTION PLAN INSTALLED EQUIPMENT

Florida Power and Light Company

Turkey Point Unit 4

NRC Docket No. 50-251

December 11, 1981

NRC TAC No. 42471

Dupe of 8112160089



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BACKGROUND

Franklin Research Center (FRC) of Philadelphia, Pa. is providing assistance to the U.S. Nuclear Regulatory Commission (NRC) for the equipment environmental qualification (EEQ) review of operating reactors. FRC will perform an EEQ review of the Licensee's 90-day response to outstanding issues from the NRC Equipment Environmental Qualification Safety Evaluation Report (SER) and the installed TMI Action Plan equipment. The review will be limited to safety-related equipment potentially exposed to a harsh environment. The results will be presented in the form of a technical evaluation report for each plant.

This request for additional information (RFI) is the result of an evaluation of the information provided by letters dated June 2, 1980 [1] and August, 1981 [2].* FRC previously requested TMI Action Plan information by a telephone memorandum dated August 14, 1981 [3]. In response to that request, Florida Power and Light Company provided the following information on August 14, 1981:

1. The cable description for the cable listed on SCEW Sheet 13-29:
W-C Cross-linked polyethylene insulation with a neoprene jacket.

A. FRC REVIEW OF THE LICENSEE'S 90-DAY RESPONSE TO THE NRC EEQ SER

<u>Information Requested</u>	<u>Date Received by FRC**</u>
<ol style="list-style-type: none"> 1. In reference to the Licensee's 90-day response [2] to the NRC SER [4], a legible single copy of each of the following qualification documents is requested in order that the FRC evaluation may proceed. The identification of those reports considered to be proprietary is requested so that proper control of documents can be maintained: <ol style="list-style-type: none"> a. Fischer & Porter Letter 3-6-75 with Ameron Lab Test #1550a dated 3-23-72 (Ref. 8) 	

*Numbers in brackets refer to citations found in the list of references.

**This column will be completed by FRC as the requested information is received.

Date Received by FRC**

- b. Westinghouse Letter NS-CE-1586, 10-28-77
(Ref. 9)
- c. Joy Engineering Test Report 1969, V.P.
5610-M-39-41-1 (Ref. 10)
- d. FPL Letter L-75-247 to NRC, May 21, 1975
(Ref. 18)
- e. Engineering Analysis of Dousing Valves
(Ref. 21)
- f. Analysis of Operating Time for Devices
Covered in IE Bulletin 79-01B Master List
(Ref. 22)
- g. Raychem Letter 4-14-80 on Heat Shrinkable
Tubing "RNF-100" (Ref. 23)
- h. Okonite Letter (March 22, 1971) to
Bechtel and IEEE Transactions Paper, Vol.
PAS 88, No. 5 May 1969 (Ref. 24)
- i. Bechtel Letter (April 7, 1980) to Okonite
and Okonite Reply (April 10, 1980) (Ref.
25)
- j. Engineering Analysis of Crouse-Hinds
Penetrations (Ref. 26)
- k. Westinghouse Specification Sheets for
Instruments (Ref. 27)
- l. A Status Report on G.E. Wire and Cable
Department Comprehensive Testing Program
with Cover Letter from G.E. dated May 30,
1949, and Mathematical Analysis (Ref. 29)
- m. Engineering Analysis of Thermocouple
Extension Wire (Ref. 30)
- n. Continental Wire & Cable Test Report and
Mathematic Analysis (Ref. 31)
- o. Charcoal Filter Temperature Elements -
Environmental Qualification - Engineering
Analysis (Ref. 32)

Date Received by FRC**

- p. Containment-Vent Air Flow Switches -
Environmental Qualification - Engineering
Analysis (Ref. 33)
- q. ITT Barton Quality Release for Level
Transmitters (Ref. 34)
- r. Engineering Analysis for Replacement
Solenoid Valves (Inside Containment)
(Ref. 35)
- s. Fischer & Porter Differential Pressure
Transmitter - Temperature Extrapolation
(Ref. 36)
- t. Engineering Analysis of Mackworth G. Rees
Local Control Stations (Ref. 38)
- u. Scotch Type 23 Electrical Tape - Product
Data & 3M Letter of 4-14-80 (Ref. 39)
- v. Static O Ring Pressure Switches -
Engineering Analysis on Qualification
(Ref. 41)
- w. Engineering Analysis on Qualification of
Motorola Pressure Transmitters (Ref. 42)
- x. Engineering Analysis of RCS to RHR Inlet
Isolation Valves (Ref. 45)
- y. Environmental Qualification/Analysis of
United Electric Pressure and Level
Controllers (Ref. 46)
- z. Engineering Analysis - Qualification of
Solenoid Valve in Auxiliary Building and
Steam Line Break Areas (Ref. 48)
- aa. Engineering Analysis Charcoal Filter
Dousing Valves (Ref. 49)
- bb. Qualification Analysis for NAMCO Limit
Switches (Ref. 50)
- cc. Isomedix Test Report for Instrument Cable
for PT-406 and PT-407 RCS Pressure
Transmitters (Ref. 51)

Date Received by FRC**

- dd. Qualification of Replacement NAMCO Controls Limit Switch Model EA-180-11320 (Ref. 52)
- ee. Engineering Analysis for Aging of Devices Covered in IEB-7901B Master List (Ref. 53)
- ff. General Electric Letter to Bechtel dated May 16, 1980 (Ref. 56)
- gg. Engineering Analysis of ITT Barton Pressure Controllers & Differential Pressure Switches (Ref. 55)
- hh. Chempump Letter to Bechtel dated June 10, 1980 (Ref. 56)
- ii. Fisher Controls Letter to FPL dated May 2, 1980 and Type 546 Bulletin (Ref. 57)
- jj. Engineering Analysis-Radiation Detectors RD-11, RD-12 (Ref. 58)
- kk. Engineering Analysis of Dayton Motors (Ref. 59)
- ll. Engineering Analysis and Product Specifications for Foxboro Instruments (Ref. 60)
- mm. Qualification Test Report No. 770831 for PYCO Temperature Detectors (Ref. 61) [TRC previously requested this information in Reference 3]
- nn. Rockbestos Qualification Test Report of June 7, 1978 for Firewall III Class 1E Electric Cables (Ref. 63)
- oo. Qualification Test Report (T.E.C. No. 517-TR-03) for Environmental and Seismic Testing (Ref. 64)

REFERENCES

1. R. E. Uhrig
Letter to J. P. O'Reilly (NRC)
Subject: Response to Items 1, 2, and 3 of IE Bulletin 79-01B
Florida Power & Light Co., 02-Jun-80, L-80-166
2. Environmental Qualification of Electrical Equipment - IE Bulletin
79-01B; Response to the Safety Evaluation Report by the Office of
Nuclear Reactor Regulation
Florida Power & Light Co., August 1981
3. Telephone Memorandum
M. Williams, M. Grotenhaus, T. Le (NRC); D. Channey, L. Craig, R.
Kaminsky (FP&L); and C. J. Crane, R. Krapf, W. Steigelmann (FRC)
Subject: TMI-Action Plan Review Request for Additional Information
Dated August 14, 1981
4. Office of Nuclear Reactor Regulation
Safety Evaluation Report for Turkey Point Units 3 and 4
Environmental Qualification of Safety-Related
Electrical Equipment
NRC, 21-May-81
5. R. E. Uhrig
Letter to J. P. O'Reilly (NRC)
Subject: Supplements to Response to IE Bulletin 79-01B, Supplement 3
dated July 3, 1980
Florida Power & Light Co., 12-Feb-81, L-81-49
6. NUREG-0737, "Clarification of TMI Action Plan Requirements"
NRC, November 1980