

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

5N 157B Lookout Place

December 16, 1985

Director of Nuclear Reactor Regulation
Attention: Mr. B. J. Youngblood, Project Director
PWR Project Directorate No. 4
Division of Pressurized Water Reactor (PWR)
Licensing A
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Youngblood:

In the Matter of the Application of) Docket Nos. 50-390
Tennessee Valley Authority) 50-391

Please refer to R. H. Shell's letter to E. Adensam dated February 19, 1985 which submitted various environmental qualification of electrical equipment information. Enclosure 1 of the referenced letter committed us to investigate, at the NRC's request, our molded case circuit breakers in relation to circuit breaker failure at Mississippi Power and Light (MP&L).

We understand MP&L was environmentally aging a General Electric type THQB molded case circuit breaker at three different temperatures (105°, 125°, and 131°C) to obtain qualified lives of different durations. During postthermal aging, functionally testing the circuit breakers demonstrated an inability to trip under test load conditions.

We awarded a change of contract (TV-56071A) to Wyle Laboratories to test molded case circuit breakers used to protect associated circuits, and determine if the same problem exists, as reported by MP&L, when the WBN breakers were subjected to the maximum expected accident temperature. In accordance with Wyle Laboratories Test Report 17737-02, the following molded case circuit breakers have demonstrated the capability to interrupt an electrical overload condition after exposure (for 366 hours) equal to the peak temperature of the temperature profile that the circuit breakers will be subjected to during an accident condition.

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Director of Nuclear Reactor Regulation

December 16, 1985

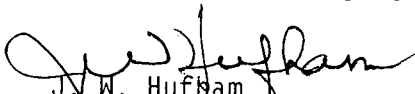
<u>Circuit Breaker</u>	<u>Temperature (°F)</u>
NEJ223125	126
NE223020	126
NE224020	126
QOB115	197
JA3125	153
JA3175	153
BQ1-B015	153
EF3-A010	153
EF3-L050	153
EF3-B070	153

We, therefore, conclude that the problem reported by MP&L is not applicable to the above circuit breakers.

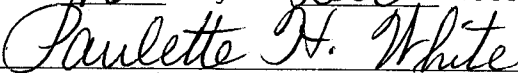
If there are any questions, please get in touch with K. P. Parr at FTS 858-2680.

Very truly yours,

TENNESSEE VALLEY AUTHORITY


J. W. Huffman
Manager of Licensing

Sworn to and subscribed before me
this 16th day of Dec. 1985


Notary Public

My Commission Expires 8-24-88

cc: U.S. Nuclear Regulatory Commission
Region II
Attention: Dr. J. Nelson Grace, Regional Administrator
101 Marietta Street, NW, Suite 2900
Atlanta, Georgia 30323

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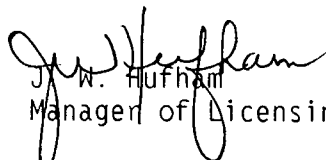
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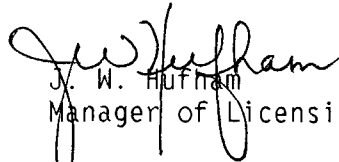
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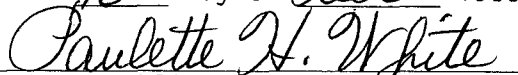
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