



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

FEB 19 1980

Docket Nos. 50-369
and 50-370

Mr. William O. Parker, Jr.
Vice President, Steam Production
Duke Power Company
P. O. Box 2178
422 South Church Street
Charlotte, North Carolina 28242

Dear Mr. Parker:

SUBJECT: ENVIRONMENTAL QUALIFICATION OF PRESSURE TRANSMITTERS
(McGuire Nuclear Station, Units 1 and 2)

In our letter dated November 16, 1979 we requested the results of tests or analyses to demonstrate acceptable environmental qualification of pressure transmitters to be used to measure containment pressure. Our concerns centered on the Barton Model 386A transmitter used in conjunction with a Barton Model 351 remote sensing bellow. In topical report WCAP-9157 Westinghouse provided test results for environmental qualification of the Barton Model 351 unit. The qualification test of the remote bellow sensing pressure transmitter resulted in an anomalous pressure spike above the test chamber pressure (Section 6-6 of WCAP-9157). The test results are unacceptable to the staff because the magnitude of the pressure spike does not meet the acceptance criteria for instrument accuracy and the anomalous indication provided by the pressure spike is contrary to the requirements of Section 4.20 of IEEE-279-1971, "IEEE Criteria for Protection Systems for Nuclear Power Generating Stations." It is concluded in WCAP-9157 that this pressure spike is attributable to the limited size of the test chamber and that the spike would not occur in the large containment. The discussion in WCAP-9157 of the cause of the pressure spike in the test and the assurance of its absence in the plant is inadequate.

Therefore, additional test results or analysis was requested to demonstrate that this pressure transmitter is acceptable. Your letter dated December 19, 1979 provided a brief summary of test conditions for an additional test that you performed. Based on this test, you conclude that this transmitter is qualified for use at the McGuire Station. Since your response does not provide a description of the test results or address the absence of any observation of the pressure spikes or ringing phenomena noted during the Westinghouse tests, we request that a copy of the test report be provided to resolve

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Mr. William O. Parker, Jr.

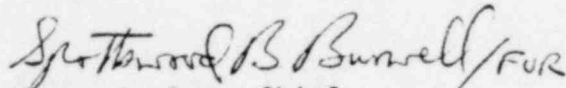
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these concerns. Should this test report not include sufficient data to demonstrate that this ringing phenomena did not occur, you should provide such evidence or basis upon which you conclude that these transmitters are acceptable for use at the McGuire Station.

We request that you provide this information by March 12, 1980.

Sincerely,

A handwritten signature in dark ink, appearing to read "Robert L. Baer" with a stylized flourish at the end.

Robert L. Baer, Chief
Light Water Reactors Branch No. 2
Division of Project Management

ccs: See next page

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FEB 15 1980

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Mr. William O. Parker, Jr.

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