

May 15, 1985

Docket Nos: 50-369
and 50-370

Mr. H. B. Tucker, Vice President
Nuclear Production Department
Duke Power Company
422 South Church Street
Charlotte, North Carolina 28242

Dear Mr. Tucker:

Subject: Supplemental Request for Additional Information Regarding
E-MAX Isolation Devices for the McGuire SPDS

The NRC staff is reviewing the McGuire Safety Parameter Display System (SPDS) based upon your SPDS Safety Analysis and Implementation Plan submitted March 9, 1984, and your supplemental letters of November 2, 1984, and February 8, 1985. We find that these submittals do not address the E-MAX electrical isolators used on the radiation monitoring inputs to the SPDS. Therefore, the additional information identified in the enclosure is needed for completion of our review of electrical isolation aspects of the SPDS.

Your response to the enclosure is requested within 90 days of this letter. If you have questions regarding the enclosure, contact our project manager at (301) 492-8408.

The reporting and/or recordkeeping requirements contained in this letter affect fewer than ten respondents; therefore, OMB clearance is not required under P.L. 96-511.

Sincerely,

Original Signed By
Elinor G. Adensam

Elinor G. Adensam, Chief
Licensing Branch No. 4
Division of Licensing

Enclosure:
As stated

cc: See next page

DSH
DL:LB #4
DHood/hmc
5/13/85

LA:DL:LB #4
MDuncan
5/13/85

DL:LB #4
EAdensam
5/14/85

8505310383 850515
PDR ADOCK 05000369
F PDR

McGuire

Mr. H. B. Tucker, Vice President
Nuclear Production Department
Duke Power Company
422 South Church Street
Charlotte, North Carolina 28242

cc: Mr. A. Carr
Duke Power Company
P. O. Box 33189
422 South Church Street
Charlotte, North Carolina 28242

Mr. F. J. Twogood
Power Systems Division
Westinghouse Electric Corp.
P. O. Box 355
Pittsburgh, Pennsylvania 15230

Mr. Robert Gill
Duke Power Company
Nuclear Production Department
P. O. Box 33189
Charlotte, North Carolina 28242

J. Michael McGarry, III, Esq.
Bishop, Liberman, Cook, Purcell
and Reynolds
1200 Seventeenth Street, N.W.
Washington, D. C. 20036

Mr. Wm. Orders
Senior Resident Inspector
c/o U.S. Nuclear Regulatory Commission
Route 4, Box 529
Hunterville, North Carolina 28078

Regional Administrator
U.S. Nuclear Regulatory Commission,
Region II
101 Marietta Street, N.W., Suite 2900
Atlanta, Georgia 30323

R. S. Howard
Operating Plants Projects
Regional Manager
Westinghouse Electric Corporation - R&D 701
P. O. Box 2728
Pittsburgh, Pennsylvania 15230

ENCLOSURE

REQUEST FOR ADDITIONAL INFORMATION ON THE E-MAX
ISOLATION DEVICES FOR THE MCGUIRE SPDS

The following additional information is needed regarding the E-MAX isolators used on the radiation monitoring inputs to the SPDS:

- a. For the E-MAX device used to accomplish electrical isolation, describe the specific testing performed to demonstrate that the device is acceptable for this application. This description should include elementary diagrams when necessary to indicate the test configuration and how the maximum credible faults were applied to the device.
- b. Provide data to verify that the maximum credible faults applied during the test were the maximum voltage/current to which the device could be exposed, and define how the maximum voltage/current was determined.
- c. Provide data to verify that the maximum credible fault was applied to the output of the device in the transverse mode (between signal and return) and that other faults were considered (i.e., open and short circuits).
- d. Define the pass/fail acceptance criteria for this device.
- e. State whether or not the isolation devices comply with environmental qualification requirements (10 CFR 50.49) and with the seismic qualification requirements which were the basis for plant licensing.
- f. Provide a description of the measures taken to protect the safety systems from electrical interference (i.e., Electrostatic Coupling, EMI, Common Mode and Crosstalk) that may be generated by the SPDS.