

March 7, 1988

Docket Nos.: 50-369/370

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

Dear Mr. Tucker:

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION REGARDING RADIOIODINE AND PARTICULATE SAMPLING-MCGUIRE NUCLEAR STATION, UNITS 1 AND 2 (TACS 66897 AND 66898)

By letter dated September 8, 1987 you requested an exception to one of four criteria regarding the radioiodine and particulate sampling requirements of NUREG 0737, Item II.F.1. The exception regards the design basis shielding envelope for Table II.F.1-2, "Sampling and Analysis or Measurement of High-Range Radioiodine and Particulate Effluents in Gaseous Effluent Streams."

NRR is assisting Region II in the review of this requested exception. We find that additional information, identified by the enclosure, is needed to complete the review.

Your response to this enclosure is requested within 45 days of receipt of this letter. Contact me at (301) 492-1442 if you have questions.

Sincerely,

Original signed by:
Darl S. Hood, Project Manager
Project Directorate II-3
Division of Reactor Projects - I/II

Enclosure: As Stated

cc w/enclosure:
See next page

DISTRIBUTION:

Docket File
NRC PDR
Local PDR
PD II-3 Reading
Acting Director
DHood
MRood
OGC
EJordan
JPartlow
ACRS (10)
DCollins, RII
JBKahle, RII
EFBranagan
LCunningham

DSH
DP-3/I-II
DHood:sw
3/7/88

DP-3/I-II
MRood
03/7/88

DP-3/I-II
Acting PD
03/7/88

Collins
RQ
My phone
DSH
3/7/88

Mr. H. B. Tucker
Duke Power Company

McGuire Nuclear Station

cc:

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

Dr. John M. Barry
Department of Environmental Health
Mecklenburg County
1200 Blythe Boulevard
Charlotte, North Carolina 28203

County Manager of Mecklenburg County
720 East Fourth Street
Charlotte, North Carolina 28202

Mr. Dayne H. Brown, Chief
Radiation Protection Branch
Division of Facility Services
Department of Human Resources
701 Barbour Drive
Raleigh, North Carolina 27603-2008

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

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

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

S. S. Kilborn
Area Manager, Mid-South Area
ESSD Projects
Westinghouse Electric Corporation
MNC West Tower - Bay 239
P. O. Box 355
Pittsburgh, Pennsylvania 15230

REQUEST FOR ADDITIONAL INFORMATION
REGARDING NUREG-0737 TABLE II.F.1-2

By letter dated September 8, 1988, you propose to use a value of 0.033 microcuries of radioiodines and particulates per cc, rather than the required design basis shielding value of 100 microcuries per cc (NUREG-0737, Table II.F.1.2). However, the basis for the value of 0.033 was not provided.

- a. State the basis for the value of 0.033 microcuries per cc, or provide a specific reference which contains the basis. Is the value of 0.033 microcuries per cc based on a TID-14844 source term and the assumption of major containment failure?
- b. If your response to the above question is no, then provide an analysis of the concentrations of radioiodines and particulates in the unit vent that is based on a TID-14844 source term. Also provide an estimate of the concentrations and total activity of radionuclides deposited on the sampling media. This analysis should include major core damage and major containment failure. Discuss the impact of loss of offsite power on the blowers used to exhaust the auxiliary building. Using the preceding assumptions compare your estimated concentrations with the design basis shielding value of 100 microcuries per cc. Provide the basis and references for all values used in the analysis.