

# DUKE POWER COMPANY

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VICE PRESIDENT  
NUCLEAR PRODUCTION

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34 MAR 15 A 8:38 March 7, 1984

✓ Mr. James P. O'Reilly, Regional Administrator  
U. S. Nuclear Regulatory Commission  
Region II  
101 Marietta Street NW, Suite 2900  
Atlanta, Georgia 30303

Subject: McGuire Nuclear Station Unit 2  
Docket No. 50-370  
LER/RO-370/83-57

Dear Mr. O'Reilly:

The following is additional information relating to Reportable Occurrence Report RO-370/83-57 which was submitted by my letter dated October 26, 1983 and subsequently revised by my letter of January 16, 1984. The submitted report is still applicable. This additional information is provided in response to a February 16, 1984 request by Messrs. V. Brownlee and T. Conlon of your staff.

The Annulus Sprinkler System is provided to meet requirements of 10 CFR 50 Appendix R, Section III.G.2.e. During the time the Annulus Fire Protection System valve (1RF-989) was shut the Annulus Sprinkler System was out of service and therefore the plant was in non-compliance with Appendix R. Messrs. Brownlee and Conlon's concern was that with the plant in non-compliance with Appendix R, it would not have been able to demonstrate shutdown capability; i.e. could the unit have been brought to hot shutdown and subsequently to cold shutdown with a fire in the Annulus and the Annulus Sprinkler System isolated (1RF-989 closed).

At no time was shutdown capability jeopardized, the unit could be shutdown given a fire in the Annulus with the sprinkler isolation valve closed. This is based on several factors:

- Low combustible loading in the Annulus; the fire initiating event would be an exposure fire from transient combustibles which is a low probability event
- Growth of fire involving plastic insulation is very slow
- Detection is provided in areas where cables are located
- Upon detection the fire brigade would respond
- Redundant functions required for shutdown are reasonably well separated and a fire would not be expected to propagate significant distances throughout the Annulus before suppression activities would bring it under control, thereby not affecting all channels of any particular function

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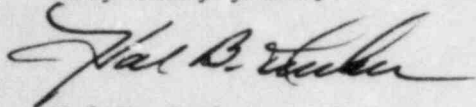
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- If all "annulus functions" (i.e. cables and instrumentation in Annulus) were lost, charging and heat removal capability would be maintained. Flow paths to the reactor and to/from steam generators would be available for any fire postulated in the Annulus.

The attached figure shows minimum separation of cables used for shutdown functions which exit the containment and Annulus.

Very truly yours,



Hal B. Tucker

PBN:dyh

Attachment

cc: Document Control Desk  
U. S. Nuclear Regulatory Commission  
Washington, D. C.

Records Center  
Institute of Nuclear Power Operations  
1100 Circle 75 Parkway, Suite 1500  
Atlanta, Georgia

Mr. W. T. Orders  
NRC Resident Inspector  
McGuire Nuclear Station

DUKE POWER COMPANY  
MCGUIRE NUCLEAR STATION - UNIT 2

