

APPENDIX A

NOTICE OF DEVIATION

Duke Power Company  
McGuire Nuclear Station

License Nos. CPPR-83  
& CPPR-84

Based on the results of the U.S. Nuclear Regulatory Commission inspection conducted on May 27-30, 1980 certain of your activities appear to deviate from your commitments to the Commission as indicated below:

Section E.3.(c) of the McGuire Nuclear Station Fire Protection Review dated September 1977 and Revised January 1979 states that the fire protection sprinkler systems conform to the National Fire Protection Association (NFPA) Standard Nos. NFPA-13, Sprinkler Systems and NFPA-15, Water Spray Fixed Systems.

Contrary to the above, the sprinkler systems do not fully meet all of the provisions of NFPA-13 and NFPA-15. Examples of discrepancies include:

1. Pendent type sprinkler heads installed in upright position. Section 3-16.2 of NFPA-13 requires sprinklers to be installed to conform to their distinct design criteria.
2. Ordinary degree sprinklers (165°F) installed in high temperature areas. Section 3-16.6 of NFPA-13 provides design criteria for installation of sprinklers in specified temperature areas.
3. Pipe of  $\frac{1}{2}$ -inch diameter is used to supply sprinkler heads for some systems. Sections 3-5, 3-6, 3-7, and 7-1.1.2 of NFPA-13 and Section 4-9.1 of NFPA-15 specifically prohibits the use of any piping smaller than one-inch in diameter.
4. Obstructions to proper discharge of water from the sprinkler systems exist in a number of areas due to cable trays, piping, ducts, structural steel supports, etc., located beneath the sprinklers. Section 4 of NFPA-13 gives specific guidance to assure minimum interference or obstructions from proper discharge of the system in the event of fire.
5. Water flow alarm devices either not provided or improperly installed. Sections 3-9.1.2, Figure A-3-9.1.2, 3-17.3, 3-17.4 and 3-17.6 of NFPA-13 contains the design and installation criteria for sprinkler system water flow alarm devices.
6. Control and sectional valves for some portions of the fire protection piping systems are not of the indicating type. Section 3-14 of NFPA-13 requires all valves controlling the water supply to sprinkler systems to be of an approved indicating type valve.