



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 17.

TO FACILITY OPERATING LICENSE NO. NPF-49

NORTHEAST NUCLEAR ENERGY COMPANY, ET AL.

MILLSTONE NUCLEAR POWER STATION, UNIT NO. 3

DOCKET NO. 50-423

INTRODUCTION

By letter dated February 5, 1988, the Northeast Nuclear Energy Company (licensee) proposed to change the Millstone Unit 3 Technical Specification 3/4.4.6 Reactor Coolant System Leakage to allow continued plant operation for up to 30 days with both the Containment Atmospheric Gaseous and Particulate Radioactivity Monitoring Systems inoperable as long as certain conditions are met.

These changes would (1) increase the time allowed for continued operation with both the Containment Atmosphere Gaseous Radioactivity Monitoring System and the Containment Atmosphere Particulate Radioactivity Monitoring System inoperable to 30 days, (2) increase the limiting grab sample frequency from once per 24 hours to once per 12 hours, and (3) delete the requirement for grab samples when one radioactivity monitor is inoperable.

EVALUATION

The existing Technical Specification Section 3.4.6.1 identifies three Reactor Coolant System Leakage Detection Systems. These are:

- a. Containment Atmosphere Gaseous Radioactivity Monitoring System
- b. Containment Drain Sump Level or Pumped Capacity Monitoring System and
- c. Containment Atmosphere Particulate Radioactivity Monitoring System.

If any one system is inoperable continued operation is allowed for 30 days. If either of the radioactivity monitoring systems is inoperable, grab samples of the containment atmosphere are required once per 24 hours. If both radioactivity monitoring systems are inoperable or if either one of the radioactivity monitoring systems and the Containment Drain Sump Level or Pumped Capacity Monitoring System are inoperable the plant is required to shut down.

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The Containment Atmosphere Gaseous Monitor and the Containment Atmosphere Particulate Monitor share a common sample point, sample line, isolation valves, sample fan, radiation monitor skid and power supply. There are two monitoring systems; one looking at a particular filter and the other at a gas chamber. Should one of the common components in the system fail, both systems will fail. With the present Technical Specifications, the unit is required to shut down in 6 hours. However, plant shutdown is unnecessary because adequate capability remains to detect primary system leakage. The containment sump monitoring capabilities are available and containment atmosphere airborne radioactivity levels will be determined using grab samples.

To eliminate this unnecessary shutdown requirement, the proposed action statement for inoperable Containment Atmosphere Gaseous and Particulate Radioactivity Monitors would permit continued operation for 30 days to allow repair or replacement of inoperable components. It requires more frequent samples (i.e., once every 12 hours rather than once every 24 hours) than the present statement. We find this change acceptable.

The proposed action statement for inoperable Containment Drain Sump Level or Pumped Capacity Monitoring System would permit continued operation for 30 days to allow for repair or replacement of inoperable components if either the gaseous or particulate radioactivity monitoring systems are operable. This is the same requirement as the present Technical Specification. Grab samples would not be required because adequate leakage detection is provided by the Containment Drain Sump Level or Pumped Capacity Monitoring System and the operable radioactivity monitor without the grab samples. We find this change acceptable.

The proposed change eliminates unnecessary plant shutdowns because of inoperable components common to the Containment Atmosphere Gaseous and Particulate Radioactivity Monitoring Systems. It also eliminates an unnecessary sampling procedure when at least one radioactivity monitor system is available for leak detection. Further, it improves the compensatory measures of grab sampling via the increased sample frequency and prompt analysis requirement. We find the proposed technical specification acceptable.

ENVIRONMENTAL CONSIDERATION

This amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously published a proposed finding that the amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

CONCLUSION

We have concluded, based on the considerations discussed above, that (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with the Commission's regulations, and the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Dated: April 18, 1988

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