

INSTRUMENTATION

FIRE DETECTION INSTRUMENTATION

LIMITING CONDITION FOR OPERATION

3.3.3.6 As a minimum, the fire detection instrumentation for each fire detection zone shown in Table 3.3-8 shall be OPERABLE.

APPLICABILITY: Whenever systems, structures, components, or equipment protected by the fire detection instrumentation are required to be OPERABLE.

ACTION:

- a. With any, but no less than the minimum required fire detection instruments shown in Table 3.3-8 inoperable, restore the inoperable instrument(s) to OPERABLE status within 14 days or within the next 1 hour establish a fire watch patrol to inspect the zone(s) with the inoperable instrument(s) at least once per hour, unless the instrument(s) is located inside the containment, then inspect that containment zone at least once per 8 hours (or monitor the containment air temperature at least once per hour per Specification 4.6.1.5).
- b. With less than the minimum required fire detection instruments in any fire zone shown in Table 3.3-8 operable, within 1 hour establish a continuous fire watch to inspect the zone(s) with the inoperable instrument(s), unless the instrument(s) is located inside the containment, then inspect that containment zone at least once per 8 hours (or monitor the containment air temperature at least once per hour per Specification 4.6.1.5).
- c. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.3.3.6.1 Each of the above required fire detection instruments which are accessible during plant operation shall be demonstrated OPERABLE at least once per 6 months by performance of a TRIP ACTUATING DEVICE OPERATIONAL TEST. Fire detectors which are not accessible during plant operation shall be demonstrated OPERABLE by the performance of a TRIP ACTUATING DEVICE OPERATIONAL TEST during each COLD SHUTDOWN exceeding 24 hours unless performed in the previous 6 months. Detectors which cannot be reset are not required to be demonstrated OPERABLE by performance of a TRIP ACTUATING DEVICE OPERATIONAL TEST.

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SEMIANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

6.9.1.7 Routine Semiannual Radioactive Effluent Release Reports covering the operation of the facility during the previous 6 months of operation shall be submitted within 60 days after January 1 and July 1 of each year.

A supplemental report containing dose assessments for the previous year shall be submitted annually within 90 days after January 1.

The report shall include that information delineated in the REMODCM.

Any changes to the REMODCM shall be submitted in the Semiannual Radioactive Effluent Release Report.

MONTHLY OPERATING REPORTS

6.9.1.8 Routine reports of operating statistics and shutdown experience shall be submitted on a monthly basis to the U.S. Nuclear Regulatory Commission, Document Control Desk, Washington, D.C. 20555, with one copy to the appropriate Regional Office of the NRC, and one copy to the appropriate NRC Resident Inspector, no later than the 15th of each month following the calendar month covered by the report.

TECHNICAL REPORT SUPPORTING CYCLE OPERATION

6.9.1.9.a Core operating limits shall be established and documented in the TECHNICAL REPORT SUPPORTING CYCLE OPERATION before each reload cycle or any remaining part of a reload cycle for the following:

1. Moderator Temperature Coefficient for Specification 3.1.1.5.
2. Moveable Control Assemblies--Bank Height for Specification 3.1.3.1.
3. Control Group Insertion Limits--Four Loops Operating, control banks for Specification 3.1.3.6.1.
4. Control Group Insertion Limits--Three Loops Operating, control banks for Specification 3.1.3.6.2.
5. Axial Offset--Four Loops Operating for Specifications 3/4.2.1.1.
6. Axial Offset--Three Loops Operating for Specifications 3/4.2.1.2.
7. Linear Heat Generation Rate--Four Loops Operating for Specifications 3/4.2.2.1.
8. Linear Heat Generation Rate--Three Loops Operating for Specifications 3/4.2.2.2.

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9. Nuclear Enthalpy Rise Hot Channel Factor $F_{\Delta H}^N$ --Four Loops Operating for Specifications 3/4.2.3.1.
10. Nuclear Enthalpy Rise Hot Channel Factor-- $F_{\Delta H}^N$ --Three Loops Operating for Specifications 3/4.2.3.2.

6.9.1.9.b The analytical methods used to determine the core operating limits shall be those previously reviewed and approved by the NRC in:

1. F. M. Akstulewicz to E. J. Mroczka, "Review of NUSCO Topical Report on Physics Methodology for PWR Reload Design (NUSCO-152)," August 3, 1987.
2. A. B. Wang to E. J. Mroczka, "Safety Evaluation for Northeast Utilities Topical Report 140-1, NUSCO Thermal Hydraulic Qualification, Volume I (RETRAN)," July 26, 1988.
3. F. M. Akstulewicz to J. F. Opeka, "NUSCO Thermal Hydraulic Model Qualification, Volume II (VIPRE), Topical Report NUSCO 140-2," October 16, 1986.
4. A. B. Wang to E. J. Mroczka, "Safety Evaluation of Northeast Utilities Topical Report 151, Haddam Neck Non-LOCA Transient Analysis," October 18, 1988.
5. Supplement to the Safety Evaluation by the Directorate of Licensing, U.S. Atomic Energy Commission Docket No. 50-213, Connecticut Yankee Atomic Power Company, Haddam Neck Plant, December 27, 1974.
6. A. B. Wang to J. F. Opeka, "Issuance of Amendment (TAC Nos. M80864, M82284, M66958, M71769, and M72083)," Part 3 of Safety Evaluation--Large-Break Loss-of-Coolant Accident Analysis Zircaloy Clad Fuel Evaluation, dated January 17, 1992.
7. A. B. Wang to J. F. Opeka, "Issuance of Amendment (TAC Nos. M80864, M82284, M66958, M71769, and M72083)," Part 4 of Safety Evaluation--Small-Break Loss-of-Coolant Accident Analysis Zircaloy Clad Fuel Evaluation, dated January 17, 1992.

6.9.1.9.c The core operating limits shall be determined so that all applicable limits (e.g. fuel thermal-mechanical limits, core thermal hydraulic limits, ECCS limits, nuclear limits such as shutdown margin and transient and accident limits) of the safety analysis are met.

6.9.1.9.d The TECHNICAL REPORT SUPPORTING CYCLE OPERATION, including any mid-cycle revisions or supplements thereto, shall be provided upon issuance for each reload cycle to the NRC Document Control Desk with copies to the Regional Administrator and Resident Inspector.

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SPECIAL REPORTS

6.9.2 Special reports shall be submitted to the U.S. Nuclear Regulatory Commission, Document Control Desk, Washington, D.C. 20555, with one copy to the appropriate Regional Office of the NRC, and one copy to the appropriate NRC Resident Inspector, within the time period specified for each report.

6.10 RECORD RETENTION

6.10.1 In addition to the applicable record retention requirements of Title 10, Code of Federal Regulations, the following records shall be retained for at least the minimum period indicated.

6.10.2 The following records shall be retained for at least 5 years:

- a. Records and logs of facility operation covering time interval at each power level;
- b. Records and logs of principal maintenance activities, inspections, repair, and replacement of principal items of equipment related to nuclear safety;
- c. ALL REPORTABLE EVENTS;
- d. Records of surveillance activities, inspections, and calibrations required by these Technical Specifications;
- e. Records of reactor tests and experiments;
- f. Records of changes made to the procedures required by Specification 6.8.1;
- g. Records of radioactive shipments;
- h. Records of sealed source and fission detector leak tests and results;
- i. Records of annual physical inventory of all sealed source material of record; and

6.10.3 The following records shall be retained for the duration of the facility Operating License:

- a. Record and drawing changes reflecting facility design modifications made to systems and equipment described in the FSAR;
- b. Records of new and irradiated fuel inventory, fuel transfers, and assembly burnup histories;