

NORTHEAST UTILITIES



THE CONNECTICUT LIGHT AND POWER COMPANY
THE HARTFORD CONNECTICUT GAS COMPANY
THE HARTFORD CONNECTICUT ELECTRIC COMPANY
THE HARTFORD CONNECTICUT WATER COMPANY
NORWICH CONNECTICUT LIGHT AND POWER COMPANY
SOUTH BRITAIN CONNECTICUT LIGHT AND POWER COMPANY

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August 10, 1979

Docket No. 50-336

Director of Nuclear Reactor Regulation
Attn: Mr. R. Reid, Chief
Operating Reactors Branch #4
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

- References: (1) R. Reid letter to W. G. Council dated May 12, 1979.
(2) W. G. Council letter to W. O. Miller dated January 17, 1979.

Gentlemen:

Millstone Nuclear Power Station, Unit No. 2
Proposed Revisions to Technical Specifications

Pursuant to 10CFR50.90, Northeast Nuclear Energy Company (NNECO) hereby proposes to amend its operating license, DPR-65, by incorporating the changes identified in Attachment 1 into the Millstone Unit No. 2 Technical Specifications.

This change proposes to add leak rate surveillance requirements to the Emergency Core Cooling Systems (ECCS) and Containment Systems to assure that the radiological consequences of engineered safety feature component leakage outside containment are acceptable. The revised Surveillance Requirements 4.5.2.c and 4.5.2.1.c and Bases 3/4.6.2.1 and 3/4.5.2 and 3/4.5.3 are included as Attachment 1. The Surveillance Requirements are revised to include:

(1) 4.5.2.c.5 ECCS

At least once per 18 months, verify a total leak rate of less than or equal to 12 gallons per hour for the high pressure safety injection system, in conjunction with the containment spray system, for those parts of the system outside containment (at post-accident operating conditions) on recirculation flow.

(2) 4.6.2.1.c Containment Systems

At least once per 18 months, verify a total leak rate of less than or equal to 12 gallons per hour for the containment spray system, in conjunction with the high pressure safety injection system, for those parts of the system outside containment (at post-accident operating conditions) on recirculation flow.

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The attached Surveillance Requirements propose leakage limits which are consistent with the radiological consequence analysis documented in Reference (1). Calculations performed by NNECO have verified that dose consequences remain well within 10CFR, Part 100, limits. The change is also consistent with SRP 15.6.5, Appendix B, and as such, the revisions proposed in Attachment 1 are suitable for inclusion into the Technical Specifications.

The above proposed changes have been reviewed pursuant to 10CFR50.59 and have not been found to constitute an unreviewed safety question.

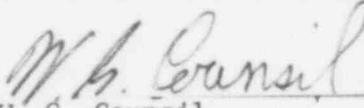
The Millstone Unit No. 2 Nuclear Review Board has reviewed and approved the above proposed changes and concurred in the above determination.

NNECO has reviewed the above proposed license amendment pursuant to the requirements of 10CFR170, and has determined that no fee is applicable in this instance. The basis for this determination is that the proposed change is a direct result of the NRC Staff review associated with the license amendment authorizing Cycle 3 operation, ultimately at the stretch power level. This action was categorized as a Class V amendment; the appropriate payment was provided with Reference (2).

We trust you find the above information responsive to the Reference (1) commitment.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY



W. G. Council
Vice President

Attachment

ATTACHMENT 1

MILLSTONE NUCLEAR POWER STATION, UNIT NO. 2
PROPOSED REVISIONS TO TECHNICAL SPECIFICATIONS

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CONTAINMENT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

3. Verifying that each spray pump operates for at least 15 minutes,
 4. Cycling each testable, automatically operated valve in each spray system flow path through at least one complete cycle,
 5. Verifying that upon a sump recirculation actuation signal, the containment sump isolation valves open and that a recirculation mode flow path via an OPERABLE shutdown cooling heat exchanger is established, and
 6. Verifying that all accessible manual valves not locked, sealed, or otherwise secured in position and all remote or automatically operated valves in each spray system flow path are positioned to take suction from the RWST on a Containment Pressure -- High-High signal.
- b. At least once per 18 months, during shutdown, by cycling each power operated valve in the spray system flow path not testable during plant operation through at least one complete cycle of full travel.
 - c. At least once per 18 months by verifying a total leak rate \leq 12 gallons per hour in conjunction with the high pressure safety injection system, reference Specification 4.5.2.c.5, for:
 1. Those parts of the system between the pump discharge and the header isolation valve including the pump seals at a discharge pressure of \geq 254 psig on recirculation flow, and
 2. The piping from the containment sump check valve to the pump suction with a minimum applied pressure of 22 psig measured at the pump suction.
 - d. At least once per five years by performing an air or smoke flow test through each spray header and verifying each spray nozzle is unobstructed.

EMERGENCY CORE COOLING SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- c. 5. Verifying a total leak rate \leq 12 gallons per hour for the high pressure safety injection system in conjunction with the containment spray system, reference specification 4.6.2.1.c., for:
- a) the parts of the system between the pump discharge and the header injection valves including the pump seals at a discharge pressure of \geq 1125 psig on recirculation flow, and
 - b) the piping from the containment sump check valve to the sump suction with a minimum applied pressure of 22 psig measured at the pump suction.

3/4.5 EMERGENCY CORE COOLING SYSTEMS (ECCS)

BASES

3/4.5.1 SAFETY INJECTION TANKS

The OPERABILITY of each of the RCS safety injection tanks ensures that a sufficient volume of borated water will be immediately forced into the reactor core through each of the cold legs in the event the RCS pressure falls below the pressure of the safety injection tanks. This initial surge of water into the core provides the initial cooling mechanism during large RCS pipe ruptures.

The limits on safety injection tank volume, boron concentration and pressure ensure that the assumptions used for safety injection tank injection in the accident analysis are met.

The limit of one hour for operation with an inoperable safety injection tank minimizes the time exposure of the plant to a LOCA event occurring concurrent with failure of an additional safety injection tank which may result in unacceptable peak cladding temperatures.

3/4.5.2 and 3/4.5.3 ECCS SUBSYSTEMS

The OPERABILITY of two separate and independent ECCS subsystems ensures that sufficient emergency core cooling capability will be available in the event of a LOCA assuming the loss of one subsystem through any single failure consideration. Either subsystem operating in conjunction with the safety injection tanks is capable of supplying sufficient core cooling to limit the peak cladding temperatures within acceptable limits for all postulated break sizes ranging from the double ended break of the largest RCS cold leg pipe downward.

The trisodium phosphate dodecahydrate (TSP) stored in dissolving baskets located in the containment basement is provided to minimize the possibility of corrosion cracking of certain metal components during operation of the ECCS following a LOCA. The TSP provides this protection by dissolving in the sump water and causing its final pH to be raised to > 7.0.

The Surveillance Requirements provided to ensure OPERABILITY of each component ensures that at a minimum, the assumptions used in the accident analyses are met and that subsystem OPERABILITY is maintained. The requirement to dissolve a representative sample of TSP in a sample of RWST water provides assurance that the stored TSP will dissolve in borated water at the postulated post-LOCA temperatures. The ECCS leak rate surveillance requirements assure that the leakage rates assumed for the system outside containment during the recirculation phase will not be exceeded.

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CONTAINMENT SYSTEMSBASES

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3/4.6.2 DEPRESSURIZATION AND COOLING SYSTEMS3/4.6.2.1 CONTAINMENT SPRAY SYSTEM

The OPERABILITY of the containment spray system ensures that containment depressurization and cooling capability will be available in the event of a LOCA. The pressure reduction and resultant lower containment leakage rate are consistent with the assumptions used in the accident analyses. The leak rate surveillance requirements assure that the leakage assumed for the system outside containment during the recirculation phase will not be exceeded.

3/4.6.2.2 CONTAINMENT AIR RECIRCULATION SYSTEM

The OPERABILITY of the containment cooling system ensures that 1) the containment air temperature will be maintained within limits during normal operation, and 2) adequate heat removal capacity is available when operated in conjunction with the containment spray systems during post-LOCA conditions.

3/4.6.3 CONTAINMENT ISOLATION VALVES

The OPERABILITY of the containment isolation valves ensures that the containment atmosphere will be isolated from the outside environment in the event of a release of radioactive material to the containment atmosphere or pressurization of the containment. Containment isolation within the time limits specified ensures that the release of radioactive material to the environment will be consistent with the assumptions used in the analyses for a LOCA.

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