

UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO.197

TO FACILITY OPERATING LICENSE NO. DPR-65

NORTHEAST NUCLEAR ENERGY COMPANY

THE CONNECTICUT LIGHT AND POWER COMPANY

THE WESTERN MASSACHUSETTS ELECTRIC COMPANY

MILLSTONE NUCLEAR POWER STATION, UNIT NO. 2

DOCKET NO. 50-336

1.0 INTRODUCTION

By letter dated May 26, 1995, as supplemented on October 20, 1995, and May 3, 1996, the Northeast Nuclear Energy Company (the licensee) submitted a request for changes to the Millstone Nuclear Power Station, Unit No. 2 Technical Specifications (TS). The requested changes would modify TS 3.8.1.1., "Electrical Power Systems, A.C. Sources, Operating," TS 3.8.1.2, "Electrical Power Systems, Shutdown," TS 3.8.2.2, "Electrical Power Systems, A.C. Distribution - Shutdown," and TS 3.8.2.4, "Electrical Power Systems, D.C. Distribution - Shutdown," to provide operational flexibility as well as consistency between action statements and to eliminate certain surveillance requirements that are not applicable in Modes 5 or 6. The October 20, 1995, letter formally withdrew the need for exigent handling of the May 26, 1995, request and included a proposed change to TS 3.8.2.4. The May 3, 1996, letter withdrew a portion of the initial request which did not affect the initial proposed no significant hazards consideration.

The proposed change related to TS 3.8.1.1, "Electrical Power Systems, A.C. Sources, Operating," is not considered in this safety evaluation since this issue is still under review by the staff and will be addressed at a latter time.

2.0 DISCUSSION AND EVALUATION

The proposed change to TS 3.8.1.2 would eliminate the performance of surveillance requirements 4.8.1.1.2.a.3, 4.8.1.1.2.c.2, 4.8.1.1.2.c.5 and 4.8.1.1.2.c.8 required by TS surveillance requirement 4.8.1.2. Surveillance requirement 4.8.1.1.2.a.3 requires that every 31 days the diesel generator be synchronized and loaded to 1300 kw in 60 seconds and operate for 60 minutes. Surveillance requirement 4.8.1.1.2.c.2 requires the verification of the operability of the automatic time delay sequencer. Surveillance requirement

9605090195 960506 PDR ADOCK 05000336 PDR 4.8.1.1.2.c.5 requires the simulation of a loss of normal power (LNP) signal in conjunction with a Safety Injection Actuation Signal (SIAS) and verification of the deenergization of the emergency buses and proper load shedding, verification of the diesel generator auto-start, energization of the emergency buses with permanently connected loads, energization of the auto connected emergency loads through the load sequencer and subsequent operation. Surveillance requirement 4.8.1.1.2.c.8 requires that on an actual or simulated SIAS, without loss of offsite power, the diesel generator starts and operates, and the diesel start time to reach rated voltage and frequency is acceptable. TSs 4.8.1.1.2.c.2, 4.8.1.1.2.c.5, and 4.8.1.1.2.c.8 are required to be performed at least once per 18 months during shutdown.

The proposed change to delete the monthly diesel generator load test (TS 4.8.1.1.2.c.a.3) with the diesel generator operating in parallel with the offsite power system is acceptable because it precludes the possibility of both diesel generators being inoperable when only one diesel generator may be available during the shutdown modes. This is consistent with the CE Owners Group Standard TSs - Shutdown Bases. Additionally, because of the anticipated limited duration of a unit outage (typically not more than twice the test frequency required during operation) and the reduced electrical load requirements during shutdown, eliminating the requirement to perform a load test during shutdown is acceptable. However, the diesel generator test that starts the diesel generator within the rated speed and voltage will be conducted during an outage with the same test interval specified.

The proposed changes to eliminate the 18 month surveillance requirements (TSs 4.8.1.1.2.c.2, and 4.8.1.1.2.c.5) during the shutdown modes are acceptable because neither the sequencer nor the SIAS associated with the operable diesel generator need be operable in Modes 5 and 6 for the diesel generator to perform its safety function. The function of the diesel generator in Modes 5 and 6 is that it be capable of providing motive power to safe shutdown loads in the event offsite power is lost. Automatic start and load of the operable diesel generator in response to an LNP is unnecessary during shutdown because of the less challenging time constraints compared to those imposed during Modes 1 through 4, when a loss-of-coolant accident (LOCA) coincident with an LNP must be assumed. Also, undervoltage sensors designed to detect an LNP are only required to be operable in Modes 1, 2 and 3 to meet TS requirements (TS Table 3.3-3).

The licensee's letter dated May 3, 1996, informed the NRC staff that it was withdrawing the request to delete the requirement to perform the surveillance requirement of TS 4.8.1.1.2.c.8 at least once per 18 months during shutdown.

TSs 3.8.2.2 (A.C. Distribution-Shutdown) and 3.8.2.4 (D.C. Distribution-Shutdown) currently require that containment integrity be established within 8 hours if the specified minimum A.C. and D.C. electrical equipment and busses are not operable in Modes 5 and 6. However, these actions are not consistent with TS 3.8.1.2 which requires that all operations involving core alterations or positive reactivity changes be suspended until the specified minimum A.C. power sources are operable in Modes 5 and 6. In addition, TS 3/4.6.1 (Primary Containment) requires that the primary containment integrity be maintained in Modes 1 through 4. If the primary containment integrity cannot be maintained, the plant is required to be placed in Mode 5 and ultimately in Mode 6. When the plant is in Mode 5 or 6 and no core alterations or fuel movement is being performed, the plant is in an acceptable configuration.

Thus, based on the above, the staff has determined that the proposed changes to TSs 3.8.2.2 and 3.8.2.4, which require that all operations involving core alterations or positive reactivity changes be suspended until the specified minimum electrical equipment and busses are operable in Modes 5 and 6, are acceptable.

3.0 STATE CONSULTATION

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In accordance with the Commission's regulations, the Connecticut State official was notified of the proposed issuance of the amendment. The State official had no comments.

4.0 ENVIRONMENTAL CONSIDERATION

The 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 and changes surveillance requirements. The NRC 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 issued a proposed finding that the amendment involves no significant on such finding (60 FR 62493). 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.

5.0 CONCLUSION

The Commission has 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, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

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Date: May 6, 1996