



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 96 TO

FACILITY OPERATING LICENSE NO. NPF-38

ENTERGY OPERATIONS, INC.

WATERFORD STEAM ELECTRIC STATION, UNIT 3

DOCKET NO. 50-382

1.0 INTRODUCTION

By letter dated December 23, 1993, Entergy Operations, Inc. (the licensee) submitted a request for changes to the Waterford Steam Electric Station, Unit No. 3 Technical Specifications (TSs). The proposed amendment would incorporate the line-item TS improvements that were identified by the staff of the U.S. Nuclear Regulatory Commission (NRC) as reported in NUREG-1366, "Improvements to Technical Specification Surveillance Requirements," December 1992. The TS improvements were based on an NRC study of surveillance requirements and included information provided by licensee personnel that plan, manage, and perform surveillances. The study included insights from a qualitative risk assessment of surveillance requirements based on the standard TSs for Westinghouse plants and the TSs for the Edwin I. Hatch Nuclear Plant, Unit 2. The staff examined operational data from licensee event reports, the nuclear plant reliability data system (NPRDS), and other sources to assess the effect of TS surveillance requirements on plant operation. The staff evaluated the effect of longer surveillance intervals to reduce the possibility for plant transients, wear on equipment, personnel radiation exposure, and burden on personnel resources. Finally, the staff considered surveillance activities for which the safety benefits are small and not justified when compared to the effects of these activities on the safety of personnel and the plant. The NRC staff issued guidance on the proposed TS changes to all holders of operating licenses or construction permits for nuclear power reactors in Generic Letter (GL) 93-05, "Line Item Technical Specifications Improvements To Reduce Surveillance Requirements For Testing During Power Operation" dated September 27, 1993.

2.0 EVALUATION

The licensee proposed the modifications to the TS surveillance requirements as discussed below.

(1) Quarterly Surveillance Intervals

The surveillance intervals for the following specifications were changed from monthly to quarterly:

TS Table 4.3-3 for the radiation monitoring instrumentation to perform channel functional tests for all functional units. This change is in verbatim compliance with the GL and is based on the licensee's findings that the change is supported by operational experience. Therefore, this change is acceptable.

TS 4.7.1.2 for auxiliary feedwater pumps to perform tests to verify the specified discharge pressure. These tests to verify the specified discharge pressure were also modified to specify that they are to be performed on a staggered test basis. The GL also addressed the change in test frequency for the head-flow operating point, however, Waterford does not have this requirement in the TS since the system has a fixed orifice in the pump recirculation lines which controls flow such that it is not subject to variation. This arrangement was approved at the time of original licensing. The staff has reviewed the licensee's proposed changes (including some reformatting changes) and because the proposed revisions are supported by operational experience, this change is acceptable.

(2) Pressurizer Heater Testing

TS 4.4.3.1 was modified by changing the frequency of testing of pressurizer heaters for systems without dedicated safety-related pressurizer heaters to once each refueling interval. Waterford does not have dedicated safety-related pressurizer heaters and in accordance with the staff's recommendation in NUREG-1366, the proposed change modifies the surveillance requirement test frequency for heater capacity, TS 4.4.3.1.2, from "per 92 days" to "each refueling interval". A redundant group of pressurizer proportional heaters and three redundant groups of backup heaters are available to be placed manually on the emergency diesel generator after a loss of offsite power. The TS for emergency power supply, TS 4.4.3.1.3, is also proposed to be changed from "at least once per 18 months" to "at each refueling interval". These changes are consistent with the GL and the proposed revisions are supported by operational experience. Therefore, these changes are acceptable.

(3) Reactor Coolant System (RCS) Leakage

TS 4.4.5.2.2.b was modified by replacing 72 hours with 7 days for the time that the unit has been in cold shutdown to indicate when each pressure isolation valve must be demonstrated operable. This test is performed by verifying leakage to be within its limits before entering Mode 2 if leakage testing has not been performed in the previous 9 months. The basis for this change is that this surveillance has a potential for causing problems resulting from a hurried recovery, and extending the interval does not significantly alter the associated risk. The licensee has performed an evaluation and has determined that this change is compatible with operating experience. These changes are, therefore acceptable.

The proposed TS modifications are consistent with the guidance provided in GL 93-05. This guidance is based on the NRC staff findings and recommendations stated in NUREG-1366. In addition, the licensee states that the proposed TS changes are compatible with plant operating experience. The staff concludes that the proposed TS changes do not adversely affect plant safety and will result in a net benefit to the safe operation of the facility and, therefore, are acceptable.

### 3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Louisiana 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 hazards consideration and there has been no public comment on such finding (59 FR 7689). 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: June 6, 1994