

NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION RELATED TO AMENDMENT NO. 112 TO FACILITY OPERATING LICENSE NO. NPF-38 ENTERGY OPERATIONS, INC. WATERFORD STEAM ELECTRIC STATION, UNIT 3 DOCKET NO. 50-382

1.0 INTRODUCTION

By application dated June 22, 1994, Entergy Operations, Inc. (the licensee), submitted a request for changes to the Waterford Steam Electric Station, Unit 3, Technical Specifications (TSs). The requested changes would remove the seismic and meteorological instrumentation requirements from the TSs. The requirements are to be included in the updated final safety analysis report (UFSAR) and controlled through 10 CFR 50.59.

2.0 BACKGROUND

Section 182a of the Atomic Energy Act, as amended (the "Act") requires that applicants for nuclear power plant operating licenses incorporate TS as part of the license. The Commission's regulatory requirements related to the content of TSs are set forth in 10 CFR 50.36. That regulation requires that the TSs include items in five specific categories, including (1) safety limits, limiting safety system settings and limiting control settings; (2) limiting conditions for operation; (3) surveillance requirements; (4) design features; and (5) administrative controls. However, the regulation does not specify the particular requirements to be included in a plant's TSs.

The Commission has provided guidance for the contents of TSs in its "Final Policy Statement on Technical Specifications Improvements for Nuclear Power Reactors" ("Final Policy Statement"), 58 FR 39132 (July 22, 1993), in which the Commission indicated that compliance with the Final Policy Statement satisfies § 182a of the Act. In particular, the Commission indicated that certain items could be relocated from the TSs to licensee-controlled documents, consistent with the standard enunciated in Portland General Electric Co. (Trojan Nuclear Plant), ALAB-531, 9 NRC 263, 273 (1979). In that case, the Atomic Safety and Licensing Appeal Board indicated that "technical specifications are to be reserved for those matters as to which the imposition of rigid conditions or limitations upon reactor operation is deemed necessary to obviate the possibility of an abnormal situation or event giving rise to an immediate threat to the public health and safety."

Consistent with this approach, the Final Policy Statement identified four criteria to be used in determining whether a particular matter is required to be included in the TS, as follows: (1) installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary; (2) a process variable. design feature, or operating restriction that is an initial condition of a design basis accident or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier: (3) a structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a design basis accident or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier; and (4) a structure, system, or component which operating experience or probabilistic safety assessment has shown to be significant to public health and safety. As a result, existing TSs requirements which fall within or satisfy any of the criteria in the Final Policy Statement must be retained in the TSs, while those TS requirements which do not fall within or satisfy these criteria may be relocated to other. licensee-controlled documents.

The Commission issued a change to 10 CFR 50.36, 60 FR 36959 (July 19, 1995), pursuant to which the rule was amended to codify and incorporate the guidance contained in the Final Policy Statement.

3.0 EVALUATION

Seismic Monitoring Instrumentation

Section VI(a)(3) of Appendix A to 10 CFR Part 100 requires that seismic monitoring instrumentation be provided to promptly determine the response of those nuclear power plant features important to safety in the event of an earthquake. This capability is required to allow for a comparison of the measured response to that used in the design basis for the unit. Comparison of such data is needed to (1) determine whether the plant can continue to be operated safely, and (2) permit such timely action as may be appropriate. However, seismic instrumentation does not actuate any protective equipment or serve any direct role in the mitigation of an accident.

The capability of the plant to withstand a seismic event or other design-basis accident is determined by the initial design and construction of systems, structures, and components. The instrumentation is used to alert operators to the seismic event and evaluate the plant response. The final Policy Statement explained that instrumentation to detect precursors to reactor coolant pressure boundary leakage, such as seismic instrumentation, is not included in the first criterion. As discussed above, the seismic instrumentation does not serve as a protective design feature or part of a primary success path for events which challenge fission product barriers. The staff has concluded that the seismic monitoring instrumentation does not satisfy the final policy statement criteria and need not be included in the TS. The licensee has proposed to relocate the seismic monitoring instrumentation requirements to the UFSAR and control changes to those provisions in accordance with 10 CFR 50.59.

Meteorological Monitoring Instrumentation

In 10 CFR 50.47, "Emergency Plans," and 10 CFR Part 50, Appendix E, "Emergency Planning and Preparedness for Production and Utilization Facilities," the Commission requires power plant licensees to provide reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency. Timely access to accurate local meteorological data is important for estimating potential radiation doses to the public and for determining appropriate protective measures. In 10 CFR 50.36a(a)(2), the Commission requires nuclear power plant licensees to submit annual reports specifying the quantity of each of the principal radionuclides released to unrestricted areas in liquid and airborne effluents and such other information as may be required by the NRC to estimate maximum potential annual radiation doses to the public. A knowledge of meteorological conditions in the vicinity of the reactor is important in providing a basis for estimating annual radiation doses resulting from radioactive materials released in airborne effluents. Accordingly, the meteorological monitoring instrumentation serves a useful function in estimating radiation doses to the public from either routine or accidental releases of radioactive materials to the atmosphere.

The meteorological monitoring instrumentation does not serve such a primary protective function as to warrant inclusion in the TS in accordance with the criteria of the final policy statement. The instrumentation does not serve to ensure that the plant is operated within the bounds of initial conditions assumed in design basis accident and transient analyses or that the plant will be operated to preclude transients or accidents. Likewise, the meteorological instrumentation does not serve as part of the primary success path of a safety sequence analysis used to demonstrate that the consequences of these events are within the appropriate acceptance criteria. Accordingly, the staff has concluded that the meteorological instrumentation does not satisfy the final policy statement criteria and need not be included in TS. The staff has determined that requirements related to the meteorological monitoring instrumentation can be moved from the TS to the UFSAR, and that any subsequent changes to the provisions would be controlled pursuant to 10 CFR 50.59.

In conclusion, the above relocated requirements relating to seismic and meteorological monitoring instrumentation are not required to be in the TS under 10 CFR 50.36 or 182a of the Atomic Energy Act, and are not required to obviate the possibility of an abnormal situation or event giving rise to an immediate threat to the public health and safety. Further, they do not fall within any of the four criteria set forth in the Commission's Final Policy Statement, and codified in the revision of 10 CFR 50.36. In addition, the Staff finds that sufficient regulatory controls exist under 10 CFR 50.59 to address any future changes to these systems. Accordingly, the staff has concluded that the proposed change to relocate the seismic and meteorological monitoring instrumentation requirements from the TSs to the UFSAR is acceptable. With this action, the table of contents entry and the BASES section for TS 3/4.3.3.3 and 3/4.3.3.4 may be removed from the TSs.

4.0 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.

5.0 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 39585). 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.

6.0 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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