

January 25, 2002

MEMORANDUM TO: William D. Beckner, Chief
Technical Specification Branch
Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation

FROM: Guy S. Vissing, Senior Project Manager, Section 1 */RA/*
Project Directorate I
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Office of Nuclear Reactor Regulation

SUBJECT: CLOSURE OF FITZPATRICK BEYOND SCOPE ISSUES (BSIs) BSI-F12, (TAC NO. MB2710)

By letter dated May 31, 2001, Entergy Nuclear Operations, Inc. presented new changes to revise the proposed Improved Technical Specifications (ITS) 3.3.7.3, "Emergency Service Water System Instrumentation." Such changes are beyond scope for the conversion of the James A. FitzPatrick Nuclear Power Plant (JAFNPP) Technical Specifications to the improved standard technical specifications (STS) format, and constitute JAFNPP beyond-scope-issue (BSI) BSI-F12. The STS format is provided by NUREG-1433, Revision 1, "Standard Technical Specifications, General Electric Plants BWR/4," dated April 1995. The NRC staff has completed its review of the subject BSI and has determined that the proposed changes in instrumentation setpoint values are acceptable. The attachment provides the necessary safety evaluation to close out the subject BSI and TAC.

Docket No. 50-333

Attachment: As stated

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

IMPROVED TECHNICAL SPECIFICATION CONVERSION LICENSE AMENDMENT

BEYOND SCOPE ISSUES

ENTERGY NUCLEAR OPERATIONS, INC.

JAMES A. FITZPATRICK NUCLEAR POWER PLANT

DOCKET NO. 50-333

1.0 INTRODUCTION

By letter dated May 31, 2001, the Entergy Nuclear Operations, Inc. presented new changes to revise the proposed Improved Technical Specifications (ITS) 3.3.7.3, "Emergency Service Water System Instrumentation." Such changes are beyond scope for the conversion of the James A. Fitzpatrick Nuclear Power Plant (JAFNPP) Technical Specifications to the improved standard technical specifications (STS) format, and constitute JAFNPP beyond-scope-issue (BSI) F12. The STS format is provided by NUREG-1433, Revision 1, "Standard Technical Specifications, General Electric Plants BWR/4," dated April 1995.

2.0 BACKGROUND

The purpose of the emergency service water system (ESWS) instrumentation is to initiate appropriate responses from the system to ensure the ESWS safe shutdown loads are cooled following a design-basis accident or transient coincident with a loss of preferred power. The ESWS may be initiated by either automatic or manual means. Upon receipt of a loss of power signal or an emergency core cooling system (ECCS) initiation signal, the emergency diesel generators (EDGs) will start, which in turn starts the associated ESWS pump. Each ESWS pump will automatically pump lake water to the associated EDG cooler. The remaining ESWS loads will be automatically cooled when the associated ESWS supply header isolation valve opens and the associated ESWS minimum flow valve closes. In addition, the ESWS pumps will automatically start in response to the ESWS instrumentation initiation logic.

ESWS instrumentation provided inputs by pressure switches that sense reactor building closed loop cooling water (RBCLCW) pump discharge pressure. Four channels of ESWS instrumentation are provided as input to two one-out-of-two twice initiation logics. Each channel consists of a pressure sensor and switch that compares measured input signals with pre-established setpoints. When the setpoint is exceeded, the channel outputs a RBCLCW pump discharge initiation signal to both ESWS initiation logic circuits.

3.0 EVALUATION

The following proposed ITS changes have been determined to be beyond the scope of the conversion to the STS format for JAFNPP:

- Proposed ITS 3.3.7.3 LCO section of the Bases was changed to be consistent with the licensee's changes to their response for the staff's request for additional information (RAI), numbered 3.3.1.1-1.
- To be consistent with other similar discussion of changes (DOC) revised by the licensee, the designation of the revision for the engineering standards manual referenced in DOC-M1 has been deleted.

As revised by the licensee, the part of the proposed ITS 3.3.7.3 LCO section in the Bases follows:

"The trip set point is derived from the analytic limit and accounts for all worst case instrumentation uncertainties as appropriate (e.g., drift, process effects, calibration uncertainties, and severe environmental errors (for channels that must function in harsh environments as defined by 10 CFR 50.49)). The trip setpoints derived in this manner provide adequate protection because all expected uncertainties are accounted for. The Allowable Value is then derived from the trip setpoint by accounting for normal effects that would be seen during periodic surveillance or calibration. These effects are instrumentation uncertainties observed during normal operation (e.g., drift and calibration uncertainties)."

The staff reviewed the above LCO changes in the ITS Bases and determined that the changes were consistent with the licensee's response to RAI 3.3.1.1-1 and reflect technically accurate information. Therefore, the staff finds the ITS LCO changes to be acceptable. The licensee's response to RAI 3.3.1.1-1 provides a detailed explanation of trip setpoints, allowable values, and analytical limits, as they related to instrumentation uncertainties.

In DOC-M1, the licensee referenced New York Power Authority Engineering Standards Manual, IES-3A, "Instrument Loop Accuracy and Setpoint Calculation Methodology." To be consistent with other similar DOC revisions, the licensee deleted the revision designation for this engineering standards manual; however, the content of the referenced engineering standards manual remains unchanged. This is an administrative change and the staff finds the change acceptable.

4.0 CONCLUSION

Based on the above evaluation, the staff concludes that the changes to the proposed ITS 3.3.7.3 are acceptable.

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