APPENDIX B

NOTICE OF DEVIATION

Entergy Operations, Inc.
Waterford Steam Electric Station

Docket: 50-382
Operating License: NPF-38

Based on the results of an NRC inspection conducted on August 20-24, 1990, a deviation from your commitments to the provisions of Regulatory Guide 1.97, "Instrumentation for Light-Water-Cooled Nuclear Power Plants to Assess Plant and Environs Conditions During and Following An Accident," was identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1990) (Enforcement Policy), the deviation is listed below:

By letter to the NRC dated July 6, 1983, the licensee committed to comply with the provisions of Regulatory Guide 1.97, Revision 2, and provided a listing of instrumentation that would be used to meet those provisions.

The following are examples of the licensee's deviation from those commitments: (382/9016-01)

A. Regulatory Position 1.4 of Regulatory Guide 1.97, Revision 2 (RG 1.97) states, in part, that Types A, B, and C instruments designated as Category 1 or 2 should be specifically identified on the control panels so that the operators can easily discern that they are intended for use under accident conditions.

   In deviation from the above, instrument displays on the control panels did not contain a specific common designation, nor was it apparent that consistent training was conducted to inform the operators of which instrumentation was intended for use under accident conditions.

B. The licensee submittal, dated July 6, 1983, states that recording for two reactor coolant system (RCS) cold leg temperature instruments would be provided with a range of 0-600°F. Additionally, Regulatory Position 1.3.1a of RG 1.97 states, in part, that the instrumentation should be qualified in accordance with the methodology described in NUREG-0588 (10 CFR 50.49).

   In deviation from the above, the resistance temperature detectors (RTDs) supplying a recorder for RCS cold leg temperatures with a range of 0-600°F were not qualified in accordance with 10 CFR 50.49.

C. The licensee submittal, dated July 6, 1983, states that there would be four channels per steam generator level with a range from the bottom to top connection (wide range-equivalent to a range from tube sheet to separators).

   In deviation from the above, only two channels of wide range steam generator level were installed on each steam generator.

D. The licensee submittal, dated July 6, 1983, states that there would be four channels of neutron flux monitoring with a range of 1E-8 to 2E2 percent. Regulatory Position 1.3.1a of RG 1.97 states, in part, that the instrumentation should be qualified in accordance with the methodology described in NUREG-0588 (10 CFR 50.49).

In deviation from the above, only two channels of wide range neutron flux were qualified in accordance with 10 CFR 50.49 and the ranges were 2E-8 to 2E2 percent vice 1E-8 to 2E2 percent.

E. By letter dated August 27, 1986, the licensee committed to install Category I instrumentation for RCS pressure with a range of indication consistent with RG 1.97. By letter dated August 20, 1987, the NRC accepted the licensee's schedule to install RCS pressure indication with a range of 0-4000 psig during the third refueling outage. Regulatory Position 1.3.1f of RG 1.97 states, in part, that continuous indication should be provided.

In deviation from the above, no continuous indication of RCS pressure was provided with a range of 0-4000 psig.

F. The licensee submittal, dated July 6, 1983, states that the wide range containment sump water level would have a range of 0-20 feet.

In deviation from the above, the indicated range of the installed wide range containment sump water level is 0-10 feet.

Entergy Operations, Inc. is hereby requested to submit a written statement or explanation to this Office within 30 days of the date of the letter transmitting this Notice. This reply should include for each deviation: (1) the reason for the deviation if admitted, (2) the corrective steps that have been taken and the results achieved, (3) the corrective steps that will be taken to avoid further deviations, and (4) the date when full compliance will be achieved. Where good cause is shown, consideration will be given to extending the response time.

Dated at Arlington, Texas,
this 18th day of September 1990