March 15, 2000

Mr. Charles M. Dugger Vice President Operations Entergy Operations, Inc. 17265 River Road Killona, LA 70066-0751

SUBJECT: WATERFORD STEAM ELECTRIC STATION, UNIT 3 RE: RELIEF REQUEST

TO PERMIT INSTALLATION OF MECHANICAL NOZZLE SEAL ASSEMBLIES

(TAC NO. MA4952)

Dear Mr. Dugger:

By letter dated March 10, 1999, as supplemented by letter dated March 12, 1999, Entergy Operations, Inc. (EOI) requested, pursuant to 10 CFR 50.55a(a)(3)(i), relief to permit installation of mechanical nozzle seal assemblies (MNSAs) at Waterford Steam Electric Station, Unit 3 (Waterford 3), as an alternate repair method for leaking instrument nozzles on American Society of Mechanical Engineers (ASME) Class 1 portions of the reactor coolant system hot legs and the pressurizer. By letter dated March 23, 1999, EOI provided calculations to support the installation of the MNSAs at Waterford.

By letter dated March 25, 1999, the staff approved the interim installation of the MNSAs at Waterford 3, subject to the review and approval of the calculations submitted on March 23, 1999. The staff has since performed an evaluation of selected portions of these calculations, in particular the fatigue calculations of the hot leg with radial bolt holes in the pipe wall, to attach the MNSAs. There are four threaded holes per MNSA, which are drilled 1.125 inches deep in the 3½-inch pipe wall. These calculations were performed in accordance with the rules stated in ASME Section III, Subarticle NB-3200. The evaluation indicates that, based on certain conservative assumptions, and the load set conditions listed and provided by the EOI, the cumulative usage factor (CUF) meets the ASME Section III fatigue requirement (CUF=1.0) for the life of the plant as currently licensed. The staff finds this acceptable.

This concludes our review of the subject report under TAC No. MA4952.

If you have any questions regarding this matter, please contact N. Kalyanam at (301) 415-1480.

Sincerely,

/RA/

Robert A. Gramm, Chief, Section 1
Project Directorate IV & Decommissioning
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-382

cc: See next page

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Waterford Generating Station 3

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