Mr. Charles M. Dugger Vice President Operations Entergy Operations, Inc. P. O. Box B Killona, LA 70066

SUBJECT: WATERFORD STEAM ELECTRIC STATION, UNIT NO. 3 - CORRECTION TO AMENDMENT NO. 130, CHANGES TO APPENDIX A TECHNICAL SPECIFICATIONS 3/4.5.2 AND BASES 3/4.5.2 AND 3/4.5.3, "ECCS SUBSYSTEM - MODES 1, 2, AND 3" (TAC NO M98256)

Dear Mr. Dugger:

On June 11, 1997, the Nuclear Regulatory Commission issued Amendment No. 130 to Facility Operating License No. NPF-38 for the Waterford Steam Electric Station, Unit No. 3 (W3). This amendment involved changes to the Technical Specifications (TSs) in response to your application dated March 27, 1997, as supplemented by letter dated May 6, 1997.

Amendment No. 130 was issued with typographical errors on TS pages 3/4 5-4 and B 3/4 5-2. The corrected TS pages are enclosed.

We regret any inconvenience this oversight may have caused. If you have any questions on this action, please call me at 301/415-3025.

Sincerely,

Orig. signed by

Chandu P. Patel, Project Manager Project Directorate IV-1 Division of Reactor Projects III/IV Office of Nuclear Reactor Regulation

Docket No. 50-382

Enclosure: TS pages 3/4 5-4 and B 3/4 5-2

cc w/encls: See next page

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UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

July 16, 1997

Mr. Charles M. Dugger Vice President Operations Entergy Operations, Inc. P. O. Box B Killona, LA 70066

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Chandu P. Patel, Project Manager Project Directorate IV-1 Division of Reactor Projects III/IV Office of Nuclear Reactor Regulation

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cc:

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EMERGENCY CORE COOLING SYSTEMS

SURVEILLANCE REQUIREMENTS

4.5.2 Each ECCS subsystem shall be demonstrated OPERABLE:

a. At least once per 12 hours by verifying that the following valves are in the indicated positions with the valves key-locked shut:

Valve Number		Val	Valve Function		Valve Position	
а.	2SI-V1556 (SI-506A)	а.	Hot Leg Injection	а.	SHUT	
b.'	2SI-V1557 (SI-502A)	b.	Hot Leg Injection	b.	SHUT	
C.	2SI-V1558 (SI-502B)	C.	Hot Leg Injection	C .	SHUT	
d.	2SI-V1559 (SI-506B)	d.	Hot Leg Injection	d.	SHUT	

- b. At least once per 31 days by:
 - 1. Verifying that each valve (manual, power-operated, or automatic) in the flow path that is not locked, sealed, or otherwise secured in position, is in its correct position.
 - 2. Verifying the ECCS piping is full of water.
- c. By a visual inspection which verifies that no loose debris (rags, trash, clothing, etc.) is present in the containment which could be transported to the safety injection system sump and cause restriction of the pump suctions during LOCA conditions. This visual inspection shall be performed:
 - 1. For all accessible areas of the containment prior to establishing CONTAINMENT INTEGRITY, and
 - 2. Of the areas affected within containment at the completion of containment entry when CONTAINMENT INTEGRITY is established.
- d. At least once per 18 months by:
 - 1. Verifying the action of the open permissive interlock (OPI) and isolation valve position alarms of the shutdown cooling system when the reactor coolant system pressure (actual or simulated) is between 392 psia and 422 psia.

EMERGENCY CORE COOLING SYSTEMS

BASES

ECCS SUBSYSTEMS (Continued)

With the RCS temperature below 350°F, one OPERABLE ECCS subsystem is acceptable without single failure consideration on the basis of the stable reactivity condition of the reactor and the limited core cooling requirements.

The trisodium phosphate dodecahydrate (TSP) stored in dissolving baskets located in the containment basement is provided to minimize the possibility of corrosion cracking of certain metal components during operation of the ECCS following a LOCA. The TSP provides this protection by dissolving in the sump water and causing its final pH to be raised to greater than or equal to 7.0. The requirement to dissolve a representative sample of TSP in a sample of water borated to be representative of post-LOCA sump conditions provides assurance that the stored TSP will dissolve in borated water at the postulated post-LOCA temperatures. A boron concentration of 3011 ppm boron is postulated to be representative of the highest post-LOCA sump boron concentration based on the assumptions used in calculation EC-S96-013. The RWSP, SITs, and RCS maximum boron concentrations assumed are conservative estimates of future anticipated boron concentrations. The assumed maximum boron concentrations for the RWSP and SITs are greater than those currently allowed in Technical Specifications in order to bound future expected increases in required boron concentrations because of longer fuel cycles and higher energy fuel designs. Post-LOCA sump pH will remain between 7.0 and 8.1 for the maximum (3011 ppm) and minimum (1504 ppm) boron concentrations calculated using the maximum and minimum post-LOCA sump volumes and conservatively assumed maximum and minimum source boron concentrations.

With the exception of systems in operation, the ECCS pumps are normally in a standby, nonoperating mode. As such, flow path piping has the potential to develop voids and pockets of entrained gases. Maintaining the piping from the ECCS pumps to the RCS full of water ensures that the system will perform properly, injecting its full capacity into the RCS upon demand. This will prevent water hammer, pump cavitation, and pumping noncondensible gas (e.g., air, nitrogen, or hydrogen) into the reactor vessel following an SIAS or during SDC. The 31 day frequency takes into consideration the gradual nature of gas accumulation in the ECCS piping and the adequacy of the procedural controls governing system operation.

The Surveillance Requirements provided to ensure OPERABILITY of each component ensure that at a minimum, the assumptions used in the safety analyses are met and that subsystem OPERABILITY is maintained. Surveillance Requirements for throttle valve position stops and flow balance testing provide assurance that proper ECCS flows will be maintained in the event of a LOCA. Maintenance of proper flow resistance and pressure drop in the piping system to each injection point is necessary to: (1) prevent total pump flow from exceeding runout conditions when the system is in its minimum resistance configuration, (2) provide the proper flow split between injection points in accordance with the assumptions used in the ECCS-LOCA analyses, and (3) provide an acceptable level of total ECCS flow to all injection points equal to or above that assumed in the ECCS-LOCA analyses.

The requirement to verify the minimum pump discharge pressure on recirculation flow ensures that the pump performance curve has not degraded below that used to show that the pump exceeds the design flow condition assumed in the safety analysis and is consistent with the requirements of ASME Section XI.

WATERFORD - UNIT 3