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W3F1-92-0135
A4.05
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May 5, 1992

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

Subject: Waterford 3 SES
Docket No. 50-382
License No. NPF-38
NRC Bulletin 88-11
Pressurizer Surge Line Thermal Stratification

Gentlemen:

As discussed in a February 11, 1992 conversation between NRC staff and Waterford 3 personnel, the purpose of this letter is to provide information on the status of NRC Bulletin 88-11, "Pressurizer Surge Line Thermal Stratification," at Waterford 3.

Bulletin 88-11, issued by the NRC on December 20, 1988, requests that, in view of concerns related to thermal stratification, licensees of operating PWRs take a number of actions to confirm the integrity of the pressurizer surge line. Generally speaking, these include a visual inspection of the pressurizer surge line (action 1.a) and an evaluation to demonstrate that the surge line satisfies ASME Section III code criteria for the licensed life of the plant (action 1.b). In addition, the Bulletin requests that stress and fatigue analyses be updated to ensure compliance with ASME code requirements (action 1.d).

In accordance with Bulletin action item 1.a, Louisiana Power and Light (LP&L) provided the results of a visual inspection of the surge line in a letter to the NRC dated March 7, 1990. The letter reported that neither the surge line nor its affiliated hardware had suffered any discernable distress or structural damage.

To satisfy the requirements of Bulletin action item 1.b, LP&L, in a letter dated August 28, 1989, reported that a generic analysis performed for the Combustion Engineering Owners Group (CEOG) bounded the Waterford 3 surge line. The analysis indicated that "the integrity of the pressurizer surge line satisfies the ASME Section III Code criteria for the life of the plant, taking into account the effects of thermal stratification."

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In response, the NRC indicated in an August 15, 1990 letter "that although sufficient information has been provided to justify continued plant operation until Waterford 3 completes its final report. . . , adequate bases have not been provided for the staff to conclude that the [pressurizer surge line] meets all appropriate Code limits for [the] 40-year plant life." The NRC review of the CEOG analysis indicated that a number of complex technical issues needed to be resolved.

The scope of the effort required to address the NRC concerns clearly necessitated an adjustment to the Bulletin schedule for completion of required action items. An August 14, 1991 conference call between the CEOG and the NRC resulted in a revised completion date of December 31, 1991 for all Bulletin action items. This was confirmed by the NRC in a letter to Entergy Operations, Inc. dated September 9, 1991. The letter indicated that "...a final report from Entergy Operations, Inc., detailing the completion of all Bulletin requirements, is expected by December 31, 1991." In addition, the letter stated that "if the completion of any Bulletin action items, including any hardware modifications that may be required, is to be delayed beyond December 31, 1991, Entergy Operations, Inc. should be prepared to submit a justification for continued operation."

This agreement was modified slightly during a meeting between CEOG and NRC personnel on September 18 and 19, 1991 in Windsor, CT. As before, it was agreed that CEOG would submit the generic bounding analysis demonstrating that the structural integrity of the CEOG member utility surge lines is maintained for a forty year design life and verifying that no hardware modifications are required by December 31, 1991. It was agreed during this meeting that submittal of the analysis satisfied the requirements of Bulletin action item 1.b and that no plant specific Justification for Continued Operation would be required if the analysis was submitted by December 31, 1991. Finally, it was agreed that the completion of plant specific activities to update surge line documentation (Bulletin action item 1.d) could be scheduled based on the date of issuance of a favorable SER by the Staff on the final report.

In accordance with the revised schedule, the results of the CEOG generic bounding analysis to examine the effects of thermal stratification and thermal striping on the integrity of the surge line, CEN-387-P, Revision 1-P, were sent to the NRC by CEOG on December 20, 1991. The analysis demonstrates that the structural integrity of all CEOG plant surge lines- including the Waterford 3 surge line- is maintained for the forty year design life of the plant. In addition to demonstrating the integrity of the surge line, the submittal of CEN-387-P, Rev.1-P eliminated the need for a Justification for Continued Operation for Waterford 3.

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In summary, Waterford 3 has completed all actions necessary to address Bulletin items 1.a and 1.b. Bulletin item 1.c is not applicable to Waterford 3 because the generic bounding analysis demonstrated compliance with Code requirements over the forty year plant life. Therefore the only remaining Bulletin action item for Waterford 3 is 1.d which involves plant specific activities to update surge line design documentation.

In accordance with the agreement reached by CEQG and NRC, Waterford 3 will update surge line design documentation (Bulletin action item 1.d) within 180 days of the issuance by the NRC of a favorable SER on the generic bounding analysis.

Should you have any further questions related to this matter, please do not hesitate to contact T.W. Gates at (504) 739-6697.

Very truly yours,



RFB/TWG/ssf

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