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U. S. Nuclear Regulatory Commission  
Document Control Desk  
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Subject: Arkansas Nuclear One - Unit 1  
Docket No. 50-313  
License No. DPR-51  
Hot Leg Nozzle Repair Additional Information

Gentlemen:

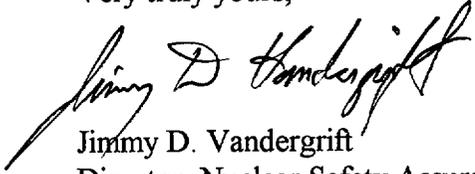
By letter dated February 29, 2000 (1CAN020009), Entergy Operations provided the NRC with information regarding an alternate ASME Code repair for the Arkansas Nuclear One (ANO), Unit 1 hot leg nozzle RC-1071/1072. During a conversation with the NRC Staff on February 29, 2000, the Staff verbally approved the weld repair for the subject nozzle with the condition that additional information be provided concerning a Z-factor by no later than March 1, 2000. The purpose of this submittal is to provide the additional information requested by the Staff.

Since not explicitly required by ASME Section XI, IWB-3642, the February 29, 2000, submittal did not consider the effects of a Z-factor that is included in Section XI, IWB-3641 and Non-mandatory Appendix C for analysis of flaws in austenitic piping welds made using the shielded metal arc welding process. The Staff noted, and Entergy Operations concurred, that the application of a 1.15 margin is an appropriate conservatism. When this margin is applied to the allowable stress of 20 ksi from Code Case 525, the modified allowable stress is  $20.0/1.15 = 17.39$  ksi. The computed membrane stress of 16.9 ksi is still less than this modified allowable stress. Therefore, the conclusions of the February 29, 2000, submittal remains valid. This margin will be included in the final evaluation.

Should you have any further questions, please contact me.

A047

Very truly yours,



Jimmy D. Vandergrift  
Director, Nuclear Safety Assurance

JDV/nbm

cc: Mr. Ellis W. Merschoff  
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