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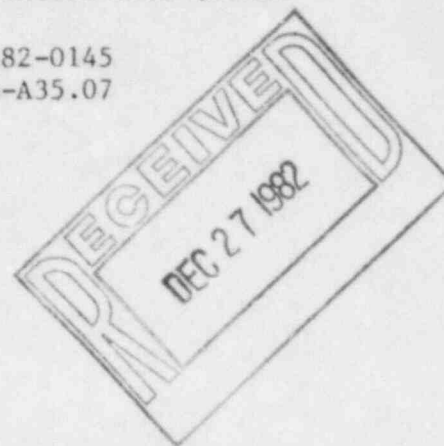
L. V. MAURIN

December 20, 1982 Vice President Nuclear Operations

W3182-0145

Q-3-A35.07

Mr. John T. Collins, Regional Administrator, Region IV
U. S. Nuclear Regulatory Commission
611 Ryan Plaza Drive, Suite 1000
Arlington, Texas 76012



SUBJECT: Waterford SES Unit No. 3
Docket No. 50-382
Potentially Reportable Deficiency No. 96
"Inadequate Shoulder Gap for
Batch C Fuel Assemblies"

REFERENCE: Telecon from M. A. Livesay (LP&L) to W. Crossman (NRC)
dated November 17, 1982

Dear Mr. Collins:

On November 17, 1982 a problem with potentially inadequate shoulder gap for Batch C fuel assemblies was reported as Potentially Reportable Deficiency No. 96. This letter is to inform you that after further evaluation, this condition is not considered to be reportable pursuant to the requirements of 10CFR50.55(e).

BACKGROUND

IE-27

On October 5, 1982, CE (CE letter LD-82-081) notified the NRC that there was a need to modify some of the Batch C fuel assemblies at ANO-2 to provide additional space for axial growth of the fuel rods. This problem was discovered during an outage when measurements indicated that some of the Batch C fuel assemblies may not have had adequate shoulder gap (distance between the top of a fuel rod and the bottom of the flow plate) to provide a high degree of assurance that contact would not occur between fuel rods and the flow plate prior to the termination of Cycle 3. This phenomenon was apparently due to a combination of greater-than-expected fuel rod growth and the lack of any appreciable overall assembly growth. In a meeting with CE on November 16, 1982, LP&L learned that this condition could be applicable to Waterford 3.

EVALUATION

The basis for the non-reportability determination is based on the Safety

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Evaluation Report section 4.2.2.10, Fuel Rod Growth, as follows:

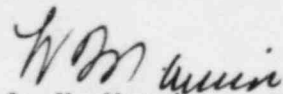
"Assurance of the acceptability of the Waterford 3 fuel design beyond an exposure of 22.5 GWd/t will be available from the visual fuel assembly inspection program, which will be performed on six fuel assemblies during each of the first three outages. Thus any trend toward unanticipated growth or mechanical interference will be evident during inspection. In addition, during the first three refueling outages of ANO-2 (a plant whose fuel design was also based on the CENPD-198 methods), the length of the fuel assembly and peripheral rods will be precisely measured in six assemblies (two from each fuel region) that have been extensively precharacterized (FSAR, Arkansas Power & Light Co., May 25, 1977). Thus, NRC staff will be able to compare the measured values with those calculated as the burnup progresses. If a nonconservative gap closure is observed, remedial action can be taken before safety is affected."

SAFETY EVALUATION

Because inspection of fuel rod growth during the first three refueling outages is required per the SER, any unanticipated gap closure would have been detected and corrected before the safety of operations of the plant was affected.

CONCLUSION

Based on the above, this condition has been determined to be not reportable. Because this problem could potentially occur at Waterford 3, modification to the appropriate fuel assemblies will be accomplished in accordance with CE recommendations prior to fuel shipment to provide a high degree of assurance that contact will not occur.


L. V. Maurin

LVM/MAL:keh

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