

October 10, 1995

OCAN109503

U. S. Nuclear Regulatory Commission
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Subject: Arkansas Nuclear One - Units 1 and 2
Docket Nos. 50-313 and 50-368
License Nos. DPR-51 and NPF-6
Use Of Westinghouse Alloy 600 Steam Generator Mechanical Plugs

Gentlemen:

On January 31, 1995 (OCAN019505), Entergy Operations submitted an action plan to repair all Westinghouse Alloy 600 mechanical plugs installed in the Arkansas Nuclear One, Units 1 and 2 (ANO-1 and ANO-2), steam generators (SGs). This action plan was predicated upon information contained in Addendum 3 to WCAP-12245, Revision 3, issued in January 1995. Based upon subsequent field experience, Westinghouse issued Addendum 4 to WCAP-12245 on May 26, 1995.

Addendum 4 recommends that each utility implement a proactive, graduated approach for plug remedial action over the next five calendar years for the remaining hot and cold leg Alloy 600 thermally treated (TT) plugs. Westinghouse also categorized the remaining plugs based upon the plugs' remaining life estimates. Plugs with remaining life estimates less than or equal to the year 2000 have been ranked Category 1; those plugs with remaining life estimates greater than the year 2000 but less than or equal to the year 2005 have been ranked as Category 2; and those plugs with remaining life estimates greater than 2005 have been ranked Category 3. Plugs in Categories 1 and 3 remain in service at ANO. Category 1 plugs are recommended to be repaired during the next scheduled outage of duration greater than 30 days, while Category 3 plugs are recommended to be repaired by the end of the year 2000. Table 1 (attached) provides the current plant configuration with the installed mechanical plugs.

Twelve Category 1 plugs remain in the hot leg of the "A" SG in ANO-1. These plugs will be repaired by the end of 1996 in accordance with our previous commitments made in the January 31, 1995, letter and in our response to NRC Bulletin 89-01, Supplement 2. Seventy-one Category 3 plugs are installed in the cold legs of the ANO-1 SGs (64 in "A" and 7 in

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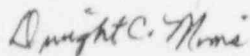
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"B"). These plugs will be repaired by the end of the year 2000 in accordance with the recommendations of Addendum 4 to the WCAP.

ANO-2 has six Category 1 plugs remaining within the "B" steam generator cold leg. Addendum 4 to the WCAP states that in some instances, plant specific circumstances may exist which support the one time deferral of remedial action during the next scheduled outage. One example is for Category 1 plugs in tubes not expected to experience perforation of the tube during plug top release. Based upon information supplied by Westinghouse, rows 1 through 4 contain the tubes at risk for possible penetration by plug top release in the ANO-2 SGs. The subject plugs are located in rows 28 and above. Based upon this information and extensive preexisting planned scope of SG tube inspections and repairs during the eleventh refueling outage at ANO-2 (2R11) which began on September 22, 1995, repair of the six cold leg plugs has been deferred until 2R12 (currently planned for the spring of 1997).

During the period until all Category 1 plugs can be repaired, continued safe operation is assured for both ANO units. The basis for acceptability of continued operation is the validation of the previously developed Justification for Continued Operation presented in Section 3.0 of WCAP-12245, Rev. 3 and additional ANO-specific analysis conducted by Westinghouse. If you have any questions regarding this submittal, please contact me.

Very truly yours,



Dwight C. Mims
Director, Licensing

DCM/jjd

attachment

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Table 1

Westinghouse Alloy 600 TT Mechanical Plugs in Use at ANO

| | <u>Quantity</u> | <u>Category</u> | <u>Heat No.</u> | <u>Location</u> | <u>Removal Date</u> |
|-------|-----------------|-----------------|-----------------|-----------------|----------------------|
| ANO-1 | 12 | 1 | NX-2387 | "A" SG Hot Leg | By December 31, 1996 |
| | 64 | 3 | NX-2387 | "A" SG Cold Leg | By December 31, 2000 |
| | 7 | 3 | NX-2387 | "B" SG Cold Leg | By December 31, 2000 |
| ANO-2 | 6 | 1 | NX-5222 | "B" SG Cold Leg | By December 31, 1997 |