



December 11, 1990

2CAN129012

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

Subject: Arkansas Nuclear One - Unit 2
Docket No. 50-368
License No. NPF-6
Reactor Coolant System Leak Detection Inspection

Gentlemen:

In an Arkansas Nuclear One - Unit 2 (ANO-2) letter dated August 12, 1988, (2CAN088801), "Licensee Event Report No. 50-368/87-003-01", interim compensatory actions were implemented until final pressurizer repairs could be completed at the subsequent refueling outage. ANO is providing an update regarding its commitment on one of the two compensatory actions. The initial condition was identified as a small leak from a Reactor Coolant System (RCS) pressurizer heater sleeve caused by the failure of a heater sheath. The RCS leakage subsequently resulted in boric acid induced corrosion of the pressurizer shell. The damaged area was repaired using a temporary weld. Additionally, several pressurizer features were removed and temporary plugs welded into their sleeves. An interim commitment was made to perform containment building inspections while ANO-2 was at power unless prohibited by ALARA considerations due to abnormal containment conditions. The inspection specifically included examinations of the pressurizer lower head where temporary plugs welded to sleeves were installed. The primary purpose of the entries was to conduct an inspection of the accessible areas of the containment building to identify and assess RCS leaks until a permanent repair of the pressurizer was completed.

The pressurizer vessel permanent repairs were completed during the 2R6 refueling outage in early 1988. Subsequent to the outage, the inspections were continued on a quarterly basis. Since the permanent repairs were completed, some minor leaks have been identified which were not related to boric acid induced corrosion. Performing the subject inspection at power poses several industrial safety concerns regarding heat stress, oxygen deficient atmospheres, lighting, communications and other personnel safety matters. In addition, other processes and procedures have been implemented which were not in place in 1987. Some of these are:

1. Procedure 2305.02D, "Reactor Coolant System Leak Detection", contains a trigger mechanism established on the leak rate form to perform an investigation if the unknown leakage exceeds the seven

day average by .3 GPM. The RCS leak rates (known and unknown) and any leakage within the containment building are plotted in the control room to enhance the capability to more readily recognize changes and trends in the data.

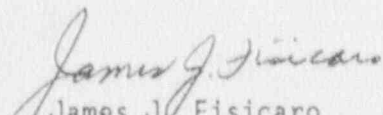
An auto leak rate program has been incorporated in the plant computer which has resulted in a smoother leak rate calculation. This has led to a higher credibility of the data and therefore a quicker response by plant operations and management.

2. Upon completion of a plant shutdown to hot standby, Procedure 2102.10, "Plant Shutdown and Cool-down", requires the performance of a RCS structural integrity inspection. This inspection is a more thorough and time consuming surveillance than the "at power" containment inspection because it also requires the cavity areas be inspected.
3. After completion of an RCS heat-up to hot standby, Procedure 2102.002, "Plant Startup", requires the performance of an RCS structural integrity inspection, and determine an RCS leak rate prior to power operations. This inspection also requires engineering standards to evaluate the leakage and determine its acceptability.

ANO's May 27, 1988 (0CAN058813) response to Generic Letter 88-05 discusses the actions to address boric acid corrosion consistent with the NRC guidance. This letter does not alter ANO's existing guidelines which include design methods to minimize the potential for RCS leakage and maximize the ability to detect RCS leakage.

ANO management believes the periodic containment entries and performance of RCS leak detection inspection, as previously committed, is no longer necessary. Current procedural requirements and leakage detection systems are sufficient to identify and assess RCS leaks. We believe it is prudent to make containment building power entries to investigate elevated RCS leakage if necessary but not on any specific frequency. This change has been discussed with members of the NRC staff. Should you have any questions please contact me.

Sincerely,


James J. Fisicaro
Manager, Licensing

JJF/RJK/mmg

cc: Mr. Robert Martin
U. S. Nuclear Regulatory Commission
Region IV
611 Ryan Plaza Drive, Suite 1000
Arlington, TX 76011

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cc: Thomas W. Alexion
NRR Project Manager,
Region IV/ANO-1
U. S. Nuclear Regulatory Commission
NRR Mail Stop 11-B-19
One White Flint North
11555 Rockville Pike
Rockville, Maryland 20852

NRC Senior Resident Inspector
Arkansas Nuclear One - ANO-1 & 2
Number 1, Nuclear Plant Road
Russellville, AR 72801

Ms. Sheri Peterson
NRR Project Manager, Region IV/ANO-2
U. S. Nuclear Regulatory Commission
NRR Mail Stop 11-B-19
One White Flint North
11555 Rockville Pike
Rockville, Maryland 20852