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June 18, 1982

## ØCANØ68283

Mr. John T. Collins Regional Administrator U. S. Nuclear Regulatory Commission Region IV 611 Ryan Plaza Drive, Suite 1000 Arlington, TX 76011



Subject: Arkansas Nuclear One - Units 1 & 2

Docket Nos. 50-313 & 50-368 License No. DPR-51 & NPF-6 Post Accident Sampling System

(File: 1510; 2-1510)

## Gentlemen:

In response to your June 4, 1982, letter to our Mr. William Cavanaugh III ( $\emptyset$ CNA $\emptyset$ 682 $\emptyset$ 1), in which you requested that we reconsider our position on the operability of AP&L's Post Accident Sampling System, the following is provided.

On the day of the 1982 Emergency Plan Exercise, it was originally AP&L's intent to demonstrate an RCS sample utilizing the ANO-2 portion of the PASS system. This would have prevented unnecessarily contaminating the ANO-1 portion which, although assembled, was still very much in a test and checkout situation since the integrated test had not been completed. This is consistent with our position as stated in our letter dated April 29, 1982 (ØCANØ4822Ø).

A manual isolation valve was closed in the ANO-2 RCS sample flow path due to a solenoid valve failure down stream in the flow path. Since the particular solenoid fails in the open position and without isolation would have permitted RCS flow into the PASS facility, the isolation valve was closed and hold carded as a safety measure to protect plant personnel. Therefore, during the exercise the process of drawing and analyzing an RCS and containment atmosphere sample was simulated rather than actually carried out. This decision was not inconsistent with the scenario objective for the drill which was to "utilize the PASS facility and simulate the analysis of the primary system and the containment atmosphere." This simulation was carried out during the exercise and was observed by the NRC.

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In our March 9, 1982, letter to Mr. Seidle (ØCANØ382Ø3) we indicated that the start-up testing of the in-line boron analysis equipment had not been completed due to several equipment problems. We also indicated that this would not prevent use of the system for radionuclide analysis in an emergency. However, we did state that we did not feel it to be prudent to conduct a final integrated system test until certain problems as described in that letter had been resolved.

Subsequent to the March 9, 1982, letter, an integrated test was conducted on the ANO-2 portion of the Post Accident Sampling System. This test demonstrated that the hydrogen and oxygen analyzers on the ANO-2 portion of the system are operable and that quantative analysis could be performed. During this test, which was witnessed by a resident inspector, samples were automatically obtained from several points (i.e., RCS hot leg, pressurizer surge line, and containment sump). The capability of obtaining a grab sample was also successfully tested. In addition to the above, an automatic isotopic measurement was obtained on both RCS liquid and containment air.

In an NRC Inspection Report dated May 19, 1982 (ØCNAØ58214), the inspector stated that "the PASS integrated test procedure adequately exercised the operable components of the Unit 2 Post Accident Sampling System."

An integrated test has not yet been completed on ANO-1. During the April 1982 Unit 1 outage, the necessary remaining equipment tie-ins were completed as described in our letter to Mr. Eisenhut dated December 21, 1981 (ØCAN1281Ø9). Unit 1 has not operated at a high, steady state power level for a sufficient length of time since the April 1982 outage to enable execution of an integrated test and a meaningful comparison of analytical results.

We have, however, performed individual component tests and a hydrostatic test to assure ourselves that a sample could be obtained using this system in an emergency.

Now that ANO-1 is back in service, it is our intention to perform the integrated test as soon as the necessary conditions are met. We expect to begin testing on June 28 and to complete testing by July 5 unless unforeseen problems arise.

NUREG-0737 requires licensees to purchase and install a single Post Accident Sampling System. The PASS system at ANO, like other non-redundant systems, will be out of service from time to time due to maintenance. The PASS system, like all other non-safety related systems, is not required to be operable continuously. PASS is a tool, as the name implies, to aid the Operations staff in assessment of core damage following an accident. AP&L realizes the value of this tool and will, as we do with other systems, assign a high priority to its repair and maintenance.

Efforts are currently underway to complete the necessary repairs to return the isolation ANO-2 this sample path to service. When repairs have been completed, the manual isolation valve will be returned to the normally open condition.

. Mr. Collins June 18, 1982 The status of the PASS system has been periodically discussed with the resident inspectors and was specifically discussed on May 20 following the drill. During that discussion, the resident inspector indicated that he was aware of the location of the isolation valves, that they were shielded and that an operator could open them fairly rapidly. We do have the capability to obtain a sample, however, we are still experiencing difficulties with the on-line analysis equipment as described in our letter of March 9, 1982. We are continuing to work closely with the vendor, Orion Research, Inc., to resolve these problems. Some progress has been made since our March 9, 1982, letter but the equipment still has been unable to consistently perform within our accuracy specifications. Orion Research has conducted additional factory tests on our equipment since March 9 and now believe that they can develop the software changes which will be necessary to correct the present accuracy problems. It should be noted that at the time AP&L began procurement of this equipment, Orion was the only vendor able to supply boron analysis equipment designed to perform in the presence of radiation source terms of the magnitude specified by NUREG-0737. As such, this is a first-of-a-kind system. Since Orion has received purchase orders for similar equipment from other nuclear power facilities, we feel they are committed to the resolution of the problems encountered here at ANO. Although we are experiencing problems with the on-line analysis equipment, the PASS facility is substantially complete and can provide the post accident sampling capability as previously indicated by our correspondence and design submittals. We continue to strive to fully integrate the PASS facility into the day-to-day operation of ANO and feel that AP&L is a leader in the industry in implementing this type of facility in response to NUREG-0737 and NUREG-0654. As has been our practice in the past, we will continue to keep the resident NRC inspectors informed of the system status and advise them of any significant change in the progress of the system. Very truly yours, John R. Marshall Manager, Licensing JRM: DEJ: s1