



ENTERGY

Entergy Operations, Inc.

1448 S.R. 333

Russellville, AR 72801

Tel 501 858-5000

November 18, 1994

OCAN119405

U. S. Nuclear Regulatory Commission  
Document Control Desk  
Mail Station P1-137  
Washington, DC 20555

Subject: Arkansas Nuclear One - Units 1 and 2  
Docket Nos. 50-313 and 50-368  
License Nos. DPR-51 and NPF-6  
Response To Inspection Report  
50-313/94-18; 50-368/94-18

Gentlemen:

Entergy Operations has reviewed your correspondence of October 26, 1994 (OCNA109420), regarding the inspection of activities associated with the Arkansas Nuclear One (ANO) emergency preparedness program.

Attached is our analysis of the two weaknesses identified concerning the failure to make timely notifications and estimating fuel failure.

Should you have any questions or comments, please call me at (501) 858-4601.

Very truly yours,

Dwight C. Mims  
Director, Licensing

DCM/slp

Attachments

230008

9411250202 941118  
PDR ADDCK 05000313  
PDR

IE35  
11

cc: Mr. Leonard J. Callan  
Regional Administrator  
U. S. Nuclear Regulatory Commission  
Region IV  
611 Ryan Plaza Drive, Suite 400  
Arlington, TX 76011-8064

NRC Senior Resident Inspector  
Arkansas Nuclear One  
1448 S. R. 333  
Russellville, AR 72801

Mr. George Kalman  
NRR Project Manager Region IV/ANO-1 & 2  
U. S. Nuclear Regulatory Commission  
NRR Mail Stop 13-H-3  
One White Flint North  
11555 Rockville Pike  
Rockville, MD 20852

**Weakness:**

The failure to make a timely notification to the State of Arkansas was identified as an exercise weakness. (Weakness 313/9418-01; 368/9418-01)

**Description of Event:**

During ANO's annual emergency exercise, an Alert declaration was made at 9:03 a.m. and the Control Room Notifications Communicator was prepared at approximately 9:13 a.m. to communicate the Alert declaration via the Dedicated Emergency Fax Voice System (DEF/VS) facsimile (fax) machine. However, an Arkansas Health Department (ADH) representative in the Emergency Operations Facility (EOF) called the ANO Unit 1 simulator and requested that the Control Room Notifications Communicator stop using the DEF/VS and stated that they had assumed responsibility for notifications to the counties. The Control Room Notifications Communicator misunderstood the ADH representative and believed that the function of notifications to offsite agencies was being assumed by the Notifications Communicator in the EOF. At this time, the Control Room Notifications Communicator ceased performing notifications.

Since the Control Room Notifications Communicator did not verify the information he received and did not adequately turnover the responsibility of notifications, the root cause of this failure to make a timely notification to the State of Arkansas was determined to be personnel error.

**Corrective Actions:**

To correct this concern the ANO Notification Communicators were provided training on:

- clarification on the use of the DEF/VS fax machine. ADH personnel were training to now request the Notification Communicator to discontinue using DEF/VS and continue notifications using the contingency for DEF/VS fax.
- clarification of the requirements for turnover of the responsibility of notifications. This training also included examples of information that should be included in turnovers.
- the importance of the documentation of notifications and the importance of completing the notifications checklist.
- miscellaneous issues including message numbering, initial, follow-up, and update notifications.

**Weakness:**

The Technical Support Center (TSC) staff calculated fuel failure approximately ten times greater than what the scenario radiochemistry data indicated. The TSC staff estimated fuel failure as high as 32 percent while the scenario radiochemistry data was indicating 4 percent fuel failure. This was identified as an exercise weakness. (Weakness 313/9418-02; 368/9418-02)

**Description of Event:**

For emergency classification purposes, and as defined in the ANO Emergency Action Level (EAL) Bases Document, the definition of failed fuel is "that quantity of gap activity that has been released into the reactor coolant".

System Engineering Procedure 1302.022, *Core Damage Assessment*, did not provide qualitative guidance to determine the appropriate release fractions to be used for EAL determination. The procedure attempts to determine both amount and type of damage to the core. Calculations for estimating the amount of fuel failure are performed by System Engineering using different assumptions as to gap release fractions. The results are reviewed and interpreted by considering other plant conditions which are indicative of core status. When there is no major core damage (overheating or uncovering of the fuel) indicated by these other plant conditions, these assumptions will not match those used by Emergency Planning in establishing the ANO EALs.

The root cause of this event is the difference in interpretation between the scenario development group (Emergency Planning) and the System Engineers as to the meaning of "failed fuel".

**Corrective Actions:**

Procedure 1302.022, *Core Damage Assessment*, is being revised to define "failed fuel" for determining EALs as that quantity of the gap activity that has been released to the reactor coolant in terms of the I-131 specific concentration. This is consistent with the ANO EAL Bases Document and the guidance as stated in NUREG-0654, *Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants*, concerning failed fuel assessment. Engineering personnel will continue to use various assessment methods to interpret the extent of core damage in order to keep the Emergency Response Organization (ERO) informed of core status throughout an emergency event.

Procedure 1302.022 will be revised and applicable ERO personnel will be trained on the revision by January 13, 1995.