

FEB 6 1991

Docket Nos. 50-313/90-42  
50-368/90-42  
License Nos. DPR-51  
NPF-6

Entergy Operations, Inc.  
ATTN: Neil S. Carns, Vice President  
Operations, Arkansas Nuclear One  
Route 3, Box 137G  
Russellville, Arkansas 72801

Gentlemen:

Thank you for your letter of January 21, 1991, in response to our letter and Notice of Violation dated December 20, 1990. We have reviewed your reply and find it responsive to the concerns raised in our Notice of Violation. We will review the implementation of your corrective actions during a future inspection to determine that full compliance has been achieved and will be maintained.

Sincerely,

ORIGINAL SIGNED BY  
SAMUEL J. COLLINS

Samuel J. Collins, Director  
Division of Reactor Projects

cc:  
Entergy Operations, Inc.  
ATTN: Donald C. Hintz, Executive Vice  
President & Chief Operating Officer  
P.O. Box 31995  
Jackson, Mississippi 39286

Entergy Operations, Inc.  
ATTN: Gerald W. Muench, Vice President  
Operations Support  
P.O. Box 31995  
Jackson, Mississippi 39286

RIV:DRP/A *read*  
MASatorius;df  
2/6/91

C:DRP/A *new for TFw*  
TFWesterman  
2/6/91

D:DRP  
SJCcollins  
2/6/91

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Wise, Carter, Child & Carawa  
ATTN: Robert B. McGehee, Esq.  
P.O. Box 651  
Jackson, Mississippi 39205

Arkansas Nuclear One  
ATTN: Early Ewing, General Manager  
Technical Support and Assessment  
Route 3, Box 137G  
Russellville, Arkansas 72801

Arkansas Nuclear One  
ATTN: Jerry Yelverton, Director  
Nuclear Operations  
Route 3, Box 137G  
Russellville, Arkansas 72801

Arkansas Nuclear One  
ATTN: Mr. Tom W. Nickels  
Route 3, Box 137G  
Russellville, Arkansas 72801

Combustion Engineering, Inc.  
ATTN: Charles B. Brinkman, Manager  
Washington Nuclear Operations  
12300 Twinbrook Parkway, Suite 330  
Rockville, Maryland 20852

Honorable Joe W. Phillips  
County Judge of Pope County  
Pope County Courthouse  
Russellville, Arkansas 72801

Winston & Strawn  
ATTN: Nicholas S. Reynolds, Esq.  
1400 L Street, N.W.  
Washington, D.C. 20005-3502

Arkansas Department of Health  
ATTN: Ms. Greta Dicus, Director  
Division of Environmental Health  
Protection  
4815 West Markam Street  
Little Rock, Arkansas 72201

Babcock & Wilcox  
Nuclear Power Generation Division  
ATTN: Mr. Robert B. Borsum  
1700 Rockville Pike, Suite 525  
Rockville, Maryland 20852

Entergy Operations, Inc.

-3-

Admiral Kinnaird R. McKee, USN (Ret)  
P.O. Box 41  
Oxford, Maryland 21654

bcc to DMB (IE01)

bcc distrib. by RIV:

R. D. Martin

DRSS-RPEPS

Lisa Shea, RM/ALF

DRP

RSTS Operator

T. Alexion, NRR Project Manager (MS: 11-D-23)

S. Peterson, NRR Project Manager (MS: 11-D-23)

Resident Inspector

Section Chief (DRP/A)

RIV File

MIS System

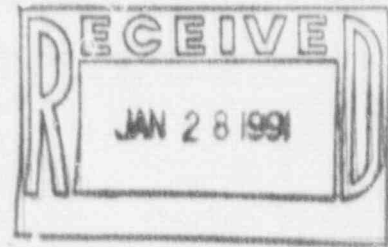
Project Engineer (DRP/A)

DRS



**Entergy  
Operations**

Entergy Operations, Inc.  
Route 3, Box 137G  
Russellville, AR 72801  
Tel: 501-964-3100



January 1, 1991

OCAN019106

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

Subject: Arkansas Nuclear One - Units 1 and 2  
Docket Nos. 50-313/50-368  
License Nos. DPR-51 and NPF-6  
Response to Inspection Report  
50-313/90-42; 50-368/90-42

Gentlemen:

Pursuant to the provisions of 10CFR2.201, attached is the response to the violation identified during the inspection of activities associated with an inadequate review of the safety analysis for conducting resin transfer cask dewatering activities.

Should you have any questions, please call me at 501-964-8601.

Very truly yours,

*James J. Fisicaro*  
James J. Fisicaro  
Manager, Licensing

JJF/DWB/mmg  
Attachment

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6pp

91-256

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

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. Shari 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

Notice of Violation

During an NRC inspection conducted October 17 through December 7, 1990, a violation of NRC requirements was identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1990) (Enforcement Policy), the violation is listed below:

Failure to perform an Adequate Safety Review.

Unit 1 Technical Specification 6.5.1.6.d requires that the Plant Safety Committee shall be responsible for "review of all proposed changes or modifications to plant systems or equipment that affect nuclear safety."

Contrary to the above, an inadequate review of the safety analysis for conducting resin transfer cask dewatering activities was performed. The review of the dewatering process did not evaluate the consequences of performing the activity in the nonradiologically controlled area (train bay) in which it was performed.

There is a Severity Level IV violation. (Supplement I) (313/9030-02)

Response to Violation 313/9030-02

(1) Reason for the violation

NOTE: For purposes of clarity in this response the term "Controlled Access Area" is defined as both unit's auxiliary building, reactor building and, for previously approved processing activities, the Low Level Radwaste Building.

ANO agrees that a violation occurred regarding an inadequate review of the safety analysis for conducting resin transfer cask dewatering activities. However, the root cause evaluation has determined that personnel involved in determining the procedural controls for performing the dewatering process did not adequately document the consequences of performing radiological activities outside of the Controlled Access Area. The corrective actions identified in sections 2 and 3 of this response will ensure that future Plant Safety Committee (PSC) reviews will include a consideration of radiological consequences of activities performed outside of the Controlled Access Area.

NRC Inspection Report 50-313; 368/84-19, included a concern that an unmonitored release might occur during resin processing in the train bay and activities associated with the process conducted in the Radwaste Building. In response to open item 313/8419-02; 368/8419-02 issued in August 1984, Revision 5 to 1612.003, "Radiological Work Permits" was initiated. This revision included Attachment 2 entitled "Radiological Evaluation Checklist for Work Outside Controlled Access Which Has The Potential for Release of Radioactive Substances". The attachment contained specific radiological precautions and monitoring requirements relating to the conduct of radiological activities outside of the Controlled Access Areas including resin transfer in the train bay. This revision was reviewed by the PSC on September 5, 1984 and became effective September 6, 1984.

Open item 313/8419-02; 368/8419-02 was closed in NRC Inspection Report 50-313; 368/84-33 (November 1984) based on Revision 5 to procedure 1612.003.

In April 1989, Revision 15 to 1612.003, "Radiological Work Permits" was initiated. In addition to other items, this revision was designed to change Attachment 2 to provide for increased utilization of the attachment to allow its use in a more generic sense. This change involved the removal of the specific steps pertaining to resin transfer. The revision was reviewed by the PSC on April 13, 1989, and became effective April 14, 1989.

Although revision 5 to 1612.003 satisfied the open item from NRC Inspection Report 84-19 concerning the resin processing activities in the train bay and the potential for an unmonitored release to the environment, in retrospect, the process was inadequate from the standpoint of providing an evaluation of the consequences of performing that activity outside of the Radiological Controlled Access Area (RCA). Revision 15 further compounded the inadequacy. Additionally, although all procedurally required reviews and evaluations were conducted; the question concerning the radiological consequences of the resin processing activity in an area outside the Controlled Access Area was not addressed.

(2) Corrective steps taken and results achieved:

As a result of the pressurization of the resin fill head and the subsequent loss of contamination control in Unit One and Two Turbine and Auxiliary Buildings resulting from this incident, all activities involving radioactive material processing outside of the Controlled Access Area has been halted until the consequence of performing these activities outside of controlled access areas has been reviewed.

An interim measure has been implemented which requires that a complete Radiological Safety Evaluation be performed for any activity involving the processing of radioactive materials outside of the Controlled Access Area. This **does not** apply to transportation of properly packaged radioactive material or storage of radioactive material in approved storage locations. The Radiological Safety Evaluation addresses various aspects of the activity such as: 1) the known or anticipated radioactivity associated with the process; 2) potential monitored and unmonitored release paths, 3) applicable regulatory requirements; and 4) the radiological impact of a release. A conclusion with appropriate recommendations is made based on the evaluation. At the completion of the evaluation, it is reviewed by the Superintendent, Nuclear Chemistry and Superintendent, Radwaste and approved by the Manager, Radiation Protection/Radwaste. The evaluation then undergoes a PSC review for comment and approval. Applicable requirements from the PSC-approved evaluation are incorporated into the appropriate Radiological Work Permits (RWP).

This interim program has been successfully applied to the contaminated scaffolding processing task. Radiological Safety Evaluations are currently in progress for the following activities:

- Primary Ion Exchange Resin Processing
- Steam Generator Cleaning Waste Processing

(3) Corrective steps that will be taken to prevent recurrence:

Procedure 1062.004, "10CFR50.59 Review Program" will be revised to screen proposed activities which may potentially result in the release, or handling, of radioactive materials outside the Radiological Controlled Access Area (RCA). For activities which are determined to meet the criterion in the preceding statement, a Radiological Safety Evaluation will be required to ensure that the review adequately addresses the potential radiological consequences of performing the activity in question outside of the RCA. The changes to procedure 1062.004 will be completed by March 31, 1991. The interim Radiological Safety Evaluation program will be formalized and incorporated into the appropriate plant procedure by March 31, 1991.

The Radiological Work Permit (RWP) currently controls work related to radiological or contaminated material outside the RCA. In addition, Health Physics implementing procedure 1612.003, "Radiological Work Permits" will be revised to require that the Radiological Safety Evaluation be reviewed and its recommendations incorporated prior to activating any RWP which allows processing of radioactive material outside of the Radiological Controlled Access Area. This revision will be completed by March 31, 1991.



Plant administrative procedure 1000.006, "Procedure Control" will be revised to require that any procedure or work plan which allows or addresses performance of activities involving the processing of radioactive material in areas outside of the Controlled Access Area be reviewed and approved by the PSC. The review shall ensure that a specific Radiological Safety Evaluation has been conducted on the activity and that it adequately addresses the radiological consequences of performing that activity outside of the Controlled Access Area. Recommendations resulting from the Radiological Safety Evaluation will be included in the appropriate procedure and/or work plan which will govern the activity in question.

Procedure 1000.006 will also be revised to ensure that a procedure and/or work plan will be required for any activity involving the processing of radioactive material in areas outside of the Controlled Access Area. The revisions to procedure 1000.006 will be completed by March 31, 1991.

A review of existing work plans and procedures (excluding those related to the storage and/or transportation of radioactive material) which may involve the processing of radioactive materials outside of the Controlled Access Area will be coordinated to determine if a Radiological Safety Evaluation is required. These reviews will be completed by May 31, 1991. If an unfavorable review results, the procedure will be revised to restrict it to areas inside the Controlled Access Area or invoke additional radiological controls to minimize the consequences. Such revisions will be completed by September 30, 1991. These procedures will not be utilized to process radioactive material outside controlled access until appropriate controls have been implemented.

Training will be provided to radiation protection personnel required to utilize the applicable health physics procedure changes. This training will be completed by October 31, 1991.

(4) Date of full compliance:

Full compliance has been achieved through the implementation of the interim administrative controls governing the performance of Radiological Safety Evaluations for activities involving the processing of radioactive materials outside the Controlled Access Area. The formal procedural controls are scheduled to be implemented by March 31, 1991. Existing procedures found to need corrections will be revised by September 30, 1991.