



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION IV

611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8064

April 9, 1997

EA 96-512

C. Randy Hutchinson, Vice President
Operations
Arkansas Nuclear One
Entergy Operations, Inc.
1448 S.R. 333
Russellville, Arkansas 72801-0967

SUBJECT: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTY -
\$50,000 (NRC Inspection Report 50-313;368/96-27)

Dear Mr. Hutchinson:

This refers to the predecisional enforcement conference conducted in Arlington, Texas, on March 28, 1997 with Entergy Operations, Inc. (Entergy) representatives. The conference was conducted to discuss apparent violations of NRC requirements associated with an October 17, 1996 fire at Arkansas Nuclear One (ANO), Unit 1, as documented in NRC Inspection Report 50-313;368/96-27, issued February 3, 1997. The inspection was conducted October 22-29 and November 21-25, 1996, and was finalized in a telephonic exit meeting on December 11, 1996.

The apparent violations described in the inspection report involved several inadequacies in NRC-required reactor coolant pump oil collection systems at ANO, and three examples of inadequate responses to plant conditions which indicated the potential for a fire (i.e., inadequate corrective action, as required by 10 CFR Part 50, Appendix B, Criterion XVI). At the conference, Entergy expressed disagreement with parts of the apparent fire protection violations, contending that the oil collection system for the reactor coolant pumps was not required to collect oil spray from lift oil piping leaks, nor to collect leakage from "remote" oil fill lines. Entergy did not explicitly disagree with the corrective action violations. However, Entergy's position was that plant personnel had responded reasonably to oil leaks and smoke in light of their lack of understanding of the "wicking" phenomenon which created the potential for oil-soaked insulation to ignite at a lower than expected temperature.

The NRC considered Entergy's fire protection arguments but has concluded that 10 CFR Part 50, Appendix R, is clear with regard to these reactor coolant pump components being protected by oil collection systems. Based on our discussions during the conference, we have clarified the violation to include the failure to protect the fill connection on the Unit 1 B reactor coolant pump and to clarify that the flanged connections were not protected on the lower reservoir transmitters. We also deleted one of the apparent examples of an Appendix B, Criterion XVI violation. Specifically, we deleted the example involving oil found on the floor of the Unit 1 containment building by radiation protection personnel during the outage because, as discussed during the conference, the small amounts of oil



involved did not represent a clear opportunity to determine the source of the leak and take corrective action.

Therefore, based on the information developed during the inspection and the information that was provided during the conference, the NRC has determined that violations of NRC requirements occurred. These violations are cited in the enclosed Notice of Violation and Proposed Imposition of Civil Penalty; the circumstances surrounding the violations were described in detail in the subject inspection report.

The violations include: 1) a failure to maintain an adequate lube oil collection system for reactor coolant pumps, which created the potential for a fire when oil spray from a cracked weld accumulated in fibrous insulation; and 2) a failure in two instances to take prompt action to identify and correct conditions which resulted in a fire in the ANO Unit 1 containment building on October 17, 1996. These violations appear to have resulted from a lack of sensitivity to fire protection requirements related to reactor coolant pump lube oil collection systems and to plant conditions which indicated a potential for a containment fire to occur.

The October 17, 1996 fire was quickly extinguished and did not affect the safety of the plant. Nonetheless, the NRC finds the fire protection inadequacies, coupled with the plant staff's inadequate response to indications of a fire, i.e., oil-soaked insulation which was reported to be smoking excessively during plant heat-up, unacceptable performance. Therefore, these violations have been classified in the aggregate as a Severity Level III problem, in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions" (Enforcement Policy), NUREG-1600.

The NRC acknowledges that Entergy has taken or planned a number of corrective actions in response to these violations, all of which were discussed at the conference. In brief, these actions involve: 1) training and procedural revisions to heighten sensitivity to smoke, oil leaks, lube oil collection system requirements and the potential for reduced auto-ignition temperatures of oil-soaked insulation; and 2) plant modifications and administrative measures to address the various inadequacies in reactor coolant pump lube oil collection systems.

In accordance with the Enforcement Policy, a civil penalty with a base value of \$50,000 is considered for a Severity Level III problem. Because your facility has been the subject of escalated enforcement actions within the last 2 years,¹ the NRC considered whether Entergy should be given credit for *Identification* and *Corrective Action* in accordance with the civil penalty assessment process in Section VI.B.2 of the Enforcement Policy. The violations were discovered only because the fire occurred. In that plant staff missed opportunities to take action to prevent the fire, the NRC has determined that Entergy should not be given credit for identification. The NRC has determined that Entergy should

¹ A \$50,000 civil penalty was issued September 6, 1996, for violations related to improper maintenance on main steam safety valves.

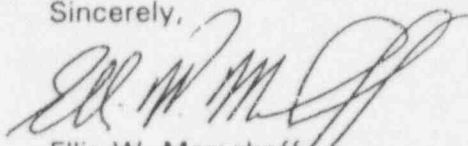
be given credit for its corrective actions, summarized above, which were prompt and comprehensive. Consideration of these factors results in the assessment of a base civil penalty.

Therefore, to emphasize the importance of adherence to fire protection requirements in the design and operation of the facility, and the importance of reacting to plant conditions indicating a potential for a fire, I have been authorized, after consultation with the Director, Office of Enforcement, to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalty (Notice) in the amount of \$50,000.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. In your response, you should document the specific actions taken and any additional actions you plan to prevent recurrence. The NRC will use your response, in part, to determine whether further enforcement action is necessary to ensure compliance with regulatory requirements.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response will be placed in the NRC Public Document Room (PDR).

Sincerely,



Ellis W. Merschoff
Regional Administrator

Docket Nos. 50-313; 50-368
License Nos. DPR-51; NPF-6

Enclosure: Notice of Violation and
Proposed Imposition of Civil Penalty

cc w/Enclosure:

Executive Vice President
& Chief Operating Officer
Entergy Operations, Inc.
P.O. Box 31995
Jackson, Mississippi 39286-1995

Vice President
Operations Support
Entergy Operations, Inc.
P.O. Box 31995
Jackson, Mississippi 39286

Entergy Operations, Inc.

- 4 -

Manager, Washington Nuclear Operations
ABB Combustion Engineering Nuclear
Power
12300 Twinbrook Parkway, Suite 330
Rockville, Maryland 20852

County Judge of Pope County
Pope County Courthouse
Russellville, Arkansas 72801

Winston & Strawn
1400 L Street, N.W.
Washington, D.C. 20005-3502

Bernard Bevill, Acting Director
Division of Radiation Control and
Emergency Management
Arkansas Department of Health
4815 West Markham Street, Slot 30
Little Rock, Arkansas 72205-3667

Manager
Rockville Nuclear Licensing
Framatome Technologies
1700 Rockville Pike, Suite 525
Rockville, Maryland 20852

Entergy Operations, Inc.

- 5 -

bcc w/Enclosure:

PDR

LPDR

SECY

CA

EDO (O-17G21)

DEDO (O-17G21)

OE:EAFfile (O-7H5)

OGC (O-15B18)

NRR (O-12G18)

GKelman, NRR

OC/LFDCB (T-9E10)

RA Reading File

RIV Files

PAO

RSLO

LWilliamson, OI

RIV Files

IE 14

NUDOCS

EC's: RI, RII, RIII

PA (O-2G4)

OIG (T-5D28)

OE (O-7H5)

OI (O-3E4)

OGC (O-15B18)

NRR/ADP (O-12G18)

OC/DAF (T-9E10)

AEOD (T-4D18)

GSanborn-EAFfile

MIS Coordinator

Chief, DRS/EB

Chief, DRP/C

E-MAIL DISTRIBUTION:

OEMAIL

TPGwynn (TPG)

GSanborn (GFS)

BHenderson (BWH)

CHackney (CAH)

Art Howell (ATH)

KPerkins (KEP)

IBarnes (IXB)

CVanDenburgh (CAV)

JDyer (JED2)

WBrown (WLB)

GMVasquez (GMV)

MHammond (MFH2)

DKunihiro (DMK1)

DChamberlain (DDC)

LYandell (LAY)

KBrockman (KEB)

KKennedy (KMK)

DOCUMENT NAME: G:\EA\DRAFT\EA96512.DFT

To receive copy of document, indicate in box: "C" = Copy without enclosures "E" = Copy with enclosures "N" = No copy

EO*		C:EB*		D:DRS*		C:DRP/C*		RC	
GSANBORN		CVANDENBURGH		AHOWELL		LYANDELL		WLBrown	
3/31/97		04/ /97		04/ /97		04/ /97		04/3 /97	
DRA		RA							
JEDyer		EWerschoff							
04/3 /97		04/4 /97							

*previously concurred

OFFICIAL RECORD COPY

bcc w/Enclosure:

PDR
LPDR
SECY
CA
EDO (O-17G21)
DEDO (O-17G21)
OE:EAFile (O-7H5)
OGC (O-15B18)
NRR (O-12G18)
GKalman, NRR
OC/LFDCB (T-9E10)

IE 14
NUDOCS
EC's: RI, RII, RIII
PA (O-2G4)
OIG (T-5D28)
OE (O-7H5)
OI (O-3E4)
OGC (O-15B18)
NRR/ADP (O-12G18)
OC/DAF (T-9E10)
AEOD (T-4D18)

RA Reading File
RIV Files
PAO
RSLO
LWilliamson, OI
RIV Files

GSanborn-EAFile
MIS Coordinator
Chief, DRS/EB
Chief, DRP/C

E-MAIL DISTRIBUTION:

OEMAIL
TPGwynn (TPG)
GSanborn (GFS)
BHenderson (BWH)
CHackney (CAH)
Art Howell (ATH)
KPerkins (KEP)
IBarnes (IXB)
CVanDenburgh (CAV)

JDyer (JED2)
WBrown (WLB)
GMVasquez (GMV)
MHammond (MFH2)
DKunihiro (DMK1)
DChamberlain (DDC)
LYandell (LAY)
KBrockman (KEB)
KKennedy (KMK)

DOCUMENT NAME: G:\EA\DRAFT\EA96512.DFT

To receive copy of document, indicate in box: "C" = Copy without enclosures "E" = Copy with enclosures "N" = No copy

EO	C:EB	D:DRS	C:DRP/C	DRA
GSANBORN	CVANDENBURGH	AHOWELL	LYANDELL	JDYER
3/31/97	04/1/97	04/2/97	04/2/97	04/ /97
RA				
EMERSCHOFF				
04/ /97				

OFFICIAL RECORD COPY