

## SAFEGUARDS INFORMATION

October 28, 2004

Mr. Jeffrey S. Forbes  
Vice President Operations ANO  
Entergy Operations, Inc.  
1448 S. R. 333  
Russellville, AR 72802

SUBJECT: ARKANSAS NUCLEAR ONE, UNITS 1 AND 2 - ADMINISTRATIVE CHANGE TO FACILITY OPERATING LICENSES IN CONJUNCTION WITH THE COMMISSION ORDER EA-03-086 REGARDING REVISED DESIGN BASIS THREAT (DBT) AND REVISIONS TO PHYSICAL SECURITY PLAN, TRAINING AND QUALIFICATIONS PLAN, AND SAFEGUARDS CONTINGENCY PLAN (TAC NOS. MC2886 AND MC2887)

Dear Mr. Forbes:

By letter dated April 29, 2004, Entergy Operations, Inc. submitted a supplemental response in accordance with Order EA-03-086, the Order requiring compliance with the revised design basis threat, dated April 29, 2003, (DBT Order) for Arkansas Nuclear One, Units 1 and 2. Section III.A of the Order requires licensees to revise their physical security plans (PSPs), training and qualification plans (T&Q Plans), and safeguards contingency plans (SCPs) to provide protection against the revised DBT set forth in Attachment 2 to the DBT Order. These revised plans, along with an implementation schedule, were required to be submitted to the Nuclear Regulatory Commission (NRC or the Commission) for review and approval no later than April 29, 2004.

The NRC staff's review of the PSP, SCP, and T&Q Plans submitted in your letter dated April 29, 2004, as supplemented on July 1, July 19, July 26, August 9, August 17, August 26, September 9 and October 4, 2004, has focused on ensuring the necessary programmatic elements are contained in these plans in order to provide the high assurance that activities involving special nuclear material are not inimical to the common defense and security and do not constitute an unreasonable risk to the public health and safety.

**NOTICE:** Enclosure 2 contains Safeguards Information.  
Upon separation from Enclosure 2, this letter and  
Enclosure 1 are DECONTROLLED.

## SAFEGUARDS INFORMATION

The NRC staff has determined that, subject to subsequent inspection and evaluation, these plans contain the necessary programmatic elements that, when effectively implemented, will provide the required high assurance that the Arkansas Nuclear One, Units 1 and 2 will be protected against the revised DBT. The NRC staff, therefore, approves the PSP, SCP, and T&Q Plan for Arkansas Nuclear One, Units 1 and 2. However, ultimately, the effectiveness of these plans will be judged on your ability to meet regulatory requirements through facility implementing procedures and site practices. As such, your facility implementing procedures and practices will continue to be subject to future NRC review and inspection, including NRC-conducted force-on-force exercises.

In addition, the NRC staff noted that your PSP included alternatives to certain requirements of Title 10 of the *Code of Federal Regulations* (10 CFR) Section 73.55. In each case, the NRC staff found that the alternative measures provide an equivalent level of protection to that of the associated requirement and meet the high assurance objective of 10 CFR 73.55(a). The NRC staff, therefore, approves the alternatives shown in the table below. The NRC staff's evaluation is discussed further in the enclosed Safety Evaluation (SE).

<b>Approved Alternatives to the Requirements of 10 CFR Part 73</b>			
<b>SE Section</b>	<b>PSP Section</b>	<b>Alternative to 10 CFR</b>	<b>Description</b>
3.6.2	6.2	73.55(c)(3)	Isolation Zones
3.9.4.3	9.4.3	73.55(d)(4)	Protected Area (PA) vehicle search requirements
3.9.4.4	9.4.4	73.55(d)(1)	PA personnel search requirements
3.9.5.2	9.5	73.55(d)(1) 73.55(d)(4)	PA access control requirements
3.10.1	10.1	73.55(c)(5)	PA illumination requirements
3.13.1	14.1	73.55(c)(1) 73.55(d)(7)(i)(B)	Temporary reclassification of Vital Areas to PA status (devitalization)

Finally, consistent with the DBT Order, conforming administrative changes to Facility Operating Licenses (FOLs) are required to ensure implementation of the DBT Order requirements. Therefore, administrative license changes to Renewed FOL No. DPR-51 and FOL NPF-6 are being made to incorporate the reference to the revised **PSP, SCP, and T&Q Plans** required by the DBT Order. These changes comply with the standards and requirements of the Atomic Energy Act of 1954, as amended, and the Commission's rules and regulations set forth in 10 CFR Chapter I.

Mr. Forbes

-3-

Please replace the enclosed pages to your Renewed FOL and FOL as indicated in the Enclosure 1.

A copy of our SE (designated as Safeguards Information), is provided in Enclosure 2.

Sincerely,

**/RA/**

John A. Nakoski, Chief  
Security Plan Review Team  
Project Directorate II  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket Nos. 50-313 and 50-368

Enclosures: 1. Administrative Change to Renewed FOL No. DPR-51 and FOL No. NPF-6  
2. Safety Evaluation (**Safeguards Information**)

cc w/encl 1 only: See Mailing List 1

cc w/encls 1 and 2: Mr. Michael R. Higgins, Superintendent of Plant Security

Mr. Forbes

-3-

Please replace the enclosed pages to your Renewed FOL and FOL as indicated in Enclosure 1.

A copy of our SE (designated as Safeguards Information), is provided as Enclosure 2.

Sincerely,

**/RA/**

John A. Nakoski, Chief  
Security Plan Review Team  
Project Directorate II  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket Nos. 50-313 and 50-368

Enclosures: 1. Administrative Change to Renewed FOL No. DPR-51 and FOL No. NPF-6  
2. Safety Evaluation (**Safeguards Information**)

cc w/encl 1 only: See Mailing List 1

cc w/encls 1 and 2: Mr. Michael R. Higgins, Superintendent of Plant Security

**DISTRIBUTION:**

PUBLIC      SPRT R/F      OGC      ACRS      DJohnson      TAlexion  
DHolland      RGramm      HBerkow      GHill (4)      DLPM DPR      TBoyce  
AHowell, RIV

Accession No.:

\*See Previous Concurrence

OFFICE	SPRT/TL	SPRT/PM	SPRT/LA	SPRT/PL	OGC	NSIR/SC	NRR/SC
NAME	PPeduzzi*	MChernoff*	CHawes*	JPeralta*	DCummings	SMorris	JNakoski
DATE	10/12/04	10/14/04	10/12/04	10/24/04	10/23/04	10/27/04	10/28/04

OFFICIAL RECORD COPY

Arkansas Nuclear One

cc w/o encl.:

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

Director, Division of Radiation  
Control and Emergency Management  
Arkansas Department of Health  
4815 West Markham Street, Slot 30  
Little Rock, AR 72205-3867

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

Mr. Mike Schoppman  
Framatome ANP  
3815 Old Forest Road  
Lynchburg, VA 24501

Senior Resident Inspector  
U.S. Nuclear Regulatory Commission  
P. O. Box 310  
London, AR 72847

Regional Administrator, Region IV  
U.S. Nuclear Regulatory Commission  
611 Ryan Plaza Drive, Suite 400  
Arlington, TX 76011-8064

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

Vice President, Operations Support  
Entergy Operations, Inc.  
P. O. Box 31995  
Jackson, MS 39286-1995

Wise, Carter, Child & Caraway  
P. O. Box 651  
Jackson, MS 39205

ENTERGY OPERATIONS, INC

DOCKET NO. 50-313

ARKANSAS NUCLEAR ONE, UNIT 1

ADMINISTRATIVE LICENSE CHANGE TO RENEWED FACILITY OPERATING LICENSE

Renewed License No. DPR-51

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. Consistent with Order EA-03-086, the Order requiring compliance with revised design basis threat, (DBT Order), issued on April 29, 2003, conforming administrative changes to Facility Operating Licenses are required to ensure implementation of the DBT Order requirements. Therefore, an administrative license change to Renewed Facility Operating License (FOL) No. DPR-51 is being made to incorporate the reference to the revised **Physical Security Plan, Safeguards Contingency Plan, and Training and Qualification Plan** required by the DBT Order. These changes comply with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this administrative license change can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this administrative license change will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this administrative license change is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

Enclosure 1

2. Accordingly, the Renewed FOL is changed, as indicated in the attachment.
3. This administrative license change is effective as of its date of issuance and shall be implemented on or before October 29, 2004.

FOR THE NUCLEAR REGULATORY COMMISSION

***/RA/***

John A. Nakoski, Section Chief,  
Security Plan Review Team,  
Project Directorate II  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Attachment: Changes to the Renewed FOL

Date of Issuance: October 28, 2004

CHANGES TO RENEWED FACILITY OPERATING LICENSE NO. DPR-51

DOCKET NO. 50-313

Replace the following pages of the Renewed Facility Operating License DPR-51 with the attached revised pages as indicated. The revised pages are identified by revision date and contains marginal lines indicating the area of change.

Remove Page

3

4

Insert Page

3

4



- (4) EOI, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess and use at any time any byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
  - (5) EOI, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components;
  - (6) EOI, pursuant to the Act and 10 CFR Parts 30 and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.
- c. This renewed license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations in 10 CFR Chapter I: Part 20, Section 30.34 of Part 30, Section 40.41 of Part 40, Sections 50.54 and 50.59 of Part 50, and Section 70.32 of Part 70; is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

EOI is authorized to operate the facility at steady state reactor core power levels not in excess of 2568 megawatts thermal.

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 221, are hereby incorporated in the renewed license. EOI shall operate the facility in accordance with the Technical Specifications.

(3) Safety Analysis Report

The licensee's SAR supplement submitted pursuant to 10 CFR 54.21(d), as revised on March 14, 2001, describes certain future inspection activities to be completed before the period of extended operation. The licensee shall complete these activities no later than May 20, 2014.

(4) Physical Protection

EOI shall fully implement and maintain in effect all provisions of the Commission-approved physical security, training and qualification,

and safeguards contingency plans, including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The plan, which contains Safeguards Information protected under 10 CFR 73.21, is entitled: "Arkansas Nuclear One Physical Security Plan, Training and Qualifications Plan, and Safeguards Contingency Plan," as submitted on October 4, 2004.

(5) Implementation of the Improved Technical Specifications (ITS)

The licensee is authorized to relocate certain Technical Specification requirements previously included in Appendix A to licensee controlled documents, as described in Table R, Relocated Specifications, and Table LA, Removal of Details, attached to the Safety Evaluation for Amendment No. 215. These requirements shall be relocated to the appropriate documents as part of the implementation of the ITS.

The schedule for performing Surveillance Requirements (SRs) that are new or revised in Amendment No. 215 shall be as follows:

1. For SRs that are new in this amendment, the first performance shall be due at the end of the first surveillance interval, which begins on the date of implementation of this amendment.
  2. For SRs that existed prior to this amendment whose intervals of performance are being reduced, the first reduced surveillance interval shall begin upon completion of the first surveillance performed after implementation of this amendment.
  3. For SRs that existed prior to this amendment that contained modified acceptance criteria, the performance shall be due at the end of the first surveillance interval that began on the date the surveillance was last performed prior to the implementation of this amendment.
  4. For SRs that existed prior to this amendment whose interval of performance are being extended, the first extended surveillance interval shall begin upon completion of the last surveillance performed prior to the implementation of this amendment.
- (6) Deleted
- (7) Deleted

ENERGY OPERATIONS, INC.

DOCKET NO. 50-368

ARKANSAS NUCLEAR ONE, UNIT 2

ADMINISTRATIVE LICENSE CHANGE TO FACILITY OPERATING LICENSE

License No. NPF-6

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. Consistent with Order EA-03-086, the Order requiring compliance with revised design basis threat, (DBT Order), issued on April 29, 2003, conforming administrative changes to Facility Operating Licenses (FOLs) are required to ensure implementation of the DBT Order requirements. Therefore, an administrative license change to FOL No. NPF-6 is being made to incorporate the reference to the revised **Physical Security Plan, Safeguards Contingency Plan, and Training and Qualification Plans** required by the DBT Order. These changes comply with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this administrative license change can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this administrative license change will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this administrative license change is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the FOL is changed, as indicated in the attachment.
3. This administrative license change is effective as of its date of issuance and shall be implemented on or before October 29, 2004.

FOR THE NUCLEAR REGULATORY COMMISSION

***/RA/***

John A. Nakoski, Section Chief,  
Security Plan Review Team,  
Project Directorate II  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Attachment: Changes to the FOL

Date of Issuance: October 28, 2004

CHANGES TO FACILITY OPERATING LICENSE NO. NPF-6

DOCKET NO. 50-368

Replace the following page of the Facility Operating License NPF-6 with the attached revised page as indicated. The revised page is identified by revision date and contains marginal lines indicating the area of change.

Remove Page

8

Insert Page

8

2.C.(4) (Number has never been used.)

- (5) EOI shall implement a program to reduce leakage from systems outside containment that would or could contain highly radioactive fluids during a serious transient or accident to as low as practical levels. This program shall include the following:
  - 1. Provisions establishing preventative maintenance and periodic visual inspection requirements, and
  - 2. Integrated leak test requirements for each system at a frequency not to exceed refueling cycle intervals.
- (6) EOI shall implement a program which will ensure the capability to accurately determine the airborne iodine concentration in vital areas under accident conditions. This program shall include the following:
  - 1. Training of personnel,
  - 2. Procedures for monitoring, and
  - 3. Provisions for maintenance of sampling and analysis equipment.

2.C.(7) Deleted per Amendment 78, 7/22/86.

(8) Antitrust Conditions

EOI shall not market or broker power or energy from Arkansas Nuclear One, Unit 2. Entergy Arkansas, Inc. is responsible and accountable for the actions of its agents to the extent said agent's actions affect the marketing or brokering of power or energy from ANO, Unit 2.

(9) Rod Average Fuel Burnup

Entergy Operations is authorized to operate the facility with an individual rod average fuel burnup (burnup averaged over the length of a fuel rod) not to exceed 60 megawatt-days/kilogram of uranium.

(D) Physical Protection

EOI shall fully implement and maintain in effect all provisions of the Commission-approved physical security, training and qualification, and safeguards contingency plans, including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The plan, which contains Safeguards Information protected under 10 CFR 73.21, is entitled: "Arkansas Nuclear One Physical Security, Safeguards Contingency and Training & Qualification Plan," as submitted on October 4, 2004.

-  
-  
-  
-  
-  
-  
-  
-