



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

March 30, 2009

Vice President, Operations  
Arkansas Nuclear One  
Entergy Operations, Inc.  
1448 S.R. 333  
Russellville, AR 72802

SUBJECT: ARKANSAS NUCLEAR ONE, UNIT NO. 1 - ISSUANCE OF AMENDMENT RE:  
TECHNICAL SPECIFICATION CHANGES ASSOCIATED WITH ADOPTION OF  
TSTF-359 (TAC NO. MD9536)

Dear Sir or Madam:

The U.S. Nuclear Regulatory Commission has issued the enclosed Amendment No. 236 to Renewed Facility Operating License No. DPR-51 for Arkansas Nuclear One, Unit No. 1 (ANO-1). The amendment consists of changes to the Technical Specifications (TSs) in response to your application dated July 21, 2008.

The amendment deletes an exception to Limiting Condition for Operation (LCO) 3.0.4 for the 30-day allowable outage time of the Startup No. 2 Transformer in TS 3.8.1. The Nuclear Regulatory Commission (NRC) approved adoption of Industry/TS Task Force (TSTF) change traveler TSTF-359, "Increased Flexibility in Mode Restraints," for ANO-1 in TS Amendment 232 dated April 2, 2008. The intent of TSTF-359 was to eliminate exceptions to LCO 3.0.4 within individual specifications and provide requirements within LCO 3.0.4 to control mode changes when TS-required equipment is inoperable. Entergy Operations, Inc., omitted deleting this LCO 3.0.4 exception in its October 22, 2007, amendment request to adopt TSTF-359.

A copy of our related Safety Evaluation is also enclosed. The Notice of Issuance will be included in the Commission's next biweekly *Federal Register* notice.

Sincerely,

A handwritten signature in cursive script that reads "Alan Wang".

Alan B. Wang, Project Manager  
Plant Licensing Branch IV  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-313

Enclosures:

1. Amendment No. 236 to DPR-51
2. Safety Evaluation

cc w/encls: Distribution via Listserv



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

ENTERGY OPERATIONS, INC.

DOCKET NO. 50-313

ARKANSAS NUCLEAR ONE, UNIT NO. 1

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

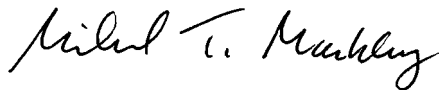
Amendment No. 236  
Renewed License No. DPR-51

1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Entergy Operations, Inc. (the licensee), dated July 21, 2008, complies 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 amendment 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 license amendment 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 amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and Paragraph 2.C.(2) of Renewed Facility Operating License No. DPR-51 is hereby amended to read as follows:
  - (2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 236 , are hereby incorporated in the renewed license. EOI shall operate the facility in accordance with the Technical Specifications.
3. The license amendment is effective as of its date of issuance and shall be implemented within 90 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Michael T. Markley, Chief  
Plant Licensing Branch IV  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Renewed Facility  
Operating License No. DPR-51  
and Technical Specifications

Date of Issuance: March 30, 2009

ATTACHMENT TO LICENSE AMENDMENT NO. 236  
RENEWED FACILITY OPERATING LICENSE NO. DPR-51  
DOCKET NO. 50-313

Replace the following pages of the Renewed Facility Operating License No. DPR-51 and Appendix A Technical Specifications with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Operating License

REMOVE

License Page 3

INSERT

License Page 3

Technical Specifications

REMOVE

3.8.1-2

INSERT

3.8.1-2

- (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. 236 , 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 combined set of plans, 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 May 4, 2006.

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>A. (continued)</p>	<p>A.3 -----NOTE----- Startup Transformer No. 2 may be removed from service for up to 30 days for preplanned preventative maintenance. This 30 day Completion Time may be applied not more than once in any 10 year period. -----</p> <p>Restore required offsite circuit to OPERABLE status.</p>	<p>72 hours</p> <p><u>AND</u></p> <p>10 days from discovery of failure to meet LCO</p>
<p>B. One DG inoperable.</p>	<p>B.1 Perform SR 3.8.1.1 for OPERABLE required offsite circuit(s).</p> <p><u>AND</u></p> <p>B.2 Declare required feature(s) supported by the inoperable DG inoperable when its redundant required feature(s) is inoperable.</p> <p><u>AND</u></p> <p>B.3.1 Determine OPERABLE DG is not inoperable due to common cause failure.</p> <p><u>OR</u></p>	<p>1 hour</p> <p><u>AND</u></p> <p>Once per 12 hours thereafter</p> <p>4 hours from discovery of Condition B concurrent with inoperability of redundant required feature(s)</p> <p>24 hours</p>



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 236 TO

RENEWED FACILITY OPERATING LICENSE NO. DPR-51

ENTERGY OPERATIONS, INC.

ARKANSAS NUCLEAR ONE, UNIT NO. 1

DOCKET NO. 50-313

1.0 INTRODUCTION

By application dated July 21, 2008 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML082040897), Entergy Operations, Inc. (the licensee), requested changes to the Technical Specifications (TSs) for Arkansas Nuclear One, Unit No. 1 (ANO-1).

The proposed change deletes the exception to Limiting Condition of Operation (LCO) 3.0.4 to the 30-day allowable outage time of the Startup No. 2 Transformer in TS 3.8.1. The Nuclear Regulatory Commission (NRC) approved the adoption of Industry/TS Task Force (TSTF) change traveler TSTF-359, "Increased Flexibility in Mode Restraints" (TSTF-359), for ANO-1 in TS Amendment 232 dated April 2, 2008 (ADAMS Accession No. ML080600006). The intent of TSTF-359 was to eliminate exceptions to LCO 3.0.4 within individual specifications and provide requirements within LCO 3.0.4 to control mode changes when TS-required equipment is inoperable. The licensee omitted deleting this LCO 3.0.4 exception in its October 22, 2007 (ADAMS Accession No. ML073030542), amendment request to adopt TSTF-359.

2.0 REGULATORY EVALUATION

In Section 50.36, "Technical specifications," of Title 10 of the *Code of Federal Regulations* (10 CFR), the Commission established its regulatory requirements related to the content of TS. Pursuant to 10 CFR 50.36, TS are required to include items in the following five specific categories related to station operation: (1) safety limits, limiting safety system settings, and limiting control settings; (2) LCOs; (3) surveillance requirements (SRs); (4) design features; and (5) administrative controls. The rule does not specify the particular requirements to be included in a plant's TS. As stated in 10 CFR 50.36(c)(2)(i), the "[l]imiting conditions for operation are the lowest functional capability or performance levels of equipment required for safe operation of the facility. When a limiting condition for operation of a nuclear reactor is not met, the licensee shall shut down the reactor or follow any remedial action permitted by the technical specification...." By convention, the LCOs are contained in Sections 3.1 through 3.10 of the TS. TS Section 3.0, on LCO and SR Applicability, provides details or ground rules for complying with the LCOs. LCO 3.0.4 and SR 3.0.4 address requirements for LCO compliance when

transitioning between modes of operation. This proposed TS change modifies the current ANO-1 TSs to be consistent with the previously approved TSTF-359.

### 3.0 TECHNICAL EVALUATION

#### 3.1 Removal of LCO 3.0.4 Exception to TS 3.8.1

By letter dated April 2, 2008, the NRC staff approved the licensee's amendment request to adopt the provisions of TSTF change TSTF-359, "Increased Flexibility in Mode Restraints." Following implementation of TS Amendment 232, the licensee found that an LCO 3.0.4 exception to TS 3.8.1 was not provided to the NRC for review in its April 2, 2008, submittal and subsequently was not included in the NRC-approved TS amendment. This exception is associated with an ANO specific application of maintenance related to the Startup No. 2 Transformer. This transformer is shared between the ANO units. The 30-day allowable outage time to support maintenance is not generic to the industry; therefore, it is not included in the standard TSs of NUREG-1430 for Babcock & Wilcox plants. Because this particular LCO 3.0.4 exception was not denoted in TSTF-359 it was not readily apparent that an affected page was missing when the final comparison of the licensee's letter to the TSTF-359 mark-ups was completed prior to transmitting to the NRC. The licensee has stated that the aforementioned omission has been entered into the ANO Corrective Action Process. The licensee has proposed to modify TS 3.8.1 by deleting the exception to LCO 3.0.4 to the 30-day allowable outage time of the Startup No. 2 Transformer to maintain consistency with the intent of TSTF-359.

Prior to the implementation of TSTF-359, plant startup was not permitted when equipment was inoperable unless the associated Actions of the TS associated with the equipment permitted continuous operation in the desired mode of operation. Because of this, some TSs were excluded from LCO 3.0.4 requirements, in order to support plant startup, when certain TS parameters were found to not be within limits, to support TS required testing where higher modes of operation are required to support such testing, and to permit plant startup when TS Completion Times (CTs) were substantial. In the case of the ANO-1 Startup No. 2 Transformer, the TS CT of the 10-year preventative maintenance activity is 30 days. Because of this long CT, the NRC approved an exception to LCO 3.0.4 such that plant startup would be permitted during periods when Startup No. 2 Transformer was out of service during the 10-year preventative maintenance activity. While the LCO exception 3.0.4 would allow the plant to start up, the startup transformer would still be required to be restored to an operable status within 30 days or the plant would be required to be shut down.

TSTF-359 proposed to delete all such "exceptions" to LCO 3.0.4 by implementing a new LCO 3.0.4.b which would require a risk assessment be performed prior to startup with inoperable equipment, such as the aforementioned startup transformer. In the April 2, 2008, safety evaluation supporting TSTF-359, the NRC staff stated:

Current notes in individual specifications that permitted mode changes are now encompassed by LCO 3.0.4(b) and can be removed. In addition, during the STS [Standard Technical Specifications] development, almost all the LCOs with completion times greater than or equal to 30 days, and many LCOs with completion times greater than or equal to 7 days, were given individual



LCO 3.0.4 exceptions. During some conversions to the STS, individual plants provided acceptable justifications for other LCO 3.0.4 exceptions. All of these specific LCO 3.0.4 exceptions allow entry into a mode or other specified condition in the TS applicability while relying on the TS required actions and associated completion times.

Therefore, because plant startup was permitted without performance of a risk assessment prior to TSTF-359, adoption of TSTF-359 and deletion of all LCO 3.0.4 exception notes is conservative.

As a result of the ANO-1 adoption of TSTF-359, the LCO 3.0.4 exception (i.e., stating that LCO 3.0.4 is not applicable) in TS 3.8.1 is invalidated. With the current LCO 3.0.4 wording, plant startup can no longer occur if Startup No. 2 Transformer is inoperable for its 10-year preventative maintenance activity. As stated above, it was not the intent of TSTF-359 to remove plant startup capability, but to require a risk assessment prior to proceeding with a plant startup. The proposed elimination of the LCO 3.0.4 exception contained in ANO-1 TS 3.8.1 complies with the intent of TSTF-359, which was previously approved for ANO-1. The NRC staff has concluded that as a result of the adoption of TSTF-359, the TS 3.8.1 LCO 3.0.4 exception is no longer valid; therefore, the removal of the LCO 3.0.4 exception is consistent with the previously approved amendment adopting TSTF-359. The removal of the LCO 3.0.4 exception to require the performance of a risk assessment, when applicable, is more conservative than the current TS and is, therefore, acceptable.

### 3.2 Misspelled Word in TS 3.8.1.B.2

The licensee noted that in the CT for TS 3.8.1.B.2 that inoperability was misspelled as "inoperability." The NRC staff found that in the ADAMS version it was spelled correctly and the change is not needed.

## 4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Arkansas State official was notified of the proposed issuance of the amendment. The State official had no comments.

## 5.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on such finding published in the *Federal Register* on October 21, 2008 (73 FR 62563). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

## 6.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: A. Wang

Date: March 30, 2009

March 30, 2009

Vice President, Operations  
Arkansas Nuclear One  
Entergy Operations, Inc.  
1448 S.R. 333  
Russellville, AR 72802

SUBJECT: ARKANSAS NUCLEAR ONE, UNIT NO. 1 - ISSUANCE OF AMENDMENT RE:  
TECHNICAL SPECIFICATION CHANGES ASSOCIATED WITH ADOPTION OF  
TSTF-359 (TAC NO. MD9536)

Dear Sir or Madam:

The U.S. Nuclear Regulatory Commission has issued the enclosed Amendment No. 236 to Renewed Facility Operating License No. DPR-51 for Arkansas Nuclear One, Unit No. 1 (ANO-1). The amendment consists of changes to the Technical Specifications (TSs) in response to your application dated July 21, 2008.

The amendment deletes an exception to Limiting Condition for Operation (LCO) 3.0.4 for the 30-day allowable outage time of the Startup No. 2 Transformer in TS 3.8.1. The Nuclear Regulatory Commission (NRC) approved adoption of Industry/TS Task Force (TSTF) change traveler TSTF-359, "Increased Flexibility in Mode Restraints," for ANO-1 in TS Amendment 232 dated April 2, 2008. The intent of TSTF-359 was to eliminate exceptions to LCO 3.0.4 within individual specifications and provide requirements within LCO 3.0.4 to control mode changes when TS-required equipment is inoperable. Entergy Operations, Inc., omitted deleting this LCO 3.0.4 exception in its October 22, 2007, amendment request to adopt TSTF-359.

A copy of our related Safety Evaluation is also enclosed. The Notice of Issuance will be included in the Commission's next biweekly *Federal Register* notice.

Sincerely,

/RA/

Alan B. Wang, Project Manager  
Plant Licensing Branch IV  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-313

Enclosures:

- 1. Amendment No. 236 to DPR-51
- 2. Safety Evaluation

cc w/encls: Distribution via Listserv

DISTRIBUTION:

PUBLIC RidsNrrDorIDpr Resource RidsOgcRp Resource  
LPLIV RF RidsNrrDorLpl4 Resource RidsRgn4MailCenter Resource  
RidsAcrsAcnwMailCTR Resource RidsNrrPMANO Resource  
RidsNrrDirsltsb Resource RidsNrrLAJBurkhardt Resource

**ADAMS Accession No. ML083030450**

\*See previous concurrence

OFFICE	NRR/LPL4/PM	NRR/LPL4/LA	NRR/LPL4/LA	DIRS/ITSB/BC	OGC – NLO	NRR/LPL4/BC	NRR/LPL4/PM
NAME	AWang*	GLappert*	JBurkhardt*	RElliott *	AJones	MMarkley*	AWang
DATE	12/15/08	12/15/08	1/14/09	1/14/09	3/6/09	3/27/09	3/30/09

: