



**ENTERGY**

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**Jerry W. Yelverton**  
Executive Vice President  
and Chief Operating Officer

May 20, 1996

2CAN059602

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

Subject: Arkansas Nuclear One - Unit 2  
Docket No. 50-368  
License No. NPF-6  
Amendment Number 13 to the ANO-2 Updated Safety Analysis Report

Gentlemen:

In accordance with 10CFR50.71(e) and 10CFR50.4(b)(6), 10 copies of Amendment 13 of the Arkansas Nuclear One, Unit 2 (ANO-2) Safety Analysis Report (SAR) are enclosed (Controlled Copies II-102 through II-111). Pursuant to 10CFR50.71(e)(4), these documents are being submitted within six months following the previous ANO-2 refueling outage (2R11) which ended on May 20, 1995.

A summary of the 10CFR50.59 evaluations associated with Amendment 13 of the ANO-2 SAR will be provided under a separate cover letter within 30 days as part of the ANO-2 10CFR50.59 Report.

As required by 10CFR50.71(e)(2), I hereby certify that to the best of my knowledge and belief, the information contained in Amendment 13 of the ANO-2 SAR accurately reflects changes made since the previous submittal. The changes to the SAR reflect information and analyses submitted to the Commission, prepared pursuant to Commission requirements, or made under the provisions of 10CFR50.59.

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G. Kalman

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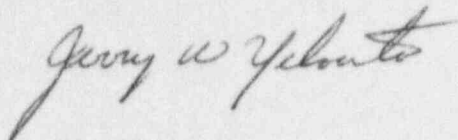
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*G. Kalman*

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Attached is the SAR amendment package containing the SAR cover page and replacement page instruction listing.

Very truly yours,



JWY/dc

Attachments

cc: Mr. Leonard J. Callan  
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ATTACHMENT TO UPDATED SAR AMENDMENT NUMBER 13

FACILITY OPERATING LICENSE NUMBER NPF-6

DOCKET NUMBER 50-368

This attachment lists replacement text sections and figures for the subject SAR which will remain in effect for subsequent versions and modifications, unless specifically altered.

A change is indicated by beginning the affected information with a revision bar on the left side of the page which stops at the end of the change. Deletions of entire paragraphs or sections have a revision bar to the left of the page where text was deleted. The amendment number is indicated at the bottom of the affected page near the left margin (Amendment No. 13). Absence of a revision bar on a replacement page means the page was reprinted for word processing purposes only.



Unit 2  
Amendment 13  
Section/Figure Replacement Instructions

All text pages and designated figures for the SAR sections/figures listed below are to be removed and replaced with the corresponding Amendment 13 SAR sections. The Master Table of Contents is to be removed and replaced in its entirety. The Table of Contents section for each chapter that was affected by the current Amendment is to be removed and replaced with the corresponding Amendment 13 Table of Contents sections. Remove only the figures listed for each chapter. Replace them with correspondingly numbered figures designated Amendment 13 unless otherwise instructed. All other figures remain the same as in the previous amendment. Any special filing instructions, new sections, figures, etc., are listed below.

**Master Table of Contents**

Remove entire Table of Contents and replace with new Master Table of Contents labeled Amendment 13.

**Chapter 1**

Chapter 1 Table of Contents Section  
Sections 1.2, 1.3, 1.5, and 1.9  
Figures 1.2-1 through 1.2-5  
Figure 1.2-8  
Figure 1.7-1 Sheets 2 and 3

**Chapter 2**

Chapter 2 Table of Contents Section  
Figure 2.4-8  
Figure 2.5-17

**Chapter 3**

Chapter 3 Table of Contents Section  
Sections 3.1, 3.6 through 3.11, and 3.13

Pages 3.13-22 through 3.13-187 should be filed behind the "Q-List" tab and should completely replace the information filed previously behind that tab.

Figure 3.2-1 Sheets 1 and 2  
Figure 3.2-2 Sheet 1  
Figure 3.2-3 Sheets 1 and 2  
Figure 3.2-4 Sheets 1, 2, and 3

### **Chapter 3 (continued)**

Figure 3.2-5 Sheets 1 and 2  
Figure 3.2-6 Sheets 1 and 3  
Figure 3.5-1  
Figures 3.5-5 and 3.5-6  
Figures 3.5-9 through 3.5-11  
Figure 3.5-15  
Figure 3.6-3 Sheet 1  
Figures 3.6-5 through 3.6-9  
Figures 3.6-24 through 3.6-27  
Figures 3.6-33 and 3.6-34  
Figures 3.6-39 through 3.6-46  
Figures 3.6-50 through 3.6-59  
Figure 3.6-64  
Figures 3.6-66 through 3.6-68

### **Chapter 4**

Chapter 4 Table of Contents Section  
Sections 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, and 4.7  
Figures 4.1-1 and 4.1-2  
Figures 4.2-3 and 4.2-4  
Figure 4.2-6  
Figures 4.2-18 and 4.2-18A  
Figure 4.2-19

New Figures 4.3-1A through 4.3-1G

Figures 4.3-1A through 4.3-1G should be  
filed behind 4.3-1

Figures 4.3-2 through 4.3-13

Figure 4.3-19

Figures 4.3-20 through 4.3-20C

New Figure 4.3-24A

Figure 4.3-24A should be filed behind  
4.3-24

Figures 4.3-25 through 4.3-25B

Figures 4.3-26 through 4.3-28

Figures 4.3-29 through 4.3-29D

Figure 4.3-34

Figures 4.3-35 through 4.3-35E

Figures 4.3-36 through 4.3-40

Figures 4.3-43 through 4.3-45

Figure 4.4-12

New Figure 4.5-1

Figure 4.5-1 should be filed behind 4.4-14

#### **Chapter 4A**

Remove all of Chapter 4A, Amendment 12, from the first page of the Table of Contents through Figure 4A.5-9 and replace with Chapter 4A, Amendment 13, pages.

#### **Chapter 4B**

Remove entire contents of Chapter 4B.

#### **Chapter 5**

Chapter 5 Table of Contents Section  
Sections 5.2, 5.5, 5.6, and 5.8  
Figure 5.1-3 Sheets 1 and 2  
Figure 5.5-2 Sheet 1

#### **Chapter 6**

Chapter 6 Table of Contents Section  
Sections 6.2, 6.3, 6.5, 6.6, and 6.7  
Figure 6.2-3G  
New Figures 6.2-3L through 6.2-3N

New Figure 6.2-16P

Figure 6.2-17 Sheets 1 and 2  
New Figures 6.2-30 through 6.2-34

Figure 6.3-2  
Figures 6.3-13A through 6.3-13H  
Figures 6.3-14A through 6.3-14H  
Figures 6.3-15A through 6.3-15H  
Figures 6.3-16A through 6.3-16H  
Figures 6.3-17A through 6.3-17H  
Figures 6.3-18A through 6.3-18R

Figures 6.3-19A through 6.3-19H  
Figures 6.3-20 and 6.3-21

Figures 6.2-3L through 6.2-3N should be  
filed behind 6.2-3K

Figure 6.2-16P should be filed behind  
6.2-16O

Figure 6.2-30 through 6.2-34 should be  
filed behind 6.2-29B

Figures 6.3-18I through 6.3-18R should be  
filed behind 6.3-18H

## **Chapter 7**

### Chapter 7 Table of Contents Section

Sections 7.2, 7.3, 7.5, 7.7, and 7.8

Figure 7.2-8 Sheets 1 and 2

New Figure 7.2-16

Figure 7.2-16 should be filed behind 7.2-15

Figures 7.2-16A and 7.2-16B

Figure 7.2-17A

FMEA Diagram 3

New FMEA Diagram 3A

FMEA Diag. 3A should be filed behind  
FMEA Diag. 3

FMEA Diagrams 12 and 13

Figure 7.3-7 Sheet 3

DRG. No. 2402 Figure 7.3-9 Sheets 2, 3, 4, and 6

Figure 7.3-10 Sheets 1 and 3

Figure 7.3-12 Sheet 2

Figure 7.4-1 Sheets 3, 6, and 8

Figure 7.4-2 Sheets 1, 4, and 6

Figure 7.7-6

## **Chapter 8**

### Chapter 8 Table of Contents Section

Sections 8.1, 8.3, and 8.4

Figure 8.3-2

Figures 8.3-4 and 8.3-5

Figures 8.3-7 through 8.3-16

Figure 8.3-17 Sheet 2

Figure 8.3-19 Sheet 1

Figures 8.3-21 and 8.3-22

Figures 8.3-25 and 8.3-26

Figure 8.3-28

Figure 8.3-29 Sheet 1

Figures 8.3-32 and 8.3-33

Figure 8.3-34 Sheet 1

Figure 8.3-35 Sheets 1 and 2

Figure 8.3-36

Figure 8.3-38 Sheet 2

Figure 8.3-39 Sheets 1 and 1A

Figure 8.3-40 Sheets 1 and 1A

Figure 8.3-43 Sheets 1, 1A, 1B, and 1C

Sheets 1A, 1B, and 1C are new figures and  
should be filed behind Sheet 1

Figure 8.3-44 Sheets 1A and 1B

Figure 8.3-45 Sheets 1A and 1B



**Chapter 8** (continued)

Figure 8.3-46 Sheets 1, 1A, 1B, and 1C      Sheets 1A, 1B, and 1C are new figures and  
should be filed behind Sheet 1

Figure 8.3-47

Figure 8.3-49 Sheets 1 and 1A

DWG. No. 2012 Figure 8.3-50 Sheets 2, 3A, and 5

DWG. No. 2456 Figure 8.3-50 Sheets 3B and 3C

DWG. No. 2102 Figure 8.3-51 Sheets 2 through 2H, and 2J

DWG. No. 2012 Figure 8.3-51 Sheets 3 and 4

Figure 8.3-52 Sheets 1 through 1H, 1J, 3, 4, and 5

Sheets 1A through 1J are new figures and  
should be filed behind Sheet 1

Figures 8.3-53 and 8.3-54

Figures 8.3-59 through 8.3-62

Figures 8.3-64 through 8.3-67

Figure 8.3-69

Figures 8.3-75 through 8.3-77

Figure 8.3-95A Sheet 2

Figure 8.3-108 Sheets 1 through 1C

Figure 8.3-109 Sheets 1 through 8

Figure 8.3-110

**Chapter 9**

Chapter 9 Table of Contents Section

Sections 9.2, 9.3, 9.4, 9.5, 9.6, 9.7, and 9D

Figure 9.1-1

DWG. No 2210 Figure 9.2-1 Sheets 1, 2, and 3

DWG. No 2211 Figure 9.2-1

Figure 9.2-6 Sheets 1 and 2

DWG. No. 2212 Figure 9.2-7 Sheets 3, 4, and 5

Figure 9.2-11

Figures 9.2-14 through 9.2-21

Figure 9.3-1 Sheets 1, 2, and 3

Figure 9.3-2 Sheets 1 and 4

Figure 9.3-3 Sheet 4

Figure 9.3-4 Sheets 1 and 2

Figure 9.4-1 Sheets 1 and 5

Figure 9.4-2 Sheets 1, 2, 3, and 4

Sheet 4 is a new figure and should be filed  
behind sheet 3

Figure 9.4-3 Sheets 1 and 5

Sheet 5 is a new figure and should be filed  
behind sheet 4

Figure 9.4-4 Sheets 1 and 3

**Chapter 9** (continued)

Figure 9.5-1 Sheets 2, 4, 5, and 7

Figure 9.5-8 Sheets 1 and 3

Figure 9.5-9 Sheet 1

**Chapter 10**

Chapter 10 Table of Contents Section

Sections 10.3, 10.4, and 10.5

Figure 10.2-3 Sheets 1 and 2

Figure 10.2-4 Sheets 2 and 4

Figure 10.2-5 Sheet 1

Figure 10.4-1

Figure 10.4-2 Sheets 1, 2, 3, 4, and 5

Figure 10.4-3 Sheets 2 and 3

Figure 10.4-4 Sheets 1, 2, and 3

Figure 10.4-7

**Chapter 11**

Chapter 11 Table of Contents

Sections 11.2, 11.3, 11.4, and 11.5

Figure 11.2-1 Sheets 1, 3, 4, 6, 7, and 8

Figure 11.2-2 Sheets 1, 2, and 3

Figure 11.2-3 Sheet 1

Figures 11.3-1 and 11.3-2

Figure 11.5-1

**Chapter 12**

Chapter 12 Table of Contents Section

Sections 12.1, 12.2, 12.3, and 12.4

Figure 12.1-5

Figure 12.1-9

Figure 12.1-11

**Chapters 13**

Chapter 13 Table of Contents Section

Sections 13.2 and 13.5

**Chapter 14**

Chapter 14 Table of Contents Section  
Section 14.1

**Chapter 15**

Chapter 15 Table of Contents Section  
Sections 15.1, 15.2, and 15.3  
Figures 15.1.1-1 through 15.1.1-4  
Figures 15.1.2-1 through 15.1.2-4  
Figures 15.1.3-11 through 15.1.3-23  
Figures 15.1.15-1 through 15.1.15-6

**Chapters 16 & 17**

No changes



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Arkansas Nuclear One  
ANO-1, Docket # 50-313  
ANO-2, Docket # 50-368

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THIS FORM TRANSMITS THE FOLLOWING APPROVED DOCUMENT UPDATE:

UNIT II SAR

AMENDMENT #13

ANO-1 [ ]

ANO-2 [X]

COMMON [ ]

REISSUE [ ]

DOCUMENTS:

ANO MANAGEMENT MANUAL	[ ]	MAINT. PROCEDURE WRITERS GUIDE	[ ]
ANO STATION POLICY	[ ]	OFFSITE DOSE CALCULATION MANUAL	[ ]
ALTERNATE SHUTDOWN BASIS DOCUMENT	[ ]	OPERATIONS PROCEDURE WRITERS GUIDE	[ ]
AOP TECHNICAL GUIDELINES	[ ]	OPERATIONS GUIDE	[ ]
B&W OWNERS GROUP GENERIC EOP BASES	[ ]	PMEE'S	[ ]
BASIS DOCUMENT ALTERNATE SHUTDOWN	[ ]	PRE-FIRE PLAN	[ ]
CONFIRMATORY ORDERS	[ ]	PRINCIPLES MANAGE NUCLEAR PERSONNEL	[ ]
CONSUMABLE CHEMICAL MATERIAL LIST (CCML)	[ ]	QA MANUAL OPERATIONS	[ ]
EOP SETPOINT DOCUMENT	[ ]	QAO'S	[ ]
EMERGENCY PROCEDURE GUIDELINES CEN-152	[ ]	QAD'S	[ ]
EOP BASES DOCUMENT	[ ]	QCO'S	[ ]
EOP TECHNICAL GUIDELINES	[ ]	QAP'S	[ ]
EMERGENCY PLAN	[ ]	RADIATION SAFETY PROGRAM	[ ]
EMERGENCY TELEPHONE DIRECTORY	[ ]	RADIOLOGICAL EMERG. RESPONSE PLAN	[ ]
EMERGENCY RESOURCES MANUAL	[ ]	TITLE 49CFR	[ ]
FIRE HAZARD ANALYSIS (FHA)	[ ]	PIPING & INSTRUMENT DIAGRAMS (P&ID)	[ ]
HOLDCARD COMPUTER INSTRUCTION GUIDE	[ ]	SAR ( SAFETY ANALYSIS REPORT)	[X]
INDUSTRIAL SECURITY PLAN	[ ]	SAR PROPRIETARY	[ ]
INDEX (STANDARDS & PROCEDURES)(OP. MANUAL)	[ ]	SER (SAFETY EVALUATION REPORT)	[ ]
LICENSING DIRECTIVES	[ ]	TECH SPECS	[ ]

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