UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-4005

March 31, 2005

EA-03-016

Jeffrey S. Forbes
Vice President Operations
Arkansas Nuclear One
Entergy Operations, Inc.
1448 S.R. 333
Russellville, AR 72801-0967

SUBJECT: ARKANSAS NUCLEAR ONE, UNITS 1 AND 2 - NRC SUPPLEMENTAL INSPECTION REPORT 05000313/2005-011; 05000368/2005-011

Dear Mr. Forbes:

On December 14, 2004, the NRC completed the onsite portion of a supplemental inspection at your Arkansas Nuclear One Plant. This supplemental inspection was performed in accordance with Inspection Manual Chapter 2515, Appendix B, as a result of the NRC's identification of an inspection finding categorized as low to moderate increased risk to safety (White). The objective of this inspection was to ensure that you had properly identified the scope of the issues and that your proposed corrective actions were sufficiently comprehensive. Additional review activities were performed in January and February of 2005. The enclosed report documents the inspection findings which were discussed with Mr. Dale James, Director, Nuclear Safety Assurance, Arkansas Nuclear One and other members of your staff on March 29, 2005.

In a letter dated May 20, 2004, the NRC issued a Final Significance Determination for a White finding and Notice of Violation identified during the triennial fire protection inspection conducted June of 2001. The finding and violation involved your failure to ensure that one train of systems and equipment necessary for achieving hot shutdown conditions was free of fire damage as required by 10 CFR Part 50, Appendix R, Section III.G.2. Specifically, in lieu of providing physical protection for these systems, you credited operator manual actions for mitigating the effects of fire damage in the event of a fire in Fire Zone 98J (Unit 1 diesel generator corridor) and Fire Zone 99M (north electrical switchgear room). This finding is described as Unresolved Item 50-313;368/0106-02 in NRC Inspection Report 50-313/01-06;50-368/01-06, dated August 20, 2001. This issue was unresolved pending NRC review of the compliance aspects of the issue. On August 30, 2001, the NRC informed Arkansas Nuclear One management and staff that the existing configurations in Fire Zones 98J and 99M did not meet the requirements of 10 CFR Part 50, Appendix R, Section III.G.2.

By letter dated September 28, 2001, Arkansas Nuclear One management claimed that NRC's position was a backfit. The NRC convened a backfit panel whose results were presented in a letter dated April 15, 2002, to Arkansas Nuclear One management. The NRC concluded that Arkansas Nuclear One management and staff had implemented a fire protection strategy that

did not meet 10 CFR Part 50, Appendix R, Section III.G.2, and denied your backfit claim. As mentioned above, the NRC issued a Notice of Violation and final significance determination of White for this finding on April 7, 2004.

In your May 7, 2004, response to the Notice of Violation, you committed to conducting a Manual Action Review Project to identify potential modifications to the plant necessary to reduce the complexity of your manual actions required to safely shut down the plant in the event of a fire in certain fire zones. By letter dated June 30, 2004, you provided the results of the Manual Action Review Project, in which you identified specific operator manual actions that you planned to eliminate. During a public meeting with NRC Region IV, conducted on August 10, 2004, you announced your intention to conduct a comprehensive Fire Protection Improvement Project, which included re-analyzing your entire fire protection program. On September 14, 2004, you provided us with a copy of your Fire Protection Improvement Plan, in which you described a systematic approach to re-analyzing your fire protection program including a plan for re-evaluating post-fire manual actions. By letter dated December 17, 2004, you submitted a list of regulatory commitments, which included a schedule for completing modifications and analyses for eliminating certain complex manual actions required for safely shutting down the plant in the event of a fire in certain fire zones.

This supplemental inspection was performed by NRC Region IV inspectors in accordance with NRC Manual Chapter 0305 and Inspection Procedure 95001, “Supplemental Inspection for One or Two White Inputs in a Strategic Performance Area.” The NRC performed the onsite portion of this inspection in conjunction with the Arkansas Nuclear One fire protection triennial inspection conducted from September 30 to October 29, 2004. The inspectors found that the re-analysis of your fire protection safe shutdown methodology was underway, but not complete. The inspectors reviewed your extent of condition, and your immediate and intermediate corrective actions. In addition, the inspectors reviewed your plans for long-term corrective actions as documented in your Fire Protection Improvement Plan.

Based on the results of this inspection, the NRC is closing this violation. The NRC concluded that your extent of condition, and your immediate and intermediate corrective actions were appropriate. The NRC’s conclusions regarding the adequacy of your long-term corrective actions are based on a review of your Fire Protection Improvement Plan and your December 17, 2004, regulatory commitments, which described future actions to be taken. The NRC concluded that your planned long-term corrective actions as described in your Fire Protection Improvement Plan are adequate. During a phone call between you and Dwight Chamberlain, Director, Division of Reactor Safety, NRC Region IV on March 25, 2005, you indicated that you will inform us of any substantial changes that you make to your Fire Protection Improvement Plan, in addition to any changes to the regulatory commitments you made in a December 17, 2004, letter to the NRC.

The NRC has recently released for comment a revision to 10 CFR Part 50, Appendix R to permit limited use of operator manual actions for complying with Section III.G.2. Your long term corrective actions include the use of non risk-significant and non-complex operator manual actions in some fire zones. To assure compliance until the proposed rule has been issued, or until you obtain NRC-approved exemptions to the existing regulation, we understand that you will maintain fire watches in areas whose configurations do not comply with NRC regulations.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Sincerely,

//RA//

Dwight D. Chamberlain
Director
Division of Reactor Safety

Dockets: 50-313
50-368
Licenses: DPR-51
NPF-6

Enclosure:
Inspection Report 05000313/2005-011; 05000368/2005-011
w/Attachment Supplemental Information

cc w/enclosure:
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ANO Site Secretary **(VLH)**

SISP Review Completed: _Yes_____ADAMS: Yes ☐ No Initials: __rln____
Publicly Available ☐ Non-Publicly Available ☐ Sensitive Non-Sensitive

R:_ANO\2005\AN_2005-011 rp rln.wpd

SRI:PEB/DRS	C:PBD	C:PEB	D:ACES	DD:DRS	D:DRS
RNease/jm	TPruett	LJSmith	GFSanborn	KSWest	DDChamberlain
/RA/	/RA/	/RA/	/RA/	/RA/	/RA/
03/24/2005	03/30/2005	03/24/2005	03/29/2005	03/31/2005	03/31/2005

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ENCLOSURE

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

Docket(s):	50-313; 50-368
License(s):	DPR-51; NPF-6
Report No.:	05000313/2005-011; 05000368/2005-011
Licensee:	Entergy Operations, Inc.
Facility:	Arkansas Nuclear One, Units 1 and 2
Location:	Junction of Hwy. 64W and Hwy. 333 South Russellville, Arkansas
Dates:	September 27 through March 29, 2005
Inspection Leader	R. Nease, Senior Reactor Inspector, Plant Engineering Branch
Inspectors:	G. Replogle, Senior Reactor Inspector, Plant Engineering Branch P. Goldberg, Reactor Inspector, Plant Engineering Branch T. McConnell, Reactor Inspector, Plant Engineering Branch
Accompanying Personnel	D. Overland, Plant Engineering Branch T. Brown, Technical Support Staff
Contractor	K. Sullivan, Project Engineer, Brookhaven National Laboratory
Approved By:	L. J. Smith, Chief, Plant Engineering Branch

SUMMARY OF FINDINGS

IR 05000313/2005-011; 05000-368/2005-011; September 27 through March 29, 2005; Arkansas Nuclear One, Units 1 and 2; Supplemental Inspection Report

This report covered an announced inspection by four region-based inspectors, two accompanying personnel from U. S. Nuclear Regulatory Commission (NRC) Region IV, and one contractor. The onsite portion of this inspection was performed in conjunction with the ANO triennial fire protection inspection, September 27 - October 1, 2004, and October 25 - 29, 2004. Additional review of the licensee's long term program for taking corrective actions was performed in December, 2004, January, and February of 2005. No findings were identified in this supplemental inspection. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 3, dated July 2000.

Cornerstone: Mitigating Systems

The NRC used Inspection Procedure 95001, "Inspection for One or Two White Inputs in a Strategic Performance Area," to assess the licensee's response to a finding having low to moderate risk significance (White) and Notice of Violation issued on May 20, 2004. The violation involved the failure to ensure one train of equipment necessary for achieving hot shutdown conditions was free of fire damage as required by 10 CFR Part 50, Appendix R, Section III.G. In lieu of providing physical protection for these systems and equipment, the licensee credited manual operator actions for mitigating the effects of fire damage in the event of a fire in Fire Zone 98J (Unit 1 diesel generator corridor) and Fire Zone 99M (north electrical switchgear room).

The NRC determined that the licensee performed a comprehensive evaluation of the violation, which included a determination of the extent of the violation, and the implementation of immediate, intermediate, and planned corrective actions. The cause of the violation was a misinterpretation of the requirements of 10 CFR Part 50, Appendix R, which resulted in the licensee implementing a post fire shutdown methodology that relied on operator action to mitigate the effects of fire damage rather than physically protecting safe shutdown systems from fire damage, as required by 10 CFR Part 50, Appendix R, Section III.G. The licensee determined the extent of the violation, and took appropriate immediate corrective actions by posting compensatory fire watches in all fire zones affected by the violation. The licensee's intermediate corrective actions included implementing procedures for post-fire operator actions, and conducting a Manual Action Review Project to identify operator actions that may be time-critical and/or risk-significant. As long term corrective actions the licensee implemented a Fire Protection Improvement Plan to re-analyze the entire Arkansas Nuclear One fire protection program, which included a re-evaluation of post-fire operator actions, with the goal of eliminating those that may be risk-significant.

The NRC inspectors concluded that the licensee's immediate and intermediate corrective actions were appropriate. In addition, the inspectors concluded that the licensee's long-term corrective actions as outlined in their Fire Protection Improvement Plan are adequate to address the root cause of the violation. Given the licensee's acceptable performance in determining the extent of condition, taking immediate and intermediate corrective actions, and implementing a long-term corrective action program, this violation is closed.

REPORT DETAILS

01 INSPECTION SCOPE

The U.S. Nuclear Regulatory Commission (NRC) used Inspection Procedure 95001, "Inspection for One or Two White Inputs in a Strategic Performance Area," to assess the licensee's response to a finding having low to moderate risk significance ("white") and a Notice of Violation issued by letter dated May 20, 2004. The violation involved the failure to ensure one train of systems and equipment necessary for achieving hot shutdown conditions was free of fire damage as required by 10 CFR Part 50, Appendix R, Section III.G.2. Specifically, in lieu of providing physical protection for these systems and equipment, the licensee credited operator manual actions for mitigating the effects of fire damage in the event of a fire in Fire Zone 98J (Unit 1 diesel generator corridor) and Fire Zone 99M (north electrical switchgear room). This finding was not limited to Fire Zones 98J and 99M in Unit 1, but affected a number of fire zones in both units, as identified by the licensee's extent of condition evaluation.

The onsite portions of this supplemental inspection were performed in conjunction with the Arkansas Nuclear One (ANO) triennial fire protection inspection, by the same inspectors as were on the triennial fire protection inspection. The NRC chose to perform both inspections at the same time, because of significant overlap in the inspectors' reviews for each inspection. All of the fire zones selected for review in the triennial inspection were included in the extent of condition for the White finding and Notice of Violation issued May 20, 2004, which is the subject of this supplemental inspection. The triennial fire protection inspection results are documented in NRC Inspection Report 05000313/2004010;05000368/2004010, dated January 28, 2005.

Documents reviewed by NRC inspectors during this inspection are listed in the Attachment to this inspection report.

02 EVALUATION OF INSPECTION REQUIREMENTS

02..01 Problem Identification

a. Determination of who (i.e., licensee, self-revealing, or NRC) identified the issue and under what conditions

During a fire protection triennial inspection in June of 2001, the NRC identified that in Fire Zones 98J (Unit 1 diesel generator corridor) and Fire Zone 99M (north electrical switchgear room) the license had failed to ensure that one train of systems and equipment necessary for achieving hot shutdown conditions was free of fire damage as required by 10 CFR Part 50, Appendix R, Section III.G. Specifically, in lieu of providing physical protection for these systems and equipment, the licensee credited operator manual actions for mitigating the effects of fire damage. This finding was not limited to Fire Zones 98J and 99M in Unit 1, but affected a number of fire zones in both units, as identified by the licensee's extent of condition evaluation.

b. Determination of how long the issue existed, and prior opportunities for identification

The NRC determined that this condition had existed since the licensee implemented their fire protection program for meeting 10 CFR Part 50, Appendix R, in 1982. No violations of this type had been issued prior to the June 2001, fire protection triennial inspection; therefore, there were no prior opportunities for identification

c. Determination of the plant-specific risk consequences (as applicable) and compliance concerns associated with the issue

The NRC determined that this violation represented low to moderate safety significance (white), as discussed in a letter to the licensee dated May 20, 2004.

02.02 Root Cause and Extent of Condition Evaluation

a. Evaluation of method(s) used to identify root cause and contributing cause

The licensee did not perform a formal root cause of this violation. Upon identification by the NRC, the licensee reviewed their entire fire protection program and licensing basis, as well as numerous NRC documents, such as, generic letters, information notices, and internal NRC memorandums. On September 28, 2001, the licensee claimed that the NRC's position on the use of manual actions for meeting 10 CFR Part 50, Appendix R, Section III.G.2 constituted a backfit. After a thorough review of the licensee's position, which included convening a formal NRC backfit panel, the NRC denied the licensee's backfit claim. The NRC determined that the licensee had mis-interpreted the NRC fire protection regulations which resulted in their implementing a post-fire shutdown methodology that relied on operator action to mitigate the effects of fire damage rather than physically protecting safe shutdown systems from fire damage, as required by 10 CFR Part 50, Appendix R, Section. The licensee was so informed by letter dated April 15, 2002. The licensee agreed that the root cause of this violation was a mis-interpretation of NRC fire protection regulations. Given the extensive review and evaluation performed by both the NRC and the licensee during the backfit process, the inspectors concluded that the root cause of this violation was well-understood by the licensee, and agreed that no formal root cause evaluation was necessary.

b. Level of detail of the root cause evaluation

As stated above, the licensee did not perform a formal root cause evaluation of this violation. However, in preparing their backfit claim, the licensee performed a very detailed review of their fire protection program and licensing basis, as well as NRC documents. The inspectors concluded that the level of detail of the licensee's review of their fire protection design and licensing basis is adequate.

c. Consideration of prior occurrences of the problem and knowledge of prior operating experience

There were no prior occurrences of this violation at ANO. In addition, there was no prior NRC enforcement experience with respect to the use of manual operator actions in lieu of providing the physical protection to systems and equipment necessary for achieving hot shutdown conditions, which does not meet the requirements of 10 CFR Part 50, Appendix R, Section III.G.2

d. Consideration of potential common cause and extent of condition/cause of the problem

Upon identification of this issue during the triennial fire protection inspection in June of 2001, the licensee performed an immediate extent of condition by reviewing their post-fire safe shutdown analysis. They identified 27 fire zones in Units 1 and 2, where non-compliant manual operator actions were credited, and immediately posted compensatory fire watches in those areas. As the licensee progressed through their Manual Action Review Project and Fire Protection Improvement Plan, they identified additional fire zones, and posted additional compensatory fire watches. The inspectors determined that the licensee's extent of condition evaluation was thorough and comprehensive.

As stated earlier, the cause of the violation was a mis-interpretation of NRC fire protection regulations, which led to the licensee implementing a fire protection program that did not meet 10 CFR Part 50, Appendix R, Section III.G.2. The licensee did not perform a formal common cause or extent of cause evaluation. However, the licensee performed an extensive review of their fire protection design and licensing basis, as well as a thorough review of NRC fire protection documents, including regulatory guides, generic letters, information notices, inspection procedures, and internal NRC memorandums. The licensee also reviewed NRC inspection reports for other plants, and took an informal poll of other licensees concerning their use of manual action for complying with 10 CFR Part 50, Appendix R, Section III.G.2. The licensee documented the results of these reviews in their letter to the NRC dated September 28, 2001, in which they stated their backfit claim. Although the NRC rejected the license's backfit argument, their discussion of NRC guidance documents provided some insight into how the licensee could have come to their position. In 2002, in part, as a result of their review of the licensee's backfit claim, the NRC issued a policy statement to clarify that the use of manual operator actions in lieu of providing the physical protection to systems and equipment necessary for achieving hot shutdown conditions does not meet the requirements of 10 CFR Part 50, Appendix R, Section III.G.2, unless approved on a case-by case basis by the NRC. The inspectors agreed that no formal common cause or extent of cause was warranted.

02.03 Corrective Actions

The licensee's corrective actions included immediate corrective actions taken upon identification of the violation, intermediate corrective actions, and long-term planned corrective actions to address the root cause of the violation.

a. Appropriateness of corrective actions

Immediate Corrective Actions: Upon identification of the non-compliance by the NRC team in 2001, the licensee reviewed all fire zones in both units to determine in which fire zones they credited manual operator actions, without obtaining prior NRC approval. The licensee took appropriate immediate corrective actions by posting compensatory fire watches in all fire zones for which manual actions were credited. The inspectors concluded that the licensee's immediate corrective actions were appropriate.

Intermediate Corrective Actions: The licensee's intermediate corrective actions included (1) implementing controlled procedures for their operator manual actions; (2) conducting a Manual Action Review Project to evaluate manual operator actions that may be time-critical and/or risk-significant, and (3) revising manual operator action procedures as necessary to eliminate or reduce as time-critical and risk-significant actions. The inspectors reviewed the results of the licensee's Manual Action Review Project, and noted that the licensee identified 13 fire zones where a reduction in the number and complexity of manual actions was warranted. The inspectors also reviewed a very comprehensive and critical self-assessment of the licensee's fire protection program dated March 12, 2004, where numerous deficiencies and significant areas of weakness were identified. This self-assessment resulted in the licensee initiating 17 new condition reports.

The inspectors noted that in implementing these intermediate corrective actions, the licensee made significant progress toward improving their fire protection program. The licensee appropriately maintained their compensatory fire watches as necessary to ensure compliance with NRC regulations. The inspectors concluded that the licensee's intermediate corrective actions were appropriate.

Long-term Corrective Actions: Based on the results of their Manual Action Review Project and the March 12, 2004, self-assessment, the licensee decided to re-evaluate their entire fire protection program at ANO. During the onsite portion of the inspection, the licensee provided the inspectors with a copy of their Fire Protection Improvement Plan, dated September 14, 2004. The re-evaluation portion of the Fire Protection Improvement Plan was underway during the onsite portion of this inspection. The inspectors reviewed the Fire Protection Improvement Plan, and found it to be very thorough and responsive to the root cause of the violation. In addition, the inspectors noted that the licensee had already revised procedures to reduce the number of complex manual actions in some fire zones.

The NRC has recently released for comment a revision to 10 CFR Part 50, Appendix R to permit limited use of operator manual actions for complying with Section III.G..2. The licensee's long term corrective actions include the use of non risk-significant and non-complex operator manual actions in some fire zones. To assure compliance, the licensee will maintain fire watches in areas with non-compliant manual actions, until the revised rule is issued, or until they obtain NRC-approved exemptions to the existing regulation. The licensee will review their fire protection program against the

requirements of the new rule, and discontinue compensatory measures in fire zones whose configurations meet NRC regulations.

Based on a review of the Fire Protection Improvement Program and the progress made by the licensee, the inspectors concluded that the licensee's long-term corrective actions were adequate to address the root cause.

b. Prioritization of corrective actions

In their Manual Action Review Project, the licensee identified a number of complex and risk-significant manual actions that they targeted for reduction or elimination. In their Fire Protection Improvement Plan and December 17, 2004 regulatory commitments, the licensee identified the modifications necessary to eliminate those complex and risk-significant manual operator actions. The inspectors reviewed the licensee's basis for prioritizing their corrective actions, and found them to be appropriate.

c. Establishment of schedule for implementing and completing the corrective actions

A schedule for completion of the Fire Protection Improvement Plan, including modifications and analyses to eliminate complex and risk-significant manual operator actions was provided to the NRC by letter dated December 17, 2004. The schedule for completing modifications was based both on risk-significance and opportunity, as the installation of some modifications required the plant to be shutdown. As described in the December 17, 2004, letter, all actions will be completed by May of 2007. The inspectors concluded that the modifications and schedule as described in the Fire Protection Improvement Plan and the letter of December 17, 2004, were appropriate.

d. Establishment of quantitative or qualitative measures of success for determining the effectiveness of the corrective actions to prevent recurrence

The licensee implemented a Fire Protection Improvement Plan which includes milestones for completion of discrete tasks, such as development of a safe shutdown equipment list, validation of the design and licensing basis, and validation of safe shutdown procedures. The licensee initiated a condition report (CR ANO-C-2004-0755) that is kept open for tracking progress and completion of these Fire Protection Improvement Plan tasks. By letter dated December 17, 2004, the licensee provided to the NRC a list of regulatory commitments that included dates for completion of modifications and analysis to eliminate certain manual operator actions. The licensee will inform the NRC of any changes to these regulatory commitment dates, and agreed to inform the NRC of any substantial changes to the Fire Protection Improvement Program.

The licensee routinely performs audits (which include a third-party review) of their fire protection program every two years. The licensee completed an audit in early 2005, and will perform another in 2007. However, due to the numerous proposed changes to the fire protection program as a result of the Fire Protection Improvement Plan, the quality assurance organization plans to perform an interim review of the ANO fire protection

program in 2005. The inspectors concluded that these ongoing activities provide the licensee with ample opportunity to measure their performance and progress with respect to their long-term planned corrective actions as described in their Fire Protection Improvement Plan.

4OA5 Other Activities

4OA6 Meetings, Including Exit

On December 14, 2004, the inspection leader briefed Mr. Clifford Eubanks, General Manager, Plant Operations and other members of his staff on the preliminary results of this supplemental inspection.

On March 25, 2005, Mr. Dwight Chamberlain, Director, Division of Reactor Safety, Region IV, conducted a regulatory performance meeting via teleconference with Mr. Jeffrey Forbes, Vice President, Operations, Arkansas Nuclear One. In this teleconference, Mr. Chamberlain informed Mr. Forbes of the NRC's intention to close this violation, and discussed the bases for this decision. Mr. Forbes indicated that Entergy Operations, Inc., would inform the NRC of any significant changes made to their Fire Protection Improvement Plan, in addition to any changes to the regulatory commitments contained in their December 17, 2004, letter to the NRC.

On March 29, 2005, the inspection leader presented the final inspection results to Mr. Dale James, Director, Nuclear Safety Assurance, and other members of his staff, who acknowledged the findings. The inspection leader confirmed that proprietary information was not provided or examined during this inspection.

ATTACHMENT: SUPPLEMENTAL INFORMATION

ATTACHMENT

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee personnel

R. Dukes, Consultant, NISYS Corporation
C. Eubanks, General Manager, Plant Operations
J. Forbes, Vice President, Operations
B. Greeson, Acting Engineering Programs and Components Manager
R. Hendrix, Fire Protection Technical Specialist
D. James, Manager, Licensing
J. Johnson, Fire Protection Specialist
E. Kleinsorg, Consultant, Kleinsorg Group
J. Kowalewski, Director, Engineering
R. Loveland, Reactor Operator
K. Parkinson, Consultant
R. Puckett, Supervisor, Fire Protection
T. Robinson, Fire Protection Technical Specialist
D. Scheide, Nuclear Safety and Licensing Specialist
D. Smith, Fire Protection Specialist
J. Storbakken, Reactor Operator
C. Tyrone, Manager, Quality Assurance
L. Valmonte, Consultant, Framatome
L. Young, Consultant

LIST OF ITEMS CLOSED

Closed

50-313;368/2001006-02	VIO	The acceptability of the use of manual actions in lieu of providing protection for cables associated with equipment necessary for achieving and maintaining hot shutdown(for a fire in Fire Zones 98J and 99M) for meeting 10 CFR Part 50, Appendix R, Section III.G.2

LIST OF DOCUMENTS REVIEWED

Calculations

85-E-0086-01, "Safe Shutdown Capability Assessment Unit 1," Revision 4
85-E-0086-02, "Manual Action Feasibility and Common Results," Revision 0
85-E-0086-03, "Manual Action Feasibility Study, Fire Area I, Fire Zones 98-J, 99-M & 112-I," Revision 0
85-E-0087-01, "Safe Shutdown Capability Assessment, Unit 2," Revision 6
87-E-0003-01, Revision 1, “Time to Isolate Main Feedwater,” Revision 1
89-E-0047-20, “Time to Restore Emergency Feedwater,” Revision 1
1CNAA039401, “Time to Isolate Main Feedwater”
Framatome Technologies Calculation 32-1266115-00, (ANO-1 Turbine Trip Analysis)
BWNP-20007, 86-1118045-00 (Steam Generator Tube Rupture and Loss of Normal AC Power)

Condition Reports

ANO-2-2004-01646	ANO-1-2004-02141
ANO-1-2004-02131	ANO-2-2004-01517
ANO-C-2004-01435	ANO-C-2004-00817
ANO-2-2003-00285	ANO-2-2002-01813
ANO-1-2003-01049	ANO-1-2003-01079
ANO-2-2002-01956	ANO-1-2003-00902
ANO-C-2003-00077	ANO-2-2004-01715
ANO-C-2004-01734	ANO-C-2004-01741
ANO-C-2004-01755	ANO-1-2004-01907
ANO-2-2004-01700	ANO-1-2004-01907
ANO-2-2004-01691	ANO-1-2004-02168
ANO-1-2004-02160	ANO-1-2004-02158
ANO-C-2004-00828	ANO-C-2004-01968
ANO-1-2001-0723	

Drawings

E-679, “Conduit & Tray Layout Auxiliary, Building Area 6"E-2006, "Low Voltage Safety Systems Power Supplies," Revision 42
Single Line Diagram E-2014 SH 1, "480V Motor Control Center 2B51," Revision 48
Single Line Diagram E-2014 SH 2, "480V Motor Control Centers 2B52," Revision 37
Single Line Diagram E-2017, SH 1A, "Green Train Vital AC and 125VDC Distribution," Revision 9
Single Line Diagram E-2017, SH 1B, "Red Train Vital AC and 125VDC Distribution," Revision 5

Procedures

1202.001, "Reactor Trip," Change No. 028-02-0
1203.049, "Fires in Areas Affecting Safe Shutdown," Change No. 001-02-0
2104.037, "Alternate AC Diesel Generator Operations, Change No. 007-01

2202.001, "Standard Post Trip Actions," Change No. 006-01-1
2203.034, "Fire or Explosion," Change Nos. 006-00-0 and 006-02-0
2203.049, "Fires in Areas Affecting Safe Shutdown," Change No. 001-01-0
1305.016, “Safe Shutdown Instrumentation and Equipment Periodic Test,” Change Number 014-00-0
1000.120, “ANO Fire Watch Program,” Change No. 010-01-0
2104.037, “Alternate AC Diesel Generator Operations,” Change No. 007-01-0

Miscellaneous Documents

Arkansas Unit 1 Safety Evaluation Report, Supporting Amendment No. 35 to Facility Operating License No. DPR-51
Engineering Report, 99-R-0002-01, “Engineering Report Evaluation of High/Low Pressure Interface with Respect to 10CFR50, Appendix B,” Revision 0
Engineering Request ER-ANO-2002-0745-001, “Appendix R & Loss of Offsite Power,” Revision 0
LO-ALO-2004-0006, "Fire Protection Self-Assessment," dated March 22, 2004
Letter to NRC from Entergy Operations, Inc., dated December 17, 2004
Letter to NRC from Entergy Operations, Inc., dated June 30, 2004
NUREG-0223, "Fire Protection Safety Evaluation Report," Docket No. 50-368, dated August 1978
NRC Inspection Report 50-313/87-14;50-368/87-14, dated September 30, 1987
NRC Inspection Report 50-313/90-28;50-368/90-28, dated September 14, 1990
NRC Inspection Report 05000313/2004010;05000368/2004010, dated January 28, 2005