



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**

REGION IV  
1600 EAST LAMAR BOULEVARD  
ARLINGTON, TEXAS 76011-4511

May 06, 2021

Mr. John Dinelli, Site Vice President  
Arkansas Nuclear One  
Entergy Operations, Inc.  
N-TSB-58  
1448 S.R. 333  
Russellville, AR 72802-0967

SUBJECT: ARKANSAS NUCLEAR ONE – INTEGRATED INSPECTION  
REPORT 05000313/2021001 AND 05000368/2021001

Dear Mr. Dinelli:

On March 31, 2021, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Arkansas Nuclear One. On April 8, 2021, the NRC inspectors discussed the results of this inspection with Mr. J. Sullivan, General Manager Plant Operations, and other members of your staff. The results of this inspection are documented in the enclosed report.

One finding of very low safety significance (Green) is documented in this report. This finding did not involve a violation of NRC requirements.

If you disagree with a finding not associated with a regulatory requirement in this report, you should provide a response within 30 days of the date of this inspection report, with the basis for your disagreement, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001; with copies to the Regional Administrator, Region IV; and the NRC Resident Inspector at Arkansas Nuclear One.

This letter, its enclosure, and your response (if any) will be made available for public inspection and copying at <http://www.nrc.gov/reading-rm/adams.html> and at the NRC Public Document Room in accordance with Title 10 of the *Code of Federal Regulations* 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

John L. Dixon, Jr., Chief  
Reactor Projects Branch D  
Division of Reactor Projects

Docket Nos. 05000313 and 05000368  
License Nos. DPR-51 and NPF-6

Enclosure:  
As stated

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ARKANSAS NUCLEAR ONE – INTEGRATED INSPECTION REPORT 05000313/2021001  
AND 05000368/2021001 – DATED MAY 06, 2021

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DATE	5/3/2021				

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**U.S. NUCLEAR REGULATORY COMMISSION  
Inspection Report**

Docket Numbers: 05000313 and 05000368

License Numbers: DPR-51 and NPF-6

Report Numbers: 05000313/2021001 and 05000368/2021001

Enterprise Identifier: I-2021-001-0050

Licensee: Entergy Operations, Inc.

Facility: Arkansas Nuclear One

Location: Russellville, AR

Inspection Dates: January 1, 2021 to March 31, 2021

Inspectors: R. Alexander, Senior Emergency Preparedness Inspector  
N. Brown, Resident Inspector  
R. Bywater, Senior Resident Inspector  
T. DeBey, Resident Inspector  
H. Freeman, Senior Project Engineer  
S. Hedger, Emergency Preparedness Inspector

Approved By: John L. Dixon, Jr., Chief  
Reactor Projects Branch D  
Division of Reactor Projects

Enclosure

## SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee's performance by conducting an integrated inspection at Arkansas Nuclear One, in accordance with the Reactor Oversight Process. The Reactor Oversight Process is the NRC's program for overseeing the safe operation of commercial nuclear power reactors. Refer to <https://www.nrc.gov/reactors/operating/oversight.html> for more information.

### List of Findings and Violations

Unit 2 Trip Due to Failure to Evaluate/Classify a Feedwater Control System Power Supply Component as Critical Equipment			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Initiating Events	Green FIN 05000368/2021001-01 Open/Closed	None	71153
The inspectors identified a Green finding for the licensee's failure to properly evaluate and classify the Unit 2 main feedwater control system power supply common filter assembly as critical equipment in accordance with Procedure EN-DC-153, "Preventive Maintenance Component Classification," Revision 21. Specifically, the failure to identify the power supply common filter assembly as a critical component with a single point vulnerability led to the failure to perform preventive maintenance, mitigate, or remove the vulnerability, whose failure was the likely cause of the automatic reactor trip on December 10, 2020.			

### Additional Tracking Items

Type	Issue Number	Title	Report Section	Status
LER	05000368/2020-001-00	Loss of Feedwater Control System Power for Train 'A' Feedwater that Resulted in Plant Trip	71153	Closed

## **PLANT STATUS**

Unit 1 began the inspection period at full power. On February 15, 2021, Unit 1 operators reduced power to 32 percent power at request of the grid operator to reduce station output. Operators returned the unit to full power on February 18, 2021.

On March 14, 2021, Unit 1 was manually tripped from 99 percent power after a loss of voltage on bus A2 resulting from a continuity failure in a related potential transformer drawer. After repairs, operators restarted the reactor on March 17, placed the unit online on March 18, and raised power to 95 percent on March 21, 2021.

Unit 1 began an end-of-operating cycle power coastdown on March 29, 2021 and ended the inspection period at approximately 90 percent power.

Unit 2 began the inspection period at full power and remained at full power until January 10, 2021, when operators reduced power to 77 percent power to address a main feedwater pump B speed oscillation issue. After repairs, operators returned the unit to 90 percent power on January 12, 2021.

On January 13, 2021, Unit 2 operators reduced power to 86 percent power to complete repairs to address elevated condenser air in-leakage. After repairs, operators returned the unit to full power on January 14, 2021.

On January 26, 2021, Unit 2 operators performed a planned power reduction to 81 percent power to replace a backup power supply for the core operating limits supervisory system and perform main turbine control valve testing. Operators returned the unit to full power the same day without replacing the power supply after determining the observed core power distribution did not support removing the core operating limits supervisory system from service at the planned reduced power level.

On February 15, 2021, Unit 2 operators reduced power to 88 percent power at the request of the grid operator to reduce station output. Operators returned the unit to full power on February 17, 2021.

On March 4, 2021, Unit 2 operators reduced power to 65 percent power to replace the core operating limits supervisory system backup power supply. After completion of repairs, operators returned to unit to full power later that day and the unit remained at full power for the remainder of the inspection period.

## **INSPECTION SCOPES**

Inspections were conducted using the appropriate portions of the inspection procedures (IPs) in effect at the beginning of the inspection unless otherwise noted. Currently approved IPs with their attached revision histories are located on the public website at <http://www.nrc.gov/reading-rm/doc-collections/insp-manual/inspection-procedure/index.html>. Samples were declared complete when the IP requirements most appropriate to the inspection activity were met consistent with Inspection Manual Chapter (IMC) 2515, "Light-Water Reactor Inspection Program - Operations Phase." The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel to assess licensee performance and compliance with Commission rules and regulations, license conditions, site procedures, and standards.

Starting on March 20, 2020, in response to the National Emergency declared by the President of the United States on the public health risks of the Coronavirus Disease 2019 (COVID-19), resident inspectors were directed to begin telework and to remotely access licensee information using available technology. During this time, the resident inspectors performed periodic site visits each week; conducted plant status activities as described in IMC 2515, Appendix D, "Plant Status;" observed risk-significant activities; and completed on-site portions of IPs. In addition, resident and regional baseline inspections were evaluated to determine if all or portions of the objectives and requirements stated in the IP could be performed remotely. If the inspections could be performed remotely, they were conducted per the applicable IP. In some cases, portions of an IP were completed remotely and on-site. The inspections documented below met the objectives and requirements for completion of the IP.

## **REACTOR SAFETY**

### 71111.04 - Equipment Alignment

#### Partial Walkdown Sample (IP Section 03.01) (4 Samples)

The inspectors evaluated system configurations during partial walkdowns of the following systems/trains:

- (1) Unit 1 decay heat removal/low-pressure injection train B during maintenance on train A on January 7, 2021
- (2) Unit 2 FLEX reactor coolant/steam generator pump placement on March 23, 2021
- (3) Unit 2 containment spray train A during maintenance on loop 1 service water to containment cooler service water isolation valve maintenance on March 30, 2021
- (4) Unit 2 motor-driven emergency feedwater train during turbine-driven emergency feedwater train flow transmitter maintenance on March 11, 2021

### 71111.05 - Fire Protection

#### Fire Area Walkdown and Inspection Sample (IP Section 03.01) (4 Samples)

The inspectors evaluated the implementation of the fire protection program by conducting a walkdown and performing a review to verify program compliance, equipment functionality, material condition, and operational readiness of the following fire areas:

- (1) Unit 1 steam pipe room, Fire Zone 170-Z, on January 6, 2021
- (2) Unit 2 upper north electrical penetration room, Fire Zone 2183-J, on January 20, 2021
- (3) Unit 1 common feedwater pump room, Fire Zone 75-AA, on January 21, 2021
- (4) Common unit diesel fuel vaults, Fire Zone 1(2)B-ADD-DFV, on March 3, 2021

#### Fire Brigade Drill Performance Sample (IP Section 03.02) (1 Sample)

- (1) The inspectors evaluated the onsite fire brigade training and performance during an unannounced fire drill on March 24, 2021.

## 71111.11Q - Licensed Operator Regualification Program and Licensed Operator Performance

### Licensed Operator Performance in the Actual Plant/Main Control Room (IP Section 03.01) (1 Sample)

- (1) The inspectors observed and evaluated licensed operator performance in the control room during a Unit 2 planned down power to 65 percent and a subsequent power increase on March 4, 2021.

### Licensed Operator Regualification Training/Examinations (IP Section 03.02) (1 Sample)

- (1) The inspectors observed and evaluated Unit 1 just-in-time training that was done in preparation for the unit operation at reduced Tavg on March 10, 2021.

## 71111.13 - Maintenance Risk Assessments and Emergent Work Control

### Risk Assessment and Management Sample (IP Section 03.01) (4 Samples)

The inspectors evaluated the accuracy and completeness of risk assessments for the following planned and emergent work activities to ensure configuration changes and appropriate work controls were addressed:

- (1) Unit 2 emergent work activities for the atmospheric dump valve isolation valve 2CV-1002 failure to stroke due to motor failure on January 22, 2021
- (2) Unit 1 emergent work activities for the emergency feedwater initiation and control Channel B failure due to freezing steam generator pressure sensing lines on February 15, 2021
- (3) Unit 1 emergent work activities for the emergency feedwater initiation and control Channel D failure due to power supply failure on February 19, 2021
- (4) Unit 1 common feedwater injection to steam generator B valve CV-2660B maintenance on March 23, 2021

## 71111.15 - Operability Determinations and Functionality Assessments

### Operability Determination or Functionality Assessment (IP Section 03.01) (6 Samples)

The inspectors evaluated the licensee's justifications and actions associated with the following operability determinations and functionality assessments:

- (1) Unit 1 operability determination for reactor building spray system after seat leakage through recirculation and test header isolation valve BS-2B was discovered during surveillance testing on February 3, 2021
- (2) Unit 1 operability determination for reactor building spray pump B suction pressure transmitter PT-2428 on February 5, 2021
- (3) Unit 1 operability determination for high-pressure injection pump P-36B on February 10, 2021
- (4) Unit 1 operability determination for emergency feedwater initiation and control channel B on February 19-22, 2021
- (5) Unit 1 operability determination for Unit 1 personnel airlock inner door seal on March 11, 2021



- (6) Unit 1 operability determination for service water pipe leak upstream of valve CV-3850, service water loop 1 to emergency feedwater supply valve on March 17, 2021

#### 71111.18 - Plant Modifications

##### Temporary Modifications and/or Permanent Modifications (IP Section 03.01 and/or 03.02) (1 Sample)

The inspectors evaluated the following temporary or permanent modifications:

- (1) ANO-1 End of Cycle 29 Tavg Reduction Maneuver on March 11-17, 2021

#### 71111.19 - Post-Maintenance Testing

##### Post-Maintenance Test Sample (IP Section 03.01) (1 Sample)

The inspectors evaluated the following post-maintenance test activities to verify system operability and functionality:

- (1) Common unit diesel-driven fire pump P-6B post-maintenance testing after engine failure and replacement of starter motor on February 27, 2021

#### 71111.22 - Surveillance Testing

The inspectors evaluated the following surveillance tests:

##### Surveillance Tests (other) (IP Section 03.01) (4 Samples)

- (1) Unit 2 valve stroke surveillance for atmospheric dump isolation valve 2CV-1002 on January 26, 2021
- (2) Unit 1 valve stroke surveillance for service water sluice gates on February 3, 2021
- (3) Unit 1 emergency diesel generator 1 monthly surveillance run on February 7, 2021
- (4) Alternate ac diesel generator quarterly run on February 9, 2021

#### 71114.01 - Exercise Evaluation

##### Inspection Review (IP Section 02.01-02.11) (1 Sample)

- (1) The inspectors evaluated the biennial emergency plan exercise conducted on March 23, 2021. The exercise scenario simulated a reactor coolant pump malfunction causing fuel damage, a steam generator tube rupture associated with a stuck open safety-relief valve, and demonstrations of extensive damage mitigation strategies consistent with 10 CFR 50.155(b)(2).

71114.04 - Emergency Action Level and Emergency Plan Changes

Inspection Review (IP Section 02.01-02.03) (1 Sample)

- (1) The licensee submitted a summary of emergency plan changes (Revision 46) to the NRC on December 2, 2020. The inspectors conducted a review of the changes from March 1 to March 31, 2021. This evaluation does not constitute NRC approval.

71114.06 - Drill Evaluation

Select Emergency Preparedness Drills and/or Training for Observation (IP Section 03.01) (1 Sample)

- (1) The inspectors evaluated an emergency planning drill involving a tornado event which damaged plant equipment on March 9, 2021.

71114.08 - Exercise Evaluation Scenario Review

Inspection Review (IP Section 02.01 - 02.04) (1 Sample)

- (1) The inspectors reviewed and evaluated the proposed scenario for the biennial emergency plan exercise on March 23, 2021.

**OTHER ACTIVITIES – BASELINE**

71151 - Performance Indicator Verification

The inspectors verified licensee performance indicators submittals listed below:

EP01: Drill/Exercise Performance (IP Section 03.12) (1 Sample)

- (1) Units 1 and 2 (July 1, 2020 through December 31, 2020)

IE01: Unplanned Scrams per 7000 Critical Hours Sample (IP Section 03.01) (2 Samples)

- (1) Unit 1 (January 1, 2020 through December 31, 2020)
- (2) Unit 2 (January 1, 2020 through December 31, 2020)

EP02: ERO Drill Participation (IP Section 03.13) (1 Sample)

- (1) Units 1 and 2 (July 1, 2020, through December 31, 2020)

IE03: Unplanned Power Changes per 7000 Critical Hours Sample (IP Section 03.02) (2 Samples)

- (1) Unit 1 (January 1, 2020 through December 31, 2020)
- (2) Unit 2 (January 1, 2020 through December 31, 2020)

EP03: Alert & Notification System Reliability (IP Section 03.14) (1 Sample)

- (1) Units 1 and 2 (July 1, 2020 through December 31, 2020)

IE04: Unplanned Scrams with Complications (USwC) Sample (IP Section 03.03) (2 Samples)

- (1) Unit 1 (January 1, 2020 through December 31, 2020)
- (2) Unit 2 (January 1, 2020 through December 31, 2020)

71153 – Follow up of Events and Notices of Enforcement Discretion

Event Report (IP Section 03.02) (1 Sample)

The inspectors evaluated the following licensee event reports (LERs):

- (1) LER 05000368/2020-001-00, Loss of Feedwater Control System Power for Train ‘A’ Feedwater that Resulted in Plant Trip (ADAMS Accession No. ML21039A557). The inspection conclusions associated with this LER are documented in this report as Finding 05000368/2021001-01.

**INSPECTION RESULTS**

Unit 2 Trip Due to Failure to Evaluate/Classify a Feedwater Control System Power Supply Component as Critical Equipment			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Initiating Events	Green FIN 05000368/2021001-01 Open/Closed	None	71153
The inspectors identified a Green finding for the licensee’s failure to properly evaluate and classify the Unit 2 main feedwater control system power supply common filter assembly as critical equipment in accordance with Procedure EN-DC-153, “Preventive Maintenance Component Classification,” Revision 21. Specifically, the failure to identify the power supply common filter assembly as a critical component with a single point vulnerability led to the failure to perform preventive maintenance, mitigate, or remove the vulnerability, whose failure was the likely cause of the automatic reactor trip on December 10, 2020.			
<u>Description:</u> On December 10, 2020, while operating at full power, the ANO Unit 2 reactor experienced a loss of main feedwater flow through the ‘A’ main feedwater train due to a complete loss of ‘A’ main feedwater control system electrical power. That power loss prevented the expected system response and associated alarms and indications for a loss of main feedwater train from occurring. The ‘A’ main feedwater pump turbine went to minimum speed, the ‘A’ main feedwater control valve shut, and manual control of the ‘A’ main feedwater train was not possible. While the licensed operators recognized there was a problem with the main feedwater system, the reactor automatically tripped on ‘A’ low steam generator water level before they could take any action. Post-trip investigation showed that the ‘A’ main feedwater control system had experienced a complete loss of power even though it had redundant power supplies. The failure of one power supply should not cause complete loss of system power. Initial troubleshooting did not identify the cause of the event. After cycling the input power switches to the power supplies, both supplies came on and provided voltage outputs that were within specifications. Some components of the individual power supplies in the ‘A’ main feedwater control system were replaced (although they were not failed) and the reactor was returned to power.			
The inspectors independently reviewed the event and questioned the licensee whether there was a downstream electrolytic capacitor that could have caused the loss of power. The			

licensee evaluated that potential and concluded that a capacitor in a filter assembly downstream of the redundant power supplies was the likely cause of the event. Since a functional failure of a capacitor in the filter assembly would cause a complete loss of power to the main feedwater control system, it would cause a plant trip. That vulnerability should have led to the capacitor filter assembly having been classified as a critical component in accordance with Procedure EN-DC-153, "Preventive Maintenance Component Classification," Revision 21, Section 5.2, Step 4. Components classified as critical "shall be included in the PM [preventive maintenance] program and have a Maintenance Strategy developed in accordance with Procedure EN-DC-335." Since the downstream filter capacitors had not been classified, there was no preventive maintenance strategy for them. In fact, the licensee could not find any evidence that any maintenance had ever been performed. That resulted in electrolytic capacitors that were more than 25 years old being in the system. Per the site's Operational Decision Making document for this event, "the electrolytic capacitors should have changed out per our SPV [single point vulnerability] PM fleet strategy on a 6 year interval." The engineering review for the power supply installation in 1995 failed to identify the vulnerability.

Corrective Actions: The 'A' train main feedwater control system power supplies for Unit 2 were reset and preventive maintenance activities were performed. A voltage monitor was set up to provide detailed data for future analysis of any similar future events. An apparent cause analysis was performed, and classification reviews of other redundant power supply systems are being performed. The site has classified the filter assemblies as single point vulnerabilities per Procedure EN-DC-175 but the critical equipment classification has not yet been completed. Future activities are being planned to redesign the main feedwater control system power supplies so that the common filter assembly is removed. The licensee submitted Licensee Event Report LER 05000368/2020-001-00.

Corrective Action References: Condition Report CR-ANO-2-2020-03843 and associated Apparent Causal Analysis CR-ANO-2-2020-03913

Performance Assessment:

Performance Deficiency: The licensee's failure to properly evaluate and classify the main feedwater control system power supply common filter assembly as critical equipment in accordance with Procedure EN-DC-153, "Preventive Maintenance Component Classification," Revision 21, was a performance deficiency. Specifically, the failure to identify the power supply common filter assembly as a critical component with a single point vulnerability led to the failure to perform preventive maintenance, mitigate, or remove the vulnerability, whose failure was the likely cause of the automatic reactor trip on December 10, 2020.

Screening: The inspectors determined the performance deficiency was more than minor because it was associated with the Design Control attribute of the Initiating Events cornerstone and adversely affected the cornerstone objective to limit the likelihood of events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Specifically, the unrecognized single point vulnerability of the power supply filter assembly led to the vulnerability not being mitigated and caused a complete loss of electrical power to the 'A' main feedwater control system that resulted in a plant trip.

Significance: The inspectors assessed the significance of the finding using Appendix A, "The Significance Determination Process (SDP) for Findings At-Power." The inspectors determined that the finding had very low safety significance (Green) because the finding did

not cause a reactor trip AND the loss of mitigation equipment relied upon to transition the plant from the onset of the trip to a stable shutdown condition.

Cross-Cutting Aspect: None. The original equipment classification error occurred when the power supplies were installed in 1995 and an additional missed opportunity to identify the issue occurred in 2015 when the system was reviewed during a site-wide “Component Criticality Validation Sample Review” was done as part of the ANO Comprehensive Recovery Plan. This missed opportunity was not considered to be reflective of present licensee performance.

Enforcement: Inspectors did not identify a violation of regulatory requirements associated with this finding.

## **EXIT MEETINGS AND DEBRIEFS**

The inspectors verified no proprietary information was retained or documented in this report.

- On February 18, 2021, the inspectors presented the emergency exercise preliminary scenario review inspection results to Mr. J. Toben, Manager, Emergency Preparedness, and other members of the licensee staff.
- On April 8, 2021, the inspectors presented the emergency preparedness exercise inspection results to Mr. J. Sullivan, General Manager Plant Operations, and other members of the licensee staff.
- On April 8, 2021, the inspectors presented the integrated inspection results to Mr. J. Sullivan, General Manager Plant Operations, and other members of the licensee staff.

## **THIRD PARTY REVIEWS**

The inspectors reviewed a World Association of Nuclear Operators report during the inspection period.

## DOCUMENTS REVIEWED

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71111.04	Corrective Action Documents	CR-ANO-	1-2020-00824, 1-2020-01378, 1-2020-01509, 1-2020-01678, 1-2020-01945, 2-2021-00464	
71111.04	Drawings	M2210, Sheet 3	Service Water System	92
71111.04	Drawings	M2236, Sheet 1	Containment Spray System	96
71111.04	Procedures	OP-1104.004	Decay Heat Removal Operating Procedure	132
		OP-2106.006	Emergency Feedwater System Operations	104
71111.04	Work Orders	WO	52894842, 52911085	
71111.05	Corrective Action Documents	CR-ANO-	1-2021-00031, 1-2021-00345, 2-2020-03887, 2-2021-00142, 2-2021-00521, C-2020-02793, C-2021-00858	
71111.05	Drawings	FP-109	Fire Zones Emergency Diesel Fuel Storage Vault	8
71111.05	Drawings	FP-2103	EI 368'-0" and 372'-0"	38
71111.05	Drawings	FP-2103, Sheet 1	EI 368'-0" and 372'-0"	38
71111.05	Drawings	FP-2111	Fire Zones Emergency Diesel Fuel Storage Vault	8
71111.05	Drawings	FZ-2027	Fire Zone Electrical Equipment Room	4
71111.05	Fire Plans	U1 PreFire Plan	Fire Zone 1B-ADD-DFV, Fire Area L (Diesel Fuel Vault)	4
71111.05	Fire Plans	U2 PreFire Plan	Fire Zone 2B-ADD-DFV, Fire Area L (Diesel Fuel Vault)	4
71111.05	Fire Plans	U2 PreFire Plan	Fire Zone 2183-J, Fire Area B-3 (UNEPR)	17
71111.05	Fire Plans	U2 PreFire Plan	Fire Zone 75-AA, Fire Area B (CFW)	17
71111.05	Fire Plans	U2 PreFire Plan	Fire Zone 2091-BB, Fire Area B-3 (North Electrical Equipment Room)	17
71111.05	Miscellaneous		Fire Hazards Analysis	19
71111.05	Miscellaneous	ASOTH-FP-FBDRLS, Att. 1	Pre-Drill Brief FBDRL 2021-05	03/24/2021
71111.05	Miscellaneous	ASOTH-FP-FBDRLS, Att. 4	Fire Brigade Drill Evaluation Worksheet	03/24/2021
71111.05	Procedures	ASOTH-FP-FBDRLS	Instructors Guide for Fire Brigade Drills	9, 10
71111.05	Procedures	EN-OP-125	Fire Brigade Drills	0
71111.05	Procedures	EN-TQ-125	Fire Brigade Drills	10
71111.05	Work Orders	WO	554636	
71111.11Q	Corrective Action Documents	CR-ANO-	1-2011-01426, 1-2011-01439, 1-2011-01441, 2-2021-00149,	

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71111.11Q	Miscellaneous	COLR-U2	Core Operating Limits Report for Cycle 28 (Unit 2)	28
71111.11Q	Procedures	OP-1102.004	Power Operation (Unit 1)	76
71111.11Q	Procedures	OP-1102.016	Power Reduction and Plant Shutdown (Unit 1)	37
71111.11Q	Procedures	OP-1305.036	Unit 1 Power Range Linear Amp Calibration at Power	15
71111.11Q	Procedures	OP-2102.004	Power Operation (Unit 2)	69
71111.13	Corrective Action Documents	CR-ANO-	1-2021-00263, 1-2021-00270, 1-2021-00300, 1-2021-00305, 1-2021-00572	
71111.13	Drawings	M204, Sheet 3	Emergency Feedwater	37
71111.13	Drawings	M204, Sheet 7	Common Feedwater System	3
71111.13	Miscellaneous		Unit 1 Station Logs	02/14-20/2021
71111.13	Miscellaneous		Unit 2 Station Logs	01/22/2021
71111.13	Miscellaneous		Unit 1 Station Logs	03/23/2021
71111.13	Procedures	1105.005	Emergency Feedwater Initiation and Control	48
71111.13	Procedures	1304.101	Unit 1 EFIC Channel D Calibration	28
71111.13	Procedures	1304.208	Unit 1 EFIC Channel D Monthly Test	28
71111.13	Procedures	EN-DC-151	PRA Maintenance and Update	8
71111.13	Procedures	EN-OP-119	Protected Equipment Postings	13
71111.13	Procedures	EN-WM-104	On Line Risk Assessment	22
71111.13	Work Orders	WO	557894-03	
71111.15	Corrective Action Documents	CR-ANO-	1-2017-02434, 1-2020-02057, 1-2021-00201, 1-2021-00212, 1-2021-00214, 1-2021-00290, 1-2021-00300, 1-2021-00308, 1-2021-00318, 1-2021-00319, 1-2021-00321, 1-2021-00442, 1-2021-00492, 1-2021-00562, C-2021-00539	
71111.15	Drawings	M204, Sheet 3	Emergency Feedwater	37
71111.15	Drawings	M210, Sheet 1	Service Water	155
71111.15	Drawings	M236, Sheet 1	P&ID Reactor Building Spray and Core Flooding Systems	95
71111.15	Miscellaneous		Unit 1 Station Logs	02/03/2021
71111.15	Miscellaneous	00-E-0023-01	Unit 1 Appendix J Containment Maximum Allowable Leakage Rate (La)	1
71111.15	Procedures	1305.037	Unit 1 Reactor Building Access and Ventilation Leak Rate Testing	12
71111.15	Procedures	EN-HU-106	Procedure and Work Instruction Use and Adherence	8

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71111.15	Procedures	OP-1104.002	Makeup and Purification System Operation	98
71111.15	Procedures	OP-1104.005	Reactor Building Spray System Operation	84
71111.15	Procedures	OP-1304.208	Unit 1 EFIC Channel 'D' Monthly Test	28
71111.15	Procedures	OP-3305.001	OPS System Alignment Tests	2
71111.15	Work Orders	WO	557894, 5555551, 52918456-01,	
71111.18	Corrective Action Documents	CR-ANO-	1-2011-01426, 1-2011-01439, 1-2011-01441	
71111.18	Miscellaneous	95-R-105-08	Generic End-of-Cycle Full Power Life Extension Maneuver Report	09/13/2002
71111.18	Miscellaneous	Cycle 29 COLR	Unit One Core Operating Limits Report	Cycle 29
71111.18	Miscellaneous	EC-78439	ANO-1 Cycle 29 Core Reload Evaluation	10/17/2019
71111.18	Miscellaneous	EC-89320	ANO-1 End of Cycle 29 Tavg Reduction Maneuver	02/21/2021
71111.18	Miscellaneous	ER-ANO-2003-0488	ANO-1 End of Cycle Tavg Reduction Maneuver	06/30/2003
71111.18	Procedures	OP-1102.004	Power Operations	76
71111.18	Work Orders	WO	52905418	
71111.19	Corrective Action Documents	CR-ANO-	1-2021-00356, C-2021-00557	
71111.19	Miscellaneous	EVAL 208820	Procurement Engineering Evaluation	02/26/2021
71111.19	Procedures	OP-1104.032	Fire Protection Systems	93
71111.19	Procedures	OP-1307.004	Diesel Fire Pump Engine (K-5) Biannual Surveillance	14
71111.19	Work Orders	WO	556999, 558192	
71111.22	Calculations	CALC-V-2CV-1002	MOV Torque Switch Setpoints for 2CV-1002	10
71111.22	Corrective Action Documents	CR-ANO-	1-2019-03844, 1-2019-00431, 1-2020-00962, 1-2020-01494, 1-2020-01618, 1-2020-01687, 1-2020-01807, 1-2020-01971, 2-2021-00060, 2-2021-00074, 2-2021-00113, C-2021-00103, C-2021-00110, C-2021-00176	
71111.22	Engineering Changes	EC-0088989	Replace Motor for MOV 2CV-1002	0
71111.22	Procedures	EN-OP-104	Operability Determination Process	16
71111.22	Procedures	OP-1104.029	Service Water and Auxiliary Cooling Water	121
71111.22	Procedures	OP-1104.036	Emergency Diesel Generator Operation	85



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71111.22	Procedures	OP-2104.037	Alternate AC Diesel Generator Operations	35
71111.22	Procedures	OP-2105.008	Steam Dump Bypass Control System Operations	36
71111.22	Work Orders	WO	556225, 52915172, 52918456-01, 52923103	
71114.01	Corrective Action Documents	CR-ANO-	1-2018-03990, 1-2018-04353, 1-2019-00231, 1-2019-04609, 2-2018-01741, 2-2020-01204, 2-2020-02928, 2-2020-02972, C-2018-02800, C-2018-02810, C-2020-02577, C-2020-02641, C-2020-03417, C-2021-00101, C-2021-0833, C-2021-0835, C-2021-0836, C-2021-0837, C-2021-0841, C-2021-0843, C-2021-0844, C-2021-0845, C-2021-0846, C-2021-0847, C-2021-0848, C-2021-0849, C-2021-0850, C-2021-0852, C-2021-0854, C-2021-0855, C-2021-0873	
71114.01	Corrective Action Documents Resulting from Inspection	CR-ANO-	C-2021-00890, C-2021-00911	
71114.01	Miscellaneous		Arkansas Nuclear One, Yellow Team Site Drill Report, August 21, 2019	09/19/2019
71114.01	Miscellaneous		Arkansas Nuclear One (ANO), ERO Team Yellow Site Drill Report, February 5, 2020	03/05/2020
71114.01	Miscellaneous		ANO (Arkansas Nuclear One), ERO Green Team Site Drill Report, November 11, 2020	12/03/2020
71114.01	Miscellaneous		Arkansas Nuclear One, Blue Team Site Drill Report, May 15, 2019	06/12/2019
71114.01	Miscellaneous		Arkansas Nuclear One, ERO Red Team Site Drill Report, February 6, 2019	02/28/2019
71114.01	Procedures	1903.010	Emergency Action Level Classification	57
71114.01	Procedures	1903.011	Emergency Response/Notifications	57, 59
71114.01	Procedures	1903.069	Equipment Important to Emergency Response	9, 10
71114.01	Procedures	1903.080	Emergency Operations Facility (EOF) Activation	4
71114.01	Procedures	1903.081	Technical Support Center (TSC) Activation	0
71114.01	Procedures	1903.082	Operational Support Center (OSC) Activation	1
71114.01	Procedures	1905.001	Emergency Radiological Controls	21
71114.01	Procedures	EN-EP-311	Emergency Response Data System (ERDS) Via the Virtual Private Network (VPN)	4

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71114.01	Procedures	EN-EP-609	Emergency Operations Facility (EOF) Operations	6
71114.01	Procedures	EN-EP-610	Technical Support Center (TSC) Operations	5
71114.01	Procedures	EN-EP-611	Operations Support Center (OSC) Operations	6
71114.04	Miscellaneous		Attachment 2, 10 CFR 50.54(q)(3) Screening, Procedure/Document Number: ANO Emergency Plan, Revision: 046	11/10/2020
71114.04	Miscellaneous		Attachment 3, 10 CFR 50.54(q)(3) Evaluation; Procedure/Document Number: ANO Emergency Plan; Revision: 046	11/20/2020
71114.04	Miscellaneous	0CAN122002	Emergency Plan and Emergency Plan Implementing Procedure, Arkansas Nuclear One, Units 1 and 2; NRC Docket Nos. 50-313, 50-368, and 72-13; Renewed Facility Operating License Nos. DPR-51 and NPF-6	12/02/2020
71114.06	Corrective Action Documents	CR-ANO-	C-2021-00670, C-2021-00686	
71114.06	Miscellaneous		2021 Emergency Preparedness Scenario 21DR	02/16/2021
71114.08	Miscellaneous	0CAN012102	Emergency Plan Full Participation - Exercise Drill Scenario; Arkansas Nuclear One, Units 1 and 2; NRC Docket Nos. 50-313, 50-368, and 72-13; Renewed Facility Operating License Nos. DPR-51 and NPF-6	01/20/2021
71114.08	Procedures	1903.010	Emergency Action Level Classification	59
71114.08	Procedures	1903.011	Emergency Response/Notifications	57
71151	Corrective Action Documents	CR-ANO-	1-2020-00547, 2-2020-02252, 2-2020-02381, 2-2020-03840, 2-2021-00243	
71151	Miscellaneous		Unit 2 Plant Data Server Power Trend	03/13/2020
71151	Miscellaneous		ANO-1 and ANO-2 NRC Performance Indicator Technique/Data Sheets - Initiating Events	Q1-2020
71151	Miscellaneous		ANO-1 and ANO-2 NRC Performance Indicator Technique/Data Sheets - Initiating Events	Q2-2020
71151	Miscellaneous		ANO-1 and ANO-2 NRC Performance Indicator Technique/Data Sheets - Initiating Events	Q3-2020
71151	Miscellaneous		ANO-1 and ANO-2 NRC Performance Indicator Technique/Data Sheets - Initiating Events	Q4-2020
71151	Miscellaneous		Unit 2 Station Log	11/01/2020

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71151	Miscellaneous		Unit 2 Station Log	12/10/2020
71151	Miscellaneous		Drill and Exercise Performance (DEP) Performance Indicator (PI) Monthly Reports	07/2020 - 12/2020
71151	Miscellaneous		Select DEP PI Opportunity Assessment Packages (3Q/2020 - 4Q/2020)	07/2020 - 12/2020
71151	Miscellaneous		ANO Emergency Response Organization Rosters (3Q/2020 - 4Q/2020)	09/30/2020, 12/31/2020
71151	Miscellaneous		ANO ERO Qualification Records (3Q/2020 - 4Q/2020)	09/30/2020, 12/31/2020
71151	Miscellaneous		ADH Siren Verification Checklists (3Q/2020 and 4Q/2020)	07/2020 - 12/2020
71151	Miscellaneous	KLD TR –1208	ANO Alert and Notification System (ANS) Design Report (Rev. 4)	09/25/2020
71151	Procedures	EN-FAP-EP-005	Emergency Preparedness Performance Indicators	14
71151	Procedures	EN-LI-114	Regulatory Performance Indicator Process	17
71151	Procedures	OP-2203.053	Rapid Power Reduction	7
71153	Corrective Action Documents	CR-ANO-	1-2021-00457	
71153	Drawings	E1, Sheet 1	Station Single Line Diagram	63
71153	Drawings	M231, Sheet 2	Makeup & Purification System	51
71153	Miscellaneous		Unit 1 Station Logs	03/14/2021
71153	Miscellaneous		Unit 1 Emergency Action Levels	0
71153	Procedures	OP-1202.001	Reactor Trip	40
71153	Procedures	OP-1203.012I	Annunciator K10 Corrective Action	62
71153	Procedures	OP-1203.019	High Activity in Reactor Coolant	19
71153	Procedures	OP-1416.002	U1 A2 Bus Switchgear Inspection	21