



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
REGION IV
1600 EAST LAMAR BOULEVARD
ARLINGTON, TEXAS 76011-4511

February 4, 2022

Mr. Joe Sullivan
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 05000313/2021004 AND 05000368/2021004**

Dear Mr. Sullivan:

On December 31, 2021, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Arkansas Nuclear One. On January 13, 2022, the NRC inspectors discussed the results of this inspection with you 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 involved a violation of NRC requirements. We are treating this violation as a non-cited violation (NCV) consistent with Section 2.3.2 of the Enforcement Policy.

If you contest the violation or the significance of the violation documented in this inspection report, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001; with copies to the Regional Administrator, Region IV; the Director, Office of Enforcement; and the NRC Resident Inspector at Arkansas Nuclear One.

If you disagree with a cross-cutting aspect assignment 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,

A handwritten signature in black ink, appearing to read 'A. Agrawal', with a stylized flourish at the end.

Signed by Agrawal, Ami
on 02/04/22

Ami N. Agrawal, Acting 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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AND 05000368/2021004 – DATED FEBRUARY 4, 2022

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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: 05000313/2021004 and 05000368/2021004

Enterprise Identifier: I-2021-004-0122

Licensee: Entergy Operations, Inc.

Facility: Arkansas Nuclear One

Location: Russellville, AR

Inspection Dates: October 1, 2021, to December 31, 2021

Inspectors: N. Brown, Resident Inspector
R. Bywater, Senior Resident Inspector
T. DeBey, Resident Inspector
J. Drake, Senior Reactor Inspector
J. Lee, Reactor Inspector

Approved By: Ami N. Agrawal, Acting 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

Failure to Maintain a Source Range Neutron Flux Monitor Audible in the Control Room as Required by Technical Specifications			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Barrier Integrity	Green NCV 05000368/2021004-01 Open/Closed	[H.7] - Documentation	71153
The inspectors identified a Green finding and associated non-cited violation of Arkansas Nuclear One, Unit 2, Technical Specification 3.9.2 for the licensee's failure to have a source range neutron flux monitor with audible indication in the control room while in Mode 6.			

Additional Tracking Items

Type	Issue Number	Title	Report Section	Status
LER	05000368/2021-001-00	Non-Compliance with Technical Specifications Resulting in Lack of Nuclear Instrumentation Audible Indication	71153	Closed

PLANT STATUS

Unit 1 began the inspection period at full power. On November 29, 2021, Unit 1 automatically tripped from 100 percent power following a failure involving the main feedwater pump A control system. After repairs, the reactor was made critical on December 1, 2021, and the unit was returned to full power on December 3, 2021. Unit 1 remained at or near full power for the remainder of the inspection period.

Unit 2 began the inspection period shut down in a planned refueling outage and the reactor was made critical on November 26, 2021. Following completion of startup testing and equipment maintenance, the unit was returned to full power on December 5, 2021. Unit 2 remained at or near 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 performed activities described in IMC 2515, Appendix D, "Plant Status," conducted routine reviews using IP 71152, "Problem Identification and Resolution," observed risk significant activities, and completed on-site portions of IPs. 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.

REACTOR SAFETY

71111.01 - Adverse Weather Protection

Seasonal Extreme Weather Sample (IP Section 03.01) (1 Sample)

- (1) The inspectors evaluated readiness for seasonal extreme weather conditions prior to the onset of the cold weather season:
 - Units 1 and 2 service water intake structure heaters on October 19, 2021
 - Common unit, alternate ac diesel generator building climate control on October 19, 2021

External Flooding Sample (IP Section 03.03) (1 Sample)

- (1) The inspectors evaluated that flood protection barriers, mitigation plans, procedures, and equipment are consistent with the licensee's design requirements and risk analysis assumptions for coping with external flooding on October 13, 2021.

71111.04 - Equipment Alignment

Partial Walkdown Sample (IP Section 03.01) (1 Sample)

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

- (1) Common feedwater system on November 22, 2021

Complete Walkdown Sample (IP Section 03.02) (2 Samples)

- (1) The inspectors evaluated system configurations during a complete walkdown of the Unit 2 train A emergency feedwater system on October 22, 2021.
- (2) The inspectors evaluated system configurations during a complete walkdown of the Unit 1 reactor building spray system on December 20, 2021.

71111.05 - Fire Protection

Fire Area Walkdown and Inspection Sample (IP Section 03.01) (3 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 ammonia tank room (common feedwater pump room), Fire Zone 75-AA, on December 1, 2021
- (2) Unit 1 emergency diesel generator rooms, Fire Zones 86-G and 87-H, on December 15, 2021
- (3) Unit 1 emergency feedwater pump room, Fire Zone 38-Y, on December 16, 2021

71111.06 - Flood Protection Measures

Inspection Activities - Internal Flooding (IP Section 03.01) (1 Sample)

The inspectors evaluated internal flooding mitigation protections in the:

- (1) Unit 2 auxiliary building, 317-foot elevation, on October 20, 2021

Cable Degradation (IP Section 03.02) (1 Sample)

The inspectors evaluated cable submergence protection in:

- (1) Manhole 2MH-13 on October 1, 2021

71111.07A - Heat Sink Performance

Annual Review (IP Section 03.01) (2 Samples)

The inspectors evaluated readiness and performance of:

- (1) Unit 2 shutdown cooling heat exchanger A performance test on November 4, 2021
- (2) Unit 2 shutdown cooling heat exchanger B performance test on November 4, 2021

71111.08P - Inservice Inspection Activities (PWR)

PWR Inservice Inspection Activities Sample (IP Section 03.01) (1 Sample)

- (1) The inspectors verified that the reactor coolant system boundary, steam generator tubes, reactor vessel internals, risk-significant piping system boundaries, and containment boundary are appropriately monitored for degradation and that repairs and replacements were appropriately fabricated, examined, and accepted by reviewing the following activities from September 27, 2021, to December 13, 2021:

03.01.a - Nondestructive Examination and Welding Activities

- Ultrasonic Examination
 - Feed water, 17-001C1, pipe to pipe
 - Feed water, 17-003C1, reducing elbow to pipe
 - Feed water, 17-004C1, pipe to reducing elbow
 - Reactor vessel closure head penetration 46
- Eddy Current Examination
 - Reactor vessel closure head penetration 46
- Dye Penetrant Examination
 - Component cooling water, 2CC-1113, FW-15C1
 - Component cooling water, 2CC-1113, FW-16C1
 - Reactor vessel closure head penetration 46
- Visual 1 Examination
 - Service water, 2HBC-59-8
 - Service water, 2HBC-59-11
 - Reactor vessel closure head penetration 46
- Visual 3 Examination
 - Main steam, 2EBB2-H2 pipe support
 - Service water, 2HBC-59-8
 - Service water, 2HBC-59-11
- Welding
 - GTAW
 - Component cooling water, 2CC-1113, FW-15C1
 - Component cooling water, 2CC-1113, FW-16C1
 - Reactor vessel closure head penetration 46

03.01.b - Pressurized-Water Reactor Vessel Upper Head Penetration Examination Activities

- The following reactor vessel head penetrations eddy current and ultrasonic examination results were observed or reviewed: 49, 52, 70, 71
- Penetration 46 had flaw identified and repaired, 50-9338579 Completed Traveler with weld package and NDE reports

03.01.c – Pressurized-Water Reactor Boric Acid Corrosion Control Activities

- ANO-2-2020-2674, ANO-2-2020-3024, ANO-2-2020-3025, ANO-2-2020-3951, ANO-2-2020-3258, ANO-2-2020-3575, ANO-2-2018-0695, ANO-2-2019-0125, ANO-2-2020-2199, ANO-2-2020-3801, ANO-2-2021-0926, ANO-2-2020-2309, ANO-2-2020-2320, ANO-2-2020-2479, ANO-2-2021-0863

Problem Identification and Resolution review of inservice items

The inspector evaluated a sample of 92 condition reports associated with inservice inspection activities. No findings or violations of more than minor significance were identified.

71111.11Q - Licensed Operator Requalification 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 Unit 1 start up and power ascension on December 1 and 2, 2021.

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

- (1) The inspectors observed and evaluated Unit 2 start up and ovation turbine control testing training on October 16, 2021.

71111.12 - Maintenance Effectiveness

Maintenance Effectiveness (IP Section 03.01) (6 Samples)

The inspectors evaluated the effectiveness of maintenance to ensure the following structures, systems, and components (SSCs) remain capable of performing their intended function:

- (1) Unit 1 emergency feedwater initiation and control system on November 2, 2021
- (2) Unit 2 containment spray isolation valve 2CV-5612-1 on November 3, 2021
- (3) Unit 1 18-month reactor protection system surveillance/human performance error/out of tolerance test on November 4, 2021
- (4) Unit 2 motor-operated valve inspection program on November 5, 2021
- (5) Periodic (a)(3) assessment on November 10, 2021
- (6) Safety-related doors functional failures on December 15, 2021

Aging Management (IP Section 03.03)

The inspectors evaluated the effectiveness of the aging management program for the following SSCs that did not meet their inspection or test acceptance criteria:

- (1) There were no inspections or tests of passive long-lived SSCs that did not pass their acceptance criteria on Unit 1 or Unit 2.

71111.13 - Maintenance Risk Assessments and Emergent Work Control

Risk Assessment and Management Sample (IP Section 03.01) (3 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 1 auto-transformer outage on October 7, 2021
- (2) Unit 1 during reduced power operations on December 2, 2021
- (3) Unit 2 during reduced power operations on December 2, 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 2 containment spray pump A suction pressure instrument overpressurization operability determination on November 3, 2021
- (2) Unit 1 door 78 flooding protection capability functionality determination on November 16, 2021
- (3) Unit 2 feedwater isolation valve 2CV-1023-2 to steam generator A magnesium motor rotor degradation operability determination on November 17, 2021
- (4) Unit 1 main feedwater valve bypass isolation valve FW-28 flange leakage operability determination on December 3, 2021
- (5) Unit 2 refueling water tank outlet valve 2CV-5630-1 control power fuse failure operability determination on December 6, 2021
- (6) Unit 2 emergency cooling pond service water supply piping identification of water in pipe during inspection operability determination on December 14, 2021

71111.18 - Plant Modifications

Temporary Modifications and/or Permanent Modifications (IP Section 03.01 and/or 03.02) (3 Samples)

The inspectors evaluated the following temporary or permanent modifications:

- (1) Unit 2 spent fuel pool cooling pumps temporary power modification on October 8, 2021
- (2) Unit 2 refueling machine modification on October 20, 2021
- (3) Unit 2 turbine control system upgrades for main turbine and main feed pump turbine electrohydraulic control on November 16, 2021

71111.19 - Post-Maintenance Testing

Post-Maintenance Test Sample (IP Section 03.01) (8 Samples)

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

- (1) Unit 2 refueling machine 2H-1 following console replacement on October 21, 2021
- (2) Unit 2 containment cooling fan 2VSF-1D following maintenance on November 5, 2021
- (3) Unit 2 turbine-driven emergency feedwater pump 2P-7A following governor upgrade on November 25, 2021
- (4) Unit 2 low-pressure safety injection motor-operated valve 2CV-5063-2 following maintenance on December 6, 2021
- (5) Unit 2 pressurizer safety valve 2PSV-4634 following maintenance on December 8, 2021
- (6) Unit 2 containment spray valve 2CV-5612-1 following maintenance on December 10, 2021
- (7) Unit 1 service water inlet to reactor building cooling coil valve CV-3813 following maintenance on December 15, 2021
- (8) Unit 2 pressurizer heaters following maintenance on December 29, 2021

71111.20 - Refueling and Other Outage Activities

Refueling/Other Outage Sample (IP Section 03.01) (1 Sample)

- (1) The inspectors evaluated Unit 2 Refueling Outage 28 activities from October 1 to December 5, 2021.

71111.22 - Surveillance Testing

The inspectors evaluated the following surveillance tests:

Surveillance Tests (other) (IP Section 03.01) (3 Samples)

- (1) Unit 2 high pressure safety injection system full flow test on November 29, 2021
- (2) Unit 2 low pressure safety injection system full flow test on November 29, 2021
- (3) Unit 2 response time testing for low departure from nucleate boiling ratio trip from reactor coolant pump speed coastdown on December 7, 2021

Inservice Testing (IP Section 03.01) (2 Samples)

- (1) Unit 2 containment spray isolation valve 2CV-5612-1 on November 2, 2021
- (2) Unit 2 containment spray pump suction check valve 2BS-3A on November 4, 2021

Containment Isolation Valve Testing (IP Section 03.01) (1 Sample)

- (1) Unit 2 main feedwater to steam generator A containment isolation valve 2CV-1023-2 test on November 12, 2021

71114.06 - Drill Evaluation

Drill/Training Evolution Observation (IP Section 03.02) (2 Samples)

The inspectors evaluated:

- (1) The Yellow emergency response organization team emergency operations facility drill on December 9, 2021.
- (2) The Green emergency response organization team emergency operations facility drill on December 16, 2021.

OTHER ACTIVITIES – BASELINE

71151 - Performance Indicator Verification

The inspectors verified licensee performance indicators submittals listed below:

MS09: Residual Heat Removal Systems (IP Section 02.08) (2 Samples)

- (1) Unit 1 (October 1, 2020, through September 30, 2021)
- (2) Unit 2 (October 1, 2020, through September 30, 2021)

MS10: Cooling Water Support Systems (IP Section 02.09) (2 Samples)

- (1) Unit 1 (October 1, 2020, through September 30, 2021)
- (2) Unit 2 (October 1, 2020, through September 30, 2021)

71152 - Problem Identification and Resolution (PI&R)

Semiannual Trend Review (IP Section 02.02) (1 Sample)

- (1) The inspectors reviewed the licensee's corrective action program for potential adverse trends in the resolution of problems that might be indicative of a more significant safety issue.

Annual Follow-up of Selected Issues (IP Section 02.03) (3 Samples)

The inspectors reviewed the licensee's implementation of its corrective action program related to the following issues:

- (1) Common feedwater human-machine interface problems on December 9, 2021
- (2) Unit 2 magnesium rotor, motor-operated valve motor inspections and replacements on December 17, 2021
- (3) Emergency feedwater A pump steam supply check valve 2MS-39B on December 17, 2021

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 05000368/2021-001-00, Non-Compliance with Technical Specifications Resulting in Lack of Nuclear Instrumentation Audible Indication (ADAMS Accession No. ML21323A180). The inspection conclusions associated with this LER and an associated non-cited violation are documented in the Inspection Results section of this report.

Personnel Performance (IP Section 03.03) (1 Sample)

- (1) The inspectors evaluated the trip of Unit 1 due to the loss of main feed pump B and the licensee's performance on November 29, 2021.

INSPECTION RESULTS

Observation: Semiannual Trend	71152
<p>Through a review of recent issues documented in the licensee's corrective action program, the inspectors were concerned that there may exist a trend of inadequate resolution of problems at Arkansas Nuclear One. The inspectors were concerned that if problems were inadequately addressed then the safety performance of the plant could degrade. The following examples illustrate where inadequate or incomplete resolution of problems could result in vulnerabilities and potential challenges to plant operations.</p>	
<p><u>Magnesium Rotor Motor-Operated Valves (MOVs)</u></p> <p>Failures of magnesium motor rotors in motor-operated valves has been a long-known industry issue (NRC Information Notice 2006-26). However, the licensee had not aggressively addressed an inspection and replacement strategy for magnesium rotors in the plant until 2021. During the recent 2021 Unit 2 2R28 refueling outage, 7 out of 10 MOVs failed their inspections and the remaining 3 passed with degradation.</p>	
<p><u>Emergency Feedwater Steam Supply Check Valves</u></p> <p>ANO has experienced repetitive failures of emergency feedwater steam supply check valves and these failures have been the subject of previous NRC enforcement (NRC Inspection Report 05000313/2018011 and 05000368/2018011; ADAMS Accession No. ML18295A382). Unit 1 implemented a modification in 2020 (Engineering Change 84422) to maintain the steam supply isolation valve upstream of one of the affected check valves in the closed position during normal operation. This has appeared to have eliminated or reduced check valve damage due to chattering. Unit 2 identified a failed check valve during the recent 2R28 refueling outage and replaced the valve. However, the cause of check valve chattering has not been addressed on Unit 2 in a similar way as it was for Unit 1.</p>	
<p><u>Watertight Door Degradation</u></p> <p>Unit 2 has had multiple problems with degrading door closure devices, incorrect placement of door closure devices after personnel ingress or egress, and degraded door closure alarms.</p>	
<p><u>Incorrect Size Motor-Operated Valves Control Power Fuse</u></p> <p>After a fuse was found to have blown in the control power circuit for the train A refueling water tank outlet valve motor-operated valve 2CV-5630-1, the licensee identified that the incorrect size fuse had been installed. The licensee determined it was not necessary to perform an inspection of a sample of other motor-operated valve control circuits to determine if a similar condition existed elsewhere.</p>	
<p><u>Secondary Plant Degraded or Nonconforming Conditions</u></p> <p>Unit 1 has had repetitive leaks of moisture separator reheater gland sealing steam supply check valves which has caused lifting of relief valves and steam leaks in the turbine building. One of these, for example, is valve PSV-6805, whose relief tailpipe is near conduit containing</p>	

reactor protection system cables. Although the cables were checked as currently functional, the conduits continue to be subjected to wet steam.

At the conclusion of the recent Unit 2 2R28 refueling outage, the licensee identified a seal water flange leak on the Unit 2 main feedwater pump B, which required repair before it could be placed in service during power escalation. The leak was attributed to incorrect bolting material and torque applied during maintenance during the outage. Through a review of maintenance records, the licensee identified the same incorrect bolting and torque condition existed on main feedwater pump A from maintenance performed during a previous outage. Since the A pump was not experiencing leakage and repairing the pump would require swapping operating main feedwater pumps and breaking vacuum on the A pump, the license decided to continue with power escalation. The licensee added an action to repair the joint during the next outage. Failure of the joint in the interim would require downpowering the unit and removing the pump from service to complete the repair.

Failure to Maintain a Source Range Neutron Flux Monitor Audible in the Control Room as Required by Technical Specifications

Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Barrier Integrity	Green NCV 05000368/2021004-01 Open/Closed	[H.7] - Documentation	71153

The inspectors identified a Green finding and associated non-cited violation of Arkansas Nuclear One, Unit 2, Technical Specification 3.9.2 for the licensee’s failure to have a source range neutron flux monitor with audible indication in the control room while in Mode 6.

Description: On October 1, 2021, while Arkansas Nuclear One (ANO), Unit 2, was operating in Mode 6 during a refueling outage and staff were performing control element assembly uncoupling, the inspectors noted there was no source range nuclear instrumentation audible in the control room. When the inspectors brought this to the attention of the shift manager, operators determined the volume setting of the instrument had been turned down to an inaudible level. The licensee then promptly increased its volume in the control room to an audible level and also confirmed it was audible inside the containment building. Technical Specification 3.9.2 requires two source range neutron flux monitors operating, each with continuous visual indication in the control room and one with audible indication in the containment and control room at all times during Mode 6.

The licensee completed a performance analysis of the event and determined that operability of both source range neutron flux monitors and their audible indication had been demonstrated on September 28, 2021, during completion of the Mode 6 entry checklist contained in Procedure OP-2103.011, “Draining the Reactor Coolant System,” Revision 62. The performance analysis documented that operators turned down the volume of the audible indication in the control room because it was considered a distraction. Additionally, the operations checklist in effect, OPS-B40, “Shutdown Cooling Log/Task Checklist,” Revision 06/11/2021, identified that the mode of applicability for having audible counts in containment or the control room was only irradiated fuel moves or new fuel moves over irradiated fuel. Although the checklist referenced Technical Specification 3.9.2, operators did not recognize the checklist disagreed with the requirements of Technical Specification 3.9.2.

Corrective Actions: The licensee promptly restored the audible indication in the control room and revised checklist OPS-B40 to require checking operation of audible source range neutron

flux indication each shift while in Mode 6. A condition report was written with corrective actions to complete a performance analysis of the event, to review other checklists to determine if there were similar discrepancies with technical specifications, to perform a training needs analysis, and to revise the process for making changes to operations logs and checklists to make it more formal and aligned with the procedure change process.

Corrective Action References: Condition Report CR-ANO-2-2021-01980

Performance Assessment:

Performance Deficiency: The inspectors determined the failure to have a source range neutron flux instrument with audible indication in the control room while in Mode 6, as required by Technical Specification 3.9.2, was a performance deficiency.

Screening: The inspectors determined the performance deficiency was more than minor because it was associated with the Procedure Quality attribute of the Barrier Integrity cornerstone and adversely affected the cornerstone objective to provide reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents or events. Specifically, the licensee did not maintain operable audible indication of source range neutron flux in the control room as required by Technical Specification 3.9.2, to monitor the core reactivity condition.

Significance: The inspectors assessed the significance of the finding using Appendix G, "Shutdown Safety SDP" because the performance deficiency occurred when the plant was shut down in Mode 6. Using the Exhibit 4 Barrier Integrity screening questions of IMC 0609, Appendix G, Attachment 1, the finding: (1) did not involve protection of the reactor pressure vessel against fracture; (2) did not involve fuel bundle misplacement or misorientation; (3) did not involve low temperature over pressurization; (4) did not involve a freeze seal; (5) did not involve steam generator nozzle dams; (6) did not involve the potential for, or an actual, reactor coolant system boron dilution event; (7) did not involve a drain down or leakage path; and (8) did not involve the containment barrier. Therefore, the finding screened as very low safety significance (Green).

Cross-Cutting Aspect: H.7 - Documentation: The organization creates and maintains complete, accurate and up-to-date documentation. Specifically, the licensee did not maintain an accurate checklist for ensuring source range neutron flux instrumentation was audible in the control room and containment in Mode 6. The mode of applicability identified in the checklist for this requirement was incorrect.

Enforcement:

Violation: Technical Specification 3.9.2 for Unit 2 requires in Mode 6 that two source range neutron flux monitors shall be operating, each with continuous visual indication in the control room and one with audible indication in the containment and control room.

Contrary to the above, on October 1, 2021, while Unit 2 was in Mode 6, the licensee failed to have a neutron flux monitor operating with audible indication in the control room.

Enforcement Action: This violation is being treated as a non-cited violation, consistent with Section 2.3.2 of the Enforcement Policy.

EXIT MEETINGS AND DEBRIEFS

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

- On October 7, 2021, the inspectors presented the Arkansas Nuclear One Unit 2 inservice inspection results to Mr. J. Dinelli, Site Vice President, and other members of the licensee staff.
- On January 13, 2022, the inspectors presented the integrated inspection results to Mr. J. Sullivan, Site Vice President, and other members of the licensee staff.

DOCUMENTS REVIEWED

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71111.01	Calculations	CALC-ANOC-CS-15-00003	ANO Flood Protection Design Basis	8
71111.01	Calculations	CALC-ANOC-CS-15-00012	ANO Flood Protection Room Evaluations – Units 1 and 2	2
71111.01	Calculations	CALC-ANOC-CS-16-00005	Arkansas Nuclear One Passive Barrier Features List	10
71111.01	Corrective Action Documents	CR-ANO-	1-2021-00335, 2-2021-00463, C-2021-00406, C-2021-00470,	
71111.01	Miscellaneous	CES-02	ANO-1 General Structural Design Guide	2
71111.01	Miscellaneous	CES-03	ANO-2 General Structural Design Guide	2
71111.01	Miscellaneous	ULD-0-TOP-17	ANO Flooding	1
71111.01	Procedures	OP-1104.039	Plant Heating and Cold Weather Operations	36
71111.01	Procedures	OP-2106.032	Unit Two Freeze Protection Guide	30
71111.01	Work Orders	WO	568314	
71111.04	Corrective Action Documents	CR-ANO-	1-2021-00137, 1-2021-00201, 1-2021-00212, 1-2021-02263, 1-2021-03017, 1-2021-03302, C-2021-01942, C-2021-01996, C-2021-02842, C-2021-02877	
71111.04	Drawings	M-2204	Piping & Instrumentation Diagram Emergency Feedwater	73
71111.04	Drawings	M-232, Sheet 1	Decay Heat Removal System	111
71111.04	Drawings	M-236, Sheet 1	Reactor Building Spray and Core Flooding Systems	95
71111.04	Engineering Changes	EC-77577	ANO-2 EFW Pump Woodward Governor Controls Upgrade 2R28	0
71111.04	Miscellaneous	STM 1-08	Reactor Building Spray and Containment Building	20
71111.04	Miscellaneous	STM 2-19-2	ANO Unit 2 System Training Manual, “Emergency Feedwater and Auxiliary Feedwater Systems”	29
71111.04	Procedures	OP-1104.005	Reactor Building Spray System Operation	85, 89
71111.04	Procedures	OP-1106.007	Common Feedwater System	9
71111.04	Procedures	OP-2106.006	Emergency Feedwater Pump Operation	104
71111.04	Work Orders	WO	485548, 485557, 52940565	
71111.05	Corrective Action Documents	CR-ANO-	1-2018-00004, 1-2021-03263, C-2021-03101	
71111.05	Drawings	FP-105, Sheet 1	Fire Zone Plan Below Grade Elev. 335'-0”	25

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71111.05	Drawings	FZ-1032, Sheet 1	Fire Zone Detail No. & So. Diesel Gener. Room	3
71111.05	Drawings	FZ-1072, Sheet 1	Fire Zone Detail Lower South Piping Penetration Area, EFWP Area	3
71111.05	Fire Plans	Unit 1 PreFire Plan	Fire Zone 75-AA Ammonia Tank Room & Main Steam Lines	4
71111.05	Miscellaneous		Unit 1 and 2 Fire Hazards Analysis	20
71111.05	Miscellaneous		Unit 1 PreFire Plans	21
71111.05	Miscellaneous		Fire Zones 86-G and 87-G North and South EDG Rooms	3
71111.05	Procedures	OP-1203.009	Fire Protection System Annunciator Corrective Action	38
71111.05	Procedures	OP-1203.049	Fires in Areas Affecting Safe Shutdown	15
71111.06	Calculations	CALC-ANOC-CS-15-00003	ANO Flood Protection Design Basis	8
71111.06	Calculations	CALC-ANOC-CS-15-00012	ANO Flood Protection Room Evaluations – Units 1 and 2	2
71111.06	Miscellaneous	ULD-0-TOP-17	ANO Flooding	1
71111.07A	Corrective Action Documents	CR-ANO-	2-2021-02893, 2-2021-02952, 2-2021-02953, 2-2021-03344, 2-2021-03347, 2-2021-03664	
71111.07A	Miscellaneous	CALC-91-R-2013-01	Service Water Performance Testing Methodology	29
71111.07A	Miscellaneous	CALC-95-R-0014-02	Test Protocol – Unit 2 Shutdown Cooling Heat Exchanger Thermal Performance Test	6
71111.07A	Procedures	OP-2311.001	Shutdown Cooling Heat Exchanger Performance Test	7
71111.07A	Work Orders	WO	474776, 548828, 52358635, 52466000, 52674944, 52939676	
71111.08P	Calculations	CALC-16-E-0300-01	ANO Unit 2 RVCH Nozzle Peening Stress Evaluation	0
71111.08P	Calculations	CALC-85-E-0053-50	Fire Area B-1 Combustible Loading Calculation	7
71111.08P	Corrective Action Documents	CR-ANO-	2-2001-00467, 2-2005-01870, 2-2011-03653, 2-2016-01065, 1-2021-01834, 1-2021-02816, 2-2016-01519, 2-2018-00695, 2-2018-04153, 2-2019-00125, 2-2019-00780, 2-2019-01025, 2-2019-01955, 2-2019-02417, 2-2020-00629, 2-2020-00720, 2-2020-00755, 2-2020-00867, 2-2020-01076, 2-2020-01205, 2-2020-01258, 2-2020-01311, 2-2020-01328, 2-2020-01330, 2-2020-01345, 2-2020-01346, 2-2020-01347, 2-2020-01348, 2-2020-01349, 2-2020-01373, 2-2020-01375, 2-2020-	

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			01381, 2-2020-01409, 2-2020-01410, 2-2020-01589, 2-2020-01633, 2-2020-01651, 2-2020-01656, 2-2020-01658, 2-2020-01660, 2-2020-01667, 2-2020-01675, 2-2020-01681, 2-2020-01702, 2-2020-01706, 2-2020-01712, 2-2020-01738, 2-2020-01760, 2-2020-01761, 2-2020-01770, 2-2020-01775, 2-2020-01778, 2-2020-01781, 2-2020-01788, 2-2020-01802, 2-2020-01837, 2-2020-01888, 2-2020-01962, 2-2020-01972, 2-2020-02199, 2-2020-02309, 2-2020-02320, 2-2020-02479, 2-2020-02674, 2-2020-02709, 2-2020-03024, 2-2020-03025, 2-2020-03258, 2-2020-03575, 2-2020-03801, 2-2020-03838, 2-2020-03951, 2-2021-00370, 2-2021-00739, 2-2021-00863, 2-2021-00926, 2-2021-01597, 2-2021-01753, 2-2021-01758, 2-2021-01759, 2-2021-01767, 2-2021-01769, 2-2021-01771, 2-2021-01800, 2-2021-01896, C-2021-02474, C-2021-02500, CR-GGN-2021-01236, CR-GGN-2021-02184	
71111.08P	Drawings	2DBD-9-1	Large Pipe Isometric Blowdown Line 2DBD-9 from 2CV-1016-1 to 2CV-1017	1
71111.08P	Drawings	2PT-6036	2 P-32 D Seal Press	4
71111.08P	Drawings	E-234-763	Closure Head Assembly Arkansas Nuclear	4
71111.08P	Drawings	E6473E40	CEDM Cooling Shroud Upgrade Assembly	5
71111.08P	Drawings	M-2001-C2-111	As-Built: EC 80291, 80388	303
71111.08P	Engineering Changes	EC-73486	ANO-2 EFPY Projection to 32 EFPY as of 8/1/17	000
71111.08P	Engineering Changes	EC-80256	Reduce Scope EC80256 - CEDM Id. Surface Improvement Only	0
71111.08P	Engineering Evaluations	LEC-1485-R1	Seal Life Evaluation of Lisega Reactor Coolant Pump Snubbers Arkansas Nuclear One, Unit 2	0
71111.08P	Miscellaneous	157-9338580-002	Repair of ANO-2 CEDM Penetration 46	00
71111.08P	Miscellaneous	2CAN072001	Inservice Inspection Summary Report for the Twenty-Seventh Refueling Outage (2R27)	07/08/2020
71111.08P	Miscellaneous	2CAN102102	Relief Request ANO2-R&R-012 Support the Repair of the Reactor Vessel Closure Head Penetration #46	10/10/2021

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71111.08P	Miscellaneous	50-9338579	Completed Repair Traveler with Weld Package and NDE Reports	4
71111.08P	Miscellaneous	51-9287972-000	ANO Unit 2 Degradation Assessment for 2R26 – Fall 2018	000
71111.08P	Miscellaneous	51-9293037-000	ANO Unit 2 Condition Monitoring for 2R26 and Final Operational - Assessment for Cycles 27, 28, and 29	000
71111.08P	Miscellaneous	CALC-ANO2-EP-20-00003	ANO-2 Steam Generator Secondary Side Integrity Plan Revision 2	01/25/2021
71111.08P	Miscellaneous	CARK2-RV030-TR-CF-000001	Justification for 50% Relaxation Factor for ANO 2 Laser Peening Surface Stress Acceptance Criterion	0-A
71111.08P	Miscellaneous	CEP-BAC-001	Boric Acid Corrosion Control (BACC) Program Plan	2
71111.08P	Miscellaneous	EN-DC-319	Boric Acid Corrosion Control Program (BACCP)	12
71111.08P	Miscellaneous	EN-EV-112	Chemical Control Program	23
71111.08P	Miscellaneous	ER-ANO-2003-0245-058	Document Effective Degradation Years (EDY) for ANO-2 Head at Start of 2R18	0
71111.08P	Miscellaneous	ER-ANO-2006-0266-000	Guidance for Concrete Repair of Intake Structure Stairwell Opening in Slab at El. 366'-0	0
71111.08P	Miscellaneous	LTR-SDA-18-124	ANO 2 Reactor Vessel Head Penetration Peening Mitigation Sketches	0
71111.08P	Miscellaneous	MRP-267	Materials Reliability Program: Technical Basis for Primary Water Stress Corrosion Cracking Mitigation by Surface Stress Improvement	2
71111.08P	Miscellaneous	MRP-335	Materials Reliability Program: Topical Report for Primary Water Stress Corrosion Cracking Mitigation by Surface Stress Improvement	3-A
71111.08P	Miscellaneous	MRP-336	Materials Reliability Program: Specification Guideline for Primary Water Stress Corrosion Cracking Mitigation by Surface Stress Improvement	1
71111.08P	Miscellaneous	SEP-BAC-ANO-001	Boric Acid Corrosion Control Program Inspection and Identification of Boric Acid Leaks for ANO-1 and ANO-2	3
71111.08P	Miscellaneous	SEP-ISI-ANO2-105	ASME Section XI, Division 1, ANO-2 Inservice Inspection Program	8
71111.08P	Miscellaneous	SPEC-ANO-M-2555	Unit 2 Piping Class Sheets	4
71111.08P	Miscellaneous	WCAP-18098-P	Technical Basis for Laser Peening (LP) of ANO 2 Reactor	1

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			Vessel Head Penetrations (RVHP)	
71111.08P	Miscellaneous	WDI-TJ-1122	ASME Section V, Article 14, Technical Justification for Dye Penetrant Examination of Reactor Vessel Head Penetration Wetted Surface	0
71111.08P	NDE Reports		Visual Inspection Service for 42" Pipe at Arkansas Nuclear One Plant Unit 2	11/08/2021
71111.08P	Procedures	CEP-NDE-0404	Manual Ultrasonic Examination of Ferritic Piping Welds (ASME XI)	9
71111.08P	Procedures	CEP-NDE-0407	Straight Beam Ultrasonic Examination of Bolts and Studs (ASME XI)	6
71111.08P	Procedures	CEP-NDE-0423	Manual Ultrasonic Examination of Austenitic Piping Welds (ASME XI)	9
71111.08P	Procedures	CEP-NDE-0504	Ultrasonic Examination of Small Bore Diameter Piping for Thermal Fatigue Damage	6
71111.08P	Procedures	CEP-NDE-0640	Description - Liquid Dye Penetrant Procedure	11
71111.08P	Procedures	CEP-NDE-0901	VT-1 Examination	6
71111.08P	Procedures	CEP-NDE-0902	VT-2 Examination	10
71111.08P	Procedures	CEP-NDE-0903	VT-3 Examination	6
71111.08P	Procedures	CEP-NDE-0955	Visual Examination (VE) of Bare-Metal Surfaces	308
71111.08P	Procedures	EN-DC-161	Control of Combustibles	24
71111.08P	Procedures	EN-MA-141	Limatorque Valve Operator Model SMB/SB/SBD-000 Through 5 MOV and HBC Periodic Inspection	18
71111.08P	Procedures	WDI-STD-1041	Reactor Vessel Head Penetration Ultrasonic Examination Analysis	17
71111.08P	Procedures	WPS-CS-1/1-A	Manual Gas Tungsten Arc Welding (GTAW) and Shielded Metal Arc Welding (SMAW) of P-No. 1 Carbon Steels	0
71111.08P	Procedures	WPS-CS-1/1-B	Manual Gas Tungsten Arc Welding (GTAW) of P-No. 1 Carbon Steels	0
71111.08P	Procedures	WPS-LA-5A/1-A	Manual Gas Tungsten Arc Welding (GTAW) and Shielded Metal Arc Welding (SMAW) of P-No. 5A Low Alloy Steels to P-No. 1 Carbon Steels	0
71111.08P	Procedures	WPS-LA-5A/5A-A	Manual Gas Tungsten Arc Welding (GTAW) and Shielded Metal Arc Welding (SMAW) of P-No. 5A Low Alloy Steels	1
71111.08P	Procedures	WPS-SS-8/8-B	Manual Gas Tungsten Arc Welding (GTAW) of P-No. 8	0

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			Stainless Steels	
71111.08P	Self-Assessments	LO-ALO-2021-0025 CA 2	Pre-NRC 2R28 ISI Activities Self-Assessment Report	05/18/2021
71111.08P	Work Orders	WO-ANO-	087669, 300901, 522875, 540245, 541519, 542001, 52781192, 52857697, WR-ANO-076667, WR-ANO-258250	
71111.11Q	Miscellaneous	A2SPGLORTCSJITT	2R28 TCS Startup and ECT JITT	0
71111.11Q	Procedures	2102.001	Plant Pre-Heatup and Pre-Critical Checklists	97
71111.11Q	Procedures	2102.002	Plant Heatup	88
71111.11Q	Procedures	2102.004	Power Operation	72
71111.11Q	Procedures	2102.016	Reactor Startup	28
71111.12	Corrective Action Documents	CR-ANO-	1-2021-01551, 1-2021-01664, 1-2021-02781, 1-2021-02844, 1-2021-02938, 1-2021-02977, 1-2021-02978, 1-2021-02992, 1-2021-03011, 1-2021-03110, 2-2021-01343, 2-2021-01362, 2-2021-01481, 2-2021-01495, 2-2021-01570, 2-2021-01964, 2-2021-01981, 2-2021-02247, 2-2021-02855, 2-2021-02880, 2-2021-03027, 2-2021-03032, 2-2021-03355, 2-2021-03507, 2-2021-03756, C-2021-02880	
71111.12	Miscellaneous		Standardized Operations Metrics	5
71111.12	Miscellaneous	CALC-15-E-0007-20	Reduced Latching Requirements for Watertight Doors	0
71111.12	Miscellaneous	CALC-95-R-0024-01	Basic Requirements for the Component Database on Station Doors and Hatches	17
71111.12	Miscellaneous	CALC-ANOC-CS-15-00012	ANO Flood Protection Room Evaluations – Units 1 and 2	2
71111.12	Miscellaneous	CALC-ANOC-SE-20-00001	Maintenance Rule 10CFR50.65 (a)(3) Periodic Assessment January 1, 2019 to June 30, 2020	1
71111.12	Miscellaneous	LO-ALO-2021-00038	Focused Self-Assessment for Upcoming Phase 4 License Renewal NRC Inspection	08/23/2021
71111.12	Miscellaneous	STM 1-66	Emergency Feedwater Initiation and Control	12
71111.12	Procedures	COPD-013	Operations Maintenance Interface Standards and Expectations	63
71111.12	Procedures	EN-DC-205	Maintenance Rule Monitoring Procedure	7
71111.12	Procedures	EN-DC-206	Maintenance Rule A(1) Process	4

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71111.12	Procedures	EN-FAP-OP-023	Operations Performance Indicators	5
71111.12	Procedures	OP-1105.005	Emergency Feedwater Initiation and Control	49
71111.12	Procedures	OP-1304.041	Unit 1 Reactor Protection System Channel A Calibration	53
71111.12	Procedures	OP-1402.100	Watertight Door Maintenance	16
71111.12	Work Orders	WO	495653, 52918059	
71111.13	Corrective Action Documents	CR-ANO-	1-2021-02896	
71111.13	Procedures	EN-WM-104	On-Line Risk Assessment	23
71111.15	Corrective Action Documents	CR-ANO-	1-2021-01664, 1-2021-03032, 1-2021-03136, 1-2021-03183, 2-2019-00887, 2-2020-01594, 2-2021-01281, 2-2021-01597, 2-2021-02416, 2-2021-02534, 2-2021-02770, 2-2021-02988, 2-2021-02989, C-2021-03142	
71111.15	Drawings	M-2236, Sheet 1	Containment Spray	96
71111.15	Engineering Changes	EC-91543	Inlet to 2P-35A Containment Spray Over Pressure	1
71111.15	Miscellaneous	0062-0213-LTR-001	Evaluation of ANO MOV-2CV-1023-2 for Continued Operation	0
71111.15	Miscellaneous	CALC-15-E-0007-20	Reduced Latching Requirements for Watertight Doors	0
71111.15	Miscellaneous	CALC-95-R-0024-01	Basic Requirements for the Component Database on Station Doors and Hatches	17
71111.15	Miscellaneous	CALC-ANOC-CS-15-00012	ANO Flood Protection Room Evaluations – Units 1 and 2	2
71111.15	Miscellaneous	FHA20	Fire Hazards Analysis	20
71111.15	Procedures	EN-EP-S-003-MULTI	ENS Magnesium Rotor MOV Management Plan	0
71111.15	Procedures	EN-MA-148	Use of VIPER or VOTES Infinity Motor Operated Valve Diagnostics	7 and 8
71111.15	Procedures	OP-2104.005	Containment Spray	93
71111.15	Procedures	OP-2202.003	Loss of Coolant Accident	16
71111.15	Work Orders	WO	548076, 556664, 50234647, 52936561	
71111.18	Corrective Action Documents	CR-ANO-	2-2021-01631, 2-2021-01634, 2-2021-02198, 2-2021-02220, 2-2021-02415, 2-2021-02507, 2-2021-02510, 2-2021-02566, 2-2021-02688, 2-2021-02703, 2-2021-02841, 2-2021-02950	
71111.18	Engineering	EC-48418	Evaluate Temporary Modification to Provide Alternate	0

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	Changes		Source of Power to Spent Fuel Pool Cooling Pump 2P-40A or 2P-40B	
71111.18	Engineering Changes	EC-85563	Evaluate and Provide Guidance for Providing Temp Power to Both Unit 2 SFP Cooling Pumps 2P-40A and 2P-40B	0
71111.18	Miscellaneous	FFN-2021-003	Turbine Control System Upgrades for Main Turbine and Main Feed Pump Turbine Digital Electro-Hydraulic Control/ EC 83032	0
71111.18	Miscellaneous	PAD	FCR 89720/ANO Unit 2 Refuel Machine Upgrade EC 83562 FCR	2
71111.18	Miscellaneous	ULD-0-SYS-03	ANO New and Spent Fuel Storage, Spent Fuel Cooling, New and Spent Fuel Handling Systems	7
71111.18	Procedures	EN-LI-100	Process Applicability Determination	30
71111.18	Procedures	EN-LI-101	10 CFR 50.59 Evaluations	20
71111.18	Procedures	OP-2104.006	Fuel Pool Systems	64
71111.18	Procedures	OP-2203.002	Spent Fuel Pool Emergencies	22
71111.18	Procedures	OP-2503.003	Operation of Fuel Handling Equipment	86
71111.19	Corrective Action Documents	CR-ANO-	2-2020-01858, 2-2020-01911, 2-2021-00728, 2-2021-02339, 2-2021-02502, 2-2021-02542, 2-2021-02594, 2-2021-02626, 2-2021-02649, 2-2021-02651, 2-2021-02684, 2-2021-02700, 2-2021-03394, 2-2021-03415, 2-2021-03655, C-2021-02669,	
71111.19	Drawings	M-2204	Piping & Instrumentation Diagram Emergency Feedwater	73
71111.19	Drawings	M-2236, Sheet 1	Containment Spray	96
71111.19	Engineering Changes	EC-77577	ANO-2 EFW Pump Woodward Governor Controls Upgrade 2R28	0
71111.19	Miscellaneous	ECT 77577-003	Post Modification Online Test of Unit 2 EFW Digital Governor	0
71111.19	Miscellaneous	STM 2-19-2	ANO Unit 2 System Training Manual, "Emergency Feedwater and Auxiliary Feedwater Systems"	29
71111.19	Procedures	EN-MA-107	Post Maintenance Testing	0
71111.19	Procedures	OP-1025.019	System Cleanliness Controls During Modification and Maintenance	9
71111.19	Procedures	OP-1104.033	Reactor Building Ventilation	87

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71111.19	Procedures	OP-2103.005	Pressurizer Heater Operations	39
71111.19	Procedures	OP-2104.001	Safety Injection Tank Operations	58
71111.19	Procedures	OP-2104.005	Containment Spray	93
71111.19	Procedures	OP-2104.033	Containment Atmosphere Control	83
71111.19	Procedures	OP-2106.006	Emergency Feedwater Pump Operation	104
71111.19	Procedures	OP-2107.001	Electrical System Operations	135
71111.19	Procedures	OP-2305.006	Cold Shutdown Valve Testing	39
71111.19	Procedures	OP-2307.009	Pressurizer Proportional Heater Checkout	13
71111.19	Procedures	OP-2402.132	Installation of the U2 Pzr Code Relief Valves	12
71111.19	Procedures	OP-2502.003	Preparation for Refueling	61
71111.19	Procedures	Pressurizer Proportional Heater Checkout	Pressurizer Heater Removal and Replacement	5
71111.19	Work Orders	WO	457653, 518475, 543054, 547623, 547788, 547805, 548457, 52937865	
71111.20	Corrective Action Documents	CR-ANO-	2-2021-02594, 2-2021-02602	
71111.20	Procedures	2102.001	Plant Pre-Heatup and Pre-Critical Checklists	97
71111.20	Procedures	2102.002	Plant Heatup	88
71111.20	Procedures	2102.004	Power Operation	72
71111.20	Procedures	2102.016	Reactor Startup	28
71111.22	Corrective Action Documents	CR-ANO-	2-2021-01597, 2-2021-01855, 2-2021-02770, 2-2021-02804, 2-2021-02830, 2-2021-02988, 2-2021-02989	
71111.22	Drawings	M-2206, Sheet 1	Steam Generator Secondary System	156
71111.22	Drawings	M-2236, Sheet 1	Containment Spray	96
71111.22	Miscellaneous		Unit 2 Updated Final Safety Analysis Report, Table 15.1.0-1	29
71111.22	Miscellaneous		Unit 2 Narrative Log	11/12/2021
71111.22	Miscellaneous	CALC-95-R-0011-08	ANO 2 GL 89-10 MOV Safety Significance Determination	2
71111.22	Miscellaneous	ULD-2-SYS-05	Containment Spray System	7
71111.22	Procedures	OP-2104.005	Containment Spray	93
71111.22	Procedures	OP-2104.039	HPSI System Operation	91
71111.22	Procedures	OP-2104.040	LPSI System Operations	78

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71111.22	Procedures	OP-2304.112	Plant Protection System Response Time Test Ch A	32
71111.22	Procedures	OP-2305.005	Valve Stroke and Position Verification	44
71111.22	Work Orders	WO	518526-32, 525716-01, 543054, 548076, 548826-01, 549055-04, 52932027	
71114.06	Miscellaneous		Arkansas Nuclear One Emergency Plan	46
71114.06	Procedures	1903.010	Emergency Action Level Classification	59
71114.06	Procedures	1903.011	Emergency Response/Notifications	61
71151	Miscellaneous		ANO-1 and ANO-2 NRC Performance Indicator Technique/Data Sheets – Residual Heat Removal	Q4-2020
71151	Miscellaneous		ANO-1 and ANO-2 NRC Performance Indicator Technique/Data Sheets - Residual Heat Removal	Q1-2021
71151	Miscellaneous		ANO-1 and ANO-2 NRC Performance Indicator Technique/Data Sheets - Residual Heat Removal	Q3-2021
71151	Miscellaneous		ANO-1 and ANO-2 NRC Performance Indicator Technique/Data Sheets - Cooling Water System	Q1-2021
71151	Miscellaneous		ANO-1 and ANO-2 NRC Performance Indicator Technique/Data Sheets - Cooling Water System	Q2-2021
71151	Miscellaneous		ANO-1 and ANO-2 NRC Performance Indicator Technique/Data Sheets - Cooling Water System	Q3-2021
71151	Miscellaneous		ANO-1 and ANO-2 NRC Performance Indicator Technique/Data Sheets – Cooling Water System	Q4-2020
71151	Miscellaneous		ANO-1 and ANO-2 NRC Performance Indicator Technique/Data Sheets - Residual Heat Removal	Q2-2021
71152	Corrective Action Documents	CR-ANO-	2-2000-00751, 2-2021-00060, 2-2021-01597, 2-2021-01772, 2-2021-01834, 2-2021-02061, 2-2021-02234, 2-2021-02245, 2-2021-02304, 2-2021-02313, 2-2021-02339, 2-2021-02496, 2-2021-02562, 2-2021-02693, 2-2021-02770, 2-2021-03658, 2-2021-03756, C-2018-03443, C-2018-04349, C-2021-00614, C-2021-02730, C-2021-02842	
71152	Drawings	M-2202, Sheet 4	Lube Oil, Lube Oil Cooling, Electro/Hydraulic Controls and Main Steam	22
71152	Drawings	M-2206, Sheet 1	Steam Generator Secondary System	154
71152	Engineering	EC-58224	ANO Common Feedwater	1

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	Changes			
71152	Miscellaneous		ANO-1 Technical Requirements Manual	73
71152	Miscellaneous		ANO-2 Technical Requirements Manual	84
71152	Miscellaneous	CALC-92-E-0077-09	Design Basis for ANO Common Feed Water System Flow	
71152	Miscellaneous	SEP-ANO-2-IST-1_008	ANO Unit 2 Inservice Testing Bases Document	8
71152	Miscellaneous	STM 1-26	Common Feedwater System	3
71152	Miscellaneous	ULD-2-SYS-12	ANO-2 Emergency Feedwater System	12
71152	Procedures	1015.008	Unit 2 SDC Control	65
71152	Procedures	2402.017	Unit 2 CEA Extension Shaft Uncoupling Using Scout Tool	10
71152	Procedures	EN-EP-S-003-MULTI	ENS Magnesium Rotor MOV Management Plan	0
71152	Procedures	OP-1106.007	Common Feedwater System	9
71152	Procedures	OP-2106.006	Emergency Feedwater System Operations	106
71152	Procedures	OP-2402.089	2MS-39 A/B Check Valve Maintenance	14
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