



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**

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

January 24, 2022

Mr. John Dent, Jr.  
Vice President and Chief Nuclear Officer  
Nebraska Public Power District  
Cooper Nuclear Station  
72676 648A Avenue  
P.O. Box 98  
Brownville, NE 68321

SUBJECT: COOPER NUCLEAR STATION – INTEGRATED INSPECTION  
REPORT 05000298/2021004

Dear Mr. Dent:

On December 31, 2021, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Cooper Nuclear Station. On January 12, 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.

No findings or violations of more than minor significance were identified during this inspection.

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 "Josey".

Signed by Josey, Jeffrey  
on 01/24/22

Jeffrey E. Josey, Chief  
Reactor Projects Branch C  
Division of Reactor Projects

Docket No. 05000298  
License No. DPR-46

Enclosure:  
As stated

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COOPER NUCLEAR STATION – INTEGRATED INSPECTION REPORT 05000298/2021004 –  
DATED JANUARY 24, 2022

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DATE	01/20/2022	01/24/2022	1/18/2022	1/24/2022	

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

Docket Number: 05000298

License Number: DPR-46

Report Number: 05000298/2021004

Enterprise Identifier: I-2021-004-0142

Licensee: Nebraska Public Power District

Facility: Cooper Nuclear Station

Location: Brownville, NE

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

Inspectors: R. Alexander, Regional State Liaison Officer  
B. Baca, Health Physicist  
K. Chambliss, Resident Inspector  
R. Fanner, Operations Engineer  
T. Farina, Senior Operations Engineer  
J. O'Donnell, Senior Health Physicist  
A. Siwy, Senior Resident Inspector  
P. Vossmar, Senior Project Engineer  
D. You, Operations Engineer

Approved By: Jeffrey E. Josey, Chief  
Reactor Projects Branch C  
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 Cooper Nuclear Station, 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**

No findings or violations of more than minor significance were identified.

### **Additional Tracking Items**

None.

## PLANT STATUS

Cooper Nuclear Station began the inspection period at rated thermal power. On October 29, 2021, power was lowered to approximately 95 percent for withdrawn control rod operability test. The plant was returned to rated thermal power on October 29, 2021. On November 5, 2021, power was lowered to approximately 65 percent for power suppression testing. The plant was returned to rated thermal power on November 9, 2021. On November 12, 2021, power was lowered to approximately 67 percent for a control rod sequence exchange. The plant was returned to rated thermal power on November 15, 2021. The unit remained at rated thermal 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

### 71111.01 - 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 seasonal cold temperatures for the following systems:
  - Condensate storage tanks
  - Standby liquid control
  - Service water
  - Off-gas

#### 71111.04 - Equipment Alignment

##### Partial Walkdown Sample (IP Section 03.01) (2 Samples)

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

- (1) Division 2 4160 Vac system on October 6, 2021
- (2) Residual heat removal pump A on December 1, 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) Reactor building northwest quadrant, 881-foot 9-inch elevation and 859-foot 9-inch elevation, on October 6, 2021
- (2) Control building auxiliary relay room, 903-foot 6-inch elevation, on October 13, 2021
- (3) Control building cable spreading room, 918-foot elevation, on October 19, 2021
- (4) Reactor building motor generator set area, 976-foot elevation, on December 1, 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) Reactor building northwest quadrant on October 13, 2021

#### 71111.11A - Licensed Operator Requalification Program and Licensed Operator Performance

##### Requalification Examination Results (IP Section 03.03) (1 Sample)

- (1) The inspectors reviewed and evaluated the licensed operator examination failure rates for the requalification annual operating exam administered on December 8, 2021.

#### 71111.11B - Licensed Operator Requalification Program and Licensed Operator Performance

##### Licensed Operator Requalification Program (IP Section 03.04) (1 Sample)

- (1) Biennial Requalification Written Examinations

The inspectors evaluated the quality of the licensed operator biennial requalification written examination administered on November 17, 2021.

##### Annual Requalification Operating Tests

The inspectors evaluated the adequacy of the licensee's annual requalification

operating test.

#### Administration of an Annual Requalification Operating Test

The inspectors evaluated the effectiveness of the licensee in administering requalification operating tests required by 10 CFR 55.59(a)(2) and that the licensee is effectively evaluating their licensed operators for mastery of training objectives.

#### Requalification Examination Security

The inspectors evaluated the ability of the licensee to safeguard examination material, such that the examination is not compromised.

#### Remedial Training and Re-examinations

The inspectors evaluated the effectiveness of remedial training conducted by the licensee and reviewed the adequacy of re-examinations for licensed operators who did not pass a required requalification examination.

#### Operator License Conditions

The inspectors evaluated the licensee's program for ensuring that licensed operators meet the conditions of their licenses.

#### Control Room Simulator

The inspectors evaluated the adequacy of the licensee's control room simulator in modeling the actual plant and for meeting the requirements contained in 10 CFR 55.46.

#### Problem Identification and Resolution

The inspectors evaluated the licensee's ability to identify and resolve problems associated with licensed operator performance.

### 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 power suppression testing on November 5, 2021.

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

- (1) The inspectors observed and evaluated an emergency preparedness training drill in the simulator on November 16, 2021.

#### 71111.12 - Maintenance Effectiveness

##### Maintenance Effectiveness (IP Section 03.01) (1 Sample)

The inspectors evaluated the effectiveness of maintenance for the following activity:

- (1) Review of a periodic evaluation conducted in accordance with 10 CFR 50.65(a)(3)

#### 71111.13 - Maintenance Risk Assessments and Emergent Work Control

##### Risk Assessment and Management Sample (IP Section 03.01) (5 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) Service water booster pump B maintenance week on October 25, 2021
- (2) Service water pump C maintenance week on November 3, 2021
- (3) Service water booster pump C maintenance week on November 10, 2021
- (4) Service water pump D maintenance week on November 24, 2021
- (5) Service air compressor A maintenance week on December 1, 2021

#### 71111.15 - Operability Determinations and Functionality Assessments

##### Operability Determination or Functionality Assessment (IP Section 03.01) (3 Samples)

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

- (1) Reactor building ventilation differential pressure on October 19, 2021
- (2) Main steam isolation valve 80C, relay 5A-K3F, failure to pick up following valve testing on November 30, 2021
- (3) Insertion of suppression rod for cell with fuel defect failure on December 10, 2021

#### 71111.18 - Plant Modifications

##### Temporary Modifications and/or Permanent Modifications (IP Section 03.01 and/or 03.02) (2 Samples)

The inspectors evaluated the following temporary or permanent modifications:

- (1) Setpoint change for high pressure coolant injection pump discharge flow instrument on November 24, 2021
- (2) Operating the main generator voltage regulator without three transducer fuses on December 2, 2021

#### 71111.19 - Post-Maintenance Testing

##### Post-Maintenance Test Sample (IP Section 03.01) (5 Samples)

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



- (1) Instrument air valve replacement on October 18, 2021
- (2) Service water booster pump B strainer replacement on October 28, 2021
- (3) Reactor equipment cooling pressure indicator replacement on November 29, 2021
- (4) Control room emergency filtration testing following planned supply fan maintenance on November 18, 2021
- (5) Service air compressor A maintenance on December 2, 2021

#### 71111.22 - Surveillance Testing

The inspectors evaluated the following surveillance tests:

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

- (1) High pressure coolant injection valve in-service test on October 19, 2021
- (2) Service water pump D in-service test on November 24, 2021
- (3) Diesel generator service water check valves in-service test on December 11, 2021

#### FLEX Testing (IP Section 03.02) (1 Sample)

- (1) FLEX building 1 generators, air compressor, and fuel pump tests on October 26, 2021

#### 71114.04 - Emergency Action Level and Emergency Plan Changes

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

- (1) The inspectors evaluated the following submitted Emergency Action Level (EAL) and Emergency Plan changes:
  - Cooper Emergency Plan, Revision 77 (effective 5/19/2021, submitted to the NRC on 6/14/2021)
  - Cooper Emergency Plan, Revision 78 (effective 5/28/2021, submitted to the NRC on 6/23/2021)
  - Cooper Emergency Plan, Revision 79 (effective 10/27/2021, submitted to the NRC on 11/3/2021)
  - EPIP 5.7.1, Emergency Classification, Revision 68 (effective 5/28/2021; associated with License Amendment No. 269, dated 3/29/2021, which implemented the approved NEI 99-01, Revision 6-based EAL scheme)
  - EPIP 5.7.1, Emergency Classification, Revision 69 (effective 5/28/2021, submitted to the NRC on 6/23/2021)
  - EPIP 5.7.1, Emergency Classification, Revision 70 (effective 8/4/2021, submitted to the NRC on 8/30/2021)
  - EPIP 5.7.1, Emergency Classification, Revision 71 (effective 10/27/2021, submitted to the NRC on 11/3/2021)
  - EPIP 5.7.6, Notifications, Revision 79 (effective 5/28/2021, submitted to the NRC on 6/23/2021)

This evaluation does not constitute NRC approval.

## **RADIATION SAFETY**

### 71124.01 - Radiological Hazard Assessment and Exposure Controls

#### Radiological Hazard Assessment (IP Section 03.01) (1 Sample)

- (1) The inspectors evaluated how the licensee identifies the magnitude and extent of radiation levels and the concentrations and quantities of radioactive materials and how the licensee assesses radiological hazards.

#### Instructions to Workers (IP Section 03.02) (1 Sample)

- (1) The inspectors evaluated how the licensee instructs workers on plant-related radiological hazards and the radiation protection requirements intended to protect workers from those hazards.

#### Contamination and Radioactive Material Control (IP Section 03.03) (2 Samples)

The inspectors observed/evaluated the following licensee processes for monitoring and controlling contamination and radioactive material:

- (1) Observed licensee surveys for release of a dry active waste liner from the reactor building truck bay radiological controlled area
- (2) Observed workers exiting and licensee surveys of potentially contaminated material leaving the radiological controlled area

#### Radiological Hazards Control and Work Coverage (IP Section 03.04) (3 Samples)

The inspectors evaluated the licensee's control of radiological hazards for the following radiological work:

- (1) Radiation Work Permit 2021-001, "Radiological Controlled Area General Entry - All Areas - All Craft," Revision 1
- (2) Radiation Work Permit 2021-051, "Operations and Radiation Protection Activities - Specific Work Permit for All Buildings," Revision 1
- (3) Radiation Work Permit 2021-052, "Reactor Building Activities in High Radiation Areas," Revision 1, and Radiation Work Permit 2021-107, "Steam Tunnel Leak," Revision 0

#### High Radiation Area and Very High Radiation Area Controls (IP Section 03.05) (3 Samples)

The inspectors evaluated licensee controls of the following high radiation areas and very high radiation areas:

- (1) Surveys and controls for the high radiation area dry active waste liner movement from the refuel floor to the reactor building truck bay
- (2) Surveys for the shipment of a high radiation area dry active waste liner
- (3) Radiation protection escort for the high radiation area dry active waste liner shipment to the transport vehicle in the owner-controlled area

Radiation Worker Performance and Radiation Protection Technician Proficiency  
(IP Section 03.06) (1 Sample)

- (1) The inspectors evaluated radiation worker and radiation protection technician performance as it pertains to radiation protection requirements.

71124.03 - In-Plant Airborne Radioactivity Control and Mitigation

Permanent Ventilation Systems (IP Section 03.01) (2 Samples)

The inspectors evaluated the configuration of the following permanently installed ventilation systems:

- (1) Control room emergency ventilation system
- (2) Technical support center/operational support center emergency ventilation system

Temporary Ventilation Systems (IP Section 03.02)

There were no temporary ventilation systems available for the inspectors to evaluate.

Use of Respiratory Protection Devices (IP Section 03.03) (1 Sample)

- (1) The inspectors evaluated the licensee's use of respiratory protection devices.

Self-Contained Breathing Apparatus for Emergency Use (IP Section 03.04) (1 Sample)

- (1) The inspectors evaluated the licensee's use and maintenance of self-contained breathing apparatuses.

**OTHER ACTIVITIES – BASELINE**

71151 - Performance Indicator Verification

The inspectors verified licensee performance indicators submittals listed below:

OR01: Occupational Exposure Control Effectiveness Sample (IP Section 02.15) (1 Sample)

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

PR01: Radiological Effluent Technical Specifications/Offsite Dose Calculation Manual  
Radiological Effluent Occurrences (RETS/ODCM) Radiological Effluent Occurrences Sample  
(IP Section 02.16) (1 Sample)

- (1) 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 control rod drive hydraulic control unit issues that might be indicative of a more significant safety issue.

### Annual Follow-up of Selected Issues (IP Section 02.03) (1 Sample)

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

- (1) Corrective actions for reactor scram CR-CNS-2020-05623 on November 4, 2021

### **INSPECTION RESULTS**

No findings were identified.

### **EXIT MEETINGS AND DEBRIEFS**

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

- On November 4, 2021, the inspectors presented the occupational radiation safety inspection results to Mr. J. Dent, Vice President and Chief Nuclear Officer, and other members of the licensee staff.
- On December 9, 2021, the inspectors presented the biennial requalification inspection results to Mr. J. Florence, Superintendent, Simulator and Training Support, and other members of the licensee staff.
- On December 15, 2021, the inspectors presented the emergency plan/emergency action level change review inspection results to Mr. L. Mocnik, Manager, Emergency Preparedness, and other members of the licensee staff.
- On January 12, 2022, the inspectors presented the integrated inspection results to Mr. J. Dent, Vice President and Chief Nuclear Officer, and other members of the licensee staff.

## DOCUMENTS REVIEWED

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71111.01	Engineering Changes	EC 16-011	Diesel Generator Fuel Oil Maximum Allowable Cloud Point Temperature	0
		ECR 11193683	EDG Fuel Oil Cloud Point Temp	
	Procedures	2.1.14	Season Weather Preparations	36
		2.2.38.2	Portable Heating System	18
		2.2.47	HVAC Reactor Building	65
	Work Orders	WO	5315112	
71111.04	Procedures	2.2A.RHR.DIV1	Residual Heat Removal System Component Checklist (Div 1)	10
		2.2A_4160.DIV2	4160 VAC Auxiliary Power Checklist (Div 2)	2
71111.05	Fire Plans	CNS-FP-213	Reactor Building Northwest Quadrant Elevations 881'-9" and 859'-9"	6
		CNS-FP-221	Reactor Building MG Set Area Elevation 976'-0"	8
		CNS-FP-225	Control Building Auxiliary Relay Room Elevation 903'-6"	8
		CNS-FP-229	Control Building Cable Spreading Room Elevation 918'-0"	6
71111.06	Miscellaneous	NEDC 09-102	Internal Flooding – HELB, MELB, and Feedwater Line Break	3
	Work Orders	WO	5363550	
71111.11A	Miscellaneous		Summary of 2021 Requalification Exam Results	12/07/2021
71111.11B	Corrective Action Documents	CR-CNS-	2020-00172, 2020-00181, 2020-02902, 2021-01627, 2021-03341, 2021-03339, 2021-04424, 2021-04704,	
	Miscellaneous		Normal Evolutions Test (Mission Test)	10/15/2020
			Steady State Performance Test	02/09/2021
			Transient Performance Test #5 - SINGLE Recirculation Pump Trip	02/10/2021
			Post Event Simulator Test - Main Turbine Governor Valve #4 Closure from 100% Power	10/06/2020
			Licensed Operator Requal/STE Short Range Training Plan 2020-2021	06/09/2021
			Operator Medical Records (5)	10/6/2021
			Cycle 2-17 Remedial Exams (8)	09/7/2021
			LOR 2021 Annual Sample Plan	0
			2021 Biennial Written Exam Week 3	11/05/2021
		2021 EX-SC-	2021 Exam Scenarios	10/6/2021

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		2/8/12/26		
		COR009-99-00	NRC Licensed Personnel Regualification Written Exams	01/22/2021
		EX-P-1-CRD-1	Conduct Alternate Rod Insertion - Vent Scram Air Header	0
		EX-P-6-LAPS-1	Shutdown from Outside the Control Room	0
		EX-P-6-NBPP-1-A	Respond to No Break Power Panel Failure (Alt Path)	0
		EX-P-6-RMIS-1	Transfer PMIS UPS static switch from inverter to alternate source	0
		EX-P-8-CW-1	Backwash a Circulating Water Pump	0
		EX-S-1-CRD-2-A	Withdrawal of control rod from position 00 (Alt Path)	0
		EX-S-1-RR-3-A	Perform Rapid Power Reduction (Alt Path)	0
		EX-S-3-RCIC-1	Place RCIC in Pressure Control (Hardcard)	0
		EX-S-6-SDG-1	Energizing 4160F from SDG	0
		EX-S-6-SDG-2	Secure SDG from the Control Room	0
		NTD210017	Simulator Performance Test Report - Fuel Cycle 32	05/13/2021
		SEP 13-0045	Simulator Enhancement Project - Fire Protection Panel	07/19/2021
		SWP 20-0031	Simulator Work Package - Conduct PEST Plant Trans GV#4	10/02/2020
		TQF-210-DD03	LORE Simulator Crew Performance Evaluation Report – Crew E	10/06/2021
		TQF-210-DD04	RO/SRO Performance Evaluation Report -Crew E	10/06/2021
	Procedures	0-EN-TQ-202	Simulator Configuration Control	9C2
		0-EN-TQ-210	Conduct of Simulator Training	9C3
		NTP0.1	Systematic Approach to Training Process	10
		NTP8.1	Administration of Licensed Operator Medical Examination Program	24
		OTP810	NRC Examination Security Operating Tests	11/13/2019
		OTP813	Annual Operating Regualification Examination Development and Administration	15
		OTP814	Simulator Scenario-Based Testing	09/01/2021
		SDG 2.2	Simulator Reactor Core Model Reload	14
		TPP 208	Shift Technical Engineer (STE) Program Procedure	52
		TPP201	CNS Licensed Personnel Regualification Program	79
		TQF-217-SEC	Exam Security Agreement	09/30/2021

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71111.11Q	Miscellaneous		2021 ERO Team 6 & C November 16 Emergency Preparedness Site Integrated Drill Guide	11/01/2021
		EPIPEALHOT	CNS EAL Wall Chart Hot	22
	Procedures	10.31.1	Power Suppression Testing	4
		5.7.6	Notification	83
71111.12	Miscellaneous	WT-2019-0038-047	CNS Maintenance Rule Periodic Assessment for Assessment Period September 1, 2019, to August 31, 2021	11/10/2021
71111.13	Corrective Action Documents	CR-CNS-	2021-05159, 2021-05464	
	Miscellaneous		Protected Equipment Tagout, RHWA-1-SW-P-BPB Week 2143	10/25/2021
	Work Orders	WO	5321572, 5387989, 5387990, 5388015	
71111.15	Corrective Action Documents	CR-CNS-	2021-04809, 2021-04902, 2021-04983, 2021-05227, 2021-05237, 2021-05246	
	Miscellaneous	GE SIL 379	Power Suppression Testing	1
		Significant Operating Experience Report 90-2	Nuclear Fuel Defects	
	Procedures	10.31.1	Power Suppression Testing	4
		2.2.47	HVAC Reactor Building	65
		2.2.73	Standby Gas Treatment System	62
	Work Orders	WO	5322678	
71111.18	Corrective Action Documents	CR-CNS-	2021-04956	
	Miscellaneous	Adverse Condition Monitoring And Contingency Plan	Main Generator Voltage Regulator Overexcitation Protection Circuitry	
		Design Equivalent Change 5419766	Main Generator Voltage Regulator Fuses Removal	0
		Vendor Manual	Turbine Control Service Associates DGC Excitation System Users Manuals	
	Work Orders	WO	5361566, 5404656, 5417931	

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71111.19	Miscellaneous	Vendor Manual	ZR145 Series Air Compressors	15
	Procedures	2.2.84	HVAC Main Control Room and Cable Spreading Room	60
		7.0.14.1	Vibration Monitoring Program	12
		7.0.5	CNS Post-Maintenance Testing	59
	Work Orders	WO	5215734, 5321572, 5327441, 5335227, 5382855, 5387876, 5387878, 5392442, 5400899	
71111.22	Corrective Action Documents	CR-CNS-	2021-05012, 2021-05705	
	Procedures	6.HPCI.201	HPCI Valve Operability Test (IST)	32
71114.04	Corrective Action Documents	CR-CNS-	2021-02722, 2021-03724	
	Corrective Action Documents Resulting from Inspection	CR-CNS-	2021-04910	
	Miscellaneous	50.54(q) Evaluation No. 2021-02	5.7.1, Emergency Classification, Rev. 68	03/03/2021
		50.54(q) Evaluation No. 2021-80	CNS Emergency Plan, Rev. 79	10/21/2021
		50.54(q) Screen No. 2021-02	5.7.1, Emergency Classification, Revision 68	02/02/2021
		50.54(q) Screen No. 2021-11	CNS Emergency Plan, Revision 77	03/18/2021
		50.54(q) Screen No. 2021-27	5.7.6, Notification, Revision 79	04/27/2021
		50.54(q) Screen No. 2021-35	5.7.1, Emergency Classification, Revision 68	05/12/2021
		50.54(q) Screen No. 2021-37	5.7.1, Emergency Classification, Revision 69	05/19/2021
		50.54(q) Screen No. 2021-47	CNS Emergency Plan, Revision 78	05/19/2021
		50.54(q) Screen	5.7.1, Emergency Classification, Revision 70	07/21/2021



Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		No. 2021-63		
		50.54(q) Screen No. 2021-80	CNS Emergency Plan, Revision 79	10/13/2021
		50.54(q) Screen No. 2021-83	5.7.1, Emergency Classification, Revision 71	10/12/2021
	Procedures	0.29.4	Other Regulatory Reviews	33
		EPIP 5.7.1, Attachment 4	EAL Classification Matrix	20, 21, & 22
71124.01	Corrective Action Documents	CR-CNS-	2020-04533, 2020-04594, 2020-04649, 2020-04698, 2020-04909, 2020-04992, 2020-05297, 2020-05394, 2020-05411, 2021-02911, 2021-03033, 2021-03472, 2021-04228	
	Miscellaneous		Source Report: Source Leak Test	
			Low Level Radwaste Container Survey and Inspection	08/25/2021
		21-08	Radwaste Shipment Package: 21-08, Dry Active Waste, Low Specific Activity (LSA-II)	11/02/2021
	Procedures	7.4.32	Work Over, Near, or In Reactor Vessel, Dryer/Separator Storage Pool, or Spent Fuel Storage Pool	20
		9.ALARA.1	Dosimetry Administration	48
		9.ALARA.4	Radiation Work Permits	25
		9.EN-RP-100	Radiation Worker Expectations	19
		9.EN-RP-110-04	Radiation Protection Risk Assessment Process	14
		9.EN-RP-113	Response to Contaminated Spills/Leaks	5
		9.EN-RP-122	Alpha Monitoring	5
		9.EN-RP-123	Radiological Controls for Highly Radioactive Objects	4
		9.ENN-RP-102	Radiological Control	3
		9.NISP-RP-02	Radiation and Contamination Surveys	0
		9.NISP-RP-03	Radiological Air Sampling	1
		9.NISP-RP-04	Radiation Protection Posting and Labeling	0
		9.NISP-RP-05	Access Control for Radiologically Controlled Areas	1
		9.NISP-RP-06	Personnel Contamination Monitoring	0
		9.NISP-RP-07	Radioactive Material Control	0
		9.NISP-RP-10	Radiological Job Coverage	0
		9.RADOP.10	Radioactive Sources Control and Accountability	23

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		9.RADOP.14	Off-Site Radioactive Material Storage	5
		9.RADOP.17	Maintenance and Testing of HEPA Units	6
		9.RADOP.21	Radiological Control of Systems with Potential for Changing Radiological Conditions	2
	Radiation Surveys	CNS-1811-0007	Unit 1, Reactor Building 1001-foot elevation, Room 2000, Reactor Cavity Job Coverage	11/01/2018
		CNS-1811-0022	Unit 1, Reactor Building 1001-foot elevation, Reactor Cavity	11/04/2018
		CNS-1811-0033	Unit 1, Reactor Building 1001-foot elevation, Reactor Cavity Job Coverage	11/06/2018
		CNS-2009-0080	CNS-RP-108E Drywell-Under Vessel Job Coverage	09/28/2020
		CNS-2010-0007	Unit 1, Reactor Building 1001-foot elevation, Room 2000, Job Coverage	10/01/2020
		CNS-2106-0012	Spent Fuel Pool Inventory Survey	06/15/2021
		CNS-2108-0018	Unit 1, Reactor Building 931-foot elevation, Room 2026, Residual Heat Removal Exchanger 1A and 1B	08/24/2021
		CNS-2109-0019	Unit 1, Reactor Building 881-foot and 859-foot elevations, Residual Heat Removal Pumps A and C	09/23/2021
		CNS-2110-0020	CNS-RP-100: ES-210 Steel Liner	10/19/2021
		CNS-2110-003	Unit 1, Reactor Building 903-foot elevation, Room 2015, Residual Heat Removal Exchanger 1A and 1B	10/28/2021
		CNS-2111-0006	Unit 1, Reactor Building 881-foot elevation, Residual Heat Removal Pumps B and D	11/03/2021
		CNS-YYMM-XXXX	Facility Neutron Survey package: CNS-2011-0030, CNS-1405-0048, CNS-1711-0025, CNS-1711-0031, CNS-1711-0039, CNS-1711-0043, CNS-1711-0046, CNS-1711-0047	
	Radiation Work Permits (RWPs)	2020-506	Undervessel Control Rod Drive Mechanisms (CRDMs) Changeout	0
		2020-518	Remote Valves, Control Valves, Manual Valves in Reactor Building LHRAs	0
		2020-545	Reactor Disassembly and Reassembly	0
		2020-549	Cavity and Dryer/Separator Pit Decontamination	0
		2020-553	HPCI-MOV-15 Repairs in Drywell in Refuel Outage 31 (RE31)	0
	Self-Assessments		2020 Radiation Protection Program Annual Report	05/27/2021
		LO-2020-0129-	Radiological Hazard Assessment and Exposure Controls and	05/21/2021

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		002	In-Plant Airborne Radioactivity Control and Mitigation	
71124.03	ALARA Plans	2021-02	ALARA TEDE Worksheet for Repair Corrosion of Sump H Liner	07/16/2021
		WO 5381917	ALARA TEDE Worksheet for Inspect IVVI Platform	10/20/2021
		WO 5401066	ALARA TEDE Worksheet for E Sump Float Replacement	10/20/2021
	Corrective Action Documents	CR-CNS-	2019-02870, 2019-04210, 2019-04398, 2019-04578, 2019-05057, 2019-06240, 2020-00219, 2020-00967, 2020-00983, 2020-01466, 2020-01691, 2020-02326, 2020-02546, 2020-02967, 2020-03060, 2020-03308, 2020-03643, 2020-04992, 2021-02311, 2021-02911, 2021-04228, 2021-04259	
	Corrective Action Documents Resulting from Inspection	CR-CNS-	2021-05132, 2021-05145, 2021-05170	
	Drawings	2019, Sheet 1 As Built 454003607	Flow Diagram: Main Control Room, Cable Room, and Computer Room Heating Ventilating and Air Conditioning	07/16/2015
	Miscellaneous		SCBA Qualification Records	09/27/2021
			Respirator Report	09/28/2021
		2019	CNS RP-402 Self-Contained Breathing Apparatus Functionals	01/09/2020
		2019	CNS RP-410 Respirator Inspection	01/09/2020
		2020	CNS RP-402 Self-Contained Breathing Apparatus Functionals	12/28/2020
		2020	CNS RP-410 Respirator Inspection	12/28/2020
		2021	CNS RP-410 Respirator Inspection	09/17/2021
		2021	CNS RP-402 Self-Contained Breathing Apparatus Functionals	09/17/2021
		409779-1	Laboratory Report - Compressed Air/Gas Quality Testing	03/16/2021
		420650-1	Laboratory Report - Compressed Air/Gas Quality Testing	06/18/2021
		C-011342-1	SCBA Certified Technician Certificate for Maintenance and Overhaul for Recertification	01/25/2021
		LO-CNSLO-2005-00182	Cooper Nuclear Station - Use of Delta Protection Suits	10/02/2006
	Procedures	15.HV.102	TSC Emergency Ventilation Charcoal and HEPA Filter Leak Test, Fan Capacity Test, And Charcoal Sampling	8
		15.HV.104	Training Center Emergency Ventilation Charcoal and HEPA Filter Leak Test, Fan Flow and Pressurization Test, and	6 and 7

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
			Charcoal Sampling	
		6.HV.104	Control Room Emergency Filter System Flow Test, Charcoal and HEPA Filter Leak Test, Filter DP Test, and Charcoal Sample Analysis	19
		9.RESP.1	Respiratory Protection Program	18
		9.RESP.2	Self-Contained Breathing Apparatus	28
		9.RESP.5	Air Quality Monitoring	7
	Self-Assessments		2020 Respiratory Program Evaluation	05/27/2021
			2019 Respiratory Program Evaluation	05/28/2020
		LO-2020-0129-002	Radiological Hazard Assessment and Exposure Controls and In-Plant Airborne Radioactivity Control and Mitigation	05/21/2021
	Work Orders	5209783 - Surveillance	Training Center Emergency Ventilation Charcoal and HEPA Filter Leak Test, Fan Flow and Pressurization Test, and Charcoal Sampling	06/16/2020
		5299028 - Surveillance	Control Room Emergency Filter System Flow Test, Charcoal and HEPA Filter Leak Test, Filter DP Test, and Charcoal Sample Analysis	05/13/2021
		5315890 - Surveillance	TSC Emergency Ventilation Charcoal and HEPA Filter Leak Test, Fan Capacity Test, And Charcoal Sampling	05/10/2021
71151	Miscellaneous	0-EN-LI-114, Attachment 9.3	Performance Indicator Documentation and Data Review: Occupational Exposure Control Effectiveness	10/01/2020 - 09/30/2021
		0-EN-LI-114, Attachment 9.3	Performance Indicator Documentation and Data Review: RETS/ODCM Radiological Effluent Occurrence	10/01/2020 - 09/30/2021
71152	Miscellaneous		Top Ten Equipment Reliability Action Plan: Control Rod Drive HCU Valve Leakage	06/17/21
		WT 2021-0074		

COOPER NUCLEAR STATION – INTEGRATED INSPECTION REPORT 05000298/2021004 DATE  
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