UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
1600 E. LAMAR BLVD.
ARLINGTON, TX 76011-4511

November 10, 2014

Mr. Oscar A. Limpias, Vice President-Nuclear
and Chief Nuclear Officer
Nebraska Public Power District
Cooper Nuclear Station
72676 648A Avenue
Brownville, NE 68321

SUBJECT: COOPER NUCLEAR STATION – NRC INTEGRATED INSPECTION REPORT 05000298/2014004

Dear Mr. Limpias:

On September 30, 2014, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Cooper Nuclear Station. On September 16, 2014, the NRC inspectors discussed the results of this inspection with you and other members of your staff. Inspectors documented the results of this inspection in the enclosed inspection report.

NRC inspectors documented three findings of very low safety significance (Green) in this report. These findings involved violations of NRC requirements. The NRC is treating these violations as non-cited violations (NCVs) consistent with Section 2.3.2.a of the NRC Enforcement Policy.

If you contest the violations or significance of the non-cited violations, 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, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC resident inspector at the Cooper Nuclear Station.

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 Regional Administrator, Region IV; and the NRC resident inspector at the Cooper Nuclear Station.

In accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 2.390, "Public Inspections, Exemptions, Requests for Withholding," a copy of this letter, its enclosure, and your response (if any) will be available electronically for public inspection in the NRC's Public Document Room or from the Publicly Available Records (PARS) component of the NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Sincerely,

/RA/

Gerond A. George, Acting Branch Chief
Project Branch C
Division of Reactor Projects

Docket Nos.: 50-298
License Nos.: DPR-46

Enclosure: Inspection Report 05000298/2014004
w/ Attachment: Supplemental
Information

cc w/ encl: Electronic Distribution

In accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 2.390, "Public Inspections, Exemptions, Requests for Withholding," a copy of this letter, its enclosure, and your response (if any) will be available electronically for public inspection in the NRC's Public Document Room or from the Publicly Available Records (PARS) component of the NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Sincerely,

/RA/

Gerond A. George, Acting Branch Chief
Project Branch C
Division of Reactor Projects

Docket Nos.: 50-298
License Nos.: DPR-46

Enclosure: Inspection Report 05000298/2014004
w/ Attachment: Supplemental Information

cc w/ encl: Electronic Distribution

Distribution:
See next page

DOCUMENT NAME: CNS2014004-RP-JJ.docx
ADAMS ACCESSION NUMBER: **ML14314A939**

☒SUNSI Review By: GGeorge	ADAMS ☒ Yes ☐ No	☒ Publicly Available ☐ Non-Publicly Available	☒ Non-Sensitive ☐ Sensitive	Keyword: NRC-002

OFFICE	SRI:DRP/C	RI:DRP/C	C:EB1	C:EB2	C:OB	C:PSB1	C:PSB2
NAME	JJosey/dll	CHenderson	TRFarnholtz	JDixon	VGaddy	MSHaire	HGepford
SIGNATURE	*T-GAG for*	*E-GAG for*	*/RA/CCO for*	*/RA/JMM for*	*/RA/*	*/RA/*	*/RA/*
DATE	10/29/14	10/28/14	10/27/14	10/27/14	10/28/14	10/17/14	10/28/14
OFFICE	C:DRS/TSB	SPE:DRP/C	BC:DRP/C				
NAME	GMiller	RAzua	GGeorge				
SIGNATURE	*/RA/*	*T-GAG for*	*/RA/*				
DATE	10/28/14	10/28/14	11/10/14				

OFFICIAL RECORD COPY

Letter to Oscar A. Limpias from Gerond A. George, dated November 10, 2014

SUBJECT: COOPER NUCLEAR STATION – NRC INTEGRATED INSPECTION REPORT 05000298/2014004

DISTRIBUTION:
Regional Administrator (Marc.Dapas@nrc.gov)
Deputy Regional Administrator (Kriss.Kennedy@nrc.gov)
Acting DRP Director (Troy.Pruett@nrc.gov)
Acting DRP Deputy Director (Jason.Kozal@nrc.gov)
DRS Director (Anton.Vegel@nrc.gov)
DRS Deputy Director (Jeff.Clark@nrc.gov)
Senior Resident Inspector (Jeffrey.Josey@nrc.gov)
Resident Inspector (Christopher.Henderson@nrc.gov)
Acting Branch Chief, DRP/C (Gerond.George@nrc.gov)
Senior Project Engineer (Ray.Azua@nrc.gov)
Senior Project Engineer (Nick.Taylor@nrc.gov)
Project Engineer (Paul.Nizov@nrc.gov)
Project Engineer (Michael.Langelier@nrc.gov)
CNS Administrative Assistant (Amy.Elam@nrc.gov)
Public Affairs Officer (Victor.Dricks@nrc.gov)
Public Affairs Officer (Lara.Uselding@nrc.gov)
Project Manager (Andrea.George@nrc.gov)
Branch Chief, DRS/TSB (Geoffrey.Miller@nrc.gov)
ACES (R4Enforcement.Resource@nrc.gov)
RITS Coordinator (Marisa.Herrera@nrc.gov)
Regional Counsel (Karla.Fuller@nrc.gov)
Technical Support Assistant (Loretta.Williams@nrc.gov)
Congressional Affairs Officer (Angel.Moreno@nrc.gov)
RIV/ETA: OEDO (John.Jandovitz@nrc.gov)
ROPReports

U.S. NUCLEAR REGULATORY COMMISSION

REGION IV

Docket: 05000298

License: DPR-46

Report: 05000298/2014004

Licensee: Nebraska Public Power District

Facility: Cooper Nuclear Station

Location: 72676 648A Ave
Brownville, NE

Dates: July 1 through September 30, 2014

Inspectors: J. Josey, Senior Resident Inspector
C. Henderson, Resident Inspector
P. Elkmann, Senior Emergency Preparedness Inspector
S. Garchow, Senior Operations Engineer
M. Langelier, Project Engineer
G. Guerra, CHP, Emergency Preparedness Inspector
J. Larson, Senior Physical Security Inspector
W. Sifre, Senior Reactor Inspector

Approved By: Gerond A. George
Acting Chief, Project Branch C
Division of Reactor Projects

SUMMARY

IR 05000298/2014004; 07/01/2014 – 09/30/2014; Cooper Nuclear Station; Integrated Resident and Regional Report; Operability Determination and Functionality Assessment, Maintenance of Emergency Preparedness, Performance Indicator Verification.

The inspection activities described in this report were performed between July 1 and September 30, 2014, by the resident inspectors at the Cooper Nuclear Station and inspectors from the NRC's Region IV office. Three findings of very low safety significance (Green) are documented in this report. These findings involved violations of NRC requirements. The significance of inspection findings is indicated by their color (Green, White, Yellow, or Red), which is determined using Inspection Manual Chapter 0609, "Significance Determination Process." Their cross-cutting aspects are determined using Inspection Manual Chapter 0310, "Aspects within the Cross-Cutting Areas." Violations of NRC requirements are dispositioned in accordance with the NRC Enforcement Policy. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process."

Cornerstone: Mitigating Systems

- Green. The inspectors identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, Drawings," associated with the licensee's failure to assess and document the basis for operability when a degraded or nonconforming condition was identified in accordance with Station Procedure 0.5OPS, "Operations Review of Condition Reports/Operability Determination." Specifically, the licensee failed to adequately evaluate and document the basis for operability when opening the inner railroad airlock door, which serves as a tornado missile barrier for safety-related equipment inside the reactor building. To correct this issue, the licensee performed an operability evaluation and designated compensatory actions. The licensee entered this deficiency into their corrective action program for resolution as Condition Reports CR-CNS-2014-05207 and CR-CNS-2014-05366.

  The failure to properly assess and document the basis for operability when a degraded or nonconforming condition was identified was a performance deficiency. The performance deficiency was more than minor, and therefore a finding, because it was associated with the equipment performance attribute of the Mitigating Systems Cornerstone and affected the cornerstone objective to ensure availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the licensee's failure to properly assess and document the basis for operability resulted in a condition of unknown operability for a degraded nonconforming condition. Using Inspection Manual Chapter 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," dated June 19, 2012, inspectors determined that the finding was of very low safety significance (Green) because the finding: (1) was not a deficiency affecting the design and qualification of a mitigating structure, system, or component, and did not result in a loss of operability or functionality; (2) did not represent a loss of system and/or function; (3) did not represent an actual loss of function of at least a single train for longer than its technical specification allowed outage time, or two separate safety systems out-of-service for longer than their technical specification allowed outage time; and (4) did not represent an actual loss of function of one or more nontechnical specification trains of equipment designated as high safety-significance in accordance with the licensee's maintenance rule program. The finding has a cross-cutting aspect in the area of human performance associated with

avoiding complacency because individuals did not recognize and plan for the possibility of mistakes, latent problems, or inherent risk, even while expecting successful outcomes [H.12]. (Section 1R15)

Cornerstone: Emergency Preparedness

- Green. The inspectors identified a non-cited violation for the licensee's failure to follow the site emergency plan between March 6, 2008, and June 23, 2014, as required by 10 CFR 50.54(q)(2). Specifically, the licensee failed to store respiratory protection equipment (self-contained breathing apparatus) at the on-site Communications Building in accordance with the requirements of Emergency Plan, Revision 64, Section 7.8. The condition was entered into the licensee's corrective action program as Condition Report CR-CNS-2013-07882.

  The failure to follow the site emergency plan was a performance deficiency. The performance deficiency was more than minor, and therefore a finding, because it was associated with the facilities and equipment attribute of the Emergency Preparedness Cornerstone and adversely affected the cornerstone objective to ensure the licensee is capable of implementing adequate measures to protect the health and safety of the public in the event of a radiological emergency. Specifically, the licensee failed to maintain respiratory protection equipment in the Communications Building contrary to the emergency plan requirement. This finding was evaluated using Manual Chapter 0609, "Emergency Preparedness Significance Determination Process," dated February 24, 2014, and was determined to be of very low safety significance because it was a failure to comply with an NRC requirement, was not a loss of planning standard function, and was not a degraded planning standard function. The planning standard function was not degraded because some respiratory protection equipment was available on-site for use by emergency workers. This finding has a cross-cutting aspect in the area of human performance associated with change management because the finding was caused by the licensee's failure in 2008 to complete a change to the site emergency plan [H.3]. (Section 1EP5)

- Green. The inspectors identified a non-cited violation for the licensee's failure to correct a deficiency occurring in a drill conducted on December 18, 2013, as required by 10 CFR 50.47(b)(14). Specifically, licensee evaluators failed to identify that the shift manager declared a General Emergency during a licensed-operator training proficiency drill when the conditions did not exist. This issue has been entered into the licensee's corrective action program as Condition Reports CR-CNS-2014-05286 and CR-CNS-2014-05291.

  The licensee's failure to correct a weakness in performance occurring during a drill was a performance deficiency. A weakness is defined in Manual Chapter 0609, Appendix B, as being performance, during a drill or exercise, that would have prevented the effective implementation of the emergency plan had the circumstances actually occurred. The performance deficiency was more than minor, and therefore a finding, because it was associated with the Emergency Response Organization performance attribute of the Emergency Preparedness Cornerstone and adversely affected the cornerstone objective to ensure the licensee is capable of implementing adequate measures to protect the health and safety of the public in the event of a radiological emergency. Specifically, the declaration of a General Emergency when conditions did not exist for the declaration would have prevented the effective implementation of the site emergency plan. This finding was evaluated using Manual Chapter 0609, "Emergency Preparedness Significance Determination Process," dated February 24, 2014, and was determined to be of very low

safety significance because it was a failure to comply with NRC requirements, was not a loss of planning standard function, and was not a degraded planning standard function. The planning standard function was not degraded because the failure to implement corrective actions occurred during a single-facility drill with limited number of evaluators. This finding has a cross-cutting aspect in the area of problem and identification associated with the identification of problems because the licensee failed to identify a performance problem when it occurred [P.1]. (Section 4OA1.2)

PLANT STATUS

The Cooper Nuclear Station began the inspection period at full power on July 1, 2014. On August 22, 2014, the plant commenced power coast down and on September 27, 2014, the licensee shut the plant down for Refueling Outage 28.

REPORT DETAILS

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity

1R01 Adverse Weather Protection (71111.01)

.1 Readiness for Seasonal Extreme Weather Conditions

a. Inspection Scope

On August 15, 2014, the inspectors completed an inspection of the station's readiness for seasonal extreme weather conditions. The inspectors reviewed the licensee's adverse weather procedures for seasonal high temperatures, and evaluated the licensee's implementation of these procedures. The inspectors verified that prior to the onset of hot weather, the licensee had corrected weather-related equipment deficiencies identified during the previous hot weather season.

The inspectors selected one risk-significant system that is required to be protected from hot weather:

- Service water intake structure

The inspectors reviewed the licensee's procedures and design information to ensure the system would remain functional when challenged by adverse weather. The inspectors verified that operator actions described in the licensee's procedures were adequate to maintain readiness of these systems. The inspectors walked down portions of these systems to verify the physical condition of the adverse weather protection features.

These activities constituted one sample of readiness for seasonal extreme weather conditions, as defined in Inspection Procedure 71111.01.

b. Findings

No findings were identified.

.2 Readiness for Impending Adverse Weather Conditions

a. Inspection Scope

On August 29, 2014, the inspectors completed an inspection of the station's readiness for impending adverse weather conditions. The inspectors reviewed plant design features, the licensee's procedures to respond to thunderstorms, and the licensee's planned implementation of these procedures. The inspectors evaluated operator staffing

and accessibility of controls and indications for those systems required to control the plant.

These activities constituted one sample of readiness for impending adverse weather conditions, as defined in Inspection Procedure 71111.01.

b. Findings

No findings were identified.

1R04 Equipment Alignment (71111.04)

.1 Partial Walkdown

a. Inspection Scope

The inspectors performed partial system walk-downs of the following risk-significant systems:

- September 8, 2014, Emergency diesel generator 1 and 2 jacket water system
- September 8, 2014, Charger 1C aligned to 125 Vdc/250 Vdc, Division 1
- September 22, 2014, Emergency diesel generator 2 lube oil system

The inspectors reviewed the licensee's procedures and system design information to determine the correct lineup for the systems. They visually verified that critical portions of the systems were correctly aligned for the existing plant configuration.

These activities constituted three partial system walk-down samples as defined in Inspection Procedure 71111.04.

b. Findings

No findings were identified.

.2 Complete Walkdown

a. Inspection Scope

On July 22, 2014, the inspectors performed a complete system walk-down inspection of the high pressure coolant injection system. The inspectors reviewed the licensee's procedures and system design information to determine the correct high pressure coolant injection lineup for the existing plant configuration. The inspectors also reviewed outstanding work orders, open condition reports, in-process design changes, temporary modifications, and other open items tracked by the licensee's operations and engineering departments. The inspectors then visually verified that the system was correctly aligned for the existing plant configuration.

These activities constituted one complete system walk-down sample, as defined in Inspection Procedure 71111.04.

b. Findings

No findings were identified.

1R05 Fire Protection (71111.05)

Quarterly Inspection

a. Inspection Scope

The inspectors evaluated the licensee's fire protection program for operational status and material condition. The inspectors focused their inspection on four plant areas important to safety:

- July 1, 2014, Disable HALON system for service water pump room, Fire Area XI, Zone 20A
- September 8, 2014, Fire impairment 14-805 vital switch gear room 1F, Fire Area II, Zone 3A
- September 9, 2014, Fire impairment FP13-BLDG-DOOR-R3, high pressure coolant injection room, Fire Area I, Zone 1E
- September 10, 2014, Fire impairment FP13-FSEALS, auxiliary relay room west wall, Fire Area VII, Zone 8A

For each area, the inspectors evaluated the fire plan against defined hazards and defense-in-depth features in the licensee's fire protection program. The inspectors evaluated control of transient combustibles and ignition sources, fire detection and suppression systems, manual firefighting equipment and capability, passive fire protection features, and compensatory measures for degraded conditions.

These activities constituted four quarterly inspection samples, as defined in Inspection Procedure 71111.05.

b. Findings

No findings were identified.

1R11 Licensed Operator Requalification Program and Licensed Operator Performance (71111.11)

.1 Review of Licensed Operator Requalification

a. Inspection Scope

On September 10, 2014, the inspectors observed simulator training for an operating crew. The inspectors assessed the performance of the operators and the evaluators' critique of their performance. The inspectors also assessed the modeling and performance of the simulator during the requalification activity.

These activities constitute completion of one quarterly licensed operator requalification program sample, as defined in Inspection Procedure 71111.11.

b. Findings

No findings were identified.

.2 Review of Licensed Operator Performance

a. Inspection Scope

On September 27, 2014, the inspectors observed the performance of on-shift licensed operators in the plant's main control room. At the time of the observations, the plant was in a period of heightened activity and risk due to reactor shutdown and placing shut down cooling in service.

In addition, the inspectors assessed the operators' adherence to plant procedures, including the conduct of operations procedure and other operations department policies.

These activities constitute completion of one quarterly licensed operator performance sample, as defined in Inspection Procedure 71111.11.

b. Findings

No findings were identified.

.3 Annual Review of Requalification Examination Results

The licensed operator requalification program involves two training cycles that are conducted over a 2-year period. In the first cycle, the annual cycle, the operators are administered an operating test consisting of job performance measures and simulator scenarios. In the second part of the training cycle, the biennial cycle, operators are administered an operating test and a comprehensive written examination. For this annual inspection requirement, the licensee was in the first part of the training cycle.

a. Inspection Scope

The inspector reviewed the results of the operating tests for Cooper Nuclear Station to satisfy the annual inspection requirements.

On July 22, 2014, the licensee informed the inspector of the following results:

- 6 of 6 crews passed the simulator portion of the operating test
- 38 of 38 licensed operators passed the simulator portion of the operating test
- 38 of 38 licensed operators passed the job performance measure portion of the operating test

There were no remediations performed for the operating tests.

The inspector completed one inspection sample of the annual licensed operator requalification program.

b. Findings

No findings were identified.

1R12 Maintenance Effectiveness (71111.12)

a. Inspection Scope

The inspectors reviewed three instances of degraded performance or condition of safety-related structures, systems, and components (SSCs):

- July 7, 2014, Emergency diesel generator buildings
- July 30, 2014, Supplemental diesel generator
- September 12, 2014, Emergency diesel generator 2 lube oil system

The inspectors reviewed the extent of condition of possible common cause structure, system, and component failures and evaluated the adequacy of the licensee's corrective actions. The inspectors reviewed the licensee's work practices to evaluate whether these may have played a role in the degradation of the structures, systems, and components. The inspectors assessed the licensee's characterization of the degradation in accordance with 10 CFR 50.65 (the Maintenance Rule), and verified that the licensee was appropriately tracking degraded performance and conditions in accordance with the Maintenance Rule.

These activities constituted completion of three maintenance effectiveness samples, as defined in Inspection Procedure 71111.12.

b. Findings

No findings were identified.

1R13 Maintenance Risk Assessments and Emergent Work Control (71111.13)

a. Inspection Scope

The inspectors reviewed four risk assessments performed by the licensee prior to changes in plant configuration and the risk management actions taken by the licensee in response to elevated risk:

- July 2, 2014, Service water maintenance, Division I
- July 28, 2014, Preparation for service water piping tie-in
- August 28, 2014, Reactor building inner airlock door
- September 11, 2014, Residual heat removal limiting condition for operation maintenance window

The inspectors verified that these risk assessments were performed timely and in accordance with the requirements of 10 CFR 50.65 (the Maintenance Rule) and plant procedures. The inspectors reviewed the accuracy and completeness of the licensee's risk assessments and verified that the licensee implemented appropriate risk management actions based on the result of the assessments.

The inspectors also observed portions of one emergent work activity that had the potential to affect the functional capability of mitigating systems.

- August 20, 2014, Diesel generator No. 1 jacket water pump repair

The inspectors verified that the licensee appropriately developed and followed a work plan for this activity. The inspectors verified that the licensee took precautions to minimize the impact of the work activity on unaffected structures, systems, and components (SSCs).

These activities constitute completion of five maintenance risk assessments and emergent work control inspection samples, as defined in Inspection Procedure 71111.13.

b. Findings

No findings were identified.

1R15 Operability Determinations and Functionality Assessments (71111.15)

a. Inspection Scope

The inspectors reviewed five operability determinations that the licensee performed for degraded or nonconforming structures, systems, or components (SSCs):

- July 25, 2014, Operability determination of drywell temperature
- August 28, 2014, Operability determination of reactor building inner airlock door
- August 28, 2014, Operability determination of auxiliary relay panels 9-33, 9-34, and 9-45 outside their seismic design configuration
- September 11, 2014, Operability determination of the main turbine bypass valve 2 failure to close
- September 30, 2014, Operability determination of the standby gas treatment fan startup to rate speed requirements

The inspectors reviewed the timeliness and technical adequacy of the licensee's evaluations. Where the licensee determined the degraded structure, system, or component to be operable, the inspectors verified that the licensee's compensatory measures were appropriate to provide reasonable assurance of operability. The inspectors verified that the licensee had considered the effect of other degraded conditions on the operability of the degraded structure, system, or component.

These activities constitute completion of five operability and functionality review samples, as defined in Inspection Procedure 71111.15.

b. Findings

Introduction. The inspectors identified a Green, non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, Drawings," associated with the licensee's failure to assess and document the basis for operability when a degraded or nonconforming condition was identified in accordance with Station Procedure 0.5OPS, "Operations Review of Condition Reports/Operability Determination."

Description. Station Procedure 0.5OPS, "Operations Review of Condition Reports/Operability Determinations," Revision 46, provides the guidance used by operations staff at the Cooper Nuclear Station to perform operability determinations. Section 3.1 required, in part, that the shift manager, "document the basis for operability when a degraded or nonconforming condition exists." The failure to properly assess degraded non-conforming conditions has the potential to result in structures, systems, and components not being able to perform their specified safety function (inoperable) and not being recognized as such by the operators.

On August 19, 2014, the licensee performed an activity which required the opening of the inner railroad airlock door. Through review of the facilities Updated Safety Analysis Report inspectors determined that opening this door affects the operability of secondary containment and the operability of safety-related equipment housed inside the reactor building because this door serves as a tornado missile barrier.

During their review of the activity, inspectors noted that operators had recognized that this activity affected the operability of secondary containment, assessed this activity, and documented the assessment in the station logs. However, inspectors noted that the licensee had not assessed and documented a basis for operability, of the safety-related equipment in the reactor building, for the removal of the tornado missile barrier when the inner railroad airlock door was opened.

Inspectors informed the licensee of their concern and the licensee initiated Condition Reports CR-CNS-2014-05207 and CR-CNS-2014-05366. The licensee subsequently assessed the degraded condition and determined that the equipment was operable with compensatory measures.

Inspectors reviewed the station logs for the past year and noted that the inner railroad airlock door had been opened several times. At none of these times was the operability of the safety-related equipment in the reactor building assessed and documented. Therefore, inspectors determined that the licensee had failed to follow the requirements of Station Procedure 0.5OPS when a degraded condition was identified.

Analysis. The failure to properly assess and document the basis for operability when a degraded or nonconforming condition was identified was a performance deficiency. The performance deficiency was more than minor, and therefore a finding, because it was associated with the equipment performance attribute of the Mitigating Systems Cornerstone and adversely affected the cornerstone objective to ensure availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the licensee's failure to properly assess and

document the basis for operability resulted in a condition of unknown operability for a degraded nonconforming condition. Using Inspection Manual Chapter 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," dated June 19, 2012, inspectors determined that the finding was of very low safety significance (Green) because the finding: (1) was not a deficiency affecting the design and qualification of a mitigating structure, system, or component, and did not result in a loss of operability or functionality; (2) did not represent a loss of system and/or function; (3) did not represent an actual loss of function of at least a single train for longer than its technical specification allowed outage time, or two separate safety systems out-of-service for longer than their technical specification allowed outage time; and (4) did not represent an actual loss of function of one or more nontechnical specification trains of equipment designated as high safety-significance in accordance with the licensee's maintenance rule program. The finding has a cross-cutting aspect in the area of human performance associated with avoiding complacency because individuals did not recognize and plan for the possibility of mistakes, latent problems, or inherent risk, even while expecting successful outcomes [H.12].

Enforcement. Title 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings, requires, in part, that activities affecting quality shall be accomplished in accordance with documented instructions, procedures, or drawings, of a type appropriate to the circumstances. Station Procedure 0.5OPS, "Operations Review of Condition Reports/Operability Determination," a procedure that is appropriate to the circumstances of evaluating the operability of safety-related components, required the licensee to properly assess and document the basis for operability when a degraded or nonconforming condition was identified. Contrary to the above, between August 19, 2014, and August 26, 2014, an activity affecting quality was not accomplished in accordance with a procedure that was appropriate to the circumstances. Specifically, operators failed to adequately assess and document the basis for operability when opening the inner railroad airlock door, which serves as a tornado missile barrier for safety-related equipment inside the reactor building. To correct this issue, the licensee performed an operability evaluation and designated compensatory actions. This violation is being treated as a non-cited violation, consistent with Section 2.3.2.a of the Enforcement Policy. The violation was entered into the licensee's corrective action program as Condition Reports CR-CNS-2014-05207 and CR-CNS-2014-05366. (NCV 05000298/2014004-01, "Failure to Follow Operability Procedure")

1R19 Post-Maintenance Testing (71111.19)

a. Inspection Scope

The inspectors reviewed six post-maintenance testing activities that affected risk-significant structures, systems, or components (SSCs):

- July 2, 2014, Service water maintenance, Division I
- July 5, 2014, Service water booster pump repair
- July 28, 2014, Emergency diesel generator 1 engine drive jacket water pump repair

- July 31, 2014, RHR-MO-13B surveillance and repair
- September 11, 2014, HPCI-MO-14 dynamic testing
- September 27, 2014, RHR-MO-17 starter examine and maintenance

The inspectors reviewed licensing- and design-basis documents for the structures, systems, and components, and the maintenance and post-maintenance test procedures. The inspectors observed the performance of the post-maintenance tests to verify that the licensee performed the tests in accordance with approved procedures, satisfied the established acceptance criteria, and restored the operability of the affected structures, systems, or components.

These activities constitute completion of six post-maintenance testing inspection samples, as defined in Inspection Procedure 71111.19.

b. Findings

No findings were identified.

1R22 Surveillance Testing (71111.22)

a. Inspection Scope

The inspectors observed five risk-significant surveillance tests and reviewed test results to verify that these tests adequately demonstrated that the structures, systems, and components (SSCs) were capable of performing their safety functions:

In-service tests:
- September 30, 2014, HPCI-MO-14 dynamic valve testing

Containment isolation valve surveillance tests:
- September 17, 2014, Testable flange PC-FLG-243AV

Reactor coolant system leak detection tests:
- August 20, 2014, Reactor coolant system leakage determination

Other surveillance tests:
- September 11, 2014, Main turbine bypass valve testing
- September 16, 2014, Standby gas quarterly surveillance, Division II

The inspectors verified that these tests met technical specification requirements, that the licensee performed the tests in accordance with their procedures, and that the results of the test satisfied appropriate acceptance criteria. The inspectors verified that the licensee restored the operability of the affected structures, systems, and components following testing.

These activities constitute completion of five surveillance testing inspection samples, as defined in Inspection Procedure 71111.22.

b. Findings

No findings were identified.

Cornerstone: Emergency Preparedness

1EP5 Maintenance of Emergency Preparedness (71114.05)

a. Inspection Scope

The inspectors performed an on-site review of Condition Report CR-CNS-2013-07882, dated November 21, 2013. The condition report identified that required self-contained breathing apparatus was missing from the on-site Communications Building. The inspectors also reviewed the associated Category C, 'Fix Evaluation,' dated December 24, 2013.

These activities constitute completion of one maintenance emergency preparedness sample as defined in Inspection Procedure 71114.05.

b. Findings

Introduction. The inspectors identified a Green, non-cited violation for the licensee's failure to follow the site emergency plan between March 6, 2008, and June 23, 2014, as required by 10 CFR 50.54(q)(2).

Description. The NRC identified that between March 6, 2008, and June 23, 2014, the licensee failed to store respiratory protection equipment at the on-site Communications Building (former Emergency Operations Facility) in accordance with the requirements of Emergency Plan, Revision 64, Section 7.8. Section 7.8 states, in part, that "…respiratory protection equipment is also located in the Communications Building." The 'respiratory protection equipment' was determined to be self-contained breathing apparatus as listed in Procedure 5.7.21, "Maintaining EP – Emergency Exercises, Drills, Tests, and Evaluations," Revision 37.

The inspectors determined the required self-contained breathing apparatus was removed from the Communications Building on March 6, 2008, following implementation of Procedure 5.7.21, "Maintaining EP – Emergency Exercises, Drills, Tests, and Evaluations," Revision 38, which removed the requirement to maintain the self-contained breathing apparatus at that location. The licensee had intended to implement a concurrent revision to the site emergency plan to remove the requirement for storing self-contained breathing apparatus at the Communications Building, but failed to complete the plan revision. The licensee subsequently walked down the Communications Building on November 21, 2013, and determined that the requirement for storing self-contained breathing apparatus had not been removed from the emergency plan and that they were not in compliance with the requirement. The licensee's corrective action for this condition was to revise the site emergency plan to remove the requirement for storing the self-contained breathing apparatus.

The licensee restored compliance with the Emergency Plan on June 23, 2014, with the implementation of Emergency Plan, Revision 65, which removed the requirement to store self-contained breathing apparatus at the Communications Building.

Analysis. The failure to follow requirements of the site emergency plan was a performance deficiency within the licensee's ability to foresee and correct. The finding was more than minor, and therefore a finding, because it was associated with the facilities and equipment attribute of the Emergency Preparedness Cornerstone and adversely affected the cornerstone objective to ensure the licensee is capable of implementing adequate measures to protect the health and safety of the public in the event of a radiological emergency. Specifically, the licensee failed to maintain respiratory protection equipment in the Communications Building contrary to the emergency plan requirement. This finding was evaluated using Manual Chapter 0609, Appendix B, "Emergency Preparedness Significance Determination Process," dated February 24, 2014, and was determined to be of very low safety significance (Green) because it was a failure to comply with an NRC requirement, was not a loss of planning standard function, and was not a degraded planning standard function. The planning standard function was not degraded because some respiratory protection equipment (self-contained breathing apparatus) was available on-site for use by emergency workers. This finding was assigned a cross-cutting aspect in the area of human performance associated with change management because the finding was caused by the licensee's failure in 2008 to complete a change to the site emergency plan, which caused Procedure 5.7.21 to no longer properly implement the emergency plan [H.3].

Enforcement. Title 10 CFR 50.54(q)(2), requires, in part, that a power reactor licensee follow an emergency plan which meets the requirements of Appendix E and the standards of 10 CFR 50.47(b). Emergency Plan, Revision 64, Section 7.8, requires that respiratory protection equipment be located in the Communications Building located on-site at Cooper Nuclear Station. Emergency Plan, Revision 64, Section 7.8, is associated with Planning Standard 50.47(b)(10) for the protection of emergency workers. Contrary to the above, between March 6, 2008, and June 23, 2014, Cooper Nuclear Station failed to follow the requirements of the Emergency Plan, Revision 64, Section 7.8. Specifically, the licensee did not locate respiratory protection equipment in the Communications Building as required by Emergency Plan, Revision 64. Compliance was restored with implementation of Emergency Plan, Revision 65, on June 23, 2014. Because this failure is of very low safety significance and has been entered into the licensee's corrective action program as Condition Report CR-CNS-2013-07882, this violation is being treated as a non-cited violation, consistent with Section 2.3.2.a of the NRC Enforcement Policy. (NCV 05000298/2014004-02, "Failure to Follow a Requirement of the Emergency Plan.")

1EP6 Drill Evaluation (71114.06)

Training Evolution Observation

a. Inspection Scope

On August 5, 2014, the inspectors observed simulator-based licensed operator requalification training that included implementation of the licensee's emergency plan. The inspectors verified that the licensee's emergency classifications, off-site notifications, and protective action recommendations were appropriate and timely. The inspectors verified that any emergency preparedness weaknesses were appropriately identified by the evaluators and entered into the corrective action program for resolution.

These activities constitute completion of one training observation sample, as defined in Inspection Procedure 71114.06.

b. Findings

No findings were identified.

1EP7 Exercise Evaluation – Hostile Action Event (71114.07)

a. Inspection Scope

The inspectors observed the August 5, 2014, biennial emergency plan exercise to verify the exercise acceptably tested the major elements of the emergency plan, provided opportunities for the Emergency Response Organization (ERO) to demonstrate key skills and functions, and demonstrated the licensee's ability to coordinate with off-site emergency responders. The scenario simulated the following to demonstrate the licensee's capability to implement its emergency plan under conditions of uncertain physical security:

- A credible threat of an attack in more than 30 minutes
- The infiltration of adversaries into the protected area
- A civil disturbance with embedded adversaries
- An attack destroying parts of the plant switchyard and emergency diesel generators, resulting in a loss of all AC electric power onsite, and causing a fire in the protected area
- Injuries and casualties among plant staff
- Failures of plant equipment causing the reactor vessel level to decrease to below the top of active fuel, creating a potential for core overheating and damage

During the exercise the inspectors observed activities in the Control Room Simulator and the following emergency response facilities:

- Alternate Technical Support Center
- Alternate Operations Support Center
- Emergency Operations Facility
- Central and/or Secondary Alarm Station(s)
- Incident Command Post
- Joint Information Center, Emergency News Center

The inspectors focused their evaluation of the licensee's performance on event classification, off-site notification, recognition of off-site dose consequences, development of protective action recommendations, staffing of alternate emergency response facilities, and the coordination between the licensee and off-site agencies to ensure reactor safety under conditions of uncertain physical security.

The inspectors also assessed recognition of, and response to, abnormal and emergency plant conditions; the transfer of decision-making authority and emergency function responsibilities between facilities; on-site and off-site communications; protection of plant

employees and emergency workers in an uncertain physical security environment; emergency repair evaluation and capability; and the overall implementation of the emergency plan to protect public health, safety, and the environment. The inspectors reviewed the current revision of the facility emergency plan, emergency plan implementing procedures associated with operation of the licensee's primary and alternate emergency response facilities, and procedures for the performance of associated emergency and security functions.

The inspectors attended the post-exercise critiques in each emergency response facility to evaluate the initial licensee self-assessment of exercise performance. The inspectors also attended a formal presentation of critique items to plant management conducted by the licensee on August 21, 2014. The specific documents reviewed during this inspection are listed in the attachment.

The inspectors reviewed the scenarios of previous biennial exercises and licensee drills conducted between January 2013 and July 2014 to determine whether the August 5, 2014, exercise was substantially independent of past exercises and avoided participant preconditioning, in accordance with the requirements of 10 CFR Part 50, Appendix E, IV.F(2)(g). The inspectors also compared observed exercise performance with corrective action program entries and after-action reports for drills and exercises conducted between January 2013 and July 2014 to determine whether identified weaknesses had been corrected in accordance with the requirements of 10 CFR 50.47(b)(14) and 10 CFR Part 50, Appendix E, IV.F.

These activities constituted completion of one exercise evaluation sample as defined in Inspection Procedure 71114.07.

b. Findings

No findings were identified.

1EP8 Exercise Evaluation – Scenario Review (71114.08)

a. Inspection Scope

The licensee submitted the preliminary exercise scenario for the August 5, 2014, biennial exercise to the NRC on June 11, 2014, in accordance with the requirements of 10 CFR Part 50, Appendix E, IV.F(2)(b). The inspectors performed an in-office review of the proposed scenario to determine whether it would acceptably test the major elements of the licensee's emergency plan and provide opportunities for the Emergency Response Organization to demonstrate key skills and functions.

These activities constituted completion of one exercise evaluation – Scenario Review sample as defined in Inspection Procedure 71114.08.

b. Findings

No findings were identified.

4. OTHER ACTIVITIES

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity, Emergency Preparedness, Public Radiation Safety, Occupational Radiation Safety, and Security

4OA1 Performance Indicator Verification (71151)

.1 Unplanned Scrams with Complications (IE04)

a. Inspection Scope

The inspectors reviewed the licensee's basis for including or excluding in this performance indicator each scram that occurred between June 23, 2013, and June 30, 2014. The inspectors used definitions and guidance contained in Nuclear Energy Institute Document 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 7, to determine the accuracy of the data reported.

These activities constituted verification of the unplanned scrams with complications performance indicator, as defined in Inspection Procedure 71151.

b. Findings

No findings were identified.

.2 Drill/Exercise Performance (EP01)

a. Inspection Scope

The inspectors reviewed the licensee's evaluated exercises, emergency plan implementations, and selected drill and training evolutions that occurred between July 2013 and June 2014 to verify the accuracy of the licensee's data for classification, notification, and protective action recommendation opportunities. The inspectors reviewed a sample of the licensee's completed classifications, notifications, and protective action recommendations to verify their timeliness and accuracy. The inspectors used definitions and guidance contained in Nuclear Energy Institute Document 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 7, to determine the accuracy of the data reported. The specific documents reviewed are described in the attachment to this report.

These activities constituted verification of the drill/exercise performance indicator as defined in Inspection Procedure 71151.

b. Findings

Introduction. The inspectors identified a Green, non-cited violation for the licensee's failure to correct a deficiency occurring in a drill conducted on December 18, 2013, as required by 10 CFR 50.47(b)(14).

Description. The NRC identified that the licensee failed to correct a deficiency (weakness) that occurred in a drill conducted on December 18, 2013. Specifically, licensee evaluators failed to identify that the shift manager declared a General

Emergency during a licensed-operator training proficiency drill when the conditions did not exist.

Procedure 5.7.1, "Emergency Classification," Revision 50, states, in part, that emergency action level SG1.1 (General Emergency) is met when, "*Loss of all off-site and all on-site AC power (Table S-3) to critical 4160V Buses 1F and 1G and either: Restoration of at least one emergency bus in < 4 hours is not likely, OR, RPV level cannot be restored and maintained > -158 inches or cannot be determined*."

The inspectors determined that during a proficiency drill, conducted December 18, 2013, the Simulator Control Room crew experienced a condition in which all on-site and all off-site AC power to critical 4160V Buses 1F and 1G was lost. At the time AC power was lost, reactor vessel level could be determined and was in the normal band, between +28 and +30 inches. The operations crew subsequently contacted the grid load dispatcher (Doniphan) at 1:35 p.m. to determine when off-site power would likely be restored. The drill controller role-playing Doniphan was intended by the scenario to provide information that it would take 2 to 4 hours to restore off-site power. The scripted information was intended to lead the shift manager to conclude that the conditions of emergency action level SG1.1 were not met.

The drill shift manager determined at 1:44 p.m. that restoration of at least one emergency bus within 4 hours was not likely and declared the General Emergency classification on emergency action level SG1.1. The declaration occurred 9 minutes after simulated contact with Doniphan. The licensee subsequently interviewed the shift manager, who stated that he was provided information that it would take 4 hours to restore off-site power and that met the first condition of the emergency action level. The inspectors determined that restoration of off-site power in about 4 hours would not have met the first condition of the emergency action level (restoration time). Furthermore, the shift manager did not provide a basis for his determination that the 4-hour time would likely not be met. The inspectors concluded that 9 minutes was an insufficient amount of time to come to a reasonable conclusion about the likelihood of success of actions to be completed 4 hours in the future, in the absence of any additional information (e.g., there was no information that indicated a potential impediment to success).

The inspectors concluded that licensee evaluators failed to identify a weakness in performance on the part of the shift manager when the evaluators accepted his determination that restoration of off-site power was unlikely to be completed in 4 hours.

Analysis. The licensee's failure to correct a weakness in performance occurring during a drill was a performance deficiency within the licensee's ability to foresee and correct. A weakness is defined in Manual Chapter 0609, Appendix B, "Emergency Preparedness Significance Determination Process," Section 2, as performance during a drill or exercise that would have prevented the effective implementation of the emergency plan had the circumstances actually occurred. The performance deficiency was more than minor, and therefore a finding, because it was associated with the Emergency Response Organization performance attribute of the Emergency Preparedness Cornerstone and adversely affected the cornerstone objective to ensure the licensee is capable of implementing adequate measures to protect the health and safety of the public in the event of a radiological emergency. Specifically, the inspectors determined that the declaration of a General Emergency when conditions did not exist for the declaration would have prevented the effective implementation of the site emergency plan. The

issue impacted the licensee's ability to adequately implement measures to protect public health and safety because a premature General Emergency declaration may cause unnecessary risk to the public. This finding was evaluated using Manual Chapter 0609, Appendix B, "Emergency Preparedness Significance Determination Process," dated February 24, 2014, and was determined to be of very low safety significance (Green) because it was a failure to comply with NRC requirements, was not a loss of planning standard function, and was not a degraded planning standard function. The planning standard function was not degraded because the failure to implement corrective actions occurred during a single-facility drill with limited number of evaluators. This finding was assigned a cross-cutting aspect in the area of problem identification and resolution associated with the identification of problems because the licensee failed to identify a performance problem when it occurred [P.1].

Enforcement. Title 10 CFR 50.47(b)(14) requires, in part, that deficiencies occurring in exercises and drills are corrected. Contrary to the above, Cooper Nuclear Station failed to correct a deficiency (weakness) occurring in a licensed operator training drill conducted December 18, 2013. Specifically, the licensee failed to implement corrective actions for an inaccurate emergency classification level declared by the shift manager during a licensed operator training proficiency drill. Licensee evaluators failed to identify that conditions requiring entry into emergency action level SG1.1 did not exist when the General Emergency was declared. Because this failure is of very low safety significance and has been entered into the licensee's corrective action system as Condition Reports CR-CNS-2014-05286 and CR-CNS-2014-05291, this violation is being treated as an non-cited violation, consistent with Section 2.3.2.a of the NRC Enforcement Policy. The issue does not represent an immediate safety concern because it involved a human performance error by a single individual on a single classification opportunity, and does not represent the expected performance of other emergency directors.
(NCV 05000298/2014004-03, "Failure to Correct an Inaccurate Classification During a Drill")

.3 Emergency Response Organization Drill Participation (EP02)

a. Inspection Scope

The inspectors reviewed the licensee's records for participation in drill and training evolutions between July 2013 and June 2014 to verify the accuracy of the licensee's data for drill participation opportunities. The inspectors verified that all members of the licensee's Emergency Response Organization in the identified key positions had been counted in the reported performance indicator data. The inspectors reviewed the licensee's basis for reporting the percentage of Emergency Response Organization members who participated in a drill. The inspectors reviewed drill attendance records and verified a sample of those reported as participating. The inspectors used definitions and guidance contained in Nuclear Energy Institute Document 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 7, to determine the accuracy of the data reported. The specific documents reviewed are described in the attachment to this report.

These activities constituted verification of the Emergency Response Organization drill participation performance indicator as defined in Inspection Procedure 71151.

b. Findings

No findings were identified.

.4 Alert and Notification System Reliability (EP03)

a. Inspection Scope

The inspectors reviewed the licensee's records of alert and notification system tests conducted between July 2013 and June 2014 to verify the accuracy of the licensee's data for siren system testing opportunities. The inspectors reviewed procedural guidance on assessing alert and notification system opportunities and the results of periodic alert and notification system operability tests. The inspectors used definitions and guidance contained in Nuclear Energy Institute Document 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 7, to determine the accuracy of the data reported. The specific documents reviewed are described in the attachment to this report.

These activities constituted verification of the alert and notification system reliability performance indicator as defined in Inspection Procedure 71151.

b. Findings

No findings were identified.

4OA2 Problem Identification and Resolution (71152)

.1 Routine Review

a. Inspection Scope

Throughout the inspection period, the inspectors performed daily reviews of items entered into the licensee's corrective action program and periodically attended the licensee's condition report screening meetings. The inspectors verified that licensee personnel were identifying problems at an appropriate threshold and entering these problems into the corrective action program for resolution. The inspectors verified that the licensee developed and implemented corrective actions commensurate with the significance of the problems identified. The inspectors also reviewed the licensee's problem identification and resolution activities during the performance of the other inspection activities documented in this report.

b. Findings

No findings were identified.

.2 Annual Follow-up of Selected Issues

a. Inspection Scope

The inspectors selected one issue for an in-depth follow-up:

- On July 28, 2014, the service water booster pump failed inservice testing surveillance.

The inspectors assessed the licensee's problem identification threshold, cause analyses, extent of condition reviews and compensatory actions. The inspectors verified that the licensee appropriately prioritized the planned corrective actions and that these actions were adequate to correct the condition.

This activity constitutes completion of one annual follow-up sample as defined in Inspection Procedure 71152.

b. Findings

No findings were identified.

4OA3 Follow-up of Events and Notices of Enforcement Discretion (71153)

These activities constitute completion of one event follow-up sample, as defined in Inspection Procedure 71153.

(Closed) Licensee Event Report (LER) 05000298/2013001-00, "Unfused Direct Current Ammeter Circuits Result in Unanalyzed Condition"

a. Inspection Scope

During the licensee's review of operating experience associated with the unfused remote direct current ammeter circuit, that could result in a secondary fire due to multiple fire induced faults, they determined Cooper Nuclear Station was susceptible to this condition. In a postulated event, a fire in the area of the shunt conductor's route could cause one of the ammeter wires too short to the ground plane. Simultaneously, the event could cause another direct current wire from the opposite polarity on the same battery too short to the ground plane. This would cause a ground loop through the unprotected ammeter wire. Since this circuit is not protected, this event could result in excessive current flow in the ammeter wiring causing a secondary fire in a separate fire area.

The cause of the unfused ammeter circuits was that the original design criteria had not factored in the potential of the multiple shorts to ground failure mode, and therefore, did not require overcurrent protection for remote shunt fed ammeter circuits.

Immediate corrective action was to establish compensatory fire watch measures which were implemented until an analysis was performed demonstrating that remote circuits can meet fire protection requirements without fuses.

The licensee initiated Engineering Evaluation 14-07, “Evaluation of Control Building DC Ammeters with a Potential for Causing a Secondary Fire from a Grounding Scenario During a Fire Event,” and determined the original design criteria was adequate.

The Licensee Event Report was reviewed and closed.

b. Findings

No findings were identified.

4OA6 Meetings, Including Exit

Exit Meeting Summary

On July 14, 2014, the inspectors discussed the in-office review of the preliminary scenario for the 2014 biennial exercise, submitted June 11, 2014, with Ms. M. Ferguson, Emergency Preparedness Manager, and other members of the licensee staff. The licensee acknowledged the issues presented. The licensee confirmed that any proprietary information reviewed by the inspectors had been returned or destroyed.

On July 23, 2014, the inspector obtained the final annual cycle results and telephonically exited with Mr. E. Jackson, Operator Training Instructor. The inspector did not review any proprietary information during this inspection.

On August 21, 2014, the inspectors conducted a telephonic exit meeting to present the results of the on-site inspection of the biennial emergency preparedness exercise conducted August 5, 2014, to Mr. R. Penfield, Director Nuclear Safety Assurance, and other members of the licensee staff. The licensee acknowledged the issues presented. The licensee confirmed that any proprietary information reviewed by the inspectors had been returned or destroyed.

On September 16, 2014, the inspectors presented the inspection results to Mr. O. Limpias, and other members of the licensee staff. The licensee acknowledged the issues presented. The licensee confirmed that any proprietary information reviewed by the inspectors had been returned or destroyed.

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee Personnel

E. Jackson, Operations Training Instructor
L. Dewhurst, Manager, Corrective Actions and Assessment
M. Ferguson, Manager, Emergency Preparedness
J. Flaherty, Senior Staff Licensing Engineer, Licensing
R. Penfield, Director Nuclear Safety Assurance
D. Van Der Kamp, Manager, Licensing

NRC Personnel

R. Kahler, Branch Chief, Office of Nuclear Security and Incident Response, DPR\IRIB
L. Hutchins, Emergency Preparedness Specialist, Office of Nuclear Security and Incident Response, DPR\IRIB

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened and Closed

05000298/2014004-01	NCV	Failure to Follow Operability Procedure (Section 1R15)
05000298/2014004-02	NCV	Failure to Follow a Requirement of the Emergency Plan (Section 1EP5)
05000298/2014004-03	NCV	Failure to Correct an Inaccurate Classification During a Drill (Section 4OA1)

Closed

05000298/2013001-00	LER	Unfused Direct Current Ammeter Circuits Result in Unanalyzed Condition (Section 4OA3)

LIST OF DOCUMENTS REVIEWED

Section 1R01: Adverse Weather Protection

Procedure

Number	Title	Revision
5.1Weather	Emergency Procedure, " Operation During Weather Watches and Warnings"	13

Section 1R04: Equipment Alignment

Miscellaneous Documents

Number	Title	Revision
	HPCI System Health Report	
DCD-2	HPCI Design Criteria Document	
11-123	NEDC, "Vortex Potential in Diesel Engine Lube Oil Sumps"	1
12-039	NEDC, "DG Jacket Water Pump NPSH Design Calculation"	0
14-002	REE	

Procedures

Number	Title	Revision
2.2.20	Operations Procedure, "Standby AC Power System (Diesel Generator)"	89
2.2.24.1	Operations Procedure, "250 VDC Electrical System (DIV 1)"	13
2.2.25.1	Operations Procedure, "125 VDC Electrical System (DIV 1)"	18
2.2.33B	Operations Procedure, "High Pressure Coolant Injection System Instrument Valve Checklist"	7
2.2A.DG.DIV1	Operations Procedure, "Standby AC Power System (Diesel Generator) Component Checklist (DIV 1)"	6
2.2A.DG.DIV2	Operations Procedure, "Standby AC Power System (Diesel Generator) Component Checklist (DIV 2)"	6
2.3_DG1	Operations Procedure, "Panel DG-1 – Annunciator DG-1"	21
2.3_DG2	Operations Procedure, "Panel DG-2 – Annunciator DG-2"	19
6.2.DG.101	Surveillance Procedure, "Diesel Generator 31 Day Operability Test (IST)(DIV 2)"	74
KSV-46-5	Cooper Nuclear Station Lube Oil Schematic	26
KSV-47-9-NP	Jacket Water Schematic	5

Condition Reports (CRs)

CR-CNS-2011-09045 CR-CNS-2013-00474 CR-CNS-2014-04341 CR-CNS-2014-05091
CR-CNS-2014-05249 CR-CNS-2014-05587

Work Orders

4965204 4973924

Section 1R05: Fire Protection

Miscellaneous Documents

Number	Title
2013-0046	Barrier Control Permit
2014-0537	Barrier Control Permit
2014-0840	Barrier Control Permit
FP13-SWP RM HALON	Fire Impairment Permit

Procedures

Number	Title	Revision
0.23	Station Procedure, “CNS Fire Protection Plan”	70

Work Orders

4814919 4932887 4941967 4973924

Section 1R11: Licensed Operator Requalification Program and Licensed Operator Performance

Miscellaneous Documents

Number	Title	Revision/Date
	Annual Operating Test Results	July 22, 2014
5.1.7	EPIP, “Emergency Classification”	50

Procedure

Number	Title	Revision
2.1.22	Operations Procedure, “Recovering from a Group Isolation”	58

Condition Report (CR)

CR-CNS-2014-05654

Section 1R12: Maintenance Effectiveness

Miscellaneous Documents

Number	Title	Revision
BLDG-F21	Performance Criteria Basis Document	4
EE-PF-13	Performance Criteria Basis	0
DG-PF01	Maintenance Rule Function Performance Criteria Basis Document	3
09-102	NEDC, “Internal Flooding – HELB, MELB, and Feedwater Line Break”	1

Procedures

Number	Title	Revision
0-Barrier	Station Procedure, “Barrier Control Process”	13
0-Barrier-Misc	Station Procedure, “Miscellaneous Buildings”	3
2.3_DG2	Operations Procedure, “Panel DG-2-Annunicator DG-2”	19
3-EN-DC-206	Entergy Procedure, “Maintenance Rule (a)(1) Process”	1C0
14.17.6	Instrument & Control Procedure, “DG-2 Lube Oil Low Level Alarm Calibration”	5

Condition Reports (CRs)

CR-CNS-2011-11791	CR-CNS-2013-04168	CR-CNS-2013-04700	CR-CNS-2013-08029
CR-CNS-2014-03205	CR-CNS-2014-03757	CR-CNS-2014-04155	

Section 1R13: Maintenance Risk Assessments and Emergent Work Control

Miscellaneous Documents

Number	Title	Revision
2013-0046	Barrier Control Permit	
2014-0457	Barrier Control Permit	
2014-0754	Barrier Control Permit	
4908683	Temporary Configuration Change, “Service Water Discharge Pipe Repair Headwall and Tie-In Cofferdam”	TCN 6

Procedures

Number	Title	Revision
12-004	Special Procedure, “Service Water Repair Project Meteorological Monitoring Requirements”	4
0-Barrier	Station Procedure, “Barrier Control Process”	14
0-CNS-WM-100	Station Procedure, “Work Order Generation, Screening, and Classification”	1
0-CNS-WM-104	Station Procedure, “On-line Schedule Risk Assessment”	2
0-CNS-WM-104A	Station Procedure, “On-line Fire Risk Management Actions”	1
0-Protected-Eqp	Station Procedure, “Protected Equipment Program”	30
0.23	Station Procedure, “CNS Fire Protection Plan”	70
5.1Weather	Emergency Procedure, “Operations During Weather Watches and Warning”	13
7.0.10	Maintenance Procedure, “Railroad Airlock Door Operations”	20

Condition Reports (CRs)

CR-CNS-2014-04341 CR-CNS-2014-05207 CR-CNS-2014-05354

Work Orders

4941967 4975008 4996328

Section 1R15: Operability Determinations and Functionality Assessments

Miscellaneous Documents

Number	Title	Revision
00-38	NEDC	2l and 3
00-95	NEDC	1
88-002	NEDC	
94-34A	NEDC	2
2000-0334	PIR RCR	
21888	NEDC	

Procedures

Number	Title	Revision
0-Barrier	Station Procedure, “Barrier Control Process”	14

Procedures

Number	Title	Revision
5.1Weather	Emergency Procedure, “Operations During Weather Watches and Warning”	13
6.HPCI.102	Surveillance Procedure, “HPCI Test Mode Surveillance Operation from ASD-HPCI Panel”	28
6.HPCI.103	Surveillance Procedure, “HPCI IST and 92 Day Test Mode Surveillance Operation”	50
7.0.10	Maintenance Procedure, “Railroad Airlock Door Operations”	20

Condition Reports (CRs)

CR-CNS-2014-03050	CR-CNS-2014-03215	CR-CNS-2014-03709	CR-CNS-2014-03818
CR-CNS-2014-04862	CR-CNS-2014-04901	CR-CNS-2014-05207	CR-CNS-2014-05354
CR-CNS-2014-05744			

Section 1R19: Post-Maintenance Testing

Procedures

Number	Title	Revision
EN-MA-118	Entergy Procedure, “Foreign Material Exclusion”	9C0
6.HPCI.103	Surveillance Procedure, “HPCI IST and 92 Day Test Mode Surveillance Operation”	50
6.MISC.401	Surveillance Procedure, “Position Indicator Inservice Testing (IST)”	17
6.PC.208	Surveillance Procedure, “RHR and Reactor Recirculation Valve Operability and Closure Timing (IST)”	16
6.1DG.102	Surveillance Procedure, “Diesel Generator Demonstration of Operability Test (DIV 1)”	54
6.2RHR.201	Surveillance Procedure, “RHR Power Operated Valve Operability Test (IST)(DIV 2)”	26

Condition Reports (CRs)

CR-CNS-2014-04433

Work Orders

4817790	4895849	4932887	4941967	4944211
4996328	5025897	5029220		

Section 1R22: Surveillance Testing

Miscellaneous Document

Number	Title	Revision
00-007	NEDC, "DEH RV04Z1 R1C Resistance Range Determination Calculation in Support of CED 2000-0011"	2

Procedures

Number	Title	Revision
6.LOG.601	Surveillance Procedure, "Daily Surveillance Log – Modes 1, 2, 3"	114
6.PC.525	Surveillance Procedure, "Hatch and Flange Local Leak Rate Tests"	19
6.RPS.302	Surveillance Procedure, "Main Turbine Stop Valve Closure and Steam Valve Functional Test"	48
6.2SGT.301	Surveillance Procedure, "SGT Operability Test/Off Gas Flow Monitor Channel Function Test IST (DIV 2)"	13

Condition Reports (CRs)

CR-CNS-2014-01302 CR-CNS-2014-03709 CR-CNS-2014-03818 CR-CNS-2014-05659
CR-CNS-2014-05744

Section 1EP7: Exercise Evaluation – Hostile Action Event

Procedures

Number	Title	Revision
	Cooper Nuclear Station Emergency Plan	63
EPIP 5.7.1	Emergency Classification	50
EPIP 5.7.2	Shift Supervisor EPIP	28
EPIP 5.7.6	Notification	59
EPIP 5.7.7	Activation of TSC	31
EPIP 5.7.8.1	Activation of Alternate OSC	6
EPIP 5.7.8.2	Activation of Alternate Offsite TSC/OSC	0
EPIP 5.7.9	Activation of EOF	30
EPIP 5.7.15	OSC Team Dispatch	17
EPIP 5.7.20	Protective Action Recommendations	20
OSC1	Position Instruction Manual – OSC Supervisor	17

Procedures

Number	Title	Revision
OSC2	Position Instruction Manual – Chemistry/Radiological Protection Lead	19
OSC3	Position Instruction Manual – Mechanical Lead	6
OSC4	Position Instruction Manual – Electrical Lead	6
OSC5	Position Instruction Manual – I&C Lead	6
OSC6	Position Instruction Manual – Utility Lead	2
OSC8	Position Instruction Manual – OSC Clerk	8
EPDG 2	Attachment H4, Drill and Exercise Manual, Exercise Preparations	8
EPDG 2	Attachment H5, Drill and Exercise Manual, Critique Process	7

Condition Reports (CRs)

CR-CNS-2013-01618	CR-CNS-2013-03903	CR-CNS-2013-04564	CR-CNS-2013-05587
CR-CNS-2013-07882	CR-CNS-2014-00572	CR-CNS-2014-02675	CR-CNS-2014-03298
CR-CNS-2014-03493	CR-CNS-2014-04022	CR-CNS-2014-04862	CR-CNS-2014-04876
CR-CNS-2014-04889	CR-CNS-2014-04911	CR-CNS-2014-04919	CR-CNS-2014-04920
CR-CNS-2014-04925	CR-CNS-2014-04926	CR-CNS-2014-04927	CR-CNS-2014-04937
CR-CNS-2014-05002	CR-CNS-2014-05038	CR-CNS-2014-05061	CR-CNS-2014-05079
CR-CNS-2014-05094	CR-CNS-2014-05179	CR-CNS-2014-05180	CR-CNS-2014-05181
CR-CNS-2014-05183	CR-CNS-2014-05192	CR-CNS-2014-05219	

Work Tracker (Corrective Action Program, 2013-0443-x)

106	112	115	119	122	123	125

Section 4OA1: Performance Indicator Verification

Procedures

Number	Title	Revisions
0-EN-LI-114	Performance Indicator Process	5C1
EPDG 2	Attachment C1, Semi-Monthly Alert and Notification System Siren Testing	15
EPDG 2	Attachment C6, Annual Fixed Siren Maintenance	8

Procedures

Number	Title	Revisions
EPDG 2	Attachment G1, Emergency Preparedness Performance Indicator Guide	21
EPIP 5.7.1	Emergency Classification	49, 50
EPIP 5.7.6	Notification	58, 59
EPIP 5.7.20	Protective Action Recommendations	19, 20

Condition Report (CRs)

CR-CNS-2014-01421

Section 4OA2: Problem Identification and Resolution

Condition Reports (CR)

CR-CNS-2014-03686 CR-CNS-2014-07137

Section 4OA3: Follow-up of Events and Notices of Enforcement Discretion

Miscellaneous Documents

Number	Title	Revision
14-017	Engineering Evaluation, “Evaluation of Control Building DC Ammeters with a Potential for Causing a Secondary Fire from a Grounding Scenario During a Fire Event”	0

Condition Report (CR)

CR-CNS-2013-07413