



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

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

January 19, 2022

Mr. Cleve Reasoner, Chief Executive Officer
and Chief Nuclear Officer
Wolf Creek Nuclear Operating Corporation
P.O. Box 411
Burlington, KS 66839

SUBJECT: WOLF CREEK GENERATING STATION – INTEGRATED INSPECTION
REPORT 05000482/2021004 AND INDEPENDENT SPENT FUEL STORAGE
INSTALLATION INSPECTION REPORT 07200079/2021002

Dear Mr. Reasoner:

On December 31, 2021, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Wolf Creek Generating Station. On January 13, 2022, the NRC inspectors discussed the results of this inspection with Mr. B. Bayer, General Manager, Plant Operations, and other members of your staff. The results of this inspection are documented in the enclosed report.

Two findings of very low safety significance (Green) are documented in this report. One of these findings involved a violation of NRC requirements. We are treating this violation as a non-cited violation (NCV) consistent with Section 2.3.2 of the Enforcement Policy.

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

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

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 blue ink, appearing to read "Gregory E. Werner".

Signed by Werner, Gregory
on 01/19/22

Gregory E. Werner, Chief
Reactor Projects Branch B
Division of Reactor Projects

Docket Nos. 05000482 and 07200079
License No. NPF-42

Enclosure:
As stated

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WOLF CREEK GENERATING STATION – INTEGRATED INSPECTION
 REPORT 05000482/2021004 AND INDEPENDENT SPENT FUEL STORAGE INSTALLATION
 INSPECTION REPORT 07200079/2021002 – DATED JANUARY 19, 2022

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U.S. NUCLEAR REGULATORY COMMISSION
Inspection Report

Docket Number: 05000482 and 07200079

License Number: NPF-42

Report Number: 05000482/2021004 and 07200079/2021002

Enterprise Identifier: I-2021-004-0119 and I-2021-002-0000

Licensee: Wolf Creek Nuclear Operating Corporation

Facility: Wolf Creek Generating Station and Independent Spent Fuel Storage Installation

Location: Burlington, KS

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

Inspectors: R. Alexander, Senior Emergency Preparedness Inspector
D. Antonangeli, Health Physicist
L. Brookhart, Senior Spent Fuel Storage Inspector
M. Davis, Transportation and Storage Safety Inspector
N. Greene, Senior Health Physicist
C. Henderson, Senior Resident Inspector
C. Smith, Health Physicist
H. Strittmatter, Project Engineer
J. Vera, Resident Inspector

Approved By: Gregory E. Werner, Chief
Reactor Projects Branch B
Division of Reactor Projects

Enclosure

SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee's performance by conducting an integrated inspection and an independent spent fuel storage installation inspection at Wolf Creek Generating 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

Failure to Reestablish Station Blackout Diesel Generator Preventive Maintenance			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Mitigating Systems	Green FIN 05000482/2021004-01 Open/Closed	[H.13] - Consistent Process	71111.12
The inspectors reviewed a self-revealed, Green finding associated with the licensee's failure to reestablish annual vendor recommended preventive maintenance for the station blackout diesel generators' starting battery banks in accordance with Procedure AP 16B-003, "Planning and Scheduling Preventive Maintenance," Revision 8A. This condition resulted in the undetected degradation of the starting battery bank which resulted in the station blackout diesel generator C failure to start on November 1, 2021.			

Failure to Correct a Condition Adverse to Quality			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Mitigating Systems	Green NCV 05000482/2021004-02 Open/Closed	[P.2] – Evaluation	71152
The inspectors reviewed a self-revealed, Green finding and associated non-cited violation of Title 10 of the <i>Code of Federal Regulations</i> , Part 50, Appendix B, Criterion XVI, "Corrective Action," for the licensee's failure to correct a condition adverse to quality. Specifically, the licensee failed to correct potential short circuits incandescent lightbulbs and their associated sockets that result in inoperability of safety-related equipment. This condition resulted in the emergency diesel generator B lockout relay actuating and preventing its associated output breaker from closing, resulting in emergency diesel generator B being declared inoperable.			

Additional Tracking Items

Type	Issue Number	Title	Report Section	Status
LER	05000482/2021004-00	Low Steam Generator Level due to Main Feedwater Valve Failure Caused Automatic Reactor Trip	71153	Closed

PLANT STATUS

Wolf Creek Generating Station began the inspection period at full power, except for seven occasions during the quarter when the licensee reduced power to 70 percent for flexible power operations (based on daily market demand) and returned to full power after each occasion.

INSPECTION SCOPES

Inspections were conducted using the appropriate portions of the inspection procedures (IPs) in effect at the beginning of the inspection unless otherwise noted. Currently approved IPs with their attached revision histories are located on the public website at <http://www.nrc.gov/reading-rm/doc-collections/insp-manual/inspection-procedure/index.html>. Samples were declared complete when the IP requirements most appropriate to the inspection activity were met consistent with Inspection Manual Chapter (IMC) 2515, "Light-Water Reactor Inspection Program - Operations Phase." The inspectors performed activities described in IMC 2515, Appendix D, "Plant Status," and conducted routine reviews using IP 71152, "Problem Identification and Resolution." The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel to assess licensee performance and compliance with Commission rules and regulations, license conditions, site procedures, and standards.

REACTOR SAFETY

71111.04 - 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) Train B Class 1E electrical equipment air conditioning unit in recirculation mode on November 1, 2021
- (2) Safety injection accumulator A, B, C, and D aligned to vent to containment to lower accumulator pressure on November 17, 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) Essential service water vertical loop chase, fire area ESWC, on October 8, 2021
- (2) Fire impairments during train B Class 1E electrical equipment air conditioning system maintenance, fire areas C-9, C-10, C-15, and C-16, on October 26, 2021
- (3) Upper cable spreading room, fire area C-22, on November 15, 2021
- (4) Breach authorizations during loss of central chilled water system, fire areas A-16 and A-21, on November 17, 2021

71111.11Q - Licensed Operator Regualification Program and Licensed Operator Performance

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

- (1) The inspectors observed and evaluated operator performance during power changes as part of flexible power operations on October 20, 2021.

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

- (1) The inspectors observed and evaluated simulator training activities on November 15, 2021.

71111.12 - Maintenance Effectiveness

Maintenance Effectiveness (IP Section 03.01) (2 Samples)

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

- (1) Main feedwater system regulating valve failures on November 15, 2021
- (2) Station blackout diesel generator C maintenance effectiveness on December 6, 2021

71111.13 - Maintenance Risk Assessments and Emergent Work Control

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

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

- (1) Emergency diesel generator B emergent troubleshooting and corrective maintenance due to output breaker lockout on October 7, 2021
- (2) Train A Class 1E electrical equipment air conditioning unit maintenance window extended due to compressor failure on October 26, 2021
- (3) Station blackout diesel generator C failure to start emergent troubleshooting and corrective maintenance due to a failed battery on November 3, 2021
- (4) Nonsafety-related chill water pump failure emergent work, auxiliary building envelope verification due to breach permits on November 17, 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) Train B component cooling water system with component cooling water pump B inoperable due to an oil leak operability determination on November 15, 2021
- (2) Loop 1 overtemperature delta-T setpoint spikes operability determination on November 17, 2021

- (3) Emergency diesel generator B 186-2 lockout relay light bulb failure causing inoperability common cause on December 3, 2021

71111.19 - Post-Maintenance Testing

Post-Maintenance Test Sample (IP Section 03.01) (2 Samples)

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

- (1) Train A Class 1E electrical equipment air conditioning compressor replacement post-maintenance testing on November 4, 2021
- (2) Station blackout diesel generator C battery replacement post-maintenance testing on November 10, 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 recently submitted emergency action level and emergency plan changes, and the associated change process evaluations per 10 CFR 50.54(q):
 - AP 06-002, "Radiological Emergency Response Plan," Revision 22; effective 10/7/2021
 - APF 06-002-02, "Emergency Action Levels Technical Bases," Revision 1; effective 10/7/2021
 - APF 06-002-03, "EAL Classification Matrix," Revision 1; effective 10/7/2021
 - EPP 06-007, "Emergency Notifications," Revision 27; effective 8/2/2021
 - EPP 06-006, "Protective Action Recommendations," Revision 10A; effective 7/1/2021
 - EPP 06-012, "Dose Assessment," Revision 17B; effective 6/8/2021
 - Elimination of EPP 06-019, "Alert and Notification System Sirens," Revision 10; effective 6/8/2021

This evaluation does not constitute NRC approval.

RADIATION SAFETY

71124.02 - Occupational ALARA Planning and Controls

Radiological Work Planning (IP Section 03.01) (5 Samples)

The inspectors evaluated the licensee's radiological work planning. The inspectors reviewed the following radiation work permits (RWP):

- (1) RWP 191000, "Radiation Protection Rover Coverage," Revision 0
- (2) RWP 194207, "Reactor Coolant Pump Team & Preventative Maintenance," Revision 0

- (3) RWP 213220, "Primary Side Steam Generator Eddy Current Testing and Zero Entry Nozzle Dam," Revision 1
- (4) RWP 214199, "Secondary Side Steam Generator Foreign Object Search/Retrieval and Visual Inspections," Revision 0
- (5) RWP 214200, "Secondary Side Steam Generator Sludge Lance," Revision 0

Verification of Dose Estimates and Exposure Tracking Systems (IP Section 03.02) (4 Samples)

The inspectors evaluated dose estimates and exposure tracking. The inspectors reviewed the following activities:

- (1) RWP 194482, "Remove/Install Canopy Seal Weld Clamps," Revision 1
- (2) RWP 194483, "Reactor Vessel Head Reassembly to Include Canopy Seal Clamp," Revision 0
- (3) RWP 213057, "Under Reactor Head Entries for Electric Discharge Machining," Revision 4
- (4) RWP 216020, "Reactor Vessel Head Lift Preparation and Post Head Set Work Activities," Revision 0

71124.04 - Occupational Dose Assessment

Source Term Characterization (IP Section 03.01) (1 Sample)

- (1) The inspectors evaluated licensee performance as it pertains to radioactive source term characterization.

External Dosimetry (IP Section 03.02) (1 Sample)

- (1) The inspectors evaluated licensee performance as it pertains to external dosimetry that is used to assign occupational dose.

Internal Dosimetry (IP Section 03.03) (2 Samples)

The inspectors evaluated the internal dosimetry program implementation. The inspectors reviewed the following:

- (1) Whole Body Counts
 - Internal dose calculation for personnel contamination Event 7803, dated October 27, 2019
 - Internal dose calculation for personnel contamination Event 7459, dated April 21, 2021
 - Internal dose calculation for personnel contamination Event 7865, dated May 01, 2021
- (2) Dose Assessments Performed Using Air Sampling and Derived Air Concentration-Hour (DAC) Monitoring
 - Air Sample 19-0483 with DAC Hours Assigned, dated October 19, 2019
 - Air Sample 20-0102 with DAC Hours Assigned, dated September 16, 2020

- Air Sample 21-0607 with DAC hours assigned, dated April 17, 2021

Special Dosimetric Situations (IP Section 03.04) (3 Samples)

The inspectors evaluated the following special dosimetric situations:

- (1) Implementation of requirements to manage radiation protection of declared pregnant workers for three of their workers
- (2) Application of NRC-approved external dosimetry methods (i.e. EDEX) for five of their workers
- (3) Neutron dosimetry evaluation, dated April 30, 2014

OTHER ACTIVITIES – BASELINE

71151 - Performance Indicator Verification

The inspectors verified licensee performance indicators submittals listed below:

MS08: Heat Removal Systems (IP Section 02.07) (1 Sample)

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

MS09: Residual Heat Removal Systems (IP Section 02.08) (1 Sample)

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

EP01: Drill/Exercise Performance Sample (IP Section 02.12) (1 Sample)

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

EP02: Emergency Response Organization Drill Participation (IP Section 02.13) (1 Sample)

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

EP03: Alert and Notification System (ANS) Reliability Sample (IP Section 02.14)

In that the licensee transitioned its alert and notification system to a purely nonsiren-based system in April 2020, the ANS performance indicator and associated data is no longer required to be reported by Wolf Creek, and thus is not subject to further inspection/verification per IP 71151. Evaluation of the licensee's nonsiren-based ANS is completed separately per IP 71114.02.

71152 - Problem Identification and Resolution (PI&R)

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

- (1) The inspectors reviewed the licensee's system and program health reports for engineering for potential adverse trends that might be indicative of a more significant safety issue. Specifically, the inspectors reviewed actions to address identified adverse trends that might indicate the existence of a more significant safety issue and noted a negative trend in corrective actions effectiveness followup failures.

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) Emergency diesel generator B unplanned inoperability due to 186-2 lockout relay circuit light bulb failure on November 3, 2021

71153 - Follow Up of Events and Notices of Enforcement Discretion

Event Report (IP Section 03.02) (1 Sample)

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

- (1) LER 05000482/2021-004-00, "Low Steam Generator Level due to Main Feedwater Valve Failure Caused Automatic Reactor Trip" (ADAMS Accession No. ML21291A262). The inspectors determined that it was not reasonable to foresee or correct the cause discussed in the LER therefore no performance deficiency was identified. The inspectors did not identify a violation of NRC requirements. This LER is closed.

OTHER ACTIVITIES – TEMPORARY INSTRUCTIONS, INFREQUENT AND ABNORMAL

60854 - Preoperational Testing of an Independent Spent Fuel Storage Installation (ISFSI)

Determine by direct observation and independent evaluation whether the licensee had developed, implemented, and evaluated preoperational testing activities to safely load spent fuel from site's spent fuel pool to the ISFSI and safely retrieve spent fuel from the ISFSI and transfer it back to the licensee's spent fuel pool.

Preoperational Testing of an ISFSI (1 Sample)

- (1) Wolf Creek Generating Station has elected to become a 10 CFR Part 72 general licensee in accordance with 10 CFR 72.210. The licensee has selected the Transnuclear Americas LLC (TN) Nutech Horizontal Modular Storage (NUHOMS) Extended Optimized Storage (EOS) system. The licensee constructed the ISFSI storage pad in the Spring of 2020 and built the EOS Matrix Horizontal Storage Modules (HSMs) in the Fall of 2020, in accordance with the TN NUHOMS EOS Certificate of Compliance 72-1042, Amendment 1 and Final Safety Analysis Report, Revision 3. On November 1-4, 2021, inspectors performed an onsite inspection to observe and evaluate Wolf Creek Generating Station's preoperational testing and training exercises. These operations are required to be performed by a general licensee prior to the use of the system to store spent fuel assemblies. During the inspection period, inspectors specifically observed the following demonstrations that were successfully completed by the licensee:
 - (1) Fuel loading with a dummy fuel assembly (Condition 9.a.)
 - (2) Transfer cask down-ending and transfer to the ISFSI using a weighted canister (Condition 9.c.)

- (3) Dry shielded canister (DSC) transfer to the HSM using a weighted canister (Condition 9.d)
- (4) DSC retrieval from the HSM using a weighted canister (Condition 9.e.)

Additionally, the licensee closed open items from the previous preoperational dry runs performed in June of 2020 (CR 143652), which closed and completed Condition 9.g. (flooding of the DSC). The licensee has successfully completed all preoperational dry run activities required by the Certificate of Compliance 72-1042.

60856 - Review of 10 CFR 72.212(b) Evaluations

The inspection was conducted to determine if Wolf Creek Generating Station met the general license requirements of 10 CFR Part 72 before conducting operations to load their ISFSI.

Review of 10 CFR 72.212(b) Evaluations (1 Sample)

- (1) During the inspection period (October 1–December 31, 2021), the inspectors continued the inspection of Wolf Creek's programs, procedures, and calculations performed by the licensee to meet the requirements of 10 CFR Part 72. Specifically, the inspectors completed the review of:
 - Site specific analysis confirming license conditions for tornados, earthquakes, fire and explosions, normal environmental temperatures, soil liquefaction, and structural evaluations of dry cask systems and components
 - Training documentation for qualification of Part 72 operations outside at the ISFSI pad
 - Review of site specific 10 CFR 72.48 and 10 CFR 50.59 changes, tests, and experiments associated with implementation of the EOS system at Wolf Creek.

The only remaining item that has yet to be fully reviewed included the site's finalized 10 CFR 72.212 report.

INSPECTION RESULTS

Failure to Reestablish Station Blackout Diesel Generator Preventive Maintenance			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Mitigating Systems	Green FIN 05000482/2021004-01 Open/Closed	[H.13] - Consistent Process	71111.12
The inspectors reviewed a self-revealed, Green finding associated with the licensee's failure to reestablish annual vendor recommended preventive maintenance for the station blackout diesel generators' starting battery banks in accordance with Procedure AP 16B-003, "Planning and Scheduling Preventive Maintenance", Revision 8A. This condition resulted in the undetected degradation of the starting battery bank which resulted in the station blackout diesel generator C failure to start on November 1, 2021.			
<u>Description:</u> On November 1, 2021, the licensee performed Procedure STN KU-010, "Station Blackout Diesel and Non-Safety Auxiliary Feedwater Water Pump Test," Revision 13, for station blackout (SBO) diesel generator's (DG) B and C when SBO DG C failed to start. The			

licensee commenced troubleshooting, with vendor support, and identified two of the four starting batteries were faulted. This condition resulted in insufficient starting current to start SBO DG C. In response, the licensee replaced the two faulted batteries for SBO DG C and it was successfully started and ran on November 3, 2021. Additionally, the licensee performed Procedure STN KU-010 for SBO DG A and B successfully demonstrating they could be started with their starting batteries. The licensee entered this issue into their corrective action program as Condition Report (CR) 10010238 and performed an equipment performance evaluation. The equipment performance evaluation identified that the annual electrical preventive maintenance (PM) tasks were deleted when implementing the PM change under Work Order 19-452257-000 in accordance with Procedure AI 16B-002, "Preventive Maintenance Change Process," Revision 15A, and entered this condition into their corrective action program as CR 10010613.

The inspectors reviewed equipment performance evaluation documented in CR 10010283, CR 10010613, and Procedures AP 16B-003, "Planning and Scheduling Preventive Maintenance," Revision 8A, and AI 16B-002, "Preventive Maintenance Change Process", Revision 15A, and identified the following:

- Procedure AP 16B-003, step 6.2 required, in part, that when developing PM activities, the licensee consider vendor recommendations. The licensee initially established the vendor recommended PM activities of replacing the starting batteries for SBO DGs A, B, and C on a frequency of 3 to 5 years with annual electrical checks to ensure the starting batteries were capable of performing their design function of starting SBO DGs.
- Procedure AI 16B-002 step 6.1.3 stated, in part, that it is the responsibility of the maintenance department to determine the best, safest and most efficient way to conduct PM tasks, that thorough notation of the changes must be documented in a preventative maintenance change (PMC), and that the documentation shall clearly state what was changed, deleted, or combined.
- In December 2019, the licensee implemented a PMC package to streamline and reorganize the maintenance regimen for the SBO DGs in accordance with Procedure AI 16B-002. The PMC deleted all the existing PM tasks and had a task to reestablish the relevant PM activities for each individual SBO DGs. However, the licensee failed to reestablish the vendor recommended annual electrical tasks associated with the 3 to 5-year battery replacement and had no justification for not including the PM activity. This resulted in the licensee's failure to detect the two out of four faulted starting batteries for SBO DG C prior to November 1, 2021.

The inspectors concluded that the licensee failed to implement the self-imposed standard in accordance with Procedure AP 16B-003, step 6.2, to consider vendor recommendations when reestablishing the SBO DG starting battery vendor recommended 3-to-5-year replacement frequency with annual electrical checks. This resulted in failure to reestablish annual battery PM and meet the self-imposed standard in accordance with Procedure AP 16B-003.

Corrective Actions: Reestablish the annual electrical PM tasks for the SBO DGs and the battery start cart.

Corrective Action References: CRs 10010238 and 10010613			
<u>Performance Assessment:</u>			
<p>Performance Deficiency: The licensee's failure to reestablish the vendor recommended SBO DG starting battery PM in accordance with Procedure AP 16B-003 was a performance deficiency.</p> <p>Screening: The inspectors determined the performance deficiency was more than minor because it was associated with the Equipment Performance attribute of the Mitigating Systems cornerstone and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the failure to maintain vendor recommended maintenance procedures for the SBO DGs inserted a latent vulnerability in all three of the SBO DGs, in that the starting batteries on all the SBO DG's could be degraded and resulted in the failure of SBO DG C to start on November 1, 2021.</p> <p>Significance: The inspectors assessed the significance of the finding using Appendix A, "The Significance Determination Process (SDP) for Findings At-Power." Using Exhibit 2, "Mitigating Systems Screening Questions," the finding was determined to be very low safety significance (Green) because it: (1) was not a design deficiency, (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, (4) did not represent a loss of the probabilistic assessment (PRA) function of two separate technical specification systems for greater than 24 hours, (5) did not represent a loss of a PRA system and/or function for greater than 24 hours, and (6) did not result in the loss of a high safety-significant, nontechnical specification train.</p> <p>Cross-Cutting Aspect: H.13 - Consistent Process: Individuals use a consistent, systematic approach to make decisions. Risk insights are incorporated as appropriate. Specifically, the licensee failed to demonstrate an understanding of the PMC process in accordance with Procedure AI 16B-002 and use it consistently when reestablishing the PM for each of the SBO DGs. This resulted in failure to reestablish annual battery PM.</p>			
<u>Enforcement:</u> Inspectors did not identify a violation of regulatory requirements associated with this finding.			

Failure to Correct a Condition Adverse to Quality			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Mitigating Systems	Green NCV 05000482/2021004-02 Open/Closed	[P.2] – Evaluation	71152
<p>The inspectors reviewed a self-revealed, Green finding and associated non-cited violation of Title 10 of the <i>Code of Federal Regulations</i>, Part 50 (10 CFR Part 50), Appendix B, Criterion XVI, "Corrective Action," for the licensee's failure to correct a condition adverse to quality. Specifically, the licensee failed to correct potential short circuits incandescent lightbulbs and their associated sockets that result in inoperability of safety-related equipment. This condition resulted in the emergency diesel generator B lockout relay actuating and preventing its associated output breaker from closing, resulting in emergency diesel generator B being declared inoperable.</p>			

Description: On October 1, 2021, the licensee received emergency diesel generator (EDG) B trouble alarm due to 186-2/DG lockout relay inadvertently actuating due to a fault within the indicating light circuit bulb F series socket when the 120PSB incandescent light bulb burned out. This caused a short within the bulb socket bypassing the internal resistor causing the 186-2/DG lockout relay actuation preventing closure of EDG B output breaker. This condition would have prevented EDG B from energizing the train B safety-related 4160 V bus during a loss of offsite power, therefore the licensee declared EDG B inoperable until the light bulb was removed, and the 186-2/DG lockout relay was reset. The licensee entered this issue into their corrective action program as CR 10009585 and 10009587. Additionally, the licensee performed an equipment performance evaluation and a common cause evaluation.

The inspectors reviewed the equipment performance evaluation documented in CR 10009585, two common causes documented in CRs 10009587 and 140866, previous operating experience, and noted the following:

- CR 2004-1024: Documented operating experience from another plant with a similar EDG design for a failed light bulb for the 186-2/DG lockout relay circuit on the EDG B output breaker. The bulb was replaced, and the lockout condition was reset. The bulb apparently failed such that it shorted and energized the 186-2/DG lockout relay. The bulb which failed was a slide-in, friction-fit type bulb which had visual damage at the base of the bulb. No corrective actions were taken by the licensee based on the external operating experience documented in CR 2004-1024. However this operating experience was part of the common cause evaluation documented in CR 140866.
- CR 140271: On February 3, 2020, the licensee received a status panel alarm for EDG B, and it was discovered the "OFF" light (120PSB incandescent bulb) for the EDG B fuel oil transfer pump had broken off while in the F series socket when the operator was changing the light bulb. The breaker for the EDG B fuel oil transfer pump remained closed, but the 1-amp fuses were found blown due a short to ground within the socket. This condition prevented the pump from running due to a loss of control power. The fuses and light bulb were replaced to correct the issue.
- CR 141515: On March 24, 2020, the licensee observed the safety-related swing battery charger, NK25, was reading 94 Vdc, instead of the required 133 Vdc. The licensee investigation identified a blown 120PSB incandescent bulb and control power fuses. The licensee replaced the light bulb and control power fuses.
- CR 141532: On March 25, 2020, NK25 voltage was 105 Vdc, instead of the required 133 Vdc, and the AC power light also appeared to be burned out. This was due to the loose bulb socket that was missed during the initial investigation conducted under CR 141515. The bulb socket was loosened by improper bulb replacement. The 120PSB bulbs are blade type and slide in and out. They are not designed to be twisted. The twisting motion can loosen the socket from the panel or crush and break the bulb causing a short to ground.
- CR 140866: This CR evaluated the 2020 trend of loss of control power issues that had caused inoperability of safety-related equipment, which also included an external operating experience review of CR 2004-1024. The licensee concluded there was a vulnerability with proper replacement of the 120PSB incandescent bulbs. The corrective action was to replace the 120PSB bulbs with light-emitting diode (LED)

equivalents. The LED 120PSB bulbs were direct replacement for T2 slide based miniature incandescent lamps. Change Package 20403 was approved in May 2020 to replace the 120PSB light bulbs with new LEDs and a new item of sockets. However, the licensee failed to complete an extent of condition review in a timely manner, appropriate for the safety significance of the issue, to properly classify and prioritize corrective actions associated with 120PSB light bulbs and socket causing inoperability of safety-related equipment (i.e., the remaining 120PSB lightbulbs with F series sockets for EDG A and B).

- CRs 10009585 and 10009587: The equipment performance evaluation (CR 10009585) and common cause (CR 10009587) both concluded the most probable cause was an internal short within the 120PSB incandescent bulb resulting in a spurious lockout relay actuation that prevented equipment operation, due to an inadequate original plant circuit. Additionally, the licensee concluded actions taken in support of CR 2004-1024, CR 140271, and CR 140866 were ineffective.

Corrective Actions: The licensee removed the 120PSB incandescent bulbs from EDG A and B, reset the 186-1 and 186-2 lockout relays; upgraded to LEDs and replace the associated sockets with a new design; and perform an extent of condition evaluation.

Corrective Action References: CRs 10009585, 10009587, 10009590

Performance Assessment:

Performance Deficiency: The licensee's failure to correct a condition adverse to quality associated with short circuits of 120PSB incandescent bulbs and their associated sockets causing inoperability of the EDG B was a performance deficiency.

Screening: The inspectors determined the performance deficiency was more than minor because it was associated with the Equipment Performance attribute of the Mitigating Systems cornerstone and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the failure of the 120PSB incandescent bulb and its associated socket causing a short circuit that actuated the 186-2 lockout relay preventing the EDG B output breaker from closing, resulting in EDG B being declared inoperable.

Significance: The inspectors assessed the significance of the finding using Appendix A, "The Significance Determination Process (SDP) for Findings At-Power." Using Exhibit 2, "Mitigating Systems Screening Questions," the finding was determined to be very low safety significance (Green) because it: (1) was not a design deficiency, (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, (4) did not represent a loss of the probabilistic assessment (PRA) function of two separate technical specification systems for greater than 24 hours, (5) did not represent a loss of a PRA system and/or function for greater than 24 hours, and (6) did not result in the loss of a high safety-significant, nontechnical specification train.

Cross-Cutting Aspect: P.2 - Evaluation: The organization thoroughly evaluates issues to ensure that resolutions address causes and extent of conditions appropriate for their safety significance. Specifically, the licensee failed to complete an extent of condition in a timely manner, appropriate for the safety significance of the issue to properly classify and prioritize corrective actions associated with incandescent lightbulbs and associated F series sockets

that could impact safety-related equipment (i.e., the remaining EDG A and B incandescent lightbulbs and associated F series sockets).

Enforcement:

Violation: Title 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," states, in part, that measures shall be established to assure that conditions adverse to quality, such as failures, malfunctions, deficiencies, deviations, defective material and equipment, and nonconformances are promptly identified and corrected.

Contrary to the above, between May 2004 to November 2021, the licensee failed to assure that conditions adverse to quality, such as failures, malfunctions, deficiencies, deviations, defective material and equipment, and nonconformance are promptly corrected. Specifically, the licensee failed to correct a condition adverse to quality associated with 120PSB incandescent bulbs and their associated sockets short circuiting and causing inoperability of EDG B.

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

EXIT MEETINGS AND DEBRIEFS

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

- On October 7, 2021, the inspectors presented the radiation safety inspection results to Mr. J. McCoy, Site Vice President, and other members of the licensee staff.
- On November 18, 2021, the inspectors presented the emergency plan changes and performance indicator verification inspection results to M. Dekat, Manager, Emergency Preparedness, and other members of the licensee staff.
- On January 6, 2022, the inspectors presented the ISFSI preoperational exercises and Part 72 program inspection results to Mr. C. Reasoner, Chief Executive Officer and Chief Nuclear Officer, and other members of the licensee staff.
- On January 13, 2022, the inspectors presented the integrated inspection results to Mr. B. Bayer, General Manager, Plant Operations, and other members of the licensee staff.

DOCUMENTS REVIEWED

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
60854	Procedures	PTIP 3051-5.11c	EOS-37PTH TC Handling and Fuel Loading	0
60854	Procedures	PTIP 3051-5.11e	DSC Insertion into HSM-MX	0
60854	Procedures	PTIP 3051-5.11f	DSC Retraction into Transfer Cask	0
60854	Procedures	PTIP 3051-5.11g	Guidance for ISFSI Equipment Malfunctions	0
60856	Calculations	108093-C-001	SSI Analysis	1
60856	Calculations	108093-C-002	ISFSI Pad Analysis and Design	1
60856	Calculations	TN EOS01-0319	MX Transfer skid and SEFIRO Transfer Trailer System stability evaluation for tornado wind, missile impact and seismic loads	0
60856	Corrective Action Documents	Condition Reports	2021-285, 2020-241, 2021-278, 2021-279, 2021-288	
60856	Engineering Evaluations	30501-EE-006	Hazards Evaluation for the ISFSI	1
60856	Engineering Evaluations	LR 721042-098	NUHOMS MX-LC and RRT	1
60856	Procedures	AP 26A-009	10 CFR 72.48 Reviews	0
60856	Procedures	WCNOC-4	Report on Control of Heavy Loads, Lifting and Rigging	21
71111.04	Corrective Action Documents	Condition Report	10010040	
71111.04	Drawings	M-12EM01	Piping and Instrumentation Diagram High Pressure Coolant Injection System	46
71111.04	Drawings	M-12EP01	Piping and Instrumentation Diagram Accumulator Safety Injection	17
71111.04	Miscellaneous	WCRE-34	Fourth 10-Year Interval Inservice Testing Basis Document	12
71111.04	Procedures	AP 15C-004	Preparation, Review and Approval of Procedures, Instructions and Forms	55A
71111.04	Procedures	AP 26C-004	Operability Determination and Functionality Assessment	45
71111.04	Procedures	SYS EP-200	Safety Injection Accumulator Operations	50
71111.05	Corrective Action Documents	Condition Reports	10000916, 10009970	
71111.05	Corrective Action Documents	Condition Report	10010105	

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
	Resulting from Inspection			
71111.05	Drawings	E-13GK31	Schematic Diagram Fire Signal Isolation	6
71111.05	Drawings	M-12GK04	Piping and Instrumentation Diagram Control Building HVAC	15
71111.05	Miscellaneous	BAP-21-0396	Breach Authorization Permit	
71111.05	Miscellaneous	BAP-21-0397	Breach Authorization Permit	
71111.05	Miscellaneous	BAP-21-0398	Breach Authorization Permit	
71111.05	Miscellaneous	BAP-21-0399	Breach Authorization Permit	
71111.05	Miscellaneous	BAP-21-0440	Breach Authorization Permit	
71111.05	Miscellaneous	BAP-21-0441	Breach Authorization Permit	
71111.05	Miscellaneous	BAP-21-0444	Breach Authorization Permit	
71111.05	Miscellaneous	E-1F9905	Fire Hazard Analysis	11
71111.05	Miscellaneous	WCRE-35	Boundary Matrix	8
71111.05	Procedures	ALR KC-888	Fire Protection Panel KC-008 Alarm Response	32
71111.05	Procedures	AP 10-100	Fire Protection Program	24
71111.05	Procedures	AP 10-103	Fire Protection Impairment Control	37
71111.05	Procedures	AP 10-104	Breach Authorization	39
71111.05	Procedures	AP 10-106	Fire Preplan	21
71111.05	Procedures	AP-109	Fire Protection Inspections	9
71111.05	Procedures	OFN KC-016	Fire Response	51
71111.05	Procedures	STN FP-402A	Train A HALON System Checkout for KC-230	11
71111.05	Procedures	STN FP-402B	Train B HALON System Checkout for KC-230	11
71111.05	Procedures	SYS GB-200	Chilled Water System Operation	41
71111.05	Procedures	SYS GK-201	Mitigating Actions for Inoperable SKG05 Train	3A
71111.11Q	Corrective Action Documents	Condition Report	10009813	
71111.11Q	Procedures	AI 21-300	Flexible Power Operations	2
71111.12	Corrective Action Documents	Condition Reports	67122, 136146, 136778, 138215, 139226, 141273, 143729, 10005736, 10008456, 10008863, 10008874, 10009461, 10009463, 10009464, 10009465, 10009466, 10009619, 10009841, 10010238, 10010613	
71111.12	Corrective Action Documents	Condition Report	10010430	

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
	Resulting from Inspection			
71111.12	Drawings	J-12AE12	Feedwater System Motor Driven Pump Control Logic Diagram	0
71111.12	Drawings	M-12AE01	Piping and Instrumentation Diagram Feedwater System	44
71111.12	Drawings	M-12AL01	Piping and Instrumentation Diagram Auxiliary Feedwater System	32
71111.12	Engineering Changes	DCP 020161	Removal of Interlock to Motor Driven Feedwater Pump Motor Start	1
71111.12	Miscellaneous	M-022-00001	Station Blackout Diesel Generator Kohler Instruction Manual	W03
71111.12	Miscellaneous	M-022-00012	SBO Diesel Generator Battery and 125 VDC Support Equipment	W01
71111.12	Miscellaneous	M-022-00018	Station Blackout Diesel Operations and Maintenance Manual	W01
71111.12	Miscellaneous	WCRE-34	Fourth 10-Year Interval Inservice Testing Basis Document	12
71111.12	Procedures	AP 05-007	Determination of Safety Classification	15
71111.12	Procedures	AP 05J-001	Quality Group (Augmented) Quality Program Requirements	5
71111.12	Procedures	AP 23M-001	WCGS Maintenance Rule Program	13
71111.12	Procedures	EMG C-0	Loss of All AC Power	45
71111.12	Procedures	EMG ES-02	Reactor Trip Response	41
71111.12	Procedures	EMG FR-H1	Response to Loss of Secondary Heat Sink	37
71111.12	Procedures	GEN 00-005	Minimum Load to Hot Standby	95
71111.12	Procedures	STN AE-007	Startup Main Feedwater Pump Operational Test	15
71111.12	Procedures	SYS AE-122	Startup Main Feedwater Pump Startup	41
71111.12	Procedures	SYS AE-200	Feedwater Preheating during Plant Startup and Shutdown	44
71111.12	Procedures	SYS KU-124	SBO Generator Local or Manual Operations	7
71111.12	Work Orders	WO	13-366996-000, 17-432438-000, 17-432438-003, 17-432438-007, 21-475640-000	
71111.13	Corrective Action Documents	Condition Reports	10009585, 10010040, 10010238	
71111.13	Drawings	E-13NE11	Schematic Diagram 4.16kV DG NE02 Feeder Breaker 152NB0211	20
71111.13	Miscellaneous	BAP-21-0440	Breach Authorization Permit	
71111.13	Miscellaneous	PIR 1997-3174	Performance Improvement Request Review	

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71111.13	Miscellaneous	STS PE-004	Aux Building and Control Room Pressure Test as performed on 11/20/1998	10
71111.13	Miscellaneous	WCRE-35	Boundary Matrix	8
71111.13	Procedures	ALR 00-023D	DG NE2 Trouble	10
71111.13	Procedures	AP 10-104	Breach Authorization	39
71111.13	Procedures	SYS GB-200	Chilled Water System Operation	41
71111.13	Procedures	SYS KJ-200	Inoperable Emergency Diesel	34A
71111.13	Work Orders	WO	21-475280-000, 21-475496-000, 21-475640-000	
71111.15	Corrective Action Documents	Condition Reports	025709, 031273, 073235, 10009660, 10009934, 10009945, 10010376, 10010460, 10009587	
71111.15	Drawings	E-13EG01D	Schematic Diagram Component Cooling Water Pump D	5
71111.15	Drawings	J-110-00212	Component Cooling Water System CCW Pumps B&D Discharge Header Pressure	0
71111.15	Drawings	M-018-00185	Electrical Schematic Diesel Gen. Control NE107 (NE106)	W16
71111.15	Drawings	M-12EG01	Piping and Instrumentation Diagram Component Cooling Water System	26
71111.15	Drawings	M-761-00072	Loop 1 Tavg and DT	
71111.15	Drawings	M-761-00077	Pressurizer Pressure	
71111.15	Miscellaneous	E-1F9910	Post Fire Shutdown Area Analysis	17
71111.15	Procedures	ALR 00-054B	CCW PMP B/D Press LO	8
71111.15	Procedures	AP 26C-004	Operability Determination and Functionality Assessment	45
71111.15	Procedures	AP 28-001	Operability Evaluations	27
71111.15	Procedures	OFN EG-004	CCW System Malfunctions	19
71111.15	Procedures	STN IC-458	Channel Calibration CCW Pump Discharge Pressure Loop EG PT-0078	6A
71111.15	Procedures	STS KJ-001B	Integrated D/G and Safeguards Actuation Test – Train B	67
71111.15	Work Orders	WO	21-475453-000	
71111.19	Corrective Action Documents	Condition Reports	10009065, 10010040, 10010141, 10010159, 10010238	
71111.19	Miscellaneous	M-622.1A-0089	SGK04A, SGK04B, SGK05A, and SGK05A Air Conditioning Condensers	W18
71111.19	Procedures	16E-002	Post Maintenance Testing Development	21A
71111.19	Procedures	MPE GK-003	Control Room and Class 1E A/C Units Preventative	7

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
			Maintenance Activity	
71111.19	Procedures	MPE GK-004	GK Unit Preparation for Work	11A
71111.19	Procedures	SYS GK-123	Control Building A/C Units Startup and Shutdown	36
71111.19	Work Orders	WO	21-475496-000, 21-475496-009, 21-475640-000	
71114.04	Corrective Action Documents Resulting from Inspection	Condition Reports	10010666, 10010667, 10010671	
71114.04	Miscellaneous		E-Plan Screening: EPP 06-006, Protective Action Recommendations, Rev. 10A	06/09/2021
71114.04	Miscellaneous		E-Plan Screening: EPP 06-007, Emergency Notifications, Rev 27	07/29/2021
71114.04	Miscellaneous		E-Plan Effectiveness Evaluation: EPP 06-007, Emergency Notifications, Rev. 27	07/29/2021
71114.04	Miscellaneous		E-Plan Effectiveness Evaluation: EPP 06-019, Alert and Notification System Sirens, Rev. 10 (Eliminated/Superseded)	05/25/2021
71114.04	Miscellaneous		E-Plan Screening: EPP 06-019, Alert and Notification System Sirens, Rev. 10 (Eliminated/Superseded)	03/31/2021
71114.04	Miscellaneous		E-Plan Screening: EPP 06-012, Dose Assessment, Rev. 17B	05/20/2021
71114.04	Miscellaneous		E-Plan Screening: AP 06-002, Radiological Emergency Response Plan (RERP), Rev 22	07/12/2021
71114.04	Miscellaneous		E-Plan Effectiveness Evaluation: AP 06-002, Radiological Emergency Response Plan (RERP), Rev 22	06/07/2021
71114.04	Miscellaneous		E-Plan Screening: APF 06-002-03, EAL Classification Matrix, Rev. 1	05/26/2021
71114.04	Miscellaneous		E-Plan Effectiveness Evaluation: APF 06-002-03, EAL Classification Matrix, Rev. 1	06/14/2021
71114.04	Miscellaneous		E-Plan Screening: APF 06-002-02, Emergency Action Levels Technical Bases, Rev. 1	05/26/2021
71114.04	Miscellaneous		E-Plan Effectiveness Evaluation: APF 06-002-02, Emergency Action Levels Technical Bases, Rev. 1	06/14/2021
71114.04	Procedures	AI 26A-003	Regulatory Evaluations (Other Than 10 CFR 50.59)	16, 17
71124.02	ALARA Plans		Wolf Creek ALARA 5-Year Plan 2017-2021	04/01/2021
71124.02	ALARA Plans		Wolf Creek ALARA Long Range Exposure/Source Term	02/01/2015

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
			Reduction Plan (2015-2019)	
71124.02	ALARA Plans	RWP 191000	Radiation Protection Rover Coverage ALARA Review Package	
71124.02	ALARA Plans	RWP 194207	Reactor Coolant Pump Team & Preventative Maintenance ALARA Review Package	
71124.02	ALARA Plans	RWP 194482	Remove/Install Canopy Seal Weld Clamps ALARA Review Package	
71124.02	ALARA Plans	RWP 194483	Reactor Vessel Head Reassembly (to include canopy seal clamps) ALARA Review Package	
71124.02	ALARA Plans	RWP 213057	Under Reactor Head Entries for Electric Discharge Machining ALARA Review Package	
71124.02	ALARA Plans	RWP 213220	Primary Side Steam Generator Eddy Current Testing and Zero Entry Nozzle Dam ALARA Review Package	
71124.02	ALARA Plans	RWP 214199	Secondary Side Steam Generator Foreign Object Search/Retrieval and Visual Inspections ALARA Review Package	
71124.02	ALARA Plans	RWP 214200	Secondary Side Steam Generator Sludge Lance ALARA Review Package	
71124.02	ALARA Plans	RWP 216020	Reactor Vessel Head Lift Preparation and Post Head Set Work Activities ALARA Review Package	
71124.02	Corrective Action Documents	Condition Reports	00131535, 00134905, 00136925, 00137267, 00138067, 00138968, 00139463, 00140656, 00140657, 00140676, 00140681, 00141484, 00141485, 00141486, 00144502, 10001089, 10003789, 10004210	
71124.02	Procedures	AP 25A-300	RWP Program	26
71124.02	Procedures	AP 25A-401	ALARA Program	28
71124.02	Procedures	AP 25A-410	ALARA Committee	25
71124.02	Procedures	RPP 02-105	Radiation Work Permits	50
71124.02	Radiation Surveys	M-20210127-5	Auxiliary-2000-1306	01/27/2021
71124.02	Radiation Surveys	M-20210405-22	RF-24 EPRI Survey	04/05/2021
71124.02	Self-Assessments		Refuel 24 Outage Report	07/07/2021
71124.02	Self-Assessments		Refuel 23 Outage Report	01/27/2020

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71124.02	Self-Assessments	20-01-RP/PC	Quality Assurance Audit Report - QA Radiological Protection & Process Control Programs Audit	03/02/2020
71124.02	Self-Assessments	Condition Report (CR) #00146305	Self-Assessment for NRC Inspection 71124 Attachment 02	
71124.04	Corrective Action Documents	Condition Reports	00136261, 00137866, 00138625, 00138806, 00140629, 00140663, 00140674, 00140675, 00144019, 00144020, 10004384, 10004684, 10004685, 10006933, 10007294, 10009578	
71124.04	Miscellaneous		2019 DAC-Hour Summary	10/16/2019
71124.04	Miscellaneous		2020 DAC-Hour Summary	09/16/2020
71124.04	Miscellaneous		2021 DAC-Hour Summary	04/17/2021
71124.04	Miscellaneous		Calibration Documentation WBC-200-GEM10 High Purity Germanium Based Chair	02/25/2021
71124.04	Miscellaneous		2019 Wolf Creek Multi-Packs per Person Log	2019
71124.04	Miscellaneous		2021 Wolf Creek Multi-Packs per Person Log	2021
71124.04	Miscellaneous		Wolf Creek ALARA 5-Year Plan 2017-2021	04/01/2021
71124.04	Miscellaneous		Wolf Creek Dose Excellence Plan 2017-2021	07/27/2017
71124.04	Miscellaneous		List of Positive Whole Body Counts from 3/11/2019 to 9/1/2021	09/01/2021
71124.04	Miscellaneous	WO 537181	WCNOC 10 CFR Part 61 Analysis	04/05/2021
71124.04	Procedures	AP 25A-001	Radiation Protection Manual	19
71124.04	Procedures	AP 25B-100	Radiation Worker Guidelines	54A
71124.04	Procedures	AP 25B-400	Planned Special Exposures	3C
71124.04	Procedures	RPP 02-305	Personnel Surveys/Decontamination	30
71124.04	Procedures	RPP 03-121	Determination of Neutron Dose	8
71124.04	Procedures	RPP 03-205	DAC-Hour Tracking	17A
71124.04	Procedures	RPP 03-210	Internal Exposure Calculations and Evaluations	17B
71124.04	Procedures	RPP 03-406	Radiation Protection Dosimetry/Records	16
71124.04	Procedures	RPP 05-707	Operation of Whole Body Counter	10B
71124.04	Radiation Work Permits (RWP)	RWP 192001	Mechanical Maintenance Welding Department RWP for Work Activities by Mechanical Maintenance Supervision	0
71124.04	Radiation Work Permits (RWP)	RWP 200061	Fuel Building Transfer Canal Entry for Repairs/Inspection and Decon of Fuel Building Transfer System	0

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71124.04	Radiation Work Permits (RWP)	RWP 214486	RWP to be used for CO2 Blasting Decon of the RX Head in CTMT and Associated Activities in the Fuel Building	0
71124.04	Self-Assessments		Self-Assessment for NRC Inspection 71124, Attachment 04	09/07/2021
71124.04	Self-Assessments	Quick Hit 2017-1505	NRC Inspection Procedure 71124.04, Occupational Dose Assessment, and NRC 71124.02, Occupational ALARA Planning and Controls	07/12/2017
71124.04	Self-Assessments	Quick Hit 2019-1801	NRC Inspection Procedure 71124.04, Occupational Dose Assessment	02/27/2019
71151	Corrective Action Documents	Condition Reports	10001964, 10001986, 10001992, 10006572, 10008518, 10009546, 10009731	
71151	Corrective Action Documents Resulting from Inspection	Condition Reports	10010664, 10010665, 10010673	
71151	Miscellaneous		DEP PI Evaluation - Annual Exam Session LR9490001/Rev 000 (Hawes/Hamman)	07/08/2020
71151	Miscellaneous		DEP PI Evaluation - Annual Exam Session LR9490001/Rev 000 (Faircloth/Dekat)	07/15/2020
71151	Miscellaneous		DEP PI Evaluation - LOR Session LR4640001/Rev 005 (Pitt/Strahm)	08/19/2020
71151	Miscellaneous		DEP PI Evaluation - Table Top Series #1 (GE1135662/Rev 004), DLA#1 - DLA#5	10/28/2020
71151	Miscellaneous		DEP PI Evaluation - Table Top Series #3 (GE1135662/Rev 004), DLA#1 - DLA#4	12/02/2020
71151	Miscellaneous		DEP PI Evaluation - Drill 21-SA-02 (GE1135656/Rev 000), Team A/C	03/02/2021
71151	Miscellaneous		ERO Drill Participation Tracking Data Sheets	3Q/2020 - 3Q/2021
71151	Miscellaneous		DEP PI Evaluation - Drill 21-SA-02 (GE1135656/Rev 000), Team D/A	06/15/2021
71151	Miscellaneous		DEP PI Evaluation - LOR Session LR4422801/Rev 003 (Hawes/Perry)	06/09/2021
71151	Miscellaneous		DEP PI Evaluation - LOR Session LR4422801/Rev 003 (Hamman/Turner)	06/16/2021

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71151	Miscellaneous		DEP PI Evaluation - LOR Session LR4422801/Rev 003 (Rholfing/Payne)	06/23/2021
71151	Miscellaneous		DEP PI Evaluation - 2021 Table Top Series II (GE1135662/Rev 004), Team D, DLA#1 - DLA#4	06/16/2021
71151	Miscellaneous		DEP PI Evaluation - Annual Exam Session LR9490001/Rev 000 (Greenfield/Grigsby)	06/24/2020
71151	Miscellaneous		DEP PI Evaluation - Annual Exam Session LR9490001/Rev 000 (Rohlfing/Payne)	07/22/2020
71151	Miscellaneous		DEP PI Evaluation - Annual Exam Session LR9490001/Rev 000 (Martinson/Laubner)	06/10/2020
71151	Miscellaneous	WCNOC-163	Mitigating System Performance Index Basis Document	13
71151	Procedures	AI 26A-004	Emergency Planning Performance Indicators	9
71152	Corrective Action Documents	Condition Reports	123660, 135873, 139820, 140271, 140353, 140866, 141862, 142096, 144072, 10000838, 10001040, 10001612, 10003119, 10007096, 10007438, 10007572, 10007814, 10009585, 10009587, 10009590, 10009801, 10009807, 10010305, 10010306	
71152	Corrective Action Documents Resulting from Inspection	Condition Reports	10010923, 10010924, 10010925, 10010926	
71152	Drawings	E-13NE11	Schematic Diagram 4.16kV DG NE02 Feeder Breaker 152NB0211	20
71152	Engineering Changes	CP 20403	LED Replacement for Incandescent Lamps	0
71152	Engineering Changes	EC 020406	Copper Sensing Line Replacement	3
71152	Miscellaneous	M-622.1A-00089	Instruction Manual for SGK04A, SGK04B, SGK05A, and SGK05B Air Conditioning Condensers	W18
71152	Miscellaneous	SCA-21-0009	Sensing Line Protective Plate SGK04A/B, SGK05A/B	0
71152	Procedures	AI 28A-100	Condition Report Resolution	22
71152	Procedures	AP 28A-100	Corrective Action Program	26A
71152	Procedures	INC S-0504	Tube Fitting and Installation Standard and Practices	7
71152	Work Orders	WO	20-462340-001, 20-462739-027, 20-462739-035, 21-	

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
			475367-000, 21-475367-001	
71153	Corrective Action Documents	Condition Reports	143097, 10008456, 10008863, 10008874, 10010417	
71153	Procedures	AI 28A-010	Screening Condition Reports	36
71153	Procedures	AI 28A-102	Root Cause Analysis	3

WOLF CREEK GENERATING STATION – INTEGRATED INSPECTION REPORT 05000482/2021004
 AND INDEPENDENT SPENT FUEL STORAGE INSTALLATION INSPECTION REPORT 07200079
 /2021002 DATE January 19, 2022

DISTRIBUTION:

RStuart, R-IV/DRP

OFFICE	R-IV/DRP/RPB-C	R-IV/DRS/EB1	R-IV/DNMS/MLDB	R-IV/DRP/RPB-C /CNS
NAME	DProulx <i>DP</i>	VGaddy <i>VG</i>	HGepford <i>HG</i>	ASiwy <i>AS</i>
DATE	Jan 13, 2022	Jan 14, 2022	Jan 14, 2022	Jan 14, 2022
OFFICE	R-IV/DRP/RPB-D /WAT-3	R-IV/DRS/RCB	R-IV/DRP/RPB	NRR/DRA
NAME	FRamirez <i>FR</i>	MHaire <i>MH</i>	HStrittmatter <i>HS</i>	JEvans <i>JE</i>
DATE	Jan 14, 2022	Jan 14, 2022	Jan 13, 2022	Jan 18, 2022
OFFICE	R-IV/DRS/OB			
NAME	GWerner <i>GW</i>			
DATE	Jan 19, 2022			

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