



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

April 25, 2016

Adam C. Heflin, President and
Chief Executive Officer
Wolf Creek Nuclear Operating Corporation
P.O. Box 411
Burlington, KS 66839

SUBJECT: WOLF CREEK GENERATING STATION – NRC INTEGRATED INSPECTION
REPORT 05000482/2016001

Dear Mr. Heflin:

On March 31, 2016, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Wolf Creek Generating Station. On April 13, 2016, 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 one finding of very low safety significance (Green) in this report. This finding involved a violation of NRC requirements. The NRC is treating this violation as a non-cited violation (NCV) consistent with Section 2.3.2.a of the NRC Enforcement Policy.

If you contest the violation or significance of this NCV, 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 Wolf Creek Generating 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 Wolf Creek Generating 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

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Sincerely,

/RA/

Nicholas H. Taylor, Branch Chief
Project Branch B
Division of Reactor Projects

Docket No. 50-0482
License No. NPF-42

Enclosure:
Inspection Report 05000482/2016001
w/ Attachment: Supplemental Information

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A. Heflin

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Letter to Adam Heflin from Nicholas H. Taylor dated April 25, 2016

SUBJECT: WOLF CREEK GENERATING STATION – NRC INTEGRATED INSPECTION
REPORT 05000482/2016001

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U.S. NUCLEAR REGULATORY COMMISSION

REGION IV

Docket: 05000482

License: NPF-42

Report: 05000482/2016001

Licensee: Wolf Creek Nuclear Operating Corporation

Facility: Wolf Creek Generating Station

Location: 1550 Oxen Lane NE
Burlington, KS 66839

Dates: January 1 through March 31, 2016

Inspectors: D. Dodson, Senior Resident Inspector
F. Thomas, Resident Inspector
S. Alferink, Reactor Inspector
V. Gaddy, Chief, Operations Branch

Approved By: Nicholas H. Taylor
Chief, Project Branch B
Division of Reactor Projects

SUMMARY

IR 05000482/2016001; 01/01/2016 – 03/31/2016; Wolf Creek Generating Station; Problem Identification and Resolution

The inspection activities described in this report were performed between January 1 and March 31, 2016, by the resident inspectors at Wolf Creek Generating Station and inspectors from the NRC's Region IV office. One finding of very low safety significance (Green) is documented in this report. This finding involved a violation 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," issued December 4, 2014. 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 Green non-cited violation of Technical Specification 5.4.1.a for the licensee's failure to adequately develop and adjust preventive maintenance activities in accordance with Procedure AP 16B-003, "Planning and Scheduling Preventive Maintenance," Revision 5. Specifically, the licensee did not adequately develop a preventive maintenance replacement task and schedule for control room air conditioning unit SGK04A refrigerant sensing lines and fittings. The licensee's immediate actions included securing and declaring the SGK04A system inoperable, completing corrective maintenance to eliminate the refrigerant leak, and confirming that the impacted preventive maintenance frequency was adequately established. The licensee entered this condition into the corrective action program as Condition Reports 101862 and 101867.

This finding is more than minor because it is 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. The inspectors utilized Inspection Manual Chapter 0609, Appendix A, "Significance Determination Process (SDP) for Findings At-Power," issued June 19, 2012. The inspectors determined this finding is not a deficiency affecting the design or qualification of a mitigating structures, systems, and components (SSC) that maintained its operability or functionality, the finding does not represent a loss of system and/or function, the finding does not represent an actual loss of function of at least a single train for greater than its Technical Specification allowed outage time, and the finding does not represent an actual loss of function of one or more non-Technical Specification trains of equipment designated as high safety-significant. Therefore, the inspectors determined the finding was of very low safety significance (Green). The finding has a cross-cutting aspect in the area of human performance, resources, because leaders did not ensure that personnel, equipment, procedures, and other resources are available and adequate to support nuclear safety. Specifically, leaders did not ensure procedures and other resource materials were available to support successful work performance when setting preventive maintenance activity base dates, which resulted in the licensee failing to adequately develop and adjust preventive maintenance activities associated with control room air conditioning unit SGK04A refrigerant sensing lines and fittings [H.1]. (Section 4OA2)

PLANT STATUS

Wolf Creek Generating Station began the inspection period operating at full power. On February 26, 2016, operators reduced power to approximately 84 percent to support main turbine valve cycle testing. Later that day operators reduced power to approximately 70 percent to support 345 KV switchyard insulator repairs. Plant power was restored to full power later on February 26, 2016, and the plant operated at or near full power for the rest of the period.

REPORT DETAILS

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity

1R01 Adverse Weather Protection (71111.01)

Summer Readiness for Offsite and Alternate-Alternating Current Power Systems

a. Inspection Scope

On February 26, 2016, the inspectors completed an inspection of the station's off-site and alternate-alternating current power systems. The inspectors inspected the material condition of these systems, including transformers and other switchyard equipment to verify that plant features and procedures were appropriate for operation and continued availability of off-site and alternate-alternating current power systems. The inspectors reviewed outstanding work orders and open condition reports for these systems. The inspectors walked down the switchyard to observe the material condition of equipment providing off-site power sources. The inspectors assessed corrective actions for identified degraded conditions and verified that the licensee had considered the degraded conditions in its risk evaluations and had established appropriate compensatory measures.

The inspectors verified that the licensee's procedures included appropriate measures to monitor and maintain availability and reliability of the off-site and alternate-alternating current power systems.

These activities constituted one sample of summer readiness of off-site and alternate-alternating current power systems, 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 walkdowns of the following risk-significant systems:

- January 11, 2016, train A emergency diesel generator
- January 28, 2016, train A spent fuel pool cooling
- February 8, 2016, station black out diesel generators
- February 25, 2016, train B essential service water

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 four partial system walkdown samples as defined in Inspection Procedure 71111.04.

b. Findings

No findings were identified.

.2 Complete Walkdown

a. Inspection Scope

On March 29, 2016, the inspectors completed a complete system walkdown inspection of the train A motor driven auxiliary feedwater system. The inspectors reviewed the licensee's procedures and system design information to determine the correct A motor driven auxiliary feedwater system lineup for the existing plant configuration. The inspectors also reviewed outstanding work orders, open condition reports, 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 walkdown 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:

- February 8, 2016, fire area SBO, station blackout diesel generator enclosure, elevation 2000 feet

- February 9, 2016, fire area A-14, auxiliary feedwater pump room 1326, elevation 2000 feet
- February 25, 2016, fire area ESW-2, essential service water pump house B train
- March 29, 2016, fire area A-28, auxiliary shutdown panel room

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.

1R06 Flood Protection Measures (71111.06)

a. Inspection Scope

On March 21 and 22, 2016, the inspectors completed an inspection of underground bunkers susceptible to flooding. The inspectors selected two underground vaults that contained risk-significant or multiple-train cables whose failure could disable risk-significant equipment:

- Train A essential service water system manhole MHE2A
- Train A essential service water system manhole MHE3A

The inspectors observed the material condition of the cables and splices contained in the vaults and looked for evidence of cable degradation due to water intrusion. The inspectors verified that the cables and vaults met design requirements.

These activities constituted completion of one flood protection measures sample, which consisted of two bunker/manhole inspections, as defined in Inspection Procedure 71111.06.

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 February 29, 2016, the inspectors observed an evaluated simulator scenario performed by 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 activities.

These activities constituted 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

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 risk. The inspectors observed the operators' performance of the following activities:

- January 28, 2016, control and shutdown rod operability testing in accordance with STS SF-001, "Control and Shutdown Rod Operability Verification," Revision 28, including the pre-job brief
- February 10, 2016, operator immediate response to a partial reactor trip alarm in accordance with ALR 00-083C, "Rx Partial Trip," Revision 5A
- February 26, 2016, reduction in power to approximately 84 percent to support main turbine valve cycle testing, and later operators reduced power to approximately 70 percent to support 345 KV switchyard insulator repairs, including the pre-job brief

In addition, the inspectors assessed the operators' adherence to plant procedures, including AP 21-001, "Conduct of Operations," Revision 75, and other operations department policies.

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

b. Findings

No findings were identified.

1R12 Maintenance Effectiveness (71111.12)

a. Inspection Scope

On March 22, 2016, the inspectors reviewed one instance of degraded performance or condition of safety-related SSC - Train A spent fuel pool cooling pump surveillance testing issues.

The inspectors reviewed the extent of condition of possible common cause SSC 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 SSCs. 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 one maintenance effectiveness sample, 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 three 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:

- January 11, 2016, B emergency diesel generator planned maintenance
- March 9, 2016, A service water pump discharge check valve planned maintenance
- March 23, 2016, A centrifugal charging pump planned maintenance

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 three emergent work activities that had the potential to affect the functional capability of mitigating systems or to impact barrier integrity:

- January 21, 2016, unplanned A emergency diesel generator voltage regulator handswitch replacement

- March 17, 2016, unplanned B containment spray discharge isolation valve troubleshooting
- March 24, 2016, unplanned control building air conditioning unit SGK04B refrigerant leak corrective maintenance and control room emergency ventilation radiation monitor test failure

The inspectors verified that the licensee appropriately developed and followed a work plan for these activities. The inspectors verified that the licensee took precautions to minimize the impact of the work activities on unaffected SSCs.

These activities constituted completion of six 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 SSCs:

- February 10 and 11, 2016, operability determination of the B motor-driven auxiliary feedwater pump with elevated piping vibrations
- February 11, 2016, operability determination and extent of condition for essential service water vacuum breaker valve EFV0484 after failing its as-found stroke test
- March 3, 2016, operability determination of the turbine-driven auxiliary feedwater pump with high particulate count in oil samples for both the inboard and outboard pump bearings
- March 18, 2016, operability determination of the leaking by B containment spray pump discharge valve
- March 21, 2016, operability determination of the turbine-driven auxiliary feedwater pump with the steam trap bypass valve cycling

The inspectors reviewed the timeliness and technical adequacy of the licensee's evaluations. Where the licensee determined the degraded SSC 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 SSC.

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

b. Findings

No findings were identified.

1R19 Post-Maintenance Testing (71111.19)

a. Inspection Scope

The inspectors reviewed five post-maintenance testing activities that affected risk-significant SSCs:

- January 6, 2016, B centrifugal charging pump following planned maintenance
- January 11, 2016, B emergency diesel generator following planned maintenance
- February 9, 2016, diesel fire pump following planned maintenance
- February 9 through 10, 2016, B motor driven auxiliary feedwater pump following planned maintenance
- February 18, 2016, A containment cooler fan motor following planned maintenance

The inspectors reviewed licensing- and design-basis documents for the SSCs 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 SSCs.

These activities constituted completion of five 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 SSCs were capable of performing their safety functions:

In-service tests:

- January 7, 2016, STS EJ-100B, "RHR System Inservice Pump B Test,"
Revision 44

- February 12, 2016, STS AB-201D, “Atmospheric Relief Valve Inservice Valve Test,” Revision 27A
- February 17, 2016, STS EM-100A, “Safety Injection Pump “A” Inservice Pump Test,” Revision 39

Other surveillance tests:

- January 4, 2016, STS IC-208B, “4KV Loss of Voltage & Degraded Voltage TADOT NB02 – SEP GRP 4,” Revision 4E
- February 26, 2016, STS AC-001, “Main Turbine Valve Cycle Test,” Revision 51

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 tests satisfied appropriate acceptance criteria. The inspectors verified that the licensee restored the operability of the affected SSCs following testing.

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

b. Findings

No findings were identified.

Cornerstone: Emergency Preparedness

1EP6 Drill Evaluation (71114.06)

Emergency Preparedness Drill Observation

a. Inspection Scope

The inspectors observed an emergency preparedness drill on February 17, 2016, to verify the adequacy and capability of the licensee’s assessment of drill performance. The inspectors reviewed the drill scenario, observed the drill from the Technical Support Center and Emergency Operations Facility, and attended the post-drill critique. 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 licensee in the post-drill critique and entered into the corrective action program for resolution.

These activities constituted completion of one emergency preparedness drill observation sample, as defined in Inspection Procedure 71114.06.

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 per 7000 Critical Hours (IE01)

a. Inspection Scope

The inspectors reviewed licensee event reports (LERs) for the period of January 1, 2015, through December 31, 2015, to determine the number of scrams that occurred. The inspectors compared the number of scrams reported in these LERs to the number reported for the performance indicator. Additionally, the inspectors sampled monthly operating logs to verify the number of critical hours during the period. 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 per 7000 critical hours performance indicator, as defined in Inspection Procedure 71151.

b. Findings

No findings were identified.

.2 Unplanned Power Changes per 7000 Critical Hours (IE03)

a. Inspection Scope

The inspectors reviewed LERs, and reactor power trend logs for the period of January 1, 2015, through December 31, 2015, to determine the number of unplanned power changes that occurred. The inspectors compared the number of unplanned power changes documented to the number reported for the performance indicator. Additionally, the inspectors sampled monthly operating logs to verify the number of critical hours during the period. 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 power outages per 7000 critical hours performance indicator, as defined in Inspection Procedure 71151.

b. Findings

No findings were identified.

.3 Unplanned Scrams with Complications (IE04)

a. Inspection Scope

The inspectors reviewed the licensee's basis for including or excluding in this performance indicator for each scram that occurred between January 1, 2015, and December 31, 2015. 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.

40A2 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 two issues for an in-depth follow-up:

- On December 29, 2015, the licensee recognized that inservice testing had not been performed for one of the vacuum breaker valves (EFV0478) that had been recently installed on the train A essential service water hammer mitigation loop. Additionally, an inservice testing procedure had not been developed or approved.

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 as described in Condition Report 101760.

- On January 5, 2016, the control room air conditioning unit (SGK04A) was identified with low refrigerant levels, and a refrigerant leak was discovered that resulted in the SGK04A unit being declared inoperable and unavailable for maintenance.

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 as described in Condition Report 101862.

These activities constitute completion of two annual follow-up samples as defined in Inspection Procedure 71152.

b. Findings

Introduction. The inspectors identified a Green non-cited violation of Technical Specification 5.4.1.a for the licensee's failure to adequately develop and adjust preventive maintenance activities in accordance with Procedure AP 16B-003, "Planning and Scheduling Preventive Maintenance," Revision 5. Specifically, the licensee did not adequately develop a preventive maintenance replacement task and schedule for control room air conditioning unit SGK04A refrigerant sensing lines and fittings; as a result, a "large scale" leak was identified that resulted in the SGK04A unit being declared inoperable and unavailable, required corrective maintenance, and resulted in unplanned entries into Condition A of Technical Specifications 3.7.10 and 3.7.11.

Description. On January 5, 2016, Condition Report 101862, documented that control room air conditioning unit SGK04A refrigerant level was found low. The control room air conditioning system is designed to maintain the control room temperature for 30 days of continuous occupancy. In response to Condition Report 101862 Wolf Creek personnel completed refrigerant leak checks in accordance with Work Order 16 410207-000 and identified a "large scale" leak where the water regulating valve (GKV0765) capillary sensing line attaches to a Swagelok bulkhead fitting at isolation valve number 7—this condition was documented in Condition Report 101867. A "large scale" leak is defined by Procedure MPE GK-003, "Control Room and Class 1E A/C Units Preventive Maintenance Activity," Revision 6, as any leak greater than 5 ounces per year.

The SGK04A system was immediately secured and declared inoperable on January 5, 2016, due to the location and size of the leak. As a result, at 6:58 p.m. on January 5, 2016, the station entered Technical Specification 3.7.11, Condition A, for one control room air conditioning system train inoperable. At 12:13 a.m. on January 6, 2016, the station entered Technical Specification 3.7.10, Condition A, for one control room emergency ventilation system train inoperable while the sensing line and fitting were replaced. Following completion of corrective maintenance, the SGK04A unit was

restored to service and applicable Technical Specification conditions were exited at 4:50 a.m. on January 6, 2015, following successful testing.

In response to Condition Report 101867 the licensee completed a Basic Cause Evaluation. The evaluation states,

“The probable cause of this failure was determined to be a missed opportunity to replace the sensing line in a timely manner which resulted in a large scale refrigerant leak on the water regulating valve sensing line Swagelok fitting/nut. An incorrect base date for a corrective action from CR [(condition report)] 76409 to implement a time directed replacement PM for the sensing lines to eliminate failure due to aging and vibration was established, resulting in a missed opportunity to replace the sensing line in a timely manner.”

The cause evaluation discussed Table 6-2, “Degradation Mechanisms,” of Electric Power Research Institute report 1015075, “Plant Support Engineering: Life Cycle Management Planning Sourcebooks – Chillers,” December 2007, which notes that refrigerant operated control valve capillary lines are expected to be “failure-free for 10 years.”

Evaluation determined that the preventive maintenance activity base date had been incorrectly set because the station utilized the last replacement date of the suction sensing line coming from the suction of the compressor—the licensee determined that the replacement date of the water regulating valve sensing line and fittings should have been used instead. The water regulating valve sensing line associated with the SGK04A unit had been in place since installation of the SGK04A skid in 2004, approximately 12 years prior to the component’s failure.

The inspectors noted that Procedure AP 16B-003, “Planning and Scheduling Preventive Maintenance,” Revision 5, provides direction for implementing the preventive maintenance program. Section 6.2.2 states, “PM [(preventive maintenance)] frequencies are established and adjusted in accordance with AI 16B-002, Updating the PM Activity Module and the following considerations...The age of the installed equipment.” The inspectors determined that the preventive maintenance frequency for replacement of the SGK04A water regulating valve sensing line and fittings was not adequately established and the age of installed equipment adequately considered.

The inspectors reviewed the Basic Cause Evaluation associated with Condition Report 101867 and noted the actions taken. Specifically, Wolf Creek took immediate actions to replace the impacted sensing line and Swagelok nut associated with SGK04A and returned the unit to service. The station also verified that the base date was adequately set to ensure that future SGK04A water regulating valve sensing line replacements would occur within five years (April 23, 2018) of the most recent sensing line and Swagelok nut replacement (January 6, 2016). The “Actions Planned” section stated, “No further actions are required to minimize recurrence of the failure based on the probable cause.” The inspectors questioned whether any corrective actions had been taken or documented to address the probable cause—“An incorrect base date for a corrective action from CR [(condition report)] 76409”—and the inspectors determined that no actions had been taken to understand or correct why the base date was incorrectly set. The inspectors determined through interviews and document reviews that procedure guidance associated with setting preventive maintenance base dates lacked sufficient detail to ensure that preventive maintenance activities associated with safety-related equipment are completed commensurate with their safety significance. The licensee

initiated Condition Report 103694 in response to the inspectors' questions and is evaluating what additional corrective actions are needed.

Analysis. The inspectors determined that the licensee's failure to adequately develop and adjust preventive maintenance activities associated with control room air conditioning unit SGK04A refrigerant sensing lines and fittings was a performance deficiency. This finding is more than minor because it is 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. The inspectors evaluated the finding using Attachment 0609.04, "Initial Characterization of Findings," worksheet to Inspection Manual Chapter (IMC) 0609, "Significance Determination Process," issued June 19, 2012. The attachment instructs the inspectors to utilize IMC 0609, Appendix A, "Significance Determination Process (SDP) for Findings At-Power," issued June 19, 2012. The inspectors determined this finding is not a deficiency affecting the design or qualification of a mitigating SSC that maintained its operability or functionality, the finding does not represent a loss of system and/or function, the finding does not represent an actual loss of function of at least a single train for greater than its Technical Specification allowed outage time, and the finding does not represent an actual loss of function of one or more non-Technical Specification trains of equipment designated as high safety-significant. Therefore, the inspectors determined the finding was of very low safety significance (Green).

The inspectors determined that in accordance with Inspection Manual Chapter 0310 "Aspects Within The Cross-Cutting Areas," issued December 4, 2014, the finding has a cross-cutting aspect in the area of human performance, resources, because leaders did not ensure that personnel, equipment, procedures, and other resources are available and adequate to support nuclear safety. Specifically, leaders did not ensure procedures and other resource materials were available to support successful work performance when setting preventive maintenance activity base dates, which resulted in the licensee failing to adequately develop and adjust preventive maintenance activities associated with control room air conditioning unit SGK04A refrigerant sensing lines and fittings [H.1].

Enforcement. Technical Specification 5.4.1.a, requires, in part, that procedures shall be established, implemented, and maintained covering the applicable procedures recommended in Appendix A of Regulatory Guide 1.33, Revision 2. Section 9.b of Appendix A to Regulatory Guide 1.33, Revision 2, requires that "preventive maintenance schedules be developed to specify...inspection or replacement of parts that have a specific lifetime." The licensee established Procedure AP 16B-003, "Planning and Scheduling Preventive Maintenance," Revision 5, which provides direction for implementing the preventive maintenance program to meet the Regulatory Guide 1.33 requirement. Section 6.2.2 of Procedure AP 16B-003 requires that preventive maintenance activities are established and adjusted in accordance with the age of the installed equipment. Contrary to the above, until January 6, 2016, the licensee did not ensure that preventive maintenance frequencies were established and adjusted in accordance with the age of installed equipment. Specifically, the licensee did not ensure that adequate preventive maintenance activities were developed for control room air conditioning unit SGK04A refrigerant sensing lines and fittings. As a result, a large refrigerant leak was identified that resulted in the SGK04A unit being declared inoperable and unavailable, required corrective maintenance, and resulted in unplanned

entries into Condition A of Technical Specifications 3.7.10 and 3.7.11. The licensee entered this condition into its corrective action program as Condition Reports 101862 and 101867. The licensee's immediate actions included securing and declaring the SGK04A system inoperable, completing corrective maintenance to eliminate the refrigerant leak, and confirming that the impacted preventive maintenance frequency was adequately established. Because this violation was of very low safety significance and this issue was entered into the licensee's corrective action program, this violation is being treated as a non-cited violation, consistent with Section 2.3.2.a of the Enforcement Policy. (NCV 05000482/2016001-01, Failure to Adequately Establish and Adjust Preventive Maintenance Activities for Control Room Air Conditioning Unit SGK04A Sensing Lines and Fittings)

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

(Closed) LER 05000482/2014-006-00: Post-Fire Safe Shutdown Latent Issue May Impact Ability to Achieve Safe Shutdown

On November 19, 2014, the licensee determined that a control room fire scenario could result in the shutdown of the train B emergency diesel generator due to high jacket water temperature prior to establishing essential service water cooling to the emergency diesel generator. This condition would preclude the emergency diesel generator from providing the necessary electrical power to safely shutdown the plant during specific control room fire scenarios. This issue was dispositioned as non-cited violation 05000482/2014008-01 in the NRC Triennial Fire Protection Inspection Report 05000482/2014008 (ADAMS Accession Number ML14352A342). This licensee event report is closed.

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

4OA5 Other Activities

(Closed) IP 92722 – Follow-up Inspection for Any Severity Level I or II Traditional Enforcement Violation or For Two or More Severity Level III Traditional Enforcement Violations in a 12-Month Period

On January 27, 2016, the NRC issued to Wolf Creek Nuclear Operating Corporation two Notices of Violation that represented a Severity III problem. Details are discussed in NRC Inspection Reports 05000482/2015010 and 05000482/2015011. The violations were associated with licensed reactor operator medical examinations and related NRC reporting requirements. In Inspection Report 05000482/2015010, the NRC concluded that information regarding: 1) the reasons for the violations, 2) the actions planned or already taken to correct the violations and prevent recurrence, and 3) the dates when full compliance was achieved were already adequately addressed on the docket and no response was required. Specifically, inspectors confirmed that the Wolf Creek Nuclear Operating Corporation: 1) requested the NRC amend the operators' licenses to include a restriction for the use of prescribed medication (on July 15, 2015, the NRC issued the amended license with the new restriction), 2) initiated a causal analysis that included an extent of condition review for all operators to determine if there were any further unknown medical conditions, and 3) trained appropriate personnel on NRC medical restriction requirements. Based on these facts, the NRC considers this item to be closed and no follow-up inspection activity for these two Notices of Violation is planned. This item is closed.

4OA6 Meetings, Including Exit

Exit Meeting Summary

On April 13, 2016, the inspectors presented the inspection results to Adam Heflin, President and Chief Executive Officer, 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

T. Baban, Manager, System Engineering
W. Brown, Superintendent, Security Operations
A. Broyles, Manager, Information Services
D. Campbell, Superintendent, Maintenance
T. East, Superintendent, Emergency Planning
J. Edwards, Manager, Operations
D. Erbe, Manager, Security
R. Flannigan, Manager, Nuclear Engineering
J. Fritton, Oversight
B. Gagnon, Superintendent, Security
C. Hafenstine, Manager, Regulatory Affairs
A. Heflin, President and Chief Executive Officer
S. Henry, Manager, Integrated Plant Scheduling
R. Hobby, Licensing Engineer
J. Isch, Operations Work Controls
B. Lee, Supervising Instructor
D. Mand, Manager, Design Engineering
J. McCoy, Vice President, Engineering
W. Muilenburg, Supervisor, Licensing
L. Ratzlaff, Manager, Maintenance
C. Reasoner, Site Vice President
M. Skiles, Manager, Radiation Protection
T. Slenker, Supervisor, Operations Support
S. Smith, Plant Manager
M. Storts, Engineer
A. Stueve, Engineer
A. Stull, Vice President and Chief Operations Administrative Officer
M. Tate, Superintendent, Security

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened and Closed

05000482/2016001-01	NCV	Failure to Adequately Establish and Adjust Preventive Maintenance Activities for Control Room Air Conditioning Unit SGK04A Sensing lines and Fittings (Section 4OA2)
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Closed

05000482/2014006-00	LER	Post-Fire Safe Shutdown Latent Issue May Impact Ability to Achieve Safe Shutdown (Section 4OA3)
05000482/2015010-01	NOV	Incomplete and Inaccurate Medical Information Resulted in Issuance of a Renewed Operator License Without a Required Medical Restriction
05000482/2015010-02	NOV	Failure to Report a Permanent Change in a Licensed Operator's Medical Status and Request a Condition be Placed on the Operator's License

LIST OF DOCUMENTS REVIEWED

Section 1R01: Adverse Weather Protection

Procedures

<u>Number</u>	<u>Title</u>	<u>Revision</u>
CKL ZI-009	Site Reading Sheet	95
OFN AF-025	Unit Limitations	47
SYS OPS-008	Cold Weather Operations	1

Condition Reports

46940	102586	103043	103090
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Miscellaneous

<u>Title</u>	<u>Date</u>
Wolf Creek 345-41 Insulator Replacement Job Plan	February 26, 2016

Section 1R04: Equipment Alignment

Procedures

<u>Number</u>	<u>Title</u>	<u>Revision</u>
CKL AL-120	Auxiliary Feedwater Normal Lineup	41
CKL EF-120	Essential Service Water Valve, Breaker and Switch Lineup	53A
CKL JE-120	Emergency Fuel Oil System Lineup	19

Procedures

<u>Number</u>	<u>Title</u>	<u>Revision</u>
CKL KJ-121	Diesel Generator NE01 and NE02 Valve Checklist	39
CKL KU-120	SBO DG Component Checklist	4
SYS EC-100A	Spent Fuel Pool Cooling Pump "A" Inservice Pump Test	25
SYS KJ-121	Diesel Generator NE01 and NE02 Lineup for Automatic Operation	50C
SYS KJ-124	Post Maintenance Run of Emergency Diesel Generator B	62D
SYS KU-121	Energizing NB01 From Station Blackout Diesel Generators	4
SYS KU-122	Energizing NB02 From Station Blackout Diesel Generators	5
SYS KU-124	SBO Generator Local or Manual Operation	2

Work Orders

14-386658-000	14-388619-029	14-388418-000	14-388418-002	14-388418-004
15-402601-000	15-402601-001	15-403533-000	15-403533-001	15-403931-000
15-403931-001	15-403932-000	15-403932-001	15-403932-002	15-403953-000
15-405709-000	16-411280-001	16-411280-002	16-411280-005	16-411280-009

Drawings

<u>Number</u>	<u>Title</u>	<u>Revision</u>
8025-E-1021	69-13.8KV Construction Power Distribution One Line, Sheet 1	75
E-11KU01	BO DG One Line Diagram, Sheet 1	2
E-13KU00	Station Blackout Diesel Generator System Schematic Index Sheet	0
E-13KU01A	Schematic Diagram Class 1E Bus NB01 Feeder Brkr. 152NB0114	1
E-13KU01B	Schematic Diagram Class 1E Bus NB01 Feeder Brkr. 152NB0214	1

E-13KU10	SBO Power Equipment Center (PEC) 120/208 VAC Power Distribution, Sheet 1	1
E-13KU11	SBO Power Equipment Center (PEC) 480 VAC Power Distribution	5
KD-7496	One Line Diagram, Sheet 1	59
KD-7496A	Distribution System Equipment Lineup Limitations	7
M-12AL01	Piping and Instrumentation Diagram Auxiliary Feedwater System	28
M-12EC01	Piping & Instrumentation Diagram Fuel Pool Cooling and Clean-Up System, Sheet 1	21
M-12EC02	Piping & Instrumentation Diagram Fuel Pool Cooling and Clean-Up	7
M-12KJ05	Piping & Instrumentation Diagram Standby Diesel Generator "B" Intake Exhaust, F.O. & Start Air Sys.	17
M-12KJ06	Piping & Instrumentation Diagram Standby Diesel Generator "B" Lube Oil System	21
M-K2EF01	Piping & Instrumentation Diagram Essential Service Water Sys.	66

Condition Reports

102667

Section 1R05: Fire Protection

Procedures

<u>Number</u>	<u>Title</u>	<u>Revision</u>
AP 10-106	Fire Preplans	16
AP 10-106	Fire Preplans	17

Drawings

<u>Number</u>	<u>Title</u>	<u>Revision</u>
E-1F9905	Fire Hazard Analysis	6

Condition Reports

102665 103680

Miscellaneous

<u>Number</u>	<u>Title</u>	<u>Revision</u>
XX-X-004	Combustible Loading Information Program	4

Section 1R06: Flood Protection Measures

Condition Reports

103471	103473
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Section 1R11: Licensed Operator Requalification Program and Licensed Operator Performance

Procedures

<u>Number</u>	<u>Title</u>	<u>Revision</u>
ALR 00-081D	Rod Bank Lo Limit	8A
ALR 00-083C	Rx Partial Trip	5A
AP 21-001	Conduct of Operations	75
GEN 00-004	Power Operation	86
OFN AF-025	Unit Limitations	47
STS SF-001	Control and Shutdown Rod Operability Verification	28

Miscellaneous

<u>Number</u>	<u>Title</u>	<u>Revision</u>
LR3406001	Precise Control Lab#1	003A

Section 1R12: Maintenance Effectiveness

Procedures

<u>Number</u>	<u>Title</u>	<u>Revision</u>
STS EC-100A	Spent Fuel Pool Cooling Pump "A" Inservice Pump Test	25

Condition Reports

43509	54683	72220
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Miscellaneous

<u>Number</u>	<u>Title</u>	<u>Date</u>
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54683	Functional Failure Determination Checklist	August 9, 2012
72220	Functional Failure Determination Checklist	September 5, 2013
EC	System Health Report	September 1, 2015, through December 31, 2015
EC-01	Maintenance Rule Final Scope Evaluation	February 16, 2010
EC-02	Maintenance Rule Final Scope Evaluation	February 16, 2010
EC-03	Maintenance Rule Final Scope Evaluation	February 16, 2010
EC-04	Maintenance Rule Final Scope Evaluation	February 16, 2010
EC-05	Maintenance Rule Final Scope Evaluation	February 16, 2010
EC-06	Maintenance Rule Final Scope Evaluation	February 16, 2010
EC-07	Maintenance Rule Final Scope Evaluation	February 16, 2010
WR9078186	Functional Failure Determination Checklist	March 17, 2010

Section 1R13: Maintenance Risk Assessments and Emergent Work Control

Procedures

<u>Number</u>	<u>Title</u>	<u>Revision</u>
AI 26C-004	Technical Specification Application for Containment Isolation Valves	6B
AP 10-103	Fire Protection Impairment Control	30
AP 16E-002	Post Maintenance Testing Development	18A
AP 22C-003	On-Line Nuclear Safety and Generation Risk Assessment	22
AP 22C-007	Risk Management and Contingency Planning	11
AP 29E-001	Program Plan for Containment Leakage Measurement	15
STS EC-100A	Spend Fuel Pool Cooling Pump "A" Inservice Pump Test	25
STS EN-100B	Containment Spray Pump B Inservice Pump Test	29
STS KJ-013A	Hot Restart of EDG NE01	19

Condition Reports

103185	103311	103374	103390	103493
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Miscellaneous

<u>Number</u>	<u>Title</u>	<u>Date</u>
12153	Engineering Disposition: Service Water Check Valve Disc Stud Pinning	August 4, 2006
16-103	Control Room Risk Assessment Log/Work Schedule: Risk Assessment Dates: January 11, 2016 through January 17, 2016	January 11, 2016
16-103	Control Room Risk Assessment Log/Work Schedule: Risk Assessment Dates: January 11, 2016 through January 17, 2016	January 13, 2016
16-103	Control Room Risk Assessment Log/Work Schedule: Risk Assessment Dates: January 11, 2016 through January 17, 2016	January 15, 2016
16-104	Control Room Risk Assessment Log/Work Schedule: Risk Assessment Dates: January 18, 2016 through January 24, 2016	January 21, 2016
16-111	Control Room Risk Assessment Log/Work Schedule: Risk Assessment Dates: March 7, 2016 through March 13 2016	March 9, 2016
16-112	Control Room Risk Assessment Log/Work Schedule: Risk Assessment Dates: March 14, 2016 through March 20 2016	March 16, 2016
16-112	Control Room Risk Assessment Log/Work Schedule: Risk Assessment Dates: March 14, 2016 through March 20 2016	March 17, 2016
16-113	Control Room Risk Assessment Log/Work Schedule: Risk Assessment Dates: March 21, 2016 through March 27, 2016	March 23, 2016

Section 1R15: Operability Determinations and Functionality Assessments

Procedures

<u>Number</u>	<u>Title</u>	<u>Revision</u>
AI 26C-004	Technical Specification Application for Containment Isolation Valve	6B
AP 16E-002	Post Maintenance Testing Development	18A
AP 26C-004	Operability Determination and Functionality Assessment	32
AP 28-001	Operability Evaluations	24
AP 29E-001	Program Plan for Containment Leakage Measurement	15

Procedures

<u>Number</u>	<u>Title</u>	<u>Revision</u>
I-ENG-004	Lubricating Oil Analysis	8
STN FC-002	Aux Feedwater Turbine Overspeed Test	32
STS EN-001	Containment Spray System Valve Verification	6
STS EN-100B	Containment Spray Pump B Inservice Pump Test	29

Drawings

<u>Number</u>	<u>Title</u>	<u>Revision</u>
M-12EN01	Piping and Instrumentation Diagram Containment Spray System	13
M-12FC02	Piping & Instrumentation Diagram Auxiliary Turbines Auxiliary Feedwater Pump Turbine	23

Condition Reports

017177	074533	102678	102680	102681
102715	102728	102729	103066	103150
103274	103390	103484		

Miscellaneous

<u>Number</u>	<u>Title</u>	<u>Revision/Date</u>
09-1774	Document Revision Request (DRR): Technical Specification Bases	44
13-2562	Document Revision Request (DRR): Technical Specification Bases	60
Maintenance Rule Database	Containment Spray System (EN)	Revised March 30, 2004
STN EN-001B	Train B Leakage Inspection Program of CTMT Spray System	Performed December 18, 2014

Section 1R19: Post-Maintenance Testing

Procedures

<u>Number</u>	<u>Title</u>	<u>Revision</u>
MGE EOOP-05	Insulation Resistance Testing	23
STN FP-211	Diesel Fire Pump 1FP01PB Monthly Operation and Fuel Level Check	34
STN NB-001B	B Train Breaker Operability and ECCS Pump Recirculation	9
STS AL-102	MDAFW Pump B Inservice Pump Test	45
STS AL-212	MD AFP Comprehensive Pump Testing, Flow Path Verification & CV Testing	30
STS BG-100B	Centrifugal Charging System "B" Train Inservice Pump Test	51
STS GN-001	Containment Cooling Fans Operability Test	10
STS KJ-005B	Manual/Auto Start, Sync & Loading of EDG NE02	61
SYS GN-120	Containment Cooling System Operation	38A
SYS KJ-121	Diesel Generator NE01 and NE02 Lineup for Automatic Operation	50C
SYS KJ-124	Post Maintenance Run of Emergency Diesel Generator B	62D

Drawings

<u>Number</u>	<u>Title</u>	<u>Revision</u>
E-13GN02	Schematic Diagram Containment Cooler Fans A & C	16
M-12AL01	Piping and Instrumentation Diagram Auxiliary Feedwater System	28
M-12BG03	Piping and Instrumentation Diagram Chemical & Volume Control System	48
M-12GN01	Piping and Instrumentation Diagram Containment Cooling System	24
M-620-035-02	Wiring Diagram Two Speed	2

Condition Reports

102749 102880

Work Orders

14-386656-000	14-386658-000	14-388619-029	14-388418-000	14-388418-002
14-388418-004	14-395829-000	15-402601-000	15-402601-001	15-403533-000
15-403533-001	15-403931-000	15-403931-001	15-403932-000	15-403932-001
15-403932-002	15-403953-000	15-405709-000	15-407284-001	16-411280-001
16-411280-002	16-411280-005	16-411280-009		

Section 1R22: Surveillance TestingProcedures

<u>Number</u>	<u>Title</u>	<u>Revision</u>
APF 22C-008-01	Qualitative Risk Screening – NB02 Undervoltage/Degraded Voltage Trip Actuating Device Operational Testing (TADOT)	2
STS AB-201D	Atmospheric Relief Valve Inservice Valve Test	27A
STS AC-001	Main Turbine Valve Cycle Test	51
STS EJ-100B	RHR System Inservice Pump B Test	44
STS EM-100A	Safety Injection Pump “A” Inservice Pump Test	39
STS IC-208B	4KV Loss of Voltage & Degraded Voltage TADOT NB02 Bus – SEP GRP 4	4E

Drawings

<u>Number</u>	<u>Title</u>	<u>Revision</u>
E-11NB02	Lower Medium Voltage Sys. Class 1E 4.16V Single Line Meter & Relay Diagram	7
E-13NB04	Lower Medium Voltage Sys. Class 1E 4.16V Three Line Meter & Relay Diagram	3
E-13NB06	Lower Medium Voltage Sys. Class 1E 4.16V Three Line Meter & Relay Diagram	5
M-12BN01	Piping and Instrumentation Diagram Borated Refueling Water Storage System	17
M-12EM01	Piping & Instrumentation Diagram High Pressure Coolant Injection System	42
M-12EJ01	Piping and Instrumentation Diagram Residual Heat Removal System	51
M-12EM03	Piping & Instrumentation Diagram High Pressure Coolant Injection System Test Line	2

Condition Reports

102751	102839
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Miscellaneous

<u>Number</u>	<u>Title</u>	<u>Revision</u>
APF 15C-004-01	Document Revision Request (DRR) 15-2442	23C

Section 1EP6: Drill EvaluationProcedures

<u>Number</u>	<u>Title</u>	<u>Revision</u>
AP 06-002	Radiological Emergency Response Plan (RERP)	18
EPP 06-003	Emergency Operations Facility Operations	23
EPP 06-005	Emergency Classification	8
EPP 06-006	Protective Action Recommendations	9
EPP 06-007	Emergency Notifications	24
EPP 06-009	Drill and Exercise Requirements	10

Condition Reports

102776	102831	102846	102848	102856
102857	102885	102889	102900	102901
102998	103007			

Miscellaneous

<u>Number</u>	<u>Title</u>	<u>Revision/Date</u>
16-SA-01	Emergency Planning Drill	February 17, 2016
APF 06-002-01	Emergency Action Levels	17A

Section 4OA1: Performance Indicator VerificationProcedures

<u>Number</u>	<u>Title</u>	<u>Revision</u>
AP 21-001	Conduct of Operations	75
GEN 00-004	Power Operation	86
STN SF-001	Control Rod Parking	18A

Miscellaneous

<u>Number</u>	<u>Title</u>	<u>Revision/Date</u>
LER 05000482/2015-001-00	Personnel Error Causes Two Inoperable Residual Heat Removal Trains	March 25, 2015
LER 05000482/2015-002-01	Two Control Room Air Conditioning Trains Inoperable Due to Failure to Meet Surveillance Requirement	August 26, 2015
LER 05000482/2015-003-00	Manual Reactor Trip due to High Steam Generator Level Transient at Low Power	July 1, 2015
LER 05000482/2015-004-01	Incorrect Decision Results in Two Containment Isolation Valves being in a Condition Prohibited by Technical Specifications	September 14, 2015
Nuclear Energy Institute Document 99-02	Regulatory Assessment Performance Indicator Guideline	Revision 7
Nuclear Plant Information System (NPIS) Log	Eight-Hour Average of Reactor Power for Wolf Creek Generating Station 2015 – Full Range Chart	January 1, 2015 through December 31, 2015
Nuclear Plant Information System (NPIS) Log	Eight-Hour Average of Reactor Power for Wolf Creek Generating Station 2015 – Narrow Range Chart	January 1, 2015 through December 31, 2015

Section 40A2: Problem Identification and Resolution

Procedures

<u>Number</u>	<u>Title</u>	<u>Revision</u>
AI 16B-002	Updating the PM Activity Module	10
AI 16B-002	Preventive Maintenance Change Process	12
AI 28A-010	Screening Condition Reports	22
AI 28A-100	Condition Report Resolution	9
AP 16B-003	Planning and Scheduling Preventive Maintenance	5
AP 28A-100	Corrective Action Program	22
CNT-MM-700	Fabrication and Installation of Tubing, Tubing Supports, Instrument Supports and Instrument Installation	5
MPE GK-003	Control Room and Class 1E A/C Units Preventive Maintenance Activity	6

Condition Reports

026247	026250	026251	027105	027228
029734	031682	040496	052753	052755
074985	076409	080575	081882	081938
101862	101867	102012	103311	103650
103694	103696			

Drawings

<u>Number</u>	<u>Title</u>	<u>Revision</u>
M-622.1A-00006	SGK04A & SGK04B Air Conditioner Refrigeration Schematic, Sheet 1	W13
M-622.1A-00007	SGK04A & SGK04B Air Conditioner Electrical Schematic, Sheet 1	W11
M-622.1A-00008	SGK04A & SGK04B Air Conditioner Electrical Schematic	W06
M-622.1A-00089	Instruction Manual for SGK04A, SGK04B, SGK05A, and SGK05B Air Conditioning Condensers	W12

Work Orders

12-353955-000	13-378855-000	14-383745-000	14-383746-000	14-383747-000
14-383748-000	14-384346-000	16-410207-000	16-410209-000	

Miscellaneous

<u>Number</u>	<u>Title</u>	<u>Date</u>
2016-001	RER Reportability Determination	January 7, 2016
2016-010	RER Reportability Determination	March 14, 2016
1015075	Electric Power Research Institute Report "Plant Support Engineering: Life Cycle Management Planning Sourcebooks – Chillers"	December, 2007