

#### UNITED STATES

#### NUCLEAR REGULATORY COMMISSION

**REGION IV** 

611 RYAN PLAZA DRIVE, SUITE 400 ARLINGTON, TEXAS 76011-8064

October 15, 2001

Otto L. Maynard, President and Chief Executive Officer Wolf Creek Nuclear Operating Corporation P.O. Box 411 Burlington, Kansas 66839

SUBJECT: NRC INTEGRATED INSPECTION REPORT 50-482/01-03

Dear Mr. Maynard:

On September 29, 2001, the NRC completed an inspection at your Wolf Creek Generating Station. The enclosed report documents the inspection findings which were discussed with Mr. R. Muench and other members of your staff on September 28, 2001.

This inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. Within these areas, the inspection consisted of selected examination of procedures and representative records, observations of activities, and interviews with personnel.

Since September 11, 2001, Wolf Creek has assumed a heightened level of security based on a series of threat advisories issued by the NRC. Although the NRC is not aware of any specific threat against nuclear facilities, the heightened level of security was recommended for all nuclear power plants and is being maintained due to the uncertainty about the possibility of additional terrorist attacks. The steps recommended by the NRC include increased patrols, augmented security forces and capabilities, additional security posts, heightened coordination with local law enforcement and military authorities, and limited access of personnel and vehicles to the site.

The NRC continues to interact with the Intelligence Community and to communicate information to the Wolf Creek Nuclear Operating Corporation. In addition, the NRC has monitored maintenance and other activities which could relate to the site's security posture.

Based on the results of this inspection, the NRC has identified three issues that were evaluated under the risk significance determination process as having very low safety significance (Green). The NRC has also determined that violations are associated with these issues. These violations are being treated as noncited violations (NCVs), consistent with Section VI.A of the Enforcement Policy. These NCVs, which have been entered into your corrective action program, are described in the subject inspection report. If you contest the violation or significance of these NCVs, 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

Wolf Creek Nuclear Operating Corporation -2-

Administrator, U.S. Nuclear Regulatory Commission, Region IV, 611 Ryan Plaza Drive, Suite 400, Arlington, Texas 76011; 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 facility.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response will be made available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <a href="http://www.nrc.gov/NRC/ADAMS/index.html">http://www.nrc.gov/NRC/ADAMS/index.html</a> (the Public Electronic Reading Room).

Should you have any questions concerning this inspection, we will be pleased to discuss them with you.

Sincerely,

/RA/

William D. Johnson, Chief Project Branch B Division of Reactor Projects

Docket: 50-482 License: NPF-42

Enclosure: NRC Inspection Report 50-482/01-03

cc w/enclosure: Vice President Operations Wolf Creek Nuclear Operating Corp. P.O. Box 411 Burlington, Kansas 66839

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RIV:SRI:DRP/B	RI:DRP/B	SPE:DRP/B	PE:DRP/B	SHP:DRS/PSB
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HP:DRS/PSB	EP:DRS/PSB	C:DRS/PSB	C:DRP/B		
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# **ENCLOSURE**

# U.S. NUCLEAR REGULATORY COMMISSION REGION IV

Docket:	50-482
License:	NPF-42
Report:	50-482/01-03
Licensee:	Wolf Creek Nuclear Operating Corporation
Facility:	Wolf Creek Generating Station
Location:	1550 Oxen Lane, NE Burlington, Kansas
Dates:	July 1 through September 29, 2001
Inspectors:	<ul> <li>F. L. Brush, Senior Resident Inspector</li> <li>J. Cruz, Resident Inspector</li> <li>R. A. Kopriva, Senior Project Engineer</li> <li>R. V. Azua, Project Engineer</li> <li>L. T. Ricketson, Senior Health Physicist</li> <li>J. S. Dodson, Health Physicist</li> <li>P. J. Elkmann, Emergency Preparedness Inspector</li> </ul>
Approved By:	W. D. Johnson, Chief, Project Branch B
ATTACHMENT:	Supplemental Information

## SUMMARY OF FINDINGS

## Wolf Creek Generating Station NRC Inspection Report 50-482/01-03

IR 50-482/01-03; on 7/1/2001 - 9/29/2001; Wolf Creek Nuclear Operating Corporation; Wolf Creek Generating Station. Integrated Resident/Regional Report. Occupational Radiation Safety, Emergency Preparedness, Physical Protection

The report covers a 13-week period of resident inspection and announced inspections by Region IV inspectors. The inspection identified three Green findings which were noncited violations. The significance of most findings is indicated by their color (green, white, yellow, or red) using Inspection Manual Chapter 0609, "Significance Determination Process." Findings for which the significance determination process does not apply are indicated by No Color or by the severity level of the applicable violation. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described at its Reactor Oversight Process website at <a href="http://www.nrc.gov/NRR/OVERSIGHT/index.html">http://www.nrc.gov/NRR/OVERSIGHT/index.html</a>.

## A. Inspector Identified Findings

## **Cornerstone: Occupational Radiation Safety**

• Green. On July 18, 2001, the inspectors identified a continuous air monitor in the radwaste truck bay with an expired calibration. The calibration due date was May 31, 2001. The licensee identified on June 4, 2001, in Performance Improvement Request 2001-1452, a survey instrument which was out of calibration. The calibration due date was also May 31, 2001. The licensee had not properly marked the instruments out of calibration or removed them to the designated holding area. Radiation Protection Procedure RPP-01-405, Revision 12, requires that instruments be properly marked out of calibration and/or placed in a proper holding area. The licensee's failures to follow procedural requirements involving out-of-calibration instruments were two examples of a violation of Technical Specification 5.4.1.a. This violation is being treated as a noncited violation consistent with Section VI.A.1 of the NRC Enforcement Policy. This violation is in the licensee's corrective action program as Performance Improvement Request 2001-1833.

The safety significance of this violation was determined to be more than minor, because it had a credible impact on safety and it involved conditions contrary to licensee procedures which impact instrumentation related to measuring worker dose. This violation was processed through the Occupational Radiation Safety Significance Determination Process and determined to be of very low safety significance, because there was no overexposure, no substantial potential for overexposure because the instruments were not used, and the ability to assess dose was not compromised because the whole body counter was operable (Section 20S3).

• Green. During a review of self-contained breathing apparatus maintenance and surveillance records, the inspector identified that 36 self-contained breathing apparatus air bottles were past the 3-year hydrostatic test dates. Hydrostatic testing had expired in April 2001 for 31 of the self-contained breathing apparatus air bottles that were in service. According to the National Institute for Occupational Safety and Health,

self-contained breathing apparatus units with expired hydrostatic testing are no longer certified. The use of non-National Institute for Occupational Safety and Health certified respiratory protection equipment was a violation of 10 CFR 20.1703(a). This violation is being treated as a noncited violation consistent with Section VI.A.1 of the NRC Enforcement Policy. This violation is in the licensee's corrective action program as Performance Improvement Request 2001-1835.

The safety significance of this violation was determined to be more than minor, because it had a credible impact on safety due to previously identified air bottle failures and questionable availability for emergency response. This violation was processed through the Emergency Preparedness Significance Determination Process and determined to be of very low safety significance, because there was no failure to meet an emergency planning standard or risk significant planning standard (Section 20S3).

## **Cornerstone: Physical Protection**

• Green. A noncited violation of 10 CFR 73.55(d)(7)(i)(B) occurred when two licensee employees failed to follow proper procedures when entering vital areas. On August 27 and September 28, 2001, licensee employees did not properly enter vital areas but followed another person through the open door.

The finding is more than minor because it had a credible impact on safety. One person entered a vital area without properly badging in. The second person did not have the appropriate access level to enter a vital area. The finding was found to be of very low safety significance using the Safeguards Significance Determination Process. There were no vulnerabilities in the access control program or the safeguards systems or plans, and a safeguard contingency response was not required. This finding of very low safety significance, which is documented in the licensee's corrective action program, is being treated as a noncited violation, consistent with Section VI.A.1 of the NRC Enforcement Policy (Section 3PP2).

B. Licensee Identified Findings

None

# Report Details

## Summary of Plant Status

The plant operated at essentially 100 percent power for the report period.

1. REACTOR SAFETY Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity, Emergency Preparedness

## 1R04 Equipment Alignment (71111.04)

a. Inspection Scope

## Partial Walkdowns

The inspectors performed the following partial walkdowns:

- Auxiliary Feedwater Train A during a Train B outage
- Auxiliary Feedwater Trains A and B during a turbine-driven auxiliary feedwater pump outage
- Emergency Diesel Generator B during an Emergency Diesel Generator A outage

## Full Walkdown

The inspectors performed a full walkdown of the auxiliary feedwater system.

The inspectors performed the walkdowns to verify equipment alignment and identify discrepancies that could impact redundant system operability. The inspectors used the Updated Final Safety Analysis Report, system drawings, system lineup checklists, and other documents to perform the walkdowns. The inspectors also discussed the walkdowns with various licensee personnel.

b. Findings

No findings of significance were identified.

- 1R05 Fire Protection (71111.05)
  - a. Inspection Scope

The inspectors performed walkdowns of the below listed areas to determine that the licensee implemented a fire protection program in accordance with the Updated Safety Analysis Report fire hazards analysis. Elements of the fire protection program inspected included the control of combustibles, fire detection and suppression equipment and passive fire protection features, and adequate compensation for inoperable or degraded fire protection equipment, systems, or features.

- Auxiliary building 1974 foot level, Fire Zone A-1
- Auxiliary building 2000 foot level, Fire Zone A-8
- Auxiliary building 2026 foot level, Fire Zone A-16
- Auxiliary building 2047 foot level, Fire Zones A-16 and A-17
- Diesel generator building 2000 foot level, Diesel Generator A

## b. Findings

No findings of significance were identified.

- 1R06 Flood Protection Measures (71111.06)
  - a. Inspection Scope

The inspectors verified that the licensee's flooding mitigation equipment was consistent with the licensee's design requirements and the risk assumptions in the Updated Safety Analysis Report. In addition, the inspectors reviewed the recent maintenance and preventive maintenance history for the auxiliary building sump, containment normal sump, containment recirculation sump, and the residual heat removal pump room sump, in addition to the equipment associated with these areas. The following are the work packages reviewed:

#### Containment Normal Sump

• WP100764; WP106131; WP109861; WP114717

## Containment Recirculation Sump

 WP114968; WP110599; WP107262; WP103382; WP100320; WP100310; WP100311; WP100717; WP100321; WP103381; WP107261

## Auxiliary Building Sump

• WP107468; WP107773; WP121878; WP110277

## Residual Heat Removal Pump Room Sumps

- WP107818; WP117088; WP119716; WP122084; WP125705
- b. <u>Findings</u>

No findings of significance were identified.

## 1R07 <u>Heat Sink Performance (71111.07)</u>

#### a. Inspection Scope

The inspectors observed the inspection of the motor-driven auxiliary feedwater Pump B room cooler, SGF02B, in accordance with Inspection Attachment 71111.07. The inspectors verified that any potential deficiencies that could mask degraded performance were identified. The inspectors reviewed the following information:

- Work Request 00-226242-001 eddy current analysis summary
- Postmaintenance testing work order

## b. <u>Findings</u>

No findings of significance were identified.

## 1R11 Licensed Operator Regualification (71111.11)

a. Inspection Scope

The inspectors observed control room operator simulator training to verify that the licensed operator requalification program ensures safe operation of the plant by adequately evaluating how well the operators and crews have mastered the training objectives. The inspectors used requalification simulator exam scenarios, Numbers 70-33 and 70-35, to evaluate operator performance. The scenarios included an anticipated transient without scram and a loss of coolant accident.

b. Findings

No findings of significance were identified.

#### 1R12 Maintenance Rule Implementation (71111.12)

a. Inspection Scope

The inspectors reviewed the licensee's maintenance rule implementation for:

- CI-01 Containment isolation system
- EG-04 Component cooling water system
- GS-02 Collect and analyze containment atmosphere samples for hydrogen gas concentration
- NG-01 Low voltage system 480V (Class 1E power system)
- Essential service water containment isolation Valves EFHV0049 and -0031 functional failure evaluations

• Motor-Driven Fire Pump 1FP01PA, functional failure evaluation

The inspectors assessed the effectiveness of maintenance efforts that apply to scoped structures, systems, and components using Inspection Attachment 71111.12. The inspectors reviewed various maintenance rule information.

b. Findings

No findings of significance were identified.

## 1R13 Maintenance Risk Assessments and Emergent Work Evaluation (71111.13)

a. Inspection Scope

The inspectors reviewed the licensee's risk assessment for equipment outages as a result of planned and emergent maintenance to evaluate the licensee's effectiveness in assessing risk for planned and emergent maintenance. The inspectors performed the review using Inspection Attachment 71111.13. The inspectors also discussed the planned and emergent work activities with planning and maintenance personnel. The inspector's review included the following:

- Operational risk assessments for planned maintenance for the weeks of July 2, 16, and 30, August 27, and September 10
- Actual, planned, and emergent work schedules for the same weeks
- b. Findings

No findings of significance were identified.

## 1R15 Operability Evaluations (71111.15)

a. Inspection Scope

The inspectors reviewed the following to ensure that operability was properly justified for the component or system in accordance with the Updated Safety Analysis Report and Technical Specifications:

- Containment Penetration P-30 and Instrument Air Test Valve KA-V218 local leak rate test
- Essential service water containment isolation Valves EFHV0031 and -0049
- Containment Air Coolers A and C and associated piping between essential service water Valves EFHV0031 and -0049
- Turbine-driven auxiliary feedwater pump

The inspectors also discussed the component or system operability status with licensee personnel.

b. Findings

No findings of significance were identified.

## 1R16 Operator Workarounds (71111.16)

a. Inspection Scope

The inspectors reviewed operator workarounds in accordance with Inspection Attachment 71111.16 to determine if the workarounds would affect the operator's ability to implement abnormal or emergency operating procedures. The inspectors also discussed, with licensee operations personnel, long-term equipment problems that were not included in the work around list. The inspectors reviewed the cumulative effects of identified operator workarounds and long-term equipment problems.

b. Findings

No findings of significance were identified.

- 1R19 <u>Postmaintenance Testing (71111.19)</u>
  - a. Inspection Scope

The inspectors reviewed or observed the postmaintenance testing on the following equipment or systems in accordance with Inspection Attachment 71111.19 to verify that procedures and test activities are adequate to verify system operability:

- Auxiliary Feedwater Pump Train B
- Auxiliary Feedwater Pump B room cooler
- Containment spray additive tank relief valve
- Emergency Diesel Generator B
- Essential Service Water Train B
- Safety Injection System Train B, July 6
- Residual heat removal Pump A room cooler
- b. Findings

No findings of significance were identified.

#### 1R22 <u>Surveillance Testing (71111.22)</u>

a. Inspection Scope

The inspectors reviewed or observed all or part of the following surveillance activities in accordance with Inspection Attachment 71111.22 to verify that risk significant

structures, systems, and components are capable of performing their intended safety functions and assessing their operational readiness:

- STN IC-466, "Calibration of the ESW Pump Room Temperature Control Loop GDLPT0011," Revision 9
- STS EM-100A, "Safety Injection Pump A Inservice Pump Test," Revision 20
- STS EN-100A, "Containment Spray Pump A Inservice Pump Test," Revision 13
- STS IC-208B, "NB02 4KV Loss of Voltage and Loss of Off-Site Power TADOT," Revision 0
- STS IC-209B, "4KV Degraded Voltage TADOT NB02 Bus Separation Group 4," Revision 6
- STS KJ-005A, "Manual/Auto Start, Synchronization and Loading of Emergency Diesel Generator NE01," Revision 39
- STS KJ-005B, "Manual/Auto Start, Synchronization & Loading Of Emergency D/G NE02," Revision 39
- b. Findings

No findings of significance were identified.

#### 1R23 Temporary Plant Modifications (71111.23)

a. Inspection Scope

The inspectors reviewed the temporary modifications in place to verify that the modification had not affected the safety functions of important safety systems. The licensee did not implement any safety significant temporary modifications this report period. Inspection Report 50-482/2001-02 discussed the startup transformer temporary modification inspection. This temporary modification is still in place. The inspectors reviewed applicable portions of the Updated Safety Analysis Report as part of the verification that the temporary modification did not affect any safety significant systems.

The inspectors reviewed the temporary modification associated with the fuel assembly spring clamp screws to verify that the modification had not affected the safety functions of systems important to safety. The fuel assembly spring clamp screws were exhibiting breakage on some fuel assemblies. The modification was to the spent fuel handling tool because the fuel assembly top nozzle spring clamp screw was susceptible to failure. Failure of the screw could prevent proper seating of the spent fuel handling tool onto the top nozzle of the fuel assembly, thereby preventing latching. The inspectors reviewed Temporary Modification Order 00-004-KE. The Updated Safety Analysis Report does

not identify or describe the orientation pin or stop lug; therefore, the design basis described in the Updated Safety Analysis Report was not affected by this temporary modification order.

b. Findings

No findings of significance were identified.

## 1EP4 Emergency Action Level and Emergency Plan Changes (71114.04)

a. Inspection Scope

The inspectors performed an in-office review of Revision 4 to AP 06-002, "Wolf Creek Radiological Emergency Response Plan," and Revision 2 to APF 06-002-01, "Emergency Action Levels," both submitted May 16, 2001, against 10 CFR 50.54(q) to determine if the revisions decreased the effectiveness of the plan.

b. Findings

No findings of significance were identified.

## 2. Radiation Safety Cornerstone: Occupational Radiation Safety

## 2OS2 As Low As Reasonably Achievable (ALARA) Planning and Controls (71121.02)

a. Inspection Scope

The inspectors interviewed radiation protection personnel involved in high dose rate and high exposure jobs in the radiologically controlled areas during routine operations. Independent radiation surveys of selected work areas within the radiologically controlled area were conducted. No high exposure job or work in high radiation areas was performed during the inspection. The following items were reviewed and compared with regulatory requirements:

- ALARA program procedures
- Processes used to estimate and track exposures
- Plant collective exposure history for the past 3 years, current exposure trends, and 3-year rolling average dose information
- Individual exposures of selected work groups (health physics, operations, and mechanical maintenance)
- Hot spot tracking and reduction program

- Plant related source-term data, including source-term control strategy
- Refueling Outage XI ALARA report
- Quality Assurance Audit (K-547), quality evaluations (OB 01-1049, OB 01-1046, and OB 01-1085), and self-assessment (SEL 01-005) reviewing ALARA performance
- Selected corrective action documents involving radiation worker practice deficiencies (Performance Improvement Requests 2000-2432, 2000-3579, 2001-306, 2001-817, 2001-1516) since the last inspection in this area
- ALARA committee meeting minutes and presentations
- Declared pregnant worker dose monitoring controls
- b. Findings

No findings of significance were identified.

#### 2OS3 Radiation Monitoring Instrumentation (71121.03)

a. Inspection Scope

The inspector interviewed cognizant licensee personnel and compared the following items to regulatory requirements to determine: (1) the accuracy and operability of radiation monitoring instruments that are used for the protection of occupational workers; and (2) the adequacy of the program used to provide self-contained breathing apparatus for entering and working in areas of unknown radiological and/or potential immediately dangerous to life and health areas:

- Calibration, operability, and alarm setpoints, when applicable, of portable radiation detection instrumentation, selected area radiation monitors (SDRE-0015, -0024, -0028, -0039, and -0047), temporary area radiation monitors, continuous air monitors, containment high range monitors (GTRE-0059 and -0060), whole-body counting equipment, electronic alarming dosimeters, teledosimetry, and personnel contamination monitors
- Calibration expiration and source response check currency on radiation detection instruments staged for use
- Calibration source accountability and traceability
- The licensee's capability for refilling and transporting self-contained breathing apparatus air bottles to and from the control room and operations support center during emergency conditions

- Control room operator and emergency response personnel training and qualifications for use of self-contained breathing apparatus
- The status and surveillance records of self-contained breathing apparatuses staged and ready for use in the plant
- Selected exposure-significant radiological incidents that involved internal exposures, radiation monitoring instrument deficiencies, or self-contained breathing apparatuses since the last inspection (June 26, 2000) in this area
- Licensee self-assessments (SEL-00-011 and SEL-01-018), plant evaluation program reports (OB-00-1191, 00-1261, and 01-1048), and audits (K-533, K-546, and K-547) focusing on radiological incidents that involved personnel internal exposures, radiation monitoring instrument deficiencies, or self-contained breathing apparatuses since the last inspection (June 26, 2000) in this area.
- Wolf Creek Performance Improvement Requests 2000-1475, -2371, -2689, -2909, -3101, -3112, -3601, -3702, and -3804
- Wolf Creek Performance Improvement Requests 2001-0137, -0301, -1007, -1209, -1452, and -1759
- b. Findings

## .1 <u>Out-of-Calibration Instrumentation</u>

A noncited violation with very low safety significance (Green) was identified for two occurrences involving a failure to follow procedures for out-of-calibration instruments. During a tour of the radiologically controlled area on July 18, 2001, the inspector identified a continuous air monitor in the radwaste truck bay with an expired calibration. The calibration due date was May 31, 2001. The licensee identified on June 4, 2001, in Performance Improvement Request 2001-1452, a survey instrument which was out of calibration. The calibration due date was also May 31, 2001. The licensee had not properly marked the instruments out of calibration or removed them to the designated holding area. Radiation Protection Procedure RPP-01-405, Revision 12, requires that instruments be properly marked out of calibration and/or placed in a proper holding area. The licensee's failures to follow procedural requirements involving out-of-calibration instruments were two examples of a violation of Technical Specification 5.4.1.a.

The safety significance of this violation was determined to be more than minor, because it had a credible impact on safety and it involved conditions contrary to licensee procedures which impact instrumentation related to measuring worker dose. This violation was processed through the Occupational Radiation Safety Significance Determination Process and determined to be of very low safety significance, because there was no overexposure, no substantial potential for overexposure because the instruments were not used, and the ability to assess dose was not compromised because the whole body counter was operable.

Technical Specification 5.4.1.a states, in part, that written procedures shall be established, implemented, and maintained for the procedures recommended in Regulatory Guide 1.33, Revision 2, Appendix A, February 1978. Regulatory Guide 1.33, Appendix A, Section 8.b(1)(aa), requires procedures for area, portable, and airborne radiation monitor calibrations. Radiation Protection Procedure RPP-01-405 requires that instruments be properly marked out of calibration and/or the instrument placed in a proper holding area. These two occurrences involving a failure to follow procedures were a violation of Technical Specification 5.4.1.a. These occurrences are being treated as a noncited violation consistent with Section VI.A.1 of the NRC Enforcement Policy. This violation is in the licensee's corrective action program as Performance Improvement Request 2001-1833 (50-482/0103-01).

## .2 Respiratory Protection Equipment

A noncited violation with very low safety significance (Green) was identified for the failure to use National Institute for Occupational Safety and Health (NIOSH) certified respiratory protection equipment. During a review of self-contained breathing apparatus maintenance and surveillance records, the inspector identified that 36 self-contained breathing apparatus air bottles were past the 3-year hydrostatic test dates. Hydrostatic testing had expired in April 2001 for 31 of the self-contained breathing apparatus air bottles that were in service. According to the NIOSH, self-contained breathing apparatus units with expired hydrostatic testing are no longer certified.

The safety significance of this violation was determined to be more than minor because it had a credible impact on safety due to previously identified air bottle failures and questionable availability for emergency response. This violation was processed through the Emergency Preparedness Significance Determination Process and determined to be of very low safety significance, because there was no failure to meet an emergency planning standard or risk significant planning standard.

10 CFR 50.54(q) requires the licensee to follow its emergency plan. Emergency plan Section 6.3.13 requires that respiratory protective devices are stored at several locations on site and the use is governed by normal Wolf Creek Generating Station procedures. 10 CFR 20.1703(a) states, in part, that the licensee shall use only respiratory protection equipment that is tested and certified by NIOSH. The licensee's use of respiratory protection equipment that was not NIOSH certified was a violation of 10 CFR 20.1703(a). This violation is being treated as a noncited violation consistent with Section VI.A.1 of the NRC Enforcement Policy. This violation is in the licensee's corrective action program as Performance Improvement Request 2001-1835 (50-482/0103-02).

# 3. SAFEGUARDS Cornerstone: Physical Protection

## 3PP2 Access Control (71130.02)

## a. Inspection Scope

The inspectors observed, during routine plant tours, access controls to various vital areas in accordance with the licensee's physical security plan and procedures.

#### b. Findings

A noncited violation of 10 CFR 73.55(d)(7)(i)(B) occurred when licensee employees failed to follow proper procedures when entering vital areas. On August 27, 2001, the inspectors identified that a licensee employee did not card into a vital area but followed another person through the open door. However, this person had the appropriate access level. On September 28, 2001, the licensee identified that an employee followed another person into a vital area for which access was not granted. The Physical Security Plan, Revision 32, Section 1.6.5.1, stated that access to vital sectors will be restricted and rigidly controlled. Administrative Procedure AP 27-007, "Vital Area Access Level Authorization," Revision 5, Section 6.1.7, required that all personnel entering a vital area log in using the card reader for that area.

The finding is more than minor because it had a credible impact on safety. It resulted in personnel entering vital areas without properly badging in or having the appropriate access level. This resulted in an unauthorized individual entering a vital area. This finding affects the physical protection cornerstone. The finding was found to be of very low safety significance (Green) using the Safeguards Significance Determination Process. There were no vulnerabilities in the access control program or the safeguards systems or plans, and a safeguard contingency response was not required.

10 CFR 73.55(d)(7)(i)(B) requires positive control of personnel access to vital areas. The licensee failed to provide positive control of personnel access to vital areas on two occasions when licensee employees improperly entered vital areas. This violation of 10 CFR 73.55(d)(7)(i)(B) is being treated as a noncited violation, consistent with Section VI.A.1 of the NRC Enforcement Policy. This issue was documented in Performance Improvement Request 2001-2170 (50-482/0103-03).

## 4. OTHER ACTIVITIES

## 4OA1 Performance Indicator Verification (71151)

a. Inspection Scope

The inspectors verified the following performance indicators for the last four quarters using Inspection Procedure 71151 to determine the accuracy and completeness of the performance indicator:

- Reactor Coolant System Leak Rate
- Safety System Functional Failures

The inspectors also discussed the performance indicators with licensee personnel.

## b. Findings

No findings of significance were identified.

#### 40A6 Meetings

#### Exit Meeting Summary

The inspectors presented the resident inspection results to Mr. R. Muench and other members of licensee management on September 28, 2001.

The inspector presented the radiation monitoring instrumentation inspection results to Mr. O. L. Maynard, Chief Executive Officer, and other members of licensee management at the conclusion of the inspection on July 19, 2001. The inspector also discussed, by telephone, with Mr. K. A. Harris, Manager, Regulatory Affairs, and other licensing personnel on July 25, 2001, that the failure to use NIOSH certified respiratory protection equipment had been reclassified as a Green finding using the Emergency Preparedness Significance Determination Process.

The inspector presented the ALARA planning and controls inspection results to Mr. B. McKinney, Vice President Operations, and other members of licensee management at the conclusion of the inspection on August 9, 2001.

The inspector presented the emergency action level and emergency plan change inspection results to Mr. K. Hall and other members of licensee management during a telephone exit interview on August 16, 2001.

The inspectors asked the licensee whether or not any materials examined during the inspection should be considered proprietary. The licensee did not identify any materials as proprietary.

# ATTACHMENT

## Supplemental Information

# PARTIAL LIST OF PERSONS CONTACTED

## <u>Licensee</u>

K. A. Harris, Manager, Regulatory Affairs

M. W. Hicks, Manager, Operations

D. Jacobs, Plant Manager

J. W. Johnson, Manager, Resource Protection

O. L. Maynard, President and Chief Executive Officer

B. T. McKinney, Vice President Operations

R. Muench, Vice President Technical Services

# ITEMS OPENED AND CLOSED

Opened and Closed		
50-482/0103-01	NCV	Failure to follow procedural requirements for out-of-calibration instruments (Section 20S3)
50-482/0103-02	NCV	Failure to use NIOSH certified respiratory protection equipment (Section 20S3)
50-482/0103-03	NCV	Failure to properly access vital areas (Section 3PP2)

## LIST OF DOCUMENTS REVIEWED

## Equipment Alignment

- Auxiliary feedwater system health report dated May 23, 2001
- Auxiliary feedwater system control room alarm response procedures
- CKL AL-120, "Auxiliary Feedwater Normal Lineup," Revision 29
- CKL-KJ-121, "Diesel Generator NE-01 and NE-02 Valve Checklist," Revision 21
- M-12AL01, Piping and Instrumentation Diagram, "Auxiliary Feedwater System," Revision 9

- Work Orders 00-222771-000, 00-222774-000, 00-222770-000, 00-222772-000, 01-226580-000, 01-225453-000, 00-221018-000, and 01-227210-000
- Technical Specifications

## Fire Protection

- FPP A-1, "Auxiliary Building 1974' and 1988' General Area," Revision 3
- FPP A-8, "Auxiliary Building 2000' General Area," Revision 7
- FPP A-16, "Auxiliary Building 2026' Corridors 1& 2, CCW Pumps & Heat Exchanger Areas A & B," Revision 4
- FPP A-17, "Auxiliary Building 2026' South Electrical Penetration Room," Revision 5
- FPP D-1, "Diesel Generator Building 2000', A Train Diesel Generator," Revision 7
- Updated Safety Analysis Report fire hazards analysis

## Maintenance Rule Documents

- Functional failure determination checklist for essential service water containment isolation Valve EFHV0031
- Functional failure determination checklist for essential service water containment isolation Valve EFHV0049
- Functional failure determination checklist for Motor-Driven Fire Pump 1FP01PA
- Functional failure evaluations for CI-01, containment isolation
- Functional failure evaluations for EG-04, component cooling water system
- Functional failure evaluations for GS-02, collect and analyze containment atmosphere samples for hydrogen gas concentration
- Functional failure evaluations for NG-01, low voltage system 480V (Class 1E power system)
- Maintenance Rule (a)(1) disposition checklist and documentation summary for CI-01, containment isolation
- Maintenance Rule (a)(1) disposition checklist and documentation summary for EG-04, component cooling water system

- Maintenance Rule (a)(1) disposition checklist and documentation summary for GS-02, collect and analyze containment atmosphere samples for hydrogen gas concentration
- Maintenance Rule (a)(1) disposition checklist and documentation summary for NG-01, low voltage system 480V (Class 1E power system)
- Maintenance rule bases information, EG-04, component cooling water system
- Maintenance rule bases information, GS-02, collect and analyze containment atmosphere samples for hydrogen gas concentration
- Maintenance rule bases information, NG-01, low voltage system 480V (Class 1E power system)
- Maintenance rule expert panel meeting minutes for CI-01, containment isolation
- Maintenance rule expert panel meeting minutes for EG-04, component cooling water system
- Maintenance rule expert panel meeting minutes for GS-02, collect and analyze containment atmosphere samples for hydrogen gas concentration
- Maintenance rule expert panel meeting minutes for NG-01, low voltage system 480V (Class 1E power system)
- Maintenance rule performance evaluation for EG-04, component cooling water system
- Maintenance rule performance evaluation for GS-02, collect and analyze containment atmosphere samples for hydrogen gas concentration
- Maintenance rule performance evaluation for NG-01, low voltage system 480V (Class 1E power system)

## **Operability Evaluations**

- STS PE-130A, "Leak Test For KA-V128," Revision 0
- Calculation EF-M-041, "Pressure Developed Due to Expansion of Trapped Water in ESW Piping Through Penetrations P-71 & P-73," Revision 0
- Control room shift manager's log
- Evaluation of nonconforming conditions of installed plant equipment initiated by Performance Improvement Request 2001-1972, "Overpressurization of ESW piping to Containment Coolers inside Containment," Revision 0

- Evaluation of nonconforming conditions of installed plant equipment initiated by Performance Improvement Request 2001-1975, "Operability evaluation of EFHV-0031," Revision 0
- Performance Improvement Requests 1995-2222, 2001-1972, -1975, -1976, and -1977
- Turbine-driven auxiliary feedwater pump technical manual with vendor updates

## Performance Indicator Verification

- Licensee Event Reports 1995-008-00, 2000-002-00, 2000-002-01, 2000-003-00, 2000-004-00, 2000-005-00
- Licensee worksheets
- Performance indicator summary reports
- Reportability Evaluation Requests: 2000-010, -011, -012, -013, -015, -016, -017, -018, -019, -020, -021, -022, -023, -024, -025, -026, -028, -060; 2001-001, 002, -003, -004, -008, and -009
- STS BB-004, "RCS Water Inventory Balance," Revision 22
- Selected control room operator logs
- Selected NRC inspection reports

## Postmaintenance Testing

- STS AL-102, "MDAFW Pump B Inservice Pump Test," Revision 26
- STS AL-201B, "Auxiliary Feedwater System Train B Inservice Valve Test," Revision 6
- STS IC-615B, "Slave Relay Test K615 Train B Safety Injection," Revision 18
- STN PE-037A, "ESW Train A Heat Exchanger Flow and DP Trending," Revision 3
- STS EF-100B, "ESW System Inservice Pump B and ESW B/Service Water Cross Connect Valve Test," Revision 20
- STS EM-201B, "Safety Injection System Train B Inservice Valve Test," Revision 2
- STS KJ-015B, "Manual/Auto Fast Start, Sync & Loading of EDG NE02," Revision 14

- SYS KJ-124, "Post Maintenance Run Of Emergency Diesel Generator B," Revision 13
- Work Order 00-219451-256, essential service water Screen B
- Work Order 00-226242-001, auxiliary feedwater Pump B room cooler eddy current analysis summary
- Work Order 01-226242-004, auxiliary feedwater Pump B room cooler
- Work Order 01-226885-001, spray additive tank relief valve, ENV0057
- Work Order 01-226968-001, Jacket Water Heater EKJ01B outlet relief valve
- Work Order 01-227178-000, replace oil supply header piping flange gasket
- Work Order 01-228292-000, essential service water Pump B motor
- Work Order 01-229623-002, residual heat removal pump room cooler