



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV  
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August 21, 2006

EA-06-184

Rick A. Muench, 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 05000482/2006003 AND EXERCISE OF ENFORCEMENT  
DISCRETION**

Dear Mr. Muench:

On July 7, 2006, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Wolf Creek Generating Station. The enclosed integrated report documents the inspection findings which were discussed on July 13, 2006, with you and other members of your staff.

The inspections 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. Inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

This report documents two NRC-identified findings of very low safety significance (Green). All of these findings were determined to involve violations of NRC requirements. Additionally, three licensee-identified violations, which were determined to be of very low safety significance, are listed in Section 4OA7 of this report. The NRC is treating these violations as noncited violations consistent with Section VI.A.1 of the NRC Enforcement Policy because of the very low safety significance and because the findings were entered into your corrective action program. If you contest these noncited violations, you should provide a response within 30 days 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.

In addition, the NRC identified a violation of Technical Specifications that involves reactor coolant system pressure boundary leakage. While conducting bare metal visual inspections of the steam generator bowl drain boss welds and heat affected zones during Refueling Outage 14, in accordance with your Allow 600 program, your staff identified the presence of

boron deposits. Subsequent analysis determined the pressure boundary leakage was due to primary water stress corrosion cracking in the Allow 600 region of the bowl drain weld area on Steam Generators C and D. Based on the circumstances, the NRC has chosen to exercise the NRC enforcement discretion (EA-06-184) in accordance with Section VII.B.6 of the NRC Enforcement Policy, to refrain from taking enforcement action because the violation was not avoidable by reasonable licensee quality assurance measures or management controls. Because the violation was not associated with a performance deficiency, it was not evaluated under the Significance Determination Process. If the violation had been evaluated under that process, NRC management determined the violation would have been of very low safety significance because restrictions present in the potential flow path would prevent the maximum leak rate from reaching that of a small break loss-of-coolant accident.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, and its enclosure, will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (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 B. Jones, Chief  
Project Branch B  
Division of Reactor Projects

Docket: 50-482  
License: NPF-42

Enclosure:  
NRC Inspection Report 05000482/2006003  
w/attachment: Supplemental Information

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 : Publicly Available ☐ Non-Publicly Available ☐ Sensitive : Non-Sensitive

R:REACTORS\WC\2006\WC2006-03RP-SDC.wpd

RIV:SRI:DRP/B	RI:DRP/B	C:DRS/EB2	SES:ORA
SDCochrum:sa	TBRhoades	LJSmith	GMVasquez
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C:DRS/OB	C:DRS/PS	C:DRS/EB1	C:DRP/B
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**U.S. NUCLEAR REGULATORY COMMISSION**

**REGION IV**

Docket: 50-482

License: NPF-42

Report: 5000482/2006003

Licensee: Wolf Creek Nuclear Operating Corporation  
Wolf Creek Generating Station

Location: 1550 Oxen Lane NE  
Burlington, Kansas

Dates: April 8 through July 7, 2006

Inspectors: S. D. Cochrum, Senior Resident Inspector  
T. B. Rhoades, Resident Inspector  
J. M. Mateychick, Senior Reactor Inspector  
B. D. Baca, Health Physicist  
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Approved By: W. B. Jones, Chief, Project Branch B

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## SUMMARY OF FINDINGS

IR 05000482/2006003; 04/08/06 - 07/7/06; Wolf Creek Generating Station; Identification and Resolution of Problems, and Event Follow-up.

This report covered a 3-month period of inspection by resident and regional inspectors. The inspection identified two Green findings, all of 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 may be Green or be assigned a severity level after NRC management review. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 3, dated July 2000.

### A. NRC-Identified Findings

#### Cornerstone: Mitigating Systems

- Green. An NRC-identified noncited violation of Technical Specification 5.4.1 was identified for failing to follow system operating procedures for the Class 1E electrical equipment air conditioning units. On May 4, 2006, a planned maintenance evolution was scheduled to be performed that required shut down of safety-related Class 1E electrical equipment air conditioning Unit A (SGK05A); however, the operator incorrectly secured Class 1E electrical equipment air conditioning Unit B (SGK05B) and used steps that had been previously marked N/A. While later performing additional steps, the operator returned to the same incorrect Unit SGK05B and secured the unit a second time. However, the planned work had previously tripped the correct unit (SGK05A). This resulted in both trains being inoperable. The control room was notified, immediately declared both trains inoperable, and entered Technical Specification 3.0.3, which requires the plant to be in Mode 3 in 7 hours. The control room instructed operators to return Unit SGK05B to service and approximately 2 minutes later exited Technical Specification 3.0.3.

The inspectors determined that the failure to follow station procedures was a performance deficiency. The finding was greater than minor because it affected the mitigating systems cornerstone attribute of support equipment that ensures the availability of equipment that responds to initiating events. Using the Significance Determination Process Phase 1 Worksheet in Inspection Manual Chapter 0609, the inspectors determined that this finding is of very low safety significance because the finding did not result in a loss of safety function per Generic Letter 91-18. This finding had crosscutting aspects of human performance because personnel did not follow established procedures and did not use appropriate human error prevention techniques, such as self- and peer-checking. (Section 4OA3.4)

## Cornerstone: Miscellaneous

- Green. An NRC-identified noncited violation of Technical Specifications 5.4.1 for failing to follow procedures was identified when electricians removed terminal leads that were still energized with 500 volt ac. During work under Clearance Orders C15-D-LF-005 and C15-D-LF-006 to replace two sump pump motors located in the radwaste tunnel, the electricians discovered that the terminals on the sump motors were still energized with 500 volt ac. The licensee's investigation discovered that the clearance orders written to isolate the sump motors did not include 120 volt ac breakers for moisture sensors located in the motor.

The inspectors determined that the failure to follow station procedures to establish appropriate administrative controls and verify components were de-energized prior to work was a performance deficiency. The inspectors concluded that the finding was greater than minor because, if left uncorrected, the failure to adhere to clearance order procedure requirements that are applicable to work on safety-related and mitigating equipment and the failure to ensure equipment is in a configuration where an unexpected response will not occur prior to work could result in a plant transient or effect mitigating equipment and become a more significant safety concern. This issue was reviewed using Manual Chapter 0609, Significance Determination Process, and determined that NRC management review for safety significance was appropriate. The safety significance was determined to be very low based on the fact that there was no impact on safety-related equipment and failure of the sump pumps would not initiate a plant transient. This finding had crosscutting aspects of problem identification and resolution for the failure to adequately address previous occurrences, specifically involving the sump pump motors, as well as human performance because the licensee failed to thoroughly evaluate a similar concern such that the cause was resolved and personnel did not follow established procedures. (Section 4OA2.2)

### B. Licensee-Identified Violations

Violations of very low safety significance, which were identified by the licensee have been reviewed by the inspectors. Corrective actions taken or planned by the licensee have been entered into the licensee's corrective action program. These violations and corrective actions are listed in Section 4OA7 of this report.



## REPORT DETAILS

### Summary of Plant Status

The plant started the inspection period at 100 percent rated thermal power. On May 31, 2006, the licensee reduced reactor power to 96 percent to replace a degraded seal on header drain Pump A. After completion of maintenance on June 1, 2006, the reactor was returned to 100 percent power and remained at or near this power level for the rest of the report period.

#### 1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity

#### 1R04 Equipment Alignment (71111.04)

##### .1 Partial System Walkdowns

###### a. Inspection Scope

The inspectors: (1) walked down portions of the risk important systems listed below and reviewed plant procedures and documents to verify that critical portions of the selected systems were correctly aligned and (2) compared deficiencies identified during the walkdown to the licensee's Updated Safety Analysis Report (USAR) and corrective action program to ensure problems were being identified and corrected.

C May 30, 2006, motor-driven auxiliary feedwater pump Train B during a motor-driven auxiliary feedwater pump Train A outage

C June 22, 2006, Emergency Diesel Generator A during an Emergency Diesel Generator B run

The inspectors completed two samples.

##### .2 Complete Walkdown

The inspectors reviewed plant procedures, drawings, the USAR, Technical Specification (TS), and vendor manuals to determine the correct alignment of the systems listed below: (1) reviewed outstanding design issues, operator workarounds, and corrective action program documents to determine if open issues affected the functionality of the system; and (2) verified that the licensee was identifying and resolving equipment alignment problems.

C June 5, 2006, 345 kV switchyard

The inspectors completed one sample.

###### b. Findings

No findings of significance were identified

1R05 Fire Protection (71111.05)

.1 Fire Protection Tours

a. Inspection Scope

The inspectors walked down the plant areas listed below to assess the material condition of active and passive fire protection features, their operational lineup, and their operational effectiveness. The inspectors: (1) verified that transient combustibles and hot work activities were controlled in accordance with plant procedures; (2) observed the condition of fire detection devices to verify they remained functional; (3) observed fire suppression systems to verify they remained functional; (4) verified that fire extinguishers and hose stations were provided at their designated locations and that they were in a satisfactory condition; (5) verified that passive fire protection features (electrical raceway barriers, fire doors, fire dampers, steel fire proofing, penetration seals, and oil collection systems) were in a satisfactory material condition; (6) verified that adequate compensatory measures were established for degraded or inoperable fire protection features; and (7) reviewed the corrective action program to determine if the licensee identified and corrected fire protection problems.

C May 2, 2006, turbine building, 2016 feet level  
C May 3, 2006, electrical penetration rooms  
C May 10, 2006, auxiliary building, 1974 feet level corridors  
C June 1, 2006, auxiliary building, 2000 feet level  
C June 6, 2006, switchyard control building  
C June 23, 2006, control room

The inspectors completed six samples.

b. Findings

No findings of significance were identified.

1R06 Flood Protection Measures (71111.06)

Annual External Flooding

a. Inspection Scope

The inspectors: (1) reviewed the USAR, the flooding analysis, and plant procedures to assess seasonal susceptibilities involving external flooding; (2) reviewed the USAR and corrective action program to determine if the licensee identified and corrected flooding problems; (3) inspected underground bunkers/manholes to verify the adequacy of (a) sump pumps, (b) level alarm circuits, (c) cable splices subject to submergence, and (d) drainage for bunkers/manholes; (4) verified that operator actions for coping with flooding can reasonably achieve the desired outcomes; and (5) walked down the below listed area to verify the adequacy of: (a) equipment seals located below the floodline,

(b) floor and wall penetration seals, (c) watertight door seals, (d) common drain lines and sumps, (e) sump pumps, level alarms, and control circuits, and (f) temporary or removable flood barriers.

C June 12, 2006, cooling lake dam and spillway

The inspectors completed one sample.

b. Findings

No findings of significance were identified.

1R07 Heat Sink Performance (71111.07)

a. Inspection Scope

The inspectors reviewed licensee programs, verified performance against industry standards, and reviewed critical operating parameters and maintenance records for the containment coolers. The inspectors verified that: (1) performance tests were satisfactorily conducted for heat exchangers/heat sinks and reviewed for problems or errors; (2) the licensee utilized the periodic maintenance method outlined in EPRI NP- 7552, "Heat Exchanger Performance Monitoring Guidelines;" (3) the licensee properly utilized biofouling controls; (4) the licensee's heat exchanger inspections adequately assessed the state of cleanliness of their tubes, and (5) the heat exchanger was correctly categorized under the maintenance rule.

The inspectors completed one sample.

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification Program (71111.11)

a. Inspection Scope

The inspectors observed testing and training of senior reactor operators and reactor operators to identify deficiencies and discrepancies in the training, to assess operator performance, and to assess the evaluator's critique. The training scenario on June 2, 2006, involved degraded switchyard voltage and a loss of alternating current power.

The inspectors completed one sample.

b. Findings

No findings of significance were identified.

1R12 Maintenance Effectiveness (71111.12)

Resident Inspector Quarterly Review

a. Inspection Scope

The inspectors reviewed the maintenance activity listed below to: (1) verify the appropriate handling of structure, system, and component (SSC) performance or condition problems; (2) verify the appropriate handling of degraded SSC functional performance; (3) evaluate the role of work practices and common cause problems; and (4) evaluate the handling of SSC issues reviewed under the requirements of the maintenance rule, 10 CFR Part 50, Appendix B, and TSs.

- May 1, 2006, 125 volt dc NK-21 battery charger failure

The inspectors completed one sample.

b. Findings

No findings of significance were identified.

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

a. Inspection Scope

Risk Assessment and Management of Risk

The inspectors reviewed the assessment activities listed below to verify: (1) performance of risk assessments when required by 10 CFR 50.65 (a)(4) and licensee procedures prior to changes in plant configuration for maintenance activities and plant operations; (2) the accuracy, adequacy, and completeness of the information considered in the risk assessment; (3) that the licensee recognizes, and/or enters as applicable, the appropriate licensee-established risk category according to the risk assessment results and licensee procedures; and (4) that the licensee identified and corrected problems related to maintenance risk assessments.

- April 30, 2006, work week 205
- June 2, 2006, work week 210

Emergent Work Control

The inspectors: (1) verified that the licensee performed actions to minimize the probability of initiating events and maintained the functional capability of mitigating systems and barrier integrity systems; (2) verified that emergent work-related activities such as troubleshooting, work planning/scheduling, establishing plant conditions, aligning equipment, tagging, temporary modifications, and equipment restoration did not

place the plant in an unacceptable configuration; and (3) reviewed the USAR and corrective action program to determine if the licensee identified and corrected risk assessment and emergent work control problems.

- May 1, 2006, extended maintenance on Switchyard Transformer 6
- June 15, 2006, emergent work on the turbine-driven auxiliary feedwater pump
- June 21, 2006, emergent work on the stator cooling water Pump A

The inspectors completed five samples.

b. Findings

No findings of significance were identified.

1R14 Operator Performance During Nonroutine Plant Evolutions and Events (71111.14)

a. Inspection Scope

For the nonroutine event listed below, the inspectors: (1) reviewed operator logs, plant computer data, and/or strip charts for the below evolutions to evaluate operator performance in coping with nonroutine events and transients; (2) verified that the operator response was in accordance with the response required by plant procedures and training; and (3) verified that the licensee has identified and implemented appropriate corrective actions associated with personnel performance problems that occurred during the nonroutine evolutions:

- May 31, 2006, the licensee reduced turbine load and reactor power to establish the necessary plant conditions to remove the heater drain Pump A from service and replace a degraded mechanical seal.

The inspectors completed one sample.

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations (71111.15)

a. Inspection Scope

The inspectors: (1) reviewed plants status documents, such as operator shift logs, emergent work documentation, deferred modifications, and standing orders, to determine if an operability evaluation was warranted for degraded components; (2) referred to the USAR and design basis documents to review the technical adequacy of licensee operability evaluations; (3) evaluated compensatory measures associated with operability evaluations; (4) determined degraded component impact on any TSs; (5) used the significance determination process (SDP) to evaluate the risk significance

of degraded or inoperable equipment; and (6) verified that the licensee has identified and implemented appropriate corrective actions associated with degraded components.

- April 17, 2006, steam generator safeties manual operators
- May 10, 2006, degraded auxiliary feedwater piping snubber
- May 30, 2006, emergency diesel fuel oil low sulfur
- June 14, 2006, reactor coolant Pump B seals under reduced flow conditions
- June 16, 2006, turbine-driven auxiliary feedwater pump governor
- July 3, 2006, safety-related room cooler insulation removal
- July 6, 2006, main steam isolation valves

The inspectors completed seven samples.

b. Findings

No findings of significance were identified.

1R19 Postmaintenance Testing (71111.19)

a. Inspection Scope

The inspectors selected the below listed postmaintenance test activities of risk significant systems or components. For each item, the inspectors: (1) reviewed the applicable licensing basis and/or design-basis documents to determine the safety functions; (2) evaluated the safety functions that may have been affected by the maintenance activity; and (3) reviewed the test procedure to ensure it adequately tested the safety function that may have been affected. The inspectors either witnessed or reviewed test data to verify that acceptance criteria were met, plant impacts were evaluated, test equipment was calibrated, procedures were followed, jumpers were properly controlled, the test data results were complete and accurate, the test equipment was removed, the system was properly realigned, and deficiencies during testing were documented. The inspectors also reviewed the USAR and corrective action program to determine if the licensee identified and corrected problems related to postmaintenance testing.

- May 5, 2006, tap changes on Switchyard Transformers 4 and 5
- May 16, 2006, steam Generator C blow down isolation valve
- June 15, 2006, turbine-driven auxiliary feedwater pump governor
- June 16, 2006, control building supply air radiation monitor
- June 22, 2006, HA-PCV-1103B, gas pressure control valve
- June 30, 2006, safety injection Pump B

The inspectors completed six samples.

b. Findings

No findings of significance were identified.

## 1R22 Surveillance Testing (71111.22)

### a. Inspection Scope

The inspectors reviewed the USAR, procedure requirements, and TSs to ensure that the five surveillance activities demonstrated that the SSCs tested were capable of performing their intended safety functions. The inspectors either witnessed or reviewed test data to verify that the following significant surveillance test attributes were adequate: (1) preconditioning; (2) evaluation of testing impact on the plant; (3) acceptance criteria; (4) test equipment; (5) procedures; (6) jumper/lifted lead controls; (7) test data; (8) testing frequency and method demonstrated TS operability; (9) test equipment removal; (10) restoration of plant systems; (11) fulfillment of ASME Code requirements; (12) updating of performance indicator data; (13) engineering evaluations, root causes, and bases for returning tested SSCs not meeting the test acceptance criteria were correct; (14) reference setting data; and (15) annunciators and alarms setpoints. The inspectors also verified that the licensee identified and implemented any needed corrective actions associated with the surveillance testing:

- May 1, 2006, SYS SR-200, "Movable Incore Detector System Operation," Revision 19
- May 16, 2006, STS IC-250B, "Channel Operational Test Containment Atmosphere and RCS Leakage Radiation Monitor GT RE-0031," Revision 19
- May 31, 2006, STS IC-608A, "Slave Relay test K608 Train A Safety Injection," Revision 16
- May 4, 2006, STN FP-402A, "Train A Halon System Checkout for KC-230," Revision 6A
- June 14, 2006, STS AL-103, "TDAFW Pump Inservice Pump Test," Revision 39
- June 30, 2006, STS PE-007, "Periodic Verification of Motor Operated Valves," Revision 2

The inspectors completed six samples.

### b. Findings

No findings of significance were identified.

## 1R23 Temporary Plant Modifications (71111.23)

### a. Inspection Scope

The inspectors reviewed the USAR, plant drawings, procedure requirements, and TSs to ensure that the temporary modification was properly implemented. The inspectors: (1) verified that the modification did not have an affect on system operability/availability,

(2) verified that the installation was consistent with the modification documents, (3) ensured that the postinstallation test results were satisfactory and that the impact of the temporary modification on permanently installed SSCs were supported by the test, (4) verified that the modifications were identified on control room drawings and that appropriate identification tags were placed on the affected drawings, and (5) verified that appropriate safety evaluations were completed. The inspectors verified that the licensee identified and implemented any needed corrective actions associated with temporary modifications:

- April 28, 2006, tap changes on Switchyard Transformer 5

The inspectors completed one sample.

b. Findings

No findings of significance was identified.

Cornerstone: Emergency Preparedness

1EP6 Drill Evaluation (71114.06)

a. Inspection Scope

For the below listed drill and simulator-based training evolution contributing to drill/exercise performance and emergency response organization performance indicators, the inspectors: (1) observed the training evolution to identify any weaknesses and deficiencies in classification, notification, and protective action requirements development activities; (2) compared the identified weaknesses and deficiencies against licensee identified findings to determine whether the licensee is properly identifying failures; and (3) determined whether licensee performance is in accordance with the guidance of the Nuclear Energy Institute (NEI) 99-02 document's acceptance criteria.

- May 4, 2006, fire in vital Buss XNB02 and loss of all alternating current power to the vital busses

The inspectors completed one sample.

b. Findings

No findings of significance were identified.



## 2. RADIATION SAFETY

Cornerstone: Occupational Radiation Safety

### 2OS1 Access Control to Radiologically Significant Areas (71121.01)

#### a. Inspection Scope

This area was inspected to assess the licensee's performance in implementing physical and administrative controls for airborne radioactivity areas, radiation areas, high radiation areas, and worker adherence to these controls. The inspector used the requirements in 10 CFR Part 20, the TSs, and the licensee's procedures required by TSs as criteria for determining compliance. During the inspection, the inspector interviewed the radiation protection manager, radiation protection supervisors, and radiation workers. The inspector performed independent radiation dose rate measurements and reviewed the following items:

- Performance indicator events and associated documentation packages reported by the licensee in the Occupational Radiation Safety Cornerstone (Samples 1 and 11)
- Self-assessments and audits related to the access control program since the last inspection (Sample 8)
- Corrective action documents related to access controls (Samples 9, 19, and 21)
- Radiation work permit briefings and worker instructions (Sample 12)
- Adequacy of radiological controls such as, required surveys, radiation protection job coverage, and contamination controls during job performance (Sample 13)
- Posting and locking of entrances to all accessible high dose rate - high radiation areas and very high radiation areas (Sample 17)
- Radiation worker and radiation protection technician performance with respect to radiation protection work requirements (Samples 18 and 20)

The inspector completed 11 of the required 21 samples.

#### b. Findings

No findings of significance were identified.

### 2OS2 ALARA Planning and Controls (71121.02)

#### a. Inspection Scope

The inspector assessed licensee performance with respect to maintaining individual and collective radiation exposures as low as is reasonably achievable (ALARA). The

inspector used the requirements in 10 CFR Part 20 and the licensee's procedures required by TSs as criteria for determining compliance. The inspector interviewed licensee personnel and reviewed:

- Current 3-year rolling average collective exposure (Sample 1)
- Four on-line maintenance work activities scheduled during the inspection period and associated work activity exposure estimates which were likely to result in the highest personnel collective exposures (Sample 2).
- Three work activities from previous work history data which resulted in the highest personnel collective exposures since the last inspection (Sample 2).
- Site-specific trends in collective exposures, plant historical data, and source-term measurements (Sample 3)
- Site-specific ALARA procedures (Sample 4)
- ALARA work activity evaluations, exposure estimates, and exposure mitigation requirements (Sample 6)
- Intended versus actual work activity doses and the reasons for any inconsistencies (Sample 7)
- Interfaces between operations, radiation protection, maintenance, maintenance planning, scheduling, and engineering groups (Sample 16)
- Postjob (work activity) reviews (Sample 21)
- Workers use of the low dose waiting areas (Sample 23)
- Radiation worker and radiation protection technician performance during work activities in radiation areas, airborne radioactivity areas, or high radiation areas (Sample 12)
- Declared pregnant workers during the current assessment period, monitoring controls, and the exposure results (Sample 13)
- Self-assessments and audits related to the ALARA program since the last inspection (Sample 14)
- Resolution through the corrective action process of problems identified through postjob reviews and postoutage ALARA report critiques (Sample 28)
- Corrective action documents related to the ALARA program and follow-up activities such as initial problem identification, characterization, and tracking (Sample 29)

The inspector completed 9 of the required 15 samples and 5 of the optional samples.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator Verification (71151)

a. Inspection Scope

Cornerstone: Initiating Events

The inspectors sampled licensee submittals for the performance indicators listed below for the period June 2005 through May 2006. The definitions and guidance of NEI 99-02, "Regulatory Assessment Indicator Guideline," Revision 4, were used to verify the licensee's basis for reporting each data element in order to verify the accuracy of performance indicator data reported during the assessment period. The inspectors reviewed licensee event reports (LERs), monthly operating reports, and operating logs as part of the assessment. Licensee performance indicator data were also reviewed against the requirements of Procedure AP 26A-007, "NRC Performance Indicators," Revision 4, and "Performance Improvement and Learning Desktop Instruction, NRC Performance Indicator Program Owner Guidance," Revision 2. The inspectors reviewed various licensee indicator input information to determine the accuracy and completeness of the performance indicator.

- C Unplanned scrams per 7,000 critical hours
- C Unplanned scrams with loss of normal heat removal
- C Unplanned power changes per 7,000 critical hours

The inspectors completed three samples in this cornerstone.

Cornerstone: Occupational Radiation Safety Cornerstone

The inspector reviewed licensee documents from April 2005 through March 2006. The review included corrective action documentation that identified occurrences in locked high radiation areas (as defined in the licensee's TSSs), very high radiation areas (as defined in 10 CFR 20.1003), and unplanned personnel exposures (as defined in NEI 99-02). Additional records reviewed included ALARA records and whole-body counts of selected individual exposures. The inspector interviewed licensee personnel that were accountable for collecting and evaluating the performance indicator data. In addition, the inspector toured plant areas to verify that high radiation, locked high radiation, and very high radiation areas were properly controlled. Performance indicator definitions and guidance contained in NEI 99-02, "Regulatory Assessment Indicator Guideline," Revision 3, were used to verify the basis in reporting for each data element.

- C Occupational Exposure Control Effectiveness

The inspector completed one sample in this cornerstone.

## Cornerstone: Public Radiation Safety Cornerstone

The inspector reviewed licensee documents from April 2005 through March 2006. Licensee records reviewed included corrective action documentation that identified occurrences for liquid or gaseous effluent releases that exceeded performance indicator thresholds and those reported to the NRC. The inspector interviewed licensee personnel that were accountable for collecting and evaluating the performance indicator data. Performance indicator definitions and guidance contained in NEI 99-02, "Regulatory Assessment Indicator Guideline," Revision 3, were used to verify the basis in reporting for each data element.

- Radiological Effluent Technical Specification/Offsite Dose Calculation Manual  
Radiological Effluent Occurrences

The inspector completed one sample in this cornerstone.

### b. Findings

No findings of significance were identified.

## 4OA2 Identification and Resolution of Problems (71152)

### .1 Routine Review of Identification and Resolutions of Problems

#### a. Inspection Scope

The inspectors performed a daily screening of items entered into the licensee's corrective action program. This assessment was accomplished by reviewing work requests, work orders, and performance improvement requests (PIR) and attending corrective action review and work control meetings. The inspectors: (1) verified that equipment, human performance, and program issues were being identified by the licensee at an appropriate threshold and that the issues were entered into the corrective action program; (2) verified that corrective actions were commensurate with the significance of the issue; and (3) identified conditions that might warrant additional followup through other baseline inspection procedures.

The inspectors completed one sample.

#### b. Findings

No findings of significance were identified.

### .2 Selected Issue Followup

#### a. Inspection Scope

In addition to the routine review, the inspectors selected the below listed issue for a more in-depth review. The inspectors considered the following during the review of the licensee's actions: (1) complete and accurate identification of the problem in a timely manner; (2) evaluation and disposition of operability/reportability issues; (3) consideration of extent of condition, generic implications, common cause, and

previous occurrences; (4) classification and prioritization of the resolution of the problem; (5) identification of root and contributing causes of the problem; (6) identification of corrective actions; and (7) completion of corrective actions in a timely manner.

PIR 2005-3416, Unidentified Energized Conductors Found Inside Clearance Order Boundary

The inspectors reviewed the licensee's followup actions to a clearance order event on December 14, 2005. The inspectors interviewed several licensee personnel and reviewed associated documentation for this event.

The inspectors completed one sample.

b. Findings

Introduction: An NRC-identified Green noncited violation (NCV) of TS 5.4.1 for failing to follow procedures was identified when electricians removed terminal leads that were still energized with 500 volts ac.

Description: During work under Clearance Orders C15-D-LF-005 and C15-D-LF-006 to replace two sump pump motors located in the radwaste tunnel, electricians discovered that the terminals on the sump motors were still energized with 500 volts ac. The licensee's investigation discovered that the clearance orders written to isolate the sump motors did not include 120-volt ac breakers for moisture sensors located in the motor. The 500-volt ac detected was being generated by a transformer located in the moisture sensor that transforms 120 to 500 volts ac.

After signing on the clearance orders, the electricians proceeded to verify the absence of voltage in the terminal box for the Sump Motor A. They verified the absence of voltage on the motor leads but failed to check other terminals in the control cable for the sump motor. After de-termining Sump Motor A, they proceeded to Sump Motor B and discovered two conductors in the control cable energized. Although they discovered unknown voltages inside the clearance order boundary, the electricians continued de-termining Sump Motor B. They returned to Motor A and found it also had unknown voltage on two terminals. After discovering voltage on the second motor, the electricians notified the clearance order group and work was stopped.

The licensee's root cause analysis determined that personnel involved in the work and clearance order did review appropriate drawings in enough detail to identify the two conductors in the control cable that were still energized from another source. A review of previous clearance orders showed that of 24, only 6 included the 120-volt ac breakers for the moisture sensors. A previous concern that a clearance order might be issued that would not isolate the moisture sensors was identified in 2001 and was documented in PIR 2001-0532. The corrective action from this PIR added notes to drawings for the sump pump circuitry that referenced the moisture sensors. The licensee root cause analysis also noted that the electricians failed to ensure a safe clearance boundary by checking that all electrical energy had been removed prior to work. The voltage that was identified during work on the second motor and had not been identified on the first motor.

Analysis: The inspectors determined that the failure to follow station procedures to establish appropriate administrative controls and verify components de-energized prior to work was a performance deficiency. The inspectors concluded that the finding was greater than minor because, if left uncorrected, the failure to adhere to clearance order procedure requirements that are applicable to safety-related and mitigating equipment and the failure to ensure equipment is in a configuration where an unexpected response will not occur prior to work could become a more significant safety concern. This finding was reviewed for safety significance using Manual Chapter 0609, SDP, and the determination made that NRC management review of the issue was appropriate. The NRC management review determined that the issue was of very low safety significance based on the fact that the failure of the components would not result in a plant transient, mitigating equipment was not affected, and the other cornerstones were not impacted. This finding had crosscutting aspects of problem identification and resolution for the failure to adequately address previous occurrences, because the licensee failed to thoroughly evaluate a similar concern such that the cause was resolved and personnel did not follow established procedures.

Enforcement: TS 5.4.1 required, in part, that written procedures shall be established, implemented, and maintained covering the applicable procedures recommended in Regulatory Guide 1.33, Revision 2, Appendix A, February 1978. Regulatory Guide 1.33, Revision 2, Appendix A, February 1978, paragraph 1.c, recommends procedures for equipment control (e.g., locking and tagging). Procedure AP 21E-001, "Clearance Orders," Revision 17," requires the tagging authority in step 6.1.1, "Identify all possible energy sources and correct isolation boundaries and hazards," and requires the clearance order holder in step 6.7.5, in part, "Prior to starting work, the clearance order holder shall walkdown the clearance order and a diverse means shall be used to verify absence of energy." Contrary to the above, on December 14, 2005, Procedure AP 21E-001 was not followed in that personnel involved in the work and clearance order did review appropriate drawings in enough detail to identify the two conductors in the control cable that were still energized from another source and verify absence of energy. Because this violation was of very low safety significance and it was entered into the licensee's corrective action program as PIR 2005-3416, this violation is being treated as an NCV, consistent with Section VI.A of the NRC Enforcement Policy: NCV 05000482/2006003-01, Failure to follow station procedures for clearance orders.

### .3 Cumulative Review of the Effects of Operator Workarounds

#### a. Inspection Scope

The inspectors reviewed the cumulative effects of operator workarounds to determine: (1) the reliability, availability, and potential for misoperation of a system; (2) if multiple mitigating systems could be affected; (3) the ability of operators to respond in a correct and timely manner to plant transients and accidents; and (4) if the licensee has identified and implemented appropriate corrective actions associated with operator workarounds.

The inspectors completed one sample.

b. Findings

No findings of significance were identified.

.4 Semiannual Trend Review

a. Inspection Scope

The inspectors completed a semiannual trend review of repetitive or closely-related issues that were documented in trend reports, problem lists, performance indicators, health reports, quality assurance audits, corrective action documents, corrective maintenance documents, and departmental self-assessments and interviewed selected licensee staff to determine if any adverse trends existed. Additionally, the inspectors reviewed the licensee's trending efforts to identify trends that might indicate the existence of more safety significant issues. The inspectors' review consisted of the 6-month period from January to June 2006. When warranted, some of the samples expanded beyond those dates to fully assess the issue. The inspectors also reviewed corrective action program items associated with the below listed issues. The inspectors compared and contrasted their results with the results contained in the licensee's quarterly trend reports. Corrective actions associated with a sample of the issues identified in the licensee's trend report were reviewed for adequacy. These areas were chosen based on information gathered by the inspectors during daily plant status reviews over the previous 6 months.

The inspectors completed one sample.

b. Findings and Observations

No findings of significance were identified. However, during the review the inspectors noted the following trends:

- The inspectors noticed a continuing negative trend in the area of clearance orders issues. Although the licensee had identified this trend and has made several attempts since 2002 to address the problem, the current trend of clearance order errors is a continuing problem. All corrective actions developed from the last root cause determination contained in PIR 2005-1963 have been completed; however, the current corrective actions have been slow to adequately assess and correct the problems.
- The inspectors identified a continuing negative trend in the area of procedure use and adherence issues. Although the licensee had identified that the current trend remains at a high level, it was not considered a negative trend. The licensee has corrective actions in place addressing a previously identified negative trend.
- The inspectors noticed an increasing negative trend in the area of configuration control. This trend was identified by the licensee in 2005; however, corrective actions have been ineffective to date. The licensee has documented this continuing negative trend in Condition Report 2006-000610.



.5 Health Physics Review of Identification and Resolutions of Problems

a. Inspection Scope

The inspector evaluated the effectiveness of the licensee's PI&R process with respect to the following inspection areas:

- Access control to radiologically significant areas (Section 2OS1)
- ALARA planning and controls (Section 2OS2)

b. Findings

Section 4OA7 describes a finding in which a radiation worker did not obtain and wear appropriate dosimetry before entering the radiological controlled area.

4OA3 Event Follow-up (71153)

.1 (Closed) LER 50-482/2005-001-00: Unanalyzed Condition Related to Loss of Emergency Diesel Generator Field Flashing during an Appendix R Fire Event

On December 5, 2005, the licensee determined that a postulated fire could adversely impact the ability of the Wolf Creek Generating Station to achieve and maintain safe shutdown. Specifically, a fire in a control room panel had the potential to blow fuses associated with emergency diesel generator speed control relays. Loss of power to these relays would prevent field flashing and result in the inoperability of the Train B emergency diesel generator. The licensee discovered this concern after reviewing the timing of procedure steps for a fire-induced control room evacuation. The licensee initiated PIR 2005-3333 to address this concern. The apparent root cause was the failure of the architect engineer to recognize the concern when preparing the original electrical fire hazards analysis for the plant. As interim corrective actions, the licensee revised Procedure OFN RP-17, "Hot Standby to Cold Shutdown from Outside the Control Room," to alert operators of this potential concern and to require placement of spare fuses in the emergency equipment locker. Permanent corrective action will be a design change to the affected circuitry which is scheduled to be installed during the 2007 refueling outage. The licensee-identified violation is documented in Section 4OA7. This LER is closed.

.2 (Closed) LER 50-482/2005-002-00: Reactor Coolant System (RCS) Pressure Boundary Leakage Due to Small Cracks in Steam Generator Lower Head Bowl Drain Lines

a. Inspection Scope

The inspectors reviewed the LER and root cause to verify that the cause was identified and corrective actions were reasonable and to determine whether a performance deficiency was associated with the event. The LER documented that bare metal visual inspections of their steam generator bowl drain boss welds and heat affected zones were conducted during a refueling outage as part of their Alloy 600 program and in response to Information Notice 2005-002. Based on the presence of boron deposits, the licensee determined that RCS pressure boundary leakage due to primary water



stress corrosion cracking in the Alloy 600 region of the bowl drain weld area on Steam Generators C and D had occurred during the previous operating cycle, which is prohibited by TS.

b. Findings

Introduction: A self-revealing, Green, violation of TS 3.4.13, RCS Operational Leakage, was identified for RCS pressure boundary leakage occurring while in Modes 1, 2, 3, or 4. This issue was determined not to be a finding because a performance deficiency was not identified. Enforcement discretion was exercised for this violation.

Description: During Refueling Outage 14, the licensee conducted bare metal visual inspections of their steam generator bowl drain boss welds and heat affected zones. The inspections were conducted as part of their Alloy 600 program and in response to Information Notice 2005-002. Based on the presence of boron deposits, the licensee determined that RCS pressure boundary leakage due to primary water stress corrosion cracking in the Alloy-600 region of the bowl drain weld area on Steam Generators C and D had occurred during the previous operating cycle.

Analysis: TS 3.4.13, RCS Operational Leakage, requires that there shall be no RCS or coolant system pressure boundary leakage while in operational Modes 1, 2, 3, and 4. The inspectors determined that a violation of TS 3.4.13 occurred since a through-wall leak of the RCS pressure boundary existed while the reactor was in operational Modes 1 through 4 during the period of December 2003 to March 2004. The inspectors determined that this violation was greater than minor because the RCS pressure boundary leakage affected the equipment performance attribute of the initiating events cornerstone.

The inspectors determined that the RCS pressure boundary leakage was not a performance deficiency because the cracking was not reasonably within the licensee's ability to foresee and correct. Because a performance deficiency was not associated with this issue, it was not subject to evaluation under the SDP. Although not suited for SDP evaluation, the violation has been reviewed by NRC management and determined to be of very low safety significance because restrictions present in the potential flow path would prevent the maximum leak rate from reaching that of a small break loss of coolant accident. It was also determined that the likelihood of a simultaneous failure of more than one bowl drain weld is highly unlikely. This issue was entered into the licensee's corrective action program as PIR 2005-1060.

Enforcement: The NRC concluded that a violation of TS 3.4.13, RCS Operational Leakage, occurred. However, the violation was not attributable to an equipment failure that was avoidable by reasonable licensee quality assurance measures or management controls. Because the applicable criteria specified in the NRC's Enforcement Policy was satisfied, the NRC is exercising enforcement discretion (EA-06-184) in accordance with Section VII.B.6 of the Enforcement Policy and is refraining from issuing enforcement action for this violation. This LER is closed.

.3 (Closed) LER 50-482/2005-004-00: Failure of Auxiliary Building Ventilation Dampers to Close on Safety Injection Signal

a. Inspection Scope

The inspectors reviewed the LER and root cause to verify that the cause was identified, and corrective actions were reasonable and to determine whether a performance deficiency was associated with the event. The LER documented that on May 10, 2005, the licensee conducted testing that simulated a loss of coolant accident coincident with a loss of offsite power and noted that the four dampers required to close to isolate the auxiliary building from the main condenser air removal filtration system had not fully closed, but were in an intermediate position. These dampers are required to close during a design basis accident to provide isolation of the auxiliary building.

b. Findings

Section 40A7 describes a violation of 10 CFR Part 50, Appendix B, Criterion III, regarding this issue.

.4 Inadvertent System Shutdown Requiring TS 3.0.3 Entry

a. Inspection Scope

The inspectors reviewed follow-up actions to a planned maintenance evolution that was required of the safety-related Class 1E electrical equipment air conditioning Unit A and resulted in a TS 3.0.3 entry.

b. Findings

Introduction: An NRC-identified, Green, NCV of TS 5.4.1 was identified for failing to follow system operating procedures for Class 1E electrical equipment air conditioning units.

Description: On May 4, 2006, a planned maintenance evolution was scheduled to be performed that required the shut down of safety-related Class 1E electrical equipment air conditioning Unit A (SGK05A). The Class 1E electrical equipment air conditioning units are required to support operability of both trains of dc subsystems, inverters, and ac vital buses. To support the maintenance, operations was required to perform Procedure SYS GK-123, "Control Building A/C Units Startup and Shutdown," Revision 10. Operations determined that several sections and steps that referred to the other unit (SGK05B) would not need to be performed and were marked not applicable (N/A). After discussing the work with the work control operator, the assigned operator completed the required sections of the procedure; however, the operator incorrectly secured Class 1E electrical equipment air conditioning Unit B (SGK05B) and notified the control room that the correct unit (SGK05A) was secured.

After discussion with maintenance, it was determined that the Unit SGK05A control power switch needed to be in the "auto start" position to support work. The operator again returned to the incorrect Unit SGK05B and placed the switch back to "run" using step 6.3.6.2 of Procedure SYS GK-123, "Control Building A/C Units Startup and Shutdown," Revision 10. This step, which states in part, "If desired lineup SGK05A for

auto start . . . Then perform the following: a. 120SS - on, b. 129SS - run," had been previously marked N/A. The control room was not informed of the procedure deviation. After returning to the work control area, the operator realized that performing step 6.3.6.2 did not comply with procedure use and determined that the correct control switch position was "pumpdown" as previously positioned. The operator returned to the same incorrect Unit SGK05B and secured the unit. However, workers in the area pointed out that the incorrect unit (SGK05B) had been secured again and that the work had previously tripped the other unit (SGK05A). This resulted in both trains being inoperable.

The control room was notified, immediately declared both trains inoperable, and entered TS 3.0.3, which requires the plant to be in Mode 3 in 7 hours. The control room instructed operators to return Unit SGK05B to service and approximately 2 minutes later exited TS 3.0.3.

Analysis: The inspectors determined that the failure to follow station procedures was a performance deficiency. The finding was greater than minor because it affected the mitigating systems cornerstone attribute of support equipment that ensures the availability of equipment that responds to initiating events. Using the SDP Phase 1 Worksheet in Inspection Manual Chapter 0609, the inspectors determined that this finding is of very low safety significance because the finding did not result in a loss of safety function. This finding had crosscutting aspects of human performance because personnel did not follow established procedures and did not use appropriate human error prevention techniques.

Enforcement: TS 5.4.1 required, in part, that written procedures shall be established, implemented, and maintained covering the applicable procedures recommended in Regulatory Guide 1.33, Revision 2, Appendix A, February 1978. Regulatory Guide 1.33, Revision 2, Appendix A, February 1978, paragraph 3.s, recommends procedures for electrical system control (e.g., startup, operation, and shutdown). Contrary to the above, operators failed to follow Procedure SYS GK-123, "Control Building A/C Units Startup and Shutdown," Revision 10, secured the incorrect equipment train multiple times, and performed an N/A step. Because this violation was of very low safety significance and it was entered into the licensee's corrective action program as PIR 2006-000327, this violation is being treated as an NCV, consistent with Section VI.A of the NRC Enforcement Policy: NCV 05000482/2006003-02, Failure to follow system operating procedures.

#### 4OA5 Other Activities

##### Implementation of Temporary Instruction 2515/165 - Operational Readiness of Offsite Power and Impact on Plant Risk

###### a. Inspection Scope

The objective of Temporary Instruction 2515/165, "Operational Readiness of Offsite Power and Impact on Plant Risk," is to gather information to support the assessment of nuclear power plant operational readiness of offsite power systems and impact on plant risk. During this inspection, the inspectors interviewed licensee personnel, reviewed licensee procedures, and gathered information for further evaluation by the Office of Nuclear Reactor Regulation.

b. Findings

No findings of significance were identified.

4OA6 Meetings, Including Exit

On June 23, 2006, the health physics inspector presented the occupational radiation safety inspection results (with emphasis on ALARA) to Mr. M. Sunseri, Vice President Oversight, and other members of his staff who acknowledged the findings. The inspector confirmed that proprietary information was not provided or examined during the inspection.

On July 13, 2006, the resident inspectors presented the inspection results of the inspections to Mr. R. Muench, President and Chief Executive Officer, and other members of the licensee's management staff. The licensee acknowledged the findings presented. The inspectors verified that no proprietary information was provided during the inspection.

4OA7 Licensee-Identified Violations

The following violations of very low significance (Green) were identified by the licensee and are violations of NRC requirements which meet the criteria of Section VI of the NRC Enforcement Policy, NUREG-1600, for being dispositioned as NCVs.

- TS 5.4, "Procedures," requires procedures for the fire protection program. Contrary to this, the licensee failed to include appropriate mitigative steps in their safe shutdown procedure. The licensee had determined this resulted from an oversight in the original electrical fire hazards analysis. In accordance with Section 6.3.3, "Violations Involving Old Design Issues," of the NRC Enforcement Manual, enforcement discretion will be granted since it met the three criteria listed. The three criteria were that it was licensee-identified, the corrective action was timely, and it was not likely to have been identified by routine licensee efforts.
- TS 5.4.1(a) requires applicable written procedures as described in Regulatory Guide 1.33, Revision 2, Appendix A, 1978. Section 7(e) of Regulatory Guide 1.33 requires procedures for access controls to radiation areas. Station Procedure RPP 02-405, "RCA Access Control," Revision 12, Section 8.3.3, requires radiation workers to wear a thermoluminescent dosimeter and an electronic alarming dosimeter when accessing the radiological controlled area. However, on March 7, 2006, a health physics technician identified a maintenance support individual that entered the radiological controlled area without their dosimetry. This event is described in the licensee's corrective action program as PIR 2006-0580. The finding was determined to be of very low safety significance because it did not involve: (1) ALARA planning and controls, (2) an overexposure, (3) a substantial potential for overexposure, or (4) an impaired ability to assess dose.
- A violation of 10 CFR Part 50, Appendix B, Criterion III, was identified on May 10, 2005, during surveillance testing that simulated a loss of coolant accident coincident with a loss of offsite power. It was noted that the four

dampers required to close to isolate the auxiliary building from the main condenser air removal filtration system had not fully closed. A licensee review of the design history of the control circuitry for these dampers revealed that a modification to provide a safety injection system override was implemented. This modification was to allow for the option of discharging the condenser vacuum pumps through the discharge filters in the event of a steam generator tube rupture. This finding was determined to be of very low safety significance because it only represents a degradation of the radiological barrier function provided for the auxiliary building.

ATTACHMENT: SUPPLEMENTAL INFORMATION

## **SUPPLEMENTAL INFORMATION**

### **KEY POINTS OF CONTACT**

#### Licensee

T. J. Garrett, Vice President Engineering  
S. E. Hedges, Vice President Operations and Plant Manager  
R. A. Muench, President and Chief Executive Officer  
K. Scherich, Director Engineering  
M. Sunseri, Vice President Oversight

### **ITEMS OPENED, CLOSED, AND DISCUSSED**

#### Opened and Closed

05000482/2006003-01	NCV	Failure to follow station procedures for clearance orders (Section 4OA2.2)
05000482/2006003-02	NCV	Failure to follow system operating procedures (Section 4OA3.4)

#### Closed

05000482/2005-001	LER	Unanalyzed condition related to loss of emergency diesel generator field flashing during an Appendix R fire event (Section 4OA3.1)
05000482/2005-004	LER	Failure of auxiliary building ventilation dampers to close on safety injection signal (Section 4OA3.3)
05000482/2005-002	LER	RCS pressure boundary leakage due to small cracks in steam generator lower head bowl drain lines (Section 4OA3.4)

### **LIST OF DOCUMENTS REVIEWED**

In addition to the documents referred to in the inspection report, the following documents were selected and reviewed by the inspectors to accomplish the objectives and scope of the inspection and to support any findings:

2OS1: Access Controls to Radiologically Significant Areas

#### Radiation Work Permits

06-0029, Resin transfer to primary spent resin storage tank  
06-0036, Containment access during power Modes 1, 2, & 3 for maintenance functions

### Performance Improvement Requests

2005-2815, 2005-2965, 2005-3113, 2005-3066, 2006-0077, 2006-0212, and 2006-0580

### Procedures

AP 25A-001, Radiation Protection Manual, Revision 11

AP-25B-100, Radiation Worker Guidelines, Revision 26

RPP 02-210, Radiation Surveys, Revision 26

RPP 02-405, RCA Access Control, Revision 12

SYS HC-201, Sluice CVCS Mixed Bed Demineralizer A Using Primary Spent Resin Sluice Pump, Revision 18

### Miscellaneous

EAD dose and peak dose rate reports  
Radiation Work Permit 06-0029 prejob briefing form  
Self-Assessment Report SEL 05-012

### 2OS2: ALARA Planning and Controls

#### ALARA Review Packages and Radiation Work Permits

05-0020, <500 Rem/hr filter media processing activities for radioactive waste preparation

05-0036, Containment access during power Modes 1, 2, & 3 for maintenance functions

05-0100, Technical Specification equipment outage

06-0020, <500 Rem/hr filter media processing activities for radioactive waste preparation

06-0029, Resin transfer to primary spent resin storage tank

06-0036, Containment access during power Modes 1, 2, & 3 for maintenance functions

06-0050, Contaminated system breach of valves, pumps, piping, and strainers for maintenance activities

06-0070, Troubleshoot/Repair/Plant modifications on the incore detector drive system in the seal table/flux map area during power operation Modes 1 & 2

06-0100, Technical Specification equipment outage

### Audits and Self-Assessments

Quality Assurance Audit Report K-639  
Self-Assessment Report SEL 05-012  
Self-Assessment Report SEL 05-022

### Performance Improvement Requests

2005-1870, 2005-2044, 2005-2530, 2005-2795, 2006-0077, 2006-0154, and 2006-0614

### Procedures

AP-25B-100, Radiation Worker Guidelines, Revision 26  
AP 25B-300, Radiation Work Permit Program, Revision 14  
RPP 02-105, Radiation Work Permit, Revision 24  
RPP 02-305, Personnel Surveys/Decontamination, Revision 15  
RPP 03-122, Skin Dose Calculations, Revision 9  
RPP 03-405, Exposure History Files, Revision 15

### Miscellaneous

2000 - 2005 Wolf Creek Exposure History - Summary  
ALARA Report Refuel 14  
Current collective exposure report  
EAD dose and peak dose rate reports  
Declared pregnant worker records  
Radiation Work Permit 06-0029 prejob briefing form  
Steam generator channel head surveys

4OA1: Performance Indicator Verification

### Procedures

AP 26A-007, NRC Performance Indicators, Revision 5

Technical Specifications