



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

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

March 31, 2000

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

SUBJECT: PLANT PERFORMANCE REVIEW - WOLF CREEK GENERATING STATION

Dear Mr. Maynard:

The purpose of this letter is to communicate our assessment of your performance and to inform you of our planned inspections at your facility. On March 8, 2000, we completed a Plant Performance Review (PPR) of Wolf Creek Generating Station. We conduct these reviews to develop an integrated overview of the safety performance of each operating nuclear power plant. We use the results of the PPR in planning and allocating inspection resources and as inputs to our senior management meeting (SMM) process. This PPR evaluated inspection results and safety performance information for the one-year period through February 11, 2000, but emphasized the last 6 months to ensure that our assessment reflected your current performance. Our most recent summary of plant performance at Wolf Creek Generating Station was provided to you in a letter dated March 19, 1999, and was discussed with you in a public meeting on March 25, 1999.

The NRC has been developing a revised reactor oversight process that will replace our existing inspection and assessment processes, including the PPR, the SMM, and the Systematic Assessment of Licensee Performance (SALP). We recently completed a pilot program for the revised reactor oversight process at nine participating sites and are making necessary adjustments based on feedback and lessons learned. We are beginning initial implementation of the revised reactor oversight process industry-wide, including your facility, on April 2, 2000.

This PPR reflects continued process improvements as we make the transition into the revised reactor oversight process. You will notice that the following summary of plant performance is organized differently from our previous performance summaries. Instead of characterizing our assessment results by SALP functional area, we are organizing the results into the strategic performance arenas embodied in the revised reactor oversight process. Additionally, in assessing your performance, we have considered the historical performance indicator data that you submitted in January 2000 in conjunction with the inspection results. The results of this PPR were used to establish the inspection plan in accordance with the new risk-informed inspection program (consisting of baseline and supplemental inspections). Although this letter incorporates some terms and concepts associated with the new oversight process, it does not reflect the much broader changes in inspection and assessment that will be evident after we have fully implemented our revised reactor oversight process.

Template RGN-001

During the last 6 months, with the exception of one reactor trip, Wolf Creek Generating Station typically operated at or near full power. Although the NRC identified some performance issues during this assessment period, we note that Wolf Creek Generating Station continues to operate in a safe manner.

In the reactor safety strategic arena, personnel errors and procedure inadequacies identified during this assessment period appeared to be isolated and not programmatic in nature. A number of engineering errors were identified with regard to modifications and engineering judgment. These errors are not indicative of a programmatic concern and, therefore, no additional inspection effort beyond the baseline inspection program is warranted.

We did not identify any significant performance issues in the radiation safety or safeguards strategic performance arenas. As a result, only baseline inspections are planned.

Enclosure 1 contains a historical listing of plant issues, referred to as the Plant Issues Matrix (PIM), that were used during this PPR process to arrive at our integrated view of your performance trends. The PIM for this assessment is grouped by the prior SALP functional areas of operations, maintenance, engineering, and plant support, although the future PIM will be organized along the cornerstones of safety as described in the revised reactor oversight process. The enclosed PIM includes items summarized from inspection reports or other docketed correspondence regarding Wolf Creek Generating Station. We did not document all aspects of licensee programs and performance that may be functioning appropriately. Rather, we only documented issues that we believe warrant management attention or represent noteworthy aspects of performance. In addition, the PPR may also have considered some predecisional and draft material that does not appear in the attached PIM, including observations from events and inspections that had occurred since our last inspection report was issued but had not yet received full review and consideration. We will make this material publically available as part of the normal issuance of our inspection reports and other correspondence.

Enclosure 2 lists our planned inspections for the period April 2000 through March 2001 at Wolf Creek Generating Station to allow you to resolve scheduling conflicts and personnel availability in advance of our inspector arrival onsite. The inspection schedule for the latter half of the period is more tentative and may be adjusted in the future due to emerging performance issues at Wolf Creek Generating Station or other Region IV facilities. We also included some NRC noninspection activities in Enclosure 2 for your information. Routine resident inspections are not listed due to their ongoing and continuous nature.

We will inform you of any changes to the inspection plan. If you have any questions, please contact me at 817-860-8148.

Sincerely,



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

Docket No. 50-482  
License Nos. NPF-42

Enclosures:

1. Plant Issues Matrix
2. Inspection Plan

cc w/enclosures:

Chief Operating Officer  
Wolf Creek Nuclear Operating Corp.  
P.O. Box 411  
Burlington, Kansas 66839

Jay Silberg, Esq.  
Shaw, Pittman, Potts & Trowbridge  
2300 N Street, NW  
Washington, DC 20037

Supervisor Licensing  
Wolf Creek Nuclear Operating Corp.  
P.O. Box 411  
Burlington, Kansas 66839

Chief Engineer  
Utilities Division  
Kansas Corporation Commission  
1500 SW Arrowhead Rd.  
Topeka, Kansas 66604-4027

Office of the Governor  
State of Kansas  
Topeka, Kansas 66612

Attorney General  
Judicial Center  
301 S.W. 10th  
2nd Floor  
Topeka, Kansas 66612-1597

County Clerk  
Coffey County Courthouse  
110 South 6th Street  
Burlington, Kansas 66839-1798

Vick L. Cooper, Chief  
Radiation Control Program, RCP  
Kansas Department of Health  
and Environment  
Bureau of Air and Radiation  
Forbes Field Building 283  
Topeka, Kansas 66620

Frank Moussa  
Division of Emergency Preparedness  
2800 SW Topeka Blvd  
Topeka, Kansas 66611-1287

Coffey County Commissioners  
Coffey County Courthouse  
110 South 6th Street  
Burlington, Kansas 66839

Coffey County Emergency  
Preparedness Coordinator  
Coffey County Courthouse  
110 South 6th Street  
Burlington, Kansas 66839

Mayor, City of Burlington  
City Hall  
P.O. Box 207  
Burlington, Kansas 66839

The Honorable Bill Freeman  
Mayor, City of LeRoy  
406 2nd Street  
LeRoy, Kansas 66857

Mayor, City of New Strawn  
City Hall  
P.O. Box 922  
New Strawn, Kansas 66871

Mayor, City of Waverly  
Rural Route 3, Box 85-B  
Waverly, Kansas 66871

Sheriff  
Allen County Emergency  
Preparedness Coordinator  
Allen County Courthouse  
P.O. Box 433  
Iola, Kansas 66749

Lyon County Emergency  
Preparedness Coordinator  
605 Lincoln  
Emporia, Kansas 66801

Anderson County Emergency  
Preparedness Coordinator  
315 Orange Street  
Garnett, Kansas 66032

Public Service Commission  
P.O. Box 360  
Jefferson City, Missouri 65102

Federal Emergency Management Agency  
John A. Miller, Regional Director  
Region VII  
2323 Grand Blvd., Suite 900  
Kansas City, Missouri 64108-2670

Ronald A. Kucera, Director of  
Intergovernmental Cooperation  
Department of Natural Resources  
P.O. Box 176  
Jefferson City, Missouri 65101

Gary McNutt, Deputy Director  
Section for Environmental Public Health  
P.O. Box 570  
Jefferson City, Missouri 65102

Jerry Uhlmann, Director  
State Emergency Management  
State Emergency Management Agency  
P.O. Box 116  
Jefferson City, Missouri 65109

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B. W. Sheron, Associate Dir. for Project Licensing and Technical Analysis (**BWS**)

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## United States Nuclear Regulatory Commission PLANT ISSUE MATRIX

By Primary Functional Area

Region IV  
 WOLF CREEK STATION

Date	Source	Functional Area	ID	Type	Template Codes	Item Title Item Description
01/08/2000	1999019-01	Pri: OPS Sec:	Licensee	NCV	Pri: 1A Sec: Ter:	<b>Failure to perform Technical Specification 3.8.1.1, Action b, within the required time limits</b> On October 14, 1999, the licensee failed to verify the operability of offsite power during an emergency diesel generator outage because of a personnel error. This is a violation of Technical Specification 3.8.1.1, Action b. This Severity Level IV violation is being treated as a noncited violation, consistent with Section VII.B.1 of the NRC Enforcement Policy. This violation is in the licensee's corrective action program as Performance Improvement Request 99-3369.
<b>Dockets Discussed:</b> 05000482 Wolf Creek 1						
11/27/1999	1999018-01	Pri: OPS Sec:	Licensee	NCV	Pri: 1A Sec: Ter:	<b>Misposition Fuel Assembly in the Spent Fuel Pool</b> The failure to move the correct fuel assembly in the spent fuel pool was a violation of Technical Specification 6.8.1.a. Licensee personnel picked up a fuel assembly from Location PP22 rather than P22 and placed it in spent fuel pool Location AA63. The safety significance was low since the fuel assembly was in a spent fuel pool location allowed by Technical Specifications. This Severity Level IV violation is being treated as a noncited violation, consistent with Section VII.B.1.a of the NRC Enforcement Policy. This violation is in the licensee's corrective action program as Performance Improvement Request 99-3521.
<b>Dockets Discussed:</b> 05000482 Wolf Creek 1						
10/16/1999	1999014	Pri: OPS Sec:	NRC	POS	Pri: 1C Sec: Ter:	<b>Resolution of a Technical Specification concern prior to repair of a reactor coolant system flow bistable output</b> The inspectors concluded that the licensee took the appropriate actions to complete the repairs on the failed reactor coolant system Loop 1 flow bistable output signal. When the signal failed, the licensee tripped the bistable within 6 hours as required by Technical Specifications. The licensee was required to remove the trip signal to allow troubleshooting activities. The licensee resolved the concern with removing the bistable from the tripped condition during discussions with NRC staff. The licensee was very thorough in their process of analyzing the concern, the technical restrictions, troubleshooting, including potential consequences, and repair activities.
<b>Dockets Discussed:</b> 05000482 Wolf Creek 1						
10/08/1999	1999010	Pri: OPS Sec:	NRC	POS	Pri: 3B Sec: 5A Ter:	<b>Good and consistent operator performance</b> Crews and individual licensed operators demonstrated good operational knowledge and ability to fulfill their licensed duties to protect public health and safety. The operators exhibited consistent performance among shift crews, staff crews, and onshift operations.
<b>Dockets Discussed:</b> 05000482 Wolf Creek 1						
10/08/1999	1999010	Pri: OPS Sec:	NRC	POS	Pri: 3B Sec: 5A Ter:	<b>A rigorous and effective licensed operator requalification evaluation process</b> A licensee prepared written and operating examinations that adequately measured operator knowledge and ability to certify continuing proficiency to protect public health and safety and for license renewal. The licensee's evaluators professionally and competently administered the operating examinations. They rigorously and thoroughly evaluated crew and operator performance to arrive at accurate pass/fail determinations. The licensee's use of "as found" evaluations was notably effective in early detection and correction of crew and individual weaknesses through an effective remedial training program.
<b>Dockets Discussed:</b> 05000482 Wolf Creek 1						
09/04/1999	1999013	Pri: OPS Sec:	NRC	POS	Pri: 1A Sec: 1B Ter:	<b>Shift Supervisor and operators performed well following the reactor trip and during the subsequent plant start</b> The licensee's response to a plant trip from 100 percent power and actions during the subsequent plant startup were very good. The shift supervisors provided very good oversight. The shift supervisors kept the control room distractions at a minimum following the trip and during the startup. The operators used three-way communications and peer checking at all times.
<b>Dockets Discussed:</b> 05000482 Wolf Creek 1						

**United States Nuclear Regulatory Commission**  
**PLANT ISSUE MATRIX**  
 By Primary Functional Area

Region IV  
 WOLF CREEK STATION

Date	Source	Functional Area	ID	Type	Template Codes	Item Title Item Description
07/24/1999	1999008	Pri: OPS Sec:	NRC	POS	Pri: 1A Sec: Ter:	<b>Communications and coordination improved during shift briefings and between operations and other depart</b> The communications and coordination during shift briefings and between the operations department and other site organizations improved. Control room shift turnover and prejob briefings improved (Section O4.1).
<b>Dockets Discussed:</b> 05000482 Wolf Creek 1						
06/12/1999	1999006	Pri: OPS Sec:	Licensee	NEG	Pri: 2B Sec: Ter:	<b>Failure to include 49 CCW system valves in locked valve program</b> During performance of the corrective actions for the failure to include Valve EGV-0105 in the locked valve program, the licensee discovered an additional 49 component cooling water system valves that were not included in the program. The licensee revised the appropriate procedure to include the additional valves. The licensee determined that the safety significance was low. The failure to include the valves in the locked valve program was an additional example of Noncited Violation 50-482/9902-04 and is not being cited separately.
<b>Dockets Discussed:</b> 05000482 Wolf Creek 1						
06/12/1999	1999006-01	Pri: OPS Sec:	NRC	NCV	Pri: 1A Sec: Ter:	<b>Failure to correctly perform a surveillance procedure during turbine generator startup</b> A control room operator and a maintenance technician did not correctly perform a Technical Specification required surveillance procedure during the main turbine generator startup. The causes of the error were an inadequate prejob briefing and poor communications during the test. The licensee successfully reperformed the surveillance procedure. The failure to properly perform the surveillance test is a violation of Technical Specification 6.8.1.a. This is a noncited violation and is in the licensee's corrective action program as Performance Improvement Request 99-1847.
<b>Dockets Discussed:</b> 05000482 Wolf Creek 1						
04/12/1999	1999003	Pri: OPS Sec:	Licensee	NEG	Pri: 1A Sec: Ter:	<b>Poor performance by operations personnel resulted in a fuel movement error during refueling efforts</b> Poor communications, ineffective supervisory oversight, and inattention to detail by refueling personnel resulted in the licensee placing one fuel assembly on top of another in the fuel transfer cart. The refueling bridge crane protective devices prevented the full weight of the assembly from resting on the assembly in the transfer cart. The fuel assemblies were not damaged. The licensee halted fuel movement until corrective actions for the event were implemented.
<b>Dockets Discussed:</b> 05000482 Wolf Creek 1						
04/12/1999	1999003-02	Pri: OPS Sec:	Licensee	NCV	Pri: 1C Sec: Ter:	<b>Containment penetration bypassed during core alterations</b> A violation of Technical Specification 3.9.4.c occurred when the licensee conducted core alterations with a direct access path open from the containment atmosphere to the auxiliary building atmosphere. A vent valve on the inside of containment and a test connection valve on the outside of containment in the reactor coolant system Hot Leg 1 to the residual heat removal Pump A line were open. This is a noncited violation and is in the licensee's corrective action program as Performance Improvement Request 99-1285.
<b>Dockets Discussed:</b> 05000482 Wolf Creek 1						
04/01/1999	1999003	Pri: OPS Sec:	NRC	POS	Pri: 1A Sec: Ter:	<b>Good operations performance during plant shutdown</b> The power reduction and transitions associated with the shutdown of the reactor for Refueling Outage 10 were conducted smoothly and error free.
<b>Dockets Discussed:</b> 05000482 Wolf Creek 1						

## United States Nuclear Regulatory Commission PLANT ISSUE MATRIX

By Primary Functional Area

Region IV  
 WOLF CREEK STATION

Date	Source	Functional Area	ID	Type	Template Codes	Item Title Item Description
03/20/1999	1999002	Pri: OPS Sec:	NRC	POS	Pri: 1A Sec: Ter:	<b>Good operator response to emergency diesel generator failure</b> The operators' response to the failure of Emergency Diesel Generator A was prompt and thorough. The shift supervisor exhibited very good supervisory oversight. The control room staff was attentive to plant parameters during troubleshooting and maintenance activities.
<b>Dockets Discussed:</b> 05000482 Wolf Creek 1						
03/19/1999	1999003	Pri: OPS Sec:	NRC	POS	Pri: 1A Sec: Ter:	<b>Good performance by operations during midloop activities</b> Operators drained the reactor coolant system to reduced inventory and midloop in a safe and deliberate manner, stopping on several occasions to ensure that all reactor coolant system level indications were tracking as required. Operations department management effectively established an environment in the control room which allowed the operators to focus on safe conduct of the evolution with few distractions.
<b>Dockets Discussed:</b> 05000482 Wolf Creek 1						
03/19/1999	1999003-01	Pri: OPS Sec:	Licensee	NCV	Pri: 1A Sec: Ter:	<b>Reactivity mismanagement event</b> A control room operator deborated the reactor coolant system for 31 minutes instead of the required 5 minutes. As a result, core thermal power exceeded the licensed power level of 3565 MwTh by 5 MwTh for a short period of time. The failure to monitor and control reactor reactivity at all times is a violation of Technical Specification 6.8.1. This is a noncited violation and is in the licensee's corrective action program as Performance Improvement Request 99-0946.
<b>Dockets Discussed:</b> 05000482 Wolf Creek 1						
02/06/1999	1998021	Pri: OPS Sec:	Licensee	POS	Pri: 1A Sec: Ter:	<b>Alert operator discovered maintenance failure to replace manway cover on waterbox</b> A nuclear station operator discovered that maintenance technicians had failed to replace a manway cover on a main condenser water box. The operator made this discovery while restoring the associated main condenser circulating water path to service following maintenance, but before flow had been restored.
<b>Dockets Discussed:</b> 05000482 Wolf Creek 1						
02/06/1999	1998021	Pri: OPS Sec:	NRC	POS	Pri: 1A Sec: Ter:	<b>Good performance by operations personnel during fire protection system testing</b> The inspectors concluded that the operations department prejob briefing of fire protection system testing was thorough, professional, and met all of the standards and expectations established by licensee management. The operations department performance of fire protection system testing demonstrated a high level of operator system knowledge and equipment familiarity. Overall, licensee performance of the fire protection system testing was very good.
<b>Dockets Discussed:</b> 05000482 Wolf Creek 1						
02/03/1999	1998021	Pri: OPS Sec:	NRC	POS	Pri: 1A Sec: Ter:	<b>End -of-life core MTC measurements were accomplished in a safe, deliberate, and conservative manner</b> The end-of-life core moderator temperature coefficient measurements were accomplished in a safe, deliberate, and conservative manner. All reactivity changes were made in accordance with established operations department guidance and expectations. The operations, engineering, and chemistry departments coordinated activities exceptionally well throughout the planning and performance of the procedure. Licensee management involvement was evident during briefings, and appropriate topics were discussed with an emphasis on safety over schedule adherence.
<b>Dockets Discussed:</b> 05000482 Wolf Creek 1						

## United States Nuclear Regulatory Commission PLANT ISSUE MATRIX

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Region IV  
 WOLF CREEK STATION

Date	Source	Functional Area	ID	Type	Template Codes	Item Title Item Description
10/24/1999	1999018-02	Pri: MAINT Sec:	Licensee	NCV	Pri: 3A Sec: Ter:	<b>Technical Specification requirement not satisfied prior to entry into Mode 4</b>  In October 1994, following replacement of the reactor coolant pump seal injection throttle valves during a refueling outage, the licensee failed to perform a flow balance test and set the throttle position of the valves prior to entering Mode 4. The event was of low safety significance since both pumps were functional (would not have reached runout following a loss of coolant accident). The licensee did not perform the required flow balance until after entry into Mode 3. This is a violation of Technical Specifications 3.5.2 and 3.5.3. This Severity Level IV violation is being treated as a noncited violation, consistent with Section VII.B.1.a of the NRC Enforcement Policy. This violation is in the licensee's corrective action program as Performance Improvement Request 99-3094. This closes Licensee Event Report 50-482/94-015.
Dockets Discussed: 05000482 Wolf Creek 1						
10/16/1999	1999014	Pri: MAINT Sec:	NRC	POS	Pri: 3A Sec: Ter:	<b>Repair of essential service water system containment isolation valve</b>  The licensee's actions were appropriate when essential service water Train A was removed from service to repair containment isolation Valve EF HV-49. The licensee posted protected train signs for emergency core cooling system Train B components and Emergency Diesel Generator B. The licensee also postponed maintenance work and surveillance tests to lessen the impact on the core damage frequency.
Dockets Discussed: 05000482 Wolf Creek 1						
10/16/1999	1999014-01	Pri: MAINT Sec:	Licensee	NCV	Pri: 2B Sec: Ter:	<b>Failure to Restore Containment Integrity Within the Required Technical Specification Time Limit</b>  The licensee identified that Technical Specification Section 3.6.1.1 should have been entered when using the postaccident sampling system and hydrogen analyzer system for containment atmosphere sampling or surveillance testing because the automatic isolation of the affected penetrations was dependent on a single channel of the solid state protection system. Thus, given a single failure, isolation of the penetrations could not be assured. From initial plant startup to May 24, 1999, the licensee failed to restore containment integrity within 1 hour when using the postaccident sampling system and hydrogen analyzer system for containment atmosphere sampling or surveillance testing. The licensee also failed to place the plant in Hot Standby within the 6 hour requirement of Technical Specification Section 3.6.1.1. This is a violation of Technical Specification Section 3.6.1.1. This Severity Level IV violation is being treated as a noncited violation, consistent with Appendix C of the NRC Enforcement Policy. This violation is in the licensee's corrective action program as Performance Improvement Requests 99-1978 and -2773 (closure of Licensee Event Report 99-006-00, 01).
Dockets Discussed: 05000482 Wolf Creek 1						
10/16/1999	1999014-02	Pri: MAINT Sec:	Licensee	NCV	Pri: 2B Sec: Ter:	<b>Failure to perform monthly channel checks on postaccident monitoring neutron flux instruments</b>  After procedure changes were implemented following issuance of Technical Specification Amendment 89, the licensee failed to perform the monthly channel checks on postaccident neutron flux instruments. This is a violation of Technical Specification 4.3.3.6, Table 4.3-7, Item 14. This Severity Level IV violation is being treated as a noncited violation, consistent with Appendix C of the NRC Enforcement Policy. This violation is in the licensee's corrective action program as Performance Improvement Request 99-2789 (closure of Licensee Event Report 99-010-00) (Section M8.2).
Dockets Discussed: 05000482 Wolf Creek 1						
09/04/1999	1999013	Pri: MAINT Sec:	NRC	POS	Pri: 2A Sec: Ter:	<b>Proactive effort by licensee regarding Moisture Separator Reheater Drain Tank to Feedwater Heater pipe repl</b>  The licensee reacted promptly to a piping failure at another facility. The licensee's investigation was thorough. The wall thickness at a 45 degree elbow for a moisture separator reheater drain tank to feedwater heater pipe was less than the required amount. The licensee replaced the piping and continued to investigate additional areas of potential problems.
Dockets Discussed: 05000482 Wolf Creek 1						

## United States Nuclear Regulatory Commission

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Region IV  
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Date	Source	Functional Area	ID	Type	Template Codes	Item Title Item Description
07/24/1999	1999008	Pri: MAINT Sec:	NRC	NEG	Pri: 2A Sec: Ter:	<b>Decline in plant material condition and housekeeping</b> The plant material condition and housekeeping had declined. This was evidenced an increase in the number of boric acid and water leaks in various systems and the presence of trash in numerous plant locations. The licensee had previously identified the material condition concerns and took corrective actions for the housekeeping items (Section M2.1).
Dockets Discussed: 05000482 Wolf Creek 1						
07/16/1999	1999011	Pri: MAINT Sec:	NRC	NEG	Pri: 5A Sec: Ter:	<b>One instance of poor implementation of the PIR program</b> The performance improvement request process was implemented poorly with respect to a meteorological instrumentation problem.
Dockets Discussed: 05000482 Wolf Creek 1						
07/16/1999	1999011	Pri: MAINT Sec:	NRC	POS	Pri: 3A Sec: Ter:	<b>Meteorological instrumentation calibrated and maintained correctly</b> With the exception of the temperature channels, the meteorological instrumentation was correctly calibrated and maintained.
Dockets Discussed: 05000482 Wolf Creek 1						
07/16/1999	1999011-01	Pri: MAINT Sec:	NRC	NCV	Pri: 3A Sec: Ter:	<b>Technical violation for failing to restore temperature measuring instrumentation within 7 days</b> The failure to restore temperature measuring instrumentation to operable status within seven days was a violation of Technical Specification 6.8.1. This Severity Level IV violation is being treated as a Non-Cited Violation, consistent with Appendix C of the NRC Enforcement Policy. This violation is in the licensee's corrective action program as Performance Improvement Request 99-2474 (Section M1.1).
Dockets Discussed: 05000482 Wolf Creek 1						
06/12/1999	1999006	Pri: MAINT Sec:	NRC	POS	Pri: 2A Sec: Ter:	<b>New central work control process was found to be good</b> The licensee's new central work control process incorporated just-in-time work package preparation, up-to-date work package review, work package approval by a senior reactor operator for current plant conditions, and inclusion of the work package in the approved daily schedule. The licensee realized an overall increase in personnel safety and reactor safety by reducing the opportunity for work to be accomplished outside of the comprehensive work planning, scheduling, and approval process.
Dockets Discussed: 05000482 Wolf Creek 1						
06/12/1999	1999006-02	Pri: MAINT Sec:	Licensee	NCV	Pri: 2B Sec: Ter:	<b>Missed surveillance on the auxiliary shutdown panel</b> From November 1997 to May 6, 1999, the licensee failed to demonstrate the operability of all the auxiliary shutdown panel controls. This was a violation of Technical Specification Section 4.3.3.5.2. The contacts were subsequently tested and found to be satisfactory. This is a noncited violation and is in the licensee's corrective action program as Performance Improvement Request 99-1777.
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 WOLF CREEK STATION

Date	Source	Functional Area	ID	Type	Template Codes	Item Title Item Description
06/12/1999	1999006-03	<b>Pri: MAINT</b> <b>Sec:</b>	Licensee	NCV	<b>Pri: 1A</b> <b>Sec:</b> <b>Ter:</b>	<b>Source range nuclear instruments not tested before entering Mode 6</b>  On April 9, 1999, the licensee entered Mode 6 without first performing an analog channel operational test for the source range neutron flux monitors. The failure to perform these tests, before entering Mode 6, violated the surveillance requirement of Technical Specification Section 4.9.2.c. This is a noncited violation and is in the licensee's corrective action program as Performance Improvement Request 99-1244.
<b>Dockets Discussed:</b> 05000482 Wolf Creek 1						
05/19/1999	1999008-01	<b>Pri: MAINT</b> <b>Sec:</b>	Licensee	NCV	<b>Pri: 3A</b> <b>Sec:</b> <b>Ter:</b>	<b>Requirements of action statement 19 not met for TS 3.3.2 due to inadequate work practices</b>  The failure to place the 4kV undervoltage circuitry in a tripped condition when the associated 15/48 Vdc power supply module was deenergized for more than an hour was a violation of action statement 19 for Technical Specification 3.3.2 (LER 50-482/99-007-00). Although the trip logic was altered from 2 of 4 signals required to actuate to 2 of 3, no loss of undervoltage trip function occurred. This Severity Level IV Violation is being treated as a noncited violation, consistent with Appendix C of the NRC Enforcement Policy. This violation is in the licensee's corrective action program as Performance Improvement Request 99-1968 (section M8.2).
<b>Dockets Discussed:</b> 05000482 Wolf Creek 1						
04/18/1999	1999003	<b>Pri: MAINT</b> <b>Sec:</b>	NRC	POS	<b>Pri: 3A</b> <b>Sec:</b> <b>Ter:</b>	<b>Good performance during Reactor Coolant Pump B maintenance activity</b>  The movement of Reactor Coolant Pump B from the reactor coolant system to a shipping container was well planned and executed. The prejob briefing was thorough and interactive. Personnel did not receive any unplanned radiological exposure.
<b>Dockets Discussed:</b> 05000482 Wolf Creek 1						
04/09/1999	1999004	<b>Pri: MAINT</b> <b>Sec:</b>	NRC	POS	<b>Pri: 3A</b> <b>Sec: 3B</b> <b>Ter:</b>	<b>Satisfactory performance by contract examiners</b>  The licensee's contractor examiners demonstrated skill in obtaining satisfactory examination coverage of a weld in spite of mechanical interference.
<b>Dockets Discussed:</b> 05000482 Wolf Creek 1						
04/09/1999	1999004	<b>Pri: MAINT</b> <b>Sec:</b>	NRC	POS	<b>Pri: 3A</b> <b>Sec: 4B</b> <b>Ter: 4C</b>	<b>Good performance regarding ASME code-governed repair and replacement activities</b>  ASME code-governed repair and replacement activities reviewed by the inspector were procured, performed, and tested in accordance with appropriate codes and procedures. The licensee's process for validating the use of proper material for code-governed repair and replacement was excellent.
<b>Dockets Discussed:</b> 05000482 Wolf Creek 1						
04/09/1999	1999004	<b>Pri: MAINT</b> <b>Sec:</b>	NRC	POS	<b>Pri: 4C</b> <b>Sec:</b> <b>Ter:</b>	<b>Successful ISI program implementation</b>  The licensee's examination reports reviewed provided good documentation of successful program implementation.
<b>Dockets Discussed:</b> 05000482 Wolf Creek 1						

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Date	Source	Functional Area	ID	Type	Template Codes	Item Title Item Description
03/20/1999	1999002-02	Pri: MAINT Sec:	Licensee	NCV	Pri: 1C Sec: Ter:	<b>Failure to correctly test a portion of the automatic level control circuitry of the EDG fuel oil transfer system</b>  On October 29, 1998, the licensee identified that since January 16, 1996, operators had failed to correctly test a portion of the automatic level control circuitry of the emergency diesel generator fuel oil transfer system. The licensee determined the root cause of the event to miscommunications between engineering and operations personnel. The failure to correctly test the fuel oil transfer circuitry was a violation of Technical Specification Surveillance Requirement 4.8.1.1.2.a.1. This Severity Level IV violation is being treated as a noncited violation, consistent with Appendix C of the NRC Enforcement Policy. This violation is in the licensee's corrective action program as Performance Improvement Request 98-3230 (closure of LER 98-06).
<b>Dockets Discussed:</b> 05000482 Wolf Creek 1						
03/20/1999	1999002-03	Pri: MAINT Sec:	Licensee	NCV	Pri: 2B Sec: Ter:	<b>Refueling water storage tank level channel analog channel operational test did not meet TS requirements</b>  On May 5, 1998, the licensee failed to place the refueling water storage tank channel in bypass during the analog channel operational test. This was a violation of Technical Specification 3.3-3, Action 16. This Severity Level IV violation is being treated as a noncited violation, consistent with Appendix C of the NRC Enforcement Policy. This violation is in the licensee's corrective action program as Performance Improvement Request 98-0486 (closure of LER 98-03) .
<b>Dockets Discussed:</b> 05000482 Wolf Creek 1						
03/20/1999	1999002-04	Pri: MAINT Sec:	Licensee	NCV	Pri: 2B Sec: Ter:	<b>CCW valve was not included in the locked valve program or monthly valve position surveillance procedure</b>  On January 28, 1999, the licensee failed to include Valve EGV-0105, component cooling water to the excess letdown heat exchanger, in the locked valve program or monthly valve position verification surveillance procedure. This was a violation of Technical Specification 4.7.3.a. This Severity Level IV violation is being treated as a noncited violation, consistent with Appendix C of the NRC Enforcement Policy. This violation is in the licensee's corrective action program as Performance Improvement Request 99-0258 (closure of LER 99-01).  FROM INSPECTION REPORT 99-06 - During performance of the corrective actions for the failure to include Valve EGV-0105 in the locked valve program, the licensee discovered an additional 49 component cooling water system valves that were not included in the program. The licensee revised the appropriate procedure to include the additional valves. The licensee determined that the safety significance was low. The failure to include the valves in the locked valve program was an additional example of Noncited Violation 50-482/9902-04 and is not being cited separately
<b>Dockets Discussed:</b> 05000482 Wolf Creek 1						
03/12/1999	1999003-03	Pri: MAINT Sec:	Licensee	NCV	Pri: 4C Sec: Ter:	<b>Failure to perform surveillance tests on containment isolation valves in the appropriate power mode</b>  On March 12, 1999, the licensee identified that prior to 1999 they had failed to complete testing of all containment isolation valves during Modes 5 or 6, as required by Technical Specification 4.6.3.2. However, all containment isolation valves had been successfully tested during this time. The majority of these valves were tested in modes other than that specified in the Technical Specification. This is a noncited violation and is in the licensee's corrective action program as Performance Improvement Request 99-0860 (Licensee Event Report 50-482/99-02).
<b>Dockets Discussed:</b> 05000482 Wolf Creek 1						
02/06/1999	1998021	Pri: MAINT Sec:	Licensee	NEG	Pri: 3A Sec: Ter:	<b>Failure by maintenance personnel to replace manway cover on a waterbox</b>  Licensee maintenance personnel did not replace a manway cover on a waterbox as specified in the work instruction. This would have allowed a significant volume of water to flow into the turbine building near the main condensate pumps, creating a significant personnel and equipment hazard, if circulating water flow had been restored.
<b>Dockets Discussed:</b> 05000482 Wolf Creek 1						

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02/06/1999	1998021	Pri: MAINT Sec:	NRC	POS	Pri: 2A Sec: Ter:	<b>Good material condition noted in essential service water pump rooms</b> The material condition of those plant systems and components evaluated during this inspection period was good, with few equipment deficiencies. Major material condition improvements were made to the essential service water pump rooms, including cleaning and painting of piping, valves, floors, and walls.
<b>Dockets Discussed:</b> 05000482 Wolf Creek 1						
02/06/1999	1998021-02	Pri: MAINT Sec:	Licensee	NCV	Pri: 1A Sec: Ter:	<b>Component cooling water pump auto-start circuits not tested</b> In November 1997, a portion of component cooling water pumps automatic start circuits was not tested in accordance with Technical Specification 4.7.3.b.2. From April 27 to May 9, 1998, component cooling water Pump B was inoperable for maintenance. In violation of Technical Specification 3.7.3, both Train B component cooling water pumps were inoperable from April 27 to May 9, 1998, which exceeded the Technical Specification allowed outage time of 72 hours (LER 98-008). This nonrepetitive, licensee-identified and corrected violation is being treated as a noncited violation consistent with Section VII.B.1 of the NRC Enforcement Policy.
<b>Dockets Discussed:</b> 05000482 Wolf Creek 1						
12/17/1999	1999021	Pri: ENG Sec:	NRC	POS	Pri: 2B Sec: Ter:	<b>Effective maintenance and testing program of engineered-safety-features ventilation system was implemented</b> The engineered safety-feature air filtration and adsorption units were properly maintained. Effective in-place filter and laboratory testing programs were implemented. The system engineer responsible for the engineered-safety-features filter ventilation systems was knowledgeable of the systems. The areas surrounding the ventilation filtration units were clean and free of debris.
<b>Dockets Discussed:</b> 05000482 Wolf Creek 1						
11/27/1999	1999018	Pri: ENG Sec:	Licensee	NEG	Pri: 4B Sec: 5B Ter:	<b>Essential Service Water Train A Unnecessarily Removed From Service</b> The licensee unnecessarily removed essential service water Train A from service for approximately 17 hours. This placed the plant in a significantly higher risk condition since Emergency Diesel Generator A and all emergency core cooling system Train A components were inoperable and unavailable. The piping downstream of the component cooling water heat exchanger had developed a pinhole leak. The licensee later determined that a noncode repair to the piping was acceptable and that the repair could be completed without removing Train A from service.
<b>Dockets Discussed:</b> 05000482 Wolf Creek 1						
10/16/1999	1999014-03	Pri: ENG Sec:	Licensee	NCV	Pri: 2B Sec: Ter:	<b>Failure to ensure the centrifugal charging pump discharge flow rate was less than or equal to 556 gallons per minute</b> The failure to ensure the centrifugal charging pump flow rate was less than or equal to 556 gallons per minute was a violation of Technical Specification 4.5.2.h.1(b). This Severity Level IV violation is being treated as a noncited violation, consistent with Appendix C of the NRC Enforcement Policy. This violation is in the licensee's corrective action program as Performance Improvement Request 99-2845 (closure of Licensee Event Report 99-011-00).
<b>Dockets Discussed:</b> 05000482 Wolf Creek 1						
09/24/1999	1999017	Pri: ENG Sec:	NRC	NEG	Pri: 4A Sec: Ter:	<b>Modification introduced potential emergency diesel generator common mode failure</b> The diodes installed in August 1998 in both emergency diesel generators were manufactured by International Resistor Corporation and were commercially procured and classified as safety-related in 1984. Nine months later, after two failures, they were removed from the emergency diesel generators and found to be defective. The diode installation resulted in the introduction of a potential common mode failure of the emergency diesel generators. However, because the failure mode of the defective diodes was use dependent, the highest overall exposure time for the common mode failures was reduced. The licensee calculated a risk increase of approximately 113 percent for an exposure period of 16 days. The NRC staff concluded that the actual risk increase was greater than 113 percent based on an exposure period of 32 days (since the last successful run) and an overall increase in risk resulting from the increase in common cause failure probability. The resulting change in the core damage frequency was determined to be risk significant.
<b>Dockets Discussed:</b> 05000482 Wolf Creek 1						

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09/24/1999	1999017	Pri: ENG Sec:	NRC	NEG	Pri: 4B Sec: Ter:	<b>Reuse of a diode stressed beyond its design was a poor practice</b>  The reuse of a diode which had been installed backwards and subjected to excessive current was a poor practice which most likely resulted in the reinstallation of a diode with reduced reliability. This diode was the second to fail on the Train A emergency diesel generator.
Dockets Discussed: 05000482 Wolf Creek 1						
09/24/1999	1999017	Pri: ENG Sec:	NRC	POS	Pri: 5B Sec: Ter:	<b>Root causes of erratic Train A emergency diesel generator voltage regulator operation</b>  The licensee's engineering organization was effective in identifying the causes of erratic Train A emergency diesel generator voltage regulator operation which was frequently observed by operators. The erratic operation of the voltage regulator resulted in several significant reactive load swings when the Train A emergency diesel generator was operated in parallel with the grid and significant voltage swings when operated on the emergency bus alone. This erratic operation was limited to the operating range of the emergency bus alone. This erratic operation was limited to the operating range of the voltage adjuster card, which was (plus or minus) 10 percent of the Train A emergency diesel generator nominal output of 4160 volts. Nevertheless, significant generator current fluctuations occurred when reactive load swings occurred. The licensee was able to re-create erratic voltage adjuster card behavior in the lab and concluded that it was caused by electronic noise from relay contact bouncing. Preliminary modifications to a prototype electronic adjuster card were effective in eliminating the sensitivity to relay contact bouncing. However, the licensee was not able to identify why the Train A emergency diesel generator was susceptible to relay contact bouncing and why the Train B emergency diesel generator was not.
Dockets Discussed: 05000482 Wolf Creek 1						
09/24/1999	1999017	Pri: ENG Sec:	NRC	POS	Pri: 5C Sec: Ter:	<b>Installation of diodes in emergency diesel generator voltage control system was good engineering practice</b>  The licensee complied with existing procurement and design control program requirements when emergency diesel generator voltage regulator control modifications were developed. The diodes were rated sufficiently for their proposed application. Although not the proper corrective actions for the observed problem, the modification was found to be a good engineering practice to minimize contact arcing, reduce electromagnetic interference, and prolong relay contact life.
Dockets Discussed: 05000482 Wolf Creek 1						
09/24/1999	1999017-01	Pri: ENG Sec:	NRC	NCV	Pri: Sec: Ter:	<b>Failure to Conduct Operability Evaluation as Required</b>  The licensee evaluated how the erratic voltage regulator affected the Train A emergency diesel generator operability and concluded that an engineering review was needed whenever the transient resulted in operation of the Train A emergency diesel generator outside the design limits specified in Drawing M-018-00371-WO1, Sheet 2. The inspectors identified two transients which were outside the limits specified in this drawing that had not been evaluated by the licensee's engineers as required by system operating procedures. Subsequent evaluations determined that the transients had no deleterious effect on the emergency diesel generator. This Severity Level IV violation of Technical Specification 6.8.1 was a noncited violation, consistent with Appendix C of the NRC Enforcement Policy (50-482/9917-01) and was placed in the licensee's corrective action program as Performance Improvement Requests 99-3142 and 99-3143.
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09/04/1999	1999013-01	Pri: ENG Sec:	NRC	NCV	Pri: 4A Sec: 4C Ter:	<b>Multiple design control errors</b> The licensee failed to verify the adequacy of designs on three occasions. Specifically, calculations did not adequately evaluate the acceptability of circuit cable lengths, did not provide an adequate analysis of the 120 Vac feeders and control circuits, and underestimated battery loads under accident conditions. The inspectors determined that the identified discrepancies had not caused a safety concern and that the licensee had acceptably corrected the affected design calculations. This was a violation of 10 CFR Part 50, Appendix B, Criterion III. This Severity Level IV violation, with three examples, is being treated as a noncited violation (50/482/9913-01), consistent with Appendix C of the NRC Enforcement Policy. The violation is in the licensee's corrective action program as the Performance Improvement Requests listed in Sections E8.1, E8.2 and E8.3. (This item closed Unresolved Item 482/97201-04)
Dockets Discussed: 05000482 Wolf Creek 1						
09/04/1999	1999013-02	Pri: ENG Sec:	NRC	NCV	Pri: 4A Sec: 4C Ter:	<b>Failure to correctly translate design input in plant procedure regarding minimum battery voltage calculation</b> The failure to correctly translate design input in plant procedures, specifically not having correct Class 1E battery service load profiles in the battery service test procedure, was identified as a violation of 10 CFR Part 50, Appendix B, Criterion V. This Severity Level IV violation is being treated as a noncited violation (50-482/9913-02), consistent with Appendix C of the NRC Enforcement Policy. The violation is in the licensee's corrective action program as Performance Improvement Request 97-4185 (This closed Unresolved Item 482/97201-11).
Dockets Discussed: 05000482 Wolf Creek 1						
09/04/1999	1999013-03	Pri: ENG Sec:	NRC	NCV	Pri: 4C Sec: Ter:	<b>Failure to accurately update USAR</b> The licensee failed to accurately update the Updated Safety Analysis Report periodically to assure that the information therein contains the latest material developed. The original 11 Updated Safety Analysis Report discrepancies identified by the NRC constituted a violation of 10 CFR Part 50.71(e) for failure to properly update the Updated Safety Analysis Report. This Severity Level IV violation is being treated as a noncited violation (50-482/9913-03), consistent with Appendix C of the NRC Enforcement Policy. The Updated Safety Analysis Report upgrade program had satisfactorily addressed the question of overall Updated Safety Analysis Report fidelity. The violation is in the licensee's corrective action program as Performance Improvement Requests 97-0547, 97-3958, 97-4018, 97-4126, 97-4179, 97-4190, 98-0062, and 98-0618 (This closed Unresolved Item 482/97201-21).
Dockets Discussed: 05000482 Wolf Creek 1						
05/01/1999	1999003-04	Pri: ENG Sec:	Licensee	NCV	Pri: 4C Sec: Ter:	<b>Failure to place snubbers in operable status within 72 hours</b> On November 9, 1997, a snubber failure resulted in the licensee's discovery that prior to October 2, 1995, several snubbers were inoperable. The licensee determined that these snubbers were not returned to operable status within 72 hours as required by then applicable Technical Specification 3.7.8. This was a violation of the Technical Specification. However, the licensee determined that the systems and subsystems remained operable with the degraded snubbers installed. This is a noncited violation and is in the licensee's corrective action program as Performance Improvement Request 99-0389 (Licensee Event Report 50-482/97-20).
Dockets Discussed: 05000482 Wolf Creek 1						
03/20/1999	1999002-05	Pri: ENG Sec:	Licensee	NCV	Pri: 3A Sec: Ter:	<b>Installation of a snubber with a defective part resulted in a historical violation of TS 3.7.8</b> On December 7, 1998, the licensee discovered the installation of an inoperable snubber on a main steam isolation valve which was a violation of Technical Specification 4.7.8. The licensee determined that the valve was operable with the defective snubber installed. This Severity Level IV violation is being treated as a noncited violation, consistent with Appendix C of the NRC Enforcement Policy. This violation is in the licensee's corrective action program as Performance Improvement Request 99-0037 (closure of LER 98-10).
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02/06/1999	1998021-03	Pri: ENG Sec:	NRC	NCV	Pri: 1A Sec: Ter:	<b>Leak rate testing of the containment hydrogen purge system</b>  The failure to include the containment hydrogen purge system's containment isolation valves in the appropriate leak rate testing program was a violation of Technical Specification 3.6.7.1. This nonrepetitive, licensee-identified and corrected violation is being treated as a noncited violation, consistent with Section VII.B.1 of the NRC Enforcement Policy.
Dockets Discussed: 05000482 Wolf Creek 1						
12/17/1999	1999021	Pri: PLTSUP Sec:	NRC	POS	Pri: 3B Sec: 3C Ter:	<b>A good radioactive waste effluent management program was implemented</b>  Overall, an effective radioactive effluent monitoring program was implemented. The processing, sampling, and analyses of radioactive liquid and gaseous waste effluents and the performance of effluent discharges were conducted in accordance with Offsite Dose Calculation Manual requirements. Improved performance was noted in the reduction of liquid and gaseous effluent radionuclide curies released and offsite doses. Since 1996, the curie amount of radioactive liquid and gaseous effluents released and resulting doses to the environment were reduced approximately 90 percent.
Dockets Discussed: 05000482 Wolf Creek 1						
12/17/1999	1999021	Pri: PLTSUP Sec:	NRC	POS	Pri: 5A Sec: 5C Ter:	<b>The Quality Assurance Assessment Program Was Properly Implemented</b>  Quality assurance oversight was effective. The lead auditor and technical specialists assigned to perform the audits of the radioactive waste effluent management program was experienced and well qualified to perform the program evaluations. The audits were intrusive and thorough and provided management with a comprehensive assessment of the Offsite Dose Calculation Manual and the radioactive waste effluent management program. Audit findings were properly documented, tracked in the station's Performance Improvement Request reporting system, and satisfactorily addressed in a timely manner. Performance Improvement Requests identified issues at the proper threshold to provide management with the information needed to assess the radioactive waste effluent management program.
Dockets Discussed: 05000482 Wolf Creek 1						
11/19/1999	1999020	Pri: PLTSUP Sec:	NRC	NEG	Pri: 1B Sec: 3A Ter:	<b>Untimely Communication of Need for Protective Action Recommendation</b>  There was slow communication to the offsite emergency manager of the need to consider protective actions beyond the emergency planning zone. This manager was not informed of this need until almost one hour after it was identified.
Dockets Discussed: 05000482 Wolf Creek 1						
11/19/1999	1999020	Pri: PLTSUP Sec:	NRC	NEG	Pri: 1C Sec: Ter:	<b>Weak Drill Control Affected Exercise Performance</b>  The scenario was adequate to demonstrate the licensee's onsite objectives. Two drill control problems were noted that affected the exercise results. These were inadequate simulation of the severity of the initiating fire and failure to prevent the premature staffing of the technical support center at the unusual event declaration.
Dockets Discussed: 05000482 Wolf Creek 1						
11/19/1999	1999020	Pri: PLTSUP Sec:	NRC	POS	Pri: 1C Sec: 5A Ter:	<b>Very Thorough and Self-Critical Evaluation of Exercise Performance</b>  The licensee's critique process was very thorough. The post-exercise facility debriefs were very well organized and inclusive. Participants were self-critical of their performances. Response managers held responders accountable for their actions, emphasizing the need for improvement where appropriate. The licensee's formal critique was well structured and referenced onsite objectives. The licensee appropriately captured the most important performance issues in the corrective action system, initiating 13 problem identification reports for issues requiring followup.
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09/03/1999	1999009	Pri: PLTSUP Sec:	NRC	STR	Pri: 1C Sec: Ter:	<b>The licensee continues to have an effective emergency preparedness program</b>  Overall, the emergency preparedness program was effectively implemented. Emergency response facilities were operationally maintained, and appropriate equipment and supplies were readily available. The emergency preparedness staff were knowledgeable and conscientious individuals with appropriate expertise. Senior station management strongly supported emergency preparedness involvement by all station personnel. Comprehensive and in-depth program audits were conducted by qualified personnel using detailed matrices. (Sections P2, P5, P6, P7.1)
Dockets Discussed: 05000482 Wolf Creek 1						
09/03/1999	1999009	Pri: PLTSUP Sec:	NRC	STR	Pri: 1C Sec: Ter:	<b>The licensee properly evaluated complex changes to the emergency plan</b>  The licensee recently implemented a complex change to the emergency plan. Procedures for conducting reviews of changes to the emergency plan were detailed, well understood, and followed during the recent plant change. Documentation related to the plan revision was readily available. The inspectors determined that changes to the emergency plan did not constitute a decrease in effectiveness. (Section P3)
Dockets Discussed: 05000482 Wolf Creek 1						
08/20/1999	1999012	Pri: PLTSUP Sec:	NRC	NEG	Pri: 2A Sec: Ter:	<b>Material condition of radwaste facilities</b>  Some problems were observed with the material condition of the licensee's radwaste facilities; one pipe tee and one valve showed significant surface rust (Section R2).
Dockets Discussed: 05000482 Wolf Creek 1						
08/20/1999	1999012	Pri: PLTSUP Sec:	NRC	NEG	Pri: 5A Sec: Ter:	<b>Biennial quality assurance audit of the Process Control Program was not comprehensive</b>  The biennial quality assurance audit of the Process Control Program was not comprehensive. The audit only addressed observation of a radwaste shipment, reviews of task observations, a summary of Performance Improvement Requests, and regulatory commitments. The Process Control Program contained approximately 13 areas and implementing procedures for processing, packaging, and transportation of radioactive wastes. As a result, this narrowly focused audit provided management with limited information needed to assess the program's performance (Section R7).
Dockets Discussed: 05000482 Wolf Creek 1						
08/13/1999	1999016	Pri: PLTSUP Sec:	NRC	NEG	Pri: 3C Sec: Ter:	<b>ALARA not fully supported by the IPS and LIC corrective actions departments</b>  The as low as is reasonably achievable committee was not fully supported by the integrated plant scheduling and licensing/corrective actions departments (Section R1.2).
Dockets Discussed: 05000482 Wolf Creek 1						
08/13/1999	1999016	Pri: PLTSUP Sec:	NRC	STR	Pri: 3B Sec: 3C Ter:	<b>1998 and 1999 nonoutage exposure goals were challenging</b>  The 1998 and 1999 nonoutage exposure goals were challenging. Departmental and task activity doses were properly tracked and trended by the as low as is reasonably achievable staff. The station's 3-year exposure average of 131 rem for 1998 was above the industry median of 116 rem. The higher exposure experienced during the 1997 refueling outage was due to the reactor core axial offset anomaly. This caused a higher source term and an increase in the station's 3-year exposure average. The temporary shielding program was effectively implemented. The hot spot reduction program was properly monitored.
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08/13/1999	1999016	Pri: PLTSUP Sec:	NRC	STR	Pri: 3B Sec: 3C Ter:	<b>ALARA work planning was effectively implemented</b> As low as is reasonably achievable (ALARA) work planning was effectively implemented. Radiological work packages were well planned, and ALARA personnel were very involved during the outage planning stage. Lessons-learned from past similar work were properly incorporated into the radiological work packages. Effective ALARA based initiatives were incorporated into the outage planning (Section R1.1).
<b>Dockets Discussed:</b> 05000482 Wolf Creek 1						
07/24/1999	1999008	Pri: PLTSUP Sec:	NRC	NEG	Pri: 3A Sec: Ter:	<b>Responding appropriately to a contamination event when removing a reactor system letdown filter vault radi</b> The licensee responded appropriately to a contamination event when removing a reactor coolant system letdown filter vault radiation detector. Four licensee personnel received internal and external contamination when removing a reactor coolant system letdown filter vault radiation detector. The licensee responded appropriately and identified proper corrective actions. There was no contamination problem during the filter change out. The licensee planned to complete the corrective actions in the near future (Section R4.1).
<b>Dockets Discussed:</b> 05000482 Wolf Creek 1						
07/16/1999	1999011	Pri: PLTSUP Sec:	NRC	STR	Pri: 3A Sec: Ter:	<b>Properly documented and implemented radiological environmental monitoring program</b> The licensee's radiological environmental monitoring program was correctly implemented. The radiological environmental monitoring program results were properly documented in an annual report.
<b>Dockets Discussed:</b> 05000482 Wolf Creek 1						
07/16/1999	1999011	Pri: PLTSUP Sec:	Licensee	WK	Pri: 3A Sec: Ter:	<b>Erroneous overexposure report due to miscalculation</b> Based on incorrect internal dose calculations, the licensee reported a suspected overexposure to the NRC. During the subsequent review of the event, the licensee determined no regulatory dose limit had been exceeded. However, the licensee identified weaknesses in radiological surveys, radiation worker practices, work planning, communications, radiation work permits, and procedural guidance for dose calculations.
<b>Dockets Discussed:</b> 05000482 Wolf Creek 1						
07/16/1999	1999011-02	Pri: PLTSUP Sec:	Licensee	NCV	Pri: 3A Sec: Ter:	<b>Failure by RP personnel to evaluate airborne radioactivity concentrations in accordance with NRC requireme</b> The licensee identified a violation involving a failure to make surveys in accordance with 10 CFR 20.1501(a). Radiation protection personnel failed to evaluate airborne radioactivity concentrations in a work area. This Severity Level IV Violation is being treated as a noncited violation, consistent with Appendix C of the NRC Enforcement Policy. This violation is in the licensee's corrective action program as Performance Improvement Request 99-2319.
<b>Dockets Discussed:</b> 05000482 Wolf Creek 1						
07/16/1999	1999011-03	Pri: PLTSUP Sec:	Licensee	NCV	Pri: 3A Sec: Ter:	<b>Failure to follow radiation protection procedures</b> The licensee identified two examples of a violation involving a worker that failed to follow radiation protection procedural guidance in accordance with Technical Specification 6.8.1. A radiation worker failed to follow radiation work permit protective clothing requirements and failed to frish properly for radioactive contamination. This Severity Level IV Violation is being treated as a noncited violation, consistent with Appendix C of the NRC Enforcement Policy. This violation is in the licensee's corrective action program as Performance Improvement Requests 99-2319 and 99-2437.
<b>Dockets Discussed:</b> 05000482 Wolf Creek 1						

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 WOLF CREEK STATION

Date	Source	Functional Area	ID	Type	Template Codes	Item Title Item Description
06/18/1999	1999007	Pri: PLTSUP Sec:	NRC	POS	Pri: 3A	<b>External exposure control program was effectively implemented</b> The external exposure control program was effectively implemented. Appropriate radiological controlled area access controls were maintained. Radiation workers wore the proper dosimetry. Radiation, contamination, high, and locked high radiation areas were properly controlled and posted. Housekeeping within the radiological controlled area was generally very good. ALARA low dose waiting areas were appropriately located and clearly identified. Keys for locked high radiation areas were issued and controlled in accordance with station procedures. Radiation work permits contained clear, consistent radiological control information. A radiological pre-job briefing for movement of fuel in the spent fuel pool was professionally conducted. Radiation protection job coverage of the fuel movement in the spent fuel pool was appropriate. An effective dosimetry program was maintained. Personnel contamination events during Refueling Outage X showed a 67 percent reduction from the number experienced during the previous refueling outage.
Dockets Discussed: 05000482 Wolf Creek 1					Ter:	
06/18/1999	1999007	Pri: PLTSUP Sec:	NRC	POS	Pri: 3A	<b>Effective internal exposure control program was implemented</b> An effective internal exposure control program was implemented. The use and positioning of air sampling equipment within the radiological controlled area were appropriate for monitoring radiological airborne conditions. The respirator inventory, maintenance, and issuance program was properly implemented. Proper total effective dose equivalent/as low as is reasonably achievable evaluations for respirator use were performed. Whole-body counting systems were calibrated and performance checked in accordance with station procedures. Internal dose assessment methodologies provided appropriate evaluations of internal dose.
Dockets Discussed: 05000482 Wolf Creek 1					Ter:	
06/18/1999	1999007	Pri: PLTSUP Sec:	NRC	POS	Pri: 3B	<b>Station workers used the personnel contamination monitors properly</b> Station workers used the personnel contamination monitors properly. Radioactive material, laundry, and trash containers were properly labeled and controlled. The portable radiation protection instrumentation program was properly maintained. The calibration and source response check programs for portable neutron and beta/gamma radiation survey instruments were implemented properly. Effective radioactive source inventory and leak testing programs were in place.
Dockets Discussed: 05000482 Wolf Creek 1					Ter:	
06/12/1999	1999006	Pri: PLTSUP Sec:	NRC	POS	Pri: 3A	<b>Good use of 'RADS' monitoring system was noted during outage</b> The licensee's use of the RADS monitoring system to monitor radiological work in the containment building during the refueling outage greatly improved the licensee's efforts to maintain dose as low as reasonably achievable. RADS was comprised of a combination of radio communications, teledosimetry, and video monitoring in a single system. This enabled health physics technicians to monitor work in containment from a remote location. The licensee reported that the overall dose received during the outage was approximately 141 REM, which was the lowest dose received since Refueling Outage 2.
Dockets Discussed: 05000482 Wolf Creek 1					Ter:	
03/31/1999	1999003	Pri: PLTSUP Sec:	NRC	POS	Pri: 3B	<b>Pre-outage radiation worker training was thorough and effective</b> Just-in-time radiation worker training provided to all radiation workers before the start of Refueling Outage 10 was thorough and effective. This resulted in raising the awareness and knowledge of radiation workers in the area of radiation protection.
Dockets Discussed: 05000482 Wolf Creek 1					Ter:	

## United States Nuclear Regulatory Commission PLANT ISSUE MATRIX

By Primary Functional Area

Region IV  
 WOLF CREEK STATION

Date	Source	Functional Area	ID	Type	Template Codes	Item Title Item Description
03/20/1999	1999002-06	Pri: PLTSUP Sec:	Licensee	NCV	Pri: 3A Sec: Ter:	<b>Contract radiation worker entered the RCA without current training</b>  A contract worker entered the radiological controlled area without current radiation worker training. The licensee determined that the root cause of the event was personnel error by a health physics technician. The technician issued dosimetry to the worker even though the computer based training record flagged the training as not current. This Severity Level IV violation is being treated as a noncited violation, consistent with Appendix C of the NRC Enforcement Policy. This violation is in the licensee's corrective action program as Performance Improvement Request 99-0327.
<b>Dockets Discussed:</b> 05000482 Wolf Creek 1						
03/31/1999	01	Pri: OTHER Sec:	NRC	LIC	Pri: 1C Sec: Ter:	<b>Technical Specification Amendment 123 (ISTS conversion)</b>  WCNOC's effort in the development of the Improved Standard Technical Specification amendment request and supplements was very good, and the support received from the WCNOC organization throughout the staff's review of the submittals was outstanding.
<b>Dockets Discussed:</b> 05000482 Wolf Creek 1						
03/30/1999	50-482	Pri: OTHER Sec:	NRC	LIC	Pri: 4C Sec: 4B Ter:	<b>Audit of Y2K readiness program.</b>  Wolf Creek is making use of its existing QA and modification programs and procedures to achieve Y2K readiness. Furthermore, Wolf Creek is engaged in extensive information sharing and interfaces with other entities on the Y2K problem. The need for Y2K contingency planning is understood by the Wolf Creek licensee and in keeping with the NEI/NUSMG 98-07 recommendation, one individual has been designated as the single point of contact for contingency planning. Executive management support was found to be aggressive at Wolf Creek. Management at Wolf Creek has dedicated the fiscal resources needed for successful completion of the Y2K readiness program.
<b>Dockets Discussed:</b> 05000482 Wolf Creek 1						

# United States Nuclear Regulatory Commission

## PLANT ISSUE MATRIX

By Primary Functional Area

### Legend

#### Type Codes:

BU	Bulletin
CDR	Construction
DEV	Deviation
EEI	Escalated Enforcement Item
IFI	Inspector follow-up item
LER	Licensee Event Report
LIC	Licensing Issue
MISC	Miscellaneous
MV	Minor Violation
NCV	NonCited Violation
NEG	Negative
NOED	Notice of Enforcement Discretion
NON	Notice of Non-Conformance
OTHR	Other
P21	Part 21
POS	Positive
SGI	Safeguard Event Report
STR	Strength
URI	Unresolved item
VIO	Violation
WK	Weakness

#### Template Codes:

1A	Normal Operations
1B	Operations During Transients
1C	Programs and Processes
2A	Equipment Condition
2B	Programs and Processes
3A	Work Performance
3B	KSA
3C	Work Environment
4A	Design
4B	Engineering Support
4C	Programs and Processes
5A	Identification
5B	Analysis
5C	Resolution

#### ID Codes:

NRC	NRC
Self	Self-Revealed
Licensee	Licensee

#### Functional Areas:

OPS	Operations
MAINT	Maintenance
ENG	Engineering
PLTSUP	Plant Support
OTHER	Other

EEIs are apparent violations of NRC Requirements that are being considered for escalated enforcement action in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Action" (Enforcement Policy), NUREG-1600. However, the NRC has not reached its final enforcement decision on the issues identified by the EEIs and the PIM entries may be modified when the final decisions are made.

URIs are unresolved items about which more information is required to determine whether the issue in question is an acceptable item, a deviation, a nonconformance, or a violation. A URI may also be a potential violation that is not likely to be considered for escalated enforcement action. However, the NRC has not reached its final conclusions on the issues, and the PIM entries may be modified when the final conclusions are made.

**WOLF CREEK STATION**  
**Inspection / Activity Plan**  
**04/02/2000 - 03/31/2001**

Units	Inspection Activity	Title	No. of Staff on Site	No. assigned to Procedure	Planned Dates Start	Planned Dates End	Inspection Type
	<b>PBB AW1 - RI - ADVERSE WEATHER PREP.</b>		<b>2</b>				
1	IP 7111101	Adverse Weather Protection		2	04/02/2000	07/01/2000	Baseline Inspections
	<b>PBB TM - RI - TEMPORARY MODIFICATIONS</b>		<b>2</b>				
1	IP 7111123	Temporary Plant Modifications		2	04/02/2000	03/31/2001	Baseline Inspections
	<b>PBB-TI - TI-144, PI DATA REVIEW</b>		<b>1</b>				
1	IP 2515/144	Performance Indicator Data Collecting and Reporting Process Review		1	05/14/2000	08/05/2000	Safety Issues
	<b>PBB EA1 - RI - EQUIPMENT ALIGNMENT 01</b>		<b>2</b>				
1	IP 7111104	Equipment Alignment		2	07/02/2000	08/12/2000	Baseline Inspections
	<b>PBB EP1 - RI - EMERGENCY PREPAREDNESS</b>		<b>2</b>				
1	IP 7111406	Drill Evaluation		2	07/02/2000	09/30/2000	Baseline Inspections
	<b>PSB-S1 - ACCESS AUTH/CONTROL, SEC PLAN, AND PIV</b>		<b>1</b>				
1	IP 7113001	Access Authorization Program (Behavior Observation Only)		1	07/10/2000	07/14/2000	Baseline Inspections
1	IP 7113002	Access Control (Search of Personnel, Packages, and Vehicles: Identification ar		1	07/10/2000	07/14/2000	Baseline Inspections
1	IP 7113004	Security Plan Changes		1	07/10/2000	07/14/2000	Baseline Inspections
1	IP 71151	Performance Indicator Verification		1	07/10/2000	07/14/2000	Baseline Inspections
	<b>PSB-RP1 - RAD MONITORING INSTR</b>		<b>1</b>				
1	IP 7112103	Radiation Monitoring Instrumentation		1	07/17/2000	07/21/2000	Baseline Inspections
	<b>PSB-RP2 - ALARA PLANNING/CONTROL 1</b>		<b>1</b>				
1	IP 7112102	ALARA Planning and Controls		1	08/28/2000	09/01/2000	Baseline Inspections
	<b>PBB AW2 - RI - ADVERSE WEATHER PREP.</b>		<b>2</b>				
1	IP 7111101	Adverse Weather Protection		2	10/01/2000	12/30/2000	Baseline Inspections
	<b>EMB - ISI</b>		<b>1</b>				
1	IP 7111108	Inservice Inspection Activities		1	10/02/2000	10/06/2000	Baseline Inspections
	<b>PSB-RP3 - ACCESS TO RAD SIGN AREAS AND PIV</b>		<b>1</b>				
1	IP 7112101	Access Control to Radiologically Significant Areas		1	10/23/2000	10/27/2000	Baseline Inspections
1	IP 71151	Performance Indicator Verification		1	10/23/2000	10/27/2000	Baseline Inspections
	<b>PSB-EP1 - A&amp;N, ERO, PI&amp;R, EAL/EP, AND PIV</b>		<b>2</b>				
1	IP 7111402	Alert and Notification System Testing		2	11/13/2000	11/17/2000	Baseline Inspections
1	IP 7111403	Emergency Response Organization Augmentation Testing		2	11/13/2000	11/17/2000	Baseline Inspections
1	IP 7111404	Emergency Action Level and Emergency Plan Changes		2	11/13/2000	11/17/2000	Baseline Inspections
1	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies		2	11/13/2000	11/17/2000	Baseline Inspections
1	IP 71151	Performance Indicator Verification		2	11/13/2000	11/17/2000	Baseline Inspections
	<b>PSB-RP4 - ALARA PLANNING/CONTROL 2</b>		<b>1</b>				
1	IP 7112102	ALARA Planning and Controls		1	11/27/2000	12/01/2000	Baseline Inspections
	<b>PBB EP2 - RI - EMERGENCY PREPAREDNESS</b>		<b>2</b>				
1	IP 7111406	Drill Evaluation		2	12/31/2000	03/31/2001	Baseline Inspections

This report does not include INPO and OUTAGE activities.  
This report shows only on-site and announced inspection procedures.

**WOLF CREEK STATION**  
**Inspection / Activity Plan**  
**04/02/2000 - 03/31/2001**

Units	Inspection Activity	Title	No. of Staff on Site	No. assigned to Procedure	Planned Dates		Inspection Type
					Start	End	
	<b>EMB</b>	<b>- MAINT RULE IMPLEMENTATION</b>	<b>1</b>				
1	IP 711112B	Maintenance Rule Implementation		1	02/12/2001	02/16/2001	Baseline Inspections
	<b>PBB EA2</b>	<b>- RI - EQUIPMENT ALIGNMENT 02</b>	<b>2</b>				
1	IP 7111104	Equipment Alignment		2	02/18/2001	03/31/2001	Baseline Inspections
	<b>EMB</b>	<b>- CHANGES</b>	<b>1</b>				
1	IP 7111102	Evaluation of Changes, Tests, or Experiments		1	03/05/2001	03/09/2001	Baseline Inspections
	<b>OB-PIR</b>	<b>- PIR INSPECT</b>	<b>5</b>				
1	IP 71152	Identification and Resolution of Problems		1	03/12/2001	03/16/2001	Baseline Inspections