

# UNITED STATES NUCLEAR REGULATORY COMMISSION

REGION IV 612 EAST LAMAR BLVD, SUITE 400 ARLINGTON, TEXAS 76011-4125

May 2, 2010

Matthew W. Sunseri, 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 05000482/2009004 ERRATA

Dear Mr. Sunseri:

Please replace pages 3, 4, 6, 27-30, and 35-38 of the Report Details in NRC Inspection Report 05000482/2009004, dated November 10, 2009 using the enclosed revision pages. These changes are needed to properly document changes from the disputed noncited violations from third quarter 2009 integrated inspection report.

In accordance with 10CFR 2.390 of the NRC's "Rule of Practice," a copy of this letter and its enclosure will be made available electronically for public inspection in the NRC Public Document Room or from the Publically Available Records component of the NRC's document system (ADAMS), accessible from the NRC website at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Sincerely,

/RA/

Geoffrey B. Miller, Chief Project Branch B Division of Reactor Projects

Docket: 50-482 License: NPF-42

Enclosure: As stated

Wolf Creek Nuclear Operating Corporation

Cc w/Enclosure: Vice President Operations/Plant Manager Wolf Creek Nuclear Operating Corporation P.O. Box 411 Burlington, KS 66839

Jay Silberg, Esq. Pillsbury Winthrop Shaw Pittman LLP 2300 N Street, NW Washington, DC 20037

Supervisor Licensing Wolf Creek Nuclear Operating Corporation P.O. Box 411 Burlington, KS 66839

Chief Engineer Utilities Division Kansas Corporation Commission 1500 SW Arrowhead Road Topeka, KS 66604-4027

Office of the Governor State of Kansas Topeka, KS 66612-1590

Attorney General 120 S.W. 10th Avenue, 2nd Floor Topeka, KS 66612-1597

County Clerk Coffey County Courthouse 110 South 6th Street Burlington, KS 66839

Chief, Radiation and Asbestos Control Section Bureau of Air and Radiation Kansas Department of Health and Environment 1000 SW Jackson, Suite 310 Topeka, KS 66612-1366

Chief, Technological Hazards Branch FEMA, Region VII 9221 Ward Parkway Suite 300 Kansas City, MO 64114-3372 Electronic distribution by RIV:

Regional Administrator (Elmo.Collins@nrc.gov)

Deputy Regional Administrator (Chuck.Casto@nrc.gov)

DRP Director (Dwight.Chamberlain@nrc.gov)

DRP Deputy Director (Anton.Vegel@nrc.gov)

DRS Director (Roy.Caniano@nrc.gov)

DRS Deputy Director (Troy.Pruett@nrc.gov)

Senior Resident Inspector (Chris.Long@nrc.gov)

Resident Inspector (Charles.Peabody@nrc.gov)

WC Administrative Assistant (Shirley.Allen@nrc.gov)

Branch Chief, DRP/B (Geoffrey.Miller@nrc.gov)

Senior Project Engineer, DRP/B (Rick.Deese@nrc.gov)

Public Affairs Officer (Victor.Dricks@nrc.gov)

Branch Chief, DRS/TSB (Michael.Hay@nrc.gov)

RITS Coordinator (Marisa.Herrera@nrc.gov)

Regional Counsel (Karla.Fuller@nrc.gov)

RIV Senior Enforcement Specialist (Ray.Kellar@nrc.gov)

Senior Enforcement Specialist (Gregory.Bowman@nrc.gov)

Congressional Affairs Officer (Jenny.Weil@nrc.gov)

**OEMail Resource** 

Only inspection reports to the following:

DRS STA (Dale.Powers@nrc.gov)

OEDO RIV Coordinator (Leigh.Trocine@nrc.gov)

R:\\_REACTORS\WC\Denial Reply.doc

ADAMS: □ No	Yes	■ SUNSI Review Complete		Reviewer Initials: GM	
		Publicly Ava	ilable	■ No	n-Sensitive
		□ Non-publicly Available		□ Sensitive	
PE:DRP/B	SRI:DRI	P/B	C:DRP/B		
CAlldredge	CLong		GMiller		
/RA/	/RA/		/RA/		
3/24/10	4/2/10		4/15/10		

OFFICIAL RECORD COPY

T=Telephone

E=E-mail

F=Fax

The cause of the finding has a problem identification and resolution crosscutting aspect in the area associated with the corrective action program because Wolf Creek failed to thoroughly evaluate the failure mechanism such that the resolutions address the causes and extent of conditions, as necessary. Specifically Wolf Creek did not properly consider the possibility of common-cause pitting failures which could have impacted the essential service water piping Train A structural integrity thereby affecting its cooling loads, including the Emergency Diesel Generator A [P.1(c)] (Section 1R15).

• Green. The inspectors identified a noncited violation of 10 CFR 50.65(a)(4) on March 24, 2009 when the licensee performed elective maintenance on safety bus relays, removed equipment from service, and failed to adequately assess and manage the increase in risk from maintenance activities. Specifically, the licensee failed to ensure that the offsite power supply remained conducive while in an extended diesel generator outage. The maintenance had the potential to open the normal offsite feeder breaker. This issue has been entered into the corrective action program as Condition Report 15727.

The inspectors determined that the performance of maintenance activities that reduced the reliability of offsite power during the extended allowed outage time for the Train B emergency diesel generator without managing the associated risk of the maintenance activities was a performance deficiency. The finding was more than minor because it is associated with the equipment performance attribute for the Mitigating Systems Cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Using Appendix M of Manual Chapter 0609, "Significance Determination Process," the inspectors determined the finding was of very low safety significance (Green) since it did not affect both qualified sources of offsite power and sufficient defense in depth remained. Additionally, the cause of the finding has a problem identification and resolution crosscutting aspect in the area associated with the corrective action program. Specifically, Wolf Creek did an extent of condition review in response to a previous violation which included Procedure STS IC-208B, but still failed to prohibit performance of STS IC-208B during the 7-day diesel outages [P.1(c)] (Section 1R19).

Green. On August 22, 2009, the inspectors identified a noncited violation of Technical Specification 3.0.3 in which both trains of Technical Specification 3.3.2 engineered safety features actuation system interlock function 8.a were bypassed with jumper wires in accordance with a plant procedure. Function 8.a is the interlock for reactor trip signal coincident with lo Tave signal. Wolf Creek blocked the signal from the feedwater valves with jumper wires during control rod drive motor-generator testing in Mode 3. The inspectors and the NRR technical specification branch found this to be contrary to the Updated Safety Analysis Report, the technical specifications, the technical specification bases, and the NRC safety evaluations supporting the technical specifications. The licensee entered this issue in their corrective action program as Condition Report 19318.

The inspectors found that the failure to implement Technical Specification 3.3.2 interlock, function 8.a was a performance deficiency. The inspectors determined that this finding was more than minor because it is associated with the design control attribute of the Mitigating Systems Cornerstone and it affected the cornerstone objective to ensure the availability, reliability, and capability of mitigating systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). The inspectors

-3- Enclosure

evaluated the significance of this finding using Inspection Manual Chapter 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," and screened the finding to Phase 2 because the finding represents a loss of a system's function. The inspectors used Inspection Manual Chapter 0609, Appendix A and screened the finding to the NRC senior reactor analyst for review because there was not an acceptable equipment deficiency in the pre-solved worksheet. The senior reactor analyst determined that the finding is Green because he solved Table 3.10 of the Risk-Informed Inspection Notebook for Wolf Creek Generating Station, Revision 2.1a and found that the loss of feedwater isolation signal for less than 3 days resulted in a 1E-7 (Green) outcome. The inspectors also determined that the cause of the finding has a crosscutting aspect in the human performance area associated with decision making because Wolf Creek failed to make a risk significant decision using a systematic process. This issue was evaluated more than once and those evaluations sought to justify bypassing the interlock rather than seek the full regulatory basis for the interlock [H.1.a] (1R15).

• Green. The inspectors identified a noncited violation of 10 CFR 50 Appendix B, Criterion III, "Design Control," for failing to translate the boric acid design basis into procedures that ensure time sensitive operator actions are completed to achieve the core shutdown margin specified in the core operating limits report. Performance Improvement Request 2005-3461 identified that if the room coolers were started while lake temperature was low, the boric acid solution temperature may decrease below the solubility limit. Corrective actions for heat tracing and room temperature logging took approximately 3 years to implement and stopped short of addressing boric acid system operation when nonsafety power is lost to the heat tracing and the plant must be taken to cold shutdown in accordance with technical specifications. The licensee entered this issue in their corrective action program as Condition Report 20717.

The failure to translate the design bases into procedures that ensure the function of the safety-related boric acid system upon loss of nonsafety-related heat tracing is a performance deficiency. The inspectors determined that this finding was more than minor because this issue aligned with Inspection Manual Chapter 0612, Appendix E, example 2.f, because the pipe temperature was required to stay above the boric acid solubility limit and the loss of the heat tracing and or room temperature decrease will block the boric acid system. This issue was associated with the equipment performance attribute of the mitigating systems cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events. The inspectors evaluated the significance of this finding using Phase 1 of Inspection Manual Chapter 0609, Appendix A, "Significance Determination of Reactor Inspection Findings for At Power Situations," and determined that the finding screened to phase 2 because the issue was a design or qualification deficiency confirmed to result in loss of operability or functionality The inspectors evaluated the significance of this finding using Phase 2 of Inspection Manual Chapter 0609, Risk Informed Inspection Notebook for Wolf Creek Generating Station, and determined that the finding was of very low safety significance because loss of the boric acid system in Table 3.9 for one year resulted in a 1E-7 CDF when giving recovery credit for the refueling water storage tank. The inspectors determined that this finding has a crosscutting aspect in the area of problem identification and resolution associated with the corrective action program component because Wolf Creek did not take appropriate corrective actions to resolve known deficiencies in the design and operation of the boric acid system for

-4- Enclosure

to allow reactor vessel head voiding during an alternative shutdown in lieu of restoring the plant to compliance with the requirements of 10 CFR Part 50, Appendix R, Section III.L constituted a reduction in safety margin [H.2(a)] (Section 40A5.3).

Cornerstone: Barrier Integrity

• Green. The inspectors identified a noncited violation of Technical Specification 5.4.1.a, "Procedures," for failure to follow Procedure AP 12-003, "Foreign Material Exclusion." On August 12, 2009, the inspectors conducted a walkdown of the spent fuel pool area and found duct tape attached to various fueling and control rod tools such that duct tape was below the water. This duct tape was not in the foreign material exclusion logs. Spent fuel pool foreign material control is required under Procedure AP 12-003. The licensee entered this issue in their corrective action program as Condition Report 20338.

The inspectors determined that the failure to log material in accordance with Procedure AP 12-003 was a performance deficiency. This finding is more than minor because it impacted the Barrier Integrity Cornerstone attribute of configuration control and affected the cornerstone objective to maintain functionality of the spent fuel pool system. Using Inspection Manual Chapter 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," this finding was determined to be of very low safety significance because the finding only affected the barrier function of the spent fuel pool. The inspectors determined that this finding has a crosscutting aspect in the area of problem identification and resolution associated with the corrective action program component because although Wolf Creek performed a root cause and extent of condition evaluation for untracked foreign material, the evaluation still failed to find the duct tape in the pool itself. This allowed the tape to continue to be untracked [P.1.c] (Section 1R05).

Cornerstone: Miscellaneous

• Severity Level IV. The inspectors identified a Severity Level IV noncited violation of 10CFR50.73, "Licensee Event Report System," with two examples in which the licensee failed to submit licensee event reports within 60 days following discovery of an event meeting the reportability criteria. First, on April 10, 2008, Wolf Creek submitted Licensee Event Report 2008-002-00 under 10 CFR 50.73(a)(2)(i)(B) which is operation prohibited by technical specifications but failed to make a report for a loss of safety function per 10 CFR 50.73(a)(2)(v) for the same event in which both trains of the emergency core cooling system were inoperable on February 13-14, 2008. Second, Wolf Creek filed Licensee Event Report 2008-004-00 on June 6, 2008 under 50.73(a)(2)(iv)(A) for an event that caused automatic start of an emergency diesel during a loss of offsite power on April 16, 2008. No report was made under 50.73(a)(2)(v) for an event or condition that could have prevented a safety function due to the loss of offsite power. Both issues are collectively captured in Condition Report 15318.

-6- Enclosure

- Turbine-Driven auxiliary feedwater pump run after trip and throttle valve maintenance on September 9, 2009
- Component cooling water train swaps after modification to valves on August 14, 2009
- Testing after repair to Emergency Diesel Generator A on December 5, 2008
- Replacement of Flow Transmitter BG FK-121 on August 28, 2009
- Limitorque and gearbox overhaul of essential service water Valve EF HV-31 on August 31, 2009
- Essential service water Valve EF HV-42 after maintenance on August 12, 2009
- Safety Bus NB02 Channel 4 under-voltage relay power supply replacement on March 24, 2009

The inspectors selected these activities based upon the structure, system, or component's (SSC) ability to affect risk. The inspectors evaluated these activities for the following:

- The effect of testing on the plant had been adequately addressed; testing was adequate for the maintenance performed
- Acceptance criteria were clear and demonstrated operational readiness; test instrumentation was appropriate

The inspectors evaluated the activities against the technical specifications, the USAR, 10 CFR Part 50 requirements, licensee procedures, and various NRC generic communications to ensure that the test results adequately ensured that the equipment met the licensing basis and design requirements. In addition, the inspectors reviewed corrective action documents associated with postmaintenance tests to determine whether the licensee was identifying problems and entering them in the corrective action program and that the problems were being corrected commensurate with their importance to safety. Specific documents reviewed during this inspection are listed in the attachment.

These activities constitute completion of eight postmaintenance testing inspection samples as defined in IP 71111.19-05.

# a. Findings

<u>Introduction.</u> The inspectors identified a Green noncited violation of 10 CFR 50.65(a)(4) in which the licensee failed to adequately assess and manage the risk associated with maintenance activities.

<u>Description.</u> On March 24, 2009, the licensee entered Technical Specification 3.8.1, Required Action B.4.2.2. This action allowed an emergency diesel generator to be inoperable for up to 7 days. On March 24, 2009, at 4:20 p.m., the inspectors noted that

-27- Enclosure

Wolf Creek performed Procedure STS IC-208B, "4kV Loss of Voltage and Degraded Voltage TADOT NB02 Bus – Separation Group 4," Revision 2A, to determine the 'asfound' conditions of the Channel 4 under voltage power supply. Operators entered Technical Specification 3.3.5, Condition A.1 and exited 19 minutes later. The power supply voltage ripple passed Procedure STS IC-208B, but Wolf Creek elected to replace it. Again on March 24, 2009, at 4:54 p.m., Wolf Creek entered Technical Specification 3.3.5, Condition A.1, to replace the subject Channel 4 power supply. Condition A.1 required the out-of-service channel to be placed in trip within 6 hours. Wolf Creek exited Technical Specification 3.3.5 at 9:09 p.m., on March 24. The removal of Channel 4 from service resulted in a higher probability of loss of power to the safety bus because the coincidence logic changed from two out of four to one out of three. The inspectors found that this logic was an input to the NB02 normal offsite power feeder breaker described in the offsite power surveillance procedure, STS NB-005, "Breaker Alignment Verification," Revision 18.

The inspectors reviewed Technical Specification Bases 3.8.1.B.4 which prohibits elective maintenance within the switchyard that would challenge offsite power while in the 7-day emergency diesel generator extended outage. The inspectors also reviewed the NRC Safety Evaluation Report (SER) for the 7-day emergency diesel generator allowed outage time (Technical Specification 3.8.1.B.4.2.2) and found that Section 4.6.c, states: "The offsite power supply [emphasis added] and switchyard conditions are conducive to an extend[ed] DG [completion time], which includes ensuring that switchyard access is restricted and no elective maintenance within the switchyard is performed that would challenge the offsite power availability." Additionally, Condition D of the technical specification bases states that no equipment or systems assumed to be available for the extended emergency diesel generator completion time are removed from service, which includes auxiliary feedwater, component cooling water, essential service water and their support systems. The support equipment protections are also mirrored in Section 4.0 of the NRC safety evaluation for Amendment 163. However, Wolf Creek removed one channel of under voltage protection for offsite power to Bus NB02 (Train B) which is a support system for the above equipment. The inspectors found that Procedure STS IC-208B permits the testing of degraded voltage relays while the diesel is out of service. These relays control the opening logic for the normal offsite power feed to the safety bus NB02. Additionally, Procedure AP 22C-003, "Operational Risk Assessment Program," Revision 13, prohibits elective maintenance within the switchyard that would challenge offsite power during Technical Specification 3.8.1.B.4.2.2. Normally the safety bus NB02 cabinets are protected equipment (no work allowed) but because this work was planned in advance for the diesel outage, the work was permitted. In consultation with the Office of Nuclear Reactor Regulation, the inspectors concluded that Procedure STS IC-208B and power supply replacement was inappropriate during the 7-day diesel outages because it increased the probability of the loss of offsite power to safety equipment that could not be powered by the diesel. Wolf Creek appropriately restricted access to the portion of the switchyard outside the protected area but did not appropriately restrict work for offsite power inside the protected area. The inspectors determined that challenges to offsite power can originate with elective maintenance inside the protected area. The inspectors found that Wolf Creek appropriately protected component cooling water, emergency service water, instrument busses, dc busses, emergency core cooling, the Train A diesel, and control room ventilation.

The inspectors determined that while Wolf Creek did assess risk under 10 CFR 50.65(a)(4) for this evolution, the risk analysis performed by the station was

-28- Enclosure

inadequate in that it failed to consider that the maintenance activity impacted the reliability of offsite power upon which the risk analysis to support the extended completion time of Required Action B.4.2.2 was based, and failed to address the potential for consequential equipment failures or human error, which indicate that the activity should have therefore been prohibited while the diesel generator was out of service. Specifically, the change in coincidence logic from 2 out of 4 to 1 out of 3 reduced the reliability of offsite power, in that a single spurious signal could result in actuation of the trip circuitry. The performance of maintenance activities inside the cabinets containing the protective circuitry for load shedder and emergency load sequencer also increased the likelihood of a spurious trip signal, similar to the way that equipment operation inside the switchyard would increase in the likelihood of spurious trip of offsite power.

The inspectors reviewed corrective actions from NCV 05000482/2008002-02 previously identified by inspectors when Wolf Creek made one of the offsite power sources inoperable during a 7-day diesel outage. The licensee reviewed Procedure STS IC-208B but did not revise it because the load shedder and emergency load sequencer procedure tests one channel at a time. No other expanded explanation was articulated in Condition Report 2008-0489. Condition Report 15727 was initiated for the March 24, 2009, maintenance, and the issue has since been corrected by Wolf Creek.

Analysis. The inspectors determined that the performance of maintenance activities that reduced the reliability of offsite power during the extended allowed outage time for the Train B emergency diesel generator without managing the associated risk of the maintenance activities was a performance deficiency. Traditional enforcement does not apply since there were no actual safety consequences or potential for impacting the NRC's regulatory function, and the finding was not the result of any willful violation of NRC requirements or Wolf Creek procedures. The finding was more than minor because it is associated with the equipment performance attribute for the Mitigating Systems Cornerstone and affected the cornerstone objective to ensure the availability. reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, this issue relates to the availability and reliability examples of the equipment performance attribute because an offsite power source was at greater risk of being lost. Using Appendix M of Manual Chapter 0609, "Significance Determination Process," the inspectors determined the finding was of very low safety significance (Green) since it did not affect both qualified sources of offsite power and sufficient defense in depth remained. Additionally, the cause of the finding has a problem identification and resolution crosscutting aspect in the area associated with the corrective action program. Specifically, Wolf Creek did an extent of condition review in response to a previous violation which included Procedure STS IC-208B, but still failed to prohibit performance of Procedure STS IC-208B during 7-day diesel outages [P.1(c)].

<u>Enforcement.</u> Title 10 CFR 50.65(a)(4) requires, in part, that licensees shall assess and manage the increase in risk that may result from proposed maintenance activities. Contrary to the above, on March 24, 2009, Wolf Creek failed to manage the risk resulting from a maintenance activity. Specifically, Wolf Creek failed to ensure that the offsite power supply remained conducive to an extended emergency diesel generator allowed outage time by performing elective maintenance which challenged the reliability of offsite power while the Train B emergency diesel generator was out of service for the extended

-29- Enclosure

outage time. Because the finding is of very low safety significance and has been entered into the corrective action program as Condition Report 15727, this violation is being treated as a noncited violation, consistent with Section VI.A of the NRC Enforcement Policy: NCV 05000482/2009004-06, "Performing Prohibited Elective Maintenance on Safety Bus NB02 Channel 4 during Emergency Diesel Generator Maintenance."

## 1R20 Refueling and Other Outage Activities (71111.20)

#### a. <u>Inspection Scope</u>

The inspectors reviewed the outage safety plan and contingency plans for the Wolf Creek outage conducted from August 19 to August 24, 2009, to confirm that licensee personnel had appropriately considered risk, industry experience, and previous site-specific problems in developing and implementing a plan that assured maintenance of defense in depth. During the forced outage, the inspectors observed portions of the shutdown and cooldown processes and monitored licensee controls over the outage activities listed below.

- Configuration management, including maintenance of defense indepth, is commensurate with the outage safety plan for key safety functions and compliance with the applicable technical specifications when taking equipment out of service.
- Clearance activities, including confirmation that tags were properly hung and equipment appropriately configured to safely support the work or testing.
- Status and configuration of electrical systems to ensure that technical specifications and outage safety-plan requirements were met, and controls over switchyard activities.
- Monitoring of decay heat removal processes, systems, and components.
- Controls over activities that could affect reactivity.
- Startup and ascension to full power operation, tracking of startup prerequisites, walkdown of the drywell (primary containment) to verify that debris had not been left which could block emergency core cooling system suction strainers, and reactor physics testing.
- Licensee identification and resolution of problems related to the August 19, 2009, forced outage activities.

Specific documents reviewed during this inspection are listed in the attachment. These activities constitute completion of one refueling outage and other outage inspection sample as defined in IP 71111.20-05.

#### b. Findings

No findings of significance were identified.

-30- Enclosure

# 4OA3 Event Follow-up (71153)

#### .1 Loss of Offsite Power and Reactor Trip on August 19, 2009

#### a. Inspection Scope

On August 19, 2009, inspectors responded to a reactor trip and a loss of offsite power when the 345 kV La Cygne line was struck by lightning. The inspectors verified that the emergency diesel generators started and supplied loads. The inspectors monitored control room activities and equipment until normal offsite power feeds were re-aligned to the safety busses. The inspectors walked down portions of the plant to ensure safety systems were functioning.

These activities constitute completion of one event response sample as defined in IP 71153-05.

#### b. Findings

No findings of significance were identified. This event was reviewed in detail by an NRC special inspection team. The results of the special inspection will be documented in NRC Inspection Report 2009-007.

## .2 Failure to Report Conditions that Could Have Prevented Fulfillment of a Safety Function

## a. <u>Inspection Scope</u>

The inspectors implemented IP 71151 consistent with Section 4OA1 of this report. The inspectors also utilized IP 71153 to review licensee event reports. The findings are documented below in accordance with Inspection Manual Chapter 0612.

# b. Findings

<u>Introduction.</u> The inspectors identified a Severity Level IV noncited violation of 10 CFR 50.73, with two examples in which the licensee failed to submit licensee event reports within 60 days following discovery of events or conditions meeting the reportability criteria.

Description. First, on April 10, 2008, the licensee submitted LER 2008-002 under 10 CFR 50.73(a)(2)(i)(B) which is operation prohibited by technical specifications. For 11 hours from February 13-14, 2008, Wolf Creek did not have an operable emergency core cooling system because no high head charging pumps were operable. Wolf Creek was in Technical Specification 3.0.3 during this time. Wolf Creek received enforcement discretion to remain at power. Charging Pump B was required to be declared inoperable because emergency diesel generator B was inoperable, and charging Pump A was inoperable because it did not have an operable room cooler. On June 25, 2009, the inspectors identified that Wolf Creek failed to report this event as a safety system functional failure under 10 CFR 50.73(a)(2)(v) for the emergency core cooling system being inoperable. Condition Report 00018156 was initiated for this issue in response to concerns raised by the NRC at the June Reactor Oversight Process meeting. On July 30, 2009, the licensee completed the evaluation of this condition report and concluded that the

-35- Enclosure

loss of high head charging was not reportable, however no evaluation demonstrated operability of the charging pumps.

The inspectors reviewed this issue under the safety system functional failures performance indicator. NEI 99-02, Regulatory Assessment Performance Indicator Guideline, Revision 5, defines a safety-system functional failure as those events meeting 10 CFR 50.73(a)(2)(v) and requires evaluation of conditions reported under other paragraphs of 50.73 for safety-system functional failures. Wolf Creek did not perform a review. Wolf Creek subsequently drafted a position paper which relied on the statements made in the Letter WO 08-0006, "Request for Notice of Enforcement Discretion from Technical Specification 3.8.1, 'AC Sources – Operating," which contained an attachment that provided information documenting Wolf Creek's verbal request for the Enforcement Discretion. The attachment contained the risk mitigation manual actions for not shutting down the unit, a discussion of the calculated incremental core damage probability used to justify enforcement discretion, and a qualitative statement regarding the adjacent pumps' room coolers. Wolf Creek also stated that it considered the centrifugal charging pump to be functional. The manual actions did not involve the failed room cooler. Wolf Creek also cited LER 2008-002-00 which contained the same discussion of the risk assessment, the functionality of the charging Pump A, and the adjacent pumps' room coolers. The inspectors did not find an evaluation demonstrating the operability of charging Pump A or B and hence the emergency core cooling system.

The inspectors consulted NUREG 1022, "Event Reporting Guidelines 10 CFR 50.72 and 50.73," Revision 2. NUREG 1022 Section 3.2.7, reportability under 50.73(a)(2)(v), states that operability under Generic Letter 91-18 is the correct standard to apply. Generic Letter 91-18 has been superseded by Regulatory Issue Summary 2005-20 which does not permit the use of risk assessment to justify operability. The inspectors found that Wolf Creek was incorrect in concluding that the application of functional under the risk assessment was equivalent to the words of "safety function" under 50.73(a)(2)(v). Another position paper drafted by Wolf Creek stated that centrifugal charging Pump B was operable although it was not supported by an operable emergency diesel generator. The inspectors disagreed with this application of the definition of the technical specification of operability and this application of Technical Specifications 3.8.1, 3.0.2, and 3.0.6 which require equipment to be supported by emergency power to perform the safety function. The inspectors consulted with NRR, who agreed with the inspectors' use of the rule and NUREG 1022. The issue was again placed into the corrective action program as Condition Report 19914.

In the second example, Wolf Creek filed LER 2008-004-00 on June 6, 2008. LER 2008 004-00 was filed under 50.73(a)(2)(iv)(A) for an event that caused automatic start of an emergency diesel during a loss of offsite power on April 16, 2008. No report was made under 50.73(a)(2)(v) for an event or condition that could have prevented a safety function due to the loss of offsite power. Inspectors reviewed NUREG 1022, Section 3.2.7 and found that:

"Both offsite electrical power (transmission lines) and onsite emergency power (usually diesel generators) are considered to be separate functions by GDC 17. If either offsite power or onsite emergency power is unavailable to the plant, it is

-36- Enclosure

reportable regardless of whether the other system is available. GDC 17 defines the safety function of each system as providing sufficient capacity and capability, etc., assuming that the other system is not available. Loss of offsite power should be determined at the essential switchgear busses."

This missed licensee event report is specifically captured in Condition Report 19371. Wolf Creek indicated that it plans to update LER 2008-004-00 or make a second licensee event report.

Analysis. The failure to submit a licensee event report was a performance deficiency. The inspectors reviewed this issue in accordance with Inspection Manual Chapter 0612 and the NRC Enforcement Manual. Through this review, the inspectors determined that traditional enforcement was applicable to this issue because the NRC's regulatory ability was affected. Specifically, the NRC relies on the licensee to identify and report conditions or events meeting the criteria specified in regulations in order to perform its regulatory function, and when this is not done, the regulatory function is impacted. The inspectors determined that this finding was not suitable for evaluation using the significance determination process, and as such, was evaluated in accordance with the NRC Enforcement Policy. The finding was reviewed by NRC management, and because the violation was determined to be of very low safety significance, was not repetitive or willful, and was entered into the corrective action program, this violation is being treated as a Severity Level IV noncited violation consistent with the NRC Enforcement Policy. This finding was determined to have a crosscutting aspect in the area of problem identification and resolution associated with the corrective action program in that the licensee failed to appropriately and thoroughly evaluate for reportability aspects all factors and time frames associated with the inoperability of the emergency core cooling system, the offsite power system, and the containment heat removal system [P.1(c)] (4OA3)

Enforcement. Title 10 CFR 50.73(a)(1) requires, in part, that licensees shall submit a licensee event report for any event of the type described in this paragraph within 60 days after the discovery of the event. Title 10 CFR 50.73(a)(2)(v) requires, in part, that events or conditions that could have prevented the fulfillment of the safety function of structures or systems that are needed to shutdown the reactor and maintain it in a safe shutdown condition, remove residual heat, control the release of radioactive material, or mitigate the consequences of an accident. Contrary to the above, in 2008, Wolf Creek failed to submit a licensee event report within 60 days for two separate events that could have prevented the fulfillment of the safety function of structures or systems that are needed to shutdown the reactor and maintain it in a safe shutdown condition, remove residual heat, control the release of radioactive material, or mitigate the consequences of an accident. Specifically, emergency core cooling and offsite power could have been or were actually lost on February 13-14, 2008 and April 16, 2008, respectively, and Wolf Creek did not submit an LER within 60 days. Wolf Creek did not have sufficient analyses to demonstrate that these two events were not reportable. In accordance with the NRC's Enforcement Policy, the finding was reviewed by NRC management and because the violation was of very low safety significance, was not repetitive or willful, and was entered into the corrective action program, this violation is being treated as a Severity Level IV noncited violation, consistent with the NRC Enforcement Policy: NCV 05000482/2009004-07, "Failure to Report Conditions that Could Have Prevented Fulfillment of a Safety Function."

-37- Enclosure

# **40A5** Other Activities

# .1 Quarterly Resident Inspector Observations of Security Personnel and Activities

#### a. Inspection Scope

During the inspection period, the inspectors performed observations of security force personnel and activities to ensure that the activities were consistent with Wolf Creek security procedures and regulatory requirements relating to nuclear plant security. These observations took place during both normal and off-normal plant working hours. These quarterly resident inspector observations of security force personnel and activities did not constitute any additional inspection samples. Rather, they were considered an integral part of the inspectors' normal plant status review and inspection activities.

# b. Findings

No findings of significance were identified.

-38- Enclosure