

## UNITED STATES NUCLEAR REGULATORY COMMISSION

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

September 2, 2008

Rick A. Muench, President and Chief Executive Officer Wolf Creek Nuclear Operating Corporation P.O. Box 411 Burlington, KS 66839

SUBJECT:

MIDCYCLE PERFORMANCE REVIEW AND INSPECTION PLAN -

WOLF CREEK GENERATING STATION

Dear. Mr. Muench:

On August 5, 2008, the NRC staff completed its performance review of Wolf Creek Generating Station for the first half of the calendar year 2008 assessment cycle. Our technical staff reviewed performance indicators for the most recent quarter and inspection results over the previous 12 months. The purpose of this letter is to inform you of our assessment of your safety performance during this period and our plans for future inspections at your facility.

This performance review and enclosed inspection plan do not include security information. A separate letter designated and marked as "Official Use Only - Security-Related Information" will include the security cornerstone review and resultant inspection plan.

Plant performance for the most recent quarter at Wolf Creek Generating Station was within the Licensee Response Column of the NRC's Action Matrix, based on all inspection findings being classified as having very low safety significance (Green) and all performance indicators indicating performance at a level requiring no additional NRC oversight (Green).

In our annual performance assessment letter dated March 3, 2008, a substantive crosscutting issue in the area of human performance was identified based on a number of findings associated with the work practices component of the human performance area specifically related to the failure to use and/or communicate human error prevention techniques and the failure to communicate expectations regarding procedural compliance. The crosscutting theme associated with the failure to use and/or communicate human error prevention techniques was also discussed during the 2006 annual assessment and the 2007 midcycle assessment. During this current assessment period, we noted that the effectiveness of your corrective actions appeared adequate to address this issue as evidenced by the identification of only one finding in the last 6 months of the assessment period involving either theme. Your corrective action included implementation of a human performance initiative to address the adverse trend, development of a coaching handbook on human performance, more management observations and initiating human performance indicators. Based on your corrective actions and the apparent effectiveness as demonstrated by the observed improvement, the substantive crosscutting issue associated with the work practices component is closed.

While it appears that the actions you implemented to address the theme associated with the work practices component were effective, we have concerns about your overall effectiveness in resolving human performance issues at Wolf Creek, as demonstrated by our identification of 14 additional findings related to other human performance components. Seven findings were related to the resources component of the human performance area. Five of these findings had a common theme related to failure to have complete, accurate, and up-to-date documentation, procedures, and/or work packages. While we have seen some effectiveness from your corrective actions, the overall trend with human performance and the identification of a new theme are of concern. Based on these findings with the common theme, the NRC staff has identified a new substantive crosscutting issue in the human performance area associated with resources at Wolf Creek. These findings occurred in the mitigating systems and initiating events cornerstones. Examples include an inadequate surveillance procedure that did not include all emergency core cooling system vent valves, a procedure that did not include an acceptance criteria for gaps in the containment sump, an inadequate procedure that resulted in the loss of all condensate pumps and a subsequent reactor trip, and an inadequate switchyard maintenance procedure that lead to a loss of offsite power. This new substantive crosscutting issue will remain open until we determine, through implementation of focused baseline inspections, that corrective actions have been effective.

In the 2007 annual assessment letter, dated March 3, 2008, the NRC identified a crosscutting theme associated with the corrective action program component of the problem identification and resolution area related to the failure to implement corrective action with a low threshold to allow for the complete, accurate, and timely resolution of issues. At that time, the NRC did not identify a substantive crosscutting issue because this theme represented a recent performance trend. Once identified, you placed the issue into your corrective action program and began developing action to address this issue. However, because of the number of findings, the presence of three common themes, and the ineffectiveness of your corrective actions during the current performance period, the NRC staff identified a substantive crosscutting issue in the problem identification and resolution area at Wolf Creek. The NRC staff identified 19 findings associated with the corrective action program component of the problem identification and resolution area. Five of these findings repeated the common theme discussed in the 2007 assessment letter associated with implementing a program with a low enough threshold for identifying problems. Seven had a common theme associated with the thoroughness of problem evaluations. The remaining seven had a common theme associated with the appropriateness of corrective actions. All of these findings were associated with the Mitigating System Cornerstone. These deficiencies resulted in failure to properly translating vortexing parameters into calculations, failure to adequately demonstrate no common cause failure mechanism existed between emergency diesel generators, an inadequate root cause assessment for emergency core cooling system voiding issues, sole reliance on engineering judgment to determine that a void stream would have no affect on pump performance, and several examples of failing to implement adequate corrective action for NRC identified issues.

Although your staff was informed of our concerns related to this adverse trend of failing to implement a program with a low enough threshold for identifying problems in our March 3, 2008, annual assessment letter, your immediate actions to address this adverse trend in problem identification and resolution were not effective since we continued to identify findings associated with this and two additional common themes. We noted that your improvement initiative, which collectively manages your overall plans for improvement, was not developed until July 2008. We understand that actions associated with this plan are in the early stage of implementation and have not yet proven effective. As a result, this substantive crosscutting issue will remain open until we determine, through implementation of the focused baseline inspections, that

corrective action implemented in accordance with your improvement initiative have been effective.

The enclosed inspection plan details the inspections, less those related to physical protection scheduled through December 31, 2009. The inspection plan is provided to allow for the resolution of any scheduling conflicts and personnel availability issues well in advance of inspector arrival onsite. Routine resident inspections are not listed due to their ongoing and continuous nature. The inspections in the last 9 months of the inspection plan are tentative and may be revised at the end-of-cycle review.

In accordance with 10 CFR 2.390 of the NRC's "Rules 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 Publicly Available Records component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <a href="http://www.nrc.gov/reading-rm/adams.html">http://www.nrc.gov/reading-rm/adams.html</a> (the Public Electronic Reading Room).

If circumstances arise which cause us to change the inspection plan, we will contact you to discuss the change as soon as possible. Please contact Vincent Gaddy of my staff at 817-860-8141 with any questions you may have regarding this letter or the inspection plan.

Sincerely,

Dwight D. Chamberlain, Director Division of Reactor Projects

Docket: 50-482 License: NPF-482

Enclosure: Wolf Creek Inspection/ Activity Plan

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

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Page 1 of 2 08/25/2008 13:44:59 Report 22

Wolf Creek
Inspection / Activity Plan

09/01/2008 - 12/31/2009

09/12/2008 Generic Safety Inspecti EP Baseline Inspection Baseline Inspections 10/24/2008 Baseline Inspections Baseline Inspections Baseline Inspections Baseline Inspections Baseline Inspections Inspection 07/17/2009 Not Applicable Not Applicable Type 09/12/2008 10/24/2008 10/10/2008 12/19/2008 07/31/2009 08/21/2009 10/03/2008 09/12/2008 09/12/2008 09/12/2008 09/12/2008 10/10/2008 06/05/2009 10/10/2008 10/10/2008 12/19/2008 12/19/2008 12/19/2008 06/05/2009 06/05/2009 12/19/2008 12/19/2008 12/19/2008 Planned Dates Start End 10/20/2008 39/08/2008 10/20/2008 39/29/2008 39/08/2008 09/08/2008 39/08/2008 09/08/2008 10/06/2008 10/06/2008 10/06/2008 0/06/2008 12/15/2008 2/15/2008 12/15/2008 2/15/2008 2/15/2008 2/15/2008 06/01/2009 36/01/2009 06/01/2009 07/20/2009 07/13/2009 08/17/2009 39/08/2008 12/15/2008 Start No. of Staff on Site Radiological Environmental Monitoring Program (REMP) And Radioactive Material Control Program Review of the Implementation of the Industry Ground Water Protection Voluntary Initiative Evaluations of Changes, Tests, or Experiments and Permanent Plant Modifications Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems Correction of Emergency Preparedness Weaknesses and Deficiencies Radiation Monitoring Instrumentation and Protective Equipment Emergency Response Organization Augmentation Testing Emergency Action Level and Emergency Plan Changes Emergency Action Level and Emergency Plan Changes Radioactive Material Processing and Transportation Access Control to Radiologically Significant Areas Title - OCCUPATIONAL RADIATION SAFETY - ALARA Occupational Exposure Control Effectiveness Licensed Operator Requalification Program - RADIATION SAFETY TEAM INSPECTION Alert and Notification System Testing RETS/ODCM Radiological Effluent Performance Indicator Verification ALARA Planning and Controls - TRIENNIAL FIRE PROTECTION INITIAL EXAM-WC (8/2009) INITIAL EXAM-WC (8/2009) - BIENNIAL REQUALIFICATION Alert & Notification System Drill/Exercise Performance Fire Protection [Triennial] Fire Protection [Triennial] Fire Protection [Triennial] **EP EXERCISE INSPECTION ERO Drill Participation** Exercise Evaluation **EP PROGRAM** 50.59 & MODS - INITIAL EXAM nspection Activity IP 71151-OR01 IP 71151-EP02 IP 71151-EP03 IP 71151-PR01 IP 71151-EP01 IP 7111111B IP 7111105T IP 7111105T IP 7111105T IP 2515/173 IP 7112102 IP 7111404 IP 7111405 IP 7112103 IP 7112201 IP 7112202 IP 7112203 IP 7112101 IP 7111402 IP 7111403 IP 7111404 IP 7111401 IP 711117 X02419 RP TEAM X02419 RP-ORS2 REQUAL IP 71151 **EB2-05T EB1-17** EXAM EP2 EP1 Number Unit

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

Wolf Creek

Inspection / Activity Plan 09/01/2008 - 12/31/2009

13:44:59

Page 2 of 2 08/25/2008 Report 22

Unit	·		No. of Staff	Planned Dates	Dates	Inspection
Number	Inspection Ac	Inspection Activity	on Site	Start	End	Type
	EB1-08 -	- INSERVICE INSPECTION	2			
<del>-</del>	IP 2515/172	Reactor Coolant System Dissimiliar Metal Butt Welds		10/10/2009		11/06/2009 Generic Safety Inspecting
<del>-</del>	IP 7111108P	Inservice Inspection Activities - PWR		10/10/2009	11/06/2009	11/06/2009 Baseline Inspections
	RP-ORS3 -	- OCCUPATIONAL RADIATION SAFETY - ALARA	~			
<del></del>	IP 7112101	Access Control to Radiologically Significant Areas		10/05/2009	10/09/2009	10/05/2009 10/09/2009 Baseline Inspections
-	IP 7112102	ALARA Planning and Controls		10/05/2009	10/09/2009	Baseline Inspections
_	IP 71151	Performance Indicator Verification		10/05/2009	10/09/2009	Baseline Inspections
	RP-ORS4 -	- OCCUPATIONAL RADIATION SAFETY - ACCESS	τ-			
<del></del>	IP 7112101	Access Control to Radiologically Significant Areas		10/26/2009	12/30/2009	12/30/2009 Baseline Inspections
<del></del>	IP 7112102	ALARA Planning and Controls		10/26/2009	10/26/2009 12/30/2009	Baseline Inspections
<b>~</b>	IP 71151	Performance Indicator Verification		10/26/2009	12/30/2009	12/30/2009 Baseline Inspections
	RP-ORS5 -	- OCCUPATIONAL RADIATION SAFETY - ALARA	<b>.</b>			
~	IP 7112101	Access Control to Radiologically Significant Areas		12/07/2009	12/11/2009	12/07/2009 12/11/2009 Baseline Inspections
-	IP 7112102	ALARA Planning and Controls		12/07/2009	12/11/2009	Baseline Inspections
<b>-</b>	IP 71151	Performance Indicator Verification		12/07/2009	12/11/2009	12/11/2009 Baseline Inspections