



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
612 EAST LAMAR BLVD, SUITE 400
ARLINGTON, TEXAS 76011-4125

September 1, 2010

Matthew W. Sunseri, President and
Chief Executive Officer
Wolf Creek Nuclear Operating Corporation
P.O. Box 411
Burlington, KS 66839

SUBJECT: MID-CYCLE PERFORMANCE REVIEW AND INSPECTION PLAN – WOLF
CREEK GENERATING STATION

Dear Mr. Sunseri:

On August 10, 2010, the NRC staff completed its performance review of Wolf Creek Generating Station. Our staff reviewed performance indicators (PIs) for the most recent quarter and inspection results for the period from July 1, 2009 through June 30, 2010. 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.

Overall, Wolf Creek Generating Station operated in a manner that preserved public health and safety and met all cornerstone objectives with moderate degradation in safety performance. We have continuing concerns regarding your staff's ability to adequately address the station's issues in the cross-cutting area of problem identification and resolution and the impact equipment issues are having on the number of plant trips and safety system functional failures. This is the fifth consecutive assessment letter with a substantive crosscutting issue associated with a theme of thorough problem evaluation. As discussed during the August 25, 2010, public meeting, we recognize that you have developed and are implementing action plans to address a broad spectrum of performance concerns involving problem identification and resolution issues, equipment reliability, human performance, and use of operating experience. Because these activities have not yet proven fully effective in sustaining improvement, the NRC plans to conduct additional oversight activities as outlined in this letter.

Plant performance for the most recent quarter was within the Degraded Cornerstone column of the NRC's Action Matrix based on two White performance indicators for Unplanned Scrams and Unplanned Scrams with Complications in the first quarter of 2010 involving the Initiating Events Cornerstone, a White performance indicator for Safety System Functional Failures involving the Mitigating Systems Cornerstone and all inspection findings classified as having very low safety significance (Green). The Unplanned Scrams with Complications performance indicator originally crossed the Green-White threshold in the third quarter of 2009. As a result, when the performance indicators for Unplanned Scrams and Safety System Functional Failures crossed the Green-White threshold in the first quarter of 2010, the station entered the Degraded

Cornerstone column of the action matrix as discussed in our assessment follow-up letter dated June 7, 2010. Although the performance indicators for Unplanned Scrams and Unplanned Scrams with Complications both returned to Green in the second quarter of 2010, the station will remain in the Degraded Cornerstone column pending successful completion of the supplemental inspection conducted using Inspection Procedure 95002, "Inspection for One Degraded Cornerstone or Any Three White Inputs in a Strategic Performance Area." This inspection procedure is conducted to provide assurance that the root and contributing causes for the individual and collective risk significant performance issues are understood, to independently assess the extent of condition, to provide assurance that the corrective actions are sufficient to prevent recurrence, and to independently determine if safety culture components caused or significantly contributed to the individual or collective risk significant performance issues. We will also implement Inspection Procedure 92723, "Follow Up Inspection for Three or More Severity Level IV Traditional Enforcement Violations in the Same Area in a 12-month Period", as part of the Inspection Procedure 95002 inspection to follow up on multiple Severity Level IV violations in the traditional enforcement area of impeding the regulatory process. We tentatively plan to conduct this inspection during the fourth quarter of the calendar year, pending notification of your readiness.

Four previous assessment letters identified a substantive crosscutting issue in the area of problem identification and resolution with a theme associated with the thoroughness of problem evaluation [P.1(c)]. In each of the assessment letters, we stated that this substantive crosscutting issue would remain open until we determined that your corrective actions had been effective. During three public meetings with the NRC between October 2008 and November 2009, you informed us that you had completed a root cause analysis for noted deficiencies related to problem identification and resolution and that you had implemented significant changes to improve the quality of problem evaluation, including: root cause evaluator training, a management alignment seminar, and increased management oversight of problem evaluation. Through our inspection process, we had noted some improvement in this area at the 2009 midcycle assessment; however, we continue to identify findings associated with this theme including thirteen Green findings identified during this assessment period. We note that you performed a safety culture assessment earlier this year and have developed corrective actions based on the results of the survey. Because the actions were only recently implemented and based on the large number of findings in this area, we feel your actions to sustain improvement have not yet proven effective. Therefore, the substantive crosscutting issue in problem identification and resolution associated with the thoroughness of problem evaluation [P.1(c)] will remain open.

Additionally, during this assessment period the NRC identified a new crosscutting theme associated with the appropriateness of timely corrective actions in the corrective action program component of problem identification and resolution. The theme is comprised of four findings affecting the initiating events and mitigating systems cornerstones. Examples include: a failure to establish goals and monitor the offgas radiation monitoring system per 10 CFR 50.65, the failure to correct an inadequate reactor vessel vent path during an outage, the failure to have adequate acceptance criteria for the effects of essential service water system corrosion, and the use of a non-safety related power supply in a safety related system. We note that the ability to develop and implement appropriate and effective corrective actions to address safety issues and adverse trends in a timely manner is dependent on the ability to evaluate problems. Given

the relation between problem evaluation and corrective action development and based on the continuation of the substantive crosscutting issue in problem evaluation for five consecutive assessment letters, we have a concern with your ability to address the new crosscutting theme in appropriate corrective action implementation. As a result, we are expanding the scope of the substantive crosscutting issue in problem identification and resolution to include the theme in appropriate corrective actions [P.1(d)].

The substantive crosscutting issue in problem identification and resolution will remain open until we determine through our inspections that corrective actions have been implemented in accordance with your improvement plan, appropriate measures and metrics demonstrate sustained improved performance, and there are no safety significant inspection findings and a notable reduction in the overall number of findings with this causal factor.

We request that you schedule a public meeting before the end of the calendar year to discuss your efforts for problem identification and resolution improvement. Also, we request you provide a written response within 30 days of the date of this letter that provides details on your corrective actions planned to address the crosscutting themes, unplanned scrams and safety system functional failures. Your response should include schedule, milestones, and performance monitoring measures and metrics.

The enclosed inspection plan details the inspections, less those related to physical protection scheduled through December 31, 2011. 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 nine months of the inspection plan are tentative and may be revised at the end-of-cycle review.

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.

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 (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

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 Geoffrey Miller at 817-860-8141 with any questions you may have regarding this letter or the inspection plan.

Sincerely,


Elmo E. Collins
Regional Administrator

Wolf Creek Nuclear Operating Corporation

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

Enclosure: Wolf Creek Generating Station Inspection / Activity Plan

cc w/Enclosure
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Publicly Avail	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Sensitive	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Sens. Type Initials	RWD
RIV/SPE/DRP/B	C:DRP/B	D:DRS	D:DRP	RA	
RWDeese	GBMiller	RJCaniano	AVegel	EECollins	
/RA/	/RA/	/JAClark for/	/RA/	/CCasto for/	
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Wolf Creek

Inspection / Activity Plan

09/01/2010 - 12/31/2011

Unit Number	Planned Dates Start End	Inspection Activity	Title	No. of Staff on Site
1	09/07/2010 09/10/2010	EB1-21 IP 7111121	- COMPONENT DESIGN BASIS INSPECTION Component Design Bases Inspection	9
1	09/20/2010 10/01/2010	IP 7111121	Component Design Bases Inspection	
1	10/04/2010 10/08/2010	BRQ IP 7111111B	- OPERATOR REQUAL INSP Licensed Operator Requalification Program	2
1	10/18/2010 10/22/2010	RS678 IP 71124.06	- RADIATION SAFETY TEAM INSPECTION Radioactive Gaseous and Liquid Effluent Treatment	3
1	10/18/2010 10/22/2010	IP 71124.07	Radiological Environmental Monitoring Program	
1	10/18/2010 10/22/2010	IP 71124.08	Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation	
1	10/25/2010 10/29/2010	EB1-07T IP 7111107T	- TRIENNIAL HEAT SINK PERFORMANCE Heat Sink Performance	1
1	11/08/2010 11/12/2010	EXAM X02451	- INITIAL EXAM INITIAL EXAM -WC (11/2010)	4
1	12/06/2010 12/17/2010	X02451	INITIAL EXAM -WC (11/2010)	
1	08/01/2011 08/05/2011	X02451	INITIAL EXAM -WC (11/2010)	
1	08/29/2011 09/02/2011	X02451	INITIAL EXAM -WC (11/2010)	
1	03/21/2011 03/25/2011	RP123 IP 71124.01	- RADIATION SAFETY Radiological Hazard Assessment and Exposure Controls	2
1	03/21/2011 03/25/2011	IP 71124.02	Occupational ALARA Planning and Controls	
1	03/21/2011 03/25/2011	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1	03/21/2011 03/25/2011	IP 71151-OR01	Occupational Exposure Control Effectiveness	
1	03/21/2011 03/25/2011	IP 71151-PR01	RETS/ODCM Radiological Effluent	
1	04/28/2011 05/13/2011	PSB2-08P IP 7111108P	- INSERVICE INSPECTION Inservice Inspection Activities - PWR	4
1	08/22/2011 08/26/2011	RS45 IP 71124.04	- RADIATION SAFETY Occupational Dose Assessment	2
1	08/22/2011 08/26/2011	IP 71124.05	Radiation Monitoring Instrumentation	
1	10/17/2011 10/21/2011	EB2-05T IP 7111105T	- TRIENNIAL FIRE PROTECTION Fire Protection [Triennial]	1
1	10/31/2011 11/04/2011	IP 7111105T	Fire Protection [Triennial]	
1	11/14/2011 11/18/2011	EP1 IP 7111401	- BIENNIAL EP EXERCISE INSPECTION Exercise Evaluation	3
1	11/14/2011 11/18/2011	IP 7111404	Emergency Action Level and Emergency Plan Changes	
1	11/14/2011 11/18/2011	IP 71151-EP01	Drill/Exercise Performance	

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

Unit Number	Planned Dates Start End	Inspection Activity	Title	No. of Staff on Site
1	11/14/2011 11/18/2011	EP1 - BIENNIAL EP EXERCISE INSPECTION		3
		IP 71151-EP02	ERO Drill Participation	
1	11/14/2011 11/18/2011	IP 71151-EP03	Alert & Notification System	

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 This report shows only on-site and announced inspection procedures.