

WOLF CREEK

NUCLEAR OPERATING CORPORATION

Matthew W. Sunseri
President and Chief Executive Officer

October 11, 2010

WM 10-0029

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Reference: Letter dated September 13, 2010, from T. Vogel, USNRC, to
M. W. Sunseri, WCNOG

Subject: Docket No. 50-482: Reply to Notice of Violation EA-10-160

Gentlemen:

Attachment I provides Wolf Creek Nuclear Operating Corporation's (WCNOG) reply to Notice of Violation (NOV) EA-10-160 as contained in the reference and described in Inspection Report 05000482/2010006. This letter contains no commitments.

If you have any questions concerning this matter, please contact me at (620) 364-4008, or Mr. Richard Flannigan, Manager Regulatory Affairs, at (620) 364-4117.

Sincerely,



Matthew W. Sunseri

MWS/rit

Attachment I – Reply to Notice of Violation EA-10-160

cc: E. E. Collins (NRC), w/a
G. B. Miller (NRC), w/a
B. K. Singal (NRC), w/a
Senior Resident Inspector (NRC), w/a

JEOL
NRC

Reply to Notice of Violation (NOV) EA-10-160

Description of Violation EA-10-160

Title 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," requires that, in the case of significant conditions adverse to quality, measures shall assure that the cause of the condition is determined and corrective action taken to preclude repetition. Contrary to the above, from December 4, 2009, to July 30, 2010, the licensee failed to assure that the cause of a significant condition adverse to quality was determined and corrective actions were taken to preclude repetition. Specifically, after a loss of offsite power event on August 19, 2009, the licensee failed to perform an adequate evaluation to determine the cause of loss of offsite power induced water hammers and internal corrosion in the essential service water system, and did not take corrective actions to preclude repetition of additional water hammer events and system leaks. The licensee performed an apparent cause evaluation when a root cause evaluation was required.

Reason for the Violation

The reason for this violation is that Wolf Creek Nuclear Operating Corporation (WCNOC) did not initially screen condition report (CR) 18785 to require performance of a root-cause evaluation (RCE) of water hammers and internal corrosion in the Essential Service Water System (ESWS). Subsequently, WCNOC did not re-screen CR 18785 to require an RCE following receipt of Non-Cited Violation (NCV) 2009007-03, *Failure to Correctly Screen Essential Service Water Piping Leaks for Significance*, on February 2, 2010.

CR 18785 reports the August 19, 2009 loss of offsite power that resulted in a water hammer of the ESWS, which contributed to formation of a leak in ESWS piping on the 1988' level of the Auxiliary Building. WCNOC performed an apparent cause evaluation (ACE), instead of the RCE required by procedure AI 28A-010, *Screening Condition Reports*, for CR 18785.

WCNOC received NCV 2009007-03 because the Screening Review Team (SRT) did not correctly apply the risk/consequence matrix criteria in attachment A, *Experience-Based Condition Classification Criteria*, and attachment B, *Risk-Informed Classification of Conditions*, of procedure AI 28A-010, *Screening Condition Reports*. Effective consideration of the multiple ESWS leaks would have increased the qualitative probability on Attachment A to AI 28A-010 from "Occasional" to "Probable" and would have resulted in the SRT assigning a root-cause evaluation to CR 18785 or CR 19248. The Senior Leadership Review Team (SLRT) did not correct the SRT's evaluation classification error because the SLRT used operational skills, knowledge, resource limitations and technical dispositions to justify assigning an ACE to CR 18785.

The special inspection team identified the failure to perform a RCE of the ESWS water hammer events and internal corrosion in an exit meeting on December 7, 2009 and CR 22239 was initiated on December 8, 2009 to address this issue. The ACE for CR 22239 did not develop a corrective action to perform a RCE of the ESWS water hammers and internal corrosion. The apparent cause evaluator for CR 22239 did not comply with step 5.8.3 of AP 28A-100, *Condition Reports*, which requires that the evaluator ensure that an ACE adequately addresses an NRC finding.

Station leadership also failed to ensure that a RCE was performed for the ESWS water hammers and internal corrosion. Despite recognizing that the ESWS leaks identified in CRs 18785, 19248 or 19278 should have increased the evaluation classification from an ACE to an RCE, the Manager Corrective Action determined that a RCE was not necessary because CR 18785 addressed the ESW leakage and CR 22239 evaluated and remediated the evaluation classification errors.

The Manager Corrective Action approved the ACE for CR 22239 on February 10, 2010 and the Corrective Action Review Board (CARB) did not challenge the failure to perform a RCE when it reviewed the ACE for CR 22239 on June 3, 2010. Appropriate action by the evaluator of CR 22239, by the Manager Corrective Action or by CARB to ensure that an RCE was performed on the ESWS internal corrosion and water hammers would have prevented NOV EA-10-160.

Corrective Steps That Have Been Taken and Results Achieved

Corrective actions taken under CR 22239 to address weaknesses in screening condition reports include providing more detailed instruction and criteria to AI 28A-010, training the SRT on screening techniques and coaching the CR screeners, SRT and SLRT on application of the CR screening criteria. Under CR 23032, the Manager Corrective Action developed evaluation criteria for CARB to use in assessing the quality of RCEs and ACEs that address NRC findings, NCVs or NOV. RCEs or ACEs that will not prevent recurrence of a NRC finding, NCV or NOV will be rejected by CARB.

To address performance of a RCE of the internal corrosion and water hammers in the ESWS, CR 26466 was initiated on June 30, 2010 to perform a Level 2 RCE. On October 2, 2010, CR 28474 was initiated to perform a Level 1 Incident Investigation (the highest level of cause determination at Wolf Creek) to evaluate and resolve the causes of ESWS internal corrosion, water hammers and recent underground leakage identified in the "A" ESWS piping. The Level 1 Incident Investigation of ESWS internal corrosion, water hammers and recent underground leakage assigned to CR 28474 is scheduled for completion by December 9, 2010.

To provide additional assurance that WCNOG responds effectively to NRC issues, Licensing compiles and reviews the corrective action documents that address cited violations, noncited violations, traditional enforcement violations, findings and unresolved items.

Corrective Steps That Will Be Taken to Avoid Future Violations

No additional corrective actions are necessary to address NOV EA-10-160.

Date When Full Compliance Will Be Achieved

Full compliance with the violation of Title 10 CFR Part 50, Appendix B, Criterion XVI described in NOV EA-10-160 will be achieved when the Level 1 Incident Investigation of ESWS internal corrosion and water hammers is completed by or on December 9, 2010.