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UNITED STATES

NUCLEAR REGULATORY COMMISSION

REGION IV

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

MAR - 7 1996

Wolf Creek Nuclear Operating Corporation ATTN: Neil S. Carns, President and Chief Executive Officer P.O. Box 411 Burlington, Kansas 66839

SUBJECT: WOLF CREEK GENERATING STATION ICING EVENT RESTART ISSUES

This letter responds to your letter of February 2, 1996, which documented the actions being taken by Wolf Creek Nuclear Operating Corporation prior to the restart of the plant following the icing event that resulted in the shutdown of the plant on January 30, 1996. Following the icing event of January 30 - February 2, 1996, I dispatched an Augmented Inspection Team to the Wolf Creek Generating Station to review the circumstances of the event. On the basis of the results of this inspection, your letter of February 2, and Licensee Event Reports 50-482/96-001 and 50-482/96-002, we have identified eight issues as of this date, which are required to be resolved prior to restarting Wolf Creek following the current refueling outage. These items are detailed in Enclosure 1. Enclosure 2 lists other issues stemming from the event which also require resolution, but not before plant restart.

As discussed with Mr. Otto Maynard in a telephone call on March 7, 1996, we plan to perform a special team inspection and conduct a review of the issues identified in Enclosure 1 prior to restart. In addition, you are requested to provide a written response addressing restart issue resolution, within 10 days of the date of this letter. If you identify other issues during the course of your review which you consider to be restart issues, please address them in your response.

Following the inspection and review of your response, and when you have indicated your readiness, we plan to conduct a public meeting in the vicinity of the plant to discuss the issues in both enclosures. This meeting has been tentatively scheduled for March 28, 1996. During this meeting, we will discuss the results of our restart inspection and related reviews. Additionally, Wolf Creek Nuclear Operating Corporation personnel will be expected to brief the NRC staff on the resolution of the restart issues and to discuss the status and planned corrective actions for the issues identified in Enclosure 2. Finally, you are encouraged to provide additional details on the planned actions described in your letter of February 22, 1996.

The issues identified in Enclosures 1 and 2, as well as other issues related to the icing event, are being reviewed for potential enforcement action. The enforcement aspects related to these issues will be addressed in separate correspondence.

Wolf Creek Nuclear Operating Corporation

If you have any questions, please contact me or Mr. Bill Johnson of my staff at 817/860-8148.

Sincerely,

lum Regional Administrator

Docket: 50-482 License: NPF-42

Enclosures: 1. Wolf Creek Restart Issues 2. Other Icing Event Issues

cc w/enclosures: Wolf Creek Nuclear Operating Corp. ATTN: Vice President Plant Operations P.O. Box 411 Burlington, Kansas 66839

Shaw, Pittman, Potts & Trowbridge ATTN: Jay Silberg, Esq. 2300 N Street, NW Washington, D.C. 20037

U.S. Nuclear Regulatory Commission ATTN: Regional Administrator, Region III 801 Warrenville Road Lisle, Illinois 60532-4351

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

Wolf Creek Nuclear Operating Corp. ATTN: Supervisor Regulatory Compliance P.O. Box 411 Burlington, Kansas 66839

Missouri Public Service Commission ATTN: Assistant Manager Energy Department P.O. Box 360 Jefferson City, Missouri 65102

MAR - 7 1996

Wolf Creek Nuclear Operating Corporation

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Wolf Creek Nuclear Operating Corporation

Kansas Corporation Commission ATTN: Chief Engineer Utilities Division 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

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Kansas Department of Health and Environment Bureau of Air & Radiation ATTN: Public Health Physicist Division of Environment Forbes Field Building 283 Topeka, Kansas 66620 Wolf Creek Nuclear Operating Corporation

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MAR - 7 1996

ENCLOSURE 1

WOLF CREEK RESTART ISSUES

- Essential service water system; adequacy of design and operation for anticipated weather
- Essential service water system misalignment on January 30, 1996; corrective actions to address impromptu alignment, lack of self-checking, shift turnover and command and control weaknesses, teamwork weakness, incomplete operations shift communications (including relief crew communications), lack of questioning attitude by operators and supervisors
- Improper positioning of a manual isolation valve (EF V-0263) in the Train B essential service water warming line in November 1995; corrective actions to prevent recurrence
- Turbine-driven auxiliary feedwater pump packing failure; corrective actions to prevent recurrence and completion of surveillance testing
- Missing procedures in control room copies of Emergency Management Guidelines; corrective actions to prevent recurrence and verification of current status
- Circulating water and service water systems; adequacy of design and operation for cold weather operation
- Emergency Plan Implementing Procedures; training, guidance and philosophy of using the administrative emergency action level chart
- Failure of 5 rod cluster control assemblies (control rods) to fully insert on January 30; actions taken to ensure control rods will fully insert and are operable

ENCLOSURE 2

OTHER ICING EVENT ISSUES

- Auxiliary boiler reliability
- Operator continued training on frazil ice detection, prevention, and mitigation
- Inaccurate Technical Specification Interpretation dealing with frazilice; cause of error and programmatic corrective actions
- Reactor engineering personnel advising operators to terminate emergency boration contrary to the procedure in effect; cause and corrective actions
- Failure to reach Mode 4 in the time required; causes and corrective actions
- Return of Train A essential service water system to operable status on January 30 without understanding and correcting the cause of the degradation; causes and corrective actions
- Capability of the turbine-driven auxiliary feedwater pump to perform its design function with water mixed with the oil of the pump inboard bearing
- Based on the lessons learned from the icing event, develop a program to determine the need to validate design input assumptions for safetyrelated systems
- Essential service water system; evaluation of past industry experience, evaluation of response to NRC Generic Letter 89-13, testing to verify adequacy of design modifications
- Evaluation of root cause for failure of 5 control rods to fully insert on January 30; future corrective actions to address the root cause