UNITED STATES



## NUCLEAR REGULATORY COMMISSION

**REGIONIV** 

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

APR 18 1996

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

SUBJECT: NRC INSPECTION REPORT 50-482/96-02

Thank you for your letter of March 28, 1996, in response to our letter and Notices of Violation and Deviation dated March 4, 1996. We have reviewed your reply and find it responsive to the concerns raised in our Notices of Violation and Deviation. We will review the implementation of your corrective actions during a future inspection to determine that full compliance has been achieved and will be maintained.

Sincerely, J. E. Dyer, Director

Division of Reactor Projects

Docket: 50-482 License: NPF-42

cc: 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

9604230308 960418 PDR ADOCK 05000482 Q PDR Wolf Creek Nuclear Operating Corporation

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

Wolf Creek Nuclear Operating Corp. ATTN: 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

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

County Clerk Coffey County Courthouse Burlington, Kansas 66839-1798

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 -3-Corporation

Division of Emergency Preparedness ATTN: Mr. Frank Moussa 2800 SW Topeka Blvd Topeka, Kansas 66611-1287

Wolf Creek Nuclear Operating Corporation

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bcc to DMB (IEO1)

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bcc distrib. by RIV:

L. J. Callan Resident Inspector DRP Director SRI (Callaway, RIV) Branch Chief (DRP/B) DRS-PSB Project Engineer (DRP/B) MIS System Branch Chief (DRP/TSS) RIV File Leah Tremper (OC/LFDCB, MS: TWFN 9E10)

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Wolf Creek Nuclear Operating Corporation

bcc to DMB (IE01)

bcc distrib. by RIV:

L. J. Callan DRP Director Branch Chief (DRP/B) Project Engineer (DRP/B) Branch Chief (DRP/TSS) Branch Chief (DRP/TSS) Leah Tremper (OC/LFDCB, MS: TWFN 9E10) Resident Inspector SRI (Callaway, RIV) DRS-PSB MIS System RIV File

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Neil S. "Buzz" Carns Chairman, President and Chief Executive Officer

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March 28, 1996

WM 96-0037

U. S. Nuclear Regulatory Commission ATTN: Document Control Desk Mail Station P1-137 Washington, D.C. 20555

Reference:	Letter	dated March	4, 1996,	from J. E.	Dyer,	NRC, to	N.S.
	Carns,						
Subject:	Docket	No. 50-482:	Response	to Deviatio	n 482,	/9602-01	and
Vio	Violat:	ion 482/9602	- 02				

Gentlemen:

Attached is Wolf Creek Nuclear Operating Corporation's (WCNOC) reply to Notice of Deviation 9602-01 and Notice of Violation 9602-02 which were documented in the referenced report by the Resident Inspectors. Deviation 9602-01 concerned two room temperatures below the value in the Updated Safety Analysis Report (USAR). This resulted in equipment in these two rooms operating in a room temperature of 52°F, instead of the stated USAR minimum value of 60°F.

Violation 9602-02 concerned the failure of the radiography personnel to ensure the radiographic exclusion area was unoccupied. As a result, a technician was in a locked room inside the radiography exclusion area boundary during radiography. In view of the EHC cabinet room's location, structure, and the configuration of the source, an individual's exposure within the room is estimated to have been less than one millirem.

WCNOC's response to the deviation and violation are in the attachment to this letter. If you have any questions regarding this response, please contact me at (316) 364-8831, extension 4100, or Mr. W. M. Lindsay at extension 8760.

Very truly yours,

neils am

Neil S. Carns

NSC/jad

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Attachment

cc: L. J. Callan (NRC), w/a W. D. Johnson (NRC), w/a J. F. Ringwald (NRC), w/a J. C. Stone (NRC), w/a

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## Reply to Notice of Deviation 482/9602-01

## Deviation 482/9602-01;

"During an NRC inspection conducted on December 31, 1995, through February 10, 1996, one deviation from your Updated Safety Analysis Report was identified. In accordance with the 'General Statement of Policy and Procedure for NRC Enforcement Action,' (60 FR 34381; June 30, 1995), the deviation is listed below:

Updated Safety Analysis Report Section 3.11(B).2.2, Table 3.11(B)-1, lists the minimum operating temperature for the electrical penetration rcom and the charging pump rooms as  $60^{\circ}F$ . Section 9.4.3.1.2 requires as part of power generation design basis four that all other areas of the auxiliary building be maintained between  $60^{\circ}F$  and  $104^{\circ}F$ .

Contrary to the above, on January 23, 1996, the inspector noted that the temperature in Electrical Penetration Room A was 52°F and on February 6, 1996, the temperature in Charging Pump B room was 52°F (482/9602-01)."

## Admission of Deviation:

Wolf Creek Nuclear Operating Corporation (WCNOC) acknowledges and agrees that a deviation of Wolf Creek Generating Station (WCGS) Updated Safety Analysis Report (USAR) occurred when the temperatures in the rooms discussed above were found below the lowest temperature described in the USAR.

#### Reason for Deviation:

The root cause for this situation is the description in the USAR which leads the reader to believe that the normal minimum values given are limits not to be exceeded. Special operating or cold weather conditions could cause the temperature to be lower than these nominal minimum design values.

## Corrective Steps That Have Been Taken and the Results Achieved:

- The condition of having the rooms at 52°F, instead of the minimum of 60°F discussed in the USAR, was evaluated by Engineering for operability concerns. Lower temperatures, down to 45°F, will not affect the operability of the components in the affected rooms.
- 2. Operations revised Procedure CKL-ZL-001 "Auxiliary Building Log and Daily Reading Sheets" to check daily the Electrical Penetration Rooms' (Rooms 1410 and 1409) temperature and maintain the temperature within the range of 65°F to 85°F by turning the Penetration Room Coolers "On" and "Off" as necessary. The procedure was revised on January 25, 1996.

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3. USAR Change Request 96-022 has been processed to reflect the change in minimum temperature for the A and B train Electrical Penetration Rooms and Charging Pump Rooms. Footnote 8 to Table 3.11(B)-1 "Plant Environmental Conditions" states "The 60°F normal minimum (temperature) is for personnel comfort and not for equipment operability. These rooms may at times be as low as 45°F without challenging equipment operability." The Plant Safety Review Committee (PSRC) approved the Unreviewed Safety Question Determination (USQD) on February, 14, 1996, allowing implementation of the USAR change.

# Corrective Steps That Will Be Taken To Avoid Further Deviation And The Date When Corrective Actions Will Be Completed.

1. Rooms with safety-related equipment in the Auxiliary Building, Control/Diesel Generator Building, Fuel Building, Radwaste Tunnel and Essential Service Water Screenhouse will be evaluated for minimum temperatures at which the equipment can operate. The evaluation will take into account characteristics such as oil viscosity, flexible seal performance, valve packing performance, nil-ductility temperatures, grease and other lubricant performance, and fan belt flexibility. Once the evaluation has been completed; if necessary, an additional USAR Change Request will be processed to update the USAR. These actions will be completed by August 30, 1996. Attachment to WM 96-0037 Page 3 of 5

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## Reply to Notice of Violation 482/9602-02

## Violation 482/9602-02:

"During an NRC inspection conducted on December 31, 1995, through February 10, 1996, one violation of NRC requirements was identified. In accordance with the 'General Statement of Policy and Procedure for NRC Enforcement Action,' (60 FR 34381; June 30, 1995), the violation is listed below:

Technical Specification 6.11 states, in part, that procedures for personal radiation protection shall be prepared consistent with the requirements of 10 CFR Part 20, and shall be approved, maintained, and adhered to for all operations involving personnel radiation exposure.

Procedure AP 25A-001, 'Radiation Protection Manual,' Revision 2, required personnel not to deviate from the conditions of a Radiation Work Permit once it is issued.

Radiation Work Permit 950047, Revision 2, required the radiographer to comply with Procedure AP 25B-200, 'Radiography Guidelines,' Revision 0.

Procedure AP 25B-200 required the radiographer to ensure that the exposure area was unoccupied.

Contrary to the above, on December 21, 1995, the radiographer failed to ensure that the exposure area was unoccupied, and as a result, two technicians remained inside the posted radiography boundary while the source was exposed."

## Admission of Violation:

Wolf Creek Nuclear Operating Corporation (WCNOC) acknowledges and agrees that a violation of Wolf Creek Generating Station (WCGS) Technical Specification 6.11 occurred when the radiographer failed to ensure the radiography exclusion area boundary was unoccupied.

## Reason for Violation:

The two radiography personnel conducting the radiography exclusion area boundary walk down (i.e., area check by radiography personnel to ensure all personnel are evacuated) on December 21, 1995, failed to provide a positive verification that the locked Electro-Hydraulic Control (EHC) cabinet room located within the radiographic exclusion area boundary was unoccupied. The radiography personnel believed that since the room was locked, it was unoccupied, therefore, no attempt was made to unlock and search the room. During the time of this walk down, an I&C Technician was working inside the locked EHC cabinet room and was in contact with a second I&C Technician located in the Control Room. An announcement was made by Operations to "Stand clear while performing radiography in the north end of the Turbine Building." The I&C Technician working in the EHC cabinet room heard this announcement and believed that he was unaffected since he was located in the south end of the Turbine Building. After the radiography was completed, but before the radiography exclusion area boundary barriers were removed, the I&C Technician Attachment to WM 96-0037 Page 4 of 5

radiography exclusion area boundary barriers were removed, the I&C Technician completed the work in the EHC cabinet room and, upon exiting the Turbine Building, determined that he was within the radiography exclusion area boundary. He immediately notified the Control Room of his situation. Radiographic operations were suspended and a significant PIR, PIR 95-3024, was initiated. Radiographic operations were suspended in the Turbine Building until December 27, 1995, after the completion of all immediate corrective action measures.

The investigation of this incident determined that there was a lack of positive verification that all personnel within the radiography exclusion area boundary were evacuated. While the procedure guidance does address conducting a check of the area within the radiography exclusion area boundary to ensure personnel are outside the radiography exclusion area boundary, training for radiography personnel did not emphasize the need to conduct a check of all areas within the boundaries such as locked rooms. The announcement provided by Operations for the notification as to the location of the radiographic activities was not specific enough to ensure all personnel understood the radiography exclusion area boundary. Through interviews with the I&C Technician, it was determined that had the announcement been more specific, the technician would have left the area. While the Control Room announcement was a contributing cause, the primary or root cause of the incident was determined to be less than adequate training for the radiography personnel on the proper method to provide verification of the absence of personnel in locked rooms which are located within a radiographic exclusion area boundary.

The distance from the exposed source to the I&C Technician was approximately 139 feet and there was a two foot, four inch thick concrete floor, as well as numerous equipment and piping installations between the individual and the source. This, combined with the use of a collimator to aid in the focusing of the radiation towards the north and down (i.e., away from the EHC cabinet room), further reduced the chances of any exposure to the I&C Technician. The individual was not wearing any dosimetry, but in view of the EHC cabinet room's location, structure, and the configuration of the source, an individual's exposure within the room is estimated to have been less than one millirem.

#### Corrective Steps That Have Been Taken and the Results Achieved:

- Letter QC 95-041 was issued on December 27, 1995 to provide additional guidance for assuring personnel are evacuated from the radiography area prior to commencing radiography and for better communicating the radiography exclusion area boundary information to plant personnel. Since the issuance of this letter, and implementation of the immediate corrective action measures described, no further incidents have occurred where personnel were found to be inside of a radiography exclusion area boundary. The letter provided the following guidance:
  - A face to face meeting with the Shift Supervisor (SS) will be held to provide a description of the area involved in the radiography exclusion area boundary.
  - The radiographer will request information from the SS on any work activities that are currently taking place in or near the radiography area.

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- The required Gai-tronics announcement by the SS will contain the location of the radiography and identification of the areas that need to be evacuated prior to commencement of the radiography.
- <sup>6</sup> Upon establishment of the preliminary radiography exclusion area boundary, radiography personnel will contact the Turbine Building watch to assist in the walk down of the area inside the radiography exclusion area boundary. This will include unlocking locked doors, so positive confirmation can be made that locked areas are free of personnel.
- The radiography personnel will consider placing the radiography exclusion area boundary at the minimum distance required by the Radiography Radiation Safety Manual, taking into account the difficulty of radiography exclusion area boundary maintenance.

QC personnel involved in radiography work were made aware of the requirements of QC letter QC 95-041 prior to recommencing radiography activities on December 27, 1995.

- 2. Lesson Plan TIN QC 11 434 07 "Radiation Safety" was revised on February 5, 1996, to incorporate the reference to PIR 95-3024 and the improvements for ensuring personnel have evacuated the radiography exclusion area boundary discussed in Letter QC 95-041 (also discussed above). Training for additional WCNOC and contractor QC personnel involved in radiography work in the plant was completed on February 13, 1996.
- 3. Lesson Plan TIN QC 11 300 06 "Inspection of Work Activities" was revised on February 5, 1996 to incorporate the reference to PIR 95-3024 and incorporate a discussion of the event described in PIR 95-3024. Training for additional WCNOC and contractor QC inspection and examination personnel to heighten their awareness of the issue was completed on February 13, 1996.

# Corrective Steps That Will Be Taken and the Date When Full Compliance Will Be Achieved.

Full compliance has been achieved and no further corrective actions are required.