

WOLF CREEK

NUCLEAR OPERATING CORPORATION

Donna Jacobs
Vice President Operations and Plant Manager

January 4, 2005

WO 04-0056

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

Subject: Docket No. 50-482: Special Report 2004-001

Gentlemen:

Special Report 2004-001, related to the unavailability of Post Accident Monitoring (PAM) equipment, is being submitted in accordance with Wolf Creek Generating Station (WCGS) Technical Specification 5.6.8, "PAM Report." This report contains information regarding the inoperability of the "A" train of Reactor Vessel Level Indicating System (RVLIS) for greater than thirty days. Attachment I provides the Special Report. Attachment II lists Wolf Creek Nuclear Operating Corporation's commitments contained in this letter.

If you have any questions concerning this matter, please contact me at (620) 364-4246, or Mr. Kevin Moles at (620) 364-4126.

Very truly yours,


Donna Jacobs

DJ/rlg

Attachment I: Special Report 2004-001
Attachment II: List of Commitments

cc: J. N. Donohew (NRC), w/a
D. N. Graves (NRC), w/a
B. S. Mallett (NRC), w/a
Senior Resident Inspector (NRC), w/a

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Special Report
2004-001

Background Information

The Reactor Vessel Level Indicating System (RVLIS) is used to assist in detecting the presence of a gas bubble or void in the reactor vessel, to assist in detecting the approach to inadequate core cooling, and to provide indication of the formation of a void in the reactor coolant system during forced flow conditions.

There are two trains of RVLIS, each utilizing two differential pressure transmitters: Narrow Range and Wide Range that measure the pressure drop from the bottom of the reactor vessel to the top. This measurement provides an indication of the reactor vessel water level or relative void content of the fluid surrounding the core. Each RVLIS train includes narrow and wide range measurements to cover different flow behaviors, ranging from no reactor coolant pump operation to any combination of reactor coolant pumps running.

The outputs from the transmitters are density compensated and displayed on four reactor vessel water level indicators in the Main Control Room. The four level indicators are divided into two separate channels, each containing both Narrow Range and Wide Range indications. For the purposes of Technical Specification 3.3.3, a channel is considered a train.

The Limiting Condition for Operation (LCO) for Technical Specification (T.S.) 3.3.3, "Post Accident Monitoring (PAM) Instrumentation," requires two channels of RVLIS to be OPERABLE in MODES 1, 2, and 3. Required Action A.1 requires restoring required channels to OPERABLE status in 30 days with one required channel inoperable. Condition B of TS 3.3.3 applies when the Required Action and associated Completion Time of Condition A is not met. Required Action B.1 requires following the directions of Specification 5.6.8, "PAM Report." Specification 5.6.8 requires a report be submitted outlining the preplanned alternate method for monitoring, the indicated cause of the inoperability, and the plans and schedule for restoring the RVLIS channels to OPERABLE status.

Description of Event:

WCGS declared the "A" train of RVLIS INOPERABLE on November 24, 2004 at 08:00 (CST), and entered Condition A of LCO 3.3.3. The resistance temperature detector (RTD) BBTE 1314 output on this train is indicating high and intermittently falling outside of the acceptable range.

Preplanned Alternate Methods of Monitoring RCS Parameters:

Alternate means of monitoring reactor vessel level are available to operators in the Main Control Room while RVLIS is not OPERABLE:

1. Core exit thermocouples indications: Instruments are located in the Main Control Room on panel RP81A/B and through monitoring of the Nuclear Plant Information System (NPIS) computer display.
2. Pressurizer level indication: Main Control Room indicators BBLI0459A, BBLI0460A and BBLI0461.
3. Reactor Coolant System Subcooling Monitor: Indicators BBTI1390A and BBTI1390B are located in the Main Control Room. In the event the subcooling monitor is not available, this information may be obtained using steam tables available in the Main Control Room along with Wide Range Resistance Temperature instruments or the core thermocouples.

While RVLIS indication is used in a limited way in WCGS Emergency Operating Procedures, guidance is provided in these procedures to direct operators to use the above alternate instrumentation should RVLIS be unavailable. Such guidance is provided in the following procedures:

Critical Safety Function Status Trees	EMG F-0
Response To Degraded Core Cooling	EMG FR-C2
Response To Saturated Core Conditions	EMG FR-C3
Response To Inadequate Core Cooling	EMG FR-C1
Natural Circulation Cooldown With Steam Void In Vessel (Without RVLIS)	EMG ES-05

Cause of Inoperability:

The "A" train of RVLIS was determined to be INOPERABLE due to indications that the density compensating RTD, BBTE1314, on train "A" was reading higher than the corresponding indicator on train "B".

Plans and Schedule for Restoring the Instrumentation Channels of the Function to Operable Status:

RVLIS transmitters are located outside containment in the Auxiliary Building. The RTDs and corresponding leads to the instrument channels are located inside the Containment bioshield and are inaccessible to personnel while operating at power. Therefore, further troubleshooting may only be done during shutdown periods. As such, additional troubleshooting and necessary correction actions will be taken during the next refueling outage, scheduled to begin in April 2005.

LIST OF COMMITMENTS

The following table identifies the actions committed to by Wolf Creek Nuclear Operating Corporation (WCNOC) in this document. Any other statements in this submittal are provided for information purposes and are not considered to be commitments. Please direct questions regarding these commitments to Mr. Kevin Moles, WCNOC Manager Regulatory Affairs, at (620) 364-4126.

COMMITMENT	Due Date/Event
WCGS will perform troubleshooting and the necessary repair and testing of transmitter instruments associated with RVLIS.	During the next refueling outage, scheduled to begin in April 2005.