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May 24, 2004

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
1 White Flint North
11555 Rockville Pike
Rockville MD 20852

Ref: Docket No. 50-607, License No. R-130
Subject: Special Report 2004-1, Missed Surveillance Requirement

Dear Sirs,

On May 13, 2004, a violation of the University of California, Davis McClellan Nuclear Radiation Center (UCD/MNRC) Technical Specifications, Rev 13, was identified. Section 4.2.1 of the Technical Specifications states, "Control rod worths shall be determined annually or after physical removal or any significant change in core or control rod configuration."

While performing a normal reactor startup on April 7, 2004, reactor operations personnel noted that the excess reactivity for that startup (Run 4991) was significantly lower than expected. Investigation revealed that the Transient Control rod (non-fueled followed) had become physically disconnected from its connecting linkage to its drive motor. The Transient Control rod was physically removed from the reactor core to inspect it and to properly reattach it to its drive linkage. It was determined that a self locking set screw had become loose, allowing the Transient rod to unthread itself from the lower connecting rod and remain fully inserted in the core (resting on the safety plate) while the control rod drive motor operated.

After replacing the suspect set screw, the Transient rod was properly reassembled and returned to its normal core location. As required by the Operating and Maintenance Manual (OMM 5140) Control rod operability tests and scram time tests were performed on the transient rod and were satisfactory. The reactor was started up and excess reactivity was determined to be satisfactory.

The reactor was then returned to normal operation.

On May 13, 2004, the Reactor Operations Supervisor was made aware of the requirements stated in Technical Specification Section 4.2.1 that control rod worths be determined "after physical removal". The reactor was shutdown until the Transient Control rod worth could be determined.

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On May 17, 2004, the worth of the Transient control rod was determined utilizing the Control Rod Calibration procedure specified in the UCD/MNRC Operating Instructions section 7.0. This value was then compared to the previous control rod worth (determined during the last annual shutdown) and found to be essentially the same (\$2.08 vs. \$2.02).

The reactor operations that occurred between April 8 and May 13 were all in accordance with the UCD/MNRC Operating Instructions. No abnormalities of any kind were noted on any monitored parameter during these operations.

All Supervisors and Operators were briefed on the above occurrence with an emphasis on maintaining a questioning attitude and reinforcing the need to check all the applicable requirements when performing work and/or retests.

In addition, the following items will occur:

- 1.0 Revision 14 to the Technical Specifications is currently being written, included in this change will be a clarification of the requirements of Section 4.2.1.
- 2.0 The next revision the UCD/MNRC Operating Instructions Section 7.0 Control Rod Calibration will include reference to Technical Specification 4.2.1 to reflect the requirements of both sections 4.1.2 and 4.2.1.
- 3.0 The next update/revision to the Control rod OMM 5140 will include reference to Technical Specifications 4.1.2 and 4.2.1 in the Maintenance section of the OMM.

This letter is to be both the preliminary and final report, which meets the requirements of Technical Specifications 6.6.2 b & c, and 6.7.2 b & c, which require a written report within 14 days, and a final report within 30 days.

Sincerely,



Walter G. Steingass
Reactor Operations Supervisor UCD/MNRC

Cc. Barry Klein
Warren Eresian
David M. Slaughter
Robert Flocchini (NSC Chairman)