

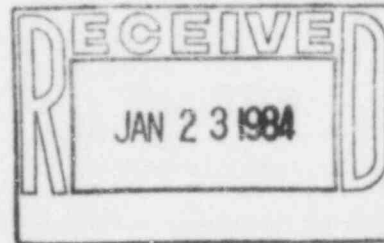


Nebraska Public Power District

GENERAL OFFICE
P.O. BOX 499, COLUMBUS, NEBRASKA 68601-0499
TELEPHONE (402) 564-8561

NLS 8400001

January 18, 1984



Mr. Eric Johnson
Reactor Project Branch I
U. S. Nuclear Regulatory Commission
Region IV
611 Ryan Plaza Drive
Suite 1000
Arlington, Texas 76011

Subject: NPPD Response to IE Inspection Report No. 50-298/83-31

Dear Mr. Johnson:

This letter is written in response to your letter dated December 23, 1983, transmitting Inspection Report No. 50-298/83-31. You indicated that one of our activities was in violation of NRC requirements.

Following is the statement of the reported violation and our response in accordance with 10CFR2.201.

Statement of Violation

Failure to Meet a Technical Specification Limiting Condition for Operation - Loading Fuel Into the Reactor Core with Control Rods Not Fully Inserted

Cooper Nuclear Station Technical Specifications, Section 3.10.A.2, states, "Fuel shall not be loaded into the reactor core unless all control rods are fully inserted or unless the spiral unload/reload technique is used."

Contrary to the above, on May 25, 1983, the licensee inserted fuel bundle LJX-113 into the reactor core with five control rods fully withdrawn.

This is a Severity Level IV Violation. (Supplement I.C) (298/8331-01)

Pursuant to the provisions of 10CFR2.201, Nebraska Public Power District is hereby required to submit to this office, within 30 days of the date of this Notice, a written statement or explanation in reply, including:

- (1) the corrective steps which have been taken and the results achieved;
- (2) corrective steps which will be taken to avoid further violations; and
- (3) the date when full compliance will be achieved.

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Discussion of Violation

During refueling outage, the refueling procedure required some new control rods to be installed into the core, certain control rods to be removed, and other control rod locations to be shuffled within the core. Generally, this was accomplished by removing the irradiated fuel from the subject fuel cells, shuffling and replacing control rods as applicable, inserting all control rods and then finally loading these fuel cells with fuel. During one of the fuel loading sequences, one of the fuel support pieces could not be positioned in the core. In order to conduct an underwater inspection using a TV camera, a change was made to the fuel movement data sheet to remove, and later reinstall, a fuel bundle in an adjacent fuel cell. This change was approved by a senior licensed operator and was noted at the time by the reactor engineering representative. After the fuel support piece was installed, the fuel bundle previously removed was reinstalled in accordance with the changed fuel movement data sheet. The performance of this fuel movement into the core prior to the insertion of all withdrawn control rods conflicted with the Technical Specifications requirement, Section 3.10.A.2 which states, "Fuel shall not be loaded into the reactor core unless all control rods are fully inserted or unless the spiral unload/reload technique is used". Prior to the removal of the fuel bundle in the adjacent fuel cell, the established pattern of control rods and fuel bundles had demonstrated a subcritical reactivity margin. Removal and reinstallation of the fuel bundle in the proper location did not change this established subcritical reactivity margin. Reinstallation of the fuel bundle did not, therefore, contribute to an increase of positive reactivity from the value that existed immediately prior to the removal of the affected fuel bundle from the core.

Corrective Steps Which Have Been Taken and the Results Achieved

1. The Operations Supervisor is now required to meet every week with the entire operating crew in training in order to discuss topics of concern involving reactor operations. One of the first topics discussed in these meetings was the error made in refueling operations. Compliance with Technical Specifications is also emphasized in these regular face to face meetings on any occasion which has raised a question of Technical Specifications. It is believed that the direct contact between the Operations Supervisor has had beneficial effect on plant operations and that this method is a more useful forum for emphasizing problems of a critical nature to operating crews than routing written reports to these shift workers or having similar material presented by instructors who probably would not be as personally involved as the Operations Supervisor. The increased involvement by the Operations Supervisor in these exchanges has also created a dialogue in which all operators have a very easy, direct feedback on operations problems. Prevention of similar occurrences should result directly from this method.

2. Training on Technical Specifications in order to emphasize both the content and the importance of Technical Specifications to the licensee has been conducted for all crews. The increased emphasis on knowing and following Technical Specifications is also visibly in evidence by the increased number of non-conformance reports written where even a possible question on Technical Specification exists. Increased emphasis on and a better knowledge of Technical Specifications will greatly reduce the probability of any recurrence of an event of this nature.
3. Inspection and Enforcement notices concerning improper control rod manipulations, refueling errors, and reactivity control problems are now routinely being routed to all licensed operators in order to maintain increased awareness of these topics and benefit from the lessons learned by the industry. INPC Significant Event Reports (SERs) and Significant Operating Experience Reports (SOERs) are also routed to licensed operators on major topics of concern, particularly reactivity control. The discussions which arise from actual industry events reinforce the need to know and apply the operators knowledge of Technical Specifications to the current evolution being conducted.
4. Just prior to all refueling evolutions, all pertinent procedures are reviewed by all licensed operators. While this review did not prevent this unique violation, almost all other common refueling errors have been avoided.

Corrective Steps Which Will be Taken to Avoid Future Violation

The Reactor Engineering group will revise the methodology for control blade swapping/replacement to reduce the probability of error. All control blade operations will be performed late in the refueling and as a separate part of refueling. No fuel movement will be allowed while control blade swap/replacement is in progress. This action may increase the number of steps for fuel movement, but this is acceptable to prevent a recurrence of moving fuel when not all control rods are inserted in the core.

The training staff and training program is being expanded to better instruct operators and better evaluate the quality of instruction that the operators receive.

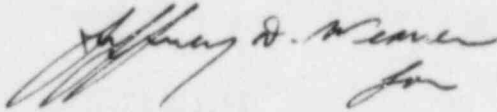
The Date When Full Compliance Will be Achieved

Compliance will be achieved by June 1, 1984. (Refueling activities are not scheduled until after October 1, 1984.)

E. H. Johnson
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If you have any questions regarding this response, please contact me or Paul Thomason at the site.

Sincerely,

A handwritten signature in dark ink, appearing to read "J. M. Pilant". The signature is fluid and cursive, with a large initial "J" and a stylized "P".

J. M. Pilant
Technical Staff Manager
Nuclear Power Group
Nebraska Public Power District

KRW:lb