



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION IV

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

JUL 21 1997

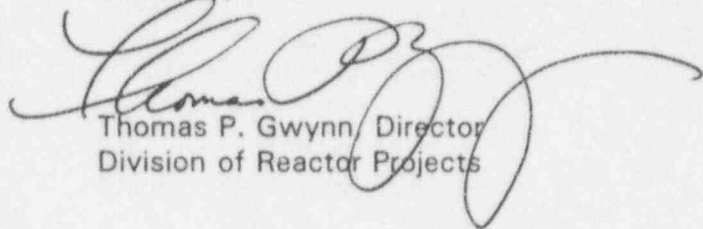
S. K. Gambhir, Division Manager
Production Engineering
Omaha Public Power District
Fort Calhoun Station FC-2-4 Adm.
P.O. Box 399
Hwy. 75 - North of Fort Calhoun
Fort Calhoun, Nebraska 68023-0399

SUBJECT: NRC INSPECTION REPORT 50-285/97-11

Dear Mr. Gambhir:

Thank you for your letter of July 3, 1997, in response to our letter and Notice of Violation dated June 4, 1997. We have reviewed your reply and find it responsive to the concerns raised in our Notice of Violation. 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,



Thomas P. Gwynn, Director
Division of Reactor Projects

Docket No.: 50-285
License No.: DPR-40

cc:
James W. Tills, Manager
Nuclear Licensing
Omaha Public Power District
Fort Calhoun Station FC-2-4 Adm.
P.O. Box 399
Hwy. 75 - North of Fort Calhoun
Fort Calhoun, Nebraska 68023-0399

9707230140 970721
PDR ADOCK 05000285
G PDR



James W. Chase, Manager
Fort Calhoun Station
P.O. Box 399
Fort Calhoun, Nebraska 68023

Perry D. Robinson, Esq.
Winston & Strawn
1400 L. Street, N.W.
Washington, D.C. 20005-3502

Chairman
Washington County Board of Supervisors
Blair, Nebraska 68008

Cheryl Rogers, LLRW Program Manager
Environmental Protection Section
Nebraska Department of Health
301 Centennial Mall, South
P.O. Box 95007
Lincoln, Nebraska 68509-5007

JUL 21 1997

bcc to DCD (IE01)

bcc distrib. by RIV:

Regional Administrator

DRP Director

Branch Chief (DRP/B)

Project Engineer (DRP/B)

Resident Inspector

DRS-PSB

MIS System

RIV File

Branch Chief (DRP/TSS)

DOCUMENT NAME: R:_FCS\FC711AK.WCW

To receive copy of document, indicate in box: "C" = Copy without enclosures "E" = Copy with enclosures "N" = No copy

RIV:PE:DRP/B	C:DRP/B	D:DRP				
DNGraves;df	WDJohnson	TPGwynn				
7/18/97	7/21/97	7/21/97				

OFFICIAL RECORD COPY

JUL 21 1997

bcc to DCD (IE01)

bcc distrib. by RIV:

Regional Administrator

DRP Director

Branch Chief (DRP/B)

Project Engineer (DRP/B)

Resident Inspector

DRS-PSB

MIS System

RIV File

Branch Chief (DRP/TSS)

DOCUMENT NAME: R:_FCS\FC711AK.WCW

To receive copy of document, indicate in box: "C" = Copy without enclosures "E" = Copy with enclosures "N" = No copy

RIV:PE:DRP/B	C:DRP/B	D:DRP				
DNGraves;df	WDJohnson	TPGwynn				
7/18/97	7/21/97	7/21/97				

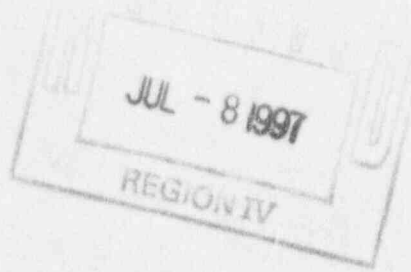
OFFICIAL RECORD COPY



Omaha Public Power District

444 South 16th Street Mall
Omaha NE 68102-2247

July 3, 1997
LIC-97-0103



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

References: 1. Docket No. 50-285
2. Letter from NRC (T. P. Gwynn) to OPPD (S. K. Gambhir) dated June 4, 1997

SUBJECT: NRC Inspection Report No. 50-285/97-11, Reply to a Notice of Violation

The subject report transmitted a Notice of Violation (NOV) resulting from an NRC special inspection conducted May 19 through May 23, 1997 at the Fort Calhoun Station (FCS). Attached is the Omaha Public Power District (OPPD) response to this NOV.

If you should have any questions, please contact me.

Sincerely,

James W. Jills For

S. K. Gambhir
Division Manager
Engineering and Operations Support

SKG/ddd

Attachment

c: Winston and Strawn
E. W. Merschhoff, NRC Regional Administrator, Region IV
L. R. Wharton, NRC Project Manager
W. C. Walker, NRC Senior Resident Inspector

~~9267100018~~ SPP
97-1431

REPLY TO A NOTICE OF VIOLATION

Omaha Public Power District
Fort Calhoun Station

Docket: 50-285
License: DPR-40

During an NRC inspection conducted on May 19-23, 1997, one violation of NRC requirements was identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions" NUREG 1600, the violation is listed below:

- A. Technical Specification 5.8.1 requires, in part, that written procedures be established, implemented, and maintained covering the applicable procedures recommended in Appendix A of Regulatory Guide 1.33, Revision 2, February 1978. Regulatory Guide 1.33, Appendix A, recommends, in part, that procedures should be written covering administrative procedures for safe operation.
1. Standing Order SO-0-1, Revision 31, "Conduct of Operations," requires in step 12.1.2B that if while performing a procedure it is discovered that the anticipated response was not received, initiate a temporary or permanent change in accordance with Standing Order G-30, "Procedure Change and Generation."
 2. Contrary to the above, the licensee did not properly implement the administrative procedure applicable to the activity in that on May 12, 1997, the licensee did not initiate a procedure change as required when the governing Procedure OP-2A, "Plant Startup," did not specify actions to be taken if all Group 4 control rods were withdrawn without reaching criticality.

This is a Severity Level IV Violation (285/97011-01) (Supplement I)

OPPD Response

The above NOV (failure to change an inadequate procedure) was a violation of SO-0-1, but did not impact nuclear safety.

1. The Reason for the Violation

Withdrawal to criticality is controlled under operations procedure OP-2A, "Plant Startup." This procedure did not address the potential condition of not achieving criticality by all rods out (ARO).

Additionally, this condition, subcritical with Group 4 rods at ARO, is believed not to have occurred previously at Fort Calhoun Station. When this condition arose on May 12, 1997, discussions of possible actions to take and the consequences of those actions were held in the Control Room between the Reactor Engineer, the Shift Supervisor, the Licensed Senior Operator, and the Assistant Plant Manager before proceeding. This discussion maintained a high emphasis on reactivity management issues and conservative decision making. Prior to proceeding, the Shift Supervisor received Manager - Operations concurrence via telephone.

The licensed members of this operating crew had recently received training on reactivity management (04/21/97) and the Reactor Engineer was also present at that training session as a Subject Matter Expert. Although OP-2A did not contain specific steps to perform the subsequent actions it was believed that existing procedural guidance provided adequate direction and control of the continuing evolution to critical. Procedure OP-2A, "Plant Startup" contains a note which allows additional hold points for 1/M plotting at the discretion of the Reactor Engineer. Procedure OI-RR-1, "Reactor Regulating System Normal Operation," was used to manipulate the control rods. Procedure OI-CH-4, "Chemical and Volume Control System Makeup Operation," provided guidance to perform the required dilution of the RCS. Additionally, since it was agreed to continue with the withdrawal to criticality, OP-2A, Attachment 2, "CEA Withdrawal to Criticality Mode 2" was the appropriate procedure to follow.

Upon his arrival, later that morning, the Manager - Operations reviewed the actions taken with the Assistant Plant Manager and the Reactor Engineer and they determined that a procedure change was warranted and requested that a Condition Report be generated to document his concern. Since procedure OP-2A was not revised prior to continuing with the approach to criticality, the violation of SO-0-1 occurred.

OPPD has the following comment on the NRC observation (01.1.2b) that "the failure to immediately place the reactor in a safe, stable condition and then to initiate a procedure change prior to continuing... was a violation..." Standing Order SO-0-1, "Conduct of Operations," Step 12.1.2B states, in part, that if while performing a procedure it is discovered that the anticipated response was not received... the following actions should be carried out:

- (1) Place the system/component in a safe condition.
- (2) Contact the Shift Supervisor and inform him of the situation

and the status of the component/system.

- (3) Evaluate the situation to determine the cause of the unexpected response.
- (4) Initiate a temporary or permanent procedure change in accordance with G-30 to allow usage of the procedure for the current situation.

The reactor was in a safe condition as it was subcritical with adequate shutdown margin. Therefore, immediate operator action was not required. The Shift Supervisor was being consulted to inform him of the situation and to determine the cause of the situation. This situation was not necessarily unexpected as the Reactor Engineer was aware that the worth of Group 4 from the predicted critical condition was less than the administrative limit between measured and predicted critical conditions ($\pm 0.5\%$ delta rho). Additionally, a dedicated operator was assigned to take the reactor critical. A portion of the eighteen minutes noted before inserting the rods was spent allowing the reactor to stabilize while it was being monitored for indications of criticality. The remainder was spent evaluating the current situation and determining the next course of action. Therefore, with the exception of Step 12.1.2.B(4), all actions taken by OPPD personnel were correct and prudent.

2. Corrective Steps Which Have Been Taken and the Results Achieved

- a) OPPD has revised procedure OP-2A to address the procedural deficiency. The procedure was issued on May 28, 1997.
- b) Plant personnel were informed of this event during Human Performance Day, which was held on June 11, 1997. This training reinforced the need for verbatim procedural compliance and the need to correct procedural deficiencies as they occur.
- c) The SO-G-92, "Conduct of Infrequently Performed Procedures," criticality briefing has been revised to address the observed weakness that the criticality briefing did not address the possibility of not going critical within the worth of Group 4 from 85 inches to ARO.

3. Corrective Steps Which Will Be Taken to Avoid Further Violations

Operations personnel will be trained on this event and the revised

procedure, OP-2A, during the next regularly scheduled training (Rotation 97-05). This training will be completed on September 19, 1997. In the event the reactor must be shut down and then started up prior to September 19, 1997, this training will be provided to the crew that will take the reactor critical.

4. **Date When Full Compliance Will Be Achieved**

OPPD is currently in full compliance.