

50-483



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

September 4, 1996

Mr. Donald F. Schnell
Senior Vice President - Nuclear
Union Electric Company
P.O. Box 149
St. Louis, Missouri 63166

SUBJECT: NRC BULLETIN 96-01, "CONTROL ROD INSERTION PROBLEMS" (TAC NO. M95050)

Dear Mr. Schnell:

On July 26, 1996, during a teleconference between Union Electric and the NRC, the NRC staff informed Union Electric that it had not relaxed the requirements in Bulletin 96-01, "Control Rod Insertion Problems", and that PWR licensees of Westinghouse-designed plants were still required to perform the testing requested in the bulletin. As a result, the staff informed Union Electric that the testing activities planned for the fall outage at the Callaway Plant, as described in Union Electric's April 4, 1996 response, were inadequate.

On August 13, 1996, the staff met with the Westinghouse Owners Group (WOG) to discuss incomplete rod insertion issues. At the conclusion of the meeting, the WOG indicated that a written request for relaxation of testing requirements in the bulletin, including the basis for relaxation, would be provided to the staff in the near future. On August 23, 1996, the staff received the WOG request dated August 22, 1996, which requested staff action by August 30, 1996.

Enclosed is a copy of the NRC's response dated September 4, 1996, to the WOG request. As indicated in the response, certain testing requirements in the bulletin may be relaxed on a plant specific basis. However, request in writing for relaxation, with appropriate justification, must be made, followed by staff review and approval of the request. Therefore, pending staff review and approval of such a request, testing as delineated in Bulletin 96-01 is expected to be performed during the fall outage at the Callaway Plant.

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Mr. Donald F. Schnell

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If you have any questions regarding this issue, please contact me at (301) 415-1362.

Sincerely,

Original Signed By

Kristine M. Thomas, Project Manager
Project Directorate IV-2
Division of Reactor Projects III/IV
Office of Nuclear Reactor Regulation

Docket No. 50-483

Enclosure: Letter to WOG

cc w/encl: See next page

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Mr. D. F. Schnell

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September 4, 1996

cc:

Professional Nuclear
Consulting, Inc.
19041 Raines Drive
Derwood, Maryland 20855

Gerald Charnoff, Esq.
Thomas A. Baxter, Esq.
Shaw, Pittman, Potts & Trowbridge
2300 N. Street, N.W.
Washington, D.C. 20037

Mr. H. D. Bono
Supervising Engineer,
Site Licensing
Union Electric Company
Post Office Box 620
Fulton, Missouri 65251

U.S. Nuclear Regulatory Commission
Resident Inspector Office
8201 NRC Road
Steedman, Missouri 65077-1302

Mr. G. L. Randolph, Vice President
Nuclear Operations
Union Electric Company
P.O. Box 620
Fulton, Missouri 65251

Manager - Electric Department
Missouri Public Service Commission
301 W. High
Post Office Box 360
Jefferson City, Missouri 65102

Regional Administrator, Region IV
U.S. Nuclear Regulatory Commission
Harris Tower & Pavilion
611 Ryan Plaza Drive, Suite 400
Arlington, Texas 76011-8064

Mr. Ronald A. Kucera, Deputy Director
Department of Natural Resources
P.O. Box 176
Jefferson City, Missouri 65102

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

Mr. Dan I. Bolef, President
Kay Drey, Representative
Board of Directors Coalition
for the Environment
6267 Delmar Boulevard
University City, Missouri 63130

Mr. Lee Fritz
Presiding Commissioner
Callaway County Court House
10 East Fifth Street
Fulton, Missouri 65151

Mr. Alan C. Passwater, Manager
Licensing and Fuels
Union Electric Company
Post Office Box 149
St. Louis, Missouri 63166

Mr. J. V. Laux, Manager
Quality Assurance
Union Electric Company
Post Office Box 620
Fulton, Missouri 65251



UNITED STATES
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September 4, 1996

Mr. Vance VanderBurg, Chairman
WOG Analysis Subcommittee
American Electric Power
Nuclear Generation Group
500 Circle Drive
Buchanan, MI 49107

Subject: Westinghouse Owners Group
Westinghouse Owners Group Request for Relaxation of NRC Bulletin 96-01
Requirements (MUHP-1210)

On August 22, 1996, the Westinghouse Owners Group (WOG) submitted a letter requesting relaxation of NRC Bulletin 96-01, "Control Rod Insertion Problems," requirements (MUHP-1210). WOG's basis for the request for the relaxation was attached for the staff's review.

The staff reviewed the request and basis for the request, and concluded that the following items are acceptable:

- 1) Definition of an Outage of Sufficient Duration - The WOG proposed that this be defined as "an outage that allows time to properly setup and test the rods by established plant procedures without restraining a plant restart."
- 2) Allow Drag Testing in Reactor Vessel or Spent Fuel Pool - The WOG proposed that the testing be performed in either the vessel or pool.
- 3) Fuel Burnup Increment Between Successive Tests - The WOG proposed a minimum burnup increment of 2,500 MWD/MTD (or equivalent) between tests.

The above items are clarifications of NRC Bulletin 96-01 and are in agreement with the intent of the bulletin. They are, therefore, acceptable.

With respect to the "Bulletin Relaxation Request," Attachment 1 of the August 22, 1996, letter, the staff did not find sufficient technical basis to support the request to eliminate testing on fuel with burnup below 40,000 MWD/MTU. While most of the rod insertion problems have been in high burnup fuel, there have been cases of anomalous behavior with fuel in the approximately 32,000 MWD/MTU range. If individual licensees wish to supplement their bulletin responses and request elimination of testing below 30,000 MWD/MTU, the staff will evaluate these cases depending on the availability of data on the particular fuel type.

With respect to the request to eliminate testing on fuel with intermediate flow mixing (IFM) grids, the staff received insufficient information. To date, no clear root cause to the control rod insertion problem has been identified. The staff's present understanding of the phenomena which led to the incomplete control rod insertion at Wolf Creek is that it was a

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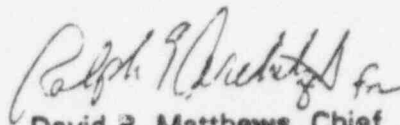
combination of factors. The problem appears to be very sensitive to this combination of factors; the interaction of which is not clearly understood. While we agree that, if considered alone, the additional stiffness resulting from the IFMs is more likely to be beneficial than detrimental to the problem, data comparisons of non-IFM and IFM fuel with corresponding factors such as power history, time, and temperature have not been presented to support this premise. Without such data we can not agree to eliminate further testing on fuel with IFMs.

With regard to the request to perform either rod drop tests or drag tests as opposed to both sets of tests, the staff continues to consider the drop testing essential. If individual licensees believe that there is sufficient data available on their fuel type and wish to make the case for not doing the drag testing, the staff will consider such requests. Such requests should address factors such as fuel type, power history, and temperature.

As was stated in the August 13, 1996 meeting, the commitments made in the bulletin responses remain in effect unless the licensees submit plant-specific changes to their initial response to Bulletin 96-01.

Should you have any questions, please contact Margaret Chatterton at (301) 415-2889 or Claudia Craig at (301) 415-1053.

Sincerely,



David B. Matthews, Chief
Generic Issues and Environmental
Projects Branch
Office of Nuclear Reactor Regulation

Project No. 694

cc: see next page