

MAY 06 1981

DISTRIBUTION:

Docket File

NRC PDR

Docket Nos. 50-315
and 50-316

L PDR

TERA-2

NSIC

ORB#1 Rdg

SVarga

SMiner

MConner

KParrish

OELD

AEOD

IE-3

ACRS-10

Gray File-2

DEisenhut



Mr. John Dolan, Vice President
Indiana and Michigan Electric Company
Post Office Box 18
Bowling Green Station
New York, New York 10004

Dear Mr. Dolan:

In our August 14, 1980 letter, we concluded that the control rod guide thimble wear issue is resolved for the 17 x 17 fuel assemblies designed by Westinghouse for the D. C. Cook, Unit No. 2. We, also, stated that our review of this subject for facilities using fuel assemblies designed by Exxon, such as D. C. Cook, Unit No. 1, is continuing.

We have now completed this review. The propensity for guide thimble tube wear in Exxon reload fuel should be, to a first approximation, equivalent to that in Westinghouse fuel in the same plant. Examinations of Exxon fuel that was discharged from H. B. Robinson, Unit No. 2, as reported by Exxon letter dated February 25, 1980, revealed no through-wall wear nor major differences in the wear from that wear which was measured on Westinghouse fuel that was discharged from Pt. Beach, Units Nos. 1 and 2.

The Exxon examinations were performed on 5 fuel assemblies that had been under control rod banks for one cycle of reactor operation. One assembly was from Cycle 4 and four assemblies were from Cycle 5 operation. Of the 100 guide thimble tubes examined by an eddy current testing (ECT) method, only 11 had detectable wear (i.e., wear greater than about 3 mils local wall thinning). The ECT measurements did not reveal the azimuthal distribution of the wear, but if the worst wear that was detected had been concentrated on one side of the guide thimble tube wall, it would have indicated that a minimum of 23% of the wall thickness remained.

We conclude that (a) the degree of wear measured by Exxon is acceptable, (b) the degree of wear in the Exxon fuel is similar to that in Westinghouse fuel, which we have found acceptable, and (c) therefore the issue of guide thimble wear in D. C. Cook Nuclear Plant, Unit No. 1 has been adequately resolved.

Sincerely,

Original signed by

Steven A. Varga, Chief
Operating Reactors Branch #1
Division of Licensing

8105180376

OFFICE	cc: See next page	ORB#1:DL	C-ORB#1:DL			
SURNAME		SMiner/cb	SVarga			
DATE		5/4/81	5/8/81			



RECEIVED
JAN 10 1964
LIBRARY

RECEIVED
JAN 10 1964
LIBRARY

RECEIVED
JAN 10 1964
LIBRARY

RECEIVED
JAN 10 1964
LIBRARY

RECEIVED
JAN 10 1964
LIBRARY

RECEIVED
JAN 10 1964
LIBRARY

RECEIVED
JAN 10 1964
LIBRARY

RECEIVED
JAN 10 1964
LIBRARY

RECEIVED
JAN 10 1964
LIBRARY



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

May 6, 1981

Docket Nos. 50-315
and 50-316

Mr. John Dolan, Vice President
Indiana and Michigan Electric Company
Post Office Box 18
Bowling Green Station
New York, New York 10004

Dear Mr. Dolan:

In our August 14, 1980 letter, we concluded that the control rod guide thimble wear issue is resolved for the 17 x 17 fuel assemblies designed by Westinghouse for the D. C. Cook, Unit No. 2. We, also, stated that our review of this subject for facilities using fuel assemblies designed by Exxon, such as D. C. Cook, Unit No. 1, is continuing.

We have now completed this review. The propensity for guide thimble tube wear in Exxon reload fuel should be, to a first approximation, equivalent to that in Westinghouse fuel in the same plant. Examinations of Exxon fuel that was discharged from H. B. Robinson, Unit No. 2, as reported by Exxon letter dated February 25, 1980, revealed no through-wall wear nor major differences in the wear from that wear which was measured on Westinghouse fuel that was discharged from Pt. Beach, Units Nos. 1 and 2.

The Exxon examinations were performed on 5 fuel assemblies that had been under control rod banks for one cycle of reactor operation. One assembly was from Cycle 4 and four assemblies were from Cycle 5 operation. Of the 100 guide thimble tubes examined by an eddy current testing (ECT) method, only 11 had detectable wear (i.e., wear greater than about 3 mils local wall thinning). The ECT measurements did not reveal the azimuthal distribution of the wear, but if the worst wear that was detected had been concentrated on one side of the guide thimble tube wall, it would have indicated that a minimum of 23% of the wall thickness remained.

We conclude that (a) the degree of wear measured by Exxon is acceptable, (b) the degree of wear in the Exxon fuel is similar to that in Westinghouse fuel, which we have found acceptable, and (c) therefore the issue of guide thimble wear in D. C. Cook Nuclear Plant, Unit No. 1 has been adequately resolved.

Sincerely,

A handwritten signature in dark ink, appearing to read "Steven A. Varga".

Steven A. Varga, Chief
Operating Reactors Branch #1
Division of Licensing

cc: See next page

Mr. John Dolan
Indiana and Michigan Electric Company

cc: Mr. Robert W. Jurgensen
Chief Nuclear Engineer
American Electric Power
Service Corporation
2 Broadway
New York, New York 10004

Gerald Charnoff, Esquire
Shaw, Pittman, Potts and Trowbridge
1800 M Street, N.W.
Washington, D. C. 20036

Maude Preston Palenske Memorial
Library
500 Market Street
St. Joseph, Michigan 49085

Mr. D. Shaller, Plant Manager
Donald C. Cook Nuclear Plant
P. O. Box 458
Bridgman, Michigan 49106

U. S. Nuclear Regulatory Commission
Resident Inspectors Office
770 Red Arrow Highway
Stevensville, Michigan 49127

William J. Scanlon, Esquire
2034 Pauline Boulevard
Ann Arbor, Michigan 48103