

AUGUST 1 1979

DISTRIBUTION

Docket File 50-315  
and 50-316

NRC PDR (2)

Local PDR

ORBI Rdg

NRR Rdg

L. D. Eisenhower

B. Grimes

W. Gammill

T. J. Carter

Attorney, OELD

I&E (3)

A. Schwencer

D. Wigginton

C. Parrish

J. Buchanan, NSIC

TERA

ACRS (16)

*M. Rubin  
To Speis*

Docket Nos. 50-315  
and 50-316

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

Dear Mr. Dolan:

On November 7, 1978, in a letter to Mr. Tillinghast, we requested additional information on the containment sump tests for the D. C. Cook Units 1 and 2. On May 31, 1979, a member of our staff toured the plant site and inspected the containment recirculation sump. As a result of that inspection, we have amplified item #3 of our November 7, 1978 request for additional information. This amplified information request is enclosed. Within thirty (30) days from the receipt of this letter, please provide a schedule for the submittal of outstanding air entrainment and jet impingement testing and your response to the enclosure.

Sincerely,

Original Signed By,

A. Schwencer, Chief  
Operating Reactors Branch #1  
Division of Operating Reactors

Enclosure:  
Request for Additional  
Information

cc: w/enclosure  
See next page

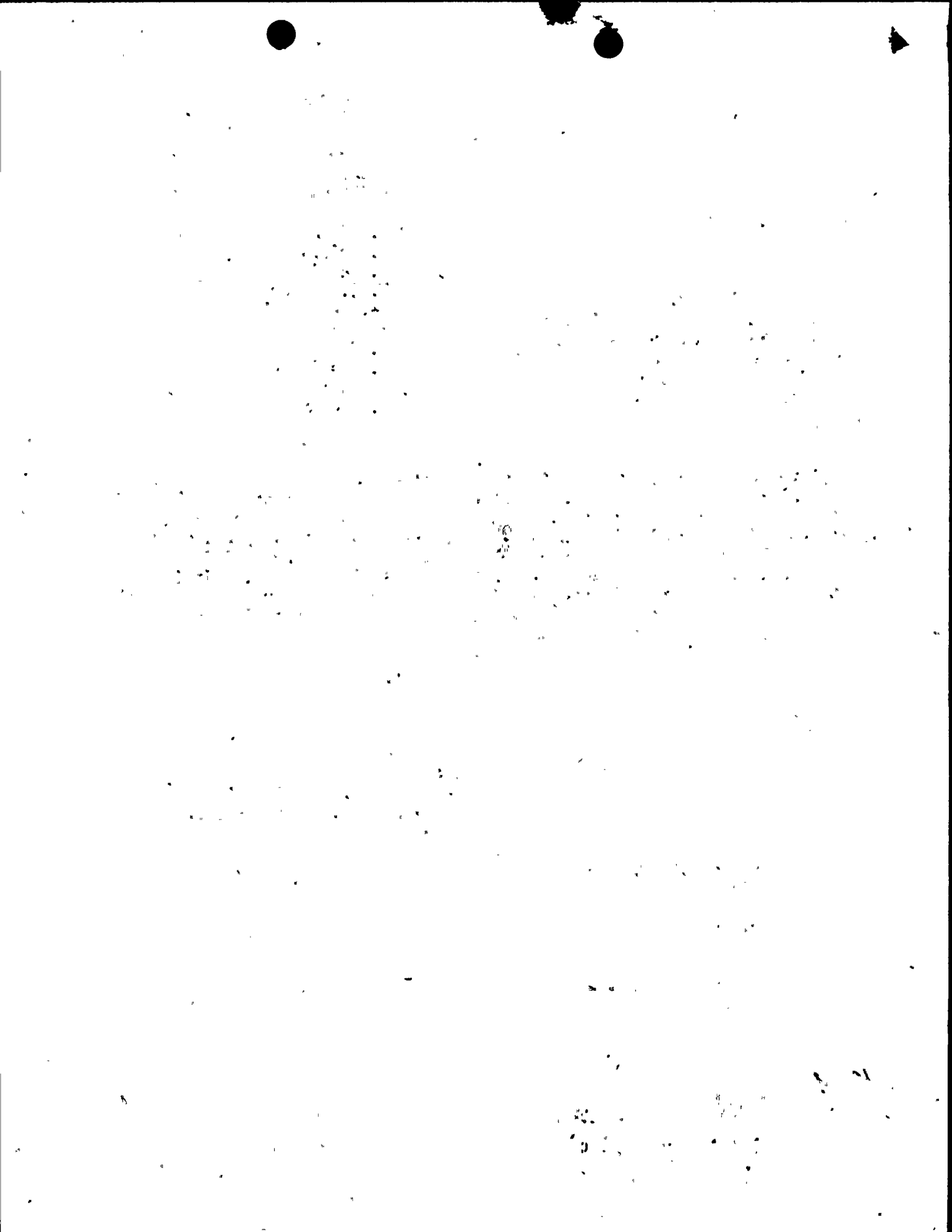
7908300589

REGULATORY DOCKET FILE COPY

Ap 3  
60

4059  
#15

OFFICE >	DOR: ORBI	DOR: ORE				
SURNAME >	D. Wigginton	J. A. Schwencer				
DATE >	08/1/79	08/1/79				





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

August 1, 1979

Docket Nos. 50-315  
and 50-316

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

Dear Mr. Dolan:

On November 7, 1978, in a letter to Mr. Tillinghast, we requested additional information on the containment sump tests for the D. C. Cook Units 1 and 2. On May 31, 1979, a member of our staff toured the plant site and inspected the containment recirculation sump. As a result of that inspection, we have amplified item #3 of our November 7, 1978 request for additional information. This amplified information request is enclosed. Within thirty (30) days from the receipt of this letter, please provide a schedule for the submittal of outstanding air entrainment and jet impingement testing and your response to the enclosure.

Sincerely,

A handwritten signature in cursive script, appearing to read "A. Schwencer".

A. Schwencer, Chief  
Operating Reactors Branch #1  
Division of Operating Reactors

Enclosure:  
Request for Additional  
Information

cc: w/enclosure  
See next page

Mr. John Dolan  
Indiana and Michigan Electric Company  
Indiana and Michigan Power Company - 2 -

August 1, 1979

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

Citizens for a Better Environment  
59 East Van Buren Street  
Chicago, Illinois 60605

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

Mr. R. Masse  
Donald C. Cook Nuclear Plant  
P. O. Box 458  
Bridgman, Michigan 49106



17  
✓

REQUEST FOR ADDITIONAL INFORMATION

DONALD C. COOK NUCLEAR PLANT, UNIT NOS. 1 AND 2

1. The licensee must show that the D. C. Cook recirculation sump performs in an acceptable manner, assuming breaks in the high pressure reactor coolant system piping in the vicinity of the sump inlet. Only mechanistic breaks of the reactor coolant system need be considered in reviewing recirculation sump performance. The licensee is directed to the breaks identified in WCAP 8082 Figure II.D-1. It must be shown that the sump design has sufficient protection against breaks shown in the above mentioned figure.

Specifically, it must be shown that the D. C. Cook sump is protected from breaks in the closure weld of the crossover leg, hot and cold leg steam generator nozzles, and reactor coolant pump suction. Some of these breaks are above the expected containment water level at switchover. For these breaks, the potential exists for a water and steam jet being directed towards the sump inlet, causing air binding or other degradation of safety injection pump performance. The effect of jet impingement on the sump structure must also be considered.

Some of the postulated breaks may be below the expected post-LOCA water level. For these, the licensee should confirm that flow from the breaks will not cause a forced rotation leading to the formation of vortices.

2. The licensee will provide diagrams of the containment in the vicinity of the recirculation sump, showing all high pressure piping, and the expected water levels at switchover. The pipe breaks considered in question #1 above should be indicated on the diagrams.