

A 08/31/78

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)  
DISTRIBUTION FOR INCOMING MATERIAL

50-315/216

REC: DENTON H R  
NRC

ORG: TILLINGHAST J  
IN & MI PWR

DOCDATE: 08/08/78  
DATE RCVD: 08/30/78

DOCTYPE: LETTER NOTARIZED: NO

COPIES RECEIVED

SUBJECT:

LTR 1 ENCL 1

RESPONSE TO NRC LTR DTD 05/18/78... FURNISHING ADDL INFO CONCERNING VIBRATORY  
LOADS ORIGINATING FROM THE POSITIVE DISPLACEMENT PUMPS, ASSOCIATED WITH THE  
CHEMICAL AND VOLUME CONTROL SYSTEMS OF SUBJECT FACILITY"S... NOTARIZED  
08/08/78... W/ATT INFO.

PLANT NAME: COOK -- UNIT 1  
COOK -- UNIT 2

REVIEWER INITIAL: XJM

DISTRIBUTER INITIAL: RTW

\*\*\*\*\* DISTRIBUTION OF THIS MATERIAL IS AS FOLLOWS \*\*\*\*\*

NOTES:

I & E - 3 CYS ALL MATERIAL

GENERAL DISTRIBUTION FOR AFTER ISSUANCE OF OPERATING LICENSE.  
(DISTRIBUTION CODE A001)

FOR ACTION: BR CHIEF ORB#1 BC\*\*W/7 ENCL

INTERNAL:

REG FILE\*\*W/ENCL

I & E\*\*W/3 ENCL

HANAUER\*\*W/ENCL

AD FOR SYS & PROJ\*\*W/ENCL

REACTOR SAFETY BR\*\*W/ENCL

EEB\*\*W/ENCL

J. MCGOUGH\*\*W/ENCL

NRC PDR\*\*W/ENCL

OELD\*\*LTR ONLY

CORE PERFORMANCE BR\*\*W/ENCL

ENGINEERING BR\*\*W/ENCL

PLANT SYSTEMS BR\*\*W/ENCL

EFFLUENT TREAT SYS\*\*W/ENCL

EXTERNAL:

LPDR'S

ST. JOSEPH, MI\*\*W/ENCL

TERA\*\*W/ENCL

NSIC\*\*W/ENCL

ACRS CAT B\*\*W/16 ENCL

DISTRIBUTION: LTR 40 ENCL 39  
SIZE: 3P+1P

CONTROL NBR: 782430098

MA 4 GP

\*\*\*\*\* THE END \*\*\*\*\*

SECRET

TO: [illegible]

FROM: [illegible]

SUBJECT: [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

# INDIANA & MICHIGAN POWER COMPANY

P. O. BOX 18  
BOWLING GREEN STATION  
NEW YORK, N. Y. 10004

August 8, 1978  
AEP:NRC:00015

U.S. NUC  
CLERICAL  
SERVICES

1978 AUG 30 PM 4 11

RECEIVED DISTRIBUTION  
SERVICES UNIT

Donald C. Cook Nuclear Plant Unit 1 and 2  
Docket Nos. 50-315 and 50-316  
License Nos. DPR-58 and DPR-74

Mr. Harold R. Denton, Director  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Dear Mr. Denton:

This letter is in response to Mr. A. Schwencer's letter dated May 18, 1978, in which he requested additional information to vibratory loads originating from the positive displacement pumps, associated with the Chemical and Volume Control Systems of the above captioned units. This response was to be submitted within 60 days of the date of the May 18, 1978 letter, however, an extension of two-three additional weeks in our time to respond in this matter was requested and granted by M. Mlynchzak of your staff.

In light of Mr. Schwencer's letter, CVCS Systems for both Unit 1 and Unit 2 have been reviewed. Our responses to the request for additional information is given below.

During performance of initial preoperational testing on Donald C. Cook Plant Units 1 & 2, observations of the vibration levels on the reciprocating charging pump discharges were made and found to be acceptable. These observations were performed during various system preoperational tests as directed by operational testing acceptance criteria AC-000-001 which was developed to comply with FSAR Section 13.1 and FSAR Response to Questions 4.7 and 4.30. The data generated by these tests for the reciprocating charging pump discharge is included as Table 1.

REGULATORY DOCKET FILE COPY

782430098

Aug 11



Mr. Harold R. Denton

-2-

August 8, 1978

Our extended operating experience has confirmed that the vibration levels experienced on this system are acceptable. However, both units at the Donald C. Cook Plant have been experiencing some pressure pulsations on the reciprocating charging pump affecting the control systems' response. We have decided that pulsation dampening devices should be installed at the reciprocating pump discharge to reduce these pressure pulsations. A specific vendor has not been chosen to provide these dampeners. However, we anticipate vendor selection and issuance of a purchase order for these dampeners within 60 days of the date of this letter with normal delivery being 24 to 30 weeks thereafter.

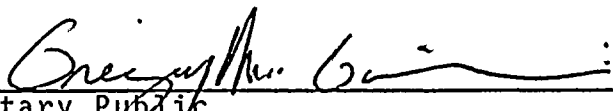
We have evaluated the information requested in items 2 through 6 of Mr. Schwencer's letter and have concluded that since test data in this depth was not anticipated during preoperational testing, we do not have the specific information you requested. Although the present vibration levels are acceptable, in our opinion addition of these pressure pulsation dampeners should have a beneficial effect on reducing pump induced piping system vibrations. However, we will provide the information requested in item 1 to the NRC after verification testing following installation of these dampeners.

Very truly yours,

JT:em

  
John Tillinghast  
Vice President

Sworn and subscribed to before me  
this 8<sup>th</sup> day of August, 1978 in  
New York County, New York.

  
Notary Public  
GREGORY M. GURICAN  
Notary Public, State of New York  
No. 31-4643431  
Qualified in New York County  
Commission Expires March 30, 1979

cc: (attached)

100-100000

100-100000

100-100000

Mr. Harold R. Denton

-3-

August 8, 1978

cc: R. C. Callen  
G. Charnoff  
P. W. Steketee  
R. J. Vollen  
R. Walsh  
D. V. Shaller-Bridgman  
R. W. Jurgensen

TABLE 1

Results of Observed Displacements  
on Reciprocating Charging Pump  
Discharge Piping

Observed Double Amplitude Inches <u>UNIT 1</u>	Single Amplitude inches	Uncorrected Hanger Span Ft.	Acceptance Criteria inches
0	0	10	.18
0	0	10	.18
0	0	18	.60
<u>Unit 2</u>			
1/8	.063	10	.18
1/16	.032	10	.18
1/8	.063	14	.36
0	0	7	.10
0	0	5	.05
1/8	.063	10	.18
1/16	.032	24	1.08
1/32	.016	5	.05



1997

THE UNIVERSITY OF CHICAGO  
LIBRARY  
540 EAST 57TH STREET  
CHICAGO, ILL. 60637

Author	Title	Year	Volume
...	...	...	...
...	...	...	...
...	...	...	...
...	...	...	...

...

...

...

...

...