

50-331

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FILE NUMBER

TO: Mr Rusche

FROM: Iowa Elec Light & Pwr Co
Cedar Rapids, Ia
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DESCRIPTION

Ltr notarized 3-9-76....trans the following:

ENCLOSURE

Supplemental Info to their Application for Amdt
to OL/Change to Tech Specs dtd 2-13-76.....
furnishing addl info concerning fuel storage...

(40 cys encl rec'd)

[ACR 16 HOLDING/SENT]

[DOCKET 50-331]

PLANT NAME: Duane Arnold

SAFETY

FOR ACTION/INFORMATION

ENVIRO

3-12-76

ehf

ASSIGNED AD :

ASSIGNED AD :

BRANCH CHIEF :

BRANCH CHIEF :

PROJECT MANAGER:

PROJECT MANAGER :

LIC. ASST. :

LIC. ASST. :

Lear
Paulson
Parrish

INTERNAL DISTRIBUTION

REG FILE

SYSTEMS SAFETY

PLANT SYSTEMS

ENVIRO TECH

NRC PDR

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SPANGLER

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MIPC

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CASE

KNIGHT

OPERATING REACTORS

SITE TECH

HANAUER

SIHWEIL

STELLO

GAMMILL

HARLESS

PAWLICKI

OPERATING TECH

HULMAN

PROJECT MANAGEMENT

REACTOR SAFETY

EISENHUT

SITE ANALYSIS

BOYD

ROSS

SHAO

VOLLMER

P. COLLINS

NOVAK

BAER

BUNCH

HOUSTON

ROSZTOCZY

SCHWENCER

J. COLLINS

PETERSON

CHECK

GRIMES

KRECER

MELTZ

HELTEMES

AT & I

SITE SAFETY & ENVIRO

SKOVHOLT

SALTZMAN

ANALYSIS

RUTBERG

DENTON & MULLER

EXTERNAL DISTRIBUTION

CONTROL NUMBER

LPDR: Cedar Rapids, Ia

NATL LAB

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REG. V-IE

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NSIC

LA PDR

ASLB

CONSULTANTS

ACRS 16 HOLDING/SENT

TO LA PARRISH

2465

REGULATORY

1000

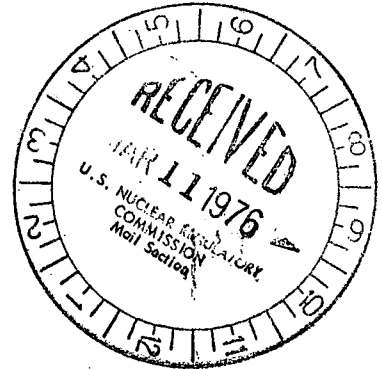
IOWA ELECTRIC LIGHT AND POWER COMPANY

General Office
CEDAR RAPIDS, IOWA

March 9, 1976
IE-76-403

LEE LIU
VICE PRESIDENT - ENGINEERING

50-331



Mr. Benard C. Rusche, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20545

Dear Mr. Rusche:

This submittal is to supplement our application dated May 30, 1975 and amended January 8, 1976 and February 13, 1976. The enclosed questions were transmitted to us orally by Mr. W. Paulson and Mr. H. Orrstein of your staff on February 26, 1976. Answers have been informally transmitted to your staff. This submittal is to provide written confirmation of those answers.

This supplement to the application, including the enclosures to this letter, is true and accurate to the best of my knowledge and belief.

Iowa Electric Light and Power Company

By


Lee Liu


Vice President, Engineering

LL/RFS/ms

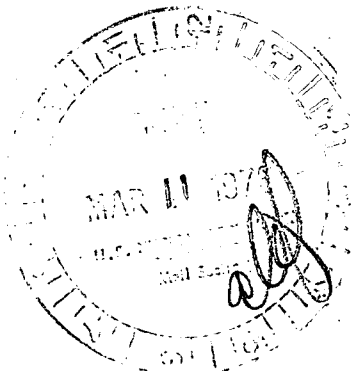
Enc.

cc: D. Arnold
J. Newman
W. Paulson, NRC (2)
J. Keppler, NRC

Sworn and Subscribed to before me on
this 9th day of March, 1976.


Notary Public in and for the State
of Iowa.

Jean R. Smith
NOTARY PUBLIC
STATE OF IOWA
Commission Expires
September 30, 1978



2465

Attachment 1

1. What is the delayed neutron fraction range?

Answer:

Beginning of Cycle - 6.27×10^{-3}

End of Cycle - 5.45×10^{-3}

2. What is the reactivity of fuel in storage?

Answer:

The answer to this is contained in Reference 1 on Page 5 - 12 and in the Duane Arnold Energy Center Technical Specifications Section 5.5.

3. Please provide beginning of Cycle scram curves.

Answer:

See Sheet Number 22 of General Electric document 384HA698 (Attached).

4. Please define "Fuel Damage Limit Not Exceeded" contained in Section 6.3.2.5.2 of your reload application.

Answer:

Section 3.2.1 of Reference 1 discusses the basis for the fuel safety evaluation.

5. What is the void fraction associated with Table 6-2 of the reload application?

Answer:

Beginning of Cycle 40.1%

End of Cycle 41.7%

6. What are the design conservatism factors used in the transient analyses?

Answer:

The design conservatism factors are:

Void Coefficient	1.25
Doppler Coefficient	0.90
Scram Reactivity	0.80

7. Please provide void coefficient of reactivity as a function of void fraction for beginning and end of cycle.

Answer:

See Sheet Number 18 of General Electric Document 384HA698 (Attached).

8. Please provide LHGR as a function of rod position.

Answer:

See Sheets 25 and 26 of General Electric Document 384HA698 (Attached).

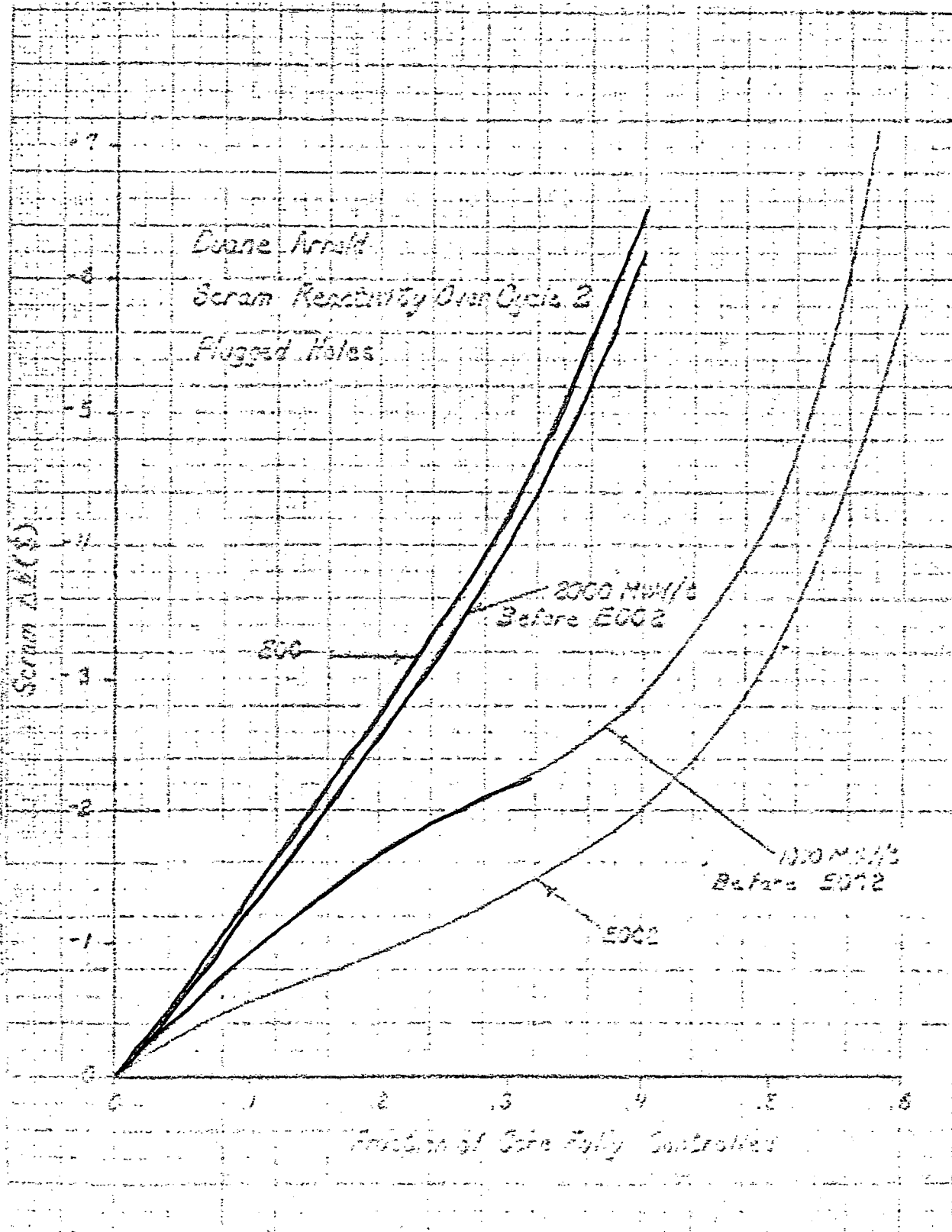
GENERAL ELECTRIC

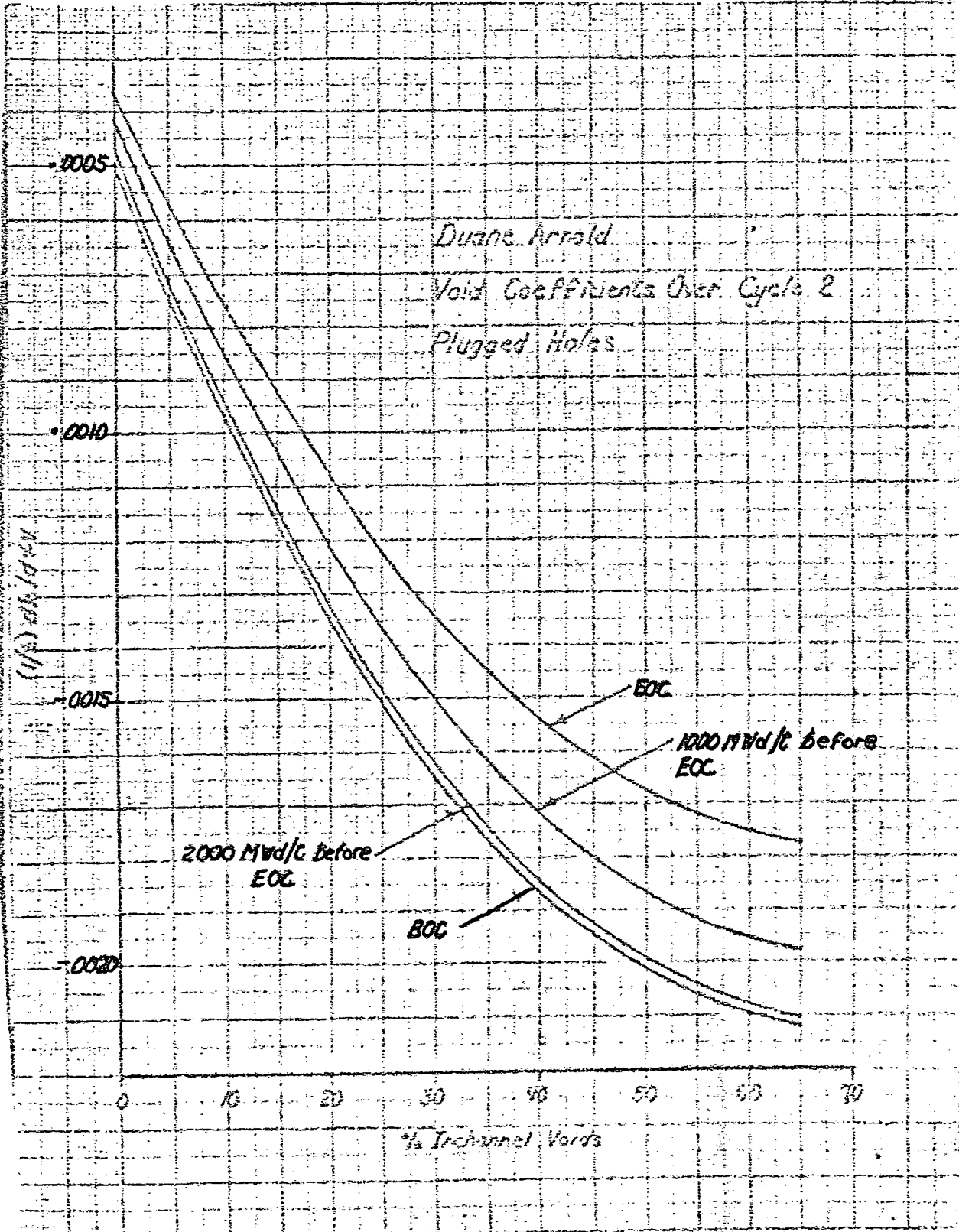
NUCLEAR ENERGY DIVISION

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SHEET NO. 22 OF 23





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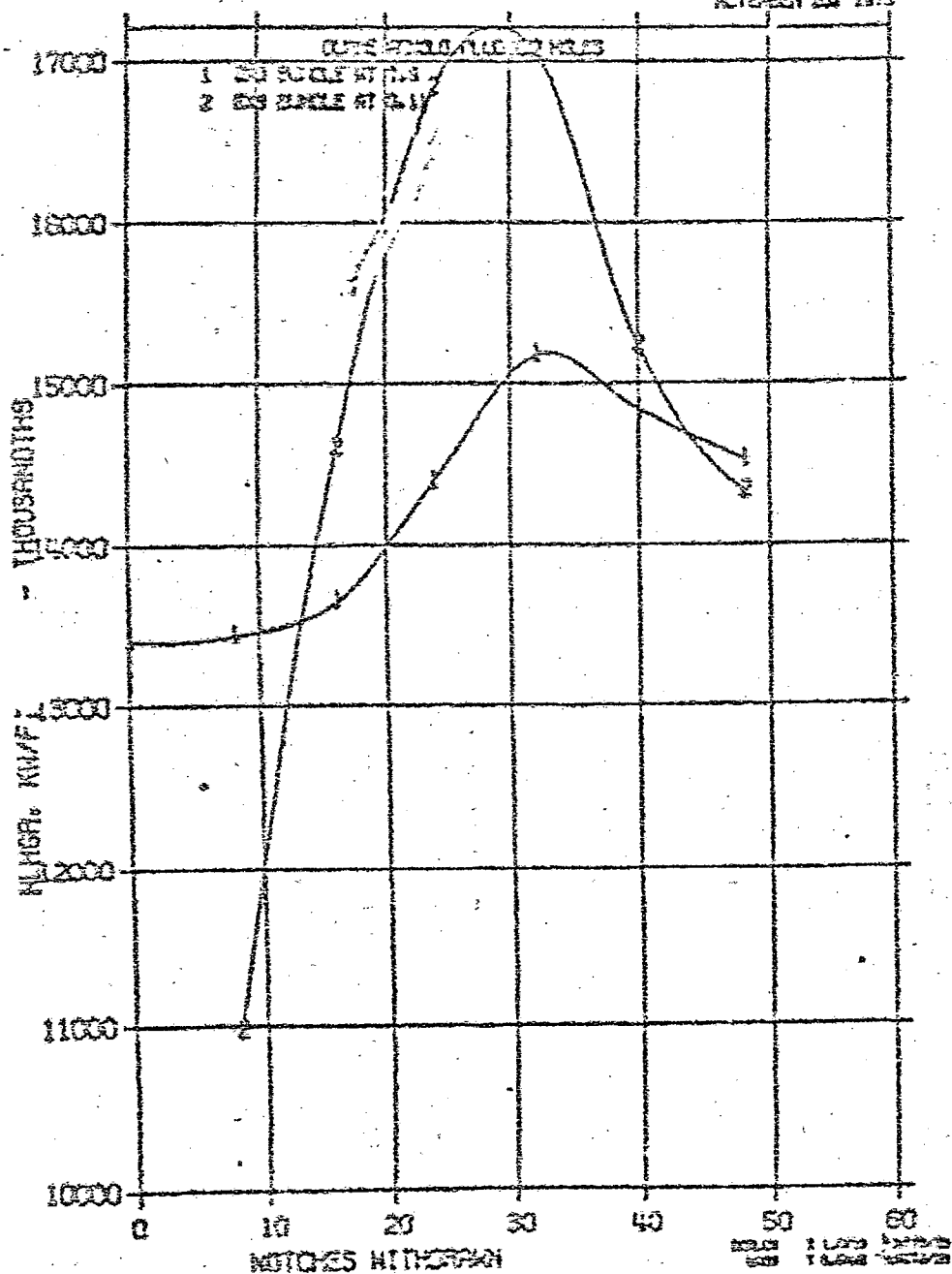


FIGURE 8.1 FIVE MLCR RESPONSE (7X7)

REVISED 21. 1975

