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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

LL/RFS/ms

Enc.

cc: D. Arnold

J. Newman

W. Paulson, NRC (2)

J. Keppler, NRC

Vice President, Engineering

Sworn and Subscribed to before me on

this gu day of March, 1976.

Notary Public in and for the State

of Iowa

NOTARY PUBLIC STATE OF IOWA Commission Expired September 30, 1978

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MAR II DOTA

Attachment 1

1. What is the delayed neutron fraction range?

Answer:

Beginning of Cycle -
$$6.27 \times 10^{-3}$$

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:

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

Answer:

The design conservatism factors are:

Void Coefficient	1.25
Doppler Coefficent	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).

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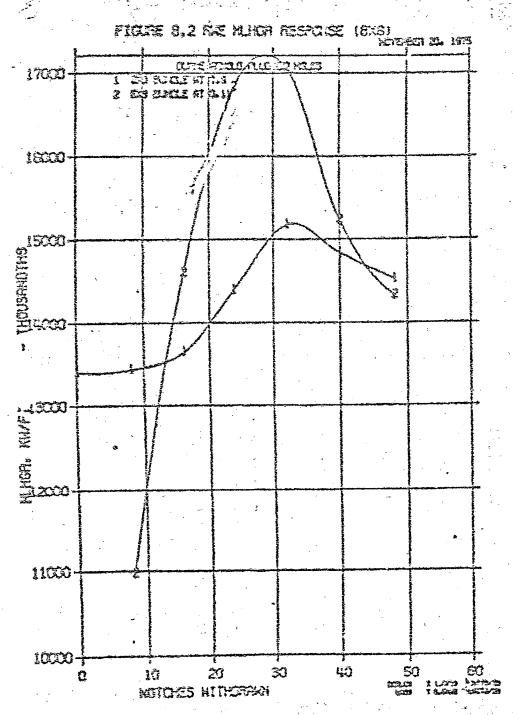
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