



ARKANSAS POWER & LIGHT COMPANY
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April 30, 1981

2R-0481-10

Director of Nuclear Reactor Regulation
ATTN: Robert A. Clark, Chief
Operating Reactors Branch #3
Division of Licensing
U. S. Nuclear Regulatory Comm.
Washington, D.C. 20555



SUBJECT: Arkansas Nuclear One - Unit 2
Docket No. 50-368
License No. NPF-6
Information Regarding ANO-2
Reload Report
(File: 2-1510)

Gentlemen:

AP&L would like to submit the attached information as requested by telephone by your Mr. Dale Powers regarding our Unit 2 reload report.

Very truly yours,

David C. Trimble

David C. Trimble
Manager, Licensing

DCT:lp

Attachment

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ATTACHMENT

1. BURNUP DATA

- a. EOC1 Core Average 12,500 MWD/MTU
- b. EOC2 Peak Assembly, Batch 'B' Fuel 25,200 MWD/MTU
- c. EOC1 Batch Averages
 - Batch 1A = 13,500 MWD/MTU
 - Batch B = 14,100 MWD/MTU
 - Batch C = 9,700 MWD/MTU
- d. EOC2 Batch Averages
 - Batch 1A = 21,000 MWD/MTU
 - Batch B = 24,500 MWD/MTU
 - Batch C = 21,600 MWD/MTU
 - Batch D = 9,700 MWD/MTU
 - Batch D* = 13,500 MWD/MTU

2. FUEL PIN AXIAL GROWTH

A calculation was performed using the method described in CENPD-198 Supplement up to the fluence limitation given in the SER for that document. The method recommended in the June 22, 1976 SER on CENPD-198 was used for incremental fluences beyond that limit. For the maximum predicted EOC2 fluence, the results of this calculation showed no interference between the fuel rods and the upper end fitting.

Preliminary review of shoulder gap (fuel rod/upper end fitting clearance) closure data from the EOC1 examination of characterized fuel assemblies has shown that less than one-half of the available gap has been closed. Since these assemblies have accumulated over 1/2 of the burnup for any assembly to be used in Cycle 2, and since gap closure rate decreases with burnup, these data provide qualitative evidence that the gap is sufficiently large to preclude interference during Cycle 2.

3. NRC FISSION GAS ENHANCEMENT FACTOR

The NRC fission gas enhancement factor is used consistently in all of the CE fission gas analysis for ANO-2 Cycle 2.

We hope that this supplemental information will aid the NRC review of the ANO-2 Cycle 2 reload.