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TO:	ORIG	CC	OTHER	SENT AEC PDR	SENT LOCAL PDR
Mr. Norman C. Moseley	1 signed			XX	XX

CLASS	UNCLASS	PROP INFO	INPUT	NO CYS REC'D	DOCKET NO:
	XXX			1	50-269

DESCRIPTION: Ltr trans the following:

ENCLOSURES: Unusual Event 50-269/75-2 on 1-3-75 re failure to calculate the hot zero power ejected rod worth after control rod group interchange....

(1 cy encl rec'd)

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PLANT NAME: Oconee Unit 1

FOR ACTION/INFORMATION DHL 2-22-75

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DUKE POWER COMPANY
POWER BUILDING
422 SOUTH CHURCH STREET, CHARLOTTE, N. C. 28201

A. C. THIES
SENIOR VICE PRESIDENT
PRODUCTION AND TRANSMISSION

P. O. BOX 2178

February 14, 1975

Mr. Norman C. Moseley, Director
U. S. Nuclear Regulatory Commission
Suite 818
230 Peachtree Street, Northwest
Atlanta, Georgia 30303

Re: Oconee Unit 1
Docket No. 50-269

Dear Mr. Moseley:

Pursuant to Sections 6.2 and 6.6.2 of the Oconee Nuclear Station Technical Specifications, please find attached Unusual Event Report UE-269/75-2.

Very truly yours,

A. C. Thies

ACT:vr
Attachment

cc: Mr. Angelo Giambusso

1994

DUKE POWER COMPANY
OCONEE UNIT 1

Report No.: UE-269/75-2

Report Date: February 14, 1975

Event Date: January 3, 1975

Facility: Oconee Unit 1, Seneca, South Carolina

Identification of Event: Failure to calculate the hot zero power ejected rod worth after control rod group interchange

Conditions Prior to Event: Not applicable

Description of Event:

On December 20, 1974, Duke Power Company was informed by the Babcock and Wilcox Company that the hot zero power ejected rod worths for the Oconee units were not calculated for core conditions after the first control rod group interchange. After careful evaluation by Duke and B&W, it was determined on January 3, 1975 that this situation constituted an unusual event as defined by Section 1.9a of the Oconee Nuclear Station Technical Specifications.

Designation of Apparent Cause of Event:

The failure to calculate the hot zero power ejected rod worth after control rod group interchange was due to omission.

Analysis of Event:

The potential ejected rod worths in Oconee units have been measured at hot zero power and at 40 percent power during the Cycle 1 zero power physics and power escalation testing. These measurements showed that the ejected rod worths were considerably less than the limits specified by Technical Specification 3.5.2.3. An analysis of the potential ejected rod worths by B&W has shown the hot zero power ejected rod worths to be less than 1.0% $\Delta k/k$ up to the time of the control rod interchange. In the case of Oconee 1, Cycle 1, this analysis also showed that the hot zero power ejected rod worths were less than 1.0% $\Delta k/k$ for core conditions during the entire fuel cycle. The normal unit startup procedure requires the control rod Group 5 to be partially withdrawn during criticality, further insuring that no control rod will exceed the 1.0% $\Delta k/k$ limit. Therefore, it is concluded that at no time have any Oconee units been in an unsafe condition with potential ejected rod worths in excess of 1.0% $\Delta k/k$ and that this incident did not and could not affect the health and safety of the public.

Corrective Action:

A program has been implemented by B&W to calculate the ejected rod worths for the period after the rod interchange. In order to verify the predicted values, a test program is being developed to measure the hot zero power ejected rod worths for Oconee 1, Cycle 2, at the beginning of the cycle and at any time between 25 EFPD and immediately after the control rod interchange. If it is not expedient to run the test between 25 EFPD and immediately after the control rod interchange, the procedure for unit operation after the control rod interchange will be modified to maintain control rod Group 5 at a minimum of 87.5 percent withdrawn and Group 6 at 12.5 percent withdrawn prior to reactor criticality; this restriction will assure that Technical Specification 3.5.2.3 will not be exceeded.