

AEC DISTRIBUTION FOR PART 50 DOCKET MATERIAL
(TEMPORARY FORM)

CONTROL NO: 1736

FILE: INCIDENT REPORT

FROM: Duke Power Co. Charlotte, .NC. A.C. Thies		DATE OF DOC 2-14-75	DATE REC'D 2-18-75	LTR xxx	TWX	RPT	OTHER
TO: Mr. Norman C. Moseley		ORIG no	CC 1	OTHER	SENT AEC PDR <u>xxxx</u> SENT LOCAL PDR <u>xxxx</u>		
CLASS	UNCLASS xxxxxx	PROP INFO	INPUT	NO CYS REC'D 1	DOCKET NO: 50-269		

DESCRIPTION:

Ltr trans the following:

*ACKNOWLEDGED
2-19-75*

ENCLOSURES:

Abnormal Occurrence #75-2 on 1-3-75 concerning failure to calculate the hot zero power ejected rod worth after control rod group interchange
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PLANT NAME: Oconee Unit 1

FOR ACTION/INFORMATION

2-19-75 JGB

BUTLER (S) W/ Copies	SCHWENCER (S) W/ Copies	ZIEMANN (S) W/ Copies	REGAN (E) W/ Copies
CLARK (S) W/ Copies	STOLZ (S) W/ Copies	DICKER (E) W/ Copies	LEAR (S) W/ Copies
PARR (S) W/ Copies	VASSALLO (S) W/ Copies	KNIGHTON (E) W/ Copies	SPEIS (S) W/ Copies
KNIEL (S) W/ Copies	PURPLE (S) W/ Copies	YOUNGBLOOD (E) W/ Copies	W/ Copies

INTERNAL DISTRIBUTION

<u>REG FILE</u>	<u>TECH REVIEW</u>	<u>DENTON</u>	<u>LIC. ASST.</u>	<u>A/T IND</u>
✓ AEC PDR	✓ SCHROEDER	GRIMES	DIGGS (S)	BRAITMAN
✓ OGC, ROOM P-506-A	✓ MACCARRY	GAMMILL	GEARIN (S)	SALTZMAN
✓ GOSSICK /STAFF	✓ KNIGHT	✓ KASTNER	GOULBOURNE (S)	B. HURT
✓ CASE	✓ PAWLICKI	BALLARD	KREUTZER (E)	
GIAMBUSSO	✓ SHAO	SPANGLER	LEE (S)	<u>PLANS</u>
BOYD	✓ STELLO		MAIGRET (S)	MCDONALD
MOORE (S) (BWR)	✓ HOUSTON	<u>ENVIRO</u>	REED (E)	CHAPMAN
DEYOUNG (S) (PWR)	✓ NOVAK	MULLER	SERVICE (S)	DUBE w/input
SKOVHOLT (S)	✓ CROSS	DICKER	✓ SHEPPARD (S)	E. COUPE
GOLLER (S)	✓ IPPOLITO	KNIGHTON	SLATER (E)	✓ R. Hartfield (2)
P. COLLINS	✓ TEDESCO	YOUNGBLOOD	SMITH (S)	✓ KLECKER
DENISE	✓ LONG	REGAN	TEETS (S)	✓ F. WILLIAMS
<u>REG OPR</u>	✓ LAINAS	PROJECT LDR	WILLIAMS (E)	
✓ FILE & REGION	✓ BENAROYA		WILSON (S)	
✓ T.R. WILSON	✓ STEELE	<u>HARLESS</u>	INGRAM (S)	Ad (4)
	✓ VOLIMER			

EXTERNAL DISTRIBUTION

✓ 1-LOCAL PDR Walhalla, S.C.	(1) (2) (10) -NATIONAL LABS	1-PDR SAN/LA/NY
✓ 1-TIC (ABERNATHY)	1-M. PENNINGTON, RM E-201 G.T.	1-BROCKHAVEN NAT LAB
✓ 1-NSIC (BUCHANAN)	1-CONSULTANTS	1-G. ULRIKSON, ORNL
1-ASLB	NEWMARK/BLUME/AGBABIAN	1-AGMED (RUTH GUSSMAN) RM B-127 G.T.
1-NEWTON ANDERSON		1-J. RUNKLES, RM E-201 G.T.
✓ 5-ACRS SENT TO LIC. ASST. <i>Shppard</i>		

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

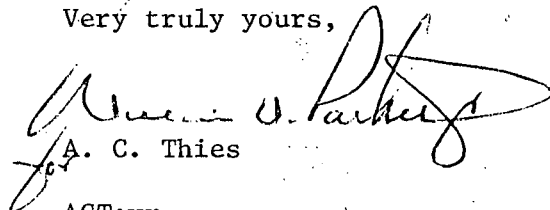
Mr. Norman C. Moseley, Director
U. S. Nuclear Regulatory Commission
Suite 818
230 Peachtree Street, Northwest
Atlanta, Georgia 30303

Re: Oconee Unit 1
Docket No. 50-269

Dear Mr. Moseley:

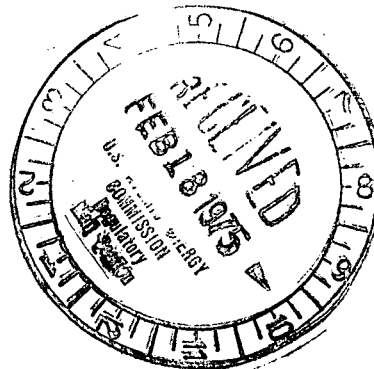
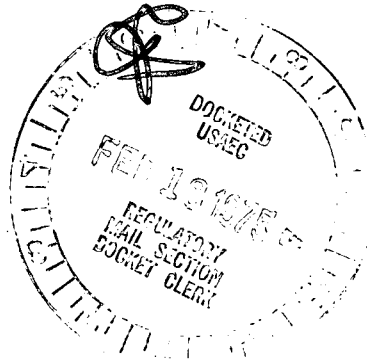
Pursuant to Sections 6.2 and 6.6.2 of the Oconee Nuclear Station
Technical Specifications, please find attached Unusual Event
Report UE-269/75-2.

Very truly yours,


A. C. Thies

ACT:vr
Attachment

cc: Mr. Angelo Giambusso



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.