

**AEC DISTRIBUTION FOR PART 50 DOCKET MATERIAL
(TEMPORARY FORM)**

CONTROL NO: 8047

FILE: _____

FROM: Duke Power Co Charlotte, NC A. C. Thies		DATE OF DOC 7-29-74	DATE REC'D 8-1-74	LTR X	TWX	RPT	OTHER
TO: Angelo Giambusso		ORIG 1 signed	CC	OTHER	SENT AEC PDR XXX SENT LOCAL PDR XXX		
CLASS.	UNCLASS	PROP INFO	INPUT	NO CYS REC'D	DOCKET NO:		
	XXX			1	50-269		
DESCRIPTION: Ltr trans the following.....				ENCLOSURES: Abnormal occurrence #AO-270/74-9 of 7-18-74 re failure to provide redundant boric acid sources. ACKNOWLEDGED DO NOT REMOVE (1 cy encl rec'd)			
PLANT NAME: ROCONEE UNIT #2				FOR ACTION/INFORMATION 8-3-74 GMC			

BUTLER (L)	SCHWENCER (L)	ZIEMANN (L)	REGAN (E)
W/ CYS	W/ CYS	W/ CYS	W/ CYS
CLARK (L)	STOLZ (L)	DICKER (E)	LEAR
W/ CYS	W/ CYS	W/ CYS	W/ CYS
DARR (L)	VASSALLO (L)	KNIGHTON (E)	
W/ CYS	W/ CYS	W/ CYS	W/ CYS
KNIEL (L)	PURPLE (L)	YOUNGBLOOD (E)	
W/ CYS	W/7 CYS	W/ CYS	W/ CYS

INTERNAL DISTRIBUTION

<input checked="" type="checkbox"/> REG FILE	<input checked="" type="checkbox"/> TECH REVIEW	DENTON	LIC ASST	A/T IND
<input checked="" type="checkbox"/> AEC PDR	<input checked="" type="checkbox"/> HENDRIE	GRIMES	DIGGS (L)	BRAITMAN
<input checked="" type="checkbox"/> OGC	<input checked="" type="checkbox"/> SCHROEDER	GAMMILL	GEARIN (L)	SALTZMAN
<input checked="" type="checkbox"/> MUNTZING/STAFF	<input checked="" type="checkbox"/> MACCARY	KASTNER	GOULBOURNE (L)	B. HURT
<input checked="" type="checkbox"/> CASE	<input checked="" type="checkbox"/> KNIGHT	BALLARD	KREUTZER (E)	
GIAMBUSSO	<input checked="" type="checkbox"/> PAWLICKI	SPANGLER	LEE (L)	PLANS
BOYD	<input checked="" type="checkbox"/> SHAO		MAIGRET (L)	MCDONALD
MOORE (L)(LWR-2)	<input checked="" type="checkbox"/> STELLO	ENVIRO	REED (E)	CHAPMAN
DEYOUNG (L)(LWR-1)	<input checked="" type="checkbox"/> HOUSTON	MULLER	SERVICE (L)	DUBE w/input
SKOVHOLT (L)	<input checked="" type="checkbox"/> NOVAK	DICKER	<input checked="" type="checkbox"/> SHEPPARD (L)	E. COUPE
<input checked="" type="checkbox"/> GOLLER (L)	<input checked="" type="checkbox"/> ROSS	KNIGHTON	SLATER (E)	<input checked="" type="checkbox"/> D. THOMPSON (2)
P. COLLINS	<input checked="" type="checkbox"/> IPPOLITO	YOUNGBLOOD	SMITH (L)	<input checked="" type="checkbox"/> KLECKER
DENISE	<input checked="" type="checkbox"/> TEDESCO	REGAN	TEETS (L)	<input checked="" type="checkbox"/> EISENHUT
<input checked="" type="checkbox"/> REG OPR	<input checked="" type="checkbox"/> LONG	PROJECT MGR	WILLIAMS (E)	
FILE & REGION (3)	<input checked="" type="checkbox"/> LAINAS		WILSON (L)	
<input checked="" type="checkbox"/> MORRIS	<input checked="" type="checkbox"/> BENAROYA	HARLESS		
<input checked="" type="checkbox"/> STEELE	<input checked="" type="checkbox"/> VOLLMER			

EXTERNAL DISTRIBUTION

<input checked="" type="checkbox"/> 1 - LOCAL PDR WALHALLA, SC	(1)(2)(10)-NATIONAL LABS	1-PDR-SAN/LA/NY
<input checked="" type="checkbox"/> 1 - TIC (ABERNATHY)	1-ASLBP(E/W Bldg, Rm 529)	1-BROOKHAVEN NAT LAB
<input checked="" type="checkbox"/> 1 - NSIC (BUCHANAN)	1-W. PENNINGTON, Rm E-201 GT	1-G. ULRIKSON, ORNL
1 - ASLB	1-B&M SWINEBROAD, Rm E-201 GT	1-AGMED (RUTH GUSMAN)
1 - P. R. DAVIS	1-CONSULTANTS	Rm E-127 GT
<input checked="" type="checkbox"/> 16 - ACRS SENT TO LIC ASST SHEPPARD 8-5	NEWMARK/BLUME/AGBABIAN	1-RD. MUELLER, Rm E-300
		GT

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

A. C. THIES
SENIOR VICE PRESIDENT
PRODUCTION AND TRANSMISSION

REGULATORY DOCKET FILE COPY P. O. Box 2178

July 29, 1974

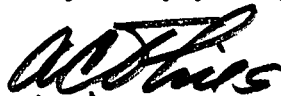
Mr. Angelo Giambusso
Deputy Director for Reactor Projects
Directorate of Licensing
Office of Regulation
U. S. Atomic Energy Commission
Washington, D. C. 20545

Re: Oconee Unit 1
Docket No. 50-269

Dear Mr. Giambusso:

Pursuant to Sections 6.2 and 6.6.2 of the Oconee Nuclear Station
Technical Specifications, please find attached Abnormal Occurrence
Report A0-270/74-9.

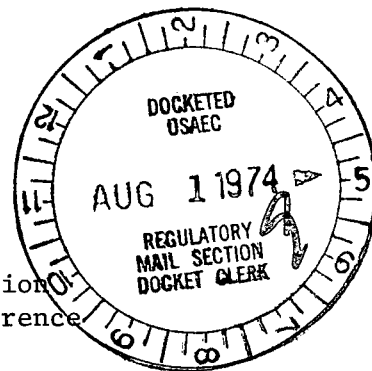
Very truly yours,



A. C. Thies

ACT:gje
Attachment

cc: Mr. Norman C. Moseley



DUKE POWER COMPANY
OCONEE UNIT 2

Report No.: AO-270/74-9

Report Date: July 29, 1974

Occurrence Date: July 18, 1974

Facility: Oconee Unit 2, Seneca, South Carolina

Identification of Occurrence: Failure to provide redundant boric acid sources

Conditions Prior to Occurrence: Reactor at 80 percent full power

Description of Occurrence:

Oconee Nuclear Station Technical Specification 3.2.2 requires that at least one source per unit of concentrated boric acid, in addition to the borated water storage tank, be available and operable prior to critical operation. This can be either the boric acid mix tank (BAMT) or the concentrated boric acid storage tank (CBAST). On July 18, 1974, the concentrated boric acid storage tank level was noted to have increased, and subsequent sampling showed the concentration was below specification. The BAMT was not available as a redundant source of boric acid since the volume was below that required by the specification.

Reactor shutdown commenced and CBAST bleed and feed to obtain necessary concentration and volume was initiated. Upon completion of boric acid transfers calculated to bring the CBAST into specification, the reactor shutdown was terminated and power level increased. Following four hours of recirculation, the CBAST was sampled, and the concentration was 8030 ppm. Reactor shutdown recommenced. On July 19, 1974, the Technical Specifications were satisfied and reactor power level was again increased.

Designation of Apparent Cause of Occurrence:

The concentrated boric acid storage tank was in specification until an increasing level trend was noted. The cause of the increasing boric acid water level was seat leakage in the demineralized water supply valve 2DW-87.

Analysis of Occurrence:

Technical Specification 3.2.2 requires that the boric acid mix tank contain at least 450 cubic feet of 10,600 ppm boric acid solution, or the concentrated boric acid storage tank contain at least 550 cubic feet of 8,700 ppm boric acid solution, to be considered a redundant source of boric acid. A redundant source of boric acid is required when the reactor is critical to ensure that a single failure will not prevent boration to a cold shutdown condition.

The result of demineralized water leaking into the concentrated boric acid storage tank was to decrease the concentration of the contents of the tank. At the time that the level increase was noted and sampled, there were 2,350 cubic feet of 7,257 ppm boric acid solution in the concentrated boric acid storage tank. Although the concentration was 17 percent below specifications, the volume was 430 percent above that required. This quantity of boric acid solution is more than sufficient to permit boration to a cold shutdown condition and thus the concentrated boric acid storage tank could have been used as a redundant source of boric acid. It is concluded that the health and safety of the public was not affected.

On July 19, 1974, a change to the Technical Specifications was approved which allows the equivalent concentrations and volumes to be maintained in the borated acid mix tank and concentrated boric acid storage tanks.

Corrective Action:

Demineralized water valve 2DW-87 was repaired. No further leakage of demineralized water into the concentrated boric acid storage tank has been noted.

Failure Data:

Grinnell 2" diaphragm valve. Grinnell Figure 2471-26-M refers.