AEC DISTRIBUTION FOR PART 50 DOCKET MATERIAL
(TEMPORARY FORM)

CONTROL NO: 8873

FILE:

FROM:	DATE OF DOC	DATE REC'D	LTR	TWX	RPT	OTHER
Duke Power Co Charlotte, NC 28201 A C Thies	8-23-74	8-28-74	XXX			

TO:	ORIG	CC	OTHER	SENT AEC PDR	SENT LOCAL PDR
Mr Moseley	1 sighed			XX	XX

CLASS	UNCLASS	PROP INFO	INPUT	NO CYS REC'D	DOCKET NO:
	XXX			1	50-270

DESCRIPTION:
Ltr trans the following:

ENCLOSURES:
REPORT: Abnormal Occurrence #74-10 on 8-9-74 re failure of reactor building fan motor.

ACKNOWLEDGED

REMOVE

PLANT NAME: Oconee #2

FOR ACTION/INFORMATION 8-28-74 ehf

BUTLER (L) W/ CYS	SCHWENCER (L) W/ CYS	ZIEMANN (L) W/ CYS	REGAN (E) W/ CYS
CLARK (L) W/ CYS	STOLZ (L) W/ CYS	DICKER (E) W/ CYS	LEAR W/ CYS
~~PARR (L)~~ W/ CYS	~~VASSALLO (L)~~ W/ CYS	~~KNIGHTON (E)~~ W/ CYS	W/ CYS
KNIEL (L) W/ CYS	✓PURPLE (L) W/4 CYS	YOUNGBLOOD (E) W/ CYS	

INTERNAL DISTRIBUTION

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

EXTERNAL DISTRIBUTION

✓1 - LOCAL PDR Walhalla, SC	(1)(2)(10)-NATIONAL LABS	1-PDR-SAN/LA/NY
✓1 - TIC (ABERNATHY)	1-ASLBP(E/W Bldg, Rm 529)	1-BROOKHAVEN NAT LAB
✓1 - NSIC (BUCHANAN)	1-W. PENNINGTON, Rm E-201 GT	1-G. ULRIKSON, ORNL
1 - ASLB	1-B&W SWINEBROAD, Rm E-201 GT	1-AGMED (RUTH GUSSMAN)
1 - Newton Anderson	1-CONSULTANTS	Rm B-127 GT
5 - ACRS SENT TO LIC ASST sheppard	NEWMARK/BLUME/AGBABIAN	

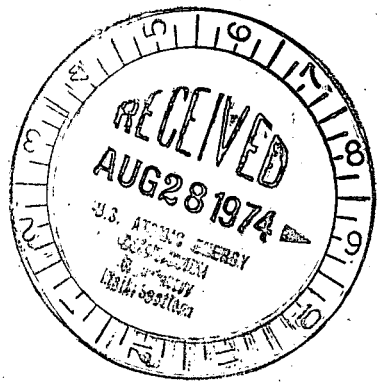
DUKE POWER COMPANY
POWER BUILDING
422 SOUTH CHURCH STREET, CHARLOTTE, N. C. 28201

A. C. THIES
SENIOR VICE PRESIDENT
PRODUCTION AND TRANSMISSION

P. O. Box 2178

August 23, 1974

Regulatory Docket File



Mr. Norman C. Moseley, Director
Directorate of Regulatory Operations
U. S. Atomic Energy Commission
Region II - Suite 818
230 Peachtree Street, Northwest
Atlanta, Georgia 30303

Re: Oconee Unit 2
Docket No. 50-270

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 AO-270/74-10.

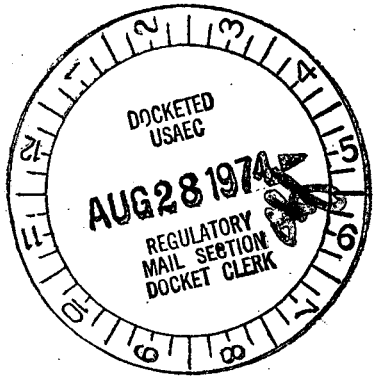
Very truly yours,

Paul H. Barton
For ACT

A. C. Thies

ACT:gje
Attachment

cc: Mr. Angelo Giambusso



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DUKE POWER COMPANY
OCONEE UNIT 2

Report No.: AO-270/74-10

Report Date: August 23, 1974

Occurrence Date: August 9, 1974

Facility: Oconee Unit 2, Seneca, South Carolina

Identification of Occurrence: Failure of Reactor Building Fan Motor Starter

Conditions Prior to Occurrence: Cold Shutdown, Partially Drained

Description of Occurrence:

On August 9, 1974, Oconee Unit 2 4160 volt auxiliary loads were being supplied from the standby buses which were energized through the 100 kV transmission line from Lee Steam Station. At 1545, a dead bus transfer was made which transferred Unit 2 auxiliary loads to Startup Transformer CT2. A fault in the Reactor Building Cooling Unit (RBCU) 2A fan motor starter resulted in the tripping of the supply breaker to Motor Control Center (MCC) 2XS1 (see Figure 1), located in the 600 volt Load Center 2X8. De-energization of MCC 2XS1 resulted in the loss of several Engineered Safeguards components. The fault in RBCU 2A fan motor starter was cleared in 15 minutes, and power was restored to the Engineered Safeguards components.

Designation of Apparent Cause of Occurrence:

The Reactor Building Cooling Unit 2A fan was operating at high speed at the time the Standby Bus was de-energized. Normally, the high speed contactors are opened by a spring upon loss of power so that when power is regained, the fan motor starts in slow speed and automatically shifts to high speed after an eight-second time delay. This prevents large starting current transients. In this instance, the RBCU fan motor starter high-speed contactor did not open upon loss of power due to a weak spring. Thus, when power was regained, the motor drew a large starting surge of current.

Normally, the motor would be protected by the 300 amp circuit breaker supplying the motor starter on MCC 2XS1. It was discovered, however, that the breaker supplying 2MCC 2XS1 on 600 volt Load Center 2X8 was also set for a 300 amp trip point. Thus, instead of the breaker on MCC 2XS1 tripping, the breaker on 2X8 tripped resulting in loss of MCC 2XS1 and subsequent loss of some Engineered Safeguard components.

Analysis of Occurrence:

Unit 2 was in a cold shutdown condition for one week prior to this incident. The operating low pressure injection pump and decay heat removal cooler were

under the control of the unaffected Engineered Safeguards Channel and continued operation. The loss of a portion of the Engineered Safeguard Components would not have affected the safety of the unit even had it been operating due to the redundancy of Engineered Safeguards components. It is therefore concluded that the health and safety of the public was not affected.

Corrective Action:

The starter contactor mechanism on RBCU fan motor 2A starter was repaired. The spring return will now apply sufficient force to open the high-speed contactors upon loss of supply voltage. The motor starter contact mechanisms for all RBCU fans for all three Oconee units were inspected with no other discrepancies noted. As part of the preventative maintenance program, the RBCU fan starters will be inspected annually to prevent future occurrences. A station modification will be implemented to change the amperage settings of the supply breaker on Load Center 2X8 to 600 amps in order to provide the proper sequence of tripping should another malfunction occur.

Failure Data:

The Clark Controller Company, Part No. 6260 (W32), Size 5 Motor Starter.

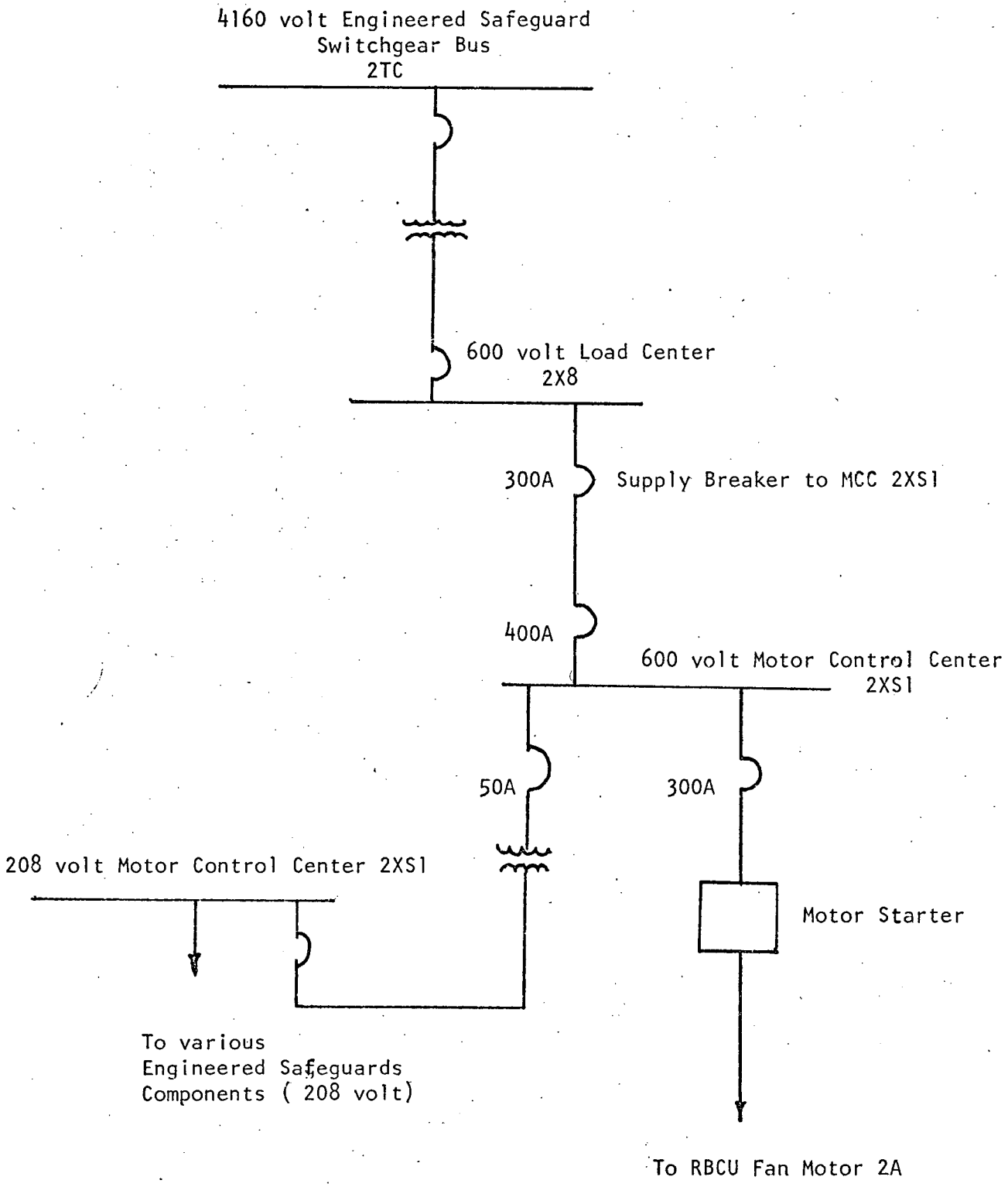
4160 volt Engineered Safeguard
Switchgear Bus
2TC
600 volt Load Center
2X8
300A
Supply Breaker to MCC 2XS1
400A
600 volt Motor Control Center
2XS1
50A
300A
208 volt Motor Control Center 2XS1
Motor Starter
To various
Engineered Safeguards
Components (208 volt)
To RBCU Fan Motor 2A

Figure 1