

C 04/05/78

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)
DISTRIBUTION FOR INCOMING MATERIAL

50-269/270/287

REC: OREILLY J P
NRC

ORG: PARKER W O
DUKE PWR

DOCDATE: 03/23/78
DATE RCVD: 03/23/78

DOCTYPE: LETTER NOTARIZED: NO
SUBJECT:

COPIES RECEIVED
LTR 1 ENCL 1

LICENSEE EVENT REPT (RD 50-269/78-003) ON 02/22/78 CONCERNING ATTEMPT TO
START KEOWEE HYDRO UNIT 2. SOURCE OF AUXILIARY PWR FOR SUBJECT FACILITY,
FAILED DUE TO AN INOPERABLE FIELD FLASHING BREAKER... W/ATT LER 78-003,
78-029 & 78-001.

PLANT NAME: OCONEE - UNIT 1
OCONEE - UNIT 2
OCONEE - UNIT 3

REVIEWER INITIAL: XJM
DISTRIBUTER INITIAL:

***** DISTRIBUTION OF THIS MATERIAL IS AS FOLLOWS *****

NOTES:

1. M. CUNNINGHAM - ALL AMENDMENTS TO FSAR AND CHANGES TO TECH SPECS

INCIDENT REPORTS
(DISTRIBUTION CODE A002)

FOR ACTION: BR CHIEF REID**W/4 ENCL

INTERNAL:

REG FILE**W/ENCL
~~I & E**W/2 ENCL~~
SCHROEDER/IPPOLITO**W/ENCL
NOVAK/CHECK**W/ENCL
KNIGHT**W/ENCL
HANAUER**W/ENCL
EISENHUT**W/ENCL
SHAO**W/ENCL
KREGER/J. COLLINS**W/ENCL
K SEYFRIT/IE**W/ENCL

NRC PDR**W/ENCL
MIPC**W/3 ENCL
HOUSTON**W/ENCL
GRIMES**W/ENCL
BUTLER**W/ENCL
TEDESCO**W/ENCL
BAER**W/ENCL
VOLLMER/BUNCH**W/ENCL
RDSA**W/ENCL

EXTERNAL:

LPDR/S
WALHALLA, SC**W/ENCL
TIC**W/ENCL
NSIC**W/ENCL
ACRS CAT B**W/16 ENCL

COPIES NOT SUBMITTED PER
REGULATORY GUIDE 10.1

DISTRIBUTION: LTR 45 ENCL 45
SIZE: 1P+2P+3P

CONTROL NBR: 780950031

***** THE END *****

004
T

DUKE POWER COMPANY

POWER BUILDING
422 SOUTH CHURCH STREET, CHARLOTTE, N.C. 28242
RECEIVED DISTRIBUTION
SERVICES UNIT

March 23, 1978

WILLIAM O. PARKER, JR.
VICE PRESIDENT
STEAM PRODUCTION

1978 MAR 31 PM 1 06
TELEPHONE: AREA 704
373-4083

RECEIVED
SERVICES
UNIT

Mr. James P. O'Reilly, Director
U. S. Nuclear Regulatory Commission
Suite 1217
230 Peachtree Street, Northwest
Atlanta, Georgia 30303

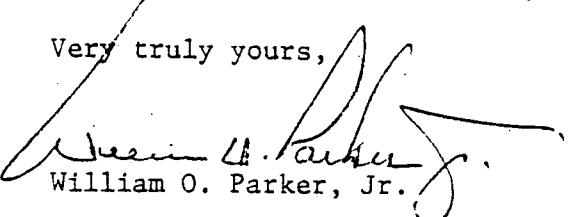
RE: Oconee Units 1, 2, and 3
Docket No. 50-269, -270, and -287

Dear Mr. O'Reilly:

Pursuant to Sections 6.2 and 6.6.2 of the Oconee Nuclear Station Technical Specifications, please find attached Reportable Occurrence Report RO-269/78-3.

Also attached are revised Licensee Event Reports submitted on two similar occurrences reported in Reportable Occurrence Reports RO-269/77-29 and RO-269/78-1, originally transmitted by my letters of January 18, and February 3, 1978, respectively.

Very truly yours,


William O. Parker, Jr.

KRW/pt

Attachment

cc: Director, Office of Management Information
and Program Control

REGULATORY DOCKET FILE COPY

780950031

A002
S
111

DUKE POWER COMPANY
OCONEE UNIT 2

Report Number: RO-269/78-3

Report Date: March 23, 1978

Occurrence Date: February 22, 1978

Facility: Oconee Nuclear Station, Seneca, South Carolina

Identification of Occurrence: Keowee Hydro Unit 2, Field Flashing Breaker
Inoperable

Conditions Prior to Occurrence: Unit 1 100% FP
Unit 2 100% FP
Unit 3 100% FP

Description of Occurrence:

At 1750, on February 22, 1978, when an attempt was made to start Keowee Hydro Unit 2, the unit's field flashing breaker failed to close. The unit was therefore inoperable, contrary to the requirements of Oconee Nuclear Station Technical Specification 3.7.1. The unit was started and successfully operated at 1752. The breaker and controls, wires and contacts within the breaker were inspected with no abnormalities discovered. The unit has successfully started on several subsequent occasions.

This type of incident has occurred on two previous occasions, which were reported in Reportable Occurrence Reports RO-269/77-29, and RO 269/78-1, transmitted by my letters of January 18, and February 3, 1978 respectively.

Apparent Cause of Occurrence:

The apparent cause of the incident was initially identified as a faulty relay within the field flashing breaker control system. The apparently faulty relay was replaced, along with another relay that had been arcing. After relay replacement, and during the investigation of this report, the breaker failed to operate again. Therefore, the exact cause of the breaker malfunction has not yet been determined. The breaker system is continuing to be observed to determine the cause of the incident.

Analysis of Occurrence:

The failure of the breaker to close caused Keowee Unit 2 to become temporarily inoperable. Two minutes after the initial unsuccessful attempt, the field flashing breaker successfully operated making Keowee Unit 2 fully operable. Throughout this period, the second Keowee Hydro unit was fully operable and available to supply emergency power to the station if required. The health and safety of the public were not endangered.

Corrective Action

Initially an inspection of the breaker and its controls was made with no defective components discovered.

During the investigation of this report two relays in the field flashing breaker control circuit were replaced. An extensive investigation is continuing in this area of concern to correct the breaker control system faults.

LICENSEE EVENT REPORT

EXHIBIT A

CONTROL BLOCK: (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

01 | S | C | N | E | E | 1 | 2 | 0 | 0 | - | 10 | 0 | 0 | 0 | 0 | - | 0 | 0 | 3 | 4 | 1 | 1 | 1 | 1 | 4 | 5

7 8 9 14 15 25 26 30 37 38 39 40 41 42 43 44 45 46 47 48 49 50

LICENSEE CODE LICENSE NUMBER LICENSE TYPE CAT 56

01 | L | 6 | 0 | 5 | 0 | 0 | 0 | 2 | 6 | 9 | 7 | 0 | 2 | 2 | 2 | 7 | 8 | 8 | 0 | 3 | 2 | 3 | 7 | 8 | 9

7 8 9 14 15 25 26 30 37 38 39 40 41 42 43 44 45 46 47 48 49 50

REPORT SOURCE DOCKET NUMBER EVENT DATE REPORT DATE

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

02 | At 1750 on February 22, 1978, during normal operation, Oconee attempted to

03 | start Keowee Hydro Unit 2 which is a source of auxillary power for the Oconee

04 | Nuclear Station. The unit failed to start due to an inoperable field flashing

05 | breaker. The unit started on the second and on subsequent attempts. Keowee

06 | Unit 1 and other sources of auxiliary power for the station were available if

07 | needed so that no loss of emergency power was experienced. Thus public health

08 | and safety were not endangered.

09 | E | E | 11 | X | 12 | X | 13 | Z | Z | Z | Z | Z | 14 | Z | 15 | Z | 16

7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50

SYSTEM CODE CAUSE CODE CAUSE SUBCODE COMPONENT CODE COMP. SUBCODE VALVE SUBCODE

17 | 7 | 8 | 0 | 0 | 3 | 0 | 3 | L | 0

21 22 23 24 25 26 27 28 29 30 31 32

LER/RO REPORT NUMBER EVENT YEAR SEQUENTIAL REPORT NO. OCCURRENCE CODE REPORT TYPE REVISION NO.

18 | X | 19 | A | 20 | Z | 21 | Z | 22 | 0 | 0 | 0 | 0 | Y | 23 | Y | 24 | L | 25 | Z | 26 | 9 | 27 | 9 | 28 | 9 | 29 | 9 | 30

33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50

ACTION: FUTURE TAKEN ACTION EFFECT ON PLANT SHUTDOWN METHOD HOURS ATTACHMENT SUBMITTED NPRO-4 FORM SUB. PRIME COMP. SUPPLIER COMPONENT MANUFACTURER

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

10 | The breaker and it's control system were initially inspected with no

11 | apparent abnormalities discovered. During subsequent investigations the

12 | breaker failed on three other occasions. Faulty relays were at first suspect

13 | but the third failure occurred after two relays were replaced. The apparent

14 | cause has not been determined but extensive investigation is continuing.

15 | E | 1 | 0 | 0 | 29 | NA | A | 31 | Operator Observation | 32

7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50

FACILITY STATUS % POWER OTHER STATUS METHOD OF DISCOVERY DISCOVERY DESCRIPTION

16 | Z | 33 | Z | 34 | NA | NA | NA | 36

7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50

ACTIVITY CONTENT RELEASED OF RELEASE AMOUNT OF ACTIVITY LOCATION OF RELEASE

17 | 0 | 0 | 0 | 37 | Z | 38 | NA

7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50

PERSONNEL EXPOSURES NUMBER TYPE DESCRIPTION

18 | 0 | 0 | 0 | 40 | NA

7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50

PERSONNEL INJURIES NUMBER DESCRIPTION

19 | Z | 42 | NA

7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50

LOSS OF OR DAMAGE TO FACILITY TYPE DESCRIPTION

20 | N | 44 | NA

7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50

PUBLICITY ISSUED DESCRIPTION

NAME OF PREPARER K. R. Wilson

PHONE: (704) 373-8197

NRC USE ONLY

LICENSEE EVENT REPORT

EXHIBIT A

CONTROL BLOCK: 1

(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

01 | S | C | N | E | E | 1 | 2 | 0 | 0 | - | 0 | 0 | 0 | 0 | - | 0 | 0 | 3 | 4 | 1 | 1 | 1 | 1 | 4 | 5

LICENSEE CODE 14 LICENSE NUMBER 25 LICENSE TYPE 30 CAT 58

CON'T

01 | REPORT SOURCE | L | 6 | 0 | 5 | 0 | 0 | 0 | 2 | 6 | 9 | 7 | 1 | 2 | 1 | 9 | 7 | 7 | 8 | 0 | 3 | 2 | 3 | 7 | 8 | 9

DOCKET NUMBER 58 EVENT DATE 74 REPORT DATE 80

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES 10

02 | During normal operation Keowee Hydro Unit 2 failed to start on initiation

03 | from Oconee control room. Since Keowee 2 is a source of auxiliary power

04 | for the Oconee station (Units 1, 2, and 3) this is reportable under

05 | T. S. 6.6.2.1.b.(2). The unit started normally on second and subsequent

06 | attempts.

07 |

08 |

09 |

SYSTEM CODE 9 CAUSE CODE 11 CAUSE SUBCODE 12 COMPONENT CODE 13 COMP. SUBCODE 15 VALVE SUBCODE 16

E | E | X | X | Z | Z | Z | Z | Z | Z | Z | Z

17 | 17 | 7 | 7 | 0 | 2 | 9 | 0 | 3 | L | 1 | 1

LER/RO REPORT NUMBER 21 EVENT YEAR 22 SEQUENTIAL REPORT NO. 24 OCCURRENCE CODE 26 REPORT TYPE 30 REVISION NO. 32

ACTION TAKEN 33 FUTURE ACTION 34 EFFECT ON PLANT 35 SHUTDOWN METHOD 36 HOURS 37 ATTACHMENT SUBMITTED 41 NPRO-4 FORM SUB. 42 PRIME COMP. SUPPLIER 43 COMPONENT MANUFACTURER 44

X | A | Z | Z | 0 | 0 | 0 | 0 | Y | Y | L | Z | 9 | 9 | 9

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS 27

10 | The Field Flashing Breaker on the generator failed to close on first attempt.

11 | The breaker was verified as operable by subsequent operation and visual

12 | examination. Normal inspection and servicing resulted in no further correc-

13 | tive action. Extensive investigation is continuing as of March 23, 1978.

14 |

FACILITY STATUS 9 % POWER 10 OTHER STATUS 30 METHOD OF DISCOVERY 45 DISCOVERY DESCRIPTION 32

E | 1 | 0 | 0 | NA | A | Operator Observation

ACTIVITY CONTENT 11 RELEASED OF RELEASE 12 AMOUNT OF ACTIVITY 35 LOCATION OF RELEASE 36

Z | Z | NA | NA

PERSONNEL EXPOSURES 11 NUMBER 12 TYPE 13 DESCRIPTION 39

0 | 0 | 0 | Z | NA

PERSONNEL INJURIES 11 NUMBER 12 DESCRIPTION 41

0 | 0 | 0 | NA

LOSS OF OR DAMAGE TO FACILITY 11 TYPE 12 DESCRIPTION 43

Z | NA

PUBLICITY 11 ISSUED 12 DESCRIPTION 45

N | NA

NAME OF PREPARER K. R. Wilson

PHONE: (704) 373-8197

NRC USE ONLY

LICENSEE EVENT REPORT

EXHIBIT A

CONTROL BLOCK:										(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)											
[0][1]		S C N E E I [2] 0 0 - 0 0 0 0 0 - 0 0 [3] 4 1 1 1 1 [4] [] [5]																			
LISCENSEE CODE		LISCENSE NUMBER										LISCENSE TYPE		CAT							
CONT		REPORT SOURCE L [6] Q 5 0 0 0 2 6 9 [7] 0 1 0 5 7 8 [8] 0 3 2 3 7 8 [9]																			
		DOCKET NUMBER										EVENT DATE		REPORT DATE							
EVENT DESCRIPTION AND PROBABLE CONSEQUENCES [10]																					
[0][2]		During normal operation Keowee Hydro Unit 2 failed to start on initiation																			
[0][3]		from Oconee control room. Since Keowee 2 is a source of auxiliary power																			
[0][4]		for the Oconee station (Units 1, 2, and 3) this is reportable under																			
[0][5]		T. S. 6.6.2.1.b.(2). The unit started normally on second and subsequent																			
[0][6]		attempts																			
[0][7]																					
[0][8]																					
[0][9]																					
		SYSTEM CODE E E [11]										CAUSE CODE X [12]		CAUSE SUBCODE X [13]		COMPONENT CODE Z Z Z Z Z [14]		COMP. SUBCODE Z [15]		VALVE SUBCODE Z [16]	
		LER/RD REPORT NO. [17]		EVENT YEAR [7][8][9]		SEQUENTIAL REPORT NO. [0][1][2]		OCCURRENCE CODE [0][3]		REPORT TYPE L [4]		REVISION NO. [2]									
ACTION TAKEN		FUTURE ACTION		EFFECT ON PLANT		SHUTDOWN METHOD		HOURS		ATTACHMENT SUBMITTED		NPRO- FORM SUB.		PRIME COMP. SUPPLIER		COMPONENT MANUFACTURER					
X [18]		A [19]		Z [20]		Z [21]		0 0 0 0 [22]		Y [23]		Y [24]		L [25]		Z 9 9 9 [26]					
CAUSE DESCRIPTION AND CORRECTIVE ACTIONS [27]																					
[1][0]		The Field Flashing Breaker (DB-26) on the generator failed to close on first																			
[1][1]		attempt. The breaker was verified as operable by subsequent operation and																			
[1][2]		visual examination. Inspection and servicing resulted in no further correc-																			
[1][3]		tive action. Extensive investigation is continuing as of March 23, 1978.																			
[1][4]																					
FACILITY STATUS		% POWER		OTHER STATUS		METHOD OF DISCOVERY		DISCOVERY DESCRIPTION													
E [28]		1 0 [29]		NA [30]		A [31]		Operator Observation [32]													
ACTIVITY CONTENT RELEASED OF RELEASE		AMOUNT OF ACTIVITY		LOCATION OF RELEASE																	
Z [33]		Z [34]		NA [36]																	
PERSONNEL EXPOSURES NUMBER		TYPE		DESCRIPTION																	
0 0 [37]		Z [38]		NA [39]																	
PERSONNEL INJURIES NUMBER		DESCRIPTION																			
0 0 [40]		NA [41]																			
LOSS OF OR DAMAGE TO FACILITY TYPE		DESCRIPTION																			
Z [42]		NA [43]																			
PUBLICITY ISSUED		DESCRIPTION																			
N [44]		NA [45]																			
NAME OF PREPARER		K. R. Wilson																			
PHONE:		(704) 373-8197																			