

C 3/22/78

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)
DISTRIBUTION FOR INCOMING MATERIAL 50-287

REC: OREILLY J P
NRC

ORG: PARKER W O
DUKE PWR

DOCDATE: 03/13/78
DATE RCVD: 03/20/78

DOCTYPE: LETTER NOTARIZED: NO

COPIES RECEIVED

SUBJECT:

LTR 0 ENCL 1

LICENSEE EVENT REPT (RO 50-287/78-6) ON 02/10/78 CONCERNING DURING A RPS
BREAKER TEST, CONTROL ROD 3, GROUP 4 DROPPED INTO THE CORE CAUSING AN
IMMEDIATE PWR RUNBACK TO 55%.

PLANT NAME: OCONEE - UNIT 3

REVIEWER INITIAL: XJM
DISTRIBUTOR INITIAL: RBT

***** 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
ROSA**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+1P+1P

CONTROL NBR: 780810008

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

004
T

DUKE POWER COMPANY

POWER BUILDING

422 SOUTH CHURCH STREET, CHARLOTTE, N. C. 28242

C 3/22/78

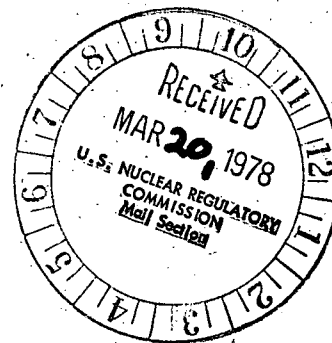
WILLIAM O. PARKER, JR.
VICE PRESIDENT
STEAM PRODUCTION

REGULATORY DOCKET FILE COPY

AREA 704
373-4083

March 13, 1978

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



RE: Oconee Unit 3
Docket No. 50-287

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-287/78-6.

Very truly yours,

William O. Parker, Jr.
William O. Parker, Jr. *By Mrs*

KRW/vmb

Attachment

cc: Director, Office of Management Information
and Program Control

780810008

A002/S *
0/1

DUKE POWER COMPANY
OCONEE UNIT 3

Report Number: RO-287/78-6

Report Date: March 13, 1978

Occurrence Date: February 10, 1978

Facility: Oconee Unit 3, Seneca, South Carolina

Identification of Occurrence: Control Rod Stator Failure During RPS Breaker Test

Conditions Prior to Occurrence: 100% Full Power

Description of Occurrence:

On February 10, 1978, at 0842, during the performance of a RPS breaker test, Control Rod 3, Group 4 fell into the core causing a power runback to 55 percent. At 0850, it was determined that an A-phase-to-neutral short had occurred and that stator replacement would be necessary.

During the above mentioned RPS breaker test, all CC phases for the Safety Groups are deenergized. Normally 2 phases, A and CC are energized to hold the Safety Groups. However, the system design is such that only one phase need be energized to hold the groups in place. The A phase had already started on this particular rod, so when the CC was deenergized, the rod fell.

Unit shutdown was initiated to replace the stator and when the replacement was accomplished the unit was returned to power operations.

Apparent Cause of Occurrence:

The short was caused by corrosion and moisture buildup within the stator cavity probably caused by failure of the O-ring seal to be leak-proof. A similar incident was reported in RO-270/77-17 which was transmitted by my letter of January 27, 1978.

Analysis of Occurrence:

The rod drop caused an immediate power runback to 55 percent, due to asymmetric control rod configuration. A unit shutdown was eventually required to replace the stator. Instrumentation and controls properly handled the runback and shutdown insuring that the reactor remained in a safe configuration at all times and that no applicable station limits were exceeded. Thus, the health and safety were not endangered by this incident.

Corrective Action:

The stator was replaced following unit shutdown.

LICENSEE EVENT REPORT

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

0 1 | S | C | N | E | E | 3 | 2 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 3 | 4 | 1 | 1 | 1 | 1 | 4 | 5
7 8 9 14 15 25 26 30 37 38 58

CON'T
0 1 | L | 6 | 0 | 5 | 0 | 0 | 0 | 2 | 8 | 7 | 7 | 0 | 2 | 1 | 0 | 7 | 8 | 8 | 0 | 3 | 1 | 3 | 7 | 8 | 9
7 8 60 61 68 69 74 75 80

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 | During a RPS breaker test, Control Rod 3, Group 4 dropped into the core
0 3 | causing an immediate power runback to 55%. It was determined that the
0 4 | stator had shorted due to moisture buildup and would have to be replaced.
0 5 | The unit was off-line from 0850 on February 10 to 0520 on February 22.
0 6 | Instrumentation and controls properly handled the situation to prevent the
0 7 | exceedance of any plant limits and to insure that the health and safety of
0 8 | the public were not endangered.

0 9 | R | B | E | A | C | R | D | R | V | E | Z | Z
7 8 9 10 11 12 13 14 15 16

17 | LER/RO REPORT NUMBER | 7 | 8 | SEQUENTIAL REPORT NO. | 0 | 0 | 6 | OCCURRENCE CODE | 0 | 3 | REPORT TYPE | L | REVISION NO. | 0 |
21 22 23 24 26 27 28 29 30 31 32
ACTION TAKEN | FUTURE ACTION | EFFECT ON PLANT | SHUTDOWN METHOD | HOURS | ATTACHMENT SUBMITTED | NPRD-4 FORM SUB. | PRIME COMP. SUPPLIER | COMPONENT MANUFACTURER |
A | Z | A | A | 0 | 1 | 0 | 2 | 0 | Y | Y | N | D | 1 | 5 | 0 |
33 34 35 36 37 40 41 42 43 44 47

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 | The stator short was probably caused by excessive moisture which entered
1 1 | the cavity due to failure of the O-ring seal to keep it leak tight. The
1 2 | corrective action was the replacement of the stator. A similar event was
1 3 | reported by RO-270/77-17 which was revised in our letter of February 28, 1978.
1 4 |

1 5 | E | 1 | 0 | 0 | NA | B | During RPS breaker test
7 8 9 10 12 13 44 45 46 80

1 6 | Z | Z | NA | NA | NA
7 8 9 10 11 44 45 80

1 7 | 0 | 0 | 0 | Z | NA
7 8 9 10 11 12 13 80

1 8 | 0 | 0 | 0 | NA
7 8 9 10 11 12 80

1 9 | Z | NA
7 8 9 10 80

2 0 | N | NA
7 8 9 10 80

NAME OF PREPARER K. R. Wilson PHONE: (704) 373-8197

RECEIVED DOCUMENT
CONTROL DESK

1978 MAR 24 PM 3 43

U.S. NRC
DISTRIBUTION SERVICES
BRANCH