

DUKE POWER COMPANY

POWER BUILDING

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

WILLIAM O. PARKER, JR.
VICE PRESIDENT
STEAM PRODUCTION

November 5, 1979

TELEPHONE: AREA 704
373-4063

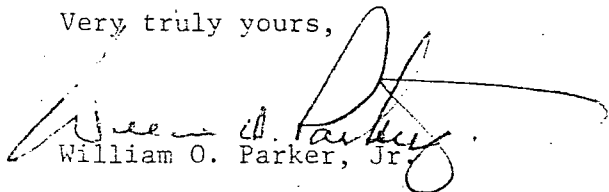
Mr. J. P. O'Reilly, Director
U.S. Nuclear Regulatory Commission
Region II
101 Marietta Street, Suite 3100
Atlanta, GA 30303

Re: Oconee Unit 1
Docket No. 50-269

Dear Mr. O'Reilly:

Please find attached Reportable Occurrence Report RO-269/79-33. This report is submitted pursuant to Oconee Nuclear Station Technical Specifications 6.2 and 6.6.2.1.b(2), which concerns operation in a degraded mode permitted by a limiting condition for operation, and describes an incident which is considered to be of no significance with respect to its effect on the health and safety of the public.

Very truly yours,


William O. Parker, Jr.

SRL/sch
Attachment

cc: Director, Office of Management Information
and Program Control



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DUKE POWER COMPANY
Oconee Unit 1

Report Number: RO-269/79-33

Report Date: November 5, 1979

Occurrence Date: October 8, 1979

Facility: Oconee 1, Seneca, South Carolina

Description of Occurrence: Control Rod Group Overlap Limit Exceeded

Conditions Prior to Occurrence: 99% Full Power

Description of Occurrence:

At 1327 on October 8, 1979, control rod assembly (CRA) Group 5 dropped into the Oconee 1 core during performance of the Reactor Protective System (RPS) Channel D On-Line Test at 99% full power. Reactor power and Reactor Coolant System (RCS) pressure decreased until a variable low pressure reactor trip occurred several seconds later from approximately 35% full power. Oconee Nuclear Station Technical Specification 3.5.2.5(b) requires that operating rod group overlap be limited to 25% + 5% between two sequential groups. This limit was exceeded when CRA Group 5 dropped. Reactor startup commenced at 1725 on October 8, and the unit was returned to service at 0214 on October 9, 1979.

Apparent Cause of Occurrence:

The control rod group overlap limit was exceeded for approximately four seconds when CRA Group 5 dropped into the core. During the subsequent investigation it was discovered that the disconnect switch for one of the two parallel supplies of DC power for CRA Group 5 was open although it should have been closed. When the RPS Channel D test was performed, the other power supply breaker were opened, causing CRA Group 5 to drop. The exact cause for the DC disconnect switch to be open could not be determined, although it may have been left open after an earlier test.

Analysis of Occurrence:

Technical Specification 3.5.2.5 permits the control rod group overlap to be exceeded for up to two hours. During the approximately four seconds the limit was exceeded when CRA Group 5 dropped, reactor power decreased from 99 to 35% full power, so that the margin to the maximum allowable heat rate actually increased. However, since this incident involved operation in a degraded mode permitted by a limiting condition for operation, it must be reported pursuant to Technical Specification 6.6.2.1.b(2), although it was of no significance with respect to safe operation, and the health and safety of the public were not affected.

Corrective Action:

The immediate corrective action was to close the open DC disconnect switch prior to returning to power. The RPS on-line test procedures will also be revised to provide further assurance that the alternate power supplies are available prior to tripping the RPS channels.

LICENSEE EVENT REPORT

EXHIBIT A

CONTROL BLOCK: [] [] [] [] [] (1) (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

011 | S | C | N | E | E | 1 | 2 | 0 | 1 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 3 | 4 | 1 | 1 | 1 | 1 | 4 | | | 5
7 8 9 14 15 25 28 30 37 38 44

CDNT
011 | REPORT SOURCE | L | 6 | 0 | 1 | 5 | 0 | 1 | 0 | 1 | 0 | 2 | 6 | 9 | 7 | 1 | 1 | 0 | 1 | 0 | 1 | 8 | 7 | 9 | 8 | 1 | 1 | 1 | 0 | 5 | 7 | 1 | 9 | 9
7 8 60 61 65 69 74 75 80

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

02 | At 1327 on October 8, 1979, CRA Group 5 dropped into the core during perfor-
03 | mance of the RPS on-line test, causing the rod group overlap limit to be
04 | exceeded for approximately 4 seconds. The reactor tripped on variable low
05 | pressure after power decreased from 99 to 35% full power. Since Tech Specs was
06 | allow the overlap limit to be exceeded for up to two hours and since the mar-
07 | gin to maximum allowable heat rate increased, the incident did not affect safe
08 | operation or the health and safety of the public.

09 | SYSTEM CODE | I | A | 11 | CAUSE CODE | X | 12 | CAUSE SUBCODE | Z | 13 | COMPONENT CODE | C | R | D | R | V | I | E | 14 | COMP. SUBCODE | Z | 15 | VALVE SUBCODE | Z | 16 |
17 | LER/RO REPORT NUMBER | 7 | 9 | 21 | EVENT YEAR | 7 | 9 | 22 | SEQUENTIAL REPORT NO. | 0 | 3 | 3 | 24 | OCCURRENCE CODE | 0 | 3 | 27 | REPORT TYPE | L | 30 | REVISION NO. | 0 | 32 |
18 | ACTION TAKEN | X | 33 | FUTURE ACTION | G | 34 | EFFECT ON PLANT | A | 35 | SHUTDOWN METHOD | C | 36 | HOURS | 0 | 1 | 0 | 1 | 3 | 37 | ATTACHMENT SUBMITTED | Y | 41 | NRC FORM SUB. | Y | 42 | PRIME COMP. SUPPLIER | L | 43 | COMPONENT MANUFACTURER | G | 0 | 8 | 1 | 0 | 45

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

10 | The switch for one of the two parallel DC power supplies for CRA Group 5 was
11 | open prior to performing the on-line test, and when the RPS Channel D test
12 | performed, the other power supply breakers opened, allowing CRA Group 5 to
13 | drop. The alternate power supply switch was reclosed, and test procedures
14 | will be revised to provide further assurance that that supply is available.

15 | FACILITY STATUS | E | 28 | % POWER | 0 | 9 | 9 | 29 | OTHER STATUS | NA | 30 | METHOD OF DISCOVERY | A | 31 | DISCOVERY DESCRIPTION | Operator observation | 32

16 | ACTIVITY RELEASED | Z | 33 | CONTENT OF RELEASE | Z | 34 | AMOUNT OF ACTIVITY | NA | 35 | LOCATION OF RELEASE | NA | 36

17 | PERSONNEL EXPOSURES NUMBER | 0 | 0 | 0 | 37 | TYPE | Z | 38 | DESCRIPTION | NA | 39

18 | PERSONNEL INJURIES NUMBER | 0 | 0 | 0 | 40 | DESCRIPTION | NA | 41

19 | LOSS OF OR DAMAGE TO FACILITY TYPE | Z | 42 | DESCRIPTION | NA | 43

20 | PUBLICITY ISSUED DESCRIPTION | N | 44 | NA | 45

NAME OF PREPARER S. R. Lewis

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