

DUKE POWER COMPANY

POWER BUILDING

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

WILLIAM O. PARKER, JR.
VICE PRESIDENT
STEAM PRODUCTION

March 14, 1979

TELEPHONE: AREA 704
373-4083

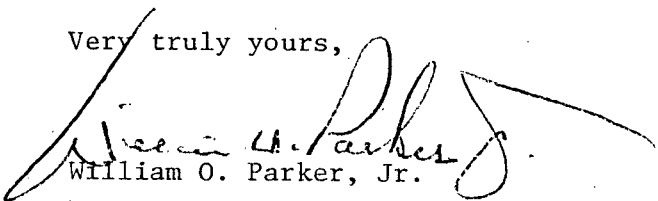
Mr. James P. O'Reilly, Director
U. S. Nuclear Regulatory Commission
Region II
101 Marietta Street, Suite 3100
Atlanta, Georgia 30303

Re: Oconee Unit 1
Docket No. 50-269

Dear Mr. O'Reilly:

Please find attached Reportable Occurrence Report RO-269/79-9. This report is being submitted pursuant to Oconee Nuclear Station Technical Specifications 6.2 and 6.6.2.1.a(2), which concerns operation in a mode which is less conservative than a limiting condition for operation, and describes an incident which is considered to have no significance with respect to its effect on the health and safety of the public.

Very truly yours,


William O. Parker, Jr.

SRL:scs
Attachment

cc: Director, Office of Management Information
and Program Control



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DUKE POWER COMPANY
OCONEE UNIT 1

Report Number: RO-269/79-9

Report Date: March 14, 1979

Occurrence Date: February 28, 1979

Facility: Oconee Unit 1, Seneca, South Carolina

Identification of Occurrence: Reactor Building High Pressure Trip Switches Out of Calibration in Non-Conservative Direction

Conditions Prior to Occurrence: 100% Full Power

Description of Occurrence:

At 1255 on February 28, 1979, during the performance of the annual Reactor Building (RB) High Pressure Trip Test, the pressure switch for Reactor Protective System (RPS) Channel A was found to be out of calibration in the non-conservative direction. The pressure switch was recalibrated and Channel A was declared operable. Later that afternoon, it was discovered that RPS Channels C and D were also out of calibration. They were recalibrated, and all three channels were operable by 1627 on February 28. The function of each pressure switch is to trip its respective RPS channel when it senses high RB pressure, which would occur in the event of a breach of Reactor Coolant System (RCS) integrity. A reactor trip is initiated whenever two of the four RPS channels are tripped. Oconee Nuclear Station Technical Specification 3.5.3 requires a maximum trip setpoint of 4.0 PSIG for the pressure switches. However, analysis of the calibration data indicated that Channels A, C and D would have tripped at 4.40, 4.45 and 4.05 PSIG, respectively. This is in violation of the requirement of Table 3.5.1-1 of the Technical Specifications that a minimum of two RPS Channels be operable. However, since the three pressure switches were recalibrated and returned to service, it was not necessary to initiate a shutdown of the unit.

Apparent Cause of Occurrence:

This is the first occurrence of this nature, and the exact cause could not be determined. The previous calibration, performed February 24, 1978, indicated that all four RPS channels were well within specification.

Analysis of Occurrence:

The 4.0 PSIG setpoint provides positive assurance that a reactor trip would occur in the unlikely event of a design basis accident, even in the absence of a low RCS pressure trip. Since the Channel B pressure switch was calibrated for a trip setpoint of 3.9 PSIG, a reactor trip would have been initiated at a RB pressure of 4.05 PSIG. Due to the small margin by which this exceeds the specified setpoint and the degree of conservatism in establishing that setpoint, the resulting delay in initiating a reactor trip in the event of a breach in RCS integrity is considered to be insignificant. In addition, the low RCS pressure trip instrumentation was operable and would have provided a reactor trip if required. Thus, safe operation of the unit was not affected, and the health and safety of the public were not endangered.

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Corrective Action:

The pressure switches were recalibrated for a trip setpoint of 3.8 PSIG and returned to service. The calibration of these switches will be checked again within six months, rather than annually as currently required, in order to determine if they are drifting significantly.

LICENSEE EVENT REPORT

EXHIBIT A

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

01 | S | I | C | N | E | E | 1 | 2 | 0 | 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 58 59 69 74 75 80

CONT
01 | REPORT SOURCE | L | 6 | 0 | 5 | 0 | 0 | 0 | 2 | 6 | 1 | 9 | 7 | 0 | 2 | 2 | 8 | 7 | 9 | 8 | 0 | 1 | 3 | 1 | 1 | 4 | 7 | 9 | 9 |
7 8 60 61 68 69 74 75 80

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

02 | During the performance of the annual Reactor Building (RB) High Pressure
03 | Trip Test, RPS Channels A, C and D pressure switches were found to be out
04 | of calibration in the non-conservative direction. In the unlikely event of a
05 | design basis accident, a reactor trip would have occurred at a RB pressure of
06 | 4.05 PSIG, only slightly above the specified maximum trip setpoint of 4.0
07 | PSIG. Thus, safe operation of the unit was not affected, and the health and
08 | safety of the public were not endangered.

09 | SYSTEM CODE | I | B | 11 | CAUSE CODE | E | 12 | CAUSE SUBCODE | E | 13 | COMPONENT CODE | I | N | S | T | R | U | 14 | COMP. SUBCODE | S | 15 | VALVE SUBCODE | Z | 16 |
7 8 9 10 11 12 13 18 19 20

17 | LER/RO REPORT NUMBER | 7 | 9 | 21 | 22 | SEQUENTIAL REPORT NO. | 0 | 0 | 9 | 24 | 26 | OCCURRENCE CODE | 0 | 1 | 27 | 29 | REPORT TYPE | T | 30 | 31 | REVISION NO. | 0 | 32 |
ACTION TAKEN | E | 18 | X | 19 | 33 | 34 | EFFECT ON PLANT | Z | 20 | 35 | SHUTDOWN METHOD | Z | 21 | 36 | HOURS | 0 | 1 | 0 | 0 | 37 | 40 | ATTACHMENT SUBMITTED | Y | 23 | 41 | NPRO-4 FORM SUB. | Y | 24 | 42 | PRIME COMP. SUPPLIER | L | 25 | 43 | COMPONENT MANUFACTURER | M | 2 | 3 | 5 | 44 | 47 | 26

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

10 | This is the first such occurrence, and the exact cause could not be
11 | determined. The switches were recalibrated and returned to service. The
12 | calibration will be checked again within six months in order to note signifi-
13 | cant instrument drift.

15 | FACILITY STATUS | E | 28 | % POWER | 1 | 0 | 0 | 29 | OTHER STATUS | NA | 30 | METHOD OF DISCOVERY | B | 31 | DISCOVERY DESCRIPTION | Annual Trip Test | 32 |
7 8 9 10 12 13 44 45 46 80

16 | ACTIVITY CONTENT RELEASED OF RELEASE | Z | 33 | Z | 34 | AMOUNT OF ACTIVITY | NA | 35 | LOCATION OF RELEASE | NA | 36 |
7 8 9 10 11 44 45 80

17 | PERSONNEL EXPOSURES NUMBER | 0 | 0 | 0 | 37 | TYPE | Z | 38 | DESCRIPTION | NA | 39 |
7 8 9 11 12 13 80

18 | PERSONNEL INJURIES NUMBER | 0 | 0 | 0 | 40 | DESCRIPTION | NA | 41 |
7 8 9 11 12 80

19 | LOSS OF OR DAMAGE TO FACILITY TYPE | Z | 42 | DESCRIPTION | NA | 43 |
7 8 9 10 80

20 | PUBLICITY ISSUED | N | 44 | DESCRIPTION | NA | 45 | NRC USE ONLY
7 8 9 10 80

NAME OF PREPARER S. R. Lewis

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