

ACCESSION NBR: 7902260495 DOC. DATE: 79/02/19 NOTARIZED: NO  
 FACIL: 50-270 OCONEE NUCLEAR STATION, UNIT 2, DUKE POWER CO.  
 AUTH. NAME: LEWIS, S.R. AUTHOR AFFILIATION: DUKE POWER CO.  
 RECIP. NAME: REGION 2, ATLANTA, OFFICE OF THE DIRECTOR

DOCKET #  
05000270

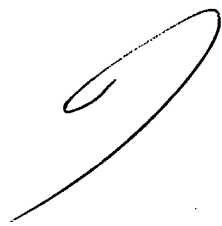
SUBJECT: LER 79-001/03L-0 ON 790118:ES CHANNEL C REACTOR BLDG NARROW RANGE PRESSURE TRANSMITTER OUT OF CALIBR IN NONCONSERVATIVE DIRECTION ON THREE OCCASIONS. NO CAUSE FOUND. TRANSMITTER AMPLIFIER REPLACED.

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 TITLE: INCIDENT REPORTS

NOTES: M. CUNNINGHAM - ALL ADPTS TO FSAR + CHANGES TO TECH SPECS.

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	29 ACRS	16	16			

FEB 28 1979



DUKE POWER COMPANY  
OCONEE UNIT 2

Report Number: RO-270/79-1

Report Date: February 19, 1979

Occurrence Date: January 18, 1979

Facility: Oconee Unit 2, Seneca, South Carolina

Identification of Occurrence: Reactor Building Narrow Range Pressure  
Transmitter Out of Calibration in Non-Conservative  
Direction

Conditions Prior to Occurrence: 97% Full Power

Description of Occurrence:

At 2335 on January 18, 1979 routine instrument surveillance revealed that the Engineered Safeguards Channel C Reactor Building Narrow Range Pressure Transmitter was out of calibration in the non-conservative direction. The channel was tripped by operations personnel. The transmitter was recalibrated and returned to service by 0800 on January 19, 1979. During the calibration it was determined that Channel C would have tripped at 4.14 PSIG, but that redundant channels A and B would have tripped at 3.4 PSIG, well within specification. On January 23, 1979 the Channel C pressure transmitter was again discovered to be out of calibration; it was again recalibrated and returned to service. The calibration indicated that it would have tripped at 4.273 PSIG. On January 29, 1979 the transmitter again drifted out of calibration and would have tripped at 4.426 PSIG. The transmitter amplifier was replaced, and the transmitter was recalibrated and returned to service. Channels A and B remained calibrated for a trip setpoint of 3.4 PSIG throughout this period.

Apparent Cause of Occurrence:

The exact cause of the setpoint drift has not been determined. Pressure transmitter setpoint drift has been a recurring problem and was previously attributed to high temperature and humidity in the penetration rooms, but this was not the case in the most recent failures. Further investigation into the cause of these transmitter failures is continuing.

Analysis of Occurrence:

Since redundant channels A and B were operable, the minimum degree of redundancy required by Table 3.5.1-1 of the Oconee Nuclear Station Technical Specifications was maintained. Therefore, 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 transmitter was recalibrated and returned to service each time subsequent to discovering its inoperability on January 18 and again on January 23, 1979. When it was again found to be out of calibration on January 29, the amplifier was replaced, and it was recalibrated and returned to service. Since this is a recurring problem, in order to isolate the failure mechanism and preclude future incidents the following actions have been initiated:

1. Three new transmitters have been ordered and will be available for use as replacements.
2. The procedure used to calibrate the transmitters will be reviewed for possible improvements and to be sure that it is being followed correctly.
3. The pressure indications of all three narrow range pressure transmitters and the wide range Reactor Building pressure transmitter, as well as the penetration room temperature, are being printed out every 15 minutes in order to monitor temperature-related drifts.
4. The instrument surveillance procedure has been revised so that the pressure transmitters will be calibrated if their readings disagree by more than 0.4 PSIG.

LICENSEE EVENT REPORT

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

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7 8 9 14 15 25 28 30 37 48  
LICENSEE CODE LICENSE NUMBER LICENSE TYPE CAT 58

01 | L | 0 | 5 | 0 | 0 | 0 | 2 | 7 | 0 | 7 | 0 | 1 | 1 | 8 | 7 | 9 | 8 | 0 | 2 | 1 | 9 | 7 | 9 | 9  
7 8 60 61 68 69 74 75 80  
REPORT SOURCE DOCKET NUMBER EVENT DATE REPORT DATE

02 | On January 18, 23, and 29, 1979 the ES Channel C Reactor Building Narrow  
03 | Range Pressure Transmitter was discovered to be out of calibration in the non-  
04 | conservative direction. Redundant Channels A and B remained operable through-  
05 | out this time period, so minimum redundancy for safe operation of the unit was  
06 | maintained. Therefore, the health and safety of the public were not endangered.  
07 | \_\_\_\_\_  
08 | \_\_\_\_\_

09 | I | B | 11 | E | 12 | E | 13 | I | N | S | T | R | U | 14 | T | 15 | Z | 16  
7 8 9 10 11 12 13 18 19 20  
SYSTEM CCDE CAUSE CODE CAUSE SUBCODE COMPONENT CODE COMP. SUBCODE VALVE SUBCODE  
17 | 7 | 9 | 21 | 0 | 0 | 1 | 24 | 0 | 3 | 28 | L | 30 | 0 | 32  
7 8 21 22 24 26 27 28 29 30 31  
LER/RO REPORT NUMBER EVENT YEAR SEQUENTIAL REPORT NO. OCCURRENCE CODE REPORT TYPE REVISION NO.  
18 | A | 19 | Z | 20 | Z | 21 | 0 | 0 | 0 | 0 | 22 | Y | 23 | Y | 24 | L | 25 | M | 4 | 5 | 5 | 26  
33 34 35 36 37 38 39 40 41 42 43 44 45  
ACTION TAKEN FUTURE ACTION EFFECT ON PLANT SHUTDOWN METHGD HOURS ATTACHMENT SUBMITTED NPRO-4 FORM SUB. PRIME COMP. SUPPLIER COMPONENT MANUFACTURER

10 | The exact cause has not been determined. Subsequent to the first two  
11 | occurrences, the transmitter was recalibrated and returned to service.  
12 | After the third, the transmitter amplifier was replaced. Replacement trans-  
13 | mitters have been ordered, and the transmitters will be more closely monitored  
14 | in order to observe temperature or age-related drift.

15 | E | 28 | 0 | 9 | 7 | 29 | NA | 30 | A | 31 | Operator Observation | 32  
7 8 9 10 11 12 13 14 15 16 17 18 19 20  
FACILITY STATUS % POWER OTHER STATUS METHOD OF DISCOVERY DISCOVERY DESCRIPTION

16 | Z | 33 | Z | 34 | NA | 35 | NA | 36  
7 8 9 10 11 12 13 14 15 16  
ACTIVITY CONTENT RELEASED OF RELEASE AMOUNT OF ACTIVITY LOCATION OF RELEASE

17 | 0 | 0 | 0 | 0 | 37 | Z | 38 | NA | 39  
7 8 9 10 11 12 13 14 15  
PERSONNEL EXPOSURES NUMBER TYPE DESCRIPTION

18 | 0 | 0 | 0 | 0 | 40 | NA | 41  
7 8 9 10 11 12 13 14  
PERSONNEL INJURIES NUMBER DESCRIPTION

19 | Z | 42 | NA | 43  
7 8 9 10 11 12 13 14  
LOSS OF OR DAMAGE TO FACILITY TYPE DESCRIPTION

20 | N | 44 | NA | 45  
7 8 9 10 11 12 13 14  
ISSUED DESCRIPTION

NAME OF PREPARER S. R. Lewis

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