

NRC DISTRIBUTION FOR PART 50 DOCKET MATERIAL

FILE NUMBER  
INCIDENT REPORT

TO: MR N C MOSELEY

FROM: DUKE POWER CO  
CHARLOTTE, NC  
W O PARKER, JR

DATE OF DOCUMENT  
5-17-76

DATE RECEIVED  
6-4-76

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DESCRIPTION  
LTR TRANS THE FOLLOWING.....  
  

1 PG  
2 ENCL

  
  
PLANT NAME: OCONEE # 1

ENCLOSURE  
RO-50-269/76-7 ON 5-3-76..RE REACTOR COOLANT FLOW MEASUREMENT ERRORS NOT INCLUDED IN THE ANALYSIS OF FLUX/FLOW TRIP SETPOINT AS PREVIOUSLY IDENTIFIED.....  
  
**DO NOT REMOVE**  
  
**ACKNOWLEDGED**  
  
NOTE: IF PERSONNEL EXPOSURE IS INVOLVED SEND DIRECTLY TO KREGER/J. COLLINS

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ACRS 17 CYS	HOLDING/SENT TO LA	

INTERNAL DISTRIBUTION		
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<input checked="" type="checkbox"/> MIPC (3)		
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EXTERNAL DISTRIBUTION	CONTROL NUMBER
<input checked="" type="checkbox"/> LPDR: WALHALLA, SC	5626
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**DUKE POWER COMPANY**  
POWER BUILDING  
422 SOUTH CHURCH STREET, CHARLOTTE, N. C. 28242

WILLIAM O. PARKER, JR.  
VICE PRESIDENT  
STEAM PRODUCTION

TELEPHONE: AREA 704  
373-4083

May 17, 1976

Mr. Norman C. Moseley, Director  
U. S. Nuclear Regulatory Commission  
Suite 818  
230 Peachtree Street, Northwest  
Atlanta, Georgia 30303

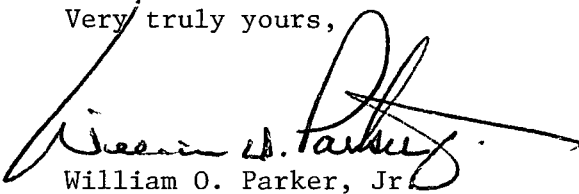
Re: Oconee Unit 1  
Docket No. 50-269

**Regulatory Docket File**

Dear Mr. Moseley:

Pursuant to Sections 6.2 and 6.6.2 of the Oconee Nuclear Station Technical Specifications, please find attached Reportable Occurrence Report RO-269/76-7.

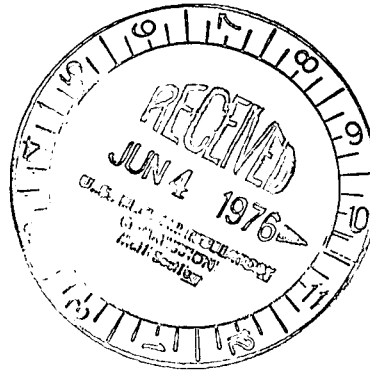
Very truly yours,

  
William O. Parker, Jr.

MST:mmb

Attachment

CC Director, Office of Management Information  
and Program Control  
Mr. B. C. Rusche



5620

DUKE POWER COMPANY  
OCONEE UNIT 1

Report No.: RO-269/76-7

Report Date: May 17, 1976

Occurrence Date: May 3, 1976

Facility: Oconee Unit 1, Seneca, South Carolina

Identification of Occurrence: Reactor coolant flow measurement errors not included in the analysis of flux/flow trip setpoint as previously identified.

Description of Occurrence:

On March 22, 1976, during the review of the proposed Technical Specification changes related to Cycle 3 operation of Oconee 1, the NRC/ONRR was informed that the measurement errors associated with the reactor coolant flow instrument string of the Reactor Protection System had been included in the analysis of the flux/flow trip setpoint. However, on May 3, 1976, while the calculational methods for determining the Oconee 2 (Cycle 2) flux/flow trip setpoint were being reviewed, it was determined that the Oconee 1 flux/flow trip setpoint had been established based on the assumption that the flow measurement errors were calibrated out of the system and that, therefore, the calculation did not explicitly include an allowance for possible errors in the flow instrument string.

Analysis of Occurrence:

At the time of the Oconee 1 (Cycle 3) flux/flow trip setpoint analysis, the calculational procedure called for various assumptions and allowances including (1) one vent valve assumed to be stuck open, (2) an allowance of 1.5% for noise in the flow signal, and (3) RC flow measurement errors assumed to be calibrated out of the system. Concurrently, a review of the calculational procedure for flux/flow trip setpoint and the manner in which possible system errors were being accounted for in the analysis was being performed, and this review indicated that the flow measurement errors were not calibrated out in their entirety, but that some residual errors could remain in the system. The calculational procedure for flux/flow trip setpoint has since then been revised to include an allowance for possible residual errors in the RPS flow instrument string ( $\Delta P$  transmitter error, summer amplifier error, function generator error, and bistable comparator error). A re-analysis of the Oconee 2 flux/flow trip setpoint has been performed taking into account the possible errors associated with the RPS flow instrument string and without including the effect of an assumed stuck open vent valve (permitted by the NRC by letter of January 30, 1976). This re-analysis yielded a flux/flow trip setpoint of 1.080 after including an allowance of 1.2% for flow measurement errors and 1.5% for noise in the flow signal. Thus the existing flux/flow trip setpoint of 1.055 is conservative compared to that which could be allowed, and it is concluded that this incident did not affect the health and safety of the public.

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Corrective Action:

Based on the above, no corrective action with regard to Oconee 1 instrumentation and setpoints is necessary. Also, the existing, on-going reviews of Technical Specifications and their analytical bases which identified this particular occurrence are considered to continue to be adequate and that no corrective action is necessary.