

PART 21 IDENTIFICATION NO. 81-399-000 COMPANY NAME TVA

DATE OF LETTER 3/30/81 DOCKET NO. 50-438-439

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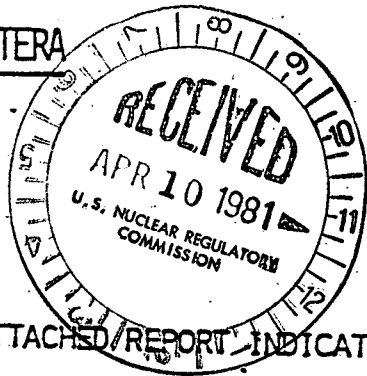
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ACTION:

PRELIMINARY EVALUATION OF THE ATTACHED REPORT INDICATES LEAD RESPONSIBILITY FOR FOLLOWUP AS SHOWN BELOW:

IE

NRR

NMSS

OTHER

EES

TENNESSEE VALLEY AUTHORITY
CHATTANOOGA, TENNESSEE 37401

81-399-000

400 Chestnut Street Tower II

March 30, 1981

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

Dear Mr. O'Reilly:

**BELLEFONTE NUCLEAR PLANT UNITS 1 AND 2 - BABCOCK & WILCOX'S NONCONSERVATIVE
ANALYSIS OF NEUTRON FLUX - NCR BLN NEB 8007 - SECOND INTERIM REPORT**

On November 5, 1980, R. W. Wright, NRC-OIE Region II, was informed that the subject nonconformance was determined to be reportable in accordance with 10 CFR 50.55(e). This was followed by our first interim report dated December 3, 1980. Enclosed is our second interim report. We consider 10 CFR Part 21 to be applicable to this deficiency. We expect to submit our next report by September 19, 1981.

If you have any questions concerning this matter, please get in touch with D. L. Lambert at FTS 857-2581.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

L. M. Mills, Manager
Nuclear Regulation and Safety

Enclosure

cc: Mr. Victor Stello, Jr., Director (Enclosure) ✓
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Mr. James McFarland (Enclosure)
Senior Project Manager
Babcock & Wilcox Company
P.O. Box 1260
Lynchburg, Virginia 24505

ENCLOSURE
BELLEFONTE NUCLEAR PLANT UNITS 1 AND 2
BABCOCK AND WILCOX'S (B&W) NONCONSERVATIVE ANALYSIS OF NEUTRON FLUX
NCR BLN NEB 8007
10 CFR 50.55(e)
SECOND INTERIM REPORT

Description of Deficiency

B&W's measurement errors assumed in determining Reactor Protection System (RPS) setpoints may be nonconservative under specific plant conditions. These errors may allow operation outside the established safety limits in certain design basis events.

The events of concern are: small overcooling and small steam line break; large steam line break in containment; and the rod ejection accident.

Interim Progress

B&W has initiated a change assessment item (item No. 907) in order to evaluate this deficiency. Their assessment is currently evaluating the following recommendations:

1. To resolve concerns during small overcooling events, B&W proposes to design and implement an alternate power measurement to be used in the steady state DNBR and kW/ft RPS trips.
2. To resolve concerns during steam line break in containment, B&W proposes to design and implement an additional RPS trip such as reactor trip on ESFAS trip or Flux/FW flow.
3. To resolve concerns during rod ejection events, B&W proposes to perform analysis to demonstrate that current RPS trips are adequate.