

400 Chestnut Street Tower II

April 27, 1981

SQRD-50-328/81-22

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:

SEQUOYAH NUCLEAR PLANT UNIT 2 - FLOW DEFICIENCY IN ERCW SYSTEM -  
SQRD-50-328/81-22 - SECOND INTERIM REPORT

The subject deficiency was initially reported to NRC-OIE Inspector R. V. Crlenjak on March 4, 1981, in accordance with 10 CFR 50.55(e) as NCR SQN SWP 8107. A first interim report was submitted on April 3, 1981. Enclosed is our second interim report. The submittal date of this report was agreed to by R. V. Crlenjak during a telephone conversation on April 14, 1981. We expect to submit our next report by May 27, 1981.

If you have any questions, 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, Director (Enclosure) ✓  
Office of Inspection and Enforcement  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

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POOR ORIGINAL

ENCLOSURE  
SEQUOYAH NUCLEAR PLANT UNIT 2  
FLOW DEFICIENCY IN ERCW SYSTEM  
SQRD-50-328/81-22  
10 CFR 50.55(e)  
SECOND INTERIM REPORT

Description of Deficiency

During the preoperational test of the unit 2 Essential Raw Cooling Water System (ERCW) which simulated the worst operating case, which is unit 1 in hot standby condition and unit 2 in a post LOCA condition, with the loss of (1) offsite power, (2) downstream dam, and (3) train B diesel generators, the flow rate requirements to several components required for safe shutdown could not be met. The total system flow rate measured in the test was approximately 2,500 gpm less than the required design flow rate of 22,000 gpm. A portion of the flow deficiency can be attributed to the excessive pressure drop across the strainers, which have been covered by another nonconformance report (SQRD-50-328/81-17).

Interim Progress

TVA has reevaluated the operating requirements of the ERCW system. Components not required to be in service during the design basis event (simulated by the test) have been isolated, and the flow requirements for some essential components, which were partially based on heat loads from nonessential components that do not operate during the design basis event, have been reduced. As a result, the flow requirements of the system have been reduced. The preoperational test instruction has been changed to incorporate the revised acceptance criteria and the flow balance testing program has resumed.

Due to the reduction in the flow requirements of the ERCW system, the system should be capable of supporting two-unit operation under conditions of the design basis event. The flow testing, presently in progress, should verify the system adequacy. The results of the testing will be included in our next report.

If the ongoing tests do not verify system adequacy, the NRC will be notified before unit 2 fuel loading.