TENNESSEE VALLEY AUTHORITY
CHATTANOOGA. TENNESSEE 37401
400 Chestnut Street Tower II

March 29, 1982 2 APR 5 All . 0 J
HTRD-50-518/82-11, -520/82-11

U.S. Nuclear Regulatory Commission Region II ATTN: James P. O'Reilly, Regional Administrator 101 Marietta Street, Suite 3100 Atlanta, Georgia 30303

Dear Mr. O'Reilly:

HARTSVILLE NUCLEAR PLANT A - REPORTABLE DEFICIENCY - EXCESSIVE STRESS ON SPRAY POND SUPPLY AND BYPASS HEADERS - HTRD-50-518/82-11, -520/82-11

The subject deficiency was initially reported to NRC-OIE, Region II, Inspector Ross Butcher on February 18, 1982 as NCR HTAHPP8202. In accordance with paragraph 50.55(e) of 10 CFR Part 50, we are enclosing the first interim report on the subject deficiency. As discussed with Inspector A. Hardin on March 22, 1982, a one-week extension was granted on the submittal of this report. We anticipate transmitting the next report on or before June 30, 1982. If you have any questions, please call Jim Domer at FTS 858-2725.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

L. M. Mills, Manager

Nuclear Regulation and Safety

Enclosure

oc: Mr. R. C. DeYoung, Director (Enclosure)
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Washington, DC 20555

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ENCLOSURE HARTSVILLE NUCLEAR PLANT A EXCESSIVE STRESS ON SPRAY POND SUPPLY AND BYPASS HEADERS 10CFR50.55(e) REPORT NO. 1 (INTERIM) NCR HTAHPP8202

Description of Deficiency

The spray pond supply and bypass header drawings were issued before the seismic analysis was completed.

Because of the long lead time required to purchase the material for this system and to provide the field with drawings they could use for planning, scheduling, and fabrication purposes, drawings were released before the seismic analysis was completed. TVA realized some changes might be required. The drawings were squadchecked before issue to all affected parties, comments were resolved, and the drawings signed out and issued. It is common practice to issue piping drawings before the seismic analysis is completed. The designer, using his experience and judgement, provides flexibility in the layout. The seismic analysts were consulted on a regular basis during the initial layout and based on their experience believed there would be no problem qualifying the piping arrangement.

When the analysis was made, the piping system was overstressed in the valve pits. To reduce the stress, additional flexibility was required in the piping system.

This condition was identified during a routine review of design input information.

Interim Progress

A redesigned piping arrangement has been analyzed and found acceptable. ECN-586 has been issued to revise the drawings. Action to prevent recurrence is not appropriate, as this sequence of events is a normal design evolution.