

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

400 Chestnut Street Tower II

September 9, 1981

YCRD-50-566/81-13

YCRD-50-567/81-11

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:

YELLOW CREEK NUCLEAR PLANT UNITS 1 AND 2 - TORNADO DEPRESSURIZATION DESIGN
DEFICIENCIES - YCRD-50-566/81-13, YCRD-50-567/81-11 - SECOND INTERIM
REPORT

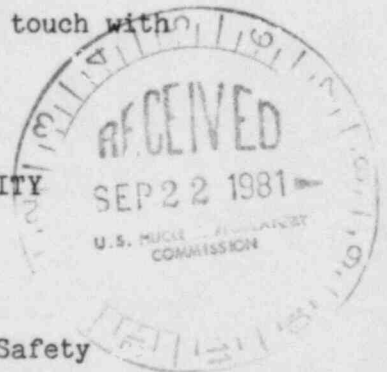
The subject deficiency was initially reported to NRC-OIE Inspector
R. V. Crlenjak on April 2, 1981, in accordance with 10 CFR 50.55(e) as
NCR YCN CDB 8101. This was followed by our first interim report dated
May 4, 1981. Enclosed is our second interim report. We expect to submit
our next report by January 27, 1982.

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
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

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ENCLOSURE

YELLOW CREEK NUCLEAR PLANT UNITS 1 AND 2
TORNADO DEPRESSURIZATION DESIGN DEFICIENCIES
YCRD-50-566/81-13, YCRD-50-567/81-11
10 CFR 50.55(e)
SECOND INTERIM REPORT

Description of Deficiency

While reviewing the tornado design of safety-related structures, design engineers discovered a discrepancy between drawings and design criteria for the Yellow Creek Nuclear Plant's Intake Pumping Station and ERCW Pumping Station concrete structures. Final structural design for these structures was completed in accordance with applicable design criteria (N8-9J-D701 and N8-K2-D701) that specify depressurization of the structures during a tornado. Construction drawings (8IE0311-K2 series and 8KE0320-K2 series) were issued, but all parts of these structures were not vented sufficiently to ensure depressurization. Civil and mechanical engineers reviewing these drawings failed to ensure venting in accordance with the design criteria.

The deficiency does not extend to other structures at this or other nuclear plants.

Interim Progress

The ventilation analysis for the ERCW Pumping Station is complete. Final documentation of assumptions relative to the ventilation analysis is in progress.

Because of the recent addition of a room to the Intake Pumping Station, another ventilation analysis will be required for this structure. All work is expected to be completed and the results included in the final report.