



CONNECTICUT YANKEE ATOMIC POWER COMPANY

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September 12, 1980

Docket No. 50-213
A00900

Mr. Boyce H. Grier, Director
Region I
Office of Inspection and Enforcement
U. S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, PA 19406

- References: (1) B. H. Grier letter to W. G. Council dated March 10, 1980,
transmitting I&E Bulletin No. 80-05.
(2) W. G. Council letter to B. H. Grier dated May 21, 1980.

Gentlemen:

Haddam Neck Plant
I&E Bulletin No. 80-05

In Reference (1), the NRC Staff requested that Connecticut Yankee Atomic Power Company (CYAPCO) review the design of all systems that contain tanks which could be valved to contain radioactive fluids and describe measures presently existing in those systems which provide adequate protection against vacuum conditions.

CYAPCO responded to Reference (1) in Reference (2) and reported that adequate vacuum protection exists at the Haddam Neck Plant on those systems for which tank damage could occur due to vacuum conditions.

A flow test of the Low Pressure Safety Injection (LPSI) Pumps during the last refueling outage resulted in a vacuum condition developing in the Refueling Water Storage Tank (RWST). The vacuum condition was alleviated and, upon evaluation, CYAPCO determined that the operability of the RWST was not affected.

Upon review of the RWST and associated systems, it was discovered that the original tank vent had been modified to divert any overflow from the RWST vent to a diked radioactive drain area. The modification consisted of adding 50 to 75 feet of piping of a reduced diameter to the original vent.

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This modification was not incorporated into the engineering drawings utilized during the review reported by Reference (2).

In addition, the inclusion of the LPSI pumps to the Safety Injection System doubled the flow rate out of the RWST while the vent was not modified accordingly.

The LPSI flow test coupled with the modified vent resulted in the vacuum conditions in the RWST. To preclude similar events in the future, CYAPCO has added a temporary fourteen (14) inch vent to the RWST. This vent has been analyzed for the worst-case ECCS operating conditions and found satisfactory. A permanent modification is presently being evaluated.

In addition, CYAPCO has reevaluated the following tanks for proper venting:

- Boron Waste Storage Tanks (BWST)
- Waste Test Tanks
- Aerated Drains Holdup Tank
- Recycled Primary Water Storage Tank
- Primary Waster Storage Tank
- Recycle Test Tank
- Demineralizer Water Storage Tank
- Fuel Oil Tank
- Boric Acid Tank

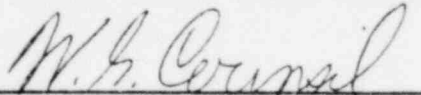
The vents on each of these tanks were visually observed and photographed with the exception of the Boric Acid Tank which was observed but not photographed. The observed venting systems were then compared with design drawings to ensure that the drawings reflect the as-built configuration.

The vent systems of all tanks were found to be satisfactory; however, the vent system on the BWST contains valves which, if closed, would prevent adequate venting of the BWST. Present plant procedures ensure that these valves remain open to preclude vacuum conditions in the BWST.

We trust you find this update to Reference (2) a satisfactory response to the above-described event.

Very truly yours,

CONNECTICUT YANKEE ATOMIC POWER COMPANY



W. G. Council
Senior Vice President