

VERMONT YANKEE NUCLEAR POWER CORPORATION



RD 5, Box 169, Ferry Road, Brattleboro, VT 05301

REPLY TO:
ENGINEERING OFFICE

1671 WORCESTER ROAD
FRAMINGHAM, MASSACHUSETTS 01701
TELEPHONE 617-872-8100

August 2, 1985

FVY 85-70

United States Nuclear Regulatory Commission
Washington, D. C. 20555

Attention: Office of Nuclear Reactor Regulation
Mr. Domenic B. Vassallo, Chief
Operating Reactors Branch No. 2
Division of Licensing

References: (a) License No. DPR-28 (Docket No. 50-271)
(b) Letter, VYNPC to USNRC, FVY 85-05, dated January 15, 1985,
"Request for License Amendment-Operation of Purge and Vent
Valves"

Subject: Response to Request for Additional Information Concerning
Operation of Purge and Vent Valve License Amendment Request

Dear Sir:

By letter dated January 15, 1985 [Reference (b)], Vermont Yankee submitted a license amendment request in response to the NRC's request to provide an iodine peak or spike limit for the reactor coolant concentration to assure that the radiological consequences of a postulated loss-of-coolant accident, while purging, are within 10CFR Part 100 dose guidelines. In response to the recent request by Mr. Larry Bell of your staff for information concerning the major assumptions used by Vermont Yankee in calculating the off-site dose from radioactivity released prior to purge valve closure during a loss-of-coolant accident, we provide the following:

1. The iodine coolant concentration is equal to 4.0 $\mu\text{Ci}/\text{gram}$
2. A factor of 0.5 was used for iodine removal;
3. The mass of primary coolant (steam) released through the 18" purge valve is equal to 2,400 lbm, and assumes critical (choked) flow at maximum LOCA pressure and full-open flow area until the valve is completely closed (valve closure time is 10.5 seconds);
4. Ground level release with no filtration (assumes that a rapid pressure surge destroys piping downstream of the safety isolation valve).

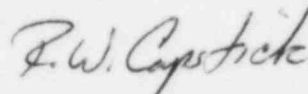
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We trust that this information is sufficient to allow for the completion of your review and subsequent issuance of the subject license amendment; however, should you have further questions or require additional information, please contact us.

Very truly yours,

VERMONT YANKEE NUCLEAR POWER CORPORATION



R. W. Capstick
Licensing Engineer

RWC/mmt