

EDISON DRIVE & AUGUSTA, MAINE 04336 (207) 623-3521

August 10, 1982 MN-82-158

JHG-82-149

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

Attention:

Office of Nuclear Reactor Regulation

Division of Licensing

Operating Reactors Branch #3 Mr. Robert A. Clark, Chief

References:

(a) License No. DFR-36 (Droket 50-309)

(b) USNRC Letter to MYAPCo dated May 21, 1982

(c) USNRC Letter to MYAPCo dated October 22, 1980

Subject:

CONTAINMENT PURGING AND VENTING WHEN NOT IN A COLD SHUTDOWN OR

REFUELING MODE

Dear Sir:

Reference (b) requested Maine Yankee to (1) commit to the installation of debris screens and provide a schedule for installation, and (2) commit to a specified annual time for venting and purging when not in a cold shutdown or refueling mode. In addition, Reference (b) requested additional information in accordance with its Enclosure (5).

The following is the subject information requested in Reference (b):

#### DEBRIS SCREENS

 Debris Screens will be installed in the containment purge supply and exhaust lines.

The screens will be seismic Category I design and be capable of withstanding a differential pressure equal to the peak containment pressure during a postulated LOCA. The spacing of the screen mesh will be similar to that given in Enclosure (3) of Reference (b). Each screen will be located about one pipe diameter or greater from the inner side of the inboard isolation valve. The screens will be removable to provide access to each inboard purge valve for maintenance.

Installation of the debris screens will be done during the October, 1982 Refueling Outage.

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2. If for some unexpected reason the screens cannot be installed at that time, on-line purging will not be permitted unless the plant is in the cold shutdown, refueling shutdown or refueling operations conditions; until the installation has been completed.

#### TIME LIMITATION FOR ON-LINE PURGE

Maine Yankee defines on-line venting and purging as applying to that venting and purging which occurs when the plant is in a condition in which containment integrity is required.

On-line purging in the containment is not normally conducted during routine operation. Typically, on-line purging is conducted for three or four days prior to an outage when work in the containment is planned. This type of purging is used to reduce containment activity levels so that occupational exposure rates will be low when the shutdown work is to start. It also serves to keep rates of release of radioactive material lower than would be achieved if high flow purging were instituted after shutdown.

Occasionally, on-line purging during normal operation is conducted in preparation for work to be performed in the containment while the reactor is operating, but this type of work is limited by direct radiation dose rates and is infrequent.

In either case, the extent of on-line purging in any calendar year is dependent on plant maintenance requirements.

- 3. Maine Yankee will administratively limit the use of on-line purging to 300 hours in any calendar year.
- 4. We will emphasize that on-line venting and purging should only be undertaken when there is a clear need to do so by instituting procedural controls for purging approval. These controls will include a required justification based on a need to improve working conditions and will require approval by the plant manager.

## ADDITIONAL INFORMATION - 42 INCH PURGE VALVES AND 8 INCH BY-PASS VALVE

# 42 INCH CONTAINMENT PURGE VALVES

Where operators are equipped with a manual mode of operation (e.g. handwheels) does their design provide for automatic re-engagement of the automatic mode of operation following the manual mode of operation? If not, describe the procedures used to assure the valve is not left in the manual mode of operation following maintenance or test operations.

ANSWER The 42" valves are equipped with air cylinder operators for automatic or manual operation. The valves also have handwheel operators which can only be used if the air operators are first physically disconnected.

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Disconnecting the air operators is permitted only for maintenance purposes and under Maine Yankee's equipment tagging rules. The rules require that safety related equipment be functionally tested following its release for service.

REQUEST Describe the periodic maintenance and inspection programs for these valves.

ANSWER

The 42 inch containment purge valves are leak tested under the Class "C" leak test program at each refueling interval and after on-line purge. In addition, the valve closure time is also measured at each refueling interval. Maintenance is performed on these valves if a problem is found during these tests.

### 8 INCH GLOBE VALVE

The purge system contains an 8 inch globe valve. This valve is in a by-pass line around the 42 inch valve VP-A-3. Describe the method used to show this valve is capable of closing under accident loads (e.g. seismic, LDCA, etc.)

ANSWER Prior to opening the 42" containment purge valves, the 8 inch globe valve is used only to depressurize the containment. At other times, this valve is in the closed position.

Masoneilan, the valve manufacturer, has stated that the subject valve will shut off against 55 PSI differential across the valve seat. A portion of the manufacturer's records for this valve and the information regarding seismic capability cannot be found. However, computer input cards are on file which indicate that a static equivalent type seismic calculation was performed on this valve. According to the card input, the accelerations were 2.0 g's vertical and 3.0 g's horizontal. The static design conditions were 55 PSIG at 280°F. Further details on the analysis are not available.

5. Maine Yankee will respond to your requests for surveillance technical specifications by September 1, 1982.

We trust that this information is satisfactory; however, should you have further questions, please contact us.

Very truly yours,

MAINE YANKEE ATOMIC POWER COMPANY

John H. Garrity, Senior Director Nuclear Engineering and Licensing

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