

BOSTON EDISON COMPANY
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G. CARL ANDOGNINI
SUPERINTENDENT
NUCLEAR OPERATIONS DEPARTMENT

September 13, 1979

BECO. Ltr. #79-182

Mr. Brian K. Grimes
Acting Assistant Director for Systems Engineering
Division of Operating Reactors
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D. C. 20555

License No. DPR-35
Docket No. 50-293

Information on Target Rock Safety/Relief Valves

Dear Sir:

In a letter sent to all Boiling Water Reactor Licensees dated July 16, 1979, you concluded that increased surveillance testing of Target Rock Safety/Relief Valves is not the most effective method of assuring reliability for these valves, and requested specific information as to the efforts being made to improve the reliability of these valves at Pilgrim Station.

Our response to your questions is provided as follows:

1. What is the status of each of the Target Rock Safety/Relief Valves at your plant, i.e.:
 - a. Are they in their original design configuration?
 - b. What is the existing simmer margin?
 - c. What modifications have you implemented to improve reliability?
 - d. On what date were these modifications made?

Response

- a. The Safety/Relief Valves are currently in their original design configuration.
- b. With simmer margin defined as the difference between set point of the valves and normal full power operating pressure, three (3) safety/relief valves have a margin of 55 psi and one (1) has a margin of 65 psi (based on a normal operating pressure of 1030 psig).

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- c. The following actions have been implemented to improve reliability:
1. Manual operation of valves is only performed when necessary.
At no time are these valves operated manually to clear a leak.
 2. Valve operability tests are rotated to distribute wear evenly.
 3. Valves are repaired at the earliest opportunity if the tail pipe thermocouple shows high temperature (indicating excessive pilot leakage).
- d. The actions listed above (c) have been implemented since early 1976.
2. What maintenance and testing do you routinely perform on these valves and how often is it performed?

Response

At least two (2) safety/relief valves are checked or replaced with bench checked valves once per operating cycle.

All safety/relief valves are tested every two cycles.

At least one safety/relief valve is disassembled and inspected each refueling outage.

The integrity of the safety/relief valve bellows is continuously monitored and the operability of the bellows monitoring system is demonstrated at least once every three (3) months.

3. What additional modifications and/or maintenance do you plan to implement in the future?

Response

The three (3) stage topworks will be replaced with two (2) stage topworks. Also, acoustic monitors will be installed on the tail pipes which will indicate if valves are open, closed, or leaking.

4. On what date will the modification(s) and/or maintenance in Item 3 be implemented?

Response

Boston Edison plans to complete these modifications by the end of the 1980 refueling outage.

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We trust this information is responsive to your concerns and adequately demonstrates Boston Edison Company's efforts to provide assurance for safety/relief valve operability and reliability. If you require further information or clarification, please contact us at your convenience.

Very truly yours,

A handwritten signature in cursive script, appearing to read "J. Paul Chiodo".

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