



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

September 24, 1979

MEMORANDUM FOR: T. Novak, Deputy Director, B&OTF
FROM: R. Capra, B&W Project Manager, B&OTF
SUBJECT: REQUEST FOR ADDITIONAL INFORMATION ON PORV/SAFETY VALVE
ACTUATION AND REACTOR TRIP FREQUENCY

Our evaluations of the B&W operating plant licensees' compliance with the Commission Orders of May 1979 stated, "... to assist the staff in developing more detailed guidance on design requirements of relief and safety valve reliability during anticipated transients, as discussed in Section 8.4.6 of the NUREG report (NUREG-0560), the licensee will be required to provide analysis of the lift frequency and mechanical reliability of the pressurizer relief and safety valves..."

It is my understanding, that to close out this item in the evaluation, we will require two things:

1. Analysis of the lift frequency - we will send each licensee a request for additional information similar to enclosure 1 to this memorandum.
2. Mechanical reliability - this requirement will be closed out by each licensee complying with Section 2.1.2 of NUREG-0578 "Performance Testing for BWR and PWR Relief and Safety Valves."

I request the following information:

1. Is my understanding of the solution in closing out this item correct?
2. Is the draft RAI (enclosure 1) acceptable to send to the licensees? Based on the discussions we had with the staff and Owners' Group on September 13, 1979, I am not sure this is what we really want.

I would like to resolve these questions as soon as possible in order to send our RAI to the licensees by Wednesday, September 26, 1979.

A handwritten signature in cursive script, appearing to read "R.A. Capra".

R.A. Capra, B&W Project Manager
Project Management Group
Bulletins & Orders Task Force

Enclosure:
as stated

cc:
D. Ross
S. Israel
I. Rosztoczy

8006060524

DRAFT REQUEST FOR ADDITIONAL INFORMATION ON PORV ACTUATION AND REACTOR TRIP FREQUENCY:

To help the staff in evaluating the probability of a small break loss-of-coolant accident and the impact of the increased number of reactor trips expected for the Babcock & Wilcox operating plants, as a result of the revised setpoints for the high pressure reactor trip and PORV actuation, provide the following information:

1. Provide a complete listing of PORV openings for each facility which occurred prior to the revised setpoints for PORV actuation and high pressure-reactor trip. This listing should include the following items:
 - a. the facility at which each event occurred,
 - b. the cause of each event,
 - c. the initial power level prior to the transient which caused the PORV to open,
 - d. indicate which of these transients caused the reactor to trip on high RCS pressure and/or caused the safety valve(s) to lift, and
 - e. if the present setpoints for high pressure trip and PORV actuation were in effect at the time of each of these transients, indicate whether any or all of the following would have taken place:
 - (1) reactor trip,
 - (2) PORV actuation, and
 - (3) lifting of the safety valve(s).

2. Provide a complete listing of reactor trips for each facility which have occurred subsequent to the revised setpoints for PORV actuation and high pressure reactor trip. This listing should include the following items:
 - a. the facility at which event occurred,
 - b. the cause of each event,

- c. the initial power level prior to the transient which caused the reactor trip,
 - d. indicate which of these transients caused the PORV and/or safety valve(s) to open, and
 - e. if the old (pre-TMI-2) setpoints for high RCS pressure and PORV activation were in affect at the time each of these transients, indicate whether any or all of the following would have taken place:
 - (1) PORV actuation,
 - (2) reactor trip on high RCS pressure, and
 - (3) lifting of the safety valve(s).
3. The lowering of the high pressure reactor trip setpoint has increased the number of expected reactor trips at each facility. Discuss how much the frequency of reactor trip has increased based on the lower trip setpoint. This discussion should include a breakdown of both primary and secondary induced transients.