

TERA

TERA

BOSTON EDISON COMPANY
GENERAL OFFICES 800 BOYLSTON STREET
BOSTON, MASSACHUSETTS 02199

G. CARL ANDOGNINI
MANAGER
NUCLEAR OPERATIONS DEPARTMENT

May 17, 1979

BECO. Ltr. #79-94

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

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

Supplementary Response to IE Bulletin No. 79-04

Reference a) Boston Edison Company Letter to Boyce H. Grier, dated May 1, 1979, titled "Response to IE Bulletin 79-04"

Dear Sir:

In a letter Reference a) above, Boston Edison Company indicated that more information would be submitted in regards to Item #4 of IE Bulletin 79-04. Accordingly, the following information is offered.

In the original seismic calculations a 3" Velan Check Valve weight of 64 lbs. was used instead of the correct weight of 85 lbs. For the original calculation maximum OBE seismic stresses were 81 psi in the vicinity of the valve.

Recalculated stresses, using the correct valve weight and the NRC - approved methods of Bechtel BP-TOP-1-3, give maximum OBE seismic stresses of 2,133 psi in the vicinity of the valve. The reason for the large increase in calculated stress (from 81 psi to 2,133 psi) resulting from the change in valve weight (from 64 lbs. to 85 lbs.) is that the original seismic calculations were performed using a detailed, accurate model of the piping system and a computer for the solution. The recalculated stresses were determined using the conservative methods of Bechtel BP-TOP-1-3, a simplified model of the piping system and a hand calculation for the solution.

The criterion of seismic acceptability is in Pilgrim FSAR Appendix A, Paragraph A.3.1.1.1.

2133 115

7906270106 Q

Mr. Boyce H. Grier
May 17, 1979
Page 2

1. Primary stress + single earthquake stress $< 1.2 S$ Allowable
2. Primary stress + double earthquake stress $< S$ Yield

The pipe material is A-53 Grade B for which S Allowable = 15,000 psi and S Yield = 30,790 psi. Also Primary Stress = 3,050 psi.

Therefore, 1. $3,050 + 2,133$ psi = 5,183 psi $< 18,000$ psi

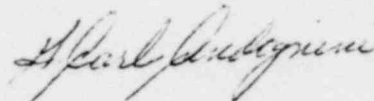
2. $3,050 + 4,266$ psi = 7,316 psi $< 30,790$ psi

Also, the pipe is supported on a 3" sch 40 strut near the valve which can carry the extra valve weight with a large margin of safety.

We conclude that the system can safely carry all the loads imposed by weight and seismic loading.

Should you have any further questions or concerns please do not hesitate to contact us.

Very truly yours,



cc: Director
Office of Inspection and Enforcement
Division of Reactor Operations Inspection
Washington, D. C. 20555

2133 116