

No. 1 emergency core cooling system attached to the reactor coolant loop inside containment. This includes the accumulator discharge line and part of the residual heat removal system. The results of this analysis are documented in a report submitted to the NRC entitled "SNUPPS (Callaway and Wolf Creek) Loop No. 1 Emergency Core Cooling System Piping Analysis," dated May 1981.

That portion of the line questioned in Contention II-A(1) is correctly designated as ASME Code Class 2. It runs from the accumulator tank outlet nozzle to the check valve at the Class 1 to Class 2 boundary. This portion of piping has a design pressure of 700 psi and a design temperature of 150°F. The results of the aforementioned confirmatory piping stress analysis show a 7,000 psi stress at the location of the alleged defective weld for sustained loads as calculated per the equation in ASME Code NC-3652.1. The ASME Code allowable stress for the piping material at 150°F is 18,300 psi.

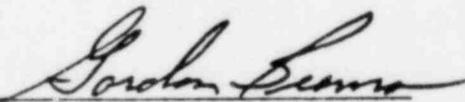
The following statements are made to address the specific allegations in Contention II-A(1):

1. In terms of the charge that the pipe was "substantially out-of-round" the measurements (taken by the Applicant with the NRC Senior Resident Inspector present) have been reviewed. The ASME Code contains no provisions for out-of-roundness of Class 2 and Class 3 piping. However, the Material Specification for ASME SA-358 piping allows an outside diameter variation of 1%. The pipe in question is 10 inch schedule 140. It has a nominal outside diameter of 10.75 inches. The measured outside diameter variation of the pipe is 0.092 inches. This is less than the 1% variation allowed by Material Specification ASME SA-358. The ASME Code provides additional

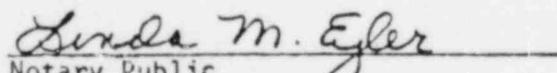
rules for out-of-roundness of Class 1 piping. If the out-of-roundness is greater than $0.05t$ (where t is the nominal wall thickness) the stress index $K1$ used in NB-3653.2 must be adjusted accordingly. The piping system in question is not part of the reactor coolant pressure boundary and is correctly designated as ASME Code Class 2. However, if the piping were evaluated using ASME Code Class 1 rules the effect of the out-of-roundness would be negligible.

2. Concerning the allegation that the pipe was "machined below the minimum wall," I have independently performed calculations to determine minimum wall thickness using ASME Section III, Article NC-3640 and find the minimum wall thickness of 0.814 inches to be acceptable.

3. In terms of the allegation that the pipe had "rejectable weld defects on the inside of a longitudinal seam weld," radiography is an acceptable method of nondestructive examination used throughout the industry. It will reveal any significant weld defects with a reasonable degree of certainty.


Gordon Beeman

Subscribed and sworn to before me
this 23rd day of September, 1981.


Notary Public

My Commission expires: July 1, 1982.