

BWRVIP

BWR Vessel & Internals Project

2000-028

January 31, 2000

Document Control Desk
U. S. Nuclear Regulatory Commission
11555 Rockville Pike
Rockville, MD 20852

Attention: C. E. Carpenter

Subject: PROJECT NO. 704 – Analysis of BWR Reactor Pressure Vessel Axial Shell Welds

Reference: Letter from Vaughn Wagoner (BWRVIP Integration Committee Technical Chairman) to Document Control Desk, "PROJECT NO. 704 – Response to NRC Comments on BWRVIP Analyses of BWR Reactor Pressure Vessel Axial Shell Welds," dated November 12, 1999.

The purpose of this letter is to provide supplemental information regarding the BWRVIP analyses of BWR reactor pressure vessel axial shell welds.

The letter referenced above provided a BWRVIP response to NRC comments on analyses of BWR reactor pressure vessel axial shell welds. The analyses provided to the NRC in the referenced letter utilized vessel material data available to the BWRVIP from industry databases. However, while the values utilized by the BWRVIP in initially preparing our submittal were conservative, we have concluded that in one case the analysis is too conservative. For example, the analysis performed for one of the plants utilized an initial RT_{NDT} value of $0^{\circ}F$. The NRC reactor vessel integrity database (RVID) contains a value of initial RT_{NDT} for that plant of $-48^{\circ}F$. Therefore, the BWRVIP analysis using $0^{\circ}F$ is conservative relative to the RVID value of $-48^{\circ}F$. Use of the RVID value will result in a more realistic analysis and is more appropriate for use in the probabilistic fracture mechanics analysis for predicting BWR reactor vessel axial shell weld failure probability.

If you have any questions on this subject please contact Bob Carter of EPRI Charlotte by telephone at 704.547.6019 or by e-mail at bcarter@epri.com

Sincerely,

for 

Vaughn Wagoner
Technical Chairman
BWRVIP Integration Committee
Carolina Power & Light