

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

Docket Nos. STN 50-556
STN 50-557

2-18

Supplemental Testimony on Board Question 2-3

The testimony of Brian Sheron and Ronald Frahm, in response to Board Question 2-3, indicated that new information was submitted on the Allens Creek docket (50-466) with regard to a BWR/6 calculation. We also indicated that we would report on this information in a supplement to our original testimony.

The Allens Creek calculation was performed to provide additional information regarding the effect of automatically diverting two low pressure coolant injection (LPCI) pumps to wetwell spray 10 minutes following a loss-of-coolant accident (LOCA). The diversion of LPCI at 10 minutes has only a slight effect on ECCS performance for large breaks since the reactor core would be reflooded (core hot spot covered) prior to 10 minutes; however, for some small breaks the core is not reflooded prior to LPCI diversion. Reflood is delayed thereby yielding a higher peak cladding temperature (PCT).

Recent calculations submitted on the Allens Creek docket show a PCT higher than those submitted on the GESSAR docket referenced by the applicant. The higher temperature is caused by assuming a different break location and single failure; and by model corrections made subsequent to the sensitivity study on LPCI diversion submitted on the GESSAR docket. For a small break in the high pressure core spray line and assuming failure to start of a Division 1 diesel, the temperature reported on Allens Creek is 2085°F and is higher than the value reported for the large break design basis accident of 2038°F. However, the temperature criterion of 10 CFR 50.46 is not exceeded. The staff is in the process of requesting additional information from the applicant and will report an update of our review in a supplement to the Black Fox Station Safety Evaluation Report.