N191. BWR Radiation Fields With Hydrogen Water Chemistry

The utility-funded project investigating the impact of hydrogen water chemistry (HWC) on shutdown radiation fields is gathering momentum. A preliminary survey of the problem by GE is available in draft form. Further contracts have been placed with RCT and NWT to carry out plant measurements and evaluate the total database. ABB will be reporting Swedish data and GE will carry out some laboratory tests to examine the causes of the field increase. PECO will be assisting EPRI in pulling together the results from all these studies.

RCT has been tracking the fields at the Monticello plant. The figure shows the increase in buildup after HWC was introduced. Zinc injection was started at the same time as the hydrogen injection rate was increased. The latest gamma scan shows that the buildup rate has slowed since a decontamination in 1991.

![Graph showing radiation buildup](image)