WATER CHEMISTRY DURING THE SHUT-DOWN OF THE BOILING WATER REACTOR LEIBSTADT

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Principal Investigator: W. Blaser
Nuclear Power Plant Leibstadt
LEIBSTADT CH-4353
SWITZERLAND
Phone: +41 56 47 7111

Project Manager: E. Schenker
Paul Scherrer Institute
VILLIGEN CH-5232
SWITZERLAND
Phone: +41 56 99 2111

Objectives: In order to better understand the reasons for activity increase in reactor water during shut-down, an extensive measuring campaign was carried out during the shut-down of the BWR Leibstadt (KKL).

Comments: The measurements began at 72% total power, or 70 hours before zero power, and lasted until 80 hours after zero power. Particle size, size distribution, corrosion product concentrations (Fe, Ni, Cr, Mn, Co, and Zn), and hydrogen peroxide concentration were measured.

Remarks/Potential for dose limitation: Peaks in activity are mainly caused by undissolved corrosion products. The concentration of hydrogen peroxide increased rapidly when the temperature dropped below 160°C.


Duration: from 1991 to 1992
Status: Completed
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