

N214. Preconditioning of PWRs

The condition of surfaces contacting primary coolant affects its propensity to incorporate Co-60. Measurements taken at Doel 2 have shown that thin metallic coatings reduce radionuclide pickup substantially. An electroplated layer of chromium reduced Co-60 pickup by a factor of five to ten over that on an electropolished coupon. This prompted Northeast Utilities to select chromium plating followed by preoxidizing in moist air as the surface finish for two of the manway seal plates in the Millstone-2 replacement steam generators. Sections of replacement piping for the residual heat removal system at Diablo Canyon-2 will be similarly treated. Dose rate measurements at these locations during subsequent outages will permit a quantitative assessment of the benefits of these various surface treatments.

Taken from, "Preconditioning of PWRs," Chris Wood. Radiation Control News, No. 15, September 1992. (EPRI, 3412 Hillview Avenue, Palo Alto, CA 94303)