

N3465. Decontamination of BWR Systems Using NP/LOMI Preoxidation Steps

“The use of a nitric or alkaline permanganate preoxidation step to remove the chromiumrich films that form in BWRs operating under hydrogen water chemistry helped achieve good decontamination factors at the Hatch BWRs.” (Dennis Zabala and Gregory Riner, Southern Nuclear Operating Company/Georgia Power Company.)

- Decontamination of the reactor recirculation system, the reactor water cleanup system, and the fuel pool system at Hatch 1 and the fuel pool system at Hatch 2 was estimated to have saved ~120 person-rem of personnel exposure during the 1996 refueling outage. Projected subsequent savings are estimated to be 95 person-rem at the 1997 outage and 35 person-rem at the 1999 outage.
- Decontamination of the reactor recirculating system (RRS) Mat Brunswick Unit 2 in early 1996 using the four-step NP/LOMI process yielded a decontamination factor of 50 for the RRS piping and removed 280 curie primary Co-60.

For more information see: Proceedings: 1995 Radiation Field Control and Decontamination Seminar. EPRI TR-106009, Vol.1 and 2, December 1995 and Chemical Decontamination with Preoxidation Steps of BWR Systems at Plant Hatch. EPRI, TR-107165, December 1996.

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