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WESTINGHOUSE RECENT CHEMICAL DECONTAMINATION EXPERIENCE

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RATE

Principal Investigator:

A. Valvasori
Westinghouse Electric Corporation
Nuclear & Advanced Technology Division
P. O. Box 355
Pittsburgh, PA 15230
U.S.A.
Phone: (412)374-4111

Project Manager:

Ronald Morris
PN Services, Inc.
P. O. Box 2110
1990 New Cut Road
Spartanburg, SC 29304
U.S.A.
Phone: (803)599-4080

Objectives: Since 1993 Westinghouse has performed sixteen decontamination applications at six different plants. Ten of the applications were performed at BWRs and six at PWRs. To absorb the lessons from these decontamination projects.

Comments: The following decontamination were performed:

Brunswick-1 (1995): Prior to the decontamination artifact testing was performed at site on the newly removed recirculation system decontamination flange. The results of the testing were used to refine the NP-LOMI decontamination process applied.

Grand Gulf (1995): The reactor water clean-up system and the discharge piping of the recirculation system were decontaminated using CAN-DEREM and LOMI respectively. The recirculation system decontamination was performed with the fuel in place. This was made possible by the use of vented jet pump plugs to isolate the system from the vessel.

Quad Cities-1 (1994): Four systems were decontaminated: The RWCU (both shell and tube side), RHR, RRS. The RRS decontamination was different from that previously performed. The annulus was excluded from the suction side LOMI and a sloshing technique was adopted for the application because of core shroud plate leakage. Another first at Quad Cities was the decon of the two RHR systems.

Susquehanna 1&2 (1993): The fuel Pool Cooling systems were decontaminated while the reactors were operating. To maintain containment integrity, special compact equipment had to be fabricated.

Remarks: The decontaminations included both the LOMI and CAN-DEREM processes along with the AP and NP oxidation steps. In addition, Westinghouse performed qualification tests on two processes currently used in Europe.

References: Valvasori, A., and R. Morris, "Westinghouse Recent Decontamination Experience," Proceedings, EPRI Radiation Field Control and Chemical Decontamination

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