N215. Demonstration of PWR Full-System Decontamination

Chemical decontamination of partial reactor systems, such as steam generator channel heads in PWRs and recirculation piping in BWRs, has made important contributions to the reduction in plant radiation exposures in recent years. Full-system decontamination has many advantages — improved efficiency, reduced critical path times, and lower residential radiation fields — but extensive qualification programs were required to provide the foundation for a plant demonstration. The NRC is currently reviewing a topical report on the qualification of two processes for PWR application; no unresolved safety issues have been identified.

Con Ed has decided to decontaminate the complete reactor coolant system of Indian Point-2 at the 1995 refueling outage, with preparatory work at the 1993 refueling outage using procedures developed in collaboration with ESEERCO and EPRI. Pacific Nuclear Services has been awarded a $20 million contract for the decontamination project. Con Ed has asked EPRI to investigate the possibility of partial funding of the demonstration, either through co-funding or tailored collaboration, in return for enhanced technology transfer and future support to utilities participating in the demonstration.

Full-system decontamination, when demonstrated and established, will represent a cost-effective technology for utilities to achieve their lower exposure goals. The technology will contribute to lower operation and maintenance costs, and will be particularly important for utilities planning to replace steam generators.

Further details can be obtained from Jack Parry at Con Edison (914/526-5038) or Chris Wood at EPRI (415/855-2379).

*Taken from, "National Demonstration of PWR Full-System Decontamination," Chris Wood. Radiation Control News, No. 15, September 1992 (EPRI, 3412 Hillview Avenue, Palo Alto, CA 94303).*