

N33. Strippable Coatings Provide Leak-Tight Integrity And Hot Particle Mitigation

Leakage of primary water through a nuclear plant's stainless steel refueling cavity is of concern, not only because of contamination control, but also due to the potential for deterioration of the concrete and reinforcing bar behind the liner plate. In the case of GPUN's Oyster Creek Plant, it was essential to find some means for restoring leak-tight integrity. Weld repairs were judged unacceptable due to potential for increasing crack propagation. The utility staff examined several alternatives including the use of a disposable membrane. A disposable strippable coating was ultimately selected as the most practical solution inasmuch as it could provide the required seal, and at the same time would decontaminate the cavity surfaces at the end of the refueling cycle, eliminating the need for high pressure water blasting.

For more, see Lomasney, H.L., "Strippable Coatings Provide Leak-Tight Integrity and Hot Particle Mitigation," Nuclear Plant Journal, p. 78, September-October, 1989.