

PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE--PNO-I-89-89

This preliminary notification constitutes EARLY notice of events of POSSIBLE safety or public interest significance. The information is as initially received without verification or evaluation, and is basically all that is known by the Region I staff on this date.

Facility:
PULSTAR Research Reactor
Nuclear Science & Technology Facility
State University of New York at
Buffalo
Buffalo, New York
Docket No. 50-57

Licensee Emergency Classification:
 Notification of Unusual Event
 Alert
 Site Area Emergency
 General Emergency
 Not Applicable

Subject: LEAKAGE FROM REACTOR POOL

On Sunday, November 5, 1989, the start-up crew for the SUNY Buffalo Research Reactor noted that the pool water loss over the weekend was about 360 gallons. Normal weekend loss, primarily evaporation and normal pump seal leakage, is about 150-180 gallons. Follow-up found a 2 gallon per hour leak from a tell-tale drain beneath the reactor. The leakage path is from the drain to a sump, which is pumped via the equipment pit to a radwaste tank. This is the first leakage at SUNY Buffalo since 1978, when pipe repairs/modifications were made.

The licensee informed the NRR project manager and Region I about 5:00 p.m., November 6, 1989. About 10:00 a.m., November 7, 1989, the licensee stated that the leakage rate seemed to be decreasing slightly, and that other research reactors had experienced similar, decreasing leaks. Weld flexure or a weld inclusion were identified by the licensee as causes of such leaks.

The reactor pool is 6.35 mm aluminum-lined, reinforced concrete. A sealant is used to prevent liner deterioration from contact with the concrete.

SUNY Buffalo has about 30 fuel elements in the pool. Twenty-four of these could be offloaded to a hot cell. A high density fuel rack modification and technical specification change would be required to increase the hot cell capacity.

The licensee is planning corrective actions. Onsite NRC follow-up will be initiated by the Ginna resident inspector and a Region I radiation specialist on November 8, 1989.

The State of New York has been notified.

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