

Attachment to LER ETS-NR/50-245/79-02
Northeast Nuclear Energy Company
Millstone Nuclear Power Station - Unit 1
Provisional License Number - DPR-21
Docket Number 50-245

Identification of Occurrence

A limit regarding the maximum reactivity allowed to be contained in the Floor Drain Sample Tank was exceeded.

Conditions Prior to Occurrence

Prior to the occurrence, the unit was operating at 95% steady state.

Description of Occurrence

On November 6, 1979, at 1650 hours, during routine chemical analysis of Floor Drain Sample Tank "B", following liquid addition, it was determined that the curie content in the tank exceeded the limit specified in Environmental Technical Specifications. The FDST curie content was initially calculated to be 34.6 curies which exceeded the Environmental Technical Specification limit of 10 curies. Subsequent analysis verified the tank curie content to be 33.6 curies.

Designation of Apparent Cause

It is felt that gradual sediment accumulation in the tank bottom, over the last several years, resulted in the curie content in excess of the limit. Since the contents of the floor drain sample tanks are no longer operationally discharged to the environment, the tanks are periodically used as additional collection volume (that is, unfiltered waste water). Use of these tanks, in this manner, does increase the sediment accumulation.

Analysis of Occurrence

Environmental Technical Specifications set limits of activity in certain tanks whose contents could be released to the environment. These limits are set to ensure that the amount of radioactive materials, contained in these liquid effluent releases, are as low as practicable. As mentioned previously, the floor drain sample tanks are no longer discharged to the environment, consistent with the essentially zero liquid release policy.

1361 096

7911.200492

Although the absolute curie content limit of the sample tank was exceeded, it is felt that the intent of the limit is uncompromised due to the fact that operating procedures require two samples of tank contents prior to a liquid release. These analyses would have detected the tank activity and prevented a release in excess of the limit.

Corrective Action

The subject tank was thoroughly flushed, refilled and sampled. Results of a sample taken November 7, 1979, at 0700 hours, following tank flush and refill, indicated an activity level of 1.67 curies.

To prevent reoccurrence, procedures have been modified to require a one (1) hour recirculation of the sample tank following any liquid addition to the tank. This allows content mixing and assures a more representative sample of tank activity at that time.

Additionally, the floor drain sample tanks will be inspected annually and cleaned, as necessary.

1361 097