

ANNUAL OPERATING REPORT FOR 1979
AS REQUIRED BY THE TECHNICAL SPECIFICATIONS FOR THE
WESTINGHOUSE NUCLEAR TRAINING REACTOR
FACILITY LICENSE NO. R-119
DOCKET NO. 50-87

1. NARRATIVE SUMMARY

The Westinghouse Nuclear Training Reactor (NTR) was operated in a routine manner during 1979. Operations included training for customers and for licensed operator trainees. Required experiments were routinely performed for surveillance testing. Thirteen irradiations were performed, all of them gold or indium foils used for training or for power calibration surveillance testing.

No changes were made in the design of the facility related to reactor safety.

The 1978 Annual Report identified higher than previously measured levels of radioactivity in the reactor moderator-shield water. The major contribution to this activity has been identified as Sodium-24. The activity peaks following power operations. In the past, sampling had not been completed following power operations. Sodium-24 can be expected since the fuel cladding and core structure material is made of aluminum. No 10CFR20 limits were exceeded.

A fuel assembly was dropped by a trainee on March 1, 1979. The investigation and subsequent report indicated that proper procedure was followed for immediate and follow up action. Measurements indicated that no fission products were released. Further inspection indicated no violation of the fuel cladding integrity. The dropping of the assembly was contributed to the less than adequate supervision of the trainee who was handling the fuel. Procedure changes and fuel-handling tool modifications were made in order to minimize a re-occurrence of this situation.

2. ENERGY GENERATED AND HOURS OPERATIONAL

The reactor generated 45,048.4 watt-hours of energy and was operational for 1,851.2 hours.

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3. INADVERTENT REACTOR TRIPS

There were 153 inadvertent reactor trips during the year. Of these, 137 were due to trainee errors and 16 were due to equipment malfunctions. This number of inadvertent trips is directly proportional to the number of customer trainees who operate this training reactor.

4. SUMMARY OF FACILITY CHANGES

No tests or experiments were conducted under the conditions of 10CFR50.59.

5. RADIOACTIVE EFFLUENTS

No releases of radioactive effluents beyond the control of the licensee were made during 1979.