



April 22, 1975

Mr. Benard C. Rusche, Director  
Office of Nuclear Reactor Regulation  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

Dear Mr. Rusche:

ABNORMAL OCCURRENCE NO. 251-75-5  
APRIL 22, 1975  
OCCURRENCE DATE: APRIL 13, 1975  
TURKEY POINT UNIT NO. 4

UNPLANNED RELEASE OF LIQUID RADIOACTIVE MATERIAL

A. CONDITIONS PRIOR TO OCCURRENCE

The reactor was in refueling shutdown condition, the reactor coolant temperature was approximately 102 F, the reactor vessel head was removed, the refueling cavity and refueling canal were filled with borated water with a boron concentration of 2,000 ppm. There was no movement of fuel in progress.

The spent fuel pit (SFP) contained approximately 306,000 gallons of water with a boron concentration of 2,000 ppm at a temperature of 130 F. There were 53 irradiated fuel assemblies stored in the SFP at the time of this occurrence. An emergency SFP cooling pump with hose connections was in operation while the normal SFP pump was being repaired.

B. DESCRIPTION OF OCCURRENCE

The SFP cooling pump bearing failed and the pump was removed from service on April 12, 1975 about 8:30 A.M.

Based on a review of the repairs required to return the pump to service, responsible plant management personnel concluded that the estimated time to repair the SFP pump would exceed the 24 hours specified in Off-Normal-Condition Procedure No. 3508.1 for the SFP cooling pump to be out of service with irradiated fuel assemblies in the SFP.

An emergency SFP pump was installed, tested, and placed in service to establish cooling flow through the SFP cooling system by 2:25 A.M., April 13, 1975.