

Reg Files

# YANKEE ATOMIC ELECTRIC COMPANY



441 STUART STREET, BOSTON, MASSACHUSETTS 02116

September 3, 1969

Director, Division of Compliance  
U.S. Atomic Energy Commission  
Washington, D.C. 20545

RE: Notification of an Exposure of an Individual to Radiation  
in Excess of USAEC Title 10 - Code of Federal Regulations  
Part 20 Applicable Limit

Dear Sir:

Pursuant to the U.S. Atomic Energy Commission regulations entitled "Standards for Protection Against Radiation", 10CFR Part 20.405(a), we hereby report to you an exposure of an individual to radiation in excess of that dose specified in 10CFR Part 20.101(b)(1).

Pursuant to 10CFR Part 20.405(c), you will find enclosed as a separate part of the report, the name of the individual who has received exposure to radiation in excess of the applicable limit.

The extent of the exposure was 3.060 REM, accumulative, during the third calendar quarter of 1969.

The radiation dose rate in the area, in which the individual was working when the applicable exposure limit was exceeded, was six roentgens per hour.

The presence of radiation dose rates of the above mentioned magnitude is due to the formation of an adherent corrosion film on the inside surfaces of our main coolant system, which is not readily removable.

The cause of the subject exposure was the lack of proper Health Physics coverage. The nature of the work involved entries into a confined space; the duration of each to be strictly timed so as to permit good account of accumulated radiation exposure. The dose accountability was to be maintained by a check of the individual's dosimeter by the Health Physics man, after each timed entry. In this instance the individual made three entries into the area with no dosimeter check until after the third entry. After the third entry the individual's dosimeter (0-1000mr) was checked and found to be off scale. The maximum total time spent in the high radiation area was 17 minutes. The individual's beta-gamma dose recording film was sent


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by carrier for immediate processing. The radiation exposure dose reported was 2.500 REM. This 2.500 REM dose coupled with a previous dose of 0.560 REM received in this quarter, totalled 3.060 REM.

The maximum time spent in the work area where the measured radiation dose rate was 100 mr/minute was 17 minutes. Using these figures, the calculated dose is 47% lower than the reported dose, based on the individual's film badge. It is also of interest to note that controlled exposure films consistently indicate doses which are 30%-40% higher than the actual dose applied. We are actively investigating these discrepancies since this problem imposes a severe penalty on our overall operation.

This incident was precipitated by a violation of Health Physics procedures due to gross negligence on the part of a Health Physics Supervisor. As a result of this, the supervisor responsible was given a two week suspension without pay. It is felt that the effects of this suspension will serve to make all personnel more keenly aware of their responsibilities and will help prevent a future overexposure.

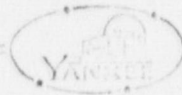
Very truly yours,

  
W.P. Johnson  
Manager of Operations

WPJ/ms

Encl.

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Name of Individual: James R. Young

Social Security No. 016-20-3244