

Metropolitan Edison Company
Post Office Box 480
Middletown, Pennsylvania 17057

Writer's Direct Dial Number

May 28, 1981
LL2-81-0138

1981 MAY 29 AM 8 59

U.S. NUCLEAR
REGULATORY COMMISSION

TMI Program Office
Attn: Mr. Lake Barrett, Deputy Director
U. S. Nuclear Regulatory Commission
c/o Three Mile Island Nuclear Station
Middletown, Pennsylvania 17057

Dear Sir:

Three Mile Island Nuclear Station, Unit 2 (TMI-2)
Operating License No. DPR-73
Docket No. 50-320
Processed Water Storage Tanks

As stated in our letter LL2-81-0075, dated April 1, 1981, we have been re-examining the Processed Water Storage Tanks (PWST) Limits we proposed in our letter, TLL 395, dated October 9, 1980. As a result of this analysis, we will monitor the contents of the PWST's so that the following criteria are met:

- a. The contents of radioactivity stored in each PWST shall be limited such that a tank failure would not result in greater than 10 CFR Part 20 (Appendix B, Table II, Column 2) concentrations at the nearest drinking water intake for combined radionuclides as a function of actual volume. This limit is quantified using the following formula which was presented in the Programmatic Environmental Impact Statement, Section 7.2.4.2

$$\frac{\sum A_i}{MPC_i} \leq 6.4 \times 10^6, \text{ (Ci/}\mu\text{Ci/ml)}$$

Where:

A_i = tank activity prior to rupture (curies)

MPC_i = maximum permissible concentration (10 CFR Part 20, Table II, Column 2 - $\mu\text{Ci/ml}$)

App's 5/10

- b. We intend to monitor radiation levels in the vicinity of the PWST's following each transfer of water to the tanks. These radiation levels will be controlled, by specifying maximum concentrations for various radionuclides, such that we will not exceed 0.6 mrem/hr at the east edge of the access road to the west of the PWST's. This is the radiation level used at TMI to determine if radiation domistry

P

8106020424

Mr. Lake Barrett

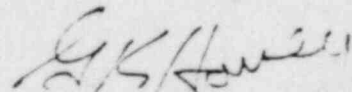
-2-

LL2-81-0138

is needed to enter an area. If needed we will rope-off an area around the PWST's to alert personnel that radiation dosimetry (e.g. a TLD) is required to be worn in order to enter that area. This criteria also ensures that offsite exposure is negligible (i.e. approximately 0.02 mrem/yr at the observation center) and is well within the 40 CFR 190 limitations.

We are presently developing a process control plan for the SDS system which we will use to administratively control the transfer of processed water to the PWST's. These controls will be based on the concentrations of the radionuclides in the processed water needed to ensure conformance with the above listed criteria.

Sincerely,



G. K. Hovey
Vice-President and
Director, TMI-2

GKH:JJB:djb

cc: Dr. B. J. Snyder, Program Director, TMI Program Office