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March 1, 1993
C311-93-2033

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555

Dear Sir:

Subject: Three Mile Island Nuclear Station, Unit 1 (TMI-1)
Operating License No. DPR-50,
Docket No. 50-289
Second Half - 1992 Semi-Annual Effluent and Release Report

The TMI-1 Semi-Annual Effluent and Release Report required by TMI-1 Technical Specifications (TS) is enclosed. The report covers the period July 1, 1992 through December 31, 1992. This report includes an Executive Summary of the Effluent Release Report, Disposal and Effluent Release Data, and an assessment of the radiation doses due to the liquid and gaseous effluents released from the Unit during the reporting period.

TS Sections 6.9.4.2.1 and 6.9.4.2.2 require reporting of effluent and solid waste shipment data in accordance with Reg. Guide 1.21 for the semi-annual report period. These tables are attached and include summaries of solid waste shipments and liquid and gaseous effluents for the reporting period.

TS Section 6.9.4.2.3 requires inclusion of a summary of unplanned releases from the site to unrestricted areas. During this report period, there were no unplanned releases.

TS Section 6.9.4.2.4 requires that changes to the Process Control Program (PCP) and Offsite Dose Calculation Manual (ODCM) be reported. The TMI-1 PCP and the ODCM were not revised during this reporting period.

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TS Section 6.9.4.2.5 requires reporting of instrumentation not returned to OPERABLE status within 30 days per Section 3.21.1.b and 3.21.2.b. All such instrumentation which became inoperable was returned to OPERABLE service within 30 days.

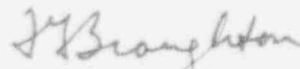
TS Section 6.9.4.3.1 requires an annual summary of hourly meteorological data collected over the previous year to be included in this report. This data is contained in the attached Joint Frequency Tables.

In accordance with TS Section 6.9.4.3.2, this report includes an annual summation table and a semi-annual table showing the assessment of the radiation doses due to liquid and gaseous effluents released from the Unit during 1992.

TS Section 6.9.4.3.3 also requires, in part, that annually this report shall include "an assessment of the radiation doses from radioactive liquid and gaseous effluents to MEMBERS OF THE PUBLIC due to their activities inside the site boundary (Figures 5-3 and 5-4) during the report period." Since the public does not have unrestricted access to TMI-1, no assessment of this dose is applicable.

TS Section 6.9.4.3.4 requires an annual assessment of radiation dose to the most likely exposed real individual from reactor releases and other nearby uranium fuel cycle sources (TMI Unit 2) to demonstrate compliance with 40 CFR 190 "Environmental Radiation Protection Standards for Nuclear Power Operations." The annual dose to the maximum exposed individual from effluents, would be no greater than 0.45 mrem to the thyroid and 0.27 mrem to any other organ including the total body. This sums doses from Unit 1 and Unit 2 and includes the maximum dose regardless of age group for different pathways. It is further estimated, based on the maximum average fence line dose rate for the year of 10.2 mrem per standard month, a person residing at the fence line for the duration specified in RG 1.109 for shoreline exposure, would receive no more than 0.94 mrem direct dose. Therefore, the maximally exposed hypothetical individual would receive a maximum potential total thyroid dose of 1.39 mrem from both units and maximum total organ dose (excluding thyroid) of 1.21 mrem from both units. These results demonstrate compliance with 40 CFR 190.

Sincerely,



T. G. Broughton
Vice President and Director, TMI-1

JSS/emf

Attachments

cc: TMI-1 Senior Project Manager
Region I Administrator
TMI Senior Resident Inspector

List of Attachments

- Attachment 1 Executive Summary
- Attachment 2 Effluent and Waste Disposal Semi-Annual Effluent
Report Supplemental Information¹
- Attachment 3 Dose Report
- Attachment 4 Interpretation of Dose Summary Table
- Attachment 5 Meteorological Data

¹Table 1D of the Semi-Annual Effluent Report is not included because TMI-1 does not have an elevated release point.