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February 27, 1992
C311-92-2030

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
1991 Technical Specifications Section 6 Annual Report

Attached is the 1991 Technical Specifications Section 6 Annual Report for Three Mile Island Nuclear Station, Unit 1 (TMI-1). This report is being submitted in accordance with Section 6.9.1.B and 6.17 of the TMI-1 Technical Specifications (T.S.). The attachments to this letter contain the following information:

Attachment I - Tabulation of Personnel Exposure Data for the Calendar Year 1991 (per T.S. Section 6.9.1.B.1).

Attachment II - Aircraft Movement Data from the Harrisburg International Airport for the Calendar Year 1991 (per T.S. Section 6.9.1.B.2).

Attachment III - Leak Reduction Program Test Information for the Calendar Year 1991 (per T.S. 6.9.1.B.3).

Attachment IV - Pressurizer Power Operated Relief Valve and Pressurizer Safety Valve Challenges for the Calendar Year 1991 (per T.S. Section 6.9.1.B.4).

Attachment V - Results of Specific Activity Analysis - Primary Coolant System (per T.S. Section 6.9.1.B.5).

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Attachment VI - Major Changes to Radioactive Waste Treatment Systems (per T.S. Section 6.17).

Sincerely,

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

DVH/mkk

Attachments

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

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ATTACHMENT 1

NUMBER OF PERSONNEL AND MAN REMS BY WORK AND JOB FUNCTION REPORT---PERIOD DATE 02/06/92
SELF READING POCKET DOSIMETER DATA
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JOB CATEGORY / JOB FUNCTION	STATION PERSONNEL NUMBER	STATION PERSONNEL REMS	UTILITY PERSONNEL NUMBER	UTILITY PERSONNEL REMS	CONTRACTOR PERSONNEL NUMBER	CONTRACTOR PERSONNEL REMS
REACTOR OPERATIONS/SURV.						
MAINTENANCE PERSONNEL	140	6.720	4	.046	209	3.089
OPERATING PERSONNEL	100	16.534	6	.060	6	.071
HEALTH PHYSICS PERSONNEL	78	12.432	4	.012	50	8.403
SUPERVISORY PERSONNEL	104	4.650	11	.047	17	.585
ENGINEERING PERSONNEL	76	1.967	14	.230	45	1.231
ADMINSTRATIVE PERSONNEL	69	.845	31	.078	15	.213
ROUTINE MAINTENANCE						
MAINTENANCE PERSONNEL	157	10.770	5	.002	465	12.662
OPERATING PERSONNEL	92	1.247	2	.046	7	.095
HEALTH PHYSICS PERSONNEL	68	1.074	4	.002	18	.283
SUPERVISORY PERSONNEL	96	1.366	9	.087	27	.429
ENGINEERING PERSONNEL	70	.925	15	.117	66	.618
ADMINSTRATIVE PERSONNEL	121	.643	22	.015	21	.199
INSERVICE INSPECTION						
MAINTENANCE PERSONNEL	51	.292	6	.074	117	7.677
OPERATING PERSONNEL	26	.575	2	.022	3	.043
HEALTH PHYSICS PERSONNEL	17	.583	3	.047	11	.247
SUPERVISORY PERSONNEL	43	.764	1	.000	6	.205
ENGINEERING PERSONNEL	26	.233	1	.001	28	2.499
ADMINSTRATIVE PERSONNEL	15	.184	4	.009	8	.377
SPECIAL MAINTENANCE						
MAINTENANCE PERSONNEL	132	12.520	3	.084	528	66.975
OPERATING PERSONNEL	47	1.886	2	.010	4	1.082
HEALTH PHYSICS PERSONNEL	36	3.042	0	.000	27	1.051
SUPERVISORY PERSONNEL	54	4.599	6	.050	25	1.679
ENGINEERING PERSONNEL	39	1.491	6	.016	56	2.994
ADMINSTRATIVE PERSONNEL	25	.287	12	.027	19	.493
WASTE PROCESSING						
MAINTENANCE PERSONNEL	59	.749	3	.010	75	2.026
OPERATING PERSONNEL	45	11.101	0	.000	6	.156
HEALTH PHYSICS PERSONNEL	44	1.820	0	.000	18	.313
SUPERVISORY PERSONNEL	54	.772	4	.000	9	.381
ENGINEERING PERSONNEL	29	.128	3	.000	12	.041
ADMINSTRATIVE PERSONNEL	32	.030	33	.003	4	.000
REFUELING						
MAINTENANCE PERSONNEL	92	8.276	0	.000	73	4.216
OPERATING PERSONNEL	93	6.899	0	.000	0	.000
HEALTH PHYSICS PERSONNEL	13	.994	0	.000	12	.539
SUPERVISORY PERSONNEL	45	2.820	0	.000	6	.065
ENGINEERING PERSONNEL	22	.967	3	.015	7	.271
ADMINSTRATIVE PERSONNEL	18	.231	1	.009	3	.133

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JOB CATEGORY / JOB FUNCTION	STATION PERSONNEL NUMBER	STATION PERSONNEL REMS	UTILITY PERSONNEL NUMBER	UTILITY PERSONNEL REMS	CONTRACTOR PERSONNEL NUMBER	CONTRACTOR PERSONNEL REMS
* TOTAL BY JOB FUNCTION *						
MAINTENANCE PERSONNEL	166	39.335	11	.216	635	96.645
OPERATING PERSONNEL	121	38.242	4	.138	13	1.447
HEALTH PHYSICS PERSONNEL	82	19.945	8	.061	52	10.836
SUPERVISORY PERSONNEL	132	14.971	17	.184	36	3.344
ENGINEERING PERSONNEL	102	5.711	28	.379	85	7.454
ADMINSTRATIVE PERSONNEL	145	2.220	87	.141	30	1.415
** GRAND TOTAL **	748	120.424	155	1.119	851	121.141

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ATTACHMENT II

AIRCRAFT MOVEMENTS AT THE
HARRISBURG INTERNATIONAL AIRPORT

JANUARY 1 THROUGH DECEMBER 31, 1991

1. Total Aircraft Movements = 99,220

2. Total number of movements of aircraft larger than 200,000 pounds is estimated to be less than 200.

NOTE: For Item 2, the data is based on estimates provided by the Capital City Airport Tower (Harrisburg Approach)*. This facility is responsible for tracking Harrisburg International Airport flights. The tower is not required to (and does not) record flights by weight or plane category.

The total number of movements (200) is less than .20% of the total movements. This compares to the TMI-1 FSAR assumption of 3%.

*Effective February 23, 1992, Harrisburg Approach is located at the Harrisburg Tower.

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ATTACHMENT III

Annual Report Regarding the Periodic Leak Reduction Program Tests (T.S. 6.9.1.B.3).

Table I summarizes the results of the Leak Reduction Program tests and inspections, by procedure number, that were performed between January 1 and December 31, 1991. Component identification of those components found to be leaking and the type of repair (if required) are included in Table I. Leaking components were repaired and retested such that the leakage was reduced from the as found condition to an acceptable level.

The two hour site boundary and 30 day low population zone offsite dose considerations were not limiting for acceptable leakage criteria in 1991. The "AS-FOUND" or "AS LEFT" leakage conditions recorded did not significantly increase the magnitude of either onsite or offsite releases during 1991.

TABLE 1

1991 LEAK REDUCTION PROGRAM TEST RESULTS FOR TMI-1

SURVEILLANCE PROCEDURE	DATE OF PERFORMANCE	LEAKING COMPONENT I.D.	LEAK RATE AS FOUND	LEAK RATE AS LEFT	MAINTENANCE UNDERTAKEN
1303-11.16 "Decay Heat Removal System Leakage"	10/17/91		0	0	None
1303-11.18 "R.B. Local Leak Rate Testing"	See Note 2	See Note 2	17737 SCCM	17377 SCCM	See Note 2
1303-11.27 "Makeup & Purification System Leakage Check"	09/24/91	MU-P1A Seal	6 ml/HR	6 ml/HR	See Note 3
		MU-P1B Seal	240 ml/HR	240 ml/HR	See Note 3
		MU-P1C Seal	24 ml/HR	24 ml/HR	See Note 3
1303-11.28 "Liquid Waste System Leak Check"	05/22/91	WDL-V1012	60 ml/HR	0	Tightened Valve Packing
1303-11.29 "Waste Gas Disposal System Leak Check"	12/11/91		0	0	None
1303-11.30 "Reactor Coolant Sampling Leakage Check"	06/13/91		0	0	None
1303-11.31 "Hydrogen Recombiner System Leak Check	11/10/91		0	0	None
1303-11.50 "RB Spray System Leakage Check"	06/18/91		0	0	None

ATTACHMENT III

TABLE 1 (Continued)

The LLRT MAX PATH "AS LEFT" Gaseous Leakage was 17377 SCCM. "As-Found" MAX PATH was 17737 SCCM - See Note 1.

The total "AS-LEFT" Liquid Leakage was 270 ml/hr. As-Found was 330 ml/hr.

The two hour site boundary and 30 day low population zone offsite dose considerations were not limiting conditions for acceptable leakage criteria in 1991. All "AS-FOUND" or "AS-LEFT" leakage recorded did not significantly increase the magnitude of either onsite or offsite releases during 1991.

Per TMI-1 Tech. Spec. 4.4.1, total leakage less than 104,846 SCCM is considered acceptable for the as-left leakage condition.

NOTE 1: Per the "MIN PATH" method of calculating leakage, the As-Found LLRT Leakage was 8767 SCCM and the As-Left was 8839 SCCM. The "MAX PATH" method assumes for two valves in series that the one with lower leakage has failed to close post accident. "MIN PATH" assumes the opposite.

NOTE 2: The valve leak testing occurred on various dates during 1991 9R Refueling Outage. Repairs were performed on the following components due to higher than desirable leakage:

1. CM-V4: Replaced leaking solenoid.
2. West Fuel Transfer Tube Penetration Pressurization System Joint Leakage Repaired.
3. MU-V2B Yoke Bushing Replaced During MOVATS.
4. WDL-V304 Lapped Seats.

NOTE 3: Considered relatively minor leakage and below the level that repairs would be initiated to repair the leakage.

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ATTACHMENT IV

Pressurizer Power Operated Relief Valve and Pressurizer Safety Valve Challenges for Calendar Year 1991.

There were no pressurizer power operated relief valve or pressurizer safety valve challenges which occurred during 1991 in response to any plant transients.

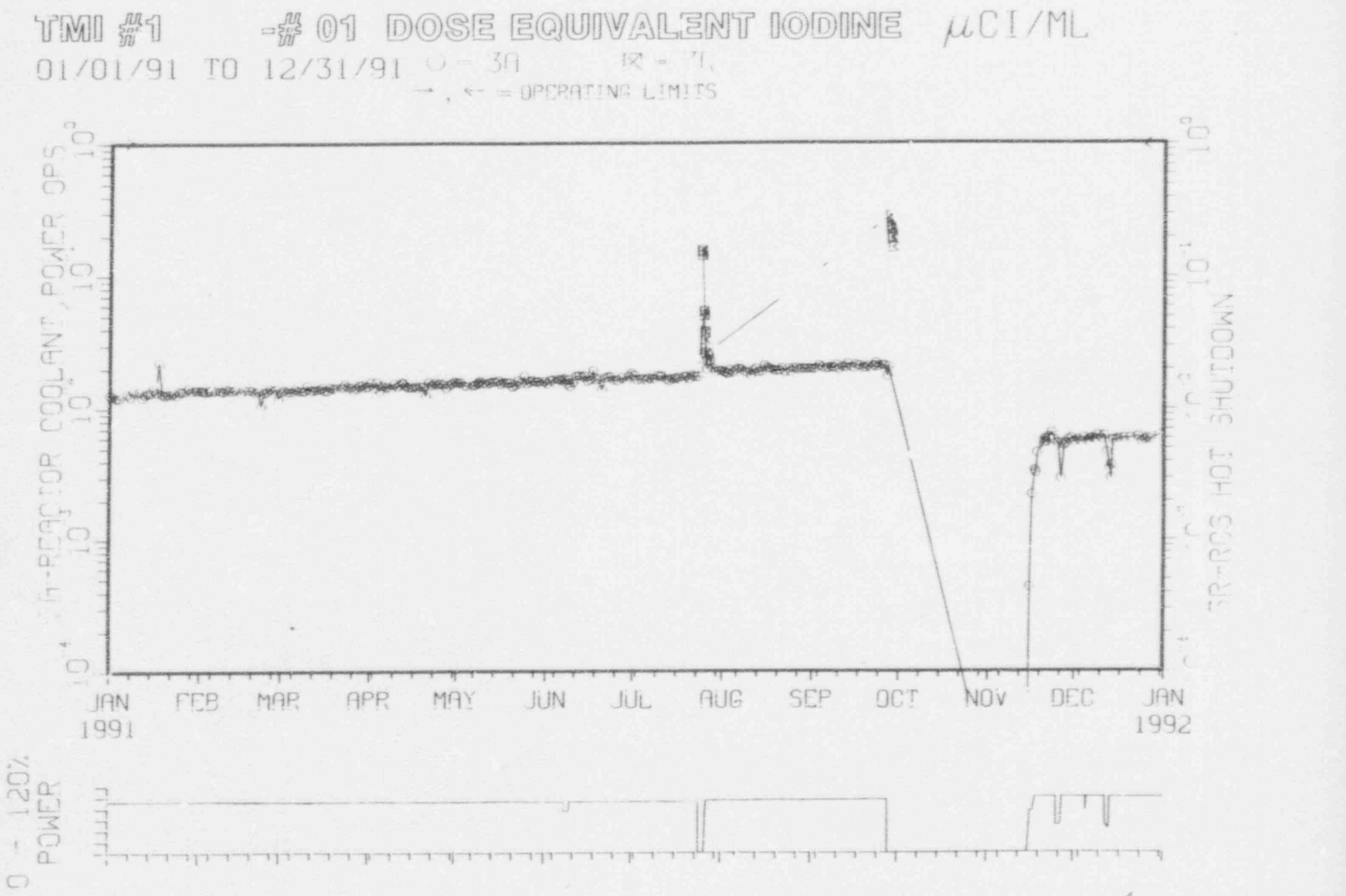
ATTACHMENT V

RESULTS OF SPECIFIC ACTIVITY ANALYSIS - PRIMARY COOLANT SYSTEM

Technical Specification 6.9.1.B.5 requires certain information regarding the results of specific activity analyses in which the primary coolant exceeded limits of Technical Specification 3.1.4.1 be reported. These limits were not exceeded during 1991. Figure 1 contains a graph of the dose equivalent I-131 concentration and Figure 2 contains a graph of the I-131 and I-133 concentrations. The figures show that all values remained below 1 µCi/ml during 1991.

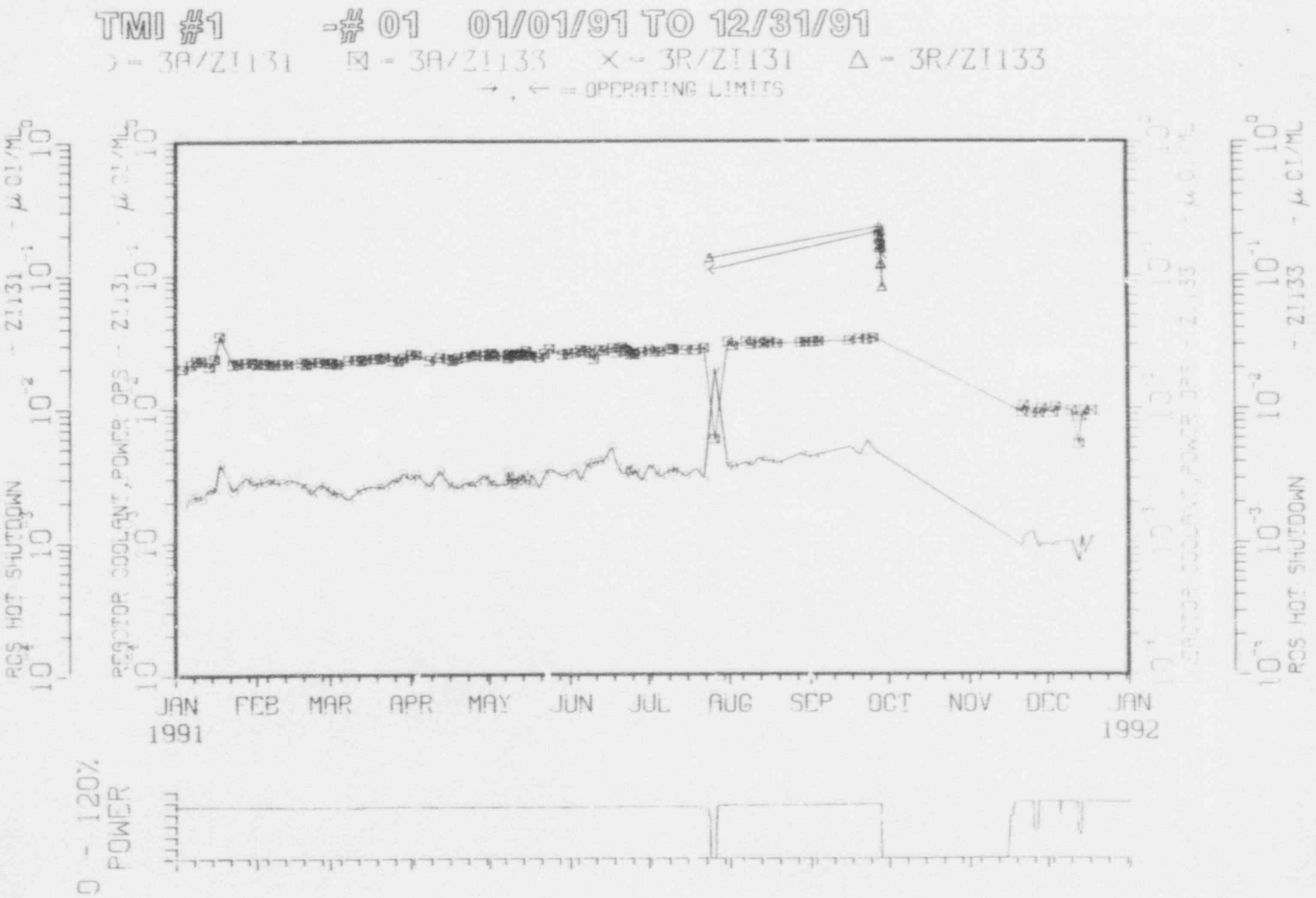
ATTACHMENT V

Figure 1



ATTACHMENT V

Figure 2



ATTACHMENT VI

Technical Specification Section 6.17 requires reporting of "Major Changes to Radioactive Waste Treatment Systems." Major changes are interpreted to mean changes that would alter how the system functions or the predicted releases that were previously analyzed.

Based on the above, no major changes were made during 1991.