

NUMBER OF PERSONNEL AND MAN REMS BY WORK AND JOB FUNCTION

REPORT---PERIOD

SELF READING POCKET DOSIMETER DATA
GPU NUCLEAR TMI UNIT-1

01/01/92 - 12/31/92

PAGE 1

JOB CATEGORY JOB FUNCTION	STATION PERSONNEL		UTILITY PERSONNEL		CONTRACTOR PERSONNEL	
	NUMBER	REMS	NUMBER	REMS	NUMBER	REMS
REACTOR OPERATIONS/SURV.						
MAINTENANCE PERSONNEL	74	.883	1	.022	7	.026
OPERATING PERSONNEL	88	5.700	0	.000	2	.005
HEALTH PHYSICS PERSONNEL	72	8.326	1	.000	0	.000
SUPERVISORY PERSONNEL	57	1.500	1	.000	2	.083
ENGINEERING PERSONNEL	37	.368	2	.000	1	.020
ADMINISTRATIVE PERSONNEL	45	.175	13	.170	2	.000
ROUTINE MAINTENANCE						
MAINTENANCE PERSONNEL	123	5.951	7	.001	18	.014
OPERATING PERSONNEL	21	.072	1	.003	5	.011
HEALTH PHYSICS PERSONNEL	13	.063	3	.002	1	.000
SUPERVISORY PERSONNEL	80	1.479	6	.000	9	.026
ENGINEERING PERSONNEL	68	.295	18	.012	20	.096
ADMINISTRATIVE PERSONNEL	115	.290	52	.024	10	.014
INSERVICE INSPECTION						
MAINTENANCE PERSONNEL	32	.002	0	.000	0	.000
OPERATING PERSONNEL	33	.019	0	.000	0	.000
HEALTH PHYSICS PERSONNEL	18	.070	0	.000	0	.000
SUPERVISORY PERSONNEL	11	.002	0	.000	2	.000
ENGINEERING PERSONNEL	14	.036	1	.011	0	.000
ADMINISTRATIVE PERSONNEL	15	.013	4	.020	1	.006
SPECIAL MAINTENANCE						
MAINTENANCE PERSONNEL	73	1.540	2	.151	17	3.307
OPERATING PERSONNEL	39	.272	0	.000	0	.000
HEALTH PHYSICS PERSONNEL	24	.450	0	.000	3	.002
SUPERVISORY PERSONNEL	19	.042	2	.002	4	.008
ENGINEERING PERSONNEL	15	.193	2	.010	2	.004
ADMINISTRATIVE PERSONNEL	20	.106	12	.022	2	2.006
WASTE PROCESSING						
MAINTENANCE PERSONNEL	52	.173	0	.000	38	.357
OPERATING PERSONNEL	56	3.888	0	.000	1	.000
HEALTH PHYSICS PERSONNEL	49	.425	0	.000	4	.007
SUPERVISORY PERSONNEL	32	.203	1	.000	12	.021
ENGINEERING PERSONNEL	16	.022	3	.000	9	.029
ADMINISTRATIVE PERSONNEL	15	.008	7	.000	5	.027
REFUELING						
MAINTENANCE PERSONNEL	12	.005	0	.000	0	.000
SUPERVISORY PERSONNEL	1	.002	0	.000	0	.000
ENGINEERING PERSONNEL	1	.002	0	.000	0	.000
ADMINISTRATIVE PERSONNEL	2	.000	0	.000	0	.000

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PAGE 2

JOB CATEGORY JOB FUNCTION	STATION PERSONNEL		UTILITY PERSONNEL		CONTRACTOR PERSONNEL	
	NUMBER	REMS	NUMBER	REMS	NUMBER	REMS
TOTAL BY JOB FUNCTION *						
MAINTENANCE PERSONNEL	128	8.554	9	.174	58	3.704
OPERATING PERSONNEL	113	9.951	1	.003	5	.016
HEALTH PHYSICS PERSONNEL	74	9.334	4	.002	8	.009
SUPERVISORY PERSONNEL	116	3.228	10	.002	19	.138
ENGINEERING PERSONNEL	85	.916	21	.033	28	.149
ADMINISTRATIVE PERSONNEL	136	.592	76	.236	13	2.053
GRAND TOTAL **	652	32.575	121	.450	131	6.069

ATTACHMENT II

AIRCRAFT MOVEMENTS AT THE
HARRISBURG INTERNATIONAL AIRPORT

JANUARY 1 THROUGH DECEMBER 31, 1992

1. Total Aircraft Movements = 93,598
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. 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 .20% of the total movements. This compares to the TMI-1 FSAR assumption of 3%.

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, 1992. 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.

TABLE I
(3310-93-0008)
1992 LEAK REDUCTION PROGRAM TEST RESULTS FOR TMI-1

SURVEILLANCE PROCEDURE	DATE OF PERFORMANCE	LEAKING COMPONENT I.D.	LEAK RATE		MAINTENANCE UNDERTAKEN
			AS FOUND	AS LEFT	
1303-11.16 "Decay Heat Removal System Leakage"	See Note 3				
1303-11.18 "R.B. Local Leak Rate Testing"	See Note 2	See Note 2	17737 SCCM	24844 SCCM See Note 1	See Note 2
1303-11.27 "Makeup & Purification System Leakage Check"	See Note 3				
1303-11.28 "Liquid Waste System Leak Check"	09/25/92		0	0	
1303-11.29 "Waste Gas Disposal System Leak Check"	See Note 3				
1303-11.30 "Reactor Coolant Sampling Leakage Check"	See Note 3				
1303-11.31 "Hydrogen Recombiner System Leak Check"	See Note 3				
1303-11.50 "RB Spray System Leakage Check"	12/14/92	BS-V1B Packing Leak	120 ml HR	120 ml HR	WR # 770489 Submitted

TABLE 1 (CONTINUED)

The total RUNNING 1992 "AS-LEFT" Liquid Leakage was 390 ml/hr. As-Found was 270 ml/hr.

The two hour site boundary and 30 day low population zone off-site dose considerations were not limiting conditions for acceptable leakage criteria in 1992. All "AS-FOUND" or "AS-LEFT" leakage recorded did not significantly increase the magnitude of either on-site or off-site releases during 1992.

NOTE 1: The LLRT MAX PATH RUNNING TOTAL Gaseous Leakage was 24844 SCCM. Per TMI-1 Tech. Spec. 4.4.1, total leakage less than 104,846 SCCM is considered acceptable for the as-left leakage condition.

The "MIN PATH" 1992 RUNNING TOTAL method of calculating leakage was 15879. 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 following repairs were performed in 1992 and LLRT data was updated.

1. Emergency access hatch inner door seal was replaced, inner handwheel packing was adjusted, inner equalizing ball valve was repaired, various PP System fittings were tightened.
2. CA-V2 body to bonnet gasket leak was repaired.

NOTE 3: Scheduled to be performed during 1993.

ATTACHMENT IV

Pressurizer Power Operated Relief Valve and Pressurizer Safety Valve Challenges for Calendar Year 1992.

There were no pressurizer power operated relief valve or pressurizer safety valve challenges during 1992 in response to plant transients.

ATTACHMENT V

RESULTS OF SPECIFIC ACTIVITY ANALYSIS
FOR THE PRIMARY COOLANT SYSTEM

Technical Specification 6.9.1.B.5 requires certain information be reported regarding the results of specific activity analyses in which the primary coolant exceeded the limits of Technical Specification 3.1.4.1. Table 1 contains: a) the reactor power history starting 48 hours prior to the first sample in which the limit was exceeded; b) the results of the last isotopic analysis for radioiodine performed prior to exceeding the limit, results of the analysis while the limit was exceeded, and results of (at least) one analysis after radioiodine activity was reduced to less than the limit; c) the cleanup system (letdown) flow history starting 48 hours prior to the first sample in which the limit was exceeded; and d) the time duration when the specific activity of the primary coolant exceeded the radioiodine limit. Figure 1 contains a graph of the dose equivalent I-131 concentration for 1992. Figure 2 contains a graph of the I-131 concentration, the I-133 concentration, and the dose equivalent I-131 concentration as a function of time for the duration of the specific activity above the steady-state level.

ATTACHMENT V

TABLE 1

IODINE DATA FOR 1992 ANNUAL REPORT

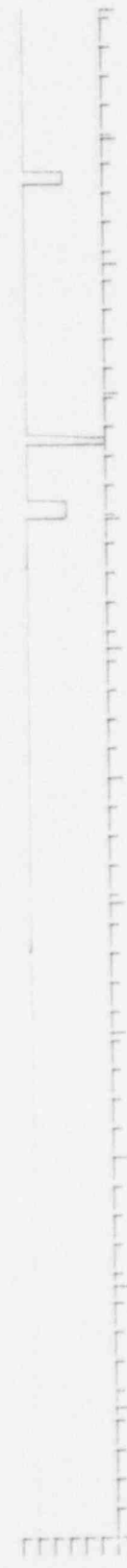
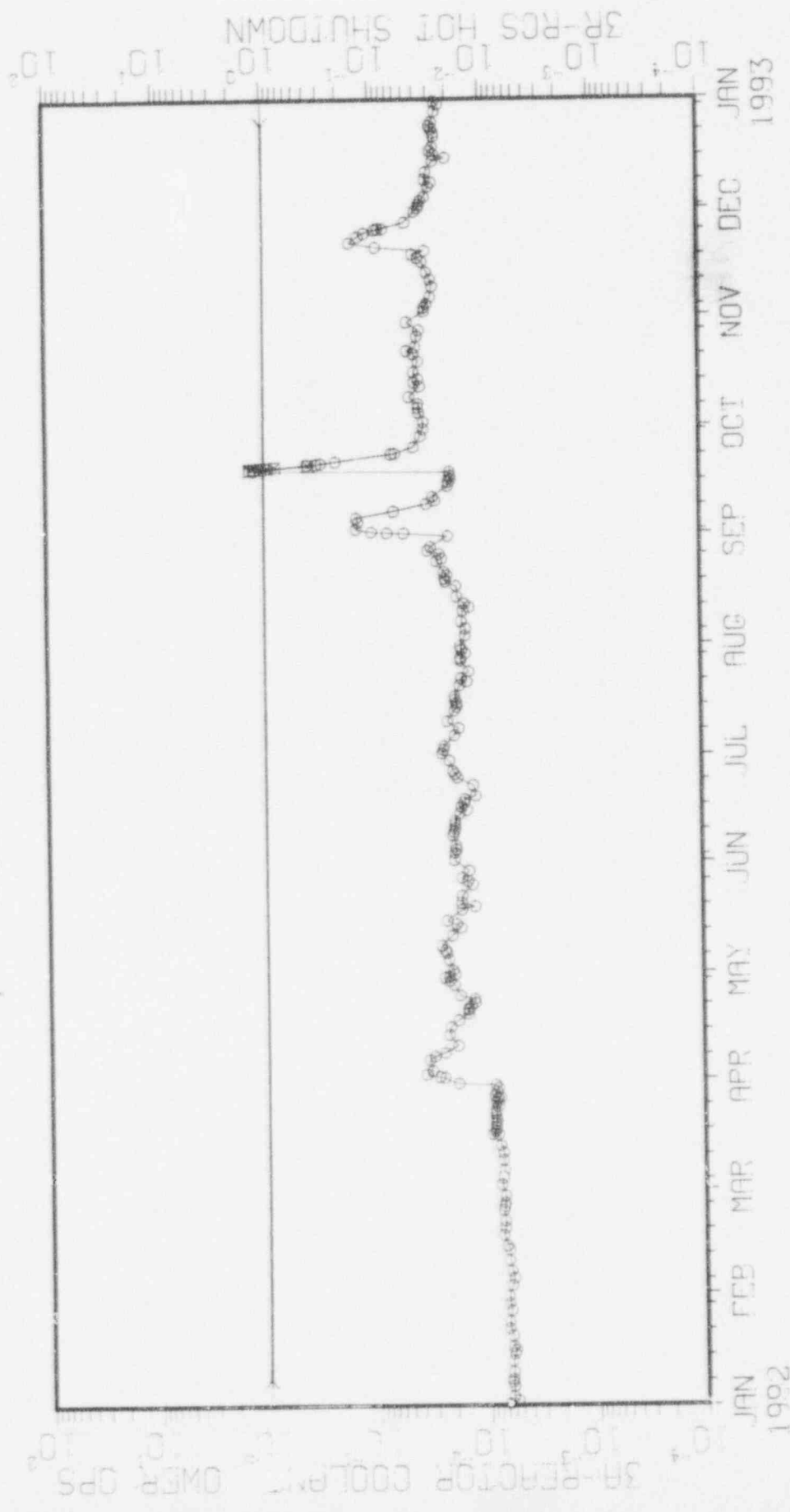
<u>DATE</u>	<u>TIME</u>	<u>POWER</u> <u>(%FP)</u>	<u>LETDOWN</u> <u>(GPM)</u>	<u>RADIOIODINE CONCENTRATION (μCi/gm)</u>					<u>Dose Eq*</u> <u>I-131</u>
				<u>I-131</u>	<u>I-132</u>	<u>I-133</u>	<u>I-134</u>	<u>I-135</u>	
09/16/92	0745	100	50	0.00879	0.0248	0.0236	0.0416	0.0285	0.0191
09/18/92	0645	100	50	0.00919	0.0247	0.0237	0.0442	0.0280	0.0196
09/18/92	2000	0	50	0.903	0.532	0.854	0.117	0.511	1.200
09/18/92	2327	0	50	1.02	0.421	0.853	0.011	0.401	1.300
09/19/92	0320	0	50	1.04	0.351	0.792	-----	0.265	1.290
09/19/92	0710	0	50	0.986	0.300	0.636	-----	0.169	1.180
09/19/92	1010	0	69	0.870	0.277	0.536	-----	0.111	1.030
09/19/92	1215	0	69	0.769	0.252	0.426	-----	0.0775	0.899
09/19/92	1545	0	69	0.655	0.238	0.325	-----	0.0475	0.755
09/20/92	0335	0	69	0.333	0.197	0.116	-----	0.00725	0.372

*Time duration when the 1.0 μ Ci/gm limit was exceeded = 16 hours.

FIGURE 1

TMI #1 -#01 DOSE EQUIVALENT IODINE $\mu\text{Ci}/\text{ML}$

01/01/92 TO 12/31/92 $\square = 3R$
 $\rightarrow, \leftarrow = \text{OPERATING LIMITS}$



TMI #1 -# 01 RCS HOT SHUTDOWN
 09/15/92 TO 09/22/92 O - DOSE1 X - Z1133
 →, ← = OPERATING LIMITS



ATTACHMENT V

TABLE 1

IODINE DATA FOR 1992 ANNUAL REPORT

<u>DATE</u>	<u>TIME</u>	<u>POWER (%FP)</u>	<u>LETDOWN (GPM)</u>	<u>RADIOIODINE CONCENTRATION (μCi/gm)</u>					<u>Dose Eq* I-131</u>
				<u>I-131</u>	<u>I-132</u>	<u>I-133</u>	<u>I-134</u>	<u>I-135</u>	
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09/19/92	0710	0	50	0.986	0.300	0.636	-----	0.169	1.180
09/19/92	1010	0	69	0.870	0.277	0.536	-----	0.111	1.030
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09/20/92	0335	0	69	0.333	0.197	0.116	-----	0.00725	0.372

*Time duration when the 1.0 μ Ci/gm limit was exceeded = 16 hours.

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 1992.