



GPU Nuclear Corporation
Post Office Box 480
Route 441 South
Middletown, Pennsylvania 17057-0191
717 944-7621
TELEX 84-2386
Writer's Direct Dial Number:

April 30, 1985
5211-85-2081

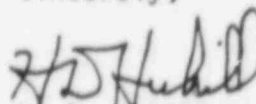
Union Carbide Corporation-Nuclear Division
CSD/ORGDP Site
Nuclear Material Control - Mail Stop 19
P. O. Box "P"
Oak Ridge, Tn. 37830

Dear Sir:

Three Mile Island Nuclear Station Unit 1 (TMI-1)
Operating License No. DPR-50
Docket No. 50-289
Semi-Annual Material Status Report
October 1, 1984 through March 30, 1985

In accordance with 10 CFR 70.53, attached is the TMI-1 Material Status Report for the period of October 1, 1984 through March 30, 1985.

Sincerely,


H. D. Hukill
Director, TMI-1

HDH/WSW/JGB/spb

cc: Director of Inspection & Enforcement
T. E. Murley, Regional Administrator

Enclosures (4)

0240A

8511040395 850430
PDR ADOCK 05000289
R PDR

APPROVED BY OMB
038-R0480
APPROVED BY GAO
B-180225 (R0690)
Expires 6-30-83

1. NAME TMI Nuclear Station Unit 1			2. DOE/NRC FORM 740M ATTACHED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		4. REPORTING IDENTIFICATION SYMBOL (RIS) YZR	
STREET ADDRESS P.O. Box 480			3. INVENTORY DATE 03/30/85		5. LICENSE NUMBER(S) DPR-50	
CITY Middletown	STATE PA	ZIP CODE 17057				

[illegible]

8. SIGNATURE (See instructions for provisions regarding confidentiality.)

Vice President & Director, TMI-1

April 30, 1985

APPROVED BY OMB
038-R0480
APPROVED BY GAO
B-180225 (R0690)
Expires 6-30-83

U.S. DEPARTMENT OF ENERGY
AND
U.S. NUCLEAR REGULATORY COMMISSION
PHYSICAL INVENTORY LISTING

MBOL (PIS)

1. NAME THE Nuclear Station Unit 1 STREET ADDRESS P.O. Box 480 CITY MIDDLEBOWN	2. DOE/NRC FORM 740M ATTACHED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	3. INVENTORY DATE 03/30/85	4. REPORTING IDENTIFICATION SYMBOL (RIS) Y2R	5. LICENSE NUMBER(S) D1-50
STATE PA		ZIP CODE 17057		

[illegible]

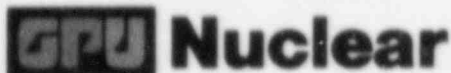
<p>To the best of my knowledge and belief, the information given above and in any attached schedules is true, complete, and correct.</p> <p>8. SIGNATURE (50 instructions provisions regarding confidentiality.)</p> <p><i>HS Hubil</i></p>	<p>9. TITLE</p> <p>Vice President & Director, TMI-1</p>	<p>10. DATE</p> <p>April 30, 1985</p>
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U. S. DEPARTMENT OF ENERGY
AND
U. S. NUCLEAR REGULATORY COMMISSION
MATERIAL BALANCE REPORT

1. NAME AND ADDRESS Metropolitan Edison Company P.O. Box 542 Reading, PA 19603		2. LICENSE NUMBER(S) DPR-50		3. REPORTING IDENTIFICATION SYMBOL (RIS) YZR	
		4. REPORT PERIOD FROM 10/01/84 TO 03/30/85		5. MATERIAL TYPE (Submit separate report for each type) 50	
SECTION A MATERIAL ACCOUNTABILITY					
7. DOE NRC FORM ATTACHED <input type="checkbox"/> YES <input type="checkbox"/> NO		A. ELEMENT WEIGHT		B. ISOTOPE WEIGHT	
8. BEGINNING INVENTORY - DOE OWNED					
9. BEGINNING INVENTORY - NOT DOE OWNED		1,127,533		838,009	
11. PROCUREMENT FROM DOE FROM		RECEIPTS RIS			
13. PROCUREMENT - FOR THE ACCOUNT OF DOE					
14. DOD RETURNS - USE A					
15. DOD RETURNS - USE B					
16. DOD RETURNS - OTHER USES					
21. PRODUCTION					
22. FROM OTHER MATERIALS a. ICT b. ICT c. ICT					
30. RECEIPTS REPORTED TO DOE NRC ON DOE NRC FORM 741 (Not listed elsewhere) FROM		RIS			
36. DONATED MATERIAL - FROM DOE TO OTHERS					
36. DONATED MATERIAL - FROM OTHERS TO DOE					
40. TOTAL (Lines 2-39)		1,127,533		838,009	
41. EXPENSED IN SPACE PROGRAMS		REMOVALS			
42. SALES TO DOE - RIS TO		RIS			
43. SALES TO OTHERS FOR THE ACCOUNT OF DOE TO		RIS			
44. DOD - USE A					
45. DOD - USE B					
46. DOD - OTHER USES					
47. EXPENSED IN DOE TESTS					
48. ROUTINE TESTS					
49. SHIPPER - RECEIVER DIFFERENCE					
51. SHIPMENTS REPORTED TO NRC DOE ON DOE NRC FORM 741 (Not listed elsewhere) TO		RIS			
56. DONATED MATERIAL - TO DOE BY OTHERS					
56. DONATED MATERIAL - TO OTHERS BY DOE					
71. DEGRADATION TO OTHER MATERIALS a. ICT b. ICT					
72. DECAY		2,213		2,213	
73. FISSION AND TRANSMUTATION					
74. NORMAL OPERATIONAL LOSSES MEASURED DISCARDS					
75. ACCIDENTAL LOSSES					
76. APPROVED WRITE OFFS					
77. INVENTORY DIFFERENCE					
80. ENDING INVENTORY - DOE OWNED					
81. ENDING INVENTORY - NOT DOE OWNED		1,125,320		835,796	
82. TOTAL (Lines 41-81)		1,127,533		838,009	
83. BIAS ADJUSTMENT					
SECTION B COUNTRY CONTROL NUMBER DATA					
1. COUNTRY CONTROL NUMBER 115 115 115 00		2. ELEMENT WEIGHT 1,125,320		3. ISOTOPE WEIGHT 835,796	
4. TOTAL WEIGHT (Total must agree with total on line 80 or 81 or both)		1,125,320		835,796	
SECTION C CERTIFICATION					
To the best of my knowledge and belief, the information given above and in any attached schedules is true, complete, and correct.					
Signature (Print name and title) <i>W. S. G. Hubert</i>		DATE April 30, 1985			
U.S.C. SECTION 101: ACT OF JUNE 26, 1946, STAT. 746 MAKES IT A CRIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION TO ANY DEPARTMENT OR AGENCY OF THE UNITED STATES AS TO ANY MATTERS WITHIN ITS JURISDICTION.					
NRC DOE FORM 742 (12-81) (Previous editions are obsolete)					

U. S. DEPARTMENT OF ENERGY
AND
U. S. NUCLEAR REGULATORY COMMISSION
MATERIAL BALANCE REPORT

1. NAME AND ADDRESS Metropolitan Edison Company P.O. Box 542 Reading, PA 19603		2. LICENSE NUMBER(S) DPR-50		3. REPORTING IDENTIFICATION SYMBOL (RIS) Y3R	
		4. REPORT PERIOD FROM 10/01/84 TO 03/30/85		5. MATERIAL TYPE (Submit separate report for each type) E1	
SECTION A MATERIAL ACCOUNTABILITY					
7. DOE NRC FORM ATTACHED <input type="checkbox"/> YES <input type="checkbox"/> NO		A. ELEMENT WEIGHT		B. ISOTOPE WEIGHT	
8. BEGINNING INVENTORY - DOE OWNED		134,763,181		2,685,465	
9. BEGINNING INVENTORY - NOT DOE OWNED					
11. PROCUREMENT FROM DOE FROM		RECEIPTS RIS			
13. PROCUREMENT - FOR THE ACCOUNT OF DOE					
14. DOD RETURNS - USE A					
15. DOD RETURNS - USE B					
16. DOD RETURNS - OTHER USES					
21. PRODUCTION					
22. FROM OTHER MATERIALS a. ICT b. ICT c. ICT					
30. RECEIPTS REPORTED TO DOE NRC ON DOE NRC FORM 741 (Not listed elsewhere) FROM		RIS			
38. DONATED MATERIAL - FROM DOE TO OTHERS					
39. DONATED MATERIAL - FROM OTHERS TO DOE					
40. TOTAL (Lines 8-39)		134,763,181		2,685,465	
41. EXPENDED IN SPACE PROGRAMS		REMOVALS			
42. SALES TO DOE - RIS TO TO		RIS			
43. SALES TO OTHERS FOR THE ACCOUNT OF DOE TO		RIS			
44. DOD - USE A					
45. DOD - USE B					
46. DOD - OTHER USES					
47. EXPENDED IN DOE TESTS					
48. ROUTINE TESTS					
49. SHIPPER - RECEIVER DIFFERENCE					
51. SHIPMENTS REPORTED TO NRC DOE ON DOE NRC FORM 741 (Not listed elsewhere) TO		RIS			
56. DONATED MATERIAL - TO DOE BY OTHERS					
59. DONATED MATERIAL - TO OTHERS BY DOE					
71. DEGRADATION TO OTHER MATERIALS a. ICT b. ICT					
72. DECAY					
73. FISSION AND TRANSMUTATION					
74. NORMAL OPERATIONAL LOSSES MEASURED BY CARDS					
75. ACCIDENTAL LOSSES					
76. APPROVED WRITE OFFS					
77. INVENTORY DIFFERENCE					
80. ENDING INVENTORY - DOE OWNED					
81. ENDING INVENTORY - NOT DOE OWNED		134,763,181		2,685,465	
82. TOTAL (Lines 81-81)		134,763,181		2,685,465	
83. BIAS ADJUSTMENT					
SECTION B COUNTRY CONTROL NUMBER DATA					
1. COUNTRY CONTROL NUMBER US US US 02		2. ELEMENT WEIGHT 134,763,181		3. ISOTOPE WEIGHT 2,685,465	
4. TOTAL WEIGHT (Total must agree with total on line 82 or 81 or both)		134,763,181		2,685,465	
SECTION C CERTIFICATION					
To the best of my knowledge and belief, the information given above and in any attached schedules is true, complete, and correct.					
Signed (Signature) _____ Special Agent in Charge		DATE April 30, 1985		Vice President & Director, TMI-1	



GPU Nuclear Corporation
Post Office Box 480
Route 441 South
Middletown, Pennsylvania 17057-0191
717 944-7621
TELEX 84-2386
Writer's Direct Dial Number:

April 26, 1985
5230-85-2033

Regional Administrator
Region I
U. S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, PA 19406

Three Mile Island Nuclear Station, Unit 2 (TMI-2)
Operating License No. DPR-73
Docket No. 50-320
1984 Annual Environmental Operating Report

Dear Sir:

In accordance with the requirements of TMI-2 Technical Specifications, enclosed are copies of the following reports:

- TMINS 1984 Environmental Operating Report for TMI-2
- An Ecological Study of the Susquehanna River near the Three Mile Island Nuclear Station - 1984

Technical questions concerning these reports should be directed to Dr. Gary Baker, Manager Environmental Controls, TMINS at (717) 657-3666.

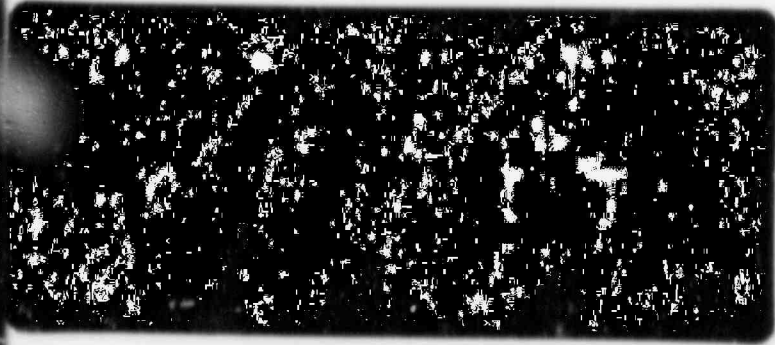
Sincerely,

R. W. Howard, Jr.
Vice President
Radiological and Environmental
Controls

RWH/TAG/ew

Enclosures

cc: Director, Office of Nuclear Reactor Regulations
W. P. Domsife, P.E.
B. J. Snyder
W. Travers
Document Control Room - 18 copies



Penelec / GPU

GPU Service

JCP&L / GPU

GPU Nuclear

Met-Ed / GPU

THREE MILE ISLAND NUCLEAR STATION
1984
ANNUAL ENVIRONMENTAL OPERATING REPORT
Docket No. 50-320

Prepared by
GPU Nuclear Corporation

~~10/10/84~~
11/70

SUMMARY

This document and the referenced report fulfill the requirements for the "Annual Environmental Operating Report" as described in the TMI-2 Environmental Technical Specifications (ETS). The purpose of the report is to discuss nonradiological environmental effects of activities at Three Mile Island Nuclear Station (TMINS). During 1984 no significant, adverse environmental impacts resulted from these activities.

Specific sections of the report have been categorized by topic and are summarized below.

1. AQUATIC STUDIES OF THE SUSQUEHANNA RIVER

Environmental studies performed to assess the nonradiological impacts of TMINS on the Susquehanna River are discussed in "An Ecological Study of the Susquehanna River near the Three Mile Island Nuclear Station - Annual Report for 1984," EA Engineering, Science, and Technology, Inc., April 1985.

2. UNUSUAL OR IMPORTANT ENVIRONMENTAL EVENTS

No unusual or important environmental events occurred during 1984.

3. EXCEEDING LIMITS OF OTHER RELEVANT PERMITS

During 1984, two noncompliance reports were submitted to the PaDER as required by the NPDES permit. Copies of the noncompliance reports were sent to the NRC as required by section 4.6.2 of the TMI-2 ETS.

The noncompliances were as follows:

- o Iron limitation exceeded at the IWTS Discharge
- o Insufficient oil and grease samples taken at the IWFS Discharge

All noncompliances resulted in personnel instruction and procedure review/revision.

4. CHANGES IN PROCEDURES, STATION DESIGN, OR OPERATION

During 1984, all proposed changes in procedures, station design, or operation were reviewed for potential environmental impact in accordance with ETS and administrative quality assurance procedures.

INTRODUCTION

This document and the referenced report fulfill the requirements for the "Annual Environmental Operating Report", as described in the Three Mile Island Nuclear Station, Unit 2 Environmental Technical Specifications (ETS), as amended May 6, 1983. This change, (Amendment 21), either deleted or revised many of the aquatic, terrestrial, and effluent monitoring requirements. The effluent monitoring restrictions are now exclusively regulated by the Pennsylvania Department of Environmental Resources through the station's NPDES permit. The Nuclear Regulatory Commission considered studies deleted by these changes either completed, no longer necessary, or regulated by the State.

Data collected in 1984 were analyzed and compared to the requirements set forth in the ETS. These data are summarized and presented in this report.

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
1. Water Quality Analysis	1
2. Biotic - Aquatic	1
3. Unusual or Important Environmental Events	1
4. Exceeding Limits of Other Relevant Permits	1
5. Environmental Program Description Document	2
6. Changes in Procedures, Station Design, or Operation	2
7. Changes in Environmental Technical Specifications	2
8. Changes in Permits and Certifications	2

LIST OF TABLES

<u>Table</u>		<u>Page</u>
1.	List of Abbreviations	v
2.	Section Reference TMI-2 1984 Annual Environmental Operating Report	vi
3.	Procedures Contained within the TMINS Environmental Program Description Document (1984)	3

Table 1. List Of Abbreviations

ETS - Environmental Technical Specifications

IWFS - Industrial Waste Filtering System

IWTS - Industrial Waste Treatment System

NRC - Nuclear Regulatory Commission

NPDES - National Pollutant Discharge Elimination
System

PaDER - Pennsylvania Department of Environmental
Resources

TMINS - Three Mile Island Nuclear Station

Table 2. Section Reference

TMI-2 1984 Annual Environmental Operating Report

<u>Report Section</u>	<u>Title</u>	<u>TMI-2 ETS</u>
1.	Water Quality Analysis	3.1.1.a.(4)
2.	Biotic - Aquatic	3.1.2a
3.	Unusual or Important Environmental Events	4.6.1
4.	Exceeding Limits of Other Relevant Permits	4.6.2
5.	Environmental Program Description Document	5.5.1
6.	Changes in Procedures, Station Design, or Operation	5.5.4c
7.	Changes in Environmental Technical Specifications	5.7.1
8.	Changes in Permits and Certifications	5.7.2

1. WATER QUALITY ANALYSIS

Water Quality Analysis is described in "An Ecological Study of the Susquehanna River near the Three Mile Island Nuclear Station - Annual Report for 1984," EA Engineering, Science, and Technology, Inc., April 1985. This report will be submitted to the NRC by May 1, 1985.

2. BIOTIC-AQUATIC

The Aquatic Program is described in "An Ecological Study of the Susquehanna River near the Three Mile Island Nuclear Station - Annual Report for 1984," EA Engineering, Science, and Technology, Inc., April 1985. This report will be submitted to the NRC by May 1, 1985.

3. UNUSUAL OR IMPORTANT ENVIRONMENTAL EVENTS

No unusual or important environmental events occurred during 1984.

4. EXCEEDING LIMITS OF OTHER RELEVANT PERMITS

During 1984 two noncompliance reports were submitted to the PaDER as required by the TMI NPDES Permit No. 0009920. Copies of the non-compliance reports were sent to the NRC as required by Section 4.6.2 of the TMI-2 ETS. The noncompliances were as follows:

Noncompliance 84-01 (September 20, 1984) occurred at the IWTs Discharge, (DSN 107). The noncompliance resulted from a release of 4.39 lbs. of iron which was in excess of the NPDES limit of 2.4 lbs./day.

The iron concentration exceeded its limit due to an unanticipated high iron concentration and a higher than usual daily flow caused by the draining of circulating water from the TMI-1 condenser. A routine sample of DSN 107 was taken during discharge, however, the analysis was not reported to the IWTs operator.

As a result of this noncompliance, the following administrative improvements were performed:

1. Plant Operations will ensure that samples are taken of water to be discharged as a result of non-routine activities to improve anticipation of higher pollutant loadings on waste treatment systems.

2. Plant Chemistry will modify sampling/analysis procedures to require that daily discharge quantities be calculated at the time a sample is analyzed. This will reduce the delay time in determining the existence of noncompliance conditions.
3. Plant Chemistry will modify appropriate procedures to provide direction to take immediate follow up samples upon the identification of an out-of-specification discharge sample analysis.

Noncompliance 84-02 (September 1984) occurred at the IWFS Discharge, (DSN 104). The noncompliance resulted from the failure to perform the required number of analyses for oil and grease for the month.

Two samples were required, but only one was taken and analyzed. A supervisor mistakenly thought the required number of samples had been taken.

As a result of this noncompliance, all chemistry supervisory personnel were counselled regarding the importance of ensuring that all effluent sampling surveillance requirements are performed on schedule.

5. ENVIRONMENTAL PROGRAM DESCRIPTION DOCUMENT

Section 5.5.1 of the TMI-2 ETS requires that procedures developed to comply with the requirements of Sections 3.1 and 4.0 of the TMI-2 ETS be compiled into an Environmental Program Description Document. The TMI Environmental Controls Procedures satisfy this requirement with applicable procedures listed in Table 3. Changes made to procedures contained within this document during 1984 reflected administrative revisions.

6. CHANGES IN PROCEDURES, STATION DESIGN, OR OPERATIONS

All proposed changes in procedures, station design, or operations during 1984 were reviewed for potential environmental impact in accordance with ETS and administrative quality assurance procedures. The reviews ensured that no changes were performed which could cause an adverse environmental impact, or which could change the findings of the Final Supplement to the Final Environmental Statement.

7. CHANGES IN ENVIRONMENTAL TECHNICAL SPECIFICATIONS

No changes were made to the ETS during 1984.

8. CHANGES IN PERMITS AND CERTIFICATIONS

No changes were made to relevant permits in 1984.

Table 3. Procedures Contained Within The TMINS Environmental
Program Description Document (1984)

<u>TMI-Unit 2</u> <u>Environmental Technical</u> <u>Specification Section</u>	<u>Procedure Title</u>	<u>Procedure Number</u>	<u>Current Revision</u> <u>Number</u>
3.1.1.a.(4) and 3.1.2.a.(1)a-c	Non-Radiological Aquatic Monitoring Review	9420-ADM-4500.12	0
3.1.1.a.(4)	Water Quality Analysis	9420-IMP-4512.01	0
3.1.2.a.(1)(a)	Benthic Macroinvertebrates	9420-IMP-4511.01	0
ω 3.1.2.a.(1)(b)	Ichthyoplankton	9420-IMP-4511.02	1
3.1.2.a.(1)(c)	Fish	9420-IMP-4511.03	1
3.1.2.a.(1)(c)	Creel Survey	9420-IMP-4511.04	0
4.6.1 and 4.6.2	NRC Nonroutine Reports	9420-ADM-4500.04	0
5.7.1 and 5.7.2	Changes Made in Environmental Permits and/or Environmental Technical Specifications	9420-ADM-4500.06	0