



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

August 26, 1977

Docket No. 50-245 - 1076
and 50-336 - 813

Licensee

Gentlemen:

The NRC is presently preparing a summary of radioactive effluents released from commercial nuclear power plants during 1976. The report will be similar to NUREG-0218, "Radioactive Materials Released from Nuclear Power Plants (1975)".

In order to verify the accuracy of the information before its publication, a draft copy of the data with respect to your plant(s) is enclosed for your review. We would appreciate receiving your comments and suggested changes by September 16, 1977. If there are changes to the enclosure that result from other than our transcription error, we request that you file an amendment to your semi-annual reports which includes a reason for the change. Also, please provide answers to any questions attached to or on the enclosed data sheets, the name and telephone number of the individual we should contact in the event that we find it necessary to clarify your comments in answer to this request. Please provide a written response even if no changes to the data are required. Responses should be addressed to:

U. S. Nuclear Regulatory Commission
Office of Management Information & Program Control
Operating Data Branch, 12105 MNBB
Washington, D. C. 20555

Any questions should be referred to T. R. Decker (301-492-7735). A copy of the final report will be sent to you.

Sincerely,

A handwritten signature in cursive script that reads "George Lear".

George Lear, Chief
Operating Reactors Branch #3
Division of Operating Reactors

Enclosure:
Draft Copy of Data

cc w/enclosure:
See next page

Northeast Nuclear Energy Company - 2 -

cc: William H. Cuddy, Esquire
Day, Berry & Howard
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One Constitution Plaza
Hartford, Connecticut 06103

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Washington, D. C. 20005

Waterford Public Library
Rope Ferry Road, Route 156
Waterford, Connecticut 06385

Northeast Nuclear Energy Company
ATTN: Superintendent
Millstone Plant
P. O. Box 128
Waterford, Connecticut 06385

FACILITY: HILLSTONE POINT 1
TYPE: BWR
LOCATION: 3.2 MI WSW NEW LONDON CT
COOLING WATER SOURCE: LONG ISLAND SOUND

DOCKET NO: 50-245

LICENSED POWER (MWT):

2011.0

0.0

0.0

INITIAL CRITICALITY:

10/26/70

OPERATION

GROSS THERMAL GENERATION	11636094.0	MWHT
NET ELECTRICAL	3754493.0	MWHE
THERMAL CAPACITY FACTOR (DURING COMMERCIAL OPERATION)	65.9	PER CENT

SUMMARY OF EFFLUENTS

AIRBORNE

A) TOTAL NOBLE GASES	5.07E+05	CURIES
B) TOTAL I-131	2.18E+00	CURIES
C) TOTAL HALOGENS (INCLUDING I-131)	3.65E+01	CURIES
D) TOTAL PARTICULATES	1.75E-01	CURIES
E) TOTAL TRITIUM	2.87E+01	CURIES

LIQUID

A) TOTAL MIXED FISSION AND ACTIVATION PRODUCTS	9.29E+00	CURIES
B) TOTAL TRITIUM	2.01E+01	CURIES
C) DISSOLVED NOBLE GASES	3.56E-01	CURIES
D) VOLUME OF LIQUID WASTE RELEASED	7.85E+02	LITERS
E) VOLUME OF DILUTION WATER	2.11E+11	LITERS

SOLID WASTE

A) VOLUME	1.33E+03	CUBIC METERS
B) ACTIVITY	1.70E+03	CURIES
C) NUMBER OF SHIPMENTS	1.53E+02	

* IF SUMMARY
VALUES ARE
DIFFERENT THAN
THE SUM OF
ISOTOPES PLEASE
EXPLAIN DISCREPANCY.

AIRBORNE EFFLUENTS (CURIES)

NOBLE GAS

KR-83M	1.23E+04
KR-85	7.10E+02
KR-85M	3.02E+04
KR-87	7.96E+04
KR-88	9.57E+04
XE-131M	1.92E+02
XE-133	4.09E+04
XE-133M	2.21E+03
XE-135	1.26E+05
XE-135M	1.57E+04
XE-138	1.04E+05

HALOGENS

I-131	2.18E+00
I-133	1.61E+01
I-135	1.82E+01

PARTICULATES

CR-51	4.21E-04
MN-54	2.87E-03
FE-59	2.68E-02
CO-58	2.77E-04
CO-60	5.44E-03
SR-89	1.08E-02
SR-90	3.03E-04
I-131	1.27E-02
CS-134	1.41E-03
CS-137	2.43E-03
BA/LA-140	1.12E-01

TRITIUM

H-3	2.87E+01
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LIQUID EFFLUENTS (CURIES)

XE-133	1.71E-01
XE-135	1.05E-01.
I-131	3.98E-01
I-132	1.29E-03
I-133	1.81E-01
I-135	3.03E-02
NA-24	1.54E-03
CR-51	1.01E-02
MN-54	8.08E-01
CU-58	7.16E-02
FE-59	9.28E-02
CU-60	3.38E-01
ZN-65	2.84E-04
SK-89	1.03E+00
SR-90	2.15E-02
Y-90	2.12E-02
ZH-95	9.28E-02
NB-95	6.57E-04
MO-99	1.27E-01
CS-134	2.34E+00
CS-136	6.11E-03
CS-137	3.50E+00
BA/LA-140	1.31E-01

TRITIUM

H-3

2.01E+01

FACILITY: MILLSTONE POINT 2
TYPE: PWR
LOCATION: 3.2 MI WSW NEW LONDON CT
COOLING WATER SOURCE: LONG ISLAND SOUND

DOCKET NO: 50-936

LICENSED POWER (MWT): 2560.0 0.0 0.0

INITIAL CRITICALITY: 10/17/75

OPERATION

GROSS THERMAL GENERATION	1515524.0	MWHT
NET ELECTRICAL	4543170.0	MWHE
THERMAL CAPACITY FACTOR (DURING COMMERCIAL OPERATION)	67.4	PER CENT

SUMMARY OF EFFLUENTS

AIRBORNE

A) TOTAL NOBLE GASES	1.57E+03	CURIES
B) TOTAL I-131	9.56E-03	CURIES
C) TOTAL HALOGENS (INCLUDING I-131)	1.28E-02	CURIES
D) TOTAL PARTICULATES	3.09E-03	CURIES
E) TOTAL TRITIUM	1.50E+01	CURIES

LIQUID

A) TOTAL MIXED FISSION AND ACTIVATION PRODUCTS	2.61E-01	CURIES
B) TOTAL TRITIUM	2.77E+02	CURIES
C) DISSOLVED NOBLE GASES	3.93E+00	CURIES
D) VOLUME OF LIQUID WASTE RELEASED	8.31E+06	LITERS
E) VOLUME OF DILUTION WATER	5.55E+10	LITERS

SOLID WASTE

A) VOLUME	2.80E+02	CUBIC METERS
B) ACTIVITY	1.80E+00	CURIES
C) NUMBER OF SHIPMENTS	2.60E+01	

* IF SUMMARY
VALUES ARE
DIFFERENT THAN
THE SUM OF
ISOTOPES PLEASE
EXPLAIN DISCREPANCY.

AIRBORNE EFFLUENTS (CURIES)

NOBLE GAS

AR-37	1.06E+01
AR-41	2.59E-01
KR-85	1.02E+02
KR-87	2.03E-01
XE-131M	1.43E-01
XE-133	1.43E+03
XE-133M	7.63E-02
XE-135	2.55E+01

HALOGENS

BR-82	2.07E-05
I-131	9.56E-03
I-133	2.00E-03
I-135	1.21E-03

PARTICULATES

MI-54	8.96E-05
CU-58	4.06E-05
CU-60	2.46E-03
SR-90	2.16E-07
CS-134	2.07E-04
CS-137	2.59E-04
CS-138	1.91E-03
BA/LA-140	2.62E-05
BA-131	2.06E-06

TRITIUM

H-3	1.58E+01
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LIQUID EFFLUENTS (CURIES)

XE-133	3.93E+00
XE-135	4.74E-03
I-131	2.04E-02
I-133	5.13E-03
I-135	2.00E-04
NA-24	3.02E-02
CR-51	4.70E-02
NI-54	5.05E-03
CO-58	1.16E-01
FE-59	2.12E-03
CU-60	6.01E-03
ZN-65	3.46E-05
SR-89	5.61E-04
ZK-95	8.87E-03
NB-95	4.70E-03
MO-99	4.52E-05
CS-134	5.40E-04
CS-136	1.65E-04
CS-137	1.14E-02
BA/LA-140	2.97E-04

TRITIUM

H-3	2.77E+02
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