



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

A

AUG 26 1977

Docket No. 50-213-782

Licensee

RE: HADDAM NECK PLANT

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, appearing to read "Albert Schwencer".

Albert Schwencer, Chief
Operating Reactors Branch #1
Division of Operating Reactors

Enclosure:
Draft Copy of Data

cc w/enclosure:
See next page

Connecticut Yankee Atomic Power Company

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August 26, 1977

cc: Day, Berry & Howard
Counselors at Law
One Constitution Plaza
Hartford, Connecticut 06103

Russell Library
119 Broad Street
Middletown, Connecticut 16457

Superintendent
Haddam Neck Plant
RFD #1
Post Office Box 127E
East Hampton, Connecticut 06424

FACILITY: CONNECTICUT YANKEE
 TYPE: PWR
 LOCATION: 9.5 MI SE MIDDLETOWN CT
 COOLING WATER SOURCE: CONNECTICUT RIVER

DUCKET NO: 50-213
 LICENSED POWER (MWT): 1825.0 0.0 0.0
 INITIAL CRITICALITY: 07/24/67

OPERATION

| | | |
|--|------------|----------|
| GROSS THERMAL GENERATION | 12964154.0 | MWHT |
| NET ELECTRICAL | 4027805.0 | MWHE |
| THERMAL CAPACITY FACTOR (DURING COMMERCIAL OPERATION) | 80.9 | PER CENT |

SUMMARY OF EFFLUENTS

AIRBORNE

| | | |
|-------------------------------------|-----------|--------|
| A) TOTAL NOBLE GASES | <4.53E+02 | CURIES |
| B) TOTAL I-131 | 7.33E-04 | CURIES |
| C) TOTAL HALOGENS (INCLUDING I-131) | <7.33E-04 | CURIES |
| D) TOTAL PARTICULATES | <1.65E-04 | CURIES |
| E) TOTAL TRITIUM | 7.38E+02 | CURIES |

LIQUID

| | | |
|--|-----------|--------|
| A) TOTAL MIXED FISSION AND ACTIVATION PRODUCTS | <1.30E-01 | CURIES |
| B) TOTAL TRITIUM | 4.85E+03 | CURIES |
| C) DISSOLVED NOBLE GASES | <3.18E-02 | CURIES |
| D) VOLUME OF LIQUID WASTE RELEASED | 6.09E+07 | LITERS |
| E) VOLUME OF DILUTION WATER | 6.99E+11 | LITERS |

SOLID WASTE

| | | |
|------------------------|----------|--------------|
| A) VOLUME | 7.67E+02 | CUBIC METERS |
| B) ACTIVITY | 7.46E+02 | CURIES |
| C) NUMBER OF SHIPMENTS | 4.20E+01 | |

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

AIRBORNE EFFLUENTS (CURIES)

NOBLE GAS

| | |
|---------|-----------|
| AR-37 | 2.17E+01 |
| KR-85 | 1.29E+02 |
| KR-95M | <7.84E-02 |
| KR-87 | <5.29E-01 |
| KR-88 | <7.67E-01 |
| XE-131M | <1.03E+00 |
| XE-133 | 2.98E+02 |
| XE-135 | <1.59E+00 |
| XE-135M | <2.90E-01 |
| XE-138 | <4.00E-06 |

HALOGENS

| | |
|-------|-----------|
| I-131 | 7.33E-04 |
| I-133 | <1.00E-11 |
| I-135 | <1.80E-11 |

PARTICULATES

| | |
|------|----------|
| DE-7 | 1.19E-05 |
|------|----------|

| | |
|-----------|-----------|
| CR-51 | 1.45E-06 |
| MN-54 | 7.30E-06 |
| CO-58 | 6.45E-06 |
| CO-60 | 8.35E-05 |
| SR-89 | <4.40E-14 |
| SR-90 | 1.56E-06 |
| RU-103 | 2.08E-07 |
| RU-106 | 3.63E-08 |
| CS-134 | 9.24E-06 |
| CS-137 | 4.52E-05 |
| BA/LA-140 | <1.00E-12 |

OTHER GASES

| | | |
|---------|------|----------|
| TRITIUM | C-14 | 2.0E+01 |
| | H-3 | 7.38E+02 |

← WAS THIS VALUE MEASURED OR CALCULATED?

PLEASE EXPLAIN

LIQUID EFFLUENTS (CURIES)

| | |
|--------------|-----------|
| AR-37 | <6.92E-06 |
| KR-85 | 1.84E-04 |
| XE-133 | <2.95E-02 |
| XE-135 | <2.12E-03 |
| I-131 | <1.12E-03 |
| I-133 | <1.91E-05 |
| DE-7 | <3.40E-06 |
| CR-51 | <1.10E-03 |
| MN-54 | <6.36E-03 |
| CO-57 | <7.33E-04 |
| CO-58 | <1.37E-02 |
| FE-59 | <4.00E-06 |
| CO-60 | <7.34E-02 |
| ZN-65 | <3.56E-06 |
| SR-89 | <6.92E-04 |
| SR-90 | <1.11E-04 |
| ZR/NB-95 | <6.40E-07 |
| MI-99 | <4.00E-06 |
| TC-99M | <2.00E-06 |
| RU-106 | <6.62E-05 |
| AG-110M | <6.37E-05 |
| SB-124 | <1.13E-03 |
| SB-125 | <5.73E-04 |
| CS-134 | <3.14E-03 |
| CS-137 | <2.29E-02 |
| BA/LA-140 | <4.30E-06 |
| CE-141 | <1.08E-06 |
| CE-144 | <1.27E-03 |
| EU-154 | <4.00E-06 |
| UNIDENTIFIED | <3.66E-03 |

TRITIUM

H-3

4.05E+03

PLEASE EXPLAIN USE OF LESS THAN
NOTATION OR MAJORITY OF ISOTOPES.

END

DATE FILMED

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