



CONNECTICUT YANKEE ATOMIC POWER COMPANY

HADDAM NECK PLANT

RR#1 • BOX 127E • EAST HAMPTON, CT 06424-9341


December 15, 1990  
Re: Technical Specification 6.9.1.8  
Docket No. 50-213

U. S. Nuclear Regulatory Commission  
Document Control Desk  
Washington, D. C. 20555

Dear Sir:

In accordance with reporting requirements of Technical Specification 6.9.1.8, the Connecticut Yankee Haddam Neck Plant Monthly Operating Report 90-10, covering operations for the period November 1, 1990 to November 30, 1990 is hereby forwarded.

Very truly yours,

  
John P. Stetz  
Station Director

JPS/va

- cc: (1) Regional Administrator, Region 1  
U. S. Nuclear Regulatory Commission  
475 Allendale Road  
King of Prussia, PA 19406
- (2) John T. Shedlosky  
Sr. Resident Inspector  
Connecticut Yankee

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Connecticut Yankee Atomic Power Company

Haddam Neck Plant

Haddam, Connecticut

Monthly Operating Report No. 90-11

For The Month of

November 1990

### Plant Operations Summary - November 1990

The following is a summary of Plant Operations for November 1990.

On November 1st at 0000 hours, the plant was in Cold Shutdown, Mode 5 for repairs.

On November 12th at 1335 hours, with the repairs complete, Hot Shutdown, Mode 4 was attained.

On November 14th at 0303 hours, Hot Standby Mode 3 was attained as the heat up continued. By 2129 hours, Startup, Mode 2 was attained

On November 15th at 0400 hours, the Reactor was critical. At 1718 hours the generator was phased to the grid commencing Power Operation, Mode 1 at 5% power. By 1757 hours, the plant was at 10% power. Load was maintained at 10% while waiting for Steam Generator water chemistry to be within specifications.

On November 16th at 0130 hours, chemistry was within specifications and the plant started a power ascension. By 0600 hours power was at 30%, and holding for chemistry. At 2255 hours, chemistry was again within specifications and a power ascension was commenced.

On November 18th at 0025 hours, power was at 100%.

On November 20th at 1030 hours, a tubing leak, on loop 1 flow transmitter was identified and a power reduction was initiated. At 1229 hours, power was at 60% load. By 1446 hours, repairs were completed with the power at 39% load. At 1630 hours, a power ascension was commenced.

On November 21st at 1630 hours, power was a 100% rated load.

The plant continued to operate at 100% load for the remainder of the month.

J&C 11/90

SYSTEM  
OR  
COMPONENT

MALFUNCTION

CAUSE

RESULT

EFFECT ON  
SAFE  
OPERATION

CORRECTIVE ACTION  
TAKEN TO PREVENT  
REPETITION

SPECIAL PRECAUTIONS  
TAKEN TO PROVIDE  
FOR REACTOR SAFETY  
DURING REPAIR

There were no  
reportable items  
for I&C for the  
month of  
November 1990

Maintenance  
November 1990

**MALFUNCTION**

**CAUSE**

**RESULT**

**EFFECT ON  
SAFE  
OPERATION**

**CORRECTIVE ACTION  
TAKEN TO PREVENT  
REPETITION**

**SPECIAL PRECAUTIONS  
TAKEN TO PROVIDE  
FOR REACTOR SAFETY  
DURING REPAIR**

**SYSTEM  
OR  
COMPONENT**

Feedwater Reg.  
Valve Bypass  
Check Valves  
FW-CV-135-1,2,3,4

Worn seats due  
to constant  
movement of  
internal parts

Seat leakage

Potential  
reduction in  
Auxiliary  
Feedwater Flow

Valves refurbished and  
relocated in line

Shutdown

EG-2A Emergency  
Diesel Generator

Governor oil  
system and/or  
air start  
system

Starting time  
not within  
specs

Potential delay  
in providing  
power to safety  
equipment

Replaced starting solenoids  
and booster pump. Bled air  
from oil system

None

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-213

Conn. Yankee

UNIT Haddam Neck

DATE 11/90

COMPLETED BY S. F. Claffey

TELEPHONE (203) 267-3650

MONTH: November

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	<u>0</u>	17	<u>365</u>
2	<u>0</u>	18	<u>583</u>
3	<u>0</u>	19	<u>584</u>
4	<u>0</u>	20	<u>415</u>
5	<u>0</u>	21	<u>502</u>
6	<u>0</u>	22	<u>587</u>
7	<u>0</u>	23	<u>588</u>
8	<u>0</u>	24	<u>587</u>
9	<u>0</u>	25	<u>587</u>
10	<u>0</u>	26	<u>587</u>
11	<u>0</u>	27	<u>588</u>
12	<u>0</u>	28	<u>588</u>
13	<u>0</u>	29	<u>588</u>
14	<u>0</u>	30	<u>588</u>
15	<u>0</u>	31	<u>-</u>
16	<u>116</u>		

INSTRUCTIONS

On this format, list the average daily unit power level in MWe-Net for each day in the reporting month. Complete the nearest whole megawatt.

CONNECTICUT YANKEE  
 REACTOR COOLANT DATA  
 MONTH: NOVEMBER 1990

REACTOR COOLANT ANALYSIS	MINIMUM	AVERAGE	MAXIMUM
PH @ 25 DEGREES C	5.57E+00	6.00E+00	6.46E+00
CONDUCTIVITY (UMHOS/CM)	8.16E+00	1.19E+01	1.74E+01
CHLORIDES (PPM)	<5.00E-02	<5.00E-02	<5.00E-02
DISSOLVED OXYGEN (PPB)	<5.00E+00	4.05E+02	5.00E+03
BORON (PPM)	8.67E+02	1.37E+03	1.92E+03
LITHIUM (PPM)	6.19E-01	1.07E+00	1.63E+00
TOTAL GAMMA ACT. (UC/ML)	5.93E-02	7.87E-01	3.24E+00
IODINE-131 ACT. (UC/ML)	1.74E-03	6.55E-03	2.10E-02
I-131/I-133 RATIO	0.00E-01	5.27E+01	7.42E+02
CRUD (MG/LITER)	<1.00E-02	9.60E-02	2.40E+00
TRITIUM (UC/ML)	3.37E-01	7.17E-01	1.27E+00
HYDROGEN (CC/KG)	2.34E+01	2.48E+01	2.75E+01

AERATED LIQUID WASTE PROCESSED(GALLONS): 1.94E+05  
 WASTE LIQUID PROCESSED THROUGH BORON RECOVERY(GALLONS): 4.20E+04  
 AVERAGE PRIMARY LEAK RATE(GALLONS PER MINUTE): 5.93E-01  
 PRIMARY TO SECONDARY LEAK RATE(GALLONS PER MINUTE): 3.35E-04

NRC OPERATING STATUS REPORT

Haddam Neck

1. Docket: 50-213
2. Reporting Period: 11/90      Outage + On-line Hours: 353.3 + 366.7 = 720.0
3. Utility Contact: J. Stanford (203) 267-3635
4. Licensed Thermal Power (Mwt): 1825
5. Nameplate Rating (Gross Mwe):  $667 \times 0.9 = 600.3$
6. Design Electrical Rating (Net Mwe): 582
7. Maximum Dependable Capacity (Gross Mwe): 591.8
8. Maximum Dependable Capacity (Net Mwe): 565
9. If changes occur above since last report, reasons are: NONE
10. Power level to which restricted, if any (Net Mwe): N/A
11. Reasons for restriction, if any: N/A

	MONTH	YEAR-TO-DATE	CUMULATIVE
12. Report period hours:	720.0	8,016.0	200,880.0
13. Hours reactor critical:	380.0	2,080.5	160,329.7
14. Reactor reserve shutdown hours:	0.0	0.0	1,285.0
15. Hours generator on-line:	366.7	1,845.9	153,933.6
16. Unit reserve shutdown hours:	0.0	0.0	398.0
17. Gross thermal energy generated (Mwth):	591,778.0	2,466,735.0	265,334,053.0 *
18. Gross electrical energy generated (Mweh):	198,398.0	796,979.0	86,890,025.0 *
19. Net electrical energy generated (Mweh):	186,362.5	721,406.2	82,544,386.2 *
20. Unit service factor:	50.9	23.0	76.6
21. Unit availability factor:	50.9	23.0	76.8
22. Unit capacity factor using MDC net:	45.8	15.9	74.8
23. Unit capacity factor using DER net:	44.5	15.5	70.6
24. Unit forced outage rate:	49.1	20.5	5.9
25. Forced outage hours:	353.3	734.7	9,710.3
26. Shutdowns scheduled over next 6 months (type,date, duration):	NONE		
27. If currently shutdown, estimated startup date:	N/A		

\* Cumulative values from the first criticality (07/24/67). (The remaining cumulative values are from the first date of commercial operation, 01/01/68).



UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-213  
 UNIT NAME Conn. Yankee  
 DATE 11/90  
 COMPLETED BY S. E. Claffey  
 TELEPHONE 203-267-3650

REPORT MONTH November

No.	Date	Type <sup>1</sup>	Duration (Hours)	Reason <sup>2</sup>	Method of Shutting Down Reactor <sup>3</sup>	LER RPT.	System <sup>4</sup> Code	Component <sup>5</sup> Code	Cause & Corrective Action to Prevent Recurrence
90-06	11/01/90	F	353.3	B	I	90-23	BI	HX	Continuation of forced outage due to fouling of the Containment Air Recirculation (CAR) Heat Exchangers
90-07	11/20/90	F	4.3	A	N/A	N/A	AB	FT	Commenced load reduction due to loop 1 flow transmitter tubing leak
							AA	EI	Continued load reduction due to inoperable MCB rod position indication

<sup>1</sup>  
 F Forced  
 S Scheduled

<sup>2</sup>  
 Reason:  
 A-Equipment Failure (Explain)      H-Other(Explain)  
 B-Maintenance or Test  
 C-Refueling  
 D-Regulatory Restriction  
 E-Operator Training & License Examination  
 F-Administrative  
 G-Operational Error (Explain)

<sup>3</sup>  
 Method:  
 1-Manual  
 2-Manual Scram  
 3-Automatic Scram  
 4-Other(Explain)

<sup>4</sup>  
 Exhibit G-Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File (NUREG-0161)

<sup>5</sup>  
 Exhibit I Same Source

Refueling Information Request

1. Name of facility

Haddam Neck

2. Scheduled date for next refueling shutdown.

October 5, 1991

3. Scheduled date for restart following refueling.

November 26, 1991

4. (a) Will refueling or resumption of operation thereafter require a technical specification change or other license amendment?

Yes

- (b) If answer is yes, what, in general, will these be?

Revise Section 5 of Technical Specifications to allow use of zircaloy clad fuel. Obtain an exemption from 10CFR50 Appendix K Sections I.D.3, I.D.4 and I.D.5.

- (c) If answer is no, has the reload fuel design and core configuration been reviewed by your Plant Safety Review Committee to determine whether any unreviewed safety questions are associated with the core reload?  
(Ref. 10 CFR section 50.59)

n/a

- (d) If no such review has taken place, when is it scheduled?

n/a

5. Scheduled date(s) for submitting proposed licensing action and supporting information.

The exemption request will be submitted to the NRC in October 1990. The request for license amendment will be submitted in March 1991.

6. Important licensing considerations associated with refueling, e.g., new or different fuel design or supplier, unreviewed design or performance analysis methods, significant changes in fuel design, new operating procedures.

Conversion to zircaloy cladding.

7. The number of fuel assemblies (a) in the core and (b) in the spent fuel storage pool.

(a) 157 (b) 709

8. The present licensed spent fuel pool storage capacity and the size of any increase in licensed storage capacity that has been requested or is planned, in number of fuel assemblies.

1168

9. The projected date of the last refueling that can be discharged to the spent fuel pool assuming the present licensed capacity.

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