

CONNECTICUT YANKEE ATOMIC POWER COMPANY

HADDAM NECK PLANT

HADDAM, CONNECTICUT

MONTHLY OPERATING REPORT NO. 80-7

FOR THE MONTH OF

JULY, 1980

8008190 550

## PLANT OPERATIONS

The following is a chronological description of plant operations for the month of July, 1980.

- 7/1/80 Reactor was shutdown for refueling.
- 7/2/80 EG2A Diesel surveillance test completed.
- 7/2/80 Initial energization of 319 transformer.
- 7/3/80 EG2B Diesel surveillance test completed.
- 7/3/80 Fire Protection system surveillance test completed.
- 7/8/80 Completed Class "A" Leak Test.
- 7/9/80 Completed "A" LPSI flow test.
- 7/9/80 Completed partial loss of AC Test.
- 7/13/80 @ 2110 RCS hydro performed successfully at 2160 PSIG.
- 7/16/80 @ 0648 #2 RCP Seal failed.
- 7/16/80 Auxiliary feed water pumps (Terry Turbine) surveillance completed.
- 7/18/80 Seal water supply valves replaced.
- 7/24/80 1652 #2 RCP seal failed.
- 7/24/80 2315 initial critical @ 530<sup>o</sup>F, 2000 psig, #1 Hot Leg C<sub>B</sub> 1757, CDA 320, B @ 300 - low power physics test begun.
- 7/25/80 @ 2330 completed low power physics test.
- 7/26/80 @ 0400 Reactor critical for initial power assention.
- 7/27/80 @ 1048 initial phase to grid.
- 7/28/80 @ 1053 completed 25% power hold.
- 7/29/80 @ 0345 increased load from 50%. ("A" feed pump repaired).
- 7/29/80 @ 0653 @ 65% power - 3 loop.
- 7/30/80 @ 1133 #2 RCP seal failure.

CONNECTICUT YANKEE  
 REACTOR COOLANT DATA  
 MONTH: JULY 1980

REACTOR COOLANT ANALYSIS	MINIMUM	AVERAGE	MAXIMUM
PH @ 25 DEGREES C	: 4.45E+00	: 5.06E+00	: 5.75E+00
CONDUCTIVITY (UMHOS/CM)	: 4.40E+00	: 6.37E+00	: 1.40E+01
CHLORIDES (PPM)	: <4.00E-02	: <4.00E-02	: <4.00E-02
DISSOLVED OXYGEN (PPB)	: <5.00E+00	: <5.00E+00	: <5.00E+00
BORON (PPM)	: 1.31E+03	: 2.01E+03	: 2.35E+03
LITHIUM (PPM)	: 5.00E-01	: 5.29E-01	: 6.00E-01
TOTAL GAMMA ACT. (UC/ML)	: 5.34E-04	: 3.37E-01	: 3.30E+00
IODINE-131 ACT. (UC/ML)	: 4.88E-03	: 7.63E-03	: 9.36E-03
I-131/I-133 RATIO	: 5.77E-01	: 6.44E-01	: 7.18E-01
CRUD (MG/LITER)	: 2.00E-01	: 2.00E-01	: 2.00E-01
TRITIUM (UC/ML)	: 2.64E-02	: 7.94E-02	: 1.35E-01
HYDROGEN (CC/KG)	: 1.15E+01	: 1.65E+01	: 2.15E+01

AERATED LIQUID WASTE PROCESSED(GALLONS):	1.07E+05
WASTE LIQUID PROCESSED THROUGH BORON RECOVERY(GALLONS):	1.17E+05
AVERAGE PRIMARY LEAK RATE(GALLONS PER MINUTE):	0.00E-01
PRIMARY TO SECONDARY LEAK RATE(GALLONS PER MINUTE):	0.00E+00

SYSTEM OR COMPONENT	MALFUNCTION		EFFECT ON SAFE OPERATION	CORRECTIVE ACTION TAKEN TO PREVENT REPETITION	SPECIAL PRECAUTIONS TAKEN TO PROVIDE FOR REACTOR SAFETY DURING REPAIR
	CAUSE	RESULT			
Steam Generator Blowdown Trip Valves MS-TV-1312-1, 1312-3 and 1312-4	Erosion	Valves failed penetration test	Valves would not isolate	Valves rebuilt	Plant was shutdown.
No. 2 RCP Oil line quick disconnect fitting	Wear	Oil leak	Possible loss of RCP oil	Replaced fitting	RCP not run until repaired
RCP Seal Water Supply Filter	Improper Assembly	Filter internally bypassed	Contamination of RCP seals with crud	Replaced missing filter parts	Switched to alternate filter
SI MOV-861A	Lead making contact with motor housing	480V Ground	Valve inoperable electrically	Reinsulated wire	Plant shutdown
DH-MOV-310	Improperly set torque switch	Valve would not shut completely	Unable to properly throttle drain header	Valve motor operator adjusted	Plant shutdown
Reactor head vent solenoids	Water and boric acid in connector	125 VDC Ground	Possible loss of valve operability	Cleaned, dried and tested	Plant shutdown
CH-V-266	Erosion	Valve would not isolate	Loss of "A" charging pump full capacity	Valve replaced with Rockwell Hermaseal valve	"B" charging pump operable
RCP Seal Water Supply valves CH-V-345 A, B, C and D	Inability of valves to operate in throttling mode	Valve disk broken in half, valve diaphragm broken	Contamination of system with valve debris, external leakage	Replaced valves with Rockwell univalves	Plant shutdown

SYSTEM OR COMPONENT	MALFUNCTION		EFFECT ON SAFE OPERATION	CORRECTIVE ACTION TAKEN TO PREVENT REPETITION	SPECIAL PRECAUTIONS TAKEN TO PROVIDE FOR REACTOR SAFETY DURING REPAIR
	CAUSE	RESULT			
No. 3 RCP Oil lift system quick disconnect	Fitting cracked due to improper assembly	Oil leak	Possible loss of RCP oil	Replaced quick disconnect	RCP not run until repaired
No. 2 RCP Seal Failure	Improper Operation and Crud	Excessive seal leakage	Loss of No. 2 RCP	Seals replaced, seal water supply valves replaced, seal supply filter repaired and procedures rewritten.	Plant in 3 loop operation
"A" Boric Acid Pump	Failed bearings excessive run time	Pump binding	Loss of "A" boric acid pump capacity	Replaced bearings	"B" boric acid pump operable
"A" Charging Pump Aux. Oil Pump	Wear	Oil seal failed	"A" Charging Pump inoperable	Replaced seal	Plant shutdown "B" Pump operable
"B" Charging Pump	Pump run without oil press. during loss of AC test	Pump bearings failed and out board seal failed	Loss of "B" Charging Pump	Bearings and seal replaced	Plant shutdown "A" pump available
"B" Primary Water Pump (P-29-1B)	Wear	Mechanical seal failed, excessive leakage	Loss of P-29-1B	Replaced seal	"A" pump operable
"B" Service Water Pump Motor	Wear	Upper motor bearing (thrust) failing	Possible loss of "B" service water pump	Replaced upper motor bearings	None - A, C & D pumps operable
RH-MOV-781	Breaker latch spring weak from age	Breaker would not remain shut	RH-MOV-781 inoperable electrically	Replaced breaker	Plant shutdown

SYSTEM OR COMPONENT	MALFUNCTION		EFFECT ON SAFE OPERATION	CORRECTIVE ACTION TAKEN TO PREVENT REPETITION	SPECIAL PRECAUTIONS TAKEN TO PROVIDE FOR REACTOR SAFETY DURING REPAIR
	CAUSE	RESULT			
Master Cycler	Low 28VDC Power Supply	No Rod motion	None - Power level controlled by boration and dilution	Replaced 28VDC power supply and master cycler	No rod motion during repairs
Pressurizer Auto Level controller	Failed Operational Amplifier	No remote auto setpoint to FCV-110	None -- Operators had manual and local auto options to use	Replaced operational amplifier	Ran RCV-110 flow controller in local auto.
Spray line low temp alarm	Failed light source	Low temp alarm on MCB	None	Replaced light source	None
Pressurizer Pressure Channel 2 & 3	New Cables installed touching force motor	Pressure not tracking with hydro	None	Relocated wires so they were not touching force motor, rechecked calibration	None - plant shutdown
#2 S.G. Narrow and Wide Range Level Transmitters	Failed wire wound bridge resistors	Hi signal level	None	Replaced all wire wound bridge resistors with Hi watts Caron resistors	None - Plant Shutdown
Source Range II	Capacitor Failed	SUR Not following with S.R. 14	None	Replaced capacitor	None - operators monitoring other channel during repairs

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-213

Conn. Yankee

UNIT Haddam Neck

DATE August 13, 1980

COMPLETED BY Reactor Engineering

TELEPHONE (203) 267-2556

MONTH: July 1980

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	_____	17	_____
2	_____	18	_____
3	_____	19	_____
4	_____	20	_____
5	_____	21	_____
6	_____	22	_____
7	_____	23	_____
8	_____	24	_____
9	_____	25	_____
10	_____	26	_____
11	_____	27	59
12	_____	28	179
13	_____	29	329
14	_____	30	336
15	_____	31	341
16	_____		

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.

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-213  
 UNIT NAME Conn. Yankee  
 DATE August 13, 1980  
 COMPLETED BY Reactor Engineering  
 TELEPHONE (203) 267-2556

REPORT MONTH July 1980

No.	Date	Type <sup>1</sup>	Duration (Hours)	Reason <sup>2</sup>	Method of Shutting Down Reactor <sup>3</sup>	Licensee Event Report #	System Code <sup>4</sup>	Component Code <sup>5</sup>	Cause & Corrective Action to Prevent Recurrence
80-3	800630 to 800727	S	634.8	C	4		ZZ	ZZZZZZ	Continuation of Core 10 refueling/ Maint. Shutdown. Phased to line @ 1048 80-07-27

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

<sup>2</sup>  
 Reason:  
 A-Equipment Failure (Explain)  
 B-Maintenance or Test  
 C-Refueling  
 D-Regulatory Restriction  
 E-Operator Training & License Examination  
 F-Administrative  
 G-Operational Error (Explain)  
 H-Other (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 (NURLG-  
 0161)

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



1. UNIT NAME....CONN. YANKEE ATOMIC POWER CO.
2. REPORTING PERIOD ....July 1980
3. LICENSED THERMAL POWER (MW)....1825
4. NAMEPLATE RATING(GROSS FME)....600.3
5. DESIGN ELECTRICAL RATING(NET FME)....580
6. MAXIMUM DEPENDABLE CAPACITY(GROSS FME)....577
7. MAXIMUM DEPENDABLE CAPACITY(NET FME)....550
8. IF CHANGES OCCUR IN CAPACITY RATINGS(ITEMS 3 THROUGH 7)SINCE LAST REPORT, GIVE REASONS ....N/A
9. POWER LEVEL TO WHICH RESTRICTED. IF ANY(NET FME) ....None
10. REASON FOR RESTRICTION. IF ANY....N/A

DOCKET NO. 50-213  
 DATE August 13, 1980  
 COMPLETED BY: Reactor Eng.  
 TELEPHONE (203) 267-2558

	THIS REPORTING PERIOD	YR. TO DATE	CUMULATIVE TO DATE
11. HOURS IN REPORTING PERIOD	744.0	5111.0	110303.0 *
12. NUMBER OF HOURS THE REACTOR WAS CRITICAL	154.3	3121.3	94318.1 *
13. REACTOR RESERVE SHUTDOWN HOURS	0.0	11.4	1104.0 *
14. HOURS GENERATOR ON LINE	109.2	3056.9	89997.1 *
15. UNIT RESERVE SHUTDOWN HOURS	0.0	0.0	369.9
16. GROSS THERMAL ENERGY GENERATED (MMB)	107212.	5197282.	155338431.
17. GROSS ELECTRICAL ENERGY GENERATED (MMB)	32200.	1724621.	51079087.
18. NET ELECTRICAL ENERGY GENERATED (MMB)	25427.	1634746.	48569509.
19. UNIT SERVICE FACTOR	14.7	59.8	81.6 *
20. UNIT AVAILABILITY FACTOR	14.7	59.8	81.9 *
21. UNIT CAPACITY FACTOR (USING MDC NET)	6.2	58.2	81.4 *
22. UNIT CAPACITY FACTOR (USING DER NET)	5.9	55.1	75.2 *
23. UNIT FORCED OUTAGE RATE	0.0	0.4	7.1 *
24. SHUTDOWNS SCHEDULED OVER NEXT 6 MONTHS(TYPE,DATE AND DURATION OF EACH)....None			
25. IF SHUTDOWN AT END OF REPORTING PERIOD, ESTIMATED DATE OF STARTUP ....N/A			
26. UNITS IN TEST STATUS(PRIOR TO COMMERCIAL OPERATION)....NOT APPLICABLE			

\*SINCE DATE OF COMMERCIAL OPERATION 1-1-68