

Enclosure

Haddam Neck Plant
Connecticut Yankee Atomic Power Company

Results and Discussions
NPDES Monthly Report - May 1997

Introduction

This report fulfills the monitoring requirements for the Haddam Neck Plant (Connecticut Yankee), NPDES Permit No. CT0003123, dated September 30, 1992. DMRs will be submitted as soon as compiled, but not later than the last day of the month following the report period as stated in the permit.

Results and Discussions

Results of the continuous, weekly and monthly monitoring programs are summarized on the DMR sheets attached. All sampling and analysis except hydrazine, ethanolamine and boron were conducted in accordance with EPA approved procedures set forth in EPA Publication 600/4-79-020. For these three chemical substances, CYAPCO submitted its own procedures to DEP for approval on October 4, 1996.

The computerized data logging report of the continuous monitoring program is included in Table 1. This report is included because it provides data for the daily range of pH, temperature, and flow; which are required under the NPDES permit. The DMR form does not have provisions for daily ranges.

DSN 001H PCB Analysis

On April 29, 1997 the semi-annual stormwater sample for DSN 001H was collected. Of the various substances required to be monitored, only the analysis for PCB's is performed off-site. However, due to trace amounts of radioactivity in this sample, it could not be sent off-site for PCB analysis. We believe we have found a solution to this problem and expect to be able to have analysis performed in the month of June. If the solution works, the analysis results will be reported in the June DMR.

STATE OF CONNECTICUT ** DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Water Management - Discharge Monitoring Report (DMR)

Permit: CT0003123 MAJ

Dist: 12 Town:061 Loc:006

Facility: CT. YANKEE ATOMIC POWER PLANT

Contact: Paul Jacobson

Town: HADDAM NECK

Phone: (860) 447-1791 ext. 2335

DATE RECEIVED (STAMPED)

Logged: Delivered: OK'd:

KEY: CT0003123 Issue: 093092 Expire: 09/30/97 Sample Month May 1997

Average Flow: 600000000 GPD

ND = none detected

Discharg 001 1 Mon Loc: 1 NON-CONTACT COOLING WATER

Code	Start	s/m	Typ	Unit	Parameter	Min.	Ave.	Max.	Freq	Sample Weeks:				
										1	2	3	4	5
00310	100192	0/0	CP	MG/L	BOD 5 DAY (20 DEG C)	*****	*****	-	02/99	Code 9				
00335	100192	0/0	CP	MG/L	CHEMICAL OXYGEN DEMAND	*****	*****	-	02/99	Code 9				
01042	100192	0/0	CP	MG/L	COPPER, TOTAL (AS CU)	*****	*****	-	02/YR	Last sampled 2-97				
50050	100192	0/0	I	MGD	FLOW, IN CONDUIT OR THRU	*****	14	276	24/01	SEE ATTACHED TABLE 1				
81313	100192	0/0	CP	MG/L	HYDRAZINE	*****	*****	-	02/99	Code 9				
01051	100192	0/0	CP	MG/L	LEAD, TOTAL (AS PB)	*****	*****	-	02/YR	Last sampled 2-97				
01067	100192	0/0	CP	MG/L	NICKEL, TOTAL (AS NI)	*****	*****	-	02/YR	Last sampled 2-97				
00610	100192	0/0	CP	MG/L	NITROGEN, AMMONIA TOTAL	*****	*****	-	02/YR	Last sampled 2-97				
00556	100192	0/0	CP	MG/L	OIL & GREASE, FREON EX	*****	*****	-	02/YR	Last sampled 2-97				
34044	100192	0/0	G	MG/L	OXIDANTS, TOTAL RESIDUAL	*****	*****	Note 1	01/07	Note1 No chlorine addition				
00400	100192	0/0	I	SU	PH	6.4	*****	7.7	24/01	SEE ATTACHED TABLE 1				
70300	100192	0/0	CP	MG/L	SOLIDS, TOTAL DISSOLVED	*****	*****	-	02/YR	Last sampled 2-97				

COMMENTS: Code 9 = conditional monitoring
Note 1 = No chlorination of circ water

Semi-annual TSS last sampled 2-97

STATE OF CONNECTICUT ** DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Water Management - Discharge Monitoring Report (DMR)

KEY: CT0003123 Issue: 093092 Expire: 09/30/97 Sample Month May 1997

Discharg 001 1 Mon Loc: 1 Average Flow: 600000000 GPD
NON-CONTACT COOLING WATER ND = none detected

Code	Start	s/m	Typ	Unit	Parameter	Min.	Ave.	Max.	Freq	Sample Weeks:				
										1	2	3	4	5
00530	100192	0/0	G	MG/L	SOLIDS, TOTAL SUSPENDED	*****	4.9	9.4	01/07	5.8	9.4	1.8	2.6	
38260	100192	0/0	CP	MG/L	SURFACTANTS (MBAS)	*****	*****	-	02/YR		Last sampled 2-97			
00018	100192	0/0	I	DEG	TEMP DIFF BETWEEN SAMP	0.0	3.4	10.4	01/01		SEE ATTACHED TABLE 1			
00011	100192	0/0	I	DEG	TEMPERATURE DEG FAHR	52.8	58.7	74.1	24/01		SEE ATTACHED TABLE 1			
00015	100192	0/0	CA	MBTU	THERMAL DISCHARGE MILL	*****	5.9	223.7	01/30		SEE ATTACHED TABLE 1			
01092	100192	0/0	CP	MG/L	ZINC, TOTAL (AS ZN)	*****	*****	-	02/YR		Last sampled 2-97			

COMMENTS:

KEY: CT0003123 Issue: 093092 Expire: 09/30/97 Sample Month May 1997

Discharg 001 1 Mon Loc: 7 Average Flow: 600000000 GPD
NON-CONTACT COOLING WATER ND = none detected

Code	Start	s/m	Typ	Unit	Parameter	Min.	Ave.	Max.	Freq	Sample Weeks:				
										1	2	3	4	5
50050	100192	0/0	I	MGD	FLOW, IN CONDUIT OR THRU	*****	14	276	24/01		SEE ATTACHED TABLE 1			
00011	100192	0/0	I	DEG	TEMPERATURE, DEG FAHR	*****	*****	65.5	24/01		SEE ATTACHED TABLE 1			

COMMENTS:

STATE OF CONNECTICUT ** DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Water Management - Discharge Monitoring Report (DMR)

KEY: CT0003123		Issue: 093092		Expire: 09/30/97		Sample Month		May 1997						
Discharg 001 1		Mon Loc: G		Average Flow: 600000000 GPD		NON-CONTACT COOLING WATER				ND = none detected				
Code	Start	s/m	Typ	Unit	Parameter	Min.	Ave.	Max.	Freq	1	2	3	4	5
01042	100192	0/0	CP	MG/L	COPPER, TOTAL (AS CU)	*****	*****	-	02/YR	Last sampled 2-97				
01051	100192	0/0	CP	MG/L	LEAD, TOTAL (AS PB)	*****	*****	-	02/YR	Last sampled 2-97				
01067	100192	0/0	CP	MG/L	NICKEL, TOTAL (AS NI)	*****	*****	-	02/YR	Last sampled 2-97				
00610	100192	0/0	CP	MG/L	NITROGEN, AMMONIA TOTAL	*****	*****	-	02/YR	Last sampled 2-97				
00556	100192	0/0	CP	MG/L	OIL & GREASE, TOTAL REC	*****	*****	-	02/YR	Last sampled 2-97				
70300	100192	0/0	CP	MG/L	SOLIDS, TOTAL DISSOLVED	*****	*****	-	02/YR	Last sampled 2-97				
00530	100192	0/0	CP	MG/L	SOLIDS, TOTAL SUSPENDED	*****	*****	-	02/YR	Last sampled 2-97				
38260	100192	0/0	CP	MG/L	SURFACTANTS, (MBAS)	*****	*****	-	02/YR	Last sampled 2-97				
01092	100192	0/0	CP	MG/L	ZINC, TOTAL (AS ZN)	*****	*****	-	02/YR	Last sampled 2-97				

KEY: CT0003123		Issue: 093092		Expire: 09/30/97		Sample Month		May 1997						
Discharg 001 1		Mon Loc: T		Average Flow: 50000000 GPD		NON-CONTACT COOLING WATER				ND = none detected				
Code	Start	s/m	Typ	Unit	Parameter	Min.	Ave.	Max.	Freq	1	2	3	4	5
TGA6C	100192	0/0	CP	P/F	P/F STAT 96 HR ACU PIMEPH	*****	-	*****	02/YR	Last sampled 2-97				
TGA3D	100192	0/0	CP	P/F	P/F STAT 48 HR ACU D. PULEX	*****	-	*****	02/YR	Last sampled 2-97				
TGC3D	100192	0/0	CP	P/F	P/F STAT CHR DAPHNIA P.	*****	-	*****	02/YR	Last sampled 2-97				
TGC6C	100192	0/0	CP	P/F	P/F STAT CHR PIMEPHALES	*****	-	*****	02/YR	Last sampled 2-97				

STATE OF CONNECTICUT ** DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Water Management - Discharge Monitoring Report (DMR)

KEY: CT0003123		Issue: 093092		Expire: 09/30/97		Sample Month		May 1997						
Discharg 001 A		Mon Loc: 1		Average Flow: 16000 GPD		STEAM ELECTRIC POWER PLANT				ND = none detected				
Code	Start	s/m	Typ	Unit	Parameter	Min.	Ave.	Max.	Freq	Sample Weeks:				
										1	2	3	4	5
01022	100192	0/0	G	MG/L	BORON, TOTAL (AS B)	*****	*****	657	02/30	NF	NF	80	657	
00164	100192	0/0	I	GPB	FLOW, GALLONS/BATCH	*****	12500	13000	01/DS	NF	NF	78	646	
01062	100192	0/0	G	MG/L	MOLYBDENUM, TOTAL (A	ND	*****	<0.001	02/30	NF	NF	12000	13000	
71850	100192	0/0	G	MG/L	NITROGEN, NITRATE TOT	ND	*****	0.021	02/30	NF	NF	13000	12000	
00615	100192	0/0	G	MG/L	NITROGEN, NITRITE TOTA	ND	*****	<0.005	02/30	NF	NF	<.001	<.001	
00556	100192	0/0	G	MG/L	OIL & GREASE, FREON EX	ND	*****	1.8	02/30	NF	NF	<.001	<.008	
34044	100192	0/0	G	MG/L	OXIDANTS, TOTAL RESIDUAL	*****	*****	0.19	01/07	0.09	0.05	0.19	0.13	0.14
00400	100192	0/0	I	SU	PH	7.29	*****	7.36	02/30	NF	NF	7.29		
00530	100192	0/0	G	MG/L	SOLIDS, TOTAL SUSPEND	ND	*****	<1	02/30	NF	NF	7.36		
COMMENTS:												<1	<1	

KEY: CT0003123		Issue: 093092		Expire: 09/30/97		Sample Month		May 1997						
Discharg 001 B		Mon Loc: 1		Average Flow: 120000 GPD		BLOW DOWN FROM HEAT/COOL				ND = none detected				
Code	Start	s/m	Typ	Unit	Parameter	Min.	Ave.	Max.	Freq	Sample Weeks:				
										1	2	3	4	5
00310	100192	0/0	CP	MG/L	BOD 5 DAY (20 DEG C)	*****	*****	Code 9	02/99					
00335	100192	0/0	CP	MG/L	CHEMICAL OXYGEN DEMAND	*****	*****	Code 9	02/99					
00940	100192	0/0	CP	MG/L	CHLORIDE (AS CL)	*****	*****	-	02/99	No Discharge				

COMMENTS: Code 9 = Conditional monitoring

STATE OF CONNECTICUT ** DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Water Management - Discharge Monitoring Report (DMR)

KEY: CT0003123		Issue: 093092		Expire: 09/30/97		Sample Month		May 1997						
Discharg 001 B		Mon Loc: 1		Average Flow: 120000 GPD		BLOW DOWN FROM HEAT/COOL				ND = none detected				
Code	Start	s/m	Typ	Unit	Parameter	Min.	Ave.	Max.	Freq	Sample Weeks:				
										1	2	3	4	5
01042	100192	0/0	CP	MG/L	COPPER, TOTAL (AS CU)	*****	*****	-	01/30	No discharge				
00056	100192	0/0	T	GPD	FLOW RATE, AVERAGE DAILY	*****	-	-	24/01	No discharge				
81313	100192	0/0	CP	MG/L	HYDRAZINE	*****	*****	-	02/99	No discharge				
01045	100192	0/0	CP	MG/L	IRON, TOTAL (AS FE)	*****	*****	-	01/30	No discharge				
00556	100192	0/0	G	MG/L	OIL & GREASE FREON EXTR.	*****	-	-	01/30	No discharge				
00400	100192	0/0	G	SU	PH	-	*****	-	01/30	No discharge				
00665	100192	0/0	CP	MG/L	PHOSPHORUS, TOTAL (AS P)	*****	*****	-	01/90	No discharge				
00530	100192	0/0	CP	MG/L	SOLIDS, TOTAL SUSPENDED	*****	*****	-	01/30	No discharge				
00945	100192	0/0	CP	MG/L	SULFATE TOTAL (AS SO4)	*****	*****	-	02/99	No discharge				
	100192	0/0	CP	MG/L	ETA	*****	*****	-	01/07	No additions made				

COMMENTS: Code 9 = Conditional Monitoring. Sampling only required when discharging wet lay up.

KEY: CT0003123		Issue: 093092		Expire: 09/30/97		Sample Month		May 1997						
Discharg 001 E		Mon Loc: 1		Average Flow: 22000 GPD		WATER PRODUCTION WASTEWTR				ND = none detected				
Code	Start	s/m	Typ	Unit	Parameter	Min.	Ave.	Max.	Freq	1	2	3	4	5
01042	100192	0/0	CP	MG/L	COPPER, TOTAL (AS CU)	*****	*****	-	01/30	No Discharge				
C0051	42195	0/1	CP	MG/L	DIMETHYL AMIDE	*****	<1	<1	01/30	<1				
										Sampled at R-18				

STATE OF CONNECTICUT ** DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Water Management - Discharge Monitoring Report (DMR)

KEY: CT0003123		Issue: 093092		Expire: 09/30/97		Sample Month		May 1997						
Discharg 001 E		Mon Loc: 1		Average Flow: 22000 GPD		WATER PRODUCTION WASTEWTR				ND = none detected				
Code	Start	s/m	Typ	Unit	Parameter	Min.	Ave.	Max.	Freq	Sample Weeks:				
										1	2	3	4	5
00056	100192	0/0	T	GPD	FLOW RATE, AVERAGE DAILY	*****	-	-	01/30	No Discharge				
01045	100192	0/0	CP	MG/L	IRON, TOTAL (AS FE)	*****	*****	-	01/30	No Discharge				
00556	100192	0/0	G	MG/L	OIL & GREASE FREON EXTR	*****	-	-	01/30	No Discharge				
00400	100192	0/0	I	SU	PH	-	*****	-	01/30	No Discharge				
00665	100192	0/0	CP	MG/L	PHOSPHORUS, TOTAL (AS P)	*****	*****	-	01/30	No Discharge				
00530	100192	0/0	G	MG/L	SOLIDS, TOTAL SUSPENDED	*****	-	-	01/30	No Discharge				

KEY: CT0003123		Issue: 093092		Expire: 09/30/97		Sample Month		May 1997								
Discharg 001 F		Mon Loc: 1		Average Flow: 28000 GPD		NON-CONTACT COOLING WATER				ND = none detected						
Code	Start	s/m	Typ	Unit	Parameter	Min.	Ave.	Max.	Freq	1	Sample Weeks:				5	
C0051	42195	0/1	CP	MG/L	DIMETHYL AMIDE	ND	*****	<1	<1	01/30	<1					
00056	100192	0/0	I	GPD	FLOW RATE, AVERAGE DAILY	*****	25900	25900	01/30		Sampled at R-18 25900					
00556	100192	0/0	G	MG/L	OIL & GREASE FREON EX	ND	*****	<1	<1	01/30		<1				
00400	100192	0/0	G	SU	PH	7.42	*****	7.42	01/30		7.42					
00530	100192	0/0	G	MG/L	SOLIDS, TOTAL SUSPENDED	*****	1.1	1.1	01/30		1.1					
00011	100192	0/0	G	DEG	TEMPERATURE DEG FAHR	*****	*****	72	01/30		72					

COMMENTS:

STATE OF CONNECTICUT ** DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Water Management - Discharge Monitoring Report (DMR)

KEY: CT0003123	Issue: 093092	Expire: 09/30/97	Sample Month	May 1997										
Discharg 001 G	Mon Loc: 1	Average Flow: INTERMITT GPD WATER PRODUCTION WASTEWTR								ND = none detected				
Code	Start	s/m	Typ	Unit	Parameter	Min.	Ave.	Max.	Freq	Sample Weeks:				
										1	2	3	4	5
00556	100192	0/0	G	MG/L	OIL & GREASE FREON EXTR	*****	-	-	02/YR	Last sampled 4-97				
39516	100192	0/0	G	MG/L	PCBS-POLYCHLORINATED	*****	-	-	02/YR	Last sampled 4-97				
00400	100192	0/0	G	SU	PH	-	*****	-	02/YR	Last sampled 4-97				

KEY: CT0003123	Issue: 093092	Expire: 09/30/97	Sample Month	May 1997									
Discharg 001 H	Mon Loc: 1	Average Flow: INTERMITT GPD						ND = none detected					
		WATER PRODUCTION WASTEWTR											
Code	Start	s/m	Typ	Unit	Parameter	Min.	Ave.	Max.	Freq	Sample Weeks:			
										2	3	4	5
00556	100192	0/0	G	MG/L	OIL & GREASE FREON EXTR	*****	-	-	02/YR	Last sampled 4-97			
39516	100192	0/0	G	MG/L	PCBS-POLYCHLORINATED	*****	-	-	02/YR	Sampled not analyzed, See Results and discussion.			
00400	100192	0/0	G	SU	PH	-	*****	-	02/YR	Last sampled 4-97			

KEY: CT0003123	Issue: 093092	Expire: 09/30/97	Sample Month	May 1997											
Discharg 001 i	Mon Loc: 1	Average Flow: 22400 GPD								ND = none detected					
		SAN SEWAGE 20,000 - 99,000													
Code	Start	s/m	Typ	Unit	Parameter	Min.	Ave.	Max.	Freq	1	2	3	4	5	
01097	100192	0/0	CP	MG/L	ANTIMONY, TOTAL (AS SB)	*****	*****	-	02/YR	No Flow					
01002	100192	0/0	CP	MG/L	ARSENIC, TOTAL (AS AS)	*****	*****	-	02/YR	No Flow					
00998	100192	0/0	CP	MG/L	BERYLLIUM, TOTAL (AS BE)	*****	*****	-	02/YR	No Flow					

COMMENTS:

STATE OF CONNECTICUT ** DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Water Management - Discharge Monitoring Report (DMR)

KEY: CT0003123		Issue: 093092		Expire: 09/30/97		Sample Month		May 1997						
Discharg 001 i		Mon Loc: 1		Average Flow: 22400 GPD						ND = none detected				
				SAN SEWAGE 20,000 - 99,000										
Code	Start	s/m	Typ	Unit	Parameter	Min.	Ave.	Max.	Freq	Sample Weeks:				
										1	2	3	4	5
00310	100192	0/0	G	MG/L	BOD 5 DAY (20 DEG C)	*****	-	-	04/30	No Flow				
01027	100192	0/0	CP	MG/L	CADMIUM, TOTAL (AS CD)	*****	*****	-	02/YR	No Flow				
01032	100192	0/0	G	MG/L	CHROMIUM, HEXAVALENT	*****	*****	-	02/YR	No Flow				
01034	100192	0/0	CP	MG/L	CHROMIUM, TOTAL (AS CR)	*****	*****	-	02/YR	No Flow				
01042	100192	0/0	CP	MG/L	COPPER, TOTAL (AS CU)	*****	*****	-	02/YR	No Flow				
00722	100192	0/0	G	MG/L	CYANIDE, FREE (AMEN. TO	*****	*****	-	02/YR	No Flow				
00720	100192	0/0	G	MG/L	CYANIDE, TOTAL (AS CN)	*****	*****	-	02/YR	No Flow				
00056	100192	0/0	T	GPD	FLOW RATE, AVERAGE DAILY	*****	-	-	01/01	No Flow				
01051	100192	0/0	CP	MG/L	LEAD, TOTAL (AS PB)	*****	*****	-	02/YR	No Flow				
71900	100192	0/0	CP	MG/L	MERCURY, TOTAL (AS HG)	*****	*****	-	02/YR	No Flow				
01067	100192	0/0	CP	MG/L	NICKEL, TOTAL (AS NI)	*****	*****	-	02/YR	No Flow				
00300	100192	0/0	G	MG/L	OXYGEN, DISSOLVED (DO)	-	*****	*****	05/07	No Flow				
00400	100192	0/0	G	SU	PH	-	*****	-	05/07	No Flow				
46000	100192	0/0	CP	MG/L	PHENOLS	*****	*****	-	02/YR	No Flow				
01147	100192	0/0	CP	MG/L	SELENIUM, TOTAL (AS SE)	*****	*****	-	02/YR	No Flow				
01077	100192	0/0	CP	MG/L	SILVER, TOTAL (AS AG)	*****	*****	-	02/YR	No Flow				
00545	100192	0/0	G	MG/L	SOLIDS, SETTLEABLE	*****	-	-	05/07	No Flow				

STATE OF CONNECTICUT ** DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Water Management - Discharge Monitoring Report (DMR)

KEY: CT0003123	Issue: 093092	Expire: 09/30/97	Sample Month	May 1997										
Discharg 001 I	Mon Loc: 1	Average Flow: 22400 GPD												
		SAN SEWAGE 20,000 - 99,000	ND = none detected											
Code	Start	s/m	Typ	Unit	Parameter	Min.	Ave.	Max.	Freq	1	Sample Weeks:			
											2	3	4	5
00530	100192	0/0	G	MG/L	SOLIDS, TOTAL SUSPENDED	*****	-	-	04/30	No Flow				
00011	100192	0/0	G	DEG	TEMPERATURE, DEG FAHR	*****	*****	-	05/07	No Flow				
01059	100192	0/0	CP	MG/L	THALLIUM, TOTAL (AS TL)	*****	*****	-	02/YR	No Flow				
00070	100192	0/0	G	NTU	TURBIDITY	*****	*****	-	05/07	No Flow				
01092	100192	0/0	CP	MG/L	ZINC, TOTAL (AS ZN)	*****	*****	-	02/YR	No Flow				

COMMENTS:

KEY: CT0003123		Issue: 093092		Expire: 09/30/97		Sample Month		May 1997						
Discharg 001 i		Mon Loc: G		Average Flow: 22400 GPD						ND = none detected				
				SAN SEWAGE 20,000 - 99,000										
Code	Start	s/m	Typ	Unit	Parameter	Min.	Ave.	Max.	Freq	1	2	3	4	5
00310	100192	0/0	G	MG/L	BOD 5 DAY (20 DEG F)	*****	-	*****	04/30	No Flow				
00400	100192	0/0	G	SU	PH	-	*****	-	04/30	No Flow				
00545	10092	0/0	G	MG/L	SOLIDS, SETTLEABLE	*****	-	*****	05/07	No Flow				
00530	10092	0/0	G	MG/L	SOLIDS, TOTAL SUSPENDED	*****	-	*****	04/30	No Flow				

COMMENTS:

STATE OF CONNECTICUT ** DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Water Management - Discharge Monitoring Report (DMR)

KEY: CT0003123		Issue: 093092		Expire: 09/30/97		Sample Month		May 1997						
Discharg 001 i		Mon Loc: K		Average Flow: 22400 GPD				ND = none detected						
				SAN SEWAGE 20,000 - 99,000										
Code	Start	s/m	Typ	Unit	Parameter	Min.	Ave.	Max.	Freq	1	Sample Weeks:			
											2	3	4	5
81010	100192	0/0	CA	%	BOD, 5-DAY PERCENT REMOV	-	*****	*****	01/30		No Flow			
81011	100192	0/0	CA	%	SOLIDS, SUSPENDED PERCEN	-	*****	*****	01/30		No Flow			

COMMENTS:

KEY: CT0003123		Issue: 093092		Expire: 09/30/97		Sample Month		May 1997							
Discharg 001 J		Mon Loc: 1		Average Flow: 10000 GPD				ND = none detected							
				BLOW DOWN FROM HEAT/COOL											
Code	Start	s/m	Typ	Unit	Parameter	Min.	Ave.	Max.	Freq	1	Sample Weeks:				
											2	3	4	5	
00056	100192	0/0	T	GPD	FLOW RATE, AVERAGE DAILY	*****	*****	500	02/99	500	500	500	500	500	
81313	100192	0/0	G	MG/L	HYDRAZINE	ND	*****	*****	14.400	01/90	4.70	14.40	7.60	0.06	<.004
00610	100192	0/0	G	MG/L	NITROGEN, AMMONIA TO	ND	*****	*****	85.300	01/90	Weekly Highs only, see Table 3				
00556	100192	0/0	G	MG/L	OIL & GREASE FREON EX	ND	*****	<1	<1	01/90	Weekly Highs only, see Table 3				
00400	100192	0/0	I	SU	PH	7.42	*****	9.21	01/90	8.75	<1	<1	<1	<1	
00530	100192	0/0	G	MG/L	SOLIDS, TOTAL SUSPEND	ND	*****	<1	2.5	01/90	Weekly Highs only, see Table 3				
											<1	<1	<1	<1	
											2.5				
COMMENTS:															

COMMENTS:

STATE OF CONNECTICUT ** DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Water Management - Discharge Monitoring Report (DMR)

PERMIT:CT0003123

DIST:12

TOWN: 061

LOC: 008

FACILITY: CT. YANKEE ATOMIC POWER PLANT

MAILING NAME: CT. YANKEE ATOMIC POWER CO.

ADDRESS: INJUN HOLLOW ROAD

ADDRESS: P.O. BOX 270

CITY, STATE, ZIP: HADDAM NECK, CT

CITY, STATE, ZIP: HARTFORD, CT 06141

CONTACT: MR. PAUL JACOBSON

CONTACT: MR. PAUL JACOBSON

PHONE: 860-447-1791 Ext. 2335

PHONE: 860-447-1791 Ext. 2335

If there are any changes or corrections with your facility information, please cross out incorrect information and replace with correct information.

THIS DMR CONSISTS OF 11 PAGES FOR THE REPORTING PERIOD May 1997

STATEMENT OF ACKNOWLEDGEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Authorized Official: S. E. Scace Title: Director - Nuclear Engineering Programs

Signature: 

Date: 6/30/97

CONN YANKEE STATION

MONTHLY WATER QUALITY DATA SUMMARY / DISCHARGE SERIAL NUMBER 001

DATA PERIOD = 1 MAY 97/0000 - 31 MAY 97/2345

DATA ACQUISITION INTERVAL = MINUTES 00-15 OF EACH HOUR

DAY	PH RANGE	FLOW RANGE			CIRC PUMP			MAX TEMP	MIN TEMP	AVG TEMP	SDEV TEMP	MAX DEL T	MIN DEL T	AVG DEL T	SDEV DEL T	MAX HL	MIN HL	AVG HL	SD HL	MRC HL
		MAX	MIN	AVG	MAX	MIN														
1	6.7- 6.4	6	0	2	0	0	0	58.2	55.0	56.5	0.9	6.9	5.6	6.1	0.3	18.5	0.0	6.9	8.7	-11.8
2	6.8- 6.5	0	0	0	0	0	0	56.8	54.6	55.9	0.7	6.0	3.3	4.1	0.9	0.0	0.0	0.0	0.0	0.0
3	6.8- 6.7	0	0	0	0	0	0	55.7	55.2	55.3	0.1	3.5	2.5	3.1	0.4	0.0	0.0	0.0	0.0	0.0
4	6.8- 6.7	0	0	0	0	0	0	56.8	55.0	55.8	0.6	3.6	2.8	3.2	0.2	0.0	0.0	0.0	0.0	0.0
5	7.0- 6.7	5	0	0	0	0	0	58.7	54.7	56.4	1.3	5.2	2.9	4.0	0.7	9.7	0.0	0.4	2.0	-9.7
6	7.2- 6.8	0	0	0	0	0	0	58.3	55.5	56.2	0.8	6.3	4.3	5.0	0.5	0.0	0.0	0.0	0.0	0.0
7	7.1- 6.7	6	0	0	0	0	0	55.5	54.0	54.7	0.5	4.7	3.6	4.0	0.3	11.8	0.0	0.5	2.4	-11.8
8	7.1- 6.7	6	0	6	0	0	0	56.8	53.8	55.1	1.1	5.5	4.2	4.7	0.4	16.4	0.0	13.1	4.2	12.8
9	7.6- 6.6	6	6	6	0	0	0	55.7	54.4	54.9	0.3	4.7	3.7	4.2	0.3	14.1	11.2	12.7	0.8	-1.3
10	6.9- 6.7	6	6	6	0	0	0	55.3	53.5	54.7	0.4	4.4	3.1	4.0	0.3	13.1	9.4	12.0	0.9	-0.9
11	7.0- 6.6	6	6	6	0	0	0	55.7	52.8	54.1	1.0	3.3	2.5	2.9	0.2	9.9	7.7	8.7	0.6	-1.2
12	7.4- 6.7	6	6	6	0	0	0	61.7	53.7	57.1	2.8	6.8	2.6	4.2	1.3	20.5	7.7	12.6	3.9	4.8
13	7.0- 6.7	6	6	6	0	0	0	59.8	56.7	58.3	0.8	5.4	2.5	4.4	1.1	16.3	7.5	13.1	3.4	-1.9
14	7.0- 6.7	192	6	64	2	0	0	58.1	54.8	55.7	0.9	4.4	0.0	1.6	1.6	223.7	0.0	20.3	45.5	210.4
15	7.2- 6.7	6	0	2	0	0	0	62.1	54.6	57.7	3.0	5.4	0.4	2.6	1.8	3.5	0.0	0.8	1.2	-3.5
16	7.0- 6.7	0	0	0	0	0	0	60.3	57.5	58.8	0.7	4.3	1.6	3.0	1.0	0.0	0.0	0.0	0.0	0.0
17	7.0- 6.6	186	0	79	1	0	0	59.0	55.3	56.8	1.1	3.1	0.0	1.3	1.1	158.9	0.0	9.2	34.3	-158.9
18	7.3- 6.9	186	0	63	1	0	0	59.2	54.1	56.5	1.7	3.0	0.0	1.1	1.0	122.0	0.0	7.1	26.4	-122.0
19	7.1- 6.9	186	0	31	1	0	0	60.7	55.3	56.9	1.6	3.6	0.0	0.9	0.9	0.0	0.0	0.0	0.0	0.0
20	7.0- 6.7	0	0	0	0	0	0	60.9	57.9	59.1	0.9	3.6	0.9	2.2	0.8	0.0	0.0	0.0	0.0	0.0
21	6.9- 6.7	1	0	0	0	0	0	59.5	56.7	58.1	0.9	1.9	0.5	1.3	0.5	0.8	0.0	0.0	0.0	0.0
22	6.9- 6.7	6	0	4	0	0	0	59.1	57.5	58.1	0.5	2.3	1.8	2.0	0.1	7.0	0.0	3.9	3.1	5.8
23	6.9- 6.8	11	6	6	0	0	0	61.5	57.4	59.2	1.5	3.8	2.0	2.7	0.6	11.6	6.1	8.4	1.8	-5.4
24	7.1- 6.7	6	6	6	0	0	0	64.3	58.1	60.7	2.1	6.6	1.6	3.0	1.5	19.9	4.8	9.1	4.5	-6.9
25	7.0- 6.7	6	6	6	0	0	0	63.4	60.7	61.6	0.7	4.4	1.9	3.2	0.6	13.4	5.9	9.7	1.8	-1.3
26	6.9- 6.6	12	6	6	0	0	0	65.9	60.2	62.4	1.9	6.2	1.4	3.0	1.4	18.6	4.3	9.2	4.1	-4.6
27	7.2- 6.6	6	6	6	0	0	0	65.6	60.7	62.8	1.7	5.3	1.7	3.1	1.2	16.1	5.2	9.3	3.5	6.4
28	7.2- 6.7	6	6	6	0	0	0	70.3	61.8	65.1	2.7	8.2	2.2	4.5	1.9	24.6	6.6	13.6	5.6	7.9
29	7.3- 6.8	6	0	1	0	0	0	72.8	64.3	67.3	2.6	10.4	3.1	5.4	2.1	14.2	0.0	2.1	4.8	-11.3
30	7.7- 6.7	0	0	0	0	0	0	68.9	65.6	67.1	1.1	5.5	2.5	3.9	1.0	0.0	0.0	0.0	0.0	0.0
31	7.4- 6.8	0	0	0	0	0	0	74.1	66.4	69.4	2.7	9.7	3.1	5.4	2.2	0.0	0.0	0.0	0.0	0.0
MON	7.7- 6.4	192	0	10	2	0	0	74.1	52.8	58.7	4.2	10.4	0.0	3.4	1.7	223.7	0.0	5.9	12.8	210.4

PH RANGE = LOWEST AND HIGHEST PH AT DISCHARGE CANAL (PH UNITS)

FLOW RANGE = LOWEST AND HIGHEST FLOW FROM DISCHARGE CANAL (10**3 GAL/MIN)

CIRC PUMP = LOWEST AND HIGHEST NUMBER OF CIRC PUMPS OPERATING

MAX TEMP = MAXIMUM TEMPERATURE AT DISCHARGE STRUCTURE (DEG F)

MIN TEMP = MINIMUM TEMPERATURE AT DISCHARGE STRUCTURE (DEG F)

AVG TEMP = AVERAGE TEMPERATURE AT DISCHARGE STRUCTURE (DEG F)

SDEV TEMP = STANDARD DEVIATION OF TEMPERATURE AT DISCHARGE STRUCTURE (DEG F)

MAX DEL T = MAXIMUM TEMPERATURE INCREASE BETWEEN INTAKE AND DISCHARGE (DEG F)

MIN DEL T = MINIMUM TEMPERATURE INCREASE BETWEEN INTAKE AND DISCHARGE (DEG F)

AVG DEL T = AVERAGE TEMPERATURE INCREASE BETWEEN INTAKE AND DISCHARGE (DEG F)

SDEV DEL T = STANDARD DEVIATION OF TEMPERATURE INCREASE BETWEEN INTAKE AND DISCHARGE (DEG F)

MAX HL = MAXIMUM HEAT LOAD OF DISCHARGE WATER (10**6 BTU/HR)

MIN HL = MINIMUM HEAT LOAD OF DISCHARGE WATER (10**6 BTU/HR)

AVG HL = AVERAGE HEAT LOAD OF DISCHARGE WATER (10**6 BTU/HR)

SD HL = STANDARD DEVIATION OF HEAT LOAD OF DISCHARGE WATER (10**6 BTU/HR)

MRC HL = MAXIMUM RATE OF CHANGE OF HEAT LOAD (HL FOR QUARTER HOUR T MINUS HL FOR QUARTER HOUR T-1/QUARTER HOUR) (10**6 BTU/HR**2)

**** MEANS MISSING OR INSUFFICIENT DATA (LESS THAN 12 HRS/DAY OF VALID HOURLY DATA; LESS THAN 360 HRS/MONTH OF VALID HOURLY DATA)

ANKEE STATION

CONN Y

MONTHLY WATER QUALITY DATA SUMMARY / DISCHARGE SERIAL NUMBER 001

EXCEPTION REPORT FOR MAXIMUM TEMPERATURE DIFFERENCE FROM INTAKE STRUCTURE TO DISCHARGE CANAL GREATER THAN 38 DEG F

NONE

EXCEPTION REPORT FOR MAXIMUM DISCHARGE TEMPERATURE AT DISCHARGE CANAL GREATER THAN 121 DEG F

NONE

EXCEPTION REPORT FOR PH AT DISCHARGE CANAL LESS THAN 6.0 OR GREATER THAN 9.0 PH UNITS

NONE

TABLE 2

May 1997

Additional TRO Analysis for DSN 001A, in mg/L

<u>Week 1</u>	<u>Week 2</u>	<u>Week 3</u>	<u>Week 4</u>	<u>Week 5</u>
0.04	0.04	0.19	0.04	0.13
0.09	0.05	0.16	0.11	0.13
0.04	0.04	0.06	0.03	0.13
0.05	0.05		0.09	0.14
	0.01		0.05	0.10
	0.01		0.02	0.09
	0.01		0.11	0.07
	<.01		0.03	
	0.01		0.10	
	0.01		0.13	
			0.11	

TABLE 3
May 1997
Connecticut Yankee, additional data (in mg/l)

DSN 001J

Date	Hydrazine		Ammonia		TSS		pH	
	Boiler B	Boiler A	Boiler B	Boiler A	Boiler B	Boiler A	Boiler B	Boiler A
5/1/97	3.300	shut down	6.165	shut down			8.68	shut down
5/2/97	4.700		22.500				8.75	
5/5/97	10.200	0.048	85.300	1.240	<1	2.5	8.89/7.42	8.96/7.48
5/6/97	2.900	0.133	15.600	2.684			8.88	8.04
5/7/97	1.900	4.400	17.870	36.760			9.00	8.86
5/8/97		7.700		62.120				9.12
5/9/97		14.400		81.300				9.21
5/12/97	6.600		21.500		<1		8.90	
5/13/97	7.600		17.700				9.03	
5/14/97	5.600		13.400				9.15	
5/15/97	4.400		49.300				8.80	
5/16/97	4.400		47.100				8.76	
5/19/97	<.004		<.400				8.63	
5/20/97	<.004		<.400		<1		7.47	
5/21/97	0.013		<.400				7.38	
5/22/97	0.062		0.441				8.33	
5/23/97	<.004		<.400				8.27	
5/25/97	<.004		<.400		<1		8.46	
5/29/97	<.004		<.400				8.22	
5/30/97	<.004		<.400				8.47	