

Public Service Electric and Gas Company P.O. Box 236 Hancocks Bridge, New Jersey 08038-0236

**Nuclear Business Unit** 

July 23, 1998

New Jersey Department of **Environmental Protection Division of Water Quality** Bureau of Permit Management **CN029** Trenton, NJ 08625-0029 Certified Mail Number P 461 187 838

## NEW JERSEY POLLUTANT DISCHARGE ELIMINATION SYSTEM **DISCHARGE MONITORING REPORTS** SALEM GENERATING STATION **PERMIT NO. NJ0005622**

Attached is the Discharge Monitoring Report for Salem Generating Station containing the information as required in Permit No. NJ0005622 for the month of June. 1998.

This report is required by and prepared specifically for the Environmental Protection Agency (EPA) and the New Jersey Department of Environmental Protection (NJDEP). It presents only the observed results of measurements and analyses required to be performed by the above agencies. The choice of the measurement devices and analytical methods is controlled by EPA and NJDEP, not by the company, and there are limitations on the accuracy of such measurement devices and analytical techniques even when used and maintained as required. Accordingly, this report is not intended as an assertion that any instrument has measured, or any reading or analytical result represents, the true value with absolute accuracy, nor is it an endorsement of the suitability of any analytical or measurement procedure.

Sincerely Martin (J

General Manager - (Acting) Salem Operations

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Attachments



NJPDES Report June, 1998

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> Mr. Gerald M. Hansler - Executive Director USNRC - Document Control Desk Unit#1-50-272 Unit#2-50-311 General Manager - Salem Operations Director - Licensing, Regulation, and Fuels M. Vaskis D. Hurka J. Schloss Central Record Facility E. Keating

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NJPDES Report Explanation of Deviations June, 1998

The following explanations are included to clarify possible deviations from permit conditions.

General - The columns labeled, "No. Ex. " on the enclosed DMR, tabulate the number of daily discharge values outside the indicated limits.

Data reporting and accuracy reflect the working environment, the design capabilities and reliability of the monitoring instruments and operating equipment.

All reported concentrations are based on daily discharge values.

Total residual chlorine is performed three times per week during chlorination unless otherwise indicated.

Analytical values which are less than detectable are reported as zero unless otherwise indicated.

Analytical results for all parameters other than pH, temperature, TSS, TRC and Bioassay results are provided by Raytheon Environmental Services Laboratory. (NJDEP certification 77373) or South Jersey Testing Laboratory (NJDEP certification 06431). Bioassay results are provided by ENSR Environmental Toxicology Laboratory (NJDEP certification 82888).

Net negative discharge values are reported as negative.

- 489C- Flow thru outfall 489 is calculated based on Oil Water Separator Lift Pump run times.
- 481-486 Chlorination of the circulation water system normally does not occur except as otherwise noted. Service water system chlorination is normally continuous and is monitored on the circulating water system outfall.

Chlorination of both systems will be indicated by results reported for both and represents their combined effect upon the circulating water outfall. NJPDES Report Explanation of Deviations June, 1998

> 48C - Non-Radioactive Liquid Waste - This system continues to be operated in a batch mode to treat for hydrazine and ammonia by the addition of sodium hypochlorite. No hydrazine has been discharged from this outfall during the reporting period. Residual chlorine is monitored at the outfalls of DSN's 481, 482, 484, and 485, and has not exceeded the permit limits at these outfalls.

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The following excursions are included in the attached report and are explained below. Excursions have not endangered nor significantly impacted public health or the environment.

DSN NO. EXPLANATION

489

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See attached 5 Day Report for DSN 489



Public Service Electric and Gas Company P.O. Box 236 Hancocks Bridge, New Jersey 08038-0236

Nuclear Business Unit

CERTIFIED MAIL RETURN RECEIPT REQUESTED ARTICLE NUMBER: P 462 770 277

## JUN 1 7 1998

LR-E980310

Assistant Director of Water and Hazardous Waste Enforcement Division of Enforcement Field Operations New Jersey Department of Environmental Protection 401 East State Street P.O. Box 422 Trenton, New Jersey 08625

To Whom It May Concern:

## PSE&G SALEM GENERATING STATION NJPDES PERMIT NO. NJ0005622 DISCHARGE OF OIL – 5 DAY REPORT CASE NO. 98-06-12-0758-23

Per NJAC 7:14A-6.10, PSE&G has prepared this report concerning the discharge of approximately 16 ounces of oil. This discharge occurred through the Salem Generating Station oil/water separator (OWS) outfall (DSN 489) to the Delaware River on June 12, 1998.

On June 12, the discharge was discovered and confirmed at 7:45 AM during a routine walkdown of the OWS outfall. An oil sheen of approximately two square feet was observed at DSN 489 in the Delaware River. The OWS system treats stormwater runoff and equipment drains from areas within the Salem Generating Station, including equipment containments, yard drains, and parking areas. An estimated 16 ounces of oil passed through the OWS, untreated, during the rain event which began early on the morning of June 12. The OWS was taken out of service and sorbent booms were placed around the outfall pipe. The OWS effluent chamber was cleaned, and the fuel oil sheen on the influent chamber was removed from the OWS.

NJDEP LR-E980310

## JUN 1 7 1998

Because of the small size of the sheen, PSE&G does not believe the discharge posed a threat to human health or the environment. PSE&G notified the National Response Center at 9:45 AM, and the discharge was assigned Case No. 441283. In addition, PSE&G notified the Nuclear Regulatory Commission pursuant to 10 CFR 50.72, Significant Events.

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The exact cause of the discharge is not known at this time. PSE&G has initiated an internal investigation through our Corrective Action Program to determine the root cause of the discharge as well as any additional actions warranted to correct the cause of the discharge. The results of this investigation will be forwarded to NJDEP within 30 days after completion of the investigation.

Please contact Don Bowman of my staff at (609) 339-1477 if you have any questions.

Sincerely,

David K. Pruell

David R. Powell Director – Licensing/Regulation & Fuels

New Jersey Department of Environmental Protection
Bureau of Water and Hazardous Waste Compliance and Enforcement
Southern Region
One Port Center
2 Riverside Drive, Suite 201
Camden, New Jersey 08103

Attention: Steven Mathis

NJDEP LR-E980310 - 3 —

JUN 1 7 1998

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BC General Manager – Salem Operations (S05) Manager – Salem Operations (S01) Chemistry Superintendent – Salem (S07) Environmental Licensing Manager (N21) J. F. Leopardi (S07) M. J. Kubiak (S07) D. K. Hurka (N21) S. F. Kugler (N21) E. J. Keating (104) M. F. Vaskis (T5C) Microfilm Nuclear Business Support Records Management (NBS RM – N64)

File 2.1.1 (S)

PIRS CLOSED: #980612096 CRCA-01

PIRS OPEN: #980612096 CRCA-02



MAPLEWOOD TESTING SERVICES REPORT

TO: Dave Hurka July 17, 1998 Sr. Staff Engineer - Nuclear Report No. TP98005 PSE&G

## SUBJECT: DETERMINATION OF CIRCULATING WATER FLOW AT SALEM GENERATING STATION - UNIT NO.1

CONDUCTED BY: Joseph Fiumara

Sr. Test Engineer, Maplewood Testing Services

#### PURPOSE

To determine the flow capacities of the Unit No.1 circulating water pumps.

#### SUMMARY

On June 23 and 24, 1998 the Mechanical Division of Maplewood Testing Services conducted a series of test runs at Salem Unit No.1 to determine the pump capacities of the 11A, 11B, 12A, 12B, 13A and 13B (CMS designations H, J, K, M, L and A respectively) circulating water pumps.

Final test results are shown in Table 1 and Figure 1.

#### DISCUSSION

Total dynamic head is calculated by subtracting the inlet head from the discharge head in feet of water. The discharge pressure is normally taken on the discharge pipe in close proximity to the pump. At Salem the discharge pressure feeler lines are not functional and the pressure is read at the inlet waterbox. Therefore, the observed discharge pressure is affected by the pressure drop in the pipe leading from the pump. This condition causes the total dynamic head to be depressed. When plotted on the pump curve, the data usually falls well below the curve.

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Dave Hurka Sr. Staff Engineer - Nuclear PSE&G

July 17, 1998 Report No.TP98005

#### TEST METHOD

The circulating water flow was determined by fluorometry using MTS Mechanical Division Procedure Mech-40 "Determination of Water Flow Using The Turner Fluorometer". In fluorometry, a dye containing fluorescent particles is injected at a known flow rate sufficiently upstream to insure complete mixing. Dilution of the dye is measured downstream by a fluorometer and the flow is determined as a ratio.

Manager Mechanical Division

cc F. Todd S. Davies

#### F:\MAG\TP98005\TP98005.DOC

Part

Senior Supervising Test Engineer Mechanical Division

FROM

## P. 4

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# Table 1Salem Generating StationCirculating Water Pump Flow Test

## Maplewood Testing Services Mechanical Division

## Report Number TP98005

## SUMMARY OF TEST RESULTS

Pump	CMS	Test	Measured	Pump	Pump	Total	
No.	Pump	Date	Pump	Suction	Discharge	Dynamic	
	Desig.		Capacity	Head	Head	Head	
			(gpm)	(ft h2o)	(ft h2o)	(ft h2o)	
11A	Н	06/24/98	181,770	-9.3	13.7	23.0	
11B	J	06/24/98	171,529	-8.5	14.7	23.2	
	·					_	
12A	<u>к</u>	06/24/98	173,979	-7.6	15.5	23.1	
						]	
12B	<u> </u>	06/23/98	161,528	-12.9	13.3	26.2	
13A	LL	06/23/98	188,203	-12.5	10.8	23.3	
				• • -			
13B	A	06/23/98	183,592	-11.7	14.5	26.2	

Note: Pump suction heads and discharge heads corrected to elevation 100'



PSE&G Maplewood Testing Services Report No. TP98005 June 1998

GSALEM

FIGURE 1

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-20-1998 3:00PM

FROM

PLWOOD TSTNG SERVS 201 761

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APLEWOOD TESTING SERVICES REPORT

TO: Dave Hurka Sr. Staff Engineer - Nuclear PSE&G

FROM

July 17, 1998 Report No.TP98005-A

#### RECORD OF RHODAMINE WT DYE INJECTION FOR SUBJECT: CIRCULATING WATER FLOW TEST AT SALEM GENERATING : **STATION - UNIT NO.1**

CONDUCTED BY: Joseph Fiumara Sr. Test Engineer, Maplewood Testing Services

PURPOSE

To report the date, time, amount and concentration of Rhodamine WT dye released to the river while testing at Salem Generating Station - Unit No.1.

## SUMMARY

Listed in Table 1 are the data pertinent to the injection of Rhodamine WT dye at Salem Generating Station - Unit No.1.

Testing is complete at this station.

nel

- Manager Mechanical Division
- c F Todd S. Davies

F:\MAG\TP98005\TP98005.DOC

Senior Supervising Test Engineer Mechanical Division

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## Table 1

## Salem Generating Station Circulating Water Pump Flow Test

## Maplewood Testing Services Mechanical Division

## Report No. TP98005-A

## **RECORD OF RHODAMINE WT INJECTION**

Test Date	Pump No.	Injection Time		Pure Dye	Number of Pumps in	Total System	Effluent Concentration	
				Injected	Service	Flow		
		(start)	(stop)	(mi)		(1000 gpm)	(ppb)	
06/24/98	11A	1340	1354	19.55	12	2220.0	0.17	
06/24/98	11B	1305	1323	24.89	12	2220.0	0.16	
06/24/98	12A	1038	1052	19.36	12	2220.0	0.16	
06/23/98	12B	1620	1634	19.26	12	2220.0	0.16	
06/23/98	13A	1540	1554	19.25	12	2220.0	0.16	
06/23/98	13B	1446	1519	44.95	12	2220.0	0.16	
06/23/98	13B	1421	1440	25.46	12	2220.0	0.16	

### COUNTY OF SALEM STATE OF NEW JERSEY

I, Martin J. Trum, of full age, being duly sworn according to law, upon my oath depose and say:

- 1. I am General Manager (Acting) of Salem Generating Station, and as such, am authorized to sign Discharge Monitoring Reports submitted to the New Jersey Department of Environmental Protection pursuant to the Station's New Jersey Pollutant Discharge Elimination System permit.
- 2. I have reviewed the attached Discharge Monitoring Reports. Pursuant to N.J. A. C. 7:14A-2.4, I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that based on my inquiry of those individuals responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.
- 3. The signature on the attached Discharge Monitoring Reports is my signature and I am submitting this affidavit in satisfaction of the requirement that my signature be notarized.

Martin J. 1 fum General Manager - (Acting) Salem Operations

Sworn and subscribed before me this  $\frac{23}{23}$  day of  $\frac{3}{244}$  1998

SHERI L. HUSTON NOTARY PUBLIC OF NEW JERSEY My Commission Expires Dec. 39 19 97 T-VWX-014

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#### NEW JERSEY DEPARTMENT OF ENVIROMENTAL PROTECTION DIVISION OF WATER QUALITY

#### MONITORING REPORT - TRANSMITTAL SHEET

	NJPI   <u>0 0 </u>	DES NO. 0 5 6 2 2		REPORTINO Mo. Yr.  0 6 9 8	3 PERIOD Mo. Yr.  0 6 9 8					
PERMITTEE:	Name :	Public Service Electric and Ga	as Company				<u>.</u>			
	Address:		<u> </u>	<u>.</u>						
<u>FACILITY:</u>	Name :	Salem Nuclear Generating Sta	ation				<u> </u>			
	Address:	Alloway Creek Neck Road			····		<u> </u>			
		Hancock's Bridge				<u>-</u>	<u>.</u>			
	Telephone	:(609) 935-6000				·.	<b>:</b>			
FORMS ATTA	ACHED (In	dicate Quantity of Each)		Operat	ing Exceptions					
SLUDGE REPORT-SANITARY <u>0</u> T-VWX-007 <u>0</u> T-VWX-008 <u>0</u> T-VWX-009			DYE TES	STING		Yes X	No —			
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<u>0</u> T-VWX-010	$\frac{0}{1} = \frac{1}{2} = \frac{1}$	VX-010B	DISINFE	DISINFECTION INTERUPTION						
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<u>0</u> VWX-015(A	R1S /X-016 <u>0</u> VWX-017 /SSION	OTHER			•	<u>X</u>				
VIDDES DISC			(Detail an	(Detail any "Yes" on reverse side in appropriate space)						
12 EPA FORM	1 3320-1		<u>NOTE</u> : T	he "Hours Att eet must also b	ended at Plant" or be completed.	n the rev	rerse			

<u>AUTHENTICATION</u> I certify under penalty of law that this document and all attachments were prepared under the direction of supervision in accordance with a system designed to assure 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.

LICENSED OPERATOR

.....

Name (Prin	nted)	Michael J. Kut	<u>biak</u> .
Grade & R	egistry No,	N-2 0016955	Δ
Signature_	Which	el . Kalu	<u>k</u>
Date	7/22/98		

# PRINCIPAL EXECUTIVE OFFICER or DULY AUTHORIZED REPRESENTATIVE

Name (Printe	ed) Martin J. Trum
Title (Printeg	Gen. Mgr. Salem Operations (Acting)
Signature	land 1 V-
Date	7/22/98

## OPERATING EXCEPTIONS DETAILED

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circulat	ing	wate	er flo	w test.	The da	te,	time, an	ount	:, ai	nd concent	ratio	n_of Rl	nodar	nine d	lye
released	to	the	river	during	testing	is	detailed	l on	the	attached	test	report	in t	the co	over
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# HOURS ATTENDED AT PLANT

Month 06 Year 98

Day of Month 10 11 12 13 14 15 16 Licensed Operator Others 19 20 21 22 23 24 28 29 30 31 Day of Month Licensed Operator Others .....

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