

IMPINGEMENT MONITORING PROGRAM

REPORT NO. 13 - APRIL 1978

SALEM NUCLEAR GENERATING STATION  
UNIT NO. 1

DOCKET NO. 50-272  
OPERATING LICENSE NO. DPR-70

*w/1tr 5-20-78  
781420046*

PUBLIC SERVICE ELECTRIC AND GAS COMPANY  
NEWARK, NEW JERSEY  
MAY 20, 1978

## SUMMARY

This is the thirteenth monthly impingement monitoring program report required by Section 3.1.2.2 of the Environmental Technical Specifications (ETS). The ETS are Appendix B of the Salem Nuclear Generating Station (SNGS) Operating License No. DPR-70. The tabular summaries attached include daily estimates of the number and weight of fish impinged on the Circulating Water System (CWS) traveling screens (Table 2) and the Service Water System (SWS) traveling screens (Table 3). CWS operation is also summarized (Table 1).

The monitoring program at both the CWS and SWS consisted of three 24-hour sampling periods per week. The CWS screens were sampled four times per 24-hour period at approximately six-hour intervals. Samples were collected by diverting approximately three minutes of screen wash water to the counting pool located on the north end of the CWS intake structure. Survival rates were calculated for CWS samples only. SWS screen samples consisted of either one 24-hour or two 12-hour samples per day. These samples consisted of all fish impinged and found in the trash baskets located on the intake structure proper.

On March 16, 1978, SNGS commenced a forced outage to initiate turbine blading repairs. CWS samples were collected during the outage if the CWS intake was in service during regularly scheduled sampling periods. SWS samples were collected on the regular ETS monitoring schedule.

MDL:aec

TABLE 1. - START TIME AND DURATION OF IMPINGEMENT SAMPLES AT THE CIRCULATING WATER INTAKE, S.N.G.S. UNIT 1  
1 APRIL THROUGH 30 APRIL 1978. NUMBER OF PUMPS AND SCREENS IN OPERATION, SCREEN OPERATING MODE  
(I= INTERMITTENT, C= CONTINUOUS), WEIGHT (G/3 MIN. SAMPLE) OF DETRITUS, AND WATER TEMPERATURE (C)  
ARE INDICATED.

DATE	SAMPLE START TIME	DUR. (MIN)	PUMPS	SCREENS	OPERATING MODE	DETRITUS WEIGHT (G/3 MIN SAMPLE)	WATER TEMPERATURE (C)
04/11/78	1200	3	1	1	C	9,800	11.0
04/11/78	1800	3	1	1	C	6,000	10.5
04/12/78	0000	3	1	1	C	16,000	11.0
04/12/78	0600	3	1	1	C	3,500	11.0
04/12/78	1200	3	1	1	C	4,000	12.0
04/12/78	1800	3	1	1	C	6,200	11.0
04/13/78	0000	3	1	1	C	10,000	12.0
04/13/78	0600	3	1	1	C	15,000	12.0
04/13/78	1200	3	1	1	C	15,000	12.0
04/13/78	1800	3	1	1	C	15,000	13.0
04/14/78	0000	3	1	1	C	20,000	13.0
04/14/78	0600	3	1	1	C	40,000	11.0
04/18/78	1200	3	1	1	C	5,200	11.5
04/18/78	1757	3	1	1	C	1,100	11.5
04/19/78	0000	3	1	1	C	7,000	11.0
04/19/78	0600	3	1	1	C	3,200	11.0
04/19/78	1200	3	1	1	C	3,800	11.5
04/19/78	1815	3	1	1	C	4,000	12.0
04/20/78	0000	3	1	1	C	2,500	11.0
04/20/78	0600	3	1	1	C	21,400	11.5
04/20/78	1200	3	1	1	C	6,200	12.0
04/20/78	1800	3	1	1	C	2,700	12.0
04/21/78	0000	3	1	1	C	10,300	11.5
04/21/78	0600	3	1	1	C	1,000	11.5
04/25/78	1200	3	1	1	C	850	13.5
04/25/78	1800	3	1	1	C	4,000	13.0
04/26/78	0000	3	1	1	C	1,900	13.5
04/26/78	0600	3	1	1	C	10,000	12.5
04/26/78	1200	3	1	1	C	2,500	13.0
04/26/78	1800	3	1	1	C	3,500	13.0
04/27/78	0000	3	1	1	C	8,200	12.5
04/27/78	0600	3	1	1	C	13,000	12.0

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SALEM NUCLEAR GENERATING STATION UNIT 1  
PSE&G, NEWARK, N.J.

TABLE 2. - IMPINGEMENT - S.N.G.S. CIRCULATING WATER SYSTEM INTAKE, 1 APRIL 1978 TO 30 APRIL 1978.

SAMPLING PERIOD - 04/11/78 1200 THROUGH 04/12/78 0600

SPECIES	N	CF	% SURVIVAL			TOTAL NUMBER COLLECTED	MEAN ESTIMATED NUMBER/ 24 HOURS	STANDARD DEVIATION	MEAN ESTIMATED WT/24 HRS (KG)	STANDARD DEVIATION	WEIGHT (GM)		LENGTH (MM)	
			L	D	D*						MIN.	MAX.	MIN.	MAX.
M. AMERICANA	4	3	50	16	33	6	720	480.0	3.92	2.8	3.6	8.6	67.5	82.5
A. AESTIVALIS	4	3	20	40	40	5	600	459.5	1.82	1.8	1.2	4.9	72.5	87.5
V. MACULATUS	4	3	100	0	0	4	480	391.9	.62	.5	.7	2.6	37.5	52.5
A. ROSIRATA	4	4	80	0	20	5	600	240.0	25.26	15.2	19.5	67.0	227.5	332.5
TOTAL						20	2400		31.62					

N = NUMBER OF 3-MINUTE SAMPLES.

CF = CATCH FREQUENCY (NUMBER OF SAMPLES IN WHICH THE SPECIES APPEARED).

% SURVIVAL: L = LIVE; D = DEAD; D\* = DAMAGED.

MEAN ESTIMATED NUMBER PER 24 HOURS FOR EACH SPECIES WAS CALCULATED BY MULTIPLYING THE NUMBER OF SPECIMENS IN EACH 3-MINUTE SAMPLE BY 480 TO OBTAIN A 24-HOUR ESTIMATE. THE ESTIMATED NUMBER FOR EACH SAMPLE WAS SUMMED AND DIVIDED BY THE NUMBER OF SAMPLES TO OBTAIN THE MEAN.

MEAN ESTIMATED WEIGHT PER 24 HOURS FOR EACH SPECIES WAS CALCULATED BY THE SAME METHOD AS MEAN ESTIMATED NUMBER.

IMPINGEMENT MONITORING PROGRAM  
SALEM NUCLEAR GENERATING STATION UNIT 1  
PSE&G, NEWARK, N.J.

TABLE 2. - (CONTINUED).

SAMPLING PERIOD - 04/12/78 1200 THROUGH 04/13/78 0600

SPECIES	N	CF	Σ SURVIVAL			TOTAL NUMBER COLLECTED	MEAN ESTIMATED NUMBER/ 24 HOURS	STANDARD DEVIATION	MEAN ESTIMATED WT/24 HRS. (KG)	STANDARD DEVIATION	WEIGHT (GM)		LENGTH (MM)	
			L	D	D*						MIN.	MAX.	MIN.	MAX.
P. FLAVESCENS	4	1	100	0	0	1	120	240.0	12.02	24.0	100.2	100.2	197.5	197.5
M. AMERICANA	4	1	50	0	50	2	240	480.0	1.27	2.5	4.5	6.1	72.5	72.5
A. AESTIVALIS	4	2	55	66	0	3	360	459.5	.92	1.0	3.7	4.0	77.5	77.5
P. ANNULARIS	4	1	100	0	0	1	120	240.0	6.12	12.2	51.0	51.0	157.5	157.5
V. MACULATUS	4	1	100	0	0	9	1080	2160.0	1.71	3.4	.7	1.6	37.5	57.5
A. ROSTRATA	4	1	100	0	0	1	120	240.0	4.14	8.2	34.5	34.5	257.5	257.5
TOTAL						17	2040		26.18					

N = NUMBER OF 3-MINUTE SAMPLES.

CF = CATCH FREQUENCY (NUMBER OF SAMPLES IN WHICH THE SPECIES APPEARED).

Σ SURVIVAL: L = LIVE; D = DEAD; D\* = DAMAGED.

MEAN ESTIMATED NUMBER PER 24 HOURS FOR EACH SPECIES WAS CALCULATED BY MULTIPLYING THE NUMBER OF SPECIMENS IN EACH 3-MINUTE SAMPLE BY 480 TO OBTAIN A 24-HOUR ESTIMATE. THE ESTIMATED NUMBER FOR EACH SAMPLE WAS SUMMED AND DIVIDED BY THE NUMBER OF SAMPLES TO OBTAIN THE MEAN.

MEAN ESTIMATED WEIGHT PER 24 HOURS FOR EACH SPECIES WAS CALCULATED BY THE SAME METHOD AS MEAN ESTIMATED NUMBER.

IMPINGEMENT MONITORING PROGRAM  
SALEM NUCLEAR GENERATING STATION UNIT 1  
PSERB, NEWARK, N.J.

TABLE 2. - (CONTINUED).

SAMPLING PERIOD - 04/13/78 1200 THROUGH 04/14/78 0600

SPECIES	N	CF	X SURVIVAL			TOTAL NUMBER COLLECTED	MEAN ESTIMATED NUMBER/ 24 HOURS	STANDARD DEVIATION	MEAN ESTIMATED WT/24 HRS (KG)	STANDARD DEVIATION	WEIGHT (GM)		LENGTH (MM)	
			L	D	D*						MIN.	MAX.	MIN.	MAX.
M. AMERICANA	4	2	77	11	11	9	1080	1585.9	10.99	20.0	2.8	53.8	62.5	147.5
A. AESTIVALIS	4	1	100	0	0	1	120	240.0	1.32	2.6	11.0	11.0	92.5	92.5
A. ROSTRATA	4	2	66	0	33	3	360	459.5	21.92	33.2	34.7	111.5	267.5	497.5
E. MACULATUS	4	1	100	0	0	1	120	240.0	.18	.3	1.5	1.5	42.5	42.5
TOTAL						14	1680		34.41					

N = NUMBER OF 3-MINUTE SAMPLES.

CF = CATCH FREQUENCY (NUMBER OF SAMPLES IN WHICH THE SPECIES APPEARED).

X SURVIVAL: L = LIVE; D = DEAD; D\* = DAMAGED.

MEAN ESTIMATED NUMBER PER 24 HOURS FOR EACH SPECIES WAS CALCULATED BY MULTIPLYING THE NUMBER OF SPECIMENS IN EACH 3-MINUTE SAMPLE BY 480 TO OBTAIN A 24-HOUR ESTIMATE. THE ESTIMATED NUMBER FOR EACH SAMPLE WAS SUMMED AND DIVIDED BY THE NUMBER OF SAMPLES TO OBTAIN THE MEAN.

MEAN ESTIMATED WEIGHT PER 24 HOURS FOR EACH SPECIES WAS CALCULATED BY THE SAME METHOD AS MEAN ESTIMATED NUMBER.

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PSE86, NEWARK, N.J.

TABLE 2. - (CONTINUED).

SAMPLING PERIOD - 04/18/78 1200 THROUGH 04/19/78 0600

SPECIES	N	CF	2 SURVIVAL			TOTAL NUMBER COLLECTED	MEAN ESTIMATED NUMBER/ 24 HOURS	STANDARD DEVIATION	MEAN ESTIMATED WT/24 HRS (KG)	STANDARD DEVIATION	WEIGHT (GM)		LENGTH (MM)	
			L	D	DA						MIN.	MAX.	MIN.	MAX.
NONE	4					0	0							
TOTAL						0	0							

N = NUMBER OF 3-MINUTE SAMPLES.

CF = CATCH FREQUENCY (NUMBER OF SAMPLES IN WHICH THE SPECIES APPEARED).

2 SURVIVAL: L = LIVE; D = DEAD; DA = DAMAGED.

MEAN ESTIMATED NUMBER PER 24 HOURS FOR EACH SPECIES WAS CALCULATED BY MULTIPLYING THE NUMBER OF SPECIMENS IN EACH 3-MINUTE SAMPLE BY 480 TO OBTAIN A 24-HOUR ESTIMATE. THE ESTIMATED NUMBER FOR EACH SAMPLE WAS SUMMED AND DIVIDED BY THE NUMBER OF SAMPLES TO OBTAIN THE MEAN.

MEAN ESTIMATED WEIGHT PER 24 HOURS FOR EACH SPECIES WAS CALCULATED BY THE SAME METHOD AS MEAN ESTIMATED NUMBER.

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PSEG, NEWARK, N.J.

TABLE 2. - (CONTINUED).

SAMPLING PERIOD - 04/19/78 1200 THROUGH 04/20/78 0600

SPECIES	N	CF	SURVIVAL			TOTAL NUMBER COLLECTED	MEAN ESTIMATED NUMBER/ 24 HOURS	STANDARD DEVIATION	MEAN ESTIMATED WT/24 HRS (KG)	STANDARD DEVIATION	WEIGHT (GM)		LENGTH (MM)	
			L	D	D*						MIN.	MAX.	MIN.	MAX.
E. MACULATUS	4	2	100	0	0	3	360	459.5	.75	.9	1.7	2.5	37.5	52.5
A. AESTIVALIS	4	2	100	0	0	3	360	459.5	1.93	2.4	4.4	6.1	77.5	82.5
M. MARGINATA	4	1	100	0	0	2	240	480.0	4.56	9.1	14.0	24.0	142.5	167.5
A. MITCHILLI	4	1	0	0	100	1	120	240.0	.28	.5	2.4	2.4	72.5	72.5
U. CHUSS	4	1	100	0	0	2	240	480.0	2.34	4.6	9.0	10.5	107.5	127.5
TOTAL						11	1320		9.86					

N = NUMBER OF 3-MINUTE SAMPLES.

CF = CATCH FREQUENCY (NUMBER OF SAMPLES IN WHICH THE SPECIES APPEARED).

SURVIVAL: L = LIVE; D = DEAD; D\* = DAMAGED.

MEAN ESTIMATED NUMBER PER 24 HOURS FOR EACH SPECIES WAS CALCULATED BY MULTIPLYING THE NUMBER OF SPECIMENS IN EACH 3-MINUTE SAMPLE BY 480 TO OBTAIN A 24-HOUR ESTIMATE. THE ESTIMATED NUMBER FOR EACH SAMPLE WAS SUMMED AND DIVIDED BY THE NUMBER OF SAMPLES TO OBTAIN THE MEAN.

MEAN ESTIMATED WEIGHT PER 24 HOURS FOR EACH SPECIES WAS CALCULATED BY THE SAME METHOD AS MEAN ESTIMATED NUMBER.

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PSEB, NEWARK, N.J.



TABLE 2\* - (CONTINUED).

SAMPLING PERIOD - 04/20/78 1200 THROUGH 04/21/78 0600

SPECIES	N	CF	Σ SURVIVAL			TOTAL NUMBER COLLECTED	MEAN ESTIMATED NUMBER/ 24 HOURS	STANDARD DEVIATION	MEAN ESTIMATED WT/24 HRS (KG)	STANDARD DEVIATION	WEIGHT (GM)		LENGTH (MM)	
			L	D	D*						MIN.	MAX.	MIN.	MAX.
V. MACULATUS	4	2	100	0	0	2	240	277.1	2.84	5.2	1.5	22.2	47.5	102.5
A. ROSTRATA	4	1	100	0	0	1	120	240.0	6.76	13.5	56.4	56.4	247.5	247.5
TOTAL						3	360		9.60					

N = NUMBER OF 3-MINUTE SAMPLES.

CF = CATCH FREQUENCY (NUMBER OF SAMPLES IN WHICH THE SPECIES APPEARED).

Σ SURVIVAL: L = LIVE; D = DEAD; D\* = DAMAGED.

MEAN ESTIMATED NUMBER PER 24 HOURS FOR EACH SPECIES WAS CALCULATED BY MULTIPLYING THE NUMBER OF SPECIMENS IN EACH 3-MINUTE SAMPLE BY 480 TO OBTAIN A 24-HOUR ESTIMATE. THE ESTIMATED NUMBER FOR EACH SAMPLE WAS SUMMED AND DIVIDED BY THE NUMBER OF SAMPLES TO OBTAIN THE MEAN.

MEAN ESTIMATED WEIGHT PER 24 HOURS FOR EACH SPECIES WAS CALCULATED BY THE SAME METHOD AS MEAN ESTIMATED NUMBER.

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PSE86, NEWARK, N.J.

TABLE 2. - (CONTINUED).

SAMPLING PERIOD - 04/25/78 1200 THROUGH 04/26/78 0600

SPECIES	N	CF	X SURVIVAL			TOTAL NUMBER COLLECTED	MEAN ESTIMATED NUMBER/ 24 HOURS	STANDARD DEVIATION	MEAN ESTIMATED WT/24 HRS (KG)	STANDARD DEVIATION	WEIGHT (GM)		LENGTH (MM)	
			L	D	D*						MIN.	MAX.	MIN.	MAX.
A. MITCHELLI	4	2	40	60	0	5	600	908.6	1.69	2.3	1.9	3.7	67.5	87.5
A. KOSTRATA	4	1	100	0	0	1	120	240.0	1.35	2.7	11.3	11.3	222.5	222.5
I. MACULATUS	4	1	100	0	0	1	120	240.0	.18	.3	1.5	1.5	42.5	42.5
TOTAL						7	840		3.22					

N = NUMBER OF 3-MINUTE SAMPLES.

CF = CATCH FREQUENCY (NUMBER OF SAMPLES IN WHICH THE SPECIES APPEARED).

X SURVIVAL: L = LIVE; D = DEAD; D\* = DAMAGED.

MEAN ESTIMATED NUMBER PER 24 HOURS FOR EACH SPECIES WAS CALCULATED BY MULTIPLYING THE NUMBER OF SPECIMENS IN EACH 3-MINUTE SAMPLE BY 480 TO OBTAIN A 24-HOUR ESTIMATE. THE ESTIMATED NUMBER FOR EACH SAMPLE WAS SUMMED AND DIVIDED BY THE NUMBER OF SAMPLES TO OBTAIN THE MEAN.

MEAN ESTIMATED WEIGHT PER 24 HOURS FOR EACH SPECIES WAS CALCULATED BY THE SAME METHOD AS MEAN ESTIMATED NUMBER.

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 PSEB6, NEWARK, N.J.

TABLE 2. - (CONTINUED).

SAMPLING PERIOD - 04/26/78 1200 THROUGH 04/27/78 0600

SPECIES	N	CF	X SURVIVAL			TOTAL NUMBER COLLECTED	MEAN ESTIMATED NUMBER/ 24 HOURS	STANDARD DEVIATION	MEAN ESTIMATED WT/24 HRS (KG)	STANDARD DEVIATION	WEIGHT (GM)		LENGTH (MM)	
			L	D	D*						MIN.	MAX.	MIN.	MAX.
T. MACULATUS	4	2	100	0	0	5	600	720.0	6.79	12.2	1.0	50.0	32.5	127.5
A. MITCHILLI	4	2	100	0	0	3	360	459.5	1.48	1.9	2.1	6.3	67.5	87.5
M. MARGINATA	4	1	100	0	0	1	120	240.0	1.23	2.4	10.3	10.3	127.5	127.5
A. ROSTRATA	4	2	100	0	0	2	240	277.1	5.65	6.8	18.4	28.7	212.5	242.5
A. PSEUDOHARENGUS	4	1	100	0	0	1	120	240.0	1.10	2.2	9.2	9.2	97.5	97.5
A. AESTIVALIS	4	1	100	0	0	2	240	480.0	1.23	2.4	5.3	6.0	82.5	87.5
TOTAL						14	1680		17.48					

N = NUMBER OF 3-MINUTE SAMPLES.

CF = CATCH FREQUENCY (NUMBER OF SAMPLES IN WHICH THE SPECIES APPEARED).

X SURVIVAL: L = LIVE; D = DEAD; D\* = DAMAGED.

MEAN ESTIMATED NUMBER PER 24 HOURS FOR EACH SPECIES WAS CALCULATED BY MULTIPLYING THE NUMBER OF SPECIMENS IN EACH 3-MINUTE SAMPLE BY 480 TO OBTAIN A 24-HOUR ESTIMATE. THE ESTIMATED NUMBER FOR EACH SAMPLE WAS SUMMED AND DIVIDED BY THE NUMBER OF SAMPLES TO OBTAIN THE MEAN.

MEAN ESTIMATED WEIGHT PER 24 HOURS FOR EACH SPECIES WAS CALCULATED BY THE SAME METHOD AS MEAN ESTIMATED NUMBER.

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 PSE86, NEWARK, N.J.

TABLE 3. - IMPINGEMENT - S.N.G.S. SERVICE WATER SYSTEM INTAKE, 1 APRIL 1978 TO 30 APRIL 1978.

SAMPLING PERIOD - 04/03/78 0900 TO 04/04/78 0900

NUMBER OF PUMPS 2 - 3

SPECIES	NUMBER	WT. (GM)	WEIGHT		LENGTH	
			MIN.	MAX.	MIN.	MAX.
A. ROSIRATA	2	114.00	46.0	68.0	312.5	337.5
M. AMERICANA	8	56.60	3.5	13.4	67.5	97.5
P. FLAVESCENS	1	5.20	5.2	5.2	87.5	87.5
P. ANNULARIS	1	36.30	36.3	36.3	137.5	137.5
T. MACULATUS	6	33.50	.9	24.0	37.5	107.5
G. ACULEATUS	1	2.20	2.2	2.2	62.5	62.5
M. MUCALIS	1	16.50	16.5	16.5	112.5	112.5
A. PSEUDOHARENGUS	1	10.00	10.0	10.0	97.5	97.5
A. AESTIVALIS	36	144.10	2.6	9.2	52.5	107.5
TOTAL	57	418.40				

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PSEGG, NEWARK, N.J.

TABLE 3. - (CONTINUED).

SAMPLING PERIOD - 04/04/78 0900 TO 04/05/78 0900

NUMBER OF PUMPS 2 - 2

SPECIES	NUMBER	WT. (GM)	WEIGHT		LENGTH	
			MIN.	MAX.	MIN.	MAX.
M. AMERICANA	9	53.50	3.4	8.4	62.5	82.5
A. AESTIVALIS	21	300.80	3.0	222.4	67.5	257.5
V. MACULATUS	1	1.60	1.6	1.6	37.5	37.5
TOTAL	31	355.90				

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PSE&G, NEWARK, N.J.

TABLE 3. - (CONTINUED).

SAMPLING PERIOD - 04/05/78 0830 TO 04/06/78 0830

NUMBER OF PUMPS 2 - 3

SPECIES	NUMBER	WT. (GM)	WEIGHT		LENGTH	
			MIN.	MAX.	MIN.	MAX.
A. AESTIVALIS	27	105.10	1.7	6.8	57.5	82.5
P. FLAVESCENS	4	84.00	9.0	51.1	87.5	157.5
M. AMERICANA	3	14.30	3.5	7.7	52.5	87.5
V. MACULATUS	2	51.90	.9	51.0	37.5	127.5

TOTAL	36	255.30				
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IMPINGEMENT MONITORING PROGRAM  
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PSE&G, NEWARK, N.J.

TABLE 3. - (CONTINUED).

SAMPLING PERIOD - 04/11/78 0830 TO 04/12/78 0830

NUMBER OF PUMPS 2 - 3

SPECIES	NUMBER	WT. (GM)	WEIGHT		LENGTH	
			MIN.	MAX.	MIN.	MAX.
M. AMERICANA	2	10.00	4.6	5.4	72.5	82.5
T. MACULATUS	2	16.90	.7	16.2	42.5	97.5
TOTAL	4	26.90				

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PSEG, NEWARK, N.J.

TABLE 3. - (CONTINUED).

SAMPLING PERIOD - 04/12/78 0830 TO 04/13/78 0830

NUMBER OF PUMPS 2 - 3

SPECIES	NUMBER	WT. (GM)	WEIGHT		LENGTH	
			MIN.	MAX.	MIN.	MAX.
M. AMERICANA	1	5.80	.7	16.2	72.5	72.5
V. MACULATUS	2	3.60	1.4	2.2	37.5	52.5
TOTAL	3	9.40				

IMPINGEMENT MONITORING PROGRAM  
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PSER6, NEWARK, N.J.



TABLE 5. - (CONTINUED).

SAMPLING PERIOD - 04/13/78 0830 TO 04/14/78 0830

NUMBER OF PUMPS 2 - 3

SPECIES	NUMBER	WT.(GM)	WEIGHT		LENGTH	
			MIN.	MAX.	MIN.	MAX.
M. AMERICANA	2	11.20	3.2	8.0	67.5	82.5
P. ANNULARIS	1	6.00	.6	6.0	82.5	82.5
V. MACULATUS	1	1.40	1.4	1.4	52.5	52.5
TOTAL	4	18.60				

IMPINGEMENT MONITORING PROGRAM  
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PSE&G, NEWARK, N.J.

TABLE 5. - (CONTINUED).

SAMPLING PERIOD - 04/18/78 0830 TO 04/19/78 0830

NUMBER OF PUMPS 2 - 3

SPECIES	NUMBER	WT. (GM)	WEIGHT		LENGTH	
			MIN.	MAX.	MIN.	MAX.
C. CARPIO	1	91.00	91.0	91.0	157.5	157.5
L. MACROCHIRUS	1	44.10	44.1	44.1	127.5	127.5
M. MARGINATA	3	35.60	5.9	19.8	112.5	152.5
T. MACULATUS	2	52.90	1.4	51.5	42.5	132.5
A. RUSTRATA	1	106.20	106.2	106.2	387.5	387.5

TOTAL	8	529.80				
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IMPINGEMENT MONITORING PROGRAM  
SALEM NUCLEAR GENERATING STATION UNIT 1  
PSE&G, NEWARK, N.J.

TABLE 5. - (CONTINUED).

SAMPLING PERIOD - 04/19/78 0830 TO 04/20/78 0830

NUMBER OF PUMPS 2 - 3

SPECIES	NUMBER	WT. (GM)	WEIGHT		LENGTH	
			MIN.	MAX.	MIN.	MAX.
P. FLAVESCENS	1	18.00	18.0	18.0	117.5	117.5
K. MARGINATA	3	59.20	12.6	25.7	132.5	172.5
M. BILINEARIS	1	8.60	8.6	8.6	107.5	107.5
U. CHUSS	2	13.10	4.5	8.6	87.5	122.5
T. MACULATUS	3	24.90	.3	22.5	32.5	102.5
A. ROSTRATA	1	49.80	49.8	49.8	312.5	312.5

TOTAL	11	173.60				
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IMPINGEMENT MONITORING PROGRAM  
SALEM NUCLEAR GENERATING STATION UNIT 1  
PSE86, NEWARK, N.J.

TABLE 3. - (CONTINUED).

SAMPLING PERIOD - 04/20/78 0830 TO 04/21/78 0830

NUMBER OF PUMPS 2 - 3

SPECIES	NUMBER	WT. (GM)	WEIGHT		LENGTH	
			MIN.	MAX.	MIN.	MAX.
C. CAMPIO	1	74.60	74.6	74.6	147.5	147.5
TOTAL	1	149.20				

IMPINGEMENT MONITORING PROGRAM  
SALEM NUCLEAR GENERATING STATION UNIT 1  
PSEG, NEWARK, N.J.

TABLE 3 - (CONTINUED).

SAMPLING PERIOD - 04/25/78 0800 TO 04/26/78 0800

NUMBER OF PUMPS 2 - 3

SPECIES	NUMBER	WT. (GM)	WEIGHT		LENGTH	
			MIN.	MAX.	MIN.	MAX.
N. MARGINATA	1	45.30	45.3	45.3	187.5	187.5
A. MITCHILLI	4	8.90	1.0	2.7	57.5	72.5
P. DENTATUS	1	32.40	32.4	32.4	157.5	157.5
L. MACROCHIRUS	1	5.10	5.1	5.1	142.5	142.5
M. AMERICANA	1	3.00	3.0	3.0	67.5	67.5
TOTAL	8	94.70				

IMPINGEMENT MONITORING PROGRAM  
SALEM NUCLEAR GENERATING STATION UNIT 1  
PSE&G, NEWARK, N.J.

TABLE 5. - (CONTINUED).

SAMPLING PERIOD - 04/26/78 0800 TO 04/27/78 0800

NUMBER OF PUMPS 2 - 2

SPECIES	NUMBER	WT. (GM)	WEIGHT		LENGTH	
			MIN.	MAX.	MIN.	MAX.
A. MITCHILLI	1	2.80	2.8	2.8	67.5	67.5
A. AESTIVALIS	4	182.60	4.6	167.2	72.5	237.5
C. SAPIDUS	1	2.00	2.0	2.0	32.5	32.5
A. ROSTRATA	1	161.60	161.6	161.6	452.5	452.5
H. MARGINATA	1	5.50	5.5	5.5	112.5	112.5
H. TYRANNUS	1	99.00	99.0	99.0	187.5	187.5
C. STRIATA	1	10.30	10.3	10.3	97.5	97.5
U. CHUSS	2	16.50	8.0	8.5	102.5	112.5
V. MACULATUS	2	33.00	1.0	32.0	37.5	117.5

TOTAL	14	513.30				
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IMPINGEMENT MONITORING PROGRAM  
SALEM NUCLEAR GENERATING STATION UNIT 1  
PSEG, NEWARK, N.J.

TABLE 5. - (CONTINUED).

SAMPLING PERIOD - 04/27/78 0800 TO 04/28/78 0800

NUMBER OF PUMPS 2 - 2

SPECIES	NUMBER	WT. (GM)	WEIGHT		LENGTH	
			MIN.	MAX.	MIN.	MAX.
U. CHUSS	2	22.50	9.5	13.0	112.5	127.5
P. DENTATUS	1	22.60	22.6	22.6	142.5	142.5
C. STRIATA	1	4.20	4.2	4.2	72.5	72.5
T. MACULATUS	1	0.40	.4	.4	32.5	32.5
A. AESTIVALIS	1	5.50	5.5	5.5	92.5	92.5

TOTAL 6 55.20

IMPINGEMENT MONITORING PROGRAM  
SALEM NUCLEAR GENERATING STATION UNIT 1  
PSE&G, NEWARK, N.J.

DATA IGNORED - IN CONTROL MODE

WBRKPT PRINTS