

IMPINGEMENT MONITORING PROGRAM

REPORT NO. 5 - AUGUST 1977

SALEM NUCLEAR GENERATING STATION
UNIT NO. 1

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

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
NEWARK, NEW JERSEY
SEPTEMBER 20, 1977

SUMMARY

This is the fifth monthly impingement monitoring program report required by the proposed changes to 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).

The monitoring program at both the CWS and SWS consists 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 are calculated for CWS samples only. Attached also (Table 1) is a summary of plant operating conditions during sample collection at CWS.

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. These data are also summarized and attached.

MDL:aec

TABLE 1. - START TIME AND DURATION OF IMPINGEMENT SAMPLES AT THE CIRCULATING WATER INTAKE, S.N.G.S UNIT 1
1 AUGUST THROUGH 1 SEPTEMBER 1977, 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)
77/08/01	1200	3	4	5	C	3,900	27.0
77/08/01	1800	3	5	5	C	10,000	27.0
77/08/02	0001	3	5	5	C	2,100	27.0
77/08/02	0600	3	5	5	C	43,000	26.0
77/08/03	1200	3	4	4	C	3,100	27.0
77/08/03	1800	3	4	4	C	15,500	27.5
77/08/04	0001	3	4	5	C	2,900	27.0
77/08/04	0600	3	5	5	C	12,000	27.0
77/08/04	1200	3	5	5	C	4,400	27.0
77/08/04	1800	3	5	5	C	15,000	27.5
77/08/05	0000	3	5	5	C	1,900	27.0
77/08/05	0608	3	6	5	C	10,500	27.0
77/08/08	1210	3	5	5	C	18,000	27.5
77/08/08	1806	3	6	6	C	900	28.0
77/08/09	0000	3	5	5	C	14,000	28.0
77/08/09	0600	3	4	5	C	1,500	28.0
77/08/10	1200	3	5	6	C	20,000	28.5
77/08/10	1805	3	6	6	C	1,600	29.0
77/08/11	0000	3	6	5	C	21,000	28.0
77/08/11	0600	3	6	6	C	1,700	28.0
77/08/11	1200	3	6	5	C	5,100	29.0
77/08/11	1808	3	5	5	C	3,300	29.0
77/08/12	0000	3	5	5	C	3,700	28.0
77/08/12	0600	3	5	5	C	1,100	28.0
77/08/15	1219	3	6	5	C	600	28.0
77/08/15	1802	3	6	6	C	18,000	28.5
77/08/16	0000	3	6	6	C	1,400	28.0
77/08/16	0600	3	6	6	C	8,000	27.5
77/08/17	1200	3	6	6	C	3,300	28.0
77/08/17	1808	3	6	6	C	8,400	28.0
77/08/18	0000	3	6	6	C	2,500	27.5
77/08/18	0600	3	6	6	C	26,500	27.0
77/08/18	1201	3	6	6	C	6,500	27.0
77/08/18	1803	3	6	6	C	24,000	27.0
77/08/19	0000	3	6	6	C	4,400	27.0
77/08/19	0600	3	6	6	C	37,000	26.0
77/08/22	1200	3	6	6	C	3,900	25.0
77/08/22	1800	3	6	6	C	445	27.0
77/08/23	0000	3	6	6	C	4,200	26.5
77/08/23	0600	3	5	5	C	1,400	25.0
77/08/24	1200	3	6	6	C	4,000	26.0
77/08/24	1805	3	6	6	C	1,900	26.0
77/08/25	0000	3	5	5	C	6,700	26.0
77/08/24	0600	3	5	5	C	2,300	25.0
77/08/25	1200	3	5	5	C	19,000	25.0
77/08/25	1800	3	5	5	C	4,200	25.0
77/08/26	0000	3	5	5	C	9,300	25.5
77/08/26	0600	3	5	6	C	5,100	25.0
77/08/29	1200	3	6	6	C	600	26.5
77/08/29	1800	3	6	6	C	10,000	27.0
77/08/30	0000	3	6	6	C	500	27.0
77/08/30	0602	3	6	6	C	6,100	26.0
77/08/31	1200	3	5	5	C	1,400	27.0
77/08/31	1800	3	5	6	C	20,000	27.5
77/09/01	0003	3	6	6	C	2,300	27.0
77/09/01	0600	3	5	5	C	19,000	27.0
77/09/01	1200	3	5	5	C	4,300	27.5
77/09/01	1800	3	5	5	C	16,000	27.5

TABLE 2. - (CONTINUED).

SAMPLING PERIOD - 08/31/77 1200 THROUGH 09/01/77 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.
T. MACULATUS	4	3	91	8	0	12	1,440	1708.3	.93	1.3	.2	.9	22.5	37.5
B. TYRANNUS	4	3	100	0	0	4	480	391.9	1.82	1.4	2.2	4.4	62.5	67.5
C. SAPIDUS	4	4	100	0	0	29	3,480	3807.3	6.42	7.3	.8	4.3	17.5	37.5
L. XANTHURUS	4	3	47	29	23	17	2,040	1585.9	29.03	20.1	4.0	25.0	67.5	117.5
C. REGALIS	4	3	63	28	7	52	6,240	4328.8	16.14	12.2	.3	9.1	37.5	102.5
R. MARGINATA	4	3	90	0	9	11	1,320	1433.3	18.48	18.5	10.6	20.4	132.5	167.5
B. CHRYSURA	4	1	100	0	0	1	120	240.0	.09	.1	.8	.8	42.5	42.5
A. MITCHILLI	4	3	44	55	0	47	5,640	6926.8	7.57	8.0	.1	3.5	32.5	77.5
P. DENTATUS	4	1	0	100	0	1	120	240.0	11.08	22.1	92.4	92.4	207.5	207.5
A. ROSTRATA	4	1	100	0	0	1	120	240.0	2.68	5.3	22.4	22.4	247.5	247.5
M. MENIDIA	4	1	100	0	0	1	120	240.0	.40	.8	3.4	3.4	77.5	77.5
TOTAL						176	21,120		94.64					

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 - 08/29/77 1200 THROUGH 08/30/77 0602

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.
B. TYRANNUS	4	3	57	42	0	14	1,680	1591.9	8.57	7.5	3.3	10.0	62.5	82.5
L. XANTHURUS	4	3	50	50	0	14	1,680	2431.7	24.63	33.7	3.9	21.7	72.5	117.5
C. SAPIDUS	4	4	100	0	0	17	2,040	2520.9	45.88	87.9	.5	184.4	17.5	177.5
A. MITCHILLI	4	3	38	50	11	18	2,160	2614.4	5.16	7.6	.2	3.7	37.5	72.5
C. REGALIS	4	3	64	29	6	75	9,000	9863.3	21.75	23.4	.8	7.8	42.5	97.5
R. MARGINATA	4	3	100	0	0	9	1,080	1262.3	17.54	23.6	7.6	30.1	117.5	182.5
T. MACULATUS	4	3	100	0	0	10	1,200	1492.3	12.74	19.1	.4	39.0	27.5	132.5
P. DENTATUS	4	1	100	0	0	1	120	240.0	5.70	11.4	47.5	47.5	177.5	177.5
P. AMERICANUS	4	1	100	0	0	1	120	240.0	.19	.3	1.6	1.6	32.5	32.5
TOTAL						159	19,080		142.16					

N = NUMBER OF 3-MINUTE SAMPLES.

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

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
PSECO, NEWARK, N.J.

TABLE 2. - (CONTINUED).

SAMPLING PERIOD - 08/25/77 1200 THROUGH 08/26/77 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.
L. XANTHURUS	4	4	41	33	25	24	2,880	1959.5	38.58	28.5	3.3	29.7	67.5	132.5
C. REGALIS	4	4	68	28	4	75	9,000	5857.5	20.46	13.1	.3	11.5	37.5	112.5
B. TYRANNUS	4	4	90	0	10	10	1,200	919.1	6.11	4.4	3.6	7.2	62.5	77.5
T. MACULATUS	4	3	100	0	0	8	960	876.3	9.59	10.8	.2	38.9	22.5	127.5
A. MITCHILLI	4	3	42	50	7	14	1,680	1774.4	3.49	4.1	.1	3.8	32.5	77.5
R. MARGINATA	4	2	62	0	37	8	960	1615.9	15.02	27.3	7.7	33.8	122.5	187.5
C. SAPIDUS	4	3	90	9	0	11	1,320	989.5	74.38	62.6	.7	259.7	22.5	192.5
H. MENIDIA	4	1	100	0	0	2	240	480.0	.26	.5	.9	1.3	52.5	62.5
P. AMERICANUS	4	1	100	0	0	1	120	240.0	.24	.5	2.2	2.2	62.5	62.5
TOTAL						153	18,360		168.15					

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.

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

TABLE 2. - (CONTINUED).

SAMPLING PERIOD - 08/24/77 1200 THROUGH 08/25/77 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.
L. XANTHURUS	4	4	40	40	20	20	2,400	1239.3	37.05	19.1	5.7	31.2	72.5	127.5
C. REGALIS	4	4	65	34	0	29	3,480	1853.8	11.03	7.3	1.0	11.5	42.5	107.5
B. TYRANNUS	4	4	92	7	0	13	1,560	1536.7	6.08	6.0	2.0	6.0	52.5	72.5
A. MITCHILLI	4	4	58	41	0	12	1,440	1036.9	5.03	.8	.3	4.8	32.5	77.5
T. MACULATUS	4	2	100	0	0	2	240	277.1	4.42	8.1	2.1	34.8	37.5	117.5
R. MARGINATA	4	2	100	0	0	6	720	1142.6	8.96	14.5	8.2	23.6	122.5	167.5
C. SAPIDUS	4	2	85	14	0	7	840	1134.1	41.09	79.5	.8	73.5	22.5	162.5
O. TAU	4	1	100	0	0	1	120	240.0	.36	.7	3.0	3.0	52.5	52.5
P. AMERICANUS	4	1	100	0	0	2	240	480.0	.30	.6	.9	1.6	42.5	52.5
TOTAL						92	11,040		114.32					

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&Q, NEWARK, N.J.

TABLE 2. - (CONTINUED).

SAMPLING PERIOD - 08/22/77 1200 THROUGH 08/23/77 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.
C. REGALIS	4	4	71	26	1	52	6,240	4603.9	14.83	13.6	.5	14.2	42.5	167.5
L. XANTHURUS	4	3	23	69	7	13	1,560	1134.1	26.03	18.8	5.2	25.2	72.5	127.5
A. MITCHILLI	4	1	100	0	0	2	240	480.0	.79	1.5	3.1	3.5	72.5	72.5
R. MARGINATA	4	2	77	4	18	22	2,640	4965.1	33.83	65.4	6.7	38.5	117.5	202.5
T. MACULATUS	4	1	100	0	0	1	120	240.0	3.79	7.5	31.6	31.6	117.5	117.5
A. ROSTRATA	4	1	100	0	0	1	120	240.0	2.55	5.1	21.3	21.3	217.5	217.5
B. TYRANNUS	4	2	66	33	0	3	360	459.5	3.46	4.4	7.5	12.2	77.5	197.5
M. MENIDIA	4	1	100	0	0	1	120	240.0	.02		.2	.2	52.5	52.5
C. SAPIDUS	4	1	100	0	0	4	480	960.0	48.07	96.1	.6	70.7	22.5	157.5
TOTAL						99	11,880		133.37					

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
PSEG, NEWARK, N.J.

TABLE 2. - (CONTINUED).

SAMPLING PERIOD - 08/18/77 1201 THROUGH 08/19/77 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.
C. REGALIS	4	4	67	30	2	119	14,280	17458.5	61.04	92.6	.9	30.0	42.5	142.5
A. MITCHILLI	4	4	64	35	0	67	8,040	10431.0	17.83	24.5	.1	5.2	27.5	77.5
L. XANTHURUS	4	4	64	29	6	65	7,800	9400.9	109.41	139.2	4.0	55.3	62.5	152.5
T. MACULATUS	4	3	100	0	0	10	1,200	1269.9	26.11	49.3	1.0	75.1	32.5	142.5
B. TYRANNUS	4	3	55	33	11	9	1,080	1064.3	5.45	4.1	3.2	5.7	62.5	72.5
C. SAPIDUS	4	3	96	3	0	28	3,360	3439.0	381.02	455.0	.1	220.0	17.5	172.5
S. MACULATUS	4	1	100	0	0	1	120	240.0	.01		.1	.1	27.5	27.5
R. MARGINATA	4	2	85	14	0	7	840	1378.6	9.50	16.1	9.5	14.9	122.5	147.5
P. SALTATRIX	4	1	100	0	0	1	120	240.0	.56	1.1	4.7	4.7	77.5	77.5
M. MENIDIA	4	1	100	0	0	1	120	240.0	.24	.4	2.0	2.0	62.5	62.5
TOTAL						308	36,960		611.17					

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 - 08/17/77 1200 THROUGH 08/18/77 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.
L. XANTHURUS	4	4	51	25	22	31	3,720	3621.2	42.69	39.7	8.5	28.6	62.5	117.5
C. REGALIS	4	4	57	32	10	28	3,360	3840.0	19.48	32.9	.9	28.1	52.5	137.5
C. SAPIDUS	4	3	100	0	0	5	600	603.9	46.82	35.3	2.0	175.2	27.5	152.5
A. MITCHILLI	4	2	44	44	11	9	1,080	1585.9	2.60	4.1	.2	4.8	32.5	77.5
B. TYRANNUS	4	2	100	0	0	5	600	908.6	2.98	4.6	3.7	7.8	62.5	82.5
R. MARGINATA	4	1	100	0	0	1	120	240.0	3.15	6.3	26.3	26.3	177.5	177.5
A. PSEUDOHARENGUS	4	1	0	100	0	1	120	240.0	1.18	2.3	9.9	9.9	92.5	92.5
P. SALTATRIX	4	1	100	0	0	2	240	480.0	4.75	9.5	19.1	20.5	122.5	122.5
T. MACULATUS	4	1	100	0	0	4	480	960.0	15.80	31.6	6.6	64.6	67.5	152.5
TOTAL						86	10,320		139.45					

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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SALEM NUCLEAR GENERATING STATION UNIT 1

PSE&G, NEWARK, N.J.

TABLE 2. - (CONTINUED).

SAMPLING PERIOD - 08/15/77 1219 THROUGH 08/16/77 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.
L. XANTHURUS	4	4	37	46	15	32	3,840	3110.7	34.28	15.9	2.6	32.3	62.5	127.5
C. REGALIS	4	4	72	25	1	177	21,240	24482.7	37.49	29.9	.5	24.4	37.5	142.5
B. TYRANNUS	4	3	71	14	14	14	1,680	1774.4	11.45	12.0	1.1	16.3	52.5	97.5
C. SAPIDUS	4	4	100	0	0	13	1,560	989.5	155.73	93.8	2.0	188.2	22.5	162.5
S. MACULATUS	4	2	100	0	0	2	240	277.1	.24	.3	.5	1.5	22.5	22.5
T. MACULATUS	4	3	100	0	0	3	360	240.0	18.76	22.3	7.4	101.6	72.5	167.5
M. MENIDIA	4	1	100	0	0	1	120	240.0	.80	1.6	6.7	6.7	82.5	82.5
A. MITCHILLI	4	3	20	79	0	24	2,880	4519.8	7.20	11.0	.1	4.0	32.5	77.5
R. MARGINATA	4	1	100	0	0	3	360	720.0	6.19	12.3	9.1	19.7	132.5	162.5
P. SALTATRIX	4	1	50	50	0	2	240	480.0	.61	1.2	2.1	3.0	57.5	67.5
M. MARTINICA	4	1	100	0	0	1	120	240.0	.49	.9	4.1	4.1	82.5	82.5
TOTAL						272	32,640		273.24					

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 - 08/11/77 1200 THROUGH 08/12/77 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.
S. VOMER	4	1	100	0	0	1	120	240.0	1.86	3.7	15.5	15.5	82.5	82.5
L. XANTHURUS	4	3	33	33	33	9	1,080	1064.3	8.79	9.9	2.9	12.1	72.5	192.5
C. REGALIS	4	4	69	27	2	228	27,360	42663.3	65.61	89.4	.6	22.2	32.5	112.5
C. SAPIDUS	4	3	100	0	0	7	840	819.7	109.91	130.7	77.8	217.3	102.5	177.5
A. MITCHILLI	4	3	78	21	0	23	2,760	3192.9	6.76	8.1	.4	4.0	32.5	82.5
B. TYRANNUS	4	3	25	75	0	4	480	391.9	1.96	1.6	4.2	8.3	62.5	82.5
A. ROSTRATA	4	1	0	0	100	1	120	240.0	5.24	10.4	43.7	43.7	267.5	267.5
R. MARGINATA	4	2	66	0	33	3	360	459.5	4.90	6.0	11.9	14.8	122.5	142.5
P. SALTATRIX	4	1	100	0	0	1	120	240.0	.25	.5	2.1	2.1	57.5	57.5
M. MENIDIA	4	1	100	0	0	2	240	480.0	.73	1.4	2.7	3.4	72.5	82.5
TOTAL						279	33,480		206.01					

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&D, NEWARK, N.J.

TABLE 2. - (CONTINUED).

SAMPLING PERIOD - 08/10/77 1200 THROUGH 08/11/77 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.
C. REGALIS	4	4	69	25	4	204	24,480	19458.2	74.58	50.1	.4	18.5	42.5	112.5
A. MITCHILLI	4	4	53	39	7	28	3,360	2478.7	11.59	13.9	.6	8.4	27.5	92.5
T. MACULATUS	4	2	100	0	0	4	480	678.8	7.30	14.4	4.0	32.7	22.5	117.5
L. XANTHURUS	4	3	50	43	6	16	1,920	2383.9	25.77	31.7	4.3	22.2	67.5	117.5
B. TYRANNUS	4	3	77	0	22	9	1,080	1536.7	7.01	11.0	4.0	10.8	67.5	77.5
C. SAPIDUS	4	3	84	15	0	26	3,120	3516.3	468.81	597.7	81.6	180.1	107.5	182.5
A. ROSTRATA	4	2	66	33	0	3	360	459.5	6.69	7.7	11.5	25.6	212.5	242.5
R. MARGINATA	4	2	83	16	0	6	720	1142.6	20.40	34.4	4.4	21.0	132.5	227.5
S. VOMER	4	1	100	0	0	1	120	240.0	1.50	3.0	12.5	12.5	77.5	77.5
P. SALTATRIX	4	1	50	50	0	2	240	480.0	.51	1.0	1.8	2.5	57.5	62.5
TOTAL						299	35,880		624.16					

DF=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 - 08/08/77 1210 THROUGH 08/09/77 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.
C. REGALIS	4	4	45	50	3	287	34,440	24369.5	122.11	99.4	.3	25.0	32.5	147.5
L. XANTHURUS	4	4	46	44	8	47	5,640	6050.9	66.28	74.4	2.1	44.8	47.5	147.5
R. MARGINATA	4	2	87	0	12	16	1,920	3527.2	53.69	101.9	8.0	61.3	122.5	227.5
B. TYRANNUS	4	1	100	0	0	1	120	240.0	.40	.8	3.4	3.4	62.5	62.5
T. MACULATUS	4	3	100	0	0	8	960	1036.9	21.46	29.6	7.6	48.0	57.5	132.5
A. MITCHILLI	4	3	15	84	0	58	6,960	8872.4	22.91	30.6	.2	4.5	32.5	82.5
P. BALTATRIX	4	1	100	0	0	3	360	720.0	6.73	13.4	13.5	24.3	107.5	122.5
C. SAPIDUS	4	2	100	0	0	9	1,080	1378.6	140.53	179.4	100.0	201.5	102.5	162.5
M. MENIDIA	4	1	100	0	0	1	120	240.0	.55	1.1	4.6	4.6	82.5	82.5
TOTAL						430	51,600		434.66					

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 - 08/04/77 1200 THROUGH 08/05/77 0608

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.
C. REGALIS	4	4	48	46	5	80	9,600	4485.7	28.12	8.5	.3	15.0	37.5	107.5
L. XANTHURUS	4	4	30	56	13	23	2,760	603.9	26.40	10.3	1.4	31.0	7.5	127.5
A. MITCHILLI	4	4	55	41	3	29	3,480	4098.7	7.57	7.6	.1	4.9	22.5	82.5
S. VOMER	4	1	0	100	0	2	240	480.0	2.73	5.4	11.1	11.7	77.5	82.5
T. MACULATUS	4	3	100	0	0	7	840	1064.3	16.30	18.0	7.4	31.5	67.5	132.5
C. SAPIDUS	4	3	100	0	0	13	1,560	1064.3	185.81	144.1	60.6	227.7	92.5	162.5
R. MARGINATA	4	2	100	0	0	4	480	554.2	7.40	8.6	8.7	19.3	117.5	167.5
M. MENIDIA	4	1	100	0	0	2	240	480.0	.21	.4	.8	1.0	42.5	52.5
P. AMERICANUS	4	1	0	100	0	1	120	240.0	.15	.3	1.3	1.3	47.5	47.5
TOTAL						161	19,320		274.69					

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 - 08/03/77 1200 THROUGH 08/04/77 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.
A. MITCHILLI	4	3	63	32	4	46	5,520	7167.9	13.81	18.2	.8	5.2	42.5	82.5
L. XANTHURUS	4	4	56	34	8	58	6,960	6540.4	70.83	67.2	3.0	29.5	62.5	127.5
C. REGALIS	4	4	56	41	1	47	8,040	6372.4	19.01	15.7	.3	9.2	37.5	102.5
T. MACULATUS	4	2	100	0	0	2	240	277.1	6.85	11.7	6.5	50.6	67.5	132.5
S. AQUOSUS	4	1	100	0	0	1	120	240.0	.57	1.1	4.8	4.8	72.5	72.5
R. MARGINATA	4	1	100	0	0	2	240	480.0	4.59	9.1	15.4	22.9	142.5	162.5
C. SAPIDUS	4	3	100	0	0	8	960	1036.9	115.60	142.2	91.5	188.6	117.5	162.5
M. MENIDIA	4	1	0	0	100	1	120	240.0	.21	.4	1.8	1.8	57.5	57.5
B. TYRANNUS	4	1	100	0	0	10	1,200	2400.0	6.26	12.5	2.4	6.3	52.5	77.5
S. MACULATUS	4	1	100	0	0	1	120	240.0	.06	.4	.5	.5	32.5	32.5
TOTAL						196	23,520		237.79					

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. - IMPINGEMENT - S.N.G.S, CIRCULATING WATER SYSTEM INTAKE, 1 AUGUST THROUGH 1 SEPTEMBER 1977.

SAMPLING PERIOD - 08/01/77 1200 THROUGH 08/02/77 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.
L. XANTHURUS	4	4	30	57	11	24	3,120	2234.2	32.84	24.8	1.2	25.0	57.5	117.5
C. REGALIS	4	4	37	62	0	16	1,920	2880.0	7.06	11.9	.7	9.2	47.5	107.5
A. MITCHILLI	4	3	46	46	8	50	6,000	9809.7	15.02	24.9	.9	3.9	52.5	82.5
T. MACULATUS	4	2	100	0	0	4	480	678.8	7.28	12.8	5.7	22.6	67.5	102.5
B. TYRANNUS	4	2	25	50	25	4	480	678.8	2.05	3.2	2.9	5.5	57.5	72.5
C. SAPIDUS	4	3	100	0	0	8	960	1299.8	119.35	138.4	54.0	242.2	97.5	152.5
M. MENIDIA	4	1	0	100	0	1	120	240.0	.16	.3	1.4	1.4	57.5	57.5
P. AMERICANUS	4	1	100	0	0	1	120	240.0	.04		4.0	4.0	47.5	47.5
S. AQUOSUS	4	1	100	0	0	1	120	240.0	.24	.4	2.0	2.0	62.5	62.5
TOTAL						111	13,320		184.04					

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&Q, NEWARK, N.J.

TABLE 3. - IMPINGEMENT - S.N.G.S. SERVICE WATER SYSTEM INTAKE, 1 AUGUST THROUGH 1 SEPTEMBER 1977.

SAMPLING PERIOD - 08/01/77 0830 TO 08/02/77 0830

SPECIES	NUMBER	WT. (GM)	WEIGHT		LENGTH	
			MIN.	MAX.	MIN.	MAX.
L. XANTHURUS	321	2598.10	2.0	38.0	57.5	132.5
C. REGALIS	39	189.10	.4	11.3	37.5	112.5
O. TAU	1	15.40	15.4	15.4		
A. MITCHILLI	19	52.70	1.5	4.1	57.5	82.5
B. TYRANNUS	17	77.10	1.5	11.0	62.5	92.5
P. AMERICANUS	4	5.00	.5	2.6	52.5	77.5
T. MACULATUS	2	11.50	4.0	7.5	62.5	72.5
A. ROSTRATA	2	56.40	27.3	29.1	247.5	287.5
C. SAPIDUS	1	16.30	16.3	16.3	57.5	57.5
TOTAL	406	3021.60				

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

TABLE 3. - (CONTINUED).

SAMPLING PERIOD - 08/03/77 0830 TQ 08/04/77 0830

SPECIES	NUMBER	WT. (GM)	WEIGHT		LENGTH	
			MIN.	MAX.	MIN.	MAX.
L. XANTHURUS	1441	1430.50	2.0	45.3	52.5	142.5
C. REGALIS	48	139.20	.3	13.5	37.5	107.5
A. MITCHILLI	13	29.20	1.5	3.3	57.5	77.5
S. AQUOSUS	3	8.90	2.4	4.1	72.5	72.5
T. MACULATUS	1	3.30	3.3	3.3	57.5	57.5
P. AMERICANUS	2	2.10	1.0	1.1	47.5	52.5
A. ROSTRATA	1	40.50	1.0	1.1		
B. TYRANNUS	5	22.10	3.9	6.1	67.5	77.5
C. SAPIDUS	1	27.30	27.3	27.3	87.5	87.5
TOTAL	1515	1703.10				

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

TABLE 3. - (CONTINUED).

SAMPLING PERIOD - 08/04/77 0830 TO 08/05/77 0830

SPECIES	NUMBER	WT. (GM)	WEIGHT		LENGTH	
			MIN.	MAX.	MIN.	MAX.
L. XANTHURUS	253	3260.00	2.5	39.1	57.5	137.5
C. REGALIS	59	161.60	.2	8.3	32.5	92.5
B. TYRANNUS	14	77.20	2.5	16.4	57.5	67.5
A. MITCHILLI	9	18.50	1.0	2.6	57.5	82.5
S. AQUOSUS	5	16.20	1.5	4.2	57.5	72.5
P. AMERICANUS	4	7.70	1.5	2.5	52.5	57.5
P. SALTATRIX	1	9.00	9.0	9.0	107.5	107.5
R. MARGINATA	2	48.70	17.7	31.0	162.5	182.5
T. MACULATUS	1	10.00	10.0	10.0	82.5	82.5
I. NEBULOSUS	1	83.70	10.0	10.0		
C. RAPIDUS	1	99.00	99.0	99.0	132.5	132.5

TOTAL	350	3791.60				
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IMPINGEMENT MONITORING PROGRAM
SALEM NUCLEAR GENERATING STATION UNIT 1
PSE&D, NEWARK, N.J.

TABLE 3. - (CONTINUED).

SAMPLING PERIOD - 08/08/77 0830 TO 08/09/77 0830

SPECIES	NUMBER	WT. (GM)	WEIGHT		LENGTH	
			MIN.	MAX.	MIN.	MAX.
B. TYRANNUS	2	111.40	9.4	102.0	82.5	182.5
L. XANTHURUS	64	805.30	2.3	37.5	52.5	137.5
C. REGALIS	33	111.20	.4	6.3	42.5	117.5
A. MITCHILLI	2	4.00	1.6	2.4	67.5	67.5
R. MARGINATA	2	74.80	35.0	39.8	182.5	202.5
M. BERYLLINA	1	1.40	1.4	1.4		
TOTAL	104	1108.10				

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

TABLE 3. - (CONTINUED).

SAMPLING PERIOD - 08/10/77 0830 TO 08/11/77 0830

SPECIES	NUMBER	WT. (GM)	WEIGHT		LENGTH	
			MIN.	MAX.	MIN.	MAX.
L. XANTHURUS	90	1158.90	5.1	36.7	67.5	137.5
C. REGALIS	97	269.70	.5	24.3	37.5	127.5
A. MITCHILLI	15	31.00	.8	3.6	27.5	72.5
B. TYRANNUS	9	59.80	3.8	9.5	62.5	87.5
P. SALTATRIX	2	24.70	8.5	16.2	102.5	117.5
L. MACROCHIRUS	1	28.50	28.5	28.5	127.5	127.5
R. MARGINATA	1	10.70	10.7	10.7	127.5	127.5
TOTAL	215	1583.30				

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

TABLE 3, - (CONTINUED).

SAMPLING PERIOD - 08/11/77 0830 TO 08/12/77 0830

SPECIES	NUMBER	WT. (GM)	WEIGHT		LENGTH	
			MIN.	MAX.	MIN.	MAX.
L. XANTHURUS	77	926.10	3.5	38.4	67.5	137.5
C. REGALIS	35	117.50	1.2	14.8	47.5	117.5
B. TYRANNUS	15	78.90	2.6	9.1	62.5	87.5
R. MARGINATA	4	70.70	9.5	30.0	127.5	187.5
P. SALTATRIX	1	12.80	12.8	12.8	107.5	107.5
A. MITCHILLI	4	12.10	.3	3.1	37.5	72.5
P. DENTATUS	1	28.00	28.0	28.0	152.5	152.5
S. AQUOSUS	1	8.60	8.6	8.6		
I. NEBULOSUS	1	222.40	8.6	8.6	142.5	142.5
TOTAL	141	1477.10				

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

TABLE 3. - (CONTINUED).

SAMPLING PERIOD - 08/15/77 0830 TO 08/16/77 0830

SPECIES	NUMBER	WT. (GM)	WEIGHT		LENGTH	
			MIN.	MAX.	MIN.	MAX.
L. XANTHURUS	147	2144.30	3.1	40.4	67.5	142.5
C. REGALIS	14	84.40	.7	11.0	42.5	107.5
A. MITCHILLI	11	27.90	1.1	4.0	57.5	77.5
B. TYRANNUS	22	119.90	2.0	10.0	57.5	92.5
M. AMERICANA	1	104.30	104.3	104.3	202.5	202.5
D. TAU	1	1.30	1.3	1.3	42.5	42.5
T. MACULATUS	1	8.50	8.5	8.5	77.5	77.5
P. DENTATUS	2	118.80	55.6	63.2	182.5	192.5
S. AQUOSUS	1	3.70	3.7	3.7	77.5	77.5
TOTAL	202	2613.10				

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

TABLE 3. - (CONTINUED).

SAMPLING PERIOD - 08/17/77 0830 TO 08/18/77 0830

SPECIES	NUMBER	WT. (GM)	WEIGHT		LENGTH	
			MIN.	MAX.	MIN.	MAX.
A. ROSTRATA	1	27.30	27.3	27.3	252.5	252.5
B. TYRANNUS	23	182.90	5.3	12.5	72.5	102.5
A. MITCHILLI	9	19.50	1.5	2.9	62.5	72.5
P. SALTATRIX	2	34.30	16.0	18.3	117.5	117.5
C. REGALIS	14	182.10	1.3	32.4	52.5	142.5
P. DENTATUS	1	43.30	43.3	43.3	172.5	172.5
L. XANTHURUS	141	2320.00	2.4	47.8	62.5	142.5
M. MARTINICA	1	5.00	5.0	5.0		
B. AQUOSUS	1	3.10	3.1	3.1	72.5	72.5
R. MARGINATA	1	14.00	14.0	14.0	147.5	147.5
TOTAL	216	2831.50				

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

TABLE 3. - (CONTINUED).

SAMPLING PERIOD - 08/18/77 1000 TO 08/19/77 1000

SPECIES	NUMBER	WT. (GM)	WEIGHT		LENGTH	
			MIN.	MAX.	MIN.	MAX.
L. XANTHURUS	61	873.60	3.9	47.6	72.5	157.5
B. TYRANNUS	10	125.10	3.4	51.3	67.5	147.5
C. REGALIS	19	114.80	1.2	19.0	42.5	122.5
S. FUSCUS	1	2.60	2.6	2.6	187.5	187.5
A. MITCHILLI	4	18.30	2.0	5.0	62.5	82.5
S. AQUOSUS	1	3.00	3.0	3.0	67.5	67.5
R. MARGINATA	2	21.80	10.0	11.8	132.5	142.5
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TOTAL	100	1159.20				

IMPINGEMENT MONITORING PROGRAM
SALEM NUCLEAR GENERATING STATION UNIT 1
PSEB0, NEWARK, N.J.

TABLE 3. - (CONTINUED).

SAMPLING PERIOD - 08/22/77 0830 TO 08/23/77 0830

SPECIES	NUMBER	WT. (GM)	WEIGHT		LENGTH	
			MIN.	MAX.	MIN.	MAX.
L. XANTHURUS	7	82.40	8.5	27.0	82.5	122.5
B. TYRANNUS	1	40.00	40.0	40.0	152.5	152.5
TOTAL	8	122.40				

IMPINGEMENT MONITORING PROGRAM
SALEM NUCLEAR GENERATING STATION UNIT 1
PBE10, NEWARK, N.J.

TABLE 3. - (CONTINUED).

SAMPLING PERIOD - 08/24/77 0830 TO 08/25/77 0830

SPECIES	NUMBER	WT. (GM)	WEIGHT		LENGTH	
			MIN.	MAX.	MIN.	MAX.
L. XANTHURUS	12	308.80	6.1	40.9	82.5	137.5
C. REGALIS	3	4.40	1.4	1.5	47.5	57.5
B. TYRANNUS	2	8.90	6.1	28.5		
P. DENTATUS	1	1.20	1.2	1.2	57.5	57.5
TOTAL	18	323.30				

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

TABLE 3. - (CONTINUED).

SAMPLING PERIOD - 08/25/77 0830 TO 08/26/77 0830

SPECIES	NUMBER	WT. (GM)	WEIGHT		LENGTH	
			MIN.	MAX.	MIN.	MAX.
L. XANTHURUS	25	465.70	9.0	36.2	77.5	127.5
P. DENTATUS	2	121.50	59.4	42.1	187.5	192.5
S. VOMER	1	15.50	15.5	15.5	87.5	87.5
B. TYRANNUS	3	12.80		8.6	62.5	67.5
S. AQUOSUS	1	2.20	2.2	2.2	57.5	57.5
P. AMERICANUS	1	.90	.9	.9	47.5	47.5
R. MARGINATA	1	7.50	7.5	7.5	117.5	117.5
TOTAL	34	626.10				

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

TABLE 3. - (CONTINUED).

SAMPLING PERIOD - 08/29/77 0830 TO 08/30/77 0800

SPECIES	NUMBER	WT. (GM)	WEIGHT		LENGTH	
			MIN.	MAX.	MIN.	MAX.
A. ROSTRATA	1	112.30	7.5	7.5		
B. MACULATUS	1	2.00	2.0	2.0	32.5	32.5
L. XANTHURUS	36	429.00	3.2	24.2	2.5	122.5
C. REGALIS	3	31.10	1.9	15.2	62.5	122.5
B. TYRANNUS	4	24.30	3.6	8.1	67.5	82.5
A. PSEUDOHARENGUS	1	5.70	5.7	5.7	77.5	77.5
A. MITCHILLI	1	1.80	1.8	1.8	62.5	62.5
P. SALTATRIX	1	4.80	4.8	4.8	72.5	72.5
C. SAPIDUS	1	1.20	.2	.2	17.5	17.5
TOTAL	49	611.20				

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

TABLE 3, - (CONTINUED).

SAMPLING PERIOD - 08/31/77 0830 TO 09/01/77 0830

SPECIES	NUMBER	WT. (GM)	WEIGHT		LENGTH	
			MIN.	MAX.	MIN.	MAX.
L. XANTHURUS	31	564.90	8.0	36.7	82.5	132.5
P. SALTATRIX	1	20.00	20.0	20.0	122.5	122.5
B. TYRANNUS	1	6.80	6.8	6.8	77.5	77.5
P. AMERICANUS	4	12.30	1.9	6.2	52.5	92.5
C. REGALIS	7	16.20	.5	5.0	52.5	72.5
C. RAPIDUS	1	103.60	103.6	103.6	112.5	112.5
R. MARGINATA	1	9.50	9.5	9.5	117.5	117.5
A. MITCHILLI	8	20.50	.5	2.0	32.5	77.5
TOTAL	54	753.80				

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