



PEACH BOTTOM—THE POWER OF EXCELLENCE

PHILADELPHIA ELECTRIC COMPANY

PEACH BOTTOM ATOMIC POWER STATION

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D. B. Miller, Jr.
Vice President

April 30, 1991

Docket Nos. 50-277
50-278

Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

SUBJECT: Peach Bottom Atomic Power Station Units 2 and 3, 1990 Radiation Dose Assessment Report

Gentlemen:

Attached is the Peach Bottom Atomic Power Station Radiation Dose Assessment Report for the period, January 1, 1990 through December 31, 1990. This report is submitted in accordance with the Technical Specification to operating licenses DPR 44 and 56, Section 6.9.2.h(3). The report indicates that PBAPS releases were a small fraction of the limits listed in 40 CFR 190, "Environmental Radiation Protection Standards for Nuclear Power Operation."

If you have any questions regarding this matter, please call.

Sincerely,

R.A. Burricelli for D.B. Miller

AAF MJB
DBM/AAF/REL/MJB:jrf

Enclosure

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PHILADELPHIA ELECTRIC COMPANY

PEACH BOTTOM ATOMIC POWER STATION
UNIT NOS. 2 & 3

DOCKET NOS. 50-277 AND 50-278

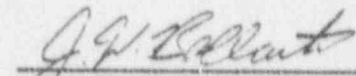
RADIATION DOSE
ASSESSMENT REPORT

NO. 6

JANUARY 1, 1990 THROUGH DECEMBER 31, 1990

SUBMITTED TO
THE UNITED STATES NUCLEAR REGULATORY COMMISSION
PURSUANT TO
FACILITY OPERATION LICENSES DPR-44 & DPR-56

Prepared by:


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Approved by:

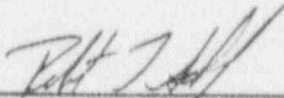

R.J. Scholz

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I. INTRODUCTION AND SUMMARY

In accordance with the unique reporting requirement of Technical Specification 6.9.2 applicable during the reporting period, this report summarizes the radiation doses due to radioactive effluent releases from Peach Bottom Atomic Power Station Units 2 and 3 for the period January 1, 1990, through December 31, 1990.

Detailed discussion of the methodology utilized in the report has been provided in a previous report (1). Only in those cases where the methodology has been changed will it be discussed in detail.

The radiation doses due to the release of radioactive materials during the reporting period were within 10CFR50 Appendix I limits and with 40CFR190 limits as indicated on Table I-1, Comparison of doses resulting from PBAPS Units 2 and 3 with 10CFR50 Appendix I Design Objectives. Specifically, the maximum offsite dose due to liquid releases was $6.40\text{E-}03$ mrem; the maximum dose due to gaseous releases was $3.89\text{E-}01$ mrem.

Since PBAPS releases were well within applicable radioactive effluent technical specifications limits and were a small fraction of 10CFR50 Appendix I design objectives, it is concluded that PBAPS releases were a small fraction of 40CFR190, "Environmental Radiation Protection Standards for Nuclear Power Operation" limits.

TABLE I-1

COMPARISON OF DOSES RESULTING FROM PBAPS UNITS 2 AND 3 WITH
10CFR50 APPENDIX I DESIGN OBJECTIVES

		MAXIMUM DOSE FROM PBAPS	DESIGN OBJECTIVES REG. GUIDE 1.109	
DOSE PATHWAY		VALUE	$\frac{1}{2}$ of A	A
I Liquid Effluents				
a.	Dose to total body from all pathways	4.24E-03	0.71	3 mrem/yr/unit
b.	Dose to any organ from all pathways	6.40E-03	0.32	10 mrem/yr/unit
II Gaseous Effluents*				
a.	Gamma dose in air	9.14E-03	0.05	10 mrad/yr/unit
b.	Beta dose in air	6.08E-02	0.15	20 mrad/yr/unit
c.	Dose to total body of an individual	6.34E-03	0.06	5 mrem/yr/unit
d.	Dose to skin of an individual	3.75E-02	0.13	15 mrem/yr/unit
e.	Dose to any organ from all pathways	3.89E-01	1.30	15 mrem/yr/unit

* 10CFR50 Appendix I specifies dose from noble gases only for categories II (a,b,c and d). PBAPS doses presented for items II (c and d) include noble gas and particulate components.

II. STATION LOCATION

Peach Bottom Atomic Power Station is located on the western shore of Conowingo Pond in York County, Pennsylvania. The station, two 3293 MWT boiling water reactors, is described in the Updated Final Safety Analysis Report (2). Conowingo Pond is the receiving stream for liquid radwaste effluents.

III. PEACH BOTTOM LIQUID AND GASEOUS RADWASTE EFFLUENTS

The release of radioactive materials in liquid and gaseous effluents from PBAPS were reported in the Peach Bottom Atomic Power Station Semi-annual Effluent Release Reports Nos. 28 and 29 (3 and 4).

IV. HYDROLOGY AND METEOROLOGY

A. HYDROLOGY

Travel times and dilution factors were determined based on the daily Conowingo Pond flows in 1990. Daily Pond flows were reviewed to determine a mean monthly Pond flow. Each daily flow value was assigned to one of three Pond flow regimes (5). The resulting daily travel times and dilution factors were then averaged to determine a monthly mean travel time and dilution factor for each receptor location.

The travel times and dilution factors for those locations in Conowingo Pond, where the highest doses were calculated, are listed in Table IV-1 for each monthly flow regime.

B. METEOROLOGY

Section VIII describes in detail the meteorology in the PBAPS region during 1990, affecting the atmospheric dispersion and the deposition of radionuclides from PBAPS gaseous radwaste releases. This meteorology was used for the evaluation of PBAPS Units 2 and 3 gaseous releases.

TABLE IV-1
PEACH BOTTOM RECEPTOR LOCATION PARAMETERS FOR 1990

Month	1500 Feet Down-Flow of Plant Discharge Travel Time (hrs)	Dilution Factor	Glen Cove Travel Time (hrs)	Dilution Factor	Conowingo Dam Travel Time (hrs)	Dilution Factor	Chester Water Intake Travel Time (hrs)	Dilution Factor
January	2.3	1.9	15.2	4.1	22.2	7.7	7.1	5.9
February	1.5	1.7	11.0	12.0	16.0	14.0	4.0	8.3
March	1.9	1.9	13.1	5.8	19.1	10.2	5.6	7.0
April	1.8	1.8	12.3	7.1	17.9	11.2	4.9	7.4
May	1.8	1.8	12.3	7.2	17.9	11.3	4.9	7.4
June	2.8	2.0	16.6	3.6	24.4	7.3	9.4	5.7
July	3.2	1.8	19.6	2.7	28.8	5.3	10.3	4.6
August	3.9	1.9	21.7	2.6	31.9	5.2	14.6	4.5
September	4.1	1.8	22.7	2.5	33.3	5.0	15.3	4.4
October	2.2	1.6	15.6	3.5	22.7	6.1	6.1	5.1
November	1.8	1.8	12.5	6.6	18.2	11.0	5.1	7.3
December	1.6	1.8	11.5	9.2	16.3	12.7	4.4	7.9

V. LIQUID AND GASEOUS PATHWAY DOSE MODELS

The maximum annual doses to individuals in unrestricted areas which could result from the effluent releases from PBAPS were calculated according to the guidelines in USNRC Regulatory Guide 1.109 (6) and the models described therein. Computer codes, LADTAP and GASPAR, which incorporate the computational models described in Regulatory Guide 1.109 and which were obtained from the NRC staff were used to perform the liquid and gaseous dose calculations respectively.

The liquid release pathways which were considered in making these calculations included drinking water, aquatic foods, shoreline usage, swimming and boating. All pathways were calculated using the equations and dose factors provided in the LADTAP computer code.

The gaseous release pathways which were considered included external radiation from the air and ground, inhalation and ingestion of vegetation, meat, cow's milk and goat's milk. The inhalation and ingestion pathways were evaluated for the adult, teenager, child and infant age groups. The dose calculation at each receptor was done in two parts - a dose component resulting from the off-gas stack and one from the building vents. These doses were then summed to yield a total dose for each pathway and organ.

VI. RECEPTOR LOCATION AND USAGE FACTORS FOR ANNUAL DOSE EVALUATIONS

A. Liquid releases

The annual doses resulting for PBAPS liquid radwaste releases were calculated at various locations on Conowingo Pond. The locations are shown in Figure VI-1. These locations were selected because they represent areas where the listed pathway activities are most likely to occur. The locations and pathways are:

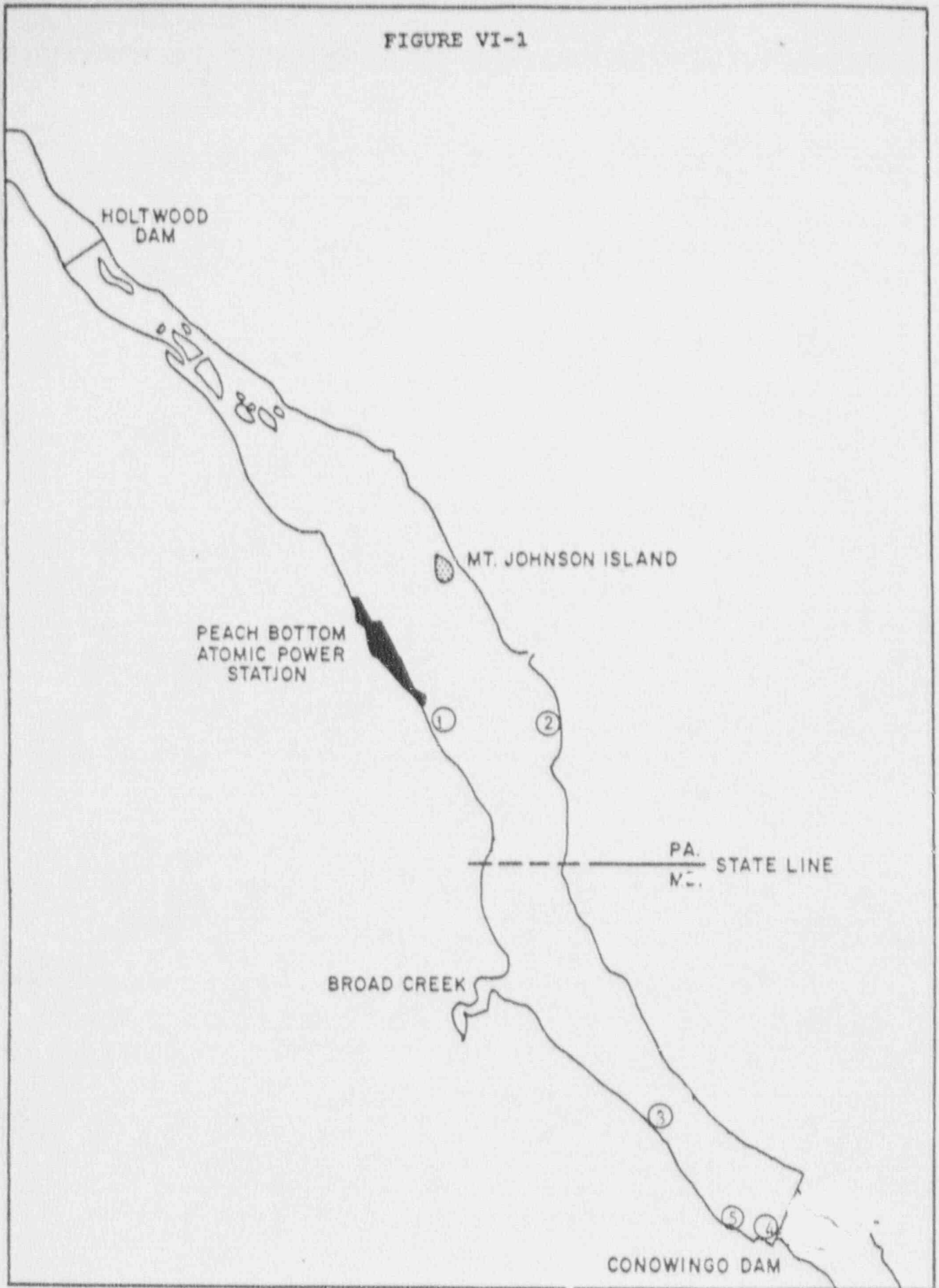
<u>Location Number</u>	<u>Name</u>	<u>Pathways</u>
1	1500 feet below discharge	boating, fish
2	Chester Water Authority	drinking water
3	Glen Cove	boating, fish, shoreline, recreation, swimming
4	Conowingo Dam	drinking water

The City of Baltimore (location 5) withdrew drinking water from Conowingo Pond at an average of 2.5 days per month throughout 1990. However, since Conowingo Pond represents only a small fraction of the water supply for the City of Baltimore, any doses resulting from this pathway are much smaller than those estimated from drinking water at Conowingo Dam. No other liquid pathway usage and consumption rates used in these calculations changed from previous years (7).

B. Gaseous Releases

In order to assure that the location of the maximum off-site annual dose to each pathway resulting from PBAPS radioactive gaseous effluents was identified, annual doses at several locations were calculated. These included real locations of dairy pastures, and residences in each sector. Meat animal pastures were assumed to co-exist with dairy pastures. A dairy pasture survey was performed in 1990 which determined the pasture closest to PBAPS in each sector. There was one herd of milk goats within five miles of PBAPS. No gaseous pathway usage and consumption rates used in these calculation changed from previous years (8).

FIGURE VI-1



Locations at which annual doses to individuals resulting from PBAPS liquid radwaste releases were evaluated.

VII. CALCULATED ANNUAL DOSES

A. Liquid Releases

Tables VII-1 through VII-4 list the calculated annual doses through the various pathways to the maximum individual in the adult, teenager, child and infant age categories as a result of PBAPS liquid radwaste releases.

The maximum calculated total body dose was $4.24\text{E}-03$ mrem to the adult and occurred at Location 1, 1500 feet downstream from the PBAPS Discharge canal exit. This is 0.71% of the 10CFR50, Appendix I design objective.

The maximum calculated dose to any organ was $6.40\text{E}-03$ mrem to the teenager liver and also occurred at Location 1. This dose is 0.32% of the 10CFR50 Appendix I design objective.

B. Gaseous Releases

Tables VII-5 and VII-6 list the annual doses to all organs through pathway by age group at the location where a person would receive the largest calculated total body and organ dose respectively resulting from exposure to noble gases, particulates and iodine released from PBAPS.

The maximum calculated total body dose was $6.35\text{E}-03$ mrem to the child and occurred at a residence 3800 feet SSE from the PBAPS building vents. This dose is 0.06% of the 10CFR50 Appendix I design objective.

The maximum calculated organ dose was $3.89\text{E}-01$ mrem to the infant thyroid and occurred at a dairy farm 6600 feet SSW from the PBAPS building vents. This dose is 1.30% of the 10CFR50 Appendix I design objective.

The maximum calculated skin dose was $3.75\text{E}-02$ mrem at a residence 14500 feet N from the PBAPS building vents. This dose is 0.13% of the Appendix I design objectives.

The maximum offsite gamma air dose is $9.14\text{E}-03$ millirad, located 15600 feet ESE from the PBAPS building vents. This dose is 0.05% of the 10CFR50 Appendix I design objective.

The maximum offsite beta air dose is $6.08\text{E}-02$ millirad, located 14100 feet N from the PBAPS building vents. This dose is 0.15% of the 10CFR50 Appendix I design objective.

objective.

The location where a person would receive the largest calculated total body dose from exposure to PBAPS releases due to non-occupational activities inside the site boundary is at the boat ramp approximately 3300 feet NNW of the PBAPS building vents. The calculated total body dose is $5.26\text{E-}05$ mrem and calculated skin dose is $1.31\text{E-}02$ mrem assuming continuous occupancy. Assuming the shoreline recreational usage factor (325 hours per year) would result in an even more insignificant dose.

TABLE VII-1
CALCULATED MAXIMUM ANNUAL DOSES TO ADULT RESULTING FROM PBAPS LIQUID RADWASTE RELEASES
(mrem/year)

Map No.	Location	Pathway	Skin	Bone	Liver	Total Body	Thyroid	Kidney	Lung	GI-L.I
1	1500 ft. below discharge canal exit	Eating fish	0.00E+00	4.39E-03	6.19E-03	4.24E-03	6.36E-05	2.07E-03	6.63E-04	9.22E-04
		Boating	0.00E+00	2.92E-07	2.92E-07	2.92E-07	2.92E-07	2.92E-07	2.92E-07	2.92E-07
		Total	0.00E+00	4.39E-03	6.19E-03	4.24E-03	6.39E-05	2.07E-03	6.63E-04	9.22E-04
3	Glen Cove	Eating Fish	0.00E+00	1.51E-03	2.06E-03	1.41E-03	2.02E-05	6.80E-04	2.20E-04	3.82E-04
		Shoreline	7.88E-05	6.73E-05	6.73E-05	6.73E-05	6.73E-05	6.73E-05	6.73E-05	6.73E-05
		Swimming	0.00E+00	4.73E-07	4.73E-07	4.73E-07	4.73E-07	4.73E-07	4.73E-07	4.73E-07
		Boating	0.00E+00	1.01E-07	1.01E-07	1.01E-07	1.01E-07	1.01E-07	1.01E-07	1.01E-07
		Total	7.88E-05	1.58E-03	2.13E-03	1.48E-03	8.81E-05	7.48E-04	2.88E-04	4.50E-04
4	Conowingo Dam	Eating Fish	0.00E+00	8.56E-04	1.18E-03	8.08E-04	1.17E-05	3.90E-04	1.26E-04	2.07E-04
		Drinking	0.00E+00	1.53E-05	1.45E-04	1.39E-04	1.45E-04	1.32E-04	1.27E-04	1.32E-04
		Fishing from dam	0.00E+00	1.56E-07	1.56E-07	1.56E-07	1.56E-07	1.56E-07	1.56E-07	1.56E-07
		Total	0.00E+00	8.71E-04	1.33E-03	9.47E-04	1.57E-04	5.22E-04	2.53E-04	3.39E-04

TABLE VII-2
CALCULATED MAXIMUM ANNUAL DOSES TO TEENAGER RESULTING FROM PBAPS LIQUID RADWASTE RELEASES
(mrem/year)

Map No.	Location	Pathway	Skin	Bone	Liver	Total Body	Thyroid	Kidney	Lung	GI-LLI
1	1500 ft. below discharge canal exit	Eating fish	0.00E+00	4.67E-03	6.40E-03	2.48E-03	5.71E-05	2.12E-03	7.92E-04	6.94E-04
		Boating	0.00E+00	2.92E-07	2.92E-07	2.92E-07	2.92E-07	2.92E-07	2.92E-07	2.92E-07
		Total	0.00E+00	4.67E-03	6.40E-03	2.48E-03	5.74E-05	2.12E-03	7.92E-04	6.94E-04
3	Glen Cove	Eating Fish	0.00E+00	1.62E-03	2.13E-03	8.32E-04	1.79E-05	6.99E-04	2.62E-04	2.87E-04
		Shoreline	7.88E-05	6.73E-05	6.73E-05	6.73E-05	6.73E-05	6.73E-05	6.73E-05	6.73E-05
		Swimming	0.00E+00	4.73E-07	4.73E-07	4.73E-07	4.73E-07	4.73E-07	4.73E-07	4.73E-07
		Boating	0.00E+00	1.01E-07	1.01E-07	1.01E-07	1.01E-07	1.01E-07	1.01E-07	1.01E-07
		Total	7.88E-05	1.69E-03	2.20E-03	9.00E-04	8.58E-05	7.67E-04	3.30E-04	3.57E-04
4	Conowingo Dam	Eating Fish	0.00E+00	9.10E-04	1.22E-03	4.90E-04	1.08E-05	4.00E-04	1.49E-04	1.64E-04
		Drinking	1.49E-05	9.48E-05	9.58E-05	1.05E-04	9.45E-05	9.04E-05	9.25E-05	4.75E-04
		Fishing from dam	0.00E+00	1.56E-07	1.56E-07	1.56E-07	1.56E-07	1.56E-07	1.56E-07	1.56E-07
		Total	1.49E-05	1.00E-03	1.32E-03	5.95E-04	1.05E-04	4.91E-04	2.42E-04	6.39E-04

TABLE VII-3
CALCULATED MAXIMUM ANNUAL DOSES TO CHILD RESULTING FROM PBAPS LIQUID RADWASTE RELEASES
(mrem/year)

Rep No.	Location	Pathway	Skin	Bone	Liver	Total Body	Thyroid	Kidney	Lung	GI-LI1
1	1500 ft. below discharge canal exit	Eating fish	0.00E+00	5.86E-03	5.70E-03	1.13E-03	5.67E-05	1.81E-03	6.31E-04	2.74E-04
		Boating	0.00E+00	1.63E-07	1.63E-07	1.63E-07	1.63E-07	1.63E-07	1.63E-07	1.63E-07
		Total	0.00E+00	5.86E-03	5.70E-03	1.13E-03	5.69E-05	1.81E-03	6.31E-04	2.74E-04
3	Glen Cove	Eating Fish	0.00E+00	2.02E-03	1.91E-03	3.92E-04	1.75E-05	6.03E-04	2.09E-04	1.15E-04
		Shoreline	3.40E-06	2.35E-06	2.35E-06	2.35E-06	2.35E-06	2.35E-06	2.35E-06	2.35E-06
		Boating	0.00E+00	5.65E-08	5.65E-08	5.65E-08	5.65E-08	5.65E-08	5.65E-08	5.65E-08
		Total	3.40E-06	2.02E-03	1.91E-03	3.94E-04	1.99E-05	6.05E-04	2.11E-04	1.17E-04
4	Corowingo Dam	Eating Fish	0.00E+00	1.14E-03	1.08E-03	2.21E-04	1.01E-05	3.42E-04	1.20E-04	6.21E-05
		Drinking	0.00E+00	4.35E-05	2.09E-04	1.77E-04	2.10E-04	1.81E-04	1.73E-04	1.72E-04
		Fishing from dam	0.00E+00	7.12E-09	7.12E-09	7.12E-09	7.12E-09	7.12E-09	7.12E-09	7.12E-09
		Total	0.00E+00	1.18E-03	1.29E-03	3.98E-04	2.20E-04	5.23E-04	2.93E-04	2.31E-04

TABLE VII-4
CALCULATED MAXIMUM ANNUAL DOSES TO INFANT RESULTING FROM PBAPS LIQUID RADWASTE RELEASES
(mrem/year)

Map No.	Location	Pathway	Skin	Bone	Liver	Total Body	Thyroid	Kidney	Lung	GI-LII
4	Conowingo Dam	Drinking		4.68E-05	2.16E-04	1.72E-04	2.31E-04	1.75E-04	1.75E-04	1.73E-04

TABLE VII-5
ANNUAL DOSES TO ALL ORGANS BY PATHWAY AT LOCATION
OF HIGHEST CALCULATED TOTAL BODY DOSE

		ANNUAL BETA AIR DOSE = 0.0		MILLIRADS				ANNUAL GAMMA AIR DOSE = 0.0		MILLIRADS	
PATHWAY	T. BODY	GI TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN			
PLUME	4.39E-05	4.39E-05	4.39E-05	4.39E-05	4.39E-05	4.39E-05	3.95E-04	2.45E-02			
GROUND	2.59E-05	2.59E-05	2.59E-05	2.59E-05	2.59E-05	2.59E-05	2.59E-05	3.15E-05			
VEGET											
ADULT	2.79E-03	4.75E-04	1.20E-02	5.23E-05	8.91E-05	1.66E-02	4.85E-08	1.44E-09			
TEEN	3.63E-03	5.85E-04	1.59E-02	5.14E-05	8.78E-05	1.45E-02	9.06E-08	1.72E-09			
CHILD	6.20E-03	4.67E-04	2.77E-02	7.13E-05	1.16E-04	2.28E-02	1.30E-07	2.70E-09			
INFANT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
MEAT											
ADULT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
TEEN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
CHILD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
INFANT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
COW MILK											
ADULT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
TEEN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
CHILD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
INFANT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
INHAL											
ADULT	1.81E-05	2.90E-06	1.94E-04	1.46E-05	2.51E-05	3.81E-03	3.27E-05	8.82E-10			
TEEN	2.15E-05	1.00E-05	2.16E-04	2.00E-05	3.45E-05	4.78E-03	5.63E-05	8.87E-10			
CHILD	2.17E-05	5.19E-06	2.10E-04	1.97E-05	3.24E-05	5.54E-03	5.04E-05	7.85E-10			
INFANT	1.19E-05	2.00E-06	9.37E-05	1.84E-05	2.14E-05	5.06E-03	4.25E-05	4.51E-10			

TABLE VII-6
ANNUAL DOSES TO ALL ORGANS AT LOCATION
OF HIGHEST CALCULATED ORGAN DOSE (THYROID)

ANNUAL BETA AIR DOSE = 3.81E-02 MILLIRADS ANNUAL GAMMA AIR DOSE = 4.73E-05 MILLIRADS								
PATHWAY	T. BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	3.16E-05	3.16E-05	3.16E-05	3.16E-05	3.16E-05	3.16E-05	4.14E-04	2.26E-02
GROUND	1.48E-05	1.48E-05	1.48E-05	1.48E-05	1.48E-05	1.48E-05	1.48E-05	1.77E-05
VEGET ADULT	1.56E-03	2.65E-04	6.77E-03	2.33E-05	3.72E-05	6.69E-03	2.96E-07	8.07E-10
TEEN	2.04E-03	3.28E-04	8.94E-03	2.49E-05	3.71E-05	5.85E-03	5.61E-07	9.64E-10
CHILD	3.53E-03	2.64E-04	1.56E-02	3.59E-05	4.93E-05	9.22E-03	6.57E-07	1.52E-09
INFANT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAT ADULT	2.90E-05	7.19E-06	1.19E-04	7.11E-06	1.18E-05	2.24E-03	3.25E-08	1.28E-10
TEEN	1.94E-05	4.48E-06	8.09E-05	5.78E-06	9.64E-06	1.62E-03	3.08E-08	7.63E-11
CHILD	2.61E-05	2.75E-06	1.14E-04	7.71E-06	1.23E-05	2.45E-03	3.62E-08	9.22E-11
INFANT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
COND MILK ADULT	1.66E-04	6.03E-05	4.86E-04	1.48E-04	2.52E-04	4.70E-02	2.39E-07	3.00E-10
TEEN	2.56E-04	8.17E-05	7.51E-04	2.63E-04	4.49E-04	7.45E-02	4.95E-07	3.91E-10
CHILD	4.61E-04	6.58E-05	1.49E-03	4.59E-04	7.46E-04	1.48E-01	7.58E-07	6.18E-10
INFANT	7.13E-04	6.55E-05	2.27E-03	1.12E-03	1.30E-03	3.58E-01	1.37E-06	9.39E-10
INHAL ADULT	9.40E-06	5.54E-06	1.08E-04	6.89E-06	1.19E-05	1.66E-03	1.87E-05	4.95E-10
TEEN	1.09E-05	6.06E-06	1.20E-04	9.50E-06	1.64E-05	2.11E-03	3.22E-05	4.96E-10
CHILD	1.12E-05	2.90E-06	1.17E-04	9.36E-06	1.54E-05	2.48E-03	2.87E-05	4.38E-10
INFANT	5.94E-06	1.12E-06	5.13E-05	8.73E-06	1.02E-05	2.27E-03	2.43E-05	2.53E-10

VIII. METEOROLOGICAL DATA

The meteorology at the PBAPS site is evaluated by instruments on a meteorological tower on the bluff overlooking the plant. It is described in the USFSAR (1). All data are summarized using the Pasquill-Gifford system. The following three tables present the annual summary of hourly meteorological data joint frequency distributions of wind speed, wind direction and atmospheric stability.

DATA FROM 33-FOOT LEVEL

PEACH BOTTOM 01/01-12/31/90

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS

WIND: 33 FT
DELTA T: (316-33FT)
LAPSE RATE: LE -1.9 DEG C/100M
CLASS A

DIRECTION	WIND SPEED GROUPS (MPH)										SUM PERCENT
	0.0-0.5	0.6-3.5	3.6-7.5	7.6-12.5	12.6-18.5	18.6-24.5	GE 24.6	SUM PERCENT			
N	0	0.0	2	0.0	0	0.0	0	0.0	3	0.0	
NNE	0	0.0	3	0.0	0	0.0	0	0.0	4	0.0	
NE	0	0.0	0	0.0	0	0.0	0	0.0	3	0.0	
ENE	0	0.0	1	0.0	0	0.0	0	0.0	2	0.0	
E	0	0.0	4	0.0	0	0.0	0	0.0	8	0.1	
ESE	0	0.0	0	0.0	0	0.0	0	0.0	2	0.0	
SE	0	0.0	3	0.0	0	0.0	0	0.0	4	0.0	
SSE	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
S	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
SSW	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
SW	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
WSW	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
W	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
WNW	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
NW	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0	
NNW	0	0.0	3	0.0	0	0.0	0	0.0	3	0.0	
	0	0.0	13	0.2	1	0.0	0	0.0	30	0.4	

MEAN WIND SPEED: 4.0
MISSING: 0

PEACH BOTTOM 01/01-12/31/90

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS

WIND: 33 FT
DELTA T: (316-33FT)

LAPSE RATE: -1.8 TO -1.7 DEG C/100M
CLASS B

WIND SPEED GROUPS (MPH)

DIRECTION	0.0-0.5	0.6-3.5	3.6-7.5	7.6-12.5	12.6-18.5	18.6-24.5	GE 24.6	SUM PERCENT
N	0	0.0	0	0.0	0	0.0	0	0.1
NNE	0	0.0	1	0.0	0	0.0	0	0.1
NE	0	0.0	2	0.0	0	0.0	0	2
ENE	0	0.0	3	0.0	0	0.0	0	3
E	0	0.0	7	0.1	0	0.0	0	7
ESE	0	0.0	2	0.0	0	0.0	0	4
SE	0	0.0	2	0.0	0	0.0	0	4
SSE	0	0.0	3	0.0	0	0.0	0	3
S	0	0.0	0	0.0	0	0.0	0	1
SSW	0	0.0	0	0.0	0	0.0	0	0
SW	0	0.0	0	0.0	0	0.0	0	0
WSW	0	0.0	1	0.0	0	0.0	0	1
W	0	0.0	0	0.1	0	0.0	0	0.1
WNW	0	0.0	0	0.0	0	0.0	0	0
WW	0	0.0	0	0.0	0	0.0	0	0
NNW	0	0.0	1	0.0	0	0.0	0	3
	0	0.0	12	0.1	0	0.0	0	46

MEAN WIND SPEED: 5.1
MISSING: 0

PEACH BOTTOM 01/01-12/31/90

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS

WIND: 33 FT

DELTA T: (316-33FT)

LAPSE RATE: -1.6 TO -1.5 DEG C/100M
CLASS C

WIND SPEED GROUPS (MPH)

DIRECTION	0.0-0.5	0.6-3.5	3.6-7.5	7.6-12.5	12.6-18.5	18.6-24.5	GE 24.6	SUM PERCENT
N	0	0.0	0	0.0	0	0.0	0	12
NNE	0	0.0	0	0.0	0	0.0	0	2
NNE	0	0.0	0	0.0	0	0.0	0	3
ENE	0	0.0	2	0.0	0	0.0	0	11
E	0	0.0	5	0.0	0	0.0	0	10
ESE	0	0.0	6	0.0	0	0.0	0	8
SE	0	0.0	7	0.0	0	0.0	0	10
SSE	0	0.0	4	0.0	0	0.0	0	9
S	0	0.0	0	0.0	2	0.0	0	12
SSW	0	0.0	1	0.0	0	0.0	0	6
SW	0	0.0	1	0.0	0	0.0	0	5
WSW	0	0.0	4	0.0	0	0.0	0	9
W	0	0.0	3	0.0	1	0.0	0	14
WNW	0	0.0	6	0.0	0	0.0	0	15
WW	0	0.0	3	0.0	0	0.0	0	11
WNW	0	0.0	7	0.0	0	0.0	0	20
	0	0.0	59	67	3	0.0	0	157

MEAN WIND SPEED: 7.1
MISSING: 1

BEACH BOTTOM 2/01-12/31/90

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS

LAPSE RATE: -1.4 TO -0.5 DEG C/100M
CLASS D

WIND: 33 FT
DELTA T: (316-33FT)

WIND SPEED GROUPS (MPH)

DIRECTION	0.0-0.5	0.6-3.5	3.6-7.5	7.6-12.5	12.6-18.5	18.6-24.5	GE 24.6	SUM PERCENT
N	0	104	195	39	1	0	0	339
NNE	0	110	33	0	0	0	0	143
NE	0	121	14	0	0	0	0	135
ENE	0	86	20	0	0	0	0	106
E	1	108	44	0	0	0	0	153
ESE	0	46	58	4	0	0	0	108
SE	0	39	107	16	0	0	0	162
SSE	0	42	173	59	13	0	0	287
S	0	22	152	176	26	1	0	377
SSW	1	9	71	49	9	0	0	139
SW	0	16	76	48	0	0	0	140
WSW	0	19	50	34	1	0	0	104
W	0	20	73	74	21	0	0	188
WNW	0	23	99	192	35	0	0	349
W	0	32	165	288	62	0	0	547
WNW	0	66	233	236	48	0	0	583
	2	863	1563	1215	216	1	0	3660
								45.0

MEAN WIND SPEED: 6.6
MISSING: 14

PEACH BOTTOM 01/01-12/31/90

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS

LAPSE RATE: -0.4 TO 1.5 DEG C/100M
CLASS E

WIND: 33 FT
DELTA T: (316-33FT)

WIND SPEED GROUPS (MPH)

DIRECTION	0.0-0.5	0.6-3.5	3.6-7.5	7.6-12.5	12.6-18.5	18.6-24.5	GE 24.6	SUM PERCENT							
N	0	0.0	0.8	38	0.4	4	0.0	0	0.0	0	0.0	0	0.0	113	1.3
NNE	0	0.0	0.6	2	0.0	0	0.0	0	0.0	0	0.0	0	0.0	54	0.6
NE	0	0.0	0.7	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	65	0.8
ENE	0	0.0	1.1	4	0.0	0	6.0	0	0.0	0	0.0	0	0.0	94	1.1
E	0	0.0	136	16	0.2	0	9.0	0	0.0	0	0.0	0	0.0	152	1.8
ESE	0	0.0	106	23	0.3	0	6.0	0	0.0	0	0.0	0	0.0	129	1.5
SE	0	0.0	116	1.4	96	1.1	13	0.2	1	0.0	0	0.0	0	226	2.6
SSE	0	0.0	133	1.6	172	2.0	22	0.3	2	0.0	0	0.0	0	329	3.8
S	1	0.0	131	1.5	184	2.1	62	0.7	16	0.2	0	0.0	0	394	4.6
SSW	0	0.0	66	0.8	85	1.0	12	0.1	2	0.0	0	0.0	0	165	1.9
SW	0	0.0	76	0.9	96	1.1	13	0.2	0	0.0	0	0.0	0	185	2.2
WSW	0	0.0	85	1.0	128	1.5	9	0.1	0	0.0	0	0.0	0	222	2.6
W	0	0.0	91	1.1	138	1.6	15	0.2	1	0.0	0	0.0	0	245	2.9
WNW	0	0.0	72	0.8	216	2.5	41	0.5	6	0.1	0	0.0	0	335	3.9
NW	0	0.0	99	1.2	216	2.5	50	0.6	4	0.1	0	0.0	0	371	4.3
NNW	0	0.0	80	0.9	77	0.9	18	0.2	1	0.0	0	0.0	0	176	2.1
														3255	38.0

MEAN WIND SPEED: 4.3
MISSING: 11

PEACH BOTTOM 01/01-12/31/90

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS

LAPSE RATE: 1.6 TO 4.0 DEG C/100M
CLASS F

WIND: 33 FT
DELTA T: (316-33FT)

WIND SPEED GROUPS (MPH)

DIRECTION	0.0-0.5	0.6-3.5	3.6-7.5	7.6-12.5	12.6-18.5	18.6-24.5	GE 24.6	SUM PERCENT
N	0	17	0	0	0	0	0	17
NNE	0	18	0	0	0	0	0	18
NE	0	8	0	0	0	0	0	8
ENE	0	27	0	0	0	0	0	27
E	1	43	0	0	0	0	0	44
ESE	0	54	1	0	0	0	0	55
SE	0	22	1	0	0	0	0	23
SSE	0	30	2	0	0	0	0	32
S	0	35	2	0	0	0	0	37
SSW	0	41	9	0	0	0	0	50
SW	0	84	14	0	0	0	0	99
WSW	0	132	57	1	0	0	0	190
W	0	109	26	0	0	0	0	135
WNW	0	54	22	0	0	0	0	76
WW	0	33	12	0	0	0	0	45
WNW	0	19	2	0	0	0	0	21
	1	726	148	2	0	0	9	877

MEAN WIND SPEED: 2.6
MISSING: 9

PEACH BOTTOM 01/01-12/31/90

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS

LAPSE RATE: GT 4.0 DEG C/100M
CLASS G

WIND: 33 FT
DELTA T: (316-33FT)

DIRECTION	WIND SPEED GROUPS (MPH)							SUM PERCENT
	0.0-0.5	0.6-3.5	3.6-7.5	7.6-12.5	12.6-18.5	18.6-24.5	GE 24.6	
N	0	17	0	0	0	0	0	17
NNE	0	11	0	0	0	0	0	11
NE	0	15	0	0	0	0	0	15
ENE	0	11	0	0	0	0	0	11
E	0	17	1	0	0	0	0	18
ESE	0	17	0	0	0	0	0	17
SE	0	12	1	0	0	0	0	13
SSE	0	6	0	0	0	0	0	6
S	0	4	0	0	0	0	0	4
SSW	0	13	0	0	0	0	0	13
SW	0	15	1	0	0	0	0	16
WSW	0	76	17	0	0	0	0	93
W	0	43	5	0	0	0	0	48
WNW	0	27	0	0	0	0	0	27
NW	0	21	0	0	0	0	0	21
NNW	0	16	0	0	0	0	0	16
	0	321	25	0	0	0	0	346
		3.7	0.3	0	0	0	0	4.0

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MEAN WIND SPEED: 2.2
MISSING: 0
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PEACH BOTTOM 01/01-12/31/90

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS

WIND: 33 FT

DELTA T: (316-33FT)

ALL STABILITY CLASSES

WIND SPEED GROUPS (MPH)

DIRECTION	0.0-0.5	0.6-3.5	3.6-7.5	7.6-12.5	12.6-18.5	18.6-24.5	GE 24.6	SUM PERCENT
N	0	213	252	43	1	0	0	509
NNE	0	195	42	0	0	0	0	237
NE	0	216	15	0	0	0	0	231
ENE	0	227	27	0	0	0	0	254
E	2	313	77	0	0	0	0	392
ESE	0	228	90	5	0	0	0	323
SE	0	194	217	30	1	0	0	442
SSE	0	212	354	83	17	0	0	666
S	1	192	338	251	42	0	0	825
SSW	1	130	166	65	11	0	0	373
SW	0	191	188	66	0	0	0	445
WSW	0	312	257	49	1	0	0	619
W	0	263	245	104	23	0	0	635
WNW	0	176	343	242	41	0	0	802
WW	0	187	396	345	68	0	0	996
NNW	0	185	320	268	49	0	0	822
	4	3434	3327	1551	254	1	0	8571
								100.0

MEAN WIND SPEED: 5.2

MISSING HOURS: 189

PEACH BOTTOM 01/01-12/31/90

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS

WIND: 33 FT
DELTA T: (316-33FT)

DIRECTION VS SPEED ONLY

WIND SPEED GROUPS (MPH)

DIRECTION	0.0-0.5	0.6-3.5	3.6-7.5	7.6-12.5	12.6-18.5	18.6-24.5	GE 24.6	SUM PERCENT
N	0	216	257	43	1	0	0	517
NNE	0	202	45	0	0	0	0	247
NE	0	216	15	0	0	0	0	231
ENE	0	253	27	0	0	0	0	280
E	2	320	78	0	0	0	0	400
ESE	0	238	94	5	0	0	0	337
SE	0	198	226	44	1	0	0	469
SSE	0	214	373	86	17	0	0	690
S	1	196	341	255	42	1	0	836
SSW	1	130	167	65	11	0	0	376
SW	0	192	191	67	0	0	0	450
WSW	0	313	257	50	1	0	0	621
W	0	266	246	104	23	0	0	639
WNW	0	176	343	242	41	0	0	802
NW	0	187	399	345	68	0	0	999
NNW	0	186	324	271	49	0	0	830
	4	3483	3383	1577	254	1	0	8702
		40.0	38.9	18.1	2.9	0.0	0.0	100.0

MISSING HOURS: 58

MEAN WIND SPEED: 5.1

DATA FROM 75-FOOT LEVEL

PEACH BOTTOM 01/01-12/31/90

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS

LAPSE RATE: LE -1.9 DEG C/100M
CLASS A

WIND: 75 FT
DELTA T: (316-33FT)

WIND SPEED GROUPS (MPH)

DIRECTION	0.0-0.5	0.6-3.5	3.6-7.5	7.6-12.5	12.6-18.5	18.6-24.5	GE 24.6	SUM PERCENT
N	0	0	0	0	0	0	0	0
NNE	0	3	5	0	0	0	0	8
NW	0	1	2	0	0	0	0	3
ENE	0	4	2	0	0	0	0	6
E	0	0	8	0	0	0	0	8
ESE	0	0	1	1	1	0	0	3
SE	0	0	0	2	0	0	0	2
SSE	0	0	0	0	0	0	0	0
S	0	0	0	0	0	0	0	0
SSW	0	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0	0
WSW	0	0	0	0	0	0	0	0
W	0	0	0	0	0	0	0	0
WNW	0	0	0	0	0	0	0	0
WW	0	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0	0
	0	8	10	3	1	0	0	30
								0.4

MEAN WIND SPEED: 5.0
MISSING: 0

PEACH BOTTOM 01/01-12/31/90

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS

WIND: 75 FT

DELTA T: (316-33FT)

LAPSE RATE: -1.8 TO -1.7 DEG C/100M
CLASS B

WIND SPEED GROUPS (MPH)

DIRECTION	0.0-0.5	0.6-3.5	3.6-7.5	7.6-12.5	12.6-18.5	18.6-24.5	GE 24.6	SUM PERCENT
N	0	0	0	1	0	0	0	3
NNE	0	1	0	0	0	0	0	1
NE	0	2	1	0	0	0	0	3
ENE	0	2	1	0	0	0	0	3
E	0	1	0	0	0	0	0	1
ESE	0	2	0	2	0	0	0	4
SE	0	0	0	0	0	0	0	0
SSE	0	0	0	1	0	0	0	1
S	0	0	0	1	0	0	0	1
SSW	0	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0	0
WSW	0	0	1	1	0	0	0	2
W	0	0	0	2	0	0	0	2
WNW	0	0	0	0	0	0	0	0
WW	0	0	0	0	0	0	0	0
NNW	0	0	1	1	0	0	0	2
	0	8	27	9	2	0	0	46

MEAN WIND SPEED: 6.3
MISSING: 0

PEACH BOTTOM 01/01-12/31/90

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS

WIND: 75 FT

DELTA T: (316-33FY)

LAPSE RATE: -1.6 TO -1.5 DEG C/100M
7-55 C

WIND SPEED GROUPS (MPH)

DIRECTION	0.0-0.5	0.6-3.5	3.6-7.5	7.6-12.5	12.6-18.5	18.6-24.5	24.6	SUM PERCENT
N	0	0	0	3	0	0	0	11
NNE	0	3	1	0	0	0	0	4
NE	0	1	1	0	0	0	0	2
ENE	0	6	5	0	0	0	0	11
E	0	6	3	0	0	0	0	9
ESE	0	3	6	5	0	0	0	14
SE	0	0	5	4	0	0	0	9
SSE	0	0	1	1	0	0	0	2
S	0	0	1	10	5	0	0	16
SSW	0	0	1	4	0	0	0	5
SW	0	0	1	3	0	0	0	4
WSW	0	0	2	4	6	0	0	12
W	0	0	3	8	6	0	0	17
WNW	0	0	2	8	4	0	0	16
NW	0	1	3	2	4	0	0	10
NNW	0	0	2	11	5	0	0	18
	0	20	45	63	30	0	0	158
	0	0.2	0.5	0.7	0.4	0	0	1.9

MEAN WIND SPEED: 8.7
MISSING: 0

PEACH BOTTOM 01/01-12/31/90

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS

WIND: 75 FT

DELTA T: (316-33FT)

LAPSE RATE: -1.4 TO -0.5 DEG C/100M
CLASS 0

WIND SPEED GROUPS (MPH)

DIRECTION	0.0-0.5	0.6-3.5	3.6-7.5	7.6-12.5	12.6-18.5	18.6-24.5	GE 24.6	SUM PERCENT
N	0	0.0	107	55	10	0	0	217
NNE	0	0.0	115	16	3	0	0	224
NNE	0	0.0	55	0	0	0	0	131
ENE	0	0.0	42	0	0	0	0	116
E	0	0.0	78	6	0	0	0	154
ESE	0	0.0	68	31	0	0	0	147
SE	0	0.0	101	55	0	0	0	181
SSE	0	0.0	121	64	14	0	0	226
S	0	0.0	148	179	50	6	0	404
SSW	0	0.0	52	60	19	1	0	151
SW	0	0.0	70	52	8	0	0	149
WSW	0	0.0	46	50	14	0	0	126
W	0	0.0	65	103	70	5	0	263
WNW	0	0.0	49	144	120	8	0	332
WW	0	0.0	103	238	150	6	0	518
WNW	0	0.0	127	235	116	8	0	518
	0	0.0	1347	1288	576	43	0	3857
		7.1	15.9	15.2	6.8	0.5	0	45.6

MEAN WIND SPEED: 8.0
MISSING: 17

PEACH BOTTOM 01/01-12/31/90

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS

WIND: 75 FT
DELTA T: (31G-33FT)
LAPSE RATE: -0.4 TO 1.5 DEG C/100M
CLASS E

WIND SPEED GROUPS (MPH)

DIRECTION	0.0-0.5	0.6-3.5	3.6-7.5	7.6-12.5	12.6-16.5	16.6-24.5	GE 24.6	SUM PERCENT
N	0	41	27	13	0	0	0	81
NNE	0	28	12	1	0	0	0	41
NNE	0	41	15	0	0	0	0	56
ENE	0	64	9	0	0	0	0	73
E	0	85	42	2	0	0	0	129
ESE	1	59	41	5	0	0	0	106
SE	0	94	125	17	4	0	0	240
SSE	0	84	178	41	4	0	0	308
S	2	101	222	93	25	1	0	444
SSW	1	51	120	32	4	0	0	209
SW	1	47	90	39	2	0	0	179
WSW	1	47	103	80	5	0	0	236
W	5	50	116	102	7	0	0	280
WNW	0	38	140	146	13	3	0	340
WW	2	37	176	117	6	0	0	338
WNW	0	27	80	36	1	0	0	144
	13	804	1496	724	71	6	0	3204
								37.9

MEAN WIND SPEED: 5.6
MISSING: 62

PEACH BOTTOM 01/01-12/31/90

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS

LAPSE RATE: 1.6 TO 4.0 DEG C/100M
CLASS F

WIND: 75 FT
DELTA T: (316-33FT)

DIRECTION	WIND SPEED GROUPS (MPH)									
	0.0-0.5	0.6-3.5	3.6-7.5	7.6-12.5	12.6-18.5	18.6-24.5	GE 24.6	SUM PERCENT	SUM PERCENT	SUM PERCENT
N	0	0.0	0	0.0	0	0.0	0	0.0	0	0.1
NNE	1	0.0	1	0.0	0	0.0	0	0.0	0	0.2
NNE	0	0.0	1	0.0	0	0.0	0	0.0	0	0.1
ENE	1	0.0	0	0.0	0	0.0	0	0.0	0	0.1
E	0	0.0	0	0.0	0	0.0	0	0.0	0	0.2
ESE	2	0.0	3	0.0	0	0.0	0	0.0	0	0.5
SE	1	0.0	9	0.1	0	0.0	0	0.0	0	0.5
SSE	1	0.0	7	0.1	0	0.0	0	0.0	0	0.6
S	2	0.0	7	0.1	0	0.0	0	0.0	0	0.5
SSW	0	0.0	11	0.1	0	0.0	0	0.0	0	0.6
SW	3	0.0	19	0.2	0	0.0	0	0.0	0	0.9
WSW	0	0.0	25	0.3	0	0.0	0	0.0	0	1.6
W	2	0.0	56	0.7	0	0.0	0	0.0	0	1.7
WNW	0	0.0	66	0.8	0	0.0	0	0.0	0	1.2
WW	1	0.0	50	0.6	0	0.0	0	0.0	0	0.7
WNW	0	0.0	33	0.4	0	0.0	0	0.0	0	0.2
WNW	0	0.0	7	0.1	0	0.0	0	0.0	0	0.2
	14	0.2	469	5.5	206	3.5	50	0.6	0	9.8

MEAN WIND SPEED: 3.6
MISSING: 57

PEACH BOTTOM 01/01-12/31/90

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS

LAPSE RATE: GT 6.6 DEG C/100M
CLASS G

WIND: 75 FT
DELTA T: (316-33FT)

DIRECTION	WIND SPEED GROUPS (MPH)							SUM PERCENT
	0.0-0.5	0.6-3.5	3.6-7.5	7.6-12.5	12.6-18.5	18.6-24.5	GE 24.6	
N	0	7	2	0	0	0	0	9
NNE	0	1	0	0	0	0	0	1
NE	0	5	0	0	0	0	0	5
ENE	0	1	0	0	0	0	0	1
E	0	10	0	0	0	0	0	10
ESE	0	13	3	0	0	0	0	16
SE	0	9	3	0	0	0	0	12
SSE	0	11	2	0	0	0	0	13
S	0	6	2	0	0	0	0	8
SSW	0	8	0	0	0	0	0	8
SW	0	14	7	0	0	0	0	21
WSW	0	30	11	0	0	0	0	41
W	0	45	36	1	0	0	0	82
WNW	0	38	15	0	0	0	0	53
NW	0	35	3	0	0	0	0	38
NNW	0	14	2	0	0	0	0	16
	0	247	86	1	0	0	0	334
		2.9	1.0					3.9

MEAN WIND SPEED: 2.8
MISSING: 12

PEACH BOTTOM 01/01-12/31/99

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS

WIND: 75 FT
DELTA 1: (316-33FT)

STABILITY CLASSES

DIRECTION	WIND SPEED GROUPS (MPH)									
	0.0-0.5	0.6-3.5	3.6-7.5	7.6-12.5	12.6-18.5	18.6-24.5	24.6-30.5	30.6-36.5	36.6-42.5	SUM PERCENT
N	0	101	147	72	10	0	0	0	0	330
NNE	1	140	143	17	3	0	0	0	0	304
NE	0	133	75	0	0	0	0	0	0	208
ENE	1	160	59	0	0	0	0	0	0	220
E	0	188	139	8	0	0	0	0	0	335
ESE	3	153	132	46	3	0	0	0	0	335
SE	1	161	244	78	4	0	0	0	0	488
SSE	1	160	309	107	18	2	0	0	0	597
S	4	160	384	283	80	7	0	0	0	918
SSW	1	107	192	98	23	2	0	0	0	423
SW	4	130	193	96	10	0	0	0	0	433
WSW	1	149	219	160	25	0	0	0	0	554
W	7	165	286	231	85	13	0	0	0	787
WNW	0	136	256	302	137	11	0	0	0	862
W	3	120	318	359	160	6	0	0	0	966
NNW	0	86	219	283	122	8	0	0	0	718
	27	2269	3315	2133	680	49	0	0	0	8458

MISSING HOURS: 302

MEAN WIND SPEED: 6.5

PEACH BOTTOM 01/01-12/31/90

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS

WIND: 75 FT

DELTA T: (316-33FT)

DIRECTION VS SPEED ONLY

DIRECTION	N	WIND SPEED GROUPS (MPH)										GE 24.6	SUM PERCENT
		0.0-0.5	0.6-3.5	3.6-7.5	7.6-12.5	12.6-18.5	18.6-24.3	24.4-30.3	30.4-36.3	36.4-42.3	42.4-48.3		
		SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT
N	0	0.0	102	1.2	150	1.7	72	0.8	10	0.1	0	0	334
NNE	1	0.0	142	1.7	148	1.7	17	0.2	3	0.0	0	0	311
NNE	0	0.0	135	1.6	77	0.9	0	0.0	0	0.0	0	0	212
NNE	1	0.0	162	1.9	60	0.7	0	0.0	0	0.0	0	0	223
E	0	0.0	191	2.2	139	1.6	8	0.1	0	0.0	0	0	338
ESE	3	0.0	158	1.8	143	1.7	45	0.5	3	0.0	0	0	352
SE	1	0.0	162	1.9	252	2.9	91	1.1	8	0.1	0	0	514
SSE	1	0.0	162	1.9	324	3.8	113	1.3	18	0.2	2	0	620
S	4	0.0	162	1.9	301	4.6	287	3.3	80	0.9	7	0	931
SSW	1	0.0	108	1.3	194	2.3	98	1.1	23	0.3	2	0	426
SW	4	0.0	132	1.5	197	2.3	96	1.1	11	0.1	0	0	440
WSW	1	0.0	151	1.8	220	2.6	161	1.9	25	0.3	0	0	558
W	7	0.1	168	2.0	268	3.4	231	2.7	85	1.0	13	0	792
WNW	0	0.0	136	1.6	257	3.0	302	3.5	137	1.6	11	0	843
WW	3	0.0	120	1.4	321	3.7	359	4.2	160	1.9	6	0	969
NNW	0	0.0	87	1.0	222	2.6	287	3.3	122	1.4	8	0	726
	27	0.3	2278	26.1	3383	39.4	2167	25.2	685	8.0	49	0	8589
													100.0

MEAN WIND SPEED: 6.5

MISSING HOURS: 171

DATA FROM 320-FOOT LEVEL

PEACH BOTTOM 01/01-12/31/90

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS

LAPSE RATE: LE -1.9 DEC C/100M
CLASS A

WIND: 320 FT
DELTA T: (316-33FT)

DIRECTION	WIND SPEED GROUPS (MPH)								SUM PERCENT	
	0.0-0.5	0.6-3.5	3.6-7.5	7.6-12.5	12.6-18.5	18.6-24.5	GE 24.6			
N	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
NNE	0	0.0	2	0.0	0	0.0	0	0.0	4	0.0
NE	0	0.0	3	0.0	0	0.0	0	0.0	3	0.0
ENE	0	0.0	3	0.0	0	0.0	0	0.0	3	0.1
E	0	0.0	3	0.0	2	0.0	1	0.0	7	0.1
ESE	0	0.0	1	0.0	5	0.1	0	0.0	6	0.1
SE	0	0.0	0	0.0	3	0.0	1	0.0	5	0.1
SSE	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
S	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SSW	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SW	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
WSW	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
W	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
WNW	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
NNW	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	0	0.0	12	0.1	12	0.1	2	0.0	30	0.4

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MEAN WIND SPEED: 8.0
MISSING: 0
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PEACK BOTTOM 01/01-12/31/90

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS

WIND: 320 FT

DELTA T: (316-33FT)

LAPSE RATE: -1.8 TO -1.7 DEG C/100M
CLASS B

WIND SPEED GROUPS (MPH)

DIRECTION	0.0-0.5	0.6-3.5	3.6-7.5	7.6-12.5	12.6-18.5	18.6-24.5	GE 24.6	SUM PERCENT
N	0	0	0	3	0	0	0	5
NNE	0	1	4	2	0	0	0	7
NE	0	0	0	0	0	0	0	0
ENE	0	2	1	0	0	0	0	3
E	0	0	4	0	0	0	0	4
ESE	0	0	9	2	1	0	0	12
SE	0	0	0	3	1	0	0	4
SSE	0	0	0	1	0	0	0	1
S	0	0	0	0	1	0	0	1
SSW	0	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0	0
WSW	0	0	0	1	0	0	0	2
W	0	0	0	0	3	0	0	4
WNW	0	0	0	0	0	0	0	0
W	0	0	0	1	0	0	0	1
WNW	0	0	0	0	0	0	0	0
W	0	0	2	0	0	0	0	2
WNW	0	0	0	0	0	0	0	0
W	0	3	22	13	7	1	0	46
WNW	0	0	0	0	0	0	0	0

MEAN WIND SPEED: 8.3
MISSING: 0

PEACH BOTTOM 01/01-12/31/90

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS

WIND: 320 FT

DELTA T: (316-33FT)

LAPSE RATE: -1.6 TO -1.5 DEG C/100M
CLASS C

WIND SPEED GROUPS (MPH)

DIRECTION	0.0-0.5	0.6-3.5	3.6-7.5	7.6-12.5	12.6-18.5	18.6-24.5	GE 24.6	SUM PERCENT
N	0	0	4	2	1	0	0	7
NNE	0	0	1	0	0	0	0	1
NNE	0	1	3	0	0	0	0	4
ENE	0	2	4	0	0	0	0	6
E	0	3	10	0	0	0	0	13
ESE	0	2	4	6	1	0	0	13
SE	0	0	2	9	2	0	0	13
SSE	0	0	0	1	1	0	0	2
S	0	0	1	3	9	2	0	15
SSW	0	0	1	1	3	0	0	5
SW	0	0	0	4	1	0	0	5
WSW	0	0	1	2	5	3	0	11
W	0	0	2	1	8	5	0	16
WNW	0	0	1	4	7	3	0	15
W	0	0	2	3	3	6	0	14
WNW	0	1	1	10	5	1	0	18
	0	9	37	46	46	20	0	158

MEAN WIND SPEED: 11.4
MISSING: 0

PEACH BOTTOM 01/01-12/31/90 JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
 BY ATMOSPHERIC STABILITY CLASS
 WIND: 320 FT
 DELTA T: (316-33FT)
 LAPSE RATE: -1.4 10 -0.5 DEG C/100M
 CLASS D

DIRECTION	WIND SPEED GROUPS (MPH)										SUM PERCENT
	0.0-0.5	0.6-3.5	3.6-7.5	7.6-12.5	12.6-18.5	18.6-24.5	GE 24.6	SUM PERCENT			
N	0	17	50	74	35	7	1	0.0	184	2.2	
NNE	0	14	52	48	10	0	0	0.0	124	1.5	
NW	0	32	68	44	7	0	0	0.0	151	1.8	
ENE	0	50	66	45	0	0	0	0.0	161	1.9	
E	0	56	48	36	18	2	0	0.0	160	1.9	
ESE	0	26	70	32	39	3	0	0.0	190	2.2	
SE	0	12	47	97	46	7	0	0.0	209	2.5	
SSE	0	8	50	77	23	3	2	0.0	163	1.9	
S	0	13	60	180	130	38	9	0.1	430	5.1	
SSW	0	6	35	66	49	15	1	0.0	172	2.0	
SW	0	10	58	57	36	7	0	0.0	168	2.0	
WSW	0	12	34	39	33	9	0	0.0	127	1.5	
W	0	4	34	45	74	67	22	0.3	246	2.9	
WNW	0	8	21	47	128	132	33	0.4	369	4.4	
WW	0	10	48	106	204	133	24	0.3	525	6.2	
NNW	0	15	77	166	137	70	15	0.2	480	5.7	
									</		

MEAN WIND SPEED: 11.8
 MISSING: 15

PEACH BOTTOM 01/01-12/31/90

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS

WIND: 320 FT

DELTA T: (316-33FT)

LAPSE RATE: -0.4 TO 1.3 DEG C/100M
CLASS E

WIND SPEED GROUPS (MPH)

DIRECTION	0.0-0.5	0.6-3.5	3.6-7.5	7.6-12.5	12.6-18.5	18.6-24.5	24.6	SUM PERCENT
N	0	0.0	50	0.6	14	1	0	1.5
NNE	0	0.0	29	0.3	0	0	0	0.0
NNE	0	0.0	39	0.5	3	0	0	0.0
ENE	0	0.0	33	0.4	8	0	0	0.0
E	0	0.0	43	0.5	22	0	0	0.0
ESE	0	0.0	44	0.5	36	0	0	0.0
SE	0	0.0	63	0.7	59	5	0	0.0
SSE	0	0.0	77	0.9	101	7	1	0.0
S	0	0.0	114	1.3	138	38	4	0.0
SSW	0	0.0	64	0.8	113	6	1	0.0
SW	0	0.0	57	0.7	54	6	0	0.0
WSW	0	0.0	28	0.3	63	15	0	0.0
W	0	0.0	33	0.4	64	18	1	0.0
WNW	0	0.0	20	0.2	49	27	12	0.1
WW	0	0.0	52	0.6	103	18	2	0.0
NNW	0	0.0	39	0.5	74	5	0	0.0
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	298	3.4	880	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
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	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
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	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208
	0	0.0	785	9.3	1083	151	21	3208

MEAN WIND SPEED: 10.3
MISSING: 58

PEACH BOTTOM 01/01-12/31/90

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS

WIND: 320 FT
DELTA 1: (316-33FT)

LAPSE RATE: 1.6 TO 4.0 DEG C/100M
CLASS F

WIND SPEED GROUPS (MPH)

DIRECTION	0.0-0.5	0.6-3.5	3.6-7.5	7.6-12.5	12.6-18.5	18.6-24.5	GE 24.6	SUM PERCENT
N	0	0	13	9	3	0	0	25
NNE	0	3	12	1	0	0	0	16
NE	0	2	4	1	0	0	0	7
ENE	0	3	2	0	0	0	0	5
E	0	4	5	2	0	0	0	11
ESE	0	5	2	6	0	0	0	13
SE	0	6	18	6	1	0	0	31
SSE	0	10	39	20	0	0	0	69
S	0	14	38	23	4	0	0	79
SSW	0	11	39	31	7	0	0	88
SW	0	8	35	33	19	0	0	95
WSW	0	11	23	33	30	2	0	99
W	0	3	25	29	39	2	0	98
WNW	0	6	14	15	19	0	0	54
NW	0	8	18	54	9	0	0	89
NNW	0	3	19	25	3	0	0	50
	0	97	306	200	134	4	0	829

MEAN WIND SPEED: 8.2
MISSING: 57

PEACH BOTTOM 01/01-12/31/90

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS

WIND: 320 FT
DELTA T: (316-33FT)

LAPSE RATE: GT 4.0 DEG C/100M CLASS 6

DIRECTION	WIND SPEED GROUPS (MPH)										SUM PERCENT	
	0.0-0.5	0.6-3.5	3.6-7.5	7.6-12.5	12.6-18.5	18.6-24.5	GE 24.6	SUM PERCENT				
N	0	0.0	3	0.0	9	0.1	1	0.0	0	0.0	13	0.2
NNE	0	0.0	0	0.0	4	0.0	1	0.0	0	0.0	5	0.1
NE	0	0.0	0	0.0	2	0.0	2	0.0	0	0.0	4	0.0
ENE	0	0.0	0	0.0	4	0.0	2	0.0	0	0.0	6	0.1
E	0	0.0	1	0.0	1	0.0	0	0.0	0	0.0	2	0.0
ESE	0	0.0	0	0.0	3	0.0	0	0.0	0	0.0	3	0.0
SE	0	0.0	4	0.0	1	0.0	0	0.0	0	0.0	5	0.1
SSE	0	0.0	0	0.0	6	0.1	2	0.0	0	0.0	8	0.1
S	0	0.0	0	0.0	11	0.1	6	0.1	0	0.0	17	0.2
SSW	0	0.0	2	0.0	6	0.1	3	0.0	0	0.0	12	0.1
SW	0	0.0	3	0.0	18	0.2	28	0.3	3	0.0	52	0.6
WSW	0	0.0	1	0.0	10	0.1	41	0.5	7	0.1	59	0.7
W	0	0.0	1	0.0	16	0.2	25	0.3	8	0.1	50	0.6
WNW	0	0.0	3	0.0	12	0.1	8	0.1	8	0.1	32	0.4
NW	0	0.0	6	0.1	14	0.2	20	0.2	3	0.0	43	0.5
NNW	0	0.0	2	0.0	9	0.1	11	0.1	2	0.0	24	0.3
	0	0.0	26	0.3	126	1.5	150	1.8	32	0.4	335	4.0

MEAN WIND SPEED: 8.1
MISSING: 11

PEACH BOTTOM 01/01-12/31/90

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS
WIND: 320 FT
DELTA T: (316-33FT)

ALL STABILITY CLASSES

WIND SPEED GROUPS (MPH)																
0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT		
DIRECTION	SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT			
N	0	0.0	37	0.4	128	1.5	135	1.6	53	0.6	8	0.1	1	0.0	362	4.3
NNE	0	0.0	29	0.3	104	1.2	67	0.8	10	0.1	0	0.0	0	0.0	210	2.5
NE	0	0.0	50	0.6	119	1.4	56	0.7	10	0.1	0	0.0	0	0.0	235	2.8
NNE	0	0.0	73	0.9	113	1.3	55	0.6	2	0.0	0	0.0	0	0.0	243	2.9
E	0	0.0	99	1.2	114	1.3	62	0.7	23	0.3	2	0.0	0	0.0	300	3.5
ESE	0	0.0	49	0.6	133	1.6	107	1.3	53	0.6	6	0.1	0	0.0	348	4.1
SE	0	0.0	46	0.5	131	1.5	177	2.1	66	0.8	13	0.2	0	0.0	433	5.1
SSE	0	0.0	44	0.5	172	2.0	202	2.4	76	0.9	10	0.1	3	0.0	507	6.0
S	0	0.0	56	0.7	224	2.6	455	5.4	282	3.3	78	0.9	13	0.2	1108	13.1
SSW	0	0.0	44	0.5	145	1.7	214	2.5	114	1.3	21	0.2	2	0.0	540	6.4
SW	0	0.0	39	0.5	168	2.0	201	2.4	113	1.3	15	0.2	0	0.0	536	6.3
WSW	0	0.0	38	0.4	96	1.1	180	2.1	139	1.6	29	0.3	0	0.0	482	5.7
W	0	0.0	20	0.2	110	1.3	164	1.9	239	2.8	93	1.1	23	0.3	649	7.7
WNW	0	0.0	24	0.3	68	0.8	123	1.5	301	3.6	163	1.9	45	0.5	724	8.6
NW	0	0.0	36	0.4	134	1.6	287	3.4	385	4.5	157	1.9	26	0.3	1025	12.1
WNW	0	0.0	35	0.4	147	1.7	286	3.4	204	2.4	76	0.9	15	0.2	763	9.0
	0	0.0	719	8.5	2106	24.9	2771	32.7	2070	24.5	671	7.9	128	1.5	8465	100.0

MEAN WIND SPEED: 10.7

MISSING HOURS: 295

PEACH BOTTOM 01/01-12/31/90

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS
WIND: 320 FT
DELTA T: (316-33FT)

DIRECTION VS SPEED ONLY

WIND SPEED GROUPS (MPH)																
0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT		
DIRECTION	SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT			
N	0	0.0	38	0.4	128	1.5	136	1.6	53	0.6	8	0.1	1	0.0	364	4.2
NNE	0	0.0	29	0.3	104	1.2	68	0.8	16	0.1	0	0.0	0	0.0	211	2.5
NE	0	0.0	51	0.6	124	1.4	56	0.7	10	0.1	0	0.0	0	0.0	241	2.8
NNE	0	0.0	75	0.9	113	1.3	55	0.6	2	0.0	0	0.0	0	0.0	245	2.9
E	0	0.0	100	1.2	114	1.3	62	0.7	23	0.3	2	0.0	0	0.0	301	3.5
ESE	0	0.0	50	0.6	133	1.5	100	1.3	57	0.7	6	0.1	0	0.0	355	4.1
SE	0	0.0	46	0.5	134	1.6	183	2.1	76	0.9	19	0.2	0	0.0	458	5.3
SSE	0	0.0	46	0.5	178	2.1	213	2.5	78	0.9	10	0.1	3	0.0	528	6.1
S	0	0.0	57	0.7	229	2.7	473	5.5	286	3.3	78	0.9	13	0.2	1136	13.2
SSW	0	0.0	44	0.5	148	1.7	214	2.5	115	1.3	21	0.2	2	0.0	544	6.3
SW	0	0.0	40	0.5	172	2.0	201	2.3	114	1.3	15	0.2	0	0.0	542	6.3
WSW	0	0.0	38	0.4	99	1.2	181	2.1	140	1.6	29	0.3	0	0.0	487	5.7
W	0	0.0	21	0.2	111	1.3	164	1.9	239	2.8	93	1.1	23	0.3	651	7.6
WNW	0	0.0	25	0.3	69	0.8	124	1.4	301	3.5	163	1.9	45	0.5	727	8.5
NW	0	0.0	37	0.4	135	1.6	289	3.4	386	4.5	157	1.8	26	0.3	1030	12.0
NNW	0	0.0	35	0.4	147	1.7	288	3.4	296	2.4	76	0.9	15	0.2	767	8.9
	0	0.0	732	8.5	2138	24.9	2816	32.8	2096	24.4	677	7.9	128	1.5	8587	100.0

MISSING HOURS: 173

MEAN WIND SPEED: 10.7

IX. CONCLUSION

Table I-1, Introduction and Summary, summarized the maximum calculated annual doses resulting from Peach Bottom Atomic Power Station Units 2 and 3 routine liquid and atmospheric radwaste releases and how they compare to the 10CFR50 Appendix I design objective dose limits. All calculated doses were extremely low and well within the 10CFR50 Appendix I design objective dose limits.

X.

REFERENCES

1. Philadelphia Electric Company, "Peach Bottom Atomic Power Station Units 2 and 3, Radiation Dose Assessment Report No. 5", January 1, 1989 through December 31, 1989.
2. Philadelphia Electric Company, "Peach Bottom Atomic Power Station Units 2 and 3, Updated Final Safety Analysis Report."
3. Philadelphia Electric Company, "Peach Bottom Atomic Power Station Units 2 and 3, Semi-Annual Effluent Releases Report No. 28", January 1, 1990 through June 30, 1990.
4. Philadelphia Electric Company, "Peach Bottom Atomic Power Station Units 2 and 3, Semi-Annual Effluent Releases Report No. 29", July 1, 1990 through December 31, 1990.
5. Philadelphia Electric Company, "Peach Bottom Atomic Power Station Units 2 and 3, Semi-Annual Effluent Dose Assessment", September 30, 1990.
6. U. S. Nuclear Regulatory Commission, Regulatory Guide 1.109, "Calculation of Annual Doses to Man from Routine Releases of Reactor Effluent for the Purpose of Evaluating Compliance with 10 CFR Part 50, Appendix I", Revision 1, October, 1977.
7. Philadelphia Electric Company, "Peach Bottom Atomic Power Station Units 2 and 3, Radiation Dose Assessment Report No. 5", January 1, 1989 through December 31, 1989, Table V-1.
8. Philadelphia Electric Company, "Peach Bottom Atomic Power Station Units 2 and 3, Radiation Dose Assessment Report No. 5", January 1, 1989 through December 31, 1989, Table V-2.