

PEACH BOTTOM—THE POWER OF EXCELLENCE

PHILADELPHIA ELECTRIC COMPANY

PEACH BOTTOM ATOMIC POWER STATION

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Docket Nos. 50-277
 50-278

U.S. Nuclear Regulatory Commission
 Document Control Desk
 Washington, DC 20555

SUBJECT: Peach Bottom Atomic Power Station Units 2 and 3 1989, Radiation Dose Assessment Report

Gentlemen:

Attached is the Peach Bottom Atomic Power Station Radiation Dose Assessment Report for the period, January 1, 1989 through December 31, 1989. 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 Operations."

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

Sincerely,

John F. Franz
 John F. Franz
 Plant Manager

TEC MJB
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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. 5

JANUARY 1, 1989 THROUGH DECEMBER 31, 1989

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

I. Introduction and Summary

In accordance with the Unique Reporting Requirement of Technical Specification 6.9.2 applicable during the reporting period, this report summarized the radiation doses due to radioactive effluent releases from Peach Bottom Atomic Power Station Units 2 and 3 for the period January 1, 1989, through December 31, 1989.

The radiation doses due to the release of radioactive materials during the reporting period were within 10CFR50 Appendix I limits and within 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 2.84×10^{-1} mrem; the maximum dose due to gaseous releases was 4.18×10^{-2} 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.

This report is assembled in two parts: Part 1 is for liquid and gaseous dose calculations; Part 2 is for meteorological data.

TABLE I-1

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

| TYPE OF DOSE | MAXIMUM DOSE FROM PBAPS | | A DESIGN OBJECTIVES REG. GUIDE 1.109 |
|--|----------------------------|-------|--|
| | Value % of A | | |
| <hr/> | | | |
| I <u>Liquid Effluents</u> | | | |
| a. Dose to total body from all pathways | 1.97E-01 | 3.2 | 3 mrem/yr per unit |
| b. Dose to any organ from all pathways | 2.84E-01 | 1.4 | 10 mrem/yr per unit |
| II <u>Gaseous Effluents*</u> | | | |
| a. Gamma dose in air | 1.51E-05 | <0.01 | 10 mrad/yr per unit |
| b. Beta dose in air | 6.43E-03 | 0.02 | 20 mrad/yr per unit |
| c. Dose to total body of an individual | 1.05E-02 | 0.10 | 5 mrem/yr per unit |
| d. Dose to skin of an individual | 4.20E-03 | 0.01 | 15 mrem/yr per unit |
| e. Dose to any organ from all pathways | 4.18E-02 | 0.14 | 15 mrem/yr per 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.

PART 1

LIQUID AND GASEOUS RADIOACTIVE
DOSE ASSESSMENT

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I. INTRODUCTION

Peach Bottom Atomic Power Station (PBAPS) 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 (1). Conowingo Pond is the receiving stream for liquid radwaste effluents. Information pertaining to the liquid and gaseous radwaste source terms, hydrology, meteorology, dose models, and receptor locations along with the resultant doses due to the operation of Peach Bottom is provided.

II. PEACH BOTTOM LIQUID AND GASEOUS RADWASTE EFFLUENT

The liquid radwaste system at Peach Bottom is a common system shared by both reactor units. The system is designed to collect various types of liquid wastes separately so that each type of waste can be processed by those methods most appropriate to that type. The liquid radwaste system is described in detail in the PBAPS UFSAR (2). Liquid wastes are processed on a batch basis and each batch is sampled prior to release. The processed liquid wastes may be returned to the condensate system for plant reuse or discharged to the environs. The liquid to be discharged is released into a discharge canal where it is mixed with the plant circulating water prior to release into Conowingo Pond through a submerged jet-type discharge structure.

Gaseous effluents are released from Peach Bottom through three release points: (1) the off-gas stack, (2) the Unit 2 roof vent, and (3) the Unit 3 roof vent. For the purposes of this evaluation, Units 2 and 3 roof vents are considered a single release point. The physical characteristics which apply to each of the Station's release points were detailed in the 10CFR50, Appendix I Radioactive Effluent Dose Assessment Report³.

The release of radioactive materials in liquid and gaseous effluents from Peach Bottom were reported in the Peach Bottom Atomic Power Station Semi-Annual Effluent Release Reports Nos. 27 and 28^(4 & 5).

III. HYDROLOGY AND METEOROLOGY

A. Hydrology

The Peach Bottom site is located on Conowingo Pond formed in the Susquehanna River by the Conowingo Dam. The flows of the Susquehanna River are unregulated except for the influences of the three run-of-the-river hydroelectric plants and one pumped storage hydroelectric plant upstream of Units 2 and 3. The average river flow at the plant site is 36,200 cubic feet per second (6).

The liquid radwaste from Peach Bottom Units 2 and 3 is discharged into a discharge canal where it is mixed with the station circulating water discharge. After release of the diluted liquid radwaste from the Peach Bottom discharge canal, the concentration of radioactivity in the Pond continues to decrease by several mechanisms, including radioactive decay and mixing of the discharged water with additional Pond water. At times, operation of the Muddy Run pumped storage hydroelectric plant also affects the mixing characteristics of Conowingo Pond by reversing the normal downstream flow during the pumping cycle. This only occurs when natural river flows are below about 13,000 cfs.

In order to estimate dilution of liquid radwaste by Pond water, an extensive series of tests were run under the supervision of Dr. D. W. Pritchard, Director of the Chesapeake Bay Institute of the Johns Hopkins University, utilizing the hydraulic model of Conowingo Pond located at the Alden Research Laboratories of Worcester Polytechnic Institute. A description of these tests and selected data are provided in the PBAPS UFSAR (7).

Since travel times and dilution factors applicable to the receptor locations of interest vary with Pond flow, the Pond flows were reviewed on a daily basis to determine a mean monthly Pond flow. Each daily flow value was assigned to one of the three Pond flow regimes (see Table III-1). 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 flow regimes - less than 15,000 cfs; between 15,000 cfs and 35,000 cfs; and greater than 35,000 cfs - match an appropriate grouping of average dilution conditions measured in model tests. The first flow regime (less than 15,000 cfs) is of particular importance because recirculation can only occur at these low natural river flows. Based on the model dilution tests, the recycle time from plant discharge to plant intake was estimated to be 50 hours, and 45 percent of the initial radwaste

discharge was assumed to be recycled to the station water intake when flows are less than 15,000 cfs.

For river flows above 15,000 cfs, recirculation is not expected to occur. In 1989, recirculation occurred only in August, September, October and December.

The travel times and dilution factors for those locations in Conowingo Pond, where the high doses were calculated, are listed in Table III-2 for each monthly flow regime and were estimated using the test data presented in the Peach Bottom Updated Final Safety Analysis Report (8). The location numbers are those shown on Figure V-1.

B. Meteorology

Part 2 describes in detail the meteorology in the Peach Bottom Region during 1989 affecting the atmospheric dispersion and the deposition of radionuclides from PBAPS gaseous radwaste releases. This meteorology was used for the evaluation of Peach Bottom Units 2 and 3 gaseous releases.

IV. LIQUID AND GASEOUS PATHWAY DOSE MODELS

The maximum annual doses to individuals in unrestricted areas which could result from the effluent releases from Peach Bottom Atomic Power Station were calculated according to the guidelines in USNRC Regulatory Guide 1.109 (9) 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. The equations for drinking water, aquatic foods, and shoreline exposure and the bases for these equations have been discussed in detail in Regulatory Guide 1.109 (9). Dose calculations for swimming and boating were not discussed in the guide, but total body doses from these pathways were calculated using the equations and dose factors provided in the LADTAP computer code. The doses to individual organs were taken to be the same as the total body doses for swimming and boating.

Since Peach Bottom Atomic Power Station is located on Conowingo Pond, where recirculation of water occurs during periods of low natural river flow, reconcentration of radionuclides was considered. To account for

reconcentration in August, September, October and December the external reconcentration model in LADTAP was used in conjunction with equation:

$$RECON_i = 1 + (RF * \exp^{-\lambda_i t_c})$$

Where:

RECON_i is the reconcentration factor for nuclide i, unitless;
RF is the fraction of the discharged liquid that is recycled through the station (1/dilution factor at point of intake) 0.45;
 λ_i is the radioactive decay constant of nuclide i, in hr⁻¹;
 t_c river back to the station and through the station to the discharge point, 50 hours.

For all other months RECON_i equals 1.0 for all nuclides. The doses from liquid releases were calculated for each month at each receptor location; the doses for each month were then summed for each pathway at each location to arrive at the total annual doses listed in Section VI.

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 groups. The dose calculated for each pathway were to the total body, GI-tract, bone, liver, kidney, thyroid, lung, and skin.

The calculation of dose for all pathways at each receptor location (see Section V) was done in two parts - a dose component resulting from the off-gas stack and one from the building vents. The equations, source term, and meteorology which apply to each case were used to calculate the dose resulting from each component. These doses were then summed to yield a total dose for each pathway and organ.

V. RECEPTOR LOCATIONS AND USAGE FACTORS FOR ANNUAL DOSE EVALUATIONS

A. Liquid Releases

The annual doses resulting from PBAPS liquid radwaste releases were calculated at various locations on Conowingo Pond. The locations are shown in Figure V-1. These were selected because they represent areas where the listed pathway activities are most likely to occur. Location No. 1 which is 1500 ft. downflow from the PBAPS Discharge Canal exit represents a worst case location where a significant amount of fishing from a boat may occur. Therefore, at this location doses from eating fish and boating were evaluated. Location No. 3, Glen Cove represents a worst case location

where a significant amount of Conowingo Pond recreational uses may occur. Therefore, at this location the doses resulting from eating fish, swimming, boating, and shoreline recreation were calculated.

Doses resulting from drinking water were calculated at drinking water supply intakes for Chester Water Authority (Location 2), and Conowingo Dam (Location 4) located on Conowingo Pond. The City of Baltimore (Location 5) withdrew drinking water from Conowingo Pond at an average of 1.6 days per month throughout 1989. 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.

The Conowingo Pond usage rates and fish and water consumption rates which were used in the calculation of doses for various pathways and locations resulting from Peach Bottom liquid radwaste releases are listed in Table V-1. The basis of each is also listed. Only fish consumption was considered for the aquatic foods pathways in the Peach Bottom region. In accordance with Regulatory Guide 1.109(9), a shore width factor of 0.2 was utilized for shoreline recreation. There is no known use of water from Conowingo Pond for crop irrigation; therefore, this pathway was not included. There are no known private residences using Pond water for drinking purposes; therefore, this pathway was not included.

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. There was one herd of milk goats within five miles of PBAPS.

The locations of real receptors which were evaluated in this study were determined by an extensive field survey during 1976 in the area within five miles of the release points. The survey was updated by a dairy pasture survey in 1989 which determined the pasture closest to PBAPS in each sector.

Doses were calculated at residence locations in the external radiation, inhalation, and vegetation consumption pathways. These locations included the residences with the highest annual X/Q values. In addition, dairy farms were evaluated by assuming a farm residence existed at the same location as the dairy pasture. In this case, the doses were calculated

via the external radiation, inhalation, vegetation consumption, cow-milk, and meat pathways. Standard usage factors were used in accordance with Regulatory Guide 1.109 (9) and are presented in Table V-2.

VI. CALCULATED ANNUAL DOSES

A. Liquid Releases

Table VI-1 through VI-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 Peach Bottom liquid radwaste releases. All locations having maximum estimated doses to any organ by any pathway or by all pathways have been included. The maximum doses calculated vary between the adult, teenager, and child categories. The following discussion, therefore, pertains to the maximum individual in each case.

The location with the highest total dose to any organ and to the total body is 1500 ft. downstream of the Discharge Canal exit (Location 1), where eating fish and boating are the potential pathways. The highest dose calculated to any organ results from eating fish, where the critical organ is liver.

The location with the highest calculated doses to any organ for the shoreline recreation and swimming pathways is Location 3, Glen Cove. The doses from these two pathways, however, are a small fraction of the dose resulting from eating fish at this location and do not significantly contribute to the total dose.

Location 4, Conowingo Dam, is the location with the highest calculated dose to any organ for the drinking water pathway. The dose from this pathway, however, is only 1.3 percent of the maximum organ dose at Location 1.

B. Gaseous Releases

Table VI-5 lists the annual doses to all organs through each pathway by age group at the location where a person would receive the largest calculated total body, and organ dose resulting from exposure to noble gases, particulates and iodine released from PBAPS. This is a residence located about 3800 feet SSE of the PBAPS building vents. This dose was calculated to the $1.05\text{E-}02$ mrem/yr. to the total body, and $4.18\text{E-}02$ mrem/yr. to the bone. The primary exposure pathway is vegetation for total body and bone. The location where a person would receive the largest calculated skin

dose is a residence located about 14,800 feet southwest of the PBAPS building vents. This dose is calculated to be $4.20\text{E-}03$ mrem/yr.

The location where a real person would receive the largest calculated total body dose from exposure to noble gases and particulates released from PBAPS due to non-occupational activities inside of the site boundary is at the boat ramp approximately 3300 feet NNW of the PBAPS building vents. This dose is calculated to be $3.63\text{E-}04$ mrem/yr. to the total body. The calculated skin dose at this location is $4.44\text{E-}04$ mrem/yr. assuming continuous occupancy. Assuming the shoreline recreational usage factor (325 hours per year) would result in an insignificant dose.

VII. CONCLUSION

Table I-I, Introduction and Summary, summarized the maximum calculated annual doses resulting from Peach Bottom Units 2 and 3 routine liquid and atmospheric radwaste releases and how they compare to the 10CFR50 Appendix I design objective dose limits.

The maximum calculated total body dose resulting from Peach Bottom Units 2 and 3 routine liquid radwaste releases during 1988 was $1.97\text{E-}01$ mrem/yr. and occurred at Location 1, 1500 ft. downstream from the Peach Bottom Discharge Canal exit. USNRC Regulatory Guide 1.109 (9), Table 1 lists the 10CFR50, Appendix I, design objective for dose to total body from all pathways as 3 mrem/yr. per reactor. The maximum calculated total body dose resulting from Peach Bottom liquid radwaste releases is 3.2% of this design objective.

The maximum calculated dose to any organ resulting from Peach Bottom Units 2 and 3 routine liquid radwaste releases was $2.84\text{E-}01$ mrem/yr. to liver and also occurred at Location 1. The Appendix I design objective for dose to any organ from all pathways as listed in USNRC Regulatory Guide 1.109 (9) is 10 mrem/yr. per reactor. The maximum calculated dose to any organ resulting from Peach Bottom liquid radwaste releases is 1.4% of this design objective.

The maximum calculated total body and skin doses occurring at occupied locations resulting from exposure to noble gases, particulates, and iodine released to the atmosphere by PBAPS were $1.05\text{E-}02$ and $4.20\text{E-}03$ mrem/yr. respectively. These values are very small fractions of the 10CFR50 Appendix I design objective dose limits as shown in Table I-1, Introduction and Summary.

The maximum calculated total annual dose to any organ from all nuclides which occurs at any location off site was $4.18\text{E-}02$ mrem/yr. to a child's bone due to all real pathways

at that location. As indicated in Table I-1, Introduction and Summary, this maximum dose is a small fraction of the design objective dose limits of 10CFR50 Appendix I listed.

The maximum calculated total body skin doses due to non-occupational on-site activities resulting from exposure to gaseous releases to the atmosphere by PBAPS were $3.63\text{E-}04$ and $4.44\text{E-}04$ mrem/yr. respectively. The values are very small fractions of 10CFR50 Appendix I dosing objective dose limits.

It is concluded that the estimated radiation doses resulting from the routine discharge of liquid and atmospheric releases from Peach Bottom Atomic Power Station are extremely low and well within the design objectives given in 10CFR50, Appendix I.

REFERENCES

1. Philadelphia Electric Company, "Peach Bottom Atomic Power Station Units 2 and 3, Updated Final Safety Analysis Report."
2. Philadelphia Electric Company, "Peach Bottom Atomic Power Station Units 2 and 3, Updated Final Safety Analysis Report," Section 9.2.
3. Philadelphia Electric Company, "Peach Bottom Atomic Power Station Units 2 and 3, Radioactive Effluent Dose Assessment", September 30, 1976.
4. Philadelphia Electric Company, "Peach Bottom Atomic Power Station Units 2 and 3, Semi-Annual Effluent Releases Report No. 27," January 1, 1989, through June 30, 1989.
5. Philadelphia Electric Company, "Peach Bottom Atomic Power Station Units 2 and 3, Semi-Annual Effluent Releases Report No. 28," July 1, 1989, through December 31, 1989.
6. Philadelphia Electric Company, "Peach Bottom Atomic Power Station Units 2 and 3, Updated Final Safety Analysis Report" Page 2.4-9.
7. Philadelphia Electric Company, "Peach Bottom Atomic Power Station Units 2 and 3, Updated Final Safety Analysis Report," Section 2.4.3.3.
8. Philadelphia Electric Company, "Peach Bottom Atomic Power Station Units 2 and 3, Updated Final Safety Analysis Report," Tables 2.4.8, 2.4.9, and 2.4.10.
9. U. S. Nuclear Regulatory Commission, Regulatory Guide 1.109, "Calculation of Annual Doses to Man from Routing Releases of Reactor Effluent for the Purpose of Evaluating Compliance with 10 CFR Part 50, Appendix I," Revision 1, October 1977.
10. Cooper, R. E. (1967), "RADOS, A code to Estimate Gamma Dose from a Cloud of Radioactive Gases," Savannah River Laboratory," DP-1098.
11. Cooper, R. E. and Busche, B. C., "The SRL Meteorological Program and Off Site Dose Calculations", DP1163 Appendix F. 1968.
12. Philadelphia Electric Company, "Peach Bottom Atomic Power Station Units 2 and 3, Environmental Report--Operating License Stage," Supplement No. 3, Page 19.

TABLE III-1
PEACH BOTTOM RECEPTOR LOCATION PARAMETERS BY RIVER FLOW REGIME

| LOCATION NUMBER | LOCATION | Less Than 15,000 cfs River Flow | | 15,000-35,000 cfs River Flow | | Greater Than 35,000 cfs River Flow | |
|--------------------|---|------------------------------------|--------------------|---------------------------------|--------------------|---------------------------------------|--------------------|
| | | TRAVEL TIME (hrs) | DILUTION FACTOR | TRAVEL TIME (hrs) | DILUTION FACTOR | TRAVEL TIME (hrs) | DILUTION FACTOR |
| 1 | 1500 feet down-flow of plant discharge | 15 | 1.4 | 3 | 2.2 | 1.5 | 1.7 |
| 3 | Glen Cove | 68 | 1.5 | 17 | 3.6 | 11 | 12 |
| 4 | Conowingo Dam | 100 | 2.9 | 25 | 7.7 | 16 | 14 |
| 2 | Chester Water Intake | 70 | 2.9 | 11 | 5.9 | 4 | 8.3 |

TABLE III-2
PEACH BOTTOM RECEPTOR LOCATION PARAMETERS FOR 1989

| Month | 1500 Feet Down-Flow of Plant Discharge | | Glen Cove | | Conowingo Dam | | Chester Water Intake | |
|-----------|---|--------------------|-------------------------|--------------------|-------------------------|--------------------|-------------------------|--------------------|
| | Travel Time (hrs) | Dilution Factor | Travel Time (hrs) | Dilution Factor | Travel Time (hrs) | Dilution Factor | Travel Time (hrs) | Dilution Factor |
| January | 3.3 | 2.1 | 18.3 | 3.2 | 27.0 | 6.6 | 12.0 | 5.4 |
| February | 2.9 | 1.9 | 17.6 | 3.2 | 25.9 | 6.3 | 9.5 | 5.2 |
| March | 2.3 | 2.0 | 14.5 | 4.7 | 21.2 | 9.0 | 7.0 | 6.5 |
| April | 1.9 | 1.9 | 13.0 | 6.0 | 19.0 | 10.3 | 5.5 | 7.1 |
| May | 1.6 | 1.8 | 11.5 | 9.2 | 16.8 | 12.7 | 4.4 | 7.9 |
| June | 1.8 | 1.8 | 12.5 | 6.8 | 18.2 | 11.0 | 5.1 | 7.3 |
| July | 1.7 | 1.8 | 12.1 | 7.5 | 17.6 | 11.6 | 4.8 | 7.5 |
| August | 7.4 | 1.5 | 38.3 | 1.8 | 56.4 | 3.5 | 29.4 | 3.3 |
| September | 8.3 | 1.5 | 42.5 | 1.7 | 62.5 | 3.3 | 33.8 | 3.2 |
| October | 3.9 | 1.6 | 24.7 | 2.2 | 36.1 | 4.1 | 12.1 | 3.8 |
| November | 2.3 | 2.0 | 14.6 | 4.6 | 21.4 | 8.9 | 7.2 | 6.5 |
| December | 5.9 | 1.6 | 31.5 | 1.9 | 46.3 | 3.8 | 22.8 | 3.6 |

TABLE V-1

LIQUID PATHWAY USAGE AND CONSUMPTION RATES FOR PBAPS

| PATHWAY | USAGE OR CONSUMPTION RATE | | | | |
|--------------------------------|---------------------------|----------|-------|--------|-------|
| | ADULT | TEENAGER | CHILD | INFANT | UNITS |
| Eating fish (a) | 21 | 16 | 6.9 | - | kg/yr |
| Drinking (b) | 730 | 510 | 510 | 330 | l/yr |
| Swimming (c) | 280 | 280 | - | - | hr/yr |
| Boating (c) | 120 | 120 | 67 | - | hr/yr |
| Shoreline Recreation (d) | 325 | 325 | 14 | - | hr/yr |
| Fishing from Conowingo Dam (e) | 325 | 325 | 14 | - | hr/yr |

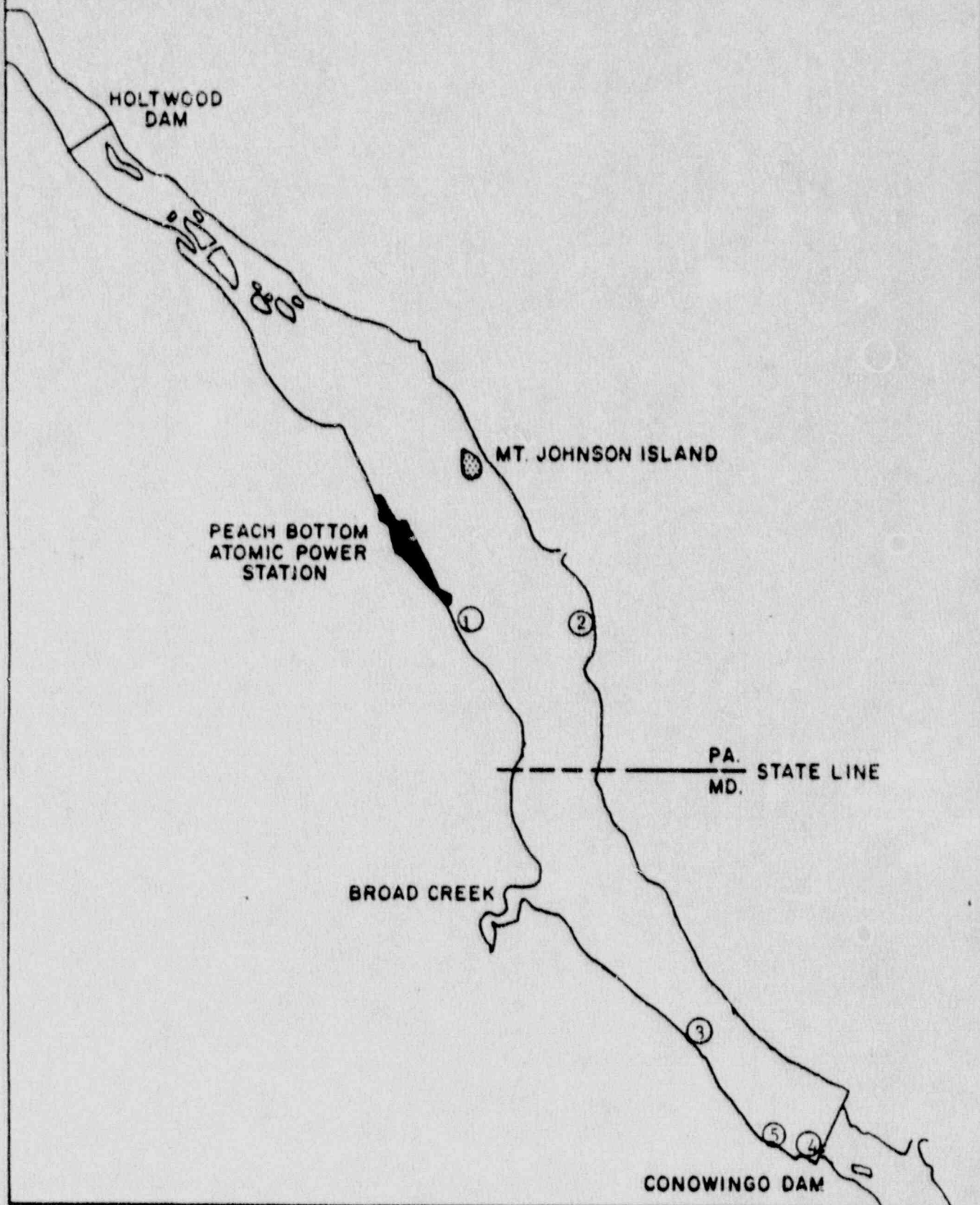
- (a) The consumption rate for eating fish at all real locations evaluated are those listed in Table E-5, USNRC Regulatory Guide 1.109⁹.
- (b) The consumption rates for drinking water at all real locations evaluated except Chester Water Authority are those listed in Table E-5, USNRC Regulatory Guide 1.109⁹. The values used for Chester Water Authority were 5 percent of those listed above because the system pumped water from Conowingo Pond a maximum of once per month.
- (c) The usage rates listed for adults and teenagers for swimming and boating are 1980 projections for maximum individuals based on 1968 Recreation Survey, Conowingo Reservoir - Susquehanna River by Fahringer, McCarty, Grey and Associates. These values were published in the PBAPS Environmental Report, Supplement No. 3, Page 19¹². The child's usage rate for boating is derived from the adult usage rate based on the ratio between adult and child usage rates as listed in Table E-5, USNRC Regulatory Guide 1.109⁹.
- (d) The adult and teenager usage rates for shoreline recreation are the 1980 projected usage rate of maximum individuals for shoreline fishing based on 1968 Recreation Survey, Conowingo Reservoir - Susquehanna River by Fahringer, McCarty, Grey and Associates. These values were published in the PBAPS Environmental Report, Supplement No. 3, Page 19¹². The child's usage rate is that listed in Table E-5 of USNRC Regulatory Guide 1.109⁹.
- (e) The adult and teenager usage rates for fishing from Conowingo Dam are 1980 projected usage rates of maximum individuals for shoreline fishing based on 1968 Recreation Survey, Conowingo Reservoir - Susquehanna River by Fahringer, McCarty, Grey and Associates. The values were published in the PBAPS Environmental Report, Supplement No. 3, Page 19¹².

TABLE V-2

GASEOUS PATHWAY USAGE AND CONSUMPTION RATES FOR PBAPS

| <u>PATHWAY</u> | <u>INFANT</u> | <u>CHILD</u> | <u>TEEN</u> | <u>ADULT</u> | <u>UNITS</u> |
|--------------------------------|---------------|--------------|-------------|--------------|--------------------|
| Fruits & Vegetables & Grain | 0.0 | 520.0 | 630.0 | 520.0 | kg/yr |
| Leafy Vegetables | 0.0 | 26.0 | 42.0 | 64.0 | kg/yr |
| Milk | 330.0 | 330.0 | 400.0 | 310.0 | liters/yr |
| Meat & Poultry | 0.0 | 41.0 | 65.0 | 110.0 | kg/yr |
| Inhalation | 1400.0 | 3700.0 | 8000.0 | 8000.0 | m ³ /yr |

FIGURE V-1



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

TABLE VI-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-Lli |
|---------|---|---------------------|----------|----------|----------|------------|----------|----------|----------|----------|
| 1 | 1500 ft. below discharge canal exit | Eating fish | 0.00E+00 | 1.73E-01 | 2.78E-01 | 1.97E-01 | 2.47E-05 | 9.34E-02 | 3.07E-02 | 8.32E-03 |
| | | Boating | 0.00E+00 | 1.55E-05 | 1.55E-05 | 1.55E-05 | 1.55E-05 | 1.55E-05 | 1.55E-05 | 1.55E-05 |
| | | Total | 0.00E+00 | 1.73E-01 | 2.78E-01 | 1.97E-01 | 4.02E-05 | 9.34E-02 | 3.07E-02 | 8.34E-03 |
| 3 | Glen Cove | Eating Fish | 0.00E+00 | 9.50E-02 | 1.53E-01 | 1.08E-01 | 1.47E-05 | 5.12E-02 | 1.68E-02 | 4.93E-03 |
| | | Shoreline | 8.50E-03 | 7.26E-03 | 7.26E-03 | 7.26E-03 | 7.26E-03 | 7.26E-03 | 7.26E-03 | 7.26E-03 |
| | | Swimming | 0.00E+00 | 4.86E-05 | 4.86E-05 | 4.86E-05 | 4.86E-05 | 4.86E-05 | 4.86E-05 | 4.86E-05 |
| | | Boating | 0.00E+00 | 1.43E-05 | 1.43E-05 | 1.43E-05 | 1.43E-05 | 1.43E-05 | 1.43E-05 | 1.43E-05 |
| | | Total | 8.50E-03 | 1.02E-01 | 1.60E-01 | 1.15E-01 | 7.34E-03 | 5.85E-02 | 2.41E-02 | 1.23E-02 |
| 4 | Conowingo Dam | Eating Fish | 0.00E+00 | 4.84E-02 | 7.76E-02 | 5.51E-02 | 7.74E-06 | 2.61E-02 | 8.58E-03 | 2.52E-03 |
| | | Drinking | 0.00E+00 | 8.65E-04 | 1.65E-03 | 1.29E-03 | 2.77E-04 | 7.28E-04 | 4.25E-04 | 7.16E-04 |
| | | Fishing from dam | 0.00E+00 | 1.43E-05 | 1.43E-05 | 1.43E-05 | 1.43E-05 | 1.43E-05 | 1.43E-05 | 1.43E-05 |
| | | Total | 0.00E+00 | 4.93E-02 | 7.93E-02 | 5.64E-02 | 2.99E-04 | 2.68E-02 | 9.02E-03 | 3.25E-03 |

TABLE VI-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 | 1.83E-01 | 2.84E-01 | 1.11E-01 | 1.92E-05 | 9.60E-02 | 3.67E-02 | 6.06E-03 |
| | | Boating | 0.00E+00 | 1.55E-05 | 1.55E-05 | 1.55E-05 | 1.55E-05 | 1.55E-05 | 1.55E-05 | 1.55E-05 |
| | | Total | 0.00E+00 | 1.83E-01 | 2.84E-01 | 1.11E-01 | 3.47E-05 | 9.60E-02 | 3.67E-02 | 6.08E-03 |
| 3 | Glen Cove | Eating Fish | 0.00E+00 | 1.01E-01 | 1.57E-01 | 6.11E-02 | 1.15E-05 | 5.26E-02 | 2.01E-02 | 4.34E-03 |
| | | Shoreline | 8.52E-03 | 7.26E-03 | 7.26E-03 | 7.26E-03 | 7.26E-03 | 7.26E-03 | 7.26E-03 | 7.26E-03 |
| | | Swimming | 0.00E+00 | 4.86E-05 | 4.86E-05 | 4.86E-05 | 4.86E-05 | 4.86E-05 | 4.86E-05 | 4.86E-05 |
| | | Boating | 0.00E+00 | 1.04E-05 | 1.04E-05 | 1.04E-05 | 1.04E-05 | 1.04E-05 | 1.04E-05 | 1.04E-05 |
| | | Total | 8.52E-03 | 1.08E-01 | 1.64E-01 | 6.84E-02 | 7.33E-03 | 5.99E-02 | 2.74E-02 | 1.17E-02 |
| 4 | Conowingo Dam | Eating Fish | 0.00E+00 | 5.13E-02 | 8.01E-02 | 3.11E-02 | 6.04E-06 | 2.68E-02 | 1.02E-02 | 1.83E-03 |
| | | Drinking | 0.00E+00 | 8.38E-04 | 1.48E-03 | 7.38E-04 | 1.95E-04 | 6.21E-04 | 3.58E-04 | 4.75E-04 |
| | | Fishing from dam | 0.00E+00 | 1.43E-05 | 1.43E-05 | 1.43E-05 | 1.43E-05 | 1.43E-05 | 1.43E-05 | 1.43E-05 |
| | | Total | 0.00E+00 | 5.22E-02 | 8.16E-02 | 3.19E-02 | 2.15E-04 | 2.74E-02 | 1.06E-02 | 2.32E-03 |

TABLE VI-3
CALCULATED MAXIMUM ANNUAL DOSES TO CHILD 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 | 2.29E-01 | 2.53E-01 | 4.32E-02 | 2.47E-05 | 9.34E-02 | 3.07E-02 | 8.32E-03 |
| | | Boating | 0.00E+00 | 8.67E-06 | 8.67E-06 | 8.67E-06 | 8.67E-06 | 8.67E-06 | 8.67E-06 | 8.67E-06 |
| | | Total | 0.00E+00 | 2.29E-01 | 2.53E-01 | 4.32E-02 | 3.34E-05 | 9.34E-02 | 3.07E-02 | 8.33E-03 |
| 3 | Glen Cove | Eating Fish | 0.00E+00 | 1.25E-01 | 1.39E-01 | 2.38E-02 | 9.74E-06 | 4.48E-02 | 1.60E-02 | 1.33E-03 |
| | | Shoreline | 3.67E-04 | 3.13E-04 | 3.13E-04 | 3.13E-04 | 3.13E-04 | 3.13E-04 | 3.13E-04 | 3.13E-04 |
| | | Boating | 0.00E+00 | 5.81E-06 | 5.81E-06 | 5.81E-06 | 5.81E-06 | 5.81E-06 | 5.81E-06 | 5.81E-06 |
| | | Total | 3.67E-04 | 1.25E-01 | 1.39E-01 | 2.41E-02 | 3.29E-04 | 4.51E-02 | 1.63E-02 | 1.65E-03 |
| 4 | Conowingo Dam | Eating Fish | 0.00E+00 | 6.39E-02 | 7.08E+02 | 1.21E-02 | 5.10E-06 | 2.28E-02 | 8.11E-03 | 6.79E-04 |
| | | Drinking | 0.00E+00 | 2.41E-03 | 3.03E-03 | 9.40E-04 | 3.75E-04 | 1.21E-03 | 6.74E-04 | 6.00E-04 |
| | | Fishing from dam | 0.00E+00 | 6.17E-07 | 6.17E-07 | 6.17E-07 | 6.17E-07 | 6.17E-07 | 6.17E-07 | 6.17E-07 |
| | | Total | 0.00E+00 | 6.63E-02 | 7.08E+02 | 1.30E-02 | 3.81E-04 | 2.40E-02 | 8.78E-03 | 1.28E-03 |

TABLE VI-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-Lli |
|---------|------------------|----------|----------|----------|----------|------------|----------|----------|----------|----------|
| 4 | Conowingo Dam | Drinking | 0.00E+00 | 2.49E-03 | 3.65E-03 | 7.55E-04 | 3.70E-04 | 1.23E-03 | 8.43E-04 | 5.07E-04 |

TABLE VI-5

ANNUAL DOSES TO ALL ORGANS BY PATHWAY
AT LOCATION OF HIGHEST CALCULATED DOSE

ANNUAL BETA AIR DOSE = 3.38E-04 MILLRADS
ANNUAL GAMMA AIR DOSE = 1.29E-05 MILLRADS

| PATHWAY | T. BODY | GI-TRACT | BONE | LIVER | KIDNEY | THYROID | LUNG | SKIN |
|----------------|----------|----------|----------|----------|----------|----------|----------|----------|
| PLUME | 8.63E-06 | 8.63E-06 | 8.63E-06 | 8.63E-06 | 8.63E-06 | 8.63E-06 | 1.20E-05 | 2.22E-04 |
| GROUND | 7.68E-04 | 7.68E-04 | 7.68E-04 | 7.68E-04 | 7.68E-04 | 7.68E-04 | 7.68E-04 | 9.01E-04 |
| VEGET ADULT | 4.38E-03 | 6.81E-04 | 1.80E-02 | 2.15E-04 | 7.23E-05 | 8.32E-05 | 2.38E-05 | 3.28E-10 |
| TEEN | 5.66E-03 | 8.39E-04 | 2.36E-02 | 3.47E-04 | 1.17E-04 | 7.22E-05 | 4.51E-05 | 3.92E-10 |
| CHILD | 9.67E-03 | 6.62E-04 | 4.07E-02 | 5.96E-04 | 1.92E-04 | 1.21E-04 | 6.88E-05 | 6.15E-10 |
| 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 |
| 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 |
| GOATMILK 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 | 1.87E-05 | 6.29E-06 | 2.85E-04 | 2.42E-06 | 1.97E-06 | 1.21E-04 | 5.41E-05 | 2.00E-10 |
| TEEN | 2.02E-05 | 6.59E-06 | 3.11E-04 | 3.32E-06 | 2.73E-06 | 1.63E-04 | 8.91E-05 | 2.02E-10 |
| CHILD | 1.91E-05 | 2.95E-06 | 2.94E-04 | 3.25E-06 | 2.56E-06 | 2.13E-04 | 7.79E-05 | 1.78E-10 |
| INFANT | 7.87E-06 | 1.11E-06 | 1.21E-04 | 2.63E-06 | 1.66E-06 | 1.97E-04 | 6.04E-05 | 1.03E-10 |

PART 2

METEOROLOGICAL DATA

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- III. DATA FROM 33-FOOT LEVEL
- IV. DATA FROM 75-FOOT LEVEL
- V. DATA FROM 320-FOOT LEVEL
- REFERENCES

I. INTRODUCTION

Peach Bottom Atomic Power Station (PBAPS) 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 (1). Information pertaining to the meteorological conditions during 1988 at PBAPS is presented.

II. 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 UFSAR¹. 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.

III. DATA FROM 33-FOOT LEVEL

PEACH BOTTOM

1/89-12/89

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASSWIND: 33 FT
DELTA T: (316-33FT)LAPSE RATE: LE -1.9 DEG C/100M
CLASS A

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 | 1 | 0.0 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 2 | 0.0 |
| NNE | 0 | 0.0 | 1 | 0.0 | 4 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 5 | 0.1 |
| NE | 0 | 0.0 | 0 | 0.0 | 4 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 4 | 0.0 |
| ENE | 0 | 0.0 | 1 | 0.0 | 9 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 10 | 0.1 |
| E | 0 | 0.0 | 0 | 0.0 | 4 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 4 | 0.0 |
| ESE | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| SE | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| SSE | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 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 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 |
| SSW | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 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 | 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 | 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 | 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 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| NW | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 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 | 0 | 0.0 | 0 | 0.0 |
| | 0 | 0.0 | 3 | 0.0 | 22 | 0.3 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 26 | 0.3 |

MEAN WIND SPEED: 4.3

MISSING: 0

PEACH BOTTOM

1/89-12/89

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASSWIND: 33 FT
DELTA T: (316-33FT)LAPSE RATE: -1.8 TO -1.7 DEG C/100M
CLASS B

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 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| NNE | 0 | 0.0 | 0 | 0.0 | 3 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 3 | 0.0 |
| NE | 0 | 0.0 | 1 | 0.0 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 2 | 0.0 |
| ENE | 0 | 0.0 | 2 | 0.0 | 2 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 4 | 0.0 |
| E | 0 | 0.0 | 3 | 0.0 | 2 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 5 | 0.1 |
| ESE | 0 | 0.0 | 1 | 0.0 | 7 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 8 | 0.1 |
| SE | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| SSE | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 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 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 |
| SSW | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 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 | 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 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| W | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 2 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 2 | 0.0 |
| WNW | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 |
| NW | 0 | 0.0 | 2 | 0.0 | 0 | 0.0 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 3 | 0.0 |
| NNW | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| | 0 | 0.0 | 9 | 0.1 | 15 | 0.2 | 5 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 29 | 0.4 |

MEAN WIND SPEED: 5.2

MISSING: 0

PEACH BOTTOM

1/89-12/89

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASSWIND: 33 FT
DELTA T: (316-33FT)LAPSE RATE: -1.6 TO -1.5 DEG C/100M
CLASS C

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 | 2 | 0.0 | 11 | 0.1 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 14 | 0.2 |
| NNE | 0 | 0.0 | 5 | 0.1 | 5 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 10 | 0.1 |
| NE | 0 | 0.0 | 3 | 0.0 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 4 | 0.0 |
| ENE | 0 | 0.0 | 7 | 0.1 | 4 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 11 | 0.1 |
| E | 0 | 0.0 | 8 | 0.1 | 3 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 11 | 0.1 |
| ESE | 0 | 0.0 | 3 | 0.0 | 4 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 7 | 0.1 |
| SE | 0 | 0.0 | 1 | 0.0 | 3 | 0.0 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 5 | 0.1 |
| SSE | 0 | 0.0 | 0 | 0.0 | 4 | 0.0 | 5 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 9 | 0.1 |
| S | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 | 6 | 0.1 | 2 | 0.0 | 0 | 0.0 | 0 | 0.0 | 9 | 0.1 |
| SSW | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 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 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 |
| WSW | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 2 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 2 | 0.0 |
| W | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 | 9 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 10 | 0.1 |
| WNW | 0 | 0.0 | 0 | 0.0 | 2 | 0.0 | 6 | 0.1 | 2 | 0.0 | 0 | 0.0 | 0 | 0.0 | 10 | 0.1 |
| NW | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 | 5 | 0.1 | 2 | 0.0 | 0 | 0.0 | 0 | 0.0 | 8 | 0.1 |
| NNW | 0 | 0.0 | 0 | 0.0 | 2 | 0.0 | 4 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 6 | 0.1 |
| | 0 | 0.0 | 29 | 0.4 | 42 | 0.5 | 40 | 0.5 | 6 | 0.1 | 0 | 0.0 | 0 | 0.0 | 117 | 1.4 |

MEAN WIND SPEED: 6.6

MISSING: 2

PEACH BOTTOM

1/89-12/89

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASSWIND: 33 FT
DELTA T: (316-33FT)LAPSE RATE: -1.4 TO -0.5 DEG C/100M
CLASS D

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 | 97 | 1.2 | 304 | 3.7 | 82 | 1.0 | 2 | 0.0 | 0 | 0.0 | 0 | 0.0 | 485 | 5.9 |
| NNE | 0 | 0.0 | 131 | 1.6 | 72 | 0.9 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 203 | 2.5 |
| NE | 0 | 0.0 | 121 | 1.5 | 39 | 0.5 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 160 | 1.9 |
| ENE | 0 | 0.0 | 113 | 1.4 | 25 | 0.3 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 138 | 1.7 |
| E | 0 | 0.0 | 106 | 1.3 | 32 | 0.4 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 138 | 1.7 |
| ESE | 0 | 0.0 | 58 | 0.7 | 57 | 0.7 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 115 | 1.4 |
| SE | 0 | 0.0 | 38 | 0.5 | 127 | 1.5 | 21 | 0.3 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 187 | 2.3 |
| SSE | 0 | 0.0 | 41 | 0.5 | 145 | 1.8 | 60 | 0.7 | 8 | 0.1 | 0 | 0.0 | 0 | 0.0 | 254 | 3.1 |
| S | 0 | 0.0 | 22 | 0.3 | 111 | 1.3 | 109 | 1.3 | 11 | 0.1 | 0 | 0.0 | 0 | 0.0 | 253 | 3.1 |
| SSW | 0 | 0.0 | 14 | 0.2 | 47 | 0.6 | 45 | 0.5 | 8 | 0.1 | 0 | 0.0 | 0 | 0.0 | 114 | 1.4 |
| SW | 0 | 0.0 | 21 | 0.3 | 59 | 0.7 | 50 | 0.6 | 3 | 0.0 | 0 | 0.0 | 0 | 0.0 | 133 | 1.6 |
| WSW | 0 | 0.0 | 20 | 0.2 | 59 | 0.7 | 40 | 0.5 | 2 | 0.0 | 0 | 0.0 | 0 | 0.0 | 121 | 1.5 |
| W | 0 | 0.0 | 13 | 0.2 | 73 | 0.9 | 71 | 0.9 | 9 | 0.1 | 0 | 0.0 | 0 | 0.0 | 166 | 2.0 |
| WNW | 0 | 0.0 | 28 | 0.3 | 109 | 1.3 | 167 | 2.0 | 39 | 0.5 | 1 | 0.0 | 0 | 0.0 | 344 | 4.2 |
| NW | 0 | 0.0 | 41 | 0.5 | 158 | 1.9 | 236 | 2.9 | 48 | 0.6 | 3 | 0.0 | 0 | 0.0 | 486 | 5.9 |
| NNW | 0 | 0.0 | 63 | 0.8 | 203 | 2.5 | 211 | 2.6 | 49 | 0.6 | 2 | 0.0 | 0 | 0.0 | 528 | 6.4 |
| | 0 | 0.0 | 927 | 11.3 | 1620 | 19.7 | 1092 | 13.3 | 180 | 2.2 | 6 | 0.1 | 0 | 0.0 | 3825 | 46.5 |

MEAN WIND SPEED: 6.4

MISSING: 101

PEACH BOTTOM

1/89-12/89

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS

WIND: 33 FT

DELTA T: (316-33FT)

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

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 | 108 | 1.3 | 85 | 1.0 | 8 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 201 | 2.4 |
| NNE | 0 | 0.0 | 78 | 0.9 | 10 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 88 | 1.1 |
| NE | 0 | 0.0 | 71 | 0.9 | 2 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 73 | 0.9 |
| ENE | 0 | 0.0 | 90 | 1.1 | 3 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 93 | 1.1 |
| E | 0 | 0.0 | 136 | 1.7 | 12 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 148 | 1.8 |
| ESE | 0 | 0.0 | 118 | 1.4 | 20 | 0.2 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 138 | 1.7 |
| SE | 0 | 0.0 | 142 | 1.7 | 104 | 1.3 | 4 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 250 | 3.0 |
| SSE | 0 | 0.0 | 124 | 1.5 | 132 | 1.6 | 24 | 0.3 | 1 | 0.0 | 2 | 0.0 | 0 | 0.0 | 283 | 3.4 |
| S | 0 | 0.0 | 98 | 1.2 | 113 | 1.4 | 33 | 0.4 | 2 | 0.0 | 0 | 0.0 | 0 | 0.0 | 246 | 3.0 |
| SSW | 0 | 0.0 | 93 | 1.1 | 75 | 0.9 | 10 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 178 | 2.2 |
| SW | 0 | 0.0 | 79 | 1.0 | 96 | 1.2 | 11 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 186 | 2.3 |
| WSW | 0 | 0.0 | 87 | 1.1 | 114 | 1.4 | 13 | 0.2 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 215 | 2.6 |
| W | 0 | 0.0 | 89 | 1.1 | 204 | 2.5 | 19 | 0.2 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 313 | 3.8 |
| WNW | 0 | 0.0 | 85 | 1.0 | 207 | 2.5 | 31 | 0.4 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 323 | 3.9 |
| NW | 0 | 0.0 | 94 | 1.1 | 161 | 2.0 | 29 | 0.4 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 284 | 3.5 |
| NNW | 0 | 0.0 | 62 | 0.8 | 108 | 1.3 | 17 | 0.2 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 187 | 2.3 |
| | 0 | 0.0 | 1554 | 18.9 | 1446 | 17.6 | 199 | 2.4 | 5 | 0.1 | 2 | 0.0 | 0 | 0.0 | 3206 | 39.0 |

MEAN WIND SPEED: 4.1

MISSING: 118

PEACH BOTTOM

1/89-12/89

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASSWIND: 33 FT
DELTA T: (316-33FT)LAPSE RATE: 1.6 TO 4.0 DEG C/100M
CLASS F

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 | SUM | PERCENT |
| N | 0 | 0.0 | 23 | 0.3 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 23 | 0.3 |
| NNE | 0 | 0.0 | 13 | 0.2 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 14 | 0.2 |
| NE | 0 | 0.0 | 19 | 0.2 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 19 | 0.2 |
| ENE | 0 | 0.0 | 20 | 0.2 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 20 | 0.2 |
| E | 0 | 0.0 | 46 | 0.6 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 46 | 0.6 |
| ESE | 0 | 0.0 | 40 | 0.5 | 4 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 44 | 0.5 |
| SE | 0 | 0.0 | 24 | 0.3 | 3 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 27 | 0.3 |
| SSE | 0 | 0.0 | 17 | 0.2 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 17 | 0.2 |
| S | 0 | 0.0 | 17 | 0.2 | 8 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 25 | 0.3 |
| SSW | 0 | 0.0 | 25 | 0.3 | 5 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 30 | 0.4 |
| SW | 0 | 0.0 | 42 | 0.5 | 11 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 53 | 0.6 |
| WSW | 0 | 0.0 | 91 | 1.1 | 67 | 0.8 | 3 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 161 | 2.0 |
| W | 0 | 0.0 | 100 | 1.2 | 40 | 0.5 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 140 | 1.7 |
| WNW | 0 | 0.0 | 50 | 0.6 | 17 | 0.2 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 67 | 0.8 |
| NW | 0 | 0.0 | 29 | 0.4 | 9 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 38 | 0.5 |
| NNW | 0 | 0.0 | 26 | 0.3 | 2 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 28 | 0.3 |
| | 0 | 0.0 | 582 | 7.1 | 167 | 2.0 | 3 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 752 | 9.1 |

MEAN WIND SPEED: 2.8

MISSING: 13

PEACH BOTTOM

1/89-12/89

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASSWIND: 33 FT
DELTA T: (316-33FT)LAPSE RATE: GT 4.0 DEG C/100M
CLASS G

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 | 3 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 3 | 0.0 |
| NNE | 0 | 0.0 | 5 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 5 | 0.1 |
| NE | 0 | 0.0 | 8 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 8 | 0.1 |
| ENE | 0 | 0.0 | 3 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 3 | 0.0 |
| E | 0 | 0.0 | 8 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 8 | 0.1 |
| ESE | 0 | 0.0 | 8 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 8 | 0.1 |
| SE | 0 | 0.0 | 2 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 2 | 0.0 |
| SSE | 0 | 0.0 | 4 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 4 | 0.0 |
| S | 0 | 0.0 | 4 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 4 | 0.0 |
| SSW | 0 | 0.0 | 6 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 6 | 0.1 |
| SW | 0 | 0.0 | 11 | 0.1 | 4 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 15 | 0.2 |
| VSW | 0 | 0.0 | 74 | 0.9 | 29 | 0.4 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 103 | 1.3 |
| W | 0 | 0.0 | 56 | 0.7 | 2 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 58 | 0.7 |
| VNW | 0 | 0.0 | 28 | 0.3 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 28 | 0.3 |
| NW | 0 | 0.0 | 8 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 8 | 0.1 |
| NNW | 0 | 0.0 | 5 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 5 | 0.1 |
| | 0 | 0.0 | 233 | 2.8 | 35 | 0.4 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 268 | 3.3 |

MEAN WIND SPEED: 2.6

MISSING: 3

PEACH BOTTOM

1/89-12/89

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)

| | 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 | 234 | 2.8 | 401 | 4.9 | 91 | 1.1 | 2 | 0.0 | 0 | 0.0 | 0 | 0.0 | 728 | 8.9 |
| NNE | 0 | 0.0 | 233 | 2.8 | 95 | 1.2 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 328 | 4.0 |
| NE | 0 | 0.0 | 223 | 2.7 | 47 | 0.6 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 270 | 3.3 |
| ENE | 0 | 0.0 | 236 | 2.9 | 43 | 0.5 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 279 | 3.4 |
| E | 0 | 0.0 | 307 | 3.7 | 53 | 0.6 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 360 | 4.4 |
| ESE | 0 | 0.0 | 228 | 2.8 | 92 | 1.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 320 | 3.9 |
| SE | 0 | 0.0 | 207 | 2.5 | 237 | 2.9 | 26 | 0.3 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 471 | 5.7 |
| SSE | 0 | 0.0 | 186 | 2.3 | 281 | 3.4 | 89 | 1.1 | 9 | 0.1 | 2 | 0.0 | 0 | 0.0 | 567 | 6.9 |
| S | 0 | 0.0 | 141 | 1.7 | 233 | 2.8 | 150 | 1.8 | 15 | 0.2 | 0 | 0.0 | 0 | 0.0 | 539 | 6.6 |
| SSW | 0 | 0.0 | 138 | 1.7 | 127 | 1.5 | 55 | 0.7 | 8 | 0.1 | 0 | 0.0 | 0 | 0.0 | 328 | 4.0 |
| SW | 0 | 0.0 | 153 | 1.9 | 170 | 2.1 | 62 | 0.8 | 3 | 0.0 | 0 | 0.0 | 0 | 0.0 | 388 | 4.7 |
| WSW | 0 | 0.0 | 272 | 3.3 | 269 | 3.3 | 58 | 0.7 | 3 | 0.0 | 0 | 0.0 | 0 | 0.0 | 602 | 7.3 |
| W | 0 | 0.0 | 258 | 3.1 | 320 | 3.9 | 101 | 1.2 | 10 | 0.1 | 0 | 0.0 | 0 | 0.0 | 689 | 8.4 |
| WNW | 0 | 0.0 | 191 | 2.3 | 335 | 4.1 | 205 | 2.5 | 41 | 0.5 | 1 | 0.0 | 0 | 0.0 | 773 | 9.4 |
| NW | 0 | 0.0 | 174 | 2.1 | 329 | 4.0 | 271 | 3.3 | 50 | 0.6 | 3 | 0.0 | 0 | 0.0 | 827 | 10.1 |
| NNW | 0 | 0.0 | 156 | 1.9 | 315 | 3.8 | 232 | 2.8 | 49 | 0.6 | 2 | 0.0 | 0 | 0.0 | 754 | 9.2 |
| | 0 | 0.0 | 3337 | 40.6 | 3347 | 40.7 | 1340 | 16.3 | 191 | 2.3 | 8 | 0.1 | 0 | 0.0 | 8223 | 100.0 |

MISSING HOURS: 537

MEAN WIND SPEED: 5.0

PEACH BOTTOM

1/89-12/89

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASSWIND: 33 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 | 251 | 2.9 | 428 | 5.0 | 91 | 1.1 | 2 | 0.0 | 0 | 0.0 | 0 | 0.0 | 772 | 9.1 |
| NNE | 0 | 0.0 | 244 | 2.9 | 96 | 1.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 340 | 4.0 |
| NE | 0 | 0.0 | 232 | 2.7 | 47 | 0.6 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 279 | 3.3 |
| ENE | 0 | 0.0 | 240 | 2.8 | 43 | 0.5 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 283 | 3.3 |
| E | 0 | 0.0 | 321 | 3.8 | 55 | 0.6 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 376 | 4.4 |
| ESE | 0 | 0.0 | 235 | 2.8 | 98 | 1.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 333 | 3.9 |
| SE | 0 | 0.0 | 213 | 2.5 | 246 | 2.9 | 27 | 0.3 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 487 | 5.7 |
| SSE | 0 | 0.0 | 197 | 2.3 | 285 | 3.3 | 89 | 1.0 | 9 | 0.1 | 2 | 0.0 | 0 | 0.0 | 582 | 6.8 |
| S | 0 | 0.0 | 147 | 1.7 | 241 | 2.8 | 153 | 1.8 | 15 | 0.2 | 0 | 0.0 | 0 | 0.0 | 556 | 6.5 |
| SSW | 0 | 0.0 | 143 | 1.7 | 129 | 1.5 | 55 | 0.6 | 8 | 0.1 | 0 | 0.0 | 0 | 0.0 | 335 | 3.9 |
| SW | 0 | 0.0 | 164 | 1.9 | 180 | 2.1 | 64 | 0.8 | 3 | 0.0 | 0 | 0.0 | 0 | 0.0 | 411 | 4.8 |
| WSW | 0 | 0.0 | 287 | 3.4 | 283 | 3.3 | 58 | 0.7 | 3 | 0.0 | 0 | 0.0 | 0 | 0.0 | 631 | 7.4 |
| W | 0 | 0.0 | 264 | 3.1 | 331 | 3.9 | 101 | 1.2 | 10 | 0.1 | 0 | 0.0 | 0 | 0.0 | 706 | 8.3 |
| WNW | 0 | 0.0 | 205 | 2.4 | 341 | 4.0 | 205 | 2.4 | 41 | 0.5 | 1 | 0.0 | 0 | 0.0 | 793 | 9.3 |
| NW | 0 | 0.0 | 178 | 2.1 | 342 | 4.0 | 272 | 3.2 | 50 | 0.6 | 3 | 0.0 | 0 | 0.0 | 845 | 9.9 |
| NNW | 0 | 0.0 | 166 | 1.9 | 334 | 3.9 | 243 | 2.9 | 49 | 0.6 | 2 | 0.0 | 0 | 0.0 | 794 | 9.3 |
| | 0 | 0.0 | 3487 | 40.9 | 3479 | 40.8 | 1358 | 15.9 | 191 | 2.2 | 8 | 0.1 | 0 | 0.0 | 8523 | 100.0 |

MISSING HOURS: 237

MEAN WIND SPEED: 5.0

IV. DATA FROM 75-FOOT LEVEL

PEACH BOTTOM

1/89-12/89

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASSWIND: 75 FT
DELTA T: (316-33FT)LAPSE RATE: LE -1.9 DEG C/100M
CLASS A

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 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 |
| NNE | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 |
| NE | 0 | 0.0 | 0 | 0.0 | 7 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 7 | 0.1 |
| ENE | 0 | 0.0 | 0 | 0.0 | 6 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 6 | 0.1 |
| E | 0 | 0.0 | 0 | 0.0 | 8 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 8 | 0.1 |
| ESE | 0 | 0.0 | 0 | 0.0 | 2 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 2 | 0.0 |
| SE | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| SSE | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 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 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| SSW | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 |
| SW | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 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 | 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 | 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 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| NW | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 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 | 0 | 0.0 | 0 | 0.0 |
| | 0 | 0.0 | 1 | 0.0 | 24 | 0.3 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 26 | 0.3 |

MEAN WIND SPEED: 5.0

MISSING: 0

PEACH BOTTOM

1/89-12/89

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASSWIND: 75 FT
DELTA T: (316-33FT)LAPSE RATE: -1.8 TO -1.7 DEG C/100M
CLASS B

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 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| NNE | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 |
| NE | 0 | 0.0 | 0 | 0.0 | 3 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 3 | 0.0 |
| ENE | 0 | 0.0 | 1 | 0.0 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 2 | 0.0 |
| E | 0 | 0.0 | 3 | 0.0 | 4 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 7 | 0.1 |
| ESE | 0 | 0.0 | 0 | 0.0 | 4 | 0.0 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 5 | 0.1 |
| SE | 0 | 0.0 | 0 | 0.0 | 4 | 0.0 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 5 | 0.1 |
| SSE | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 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 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 |
| SSW | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 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 | 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 | 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 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| WNW | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 2 | 0.0 | 0 | 0.0 | 0 | 0.0 | 2 | 0.0 |
| NW | 0 | 0.0 | 1 | 0.0 | 0 | 0.0 | 2 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 3 | 0.0 |
| NNW | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| | 0 | 0.0 | 5 | 0.1 | 17 | 0.2 | 5 | 0.1 | 2 | 0.0 | 0 | 0.0 | 0 | 0.0 | 29 | 0.3 |

MEAN WIND SPEED: 6.4

MISSING: 0

PEACH BOTTOM

1/89-12/89

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASSWIND: 75 FT
DELTA T: (316-33FT)LAPSE RATE: -1.6 TO -1.5 DEG C/100M
CLASS C

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 | 0 | 0.0 | 3 | 0.0 | 3 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 6 | 0.1 |
| NNE | 0 | 0.0 | 0 | 0.0 | 6 | 0.1 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 7 | 0.1 |
| NE | 0 | 0.0 | 1 | 0.0 | 13 | 0.2 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 15 | 0.2 |
| ENE | 0 | 0.0 | 3 | 0.0 | 4 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 7 | 0.1 |
| E | 0 | 0.0 | 6 | 0.1 | 9 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 15 | 0.2 |
| ESE | 0 | 0.0 | 1 | 0.0 | 7 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 8 | 0.1 |
| SE | 0 | 0.0 | 0 | 0.0 | 6 | 0.1 | 2 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 8 | 0.1 |
| SSE | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 | 2 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 3 | 0.0 |
| S | 0 | 0.0 | 1 | 0.0 | 1 | 0.0 | 7 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 9 | 0.1 |
| SSW | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 4 | 0.0 | 2 | 0.0 | 0 | 0.0 | 0 | 0.0 | 6 | 0.1 |
| SW | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 |
| WSW | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 |
| W | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 7 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 7 | 0.1 |
| WNW | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 6 | 0.1 | 3 | 0.0 | 0 | 0.0 | 0 | 0.0 | 9 | 0.1 |
| NW | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 4 | 0.0 | 7 | 0.1 | 0 | 0.0 | 0 | 0.0 | 11 | 0.1 |
| NNW | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 | 4 | 0.0 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 6 | 0.1 |
| | 0 | 0.0 | 12 | 0.1 | 51 | 0.6 | 42 | 0.5 | 14 | 0.2 | 8 | 0.0 | 0 | 0.0 | 119 | 1.4 |

MEAN WIND SPEED: 7.8

MISSING: 0

PEACH BOTTOM

1/89-12/89

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASSWIND: 75 FT
DELTA T: (316-53FT)LAPSE RATE: -1.4 TO -0.5 DEG C/100M
CLASS D

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 | 1 | 0.0 | 27 | 0.3 | 142 | 1.7 | 133 | 1.6 | 41 | 0.5 | 6 | 0.1 | 0 | 0.0 | 350 | 4.1 |
| NNE | 0 | 0.0 | 72 | 0.9 | 169 | 2.0 | 114 | 1.4 | 16 | 0.2 | 0 | 0.0 | 0 | 0.0 | 371 | 4.4 |
| NE | 0 | 0.0 | 80 | 0.9 | 101 | 1.2 | 22 | 0.3 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 203 | 2.4 |
| ENE | 0 | 0.0 | 108 | 1.3 | 79 | 0.9 | 5 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 192 | 2.3 |
| E | 0 | 0.0 | 78 | 0.9 | 82 | 1.0 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 161 | 1.9 |
| ESE | 0 | 0.0 | 62 | 0.7 | 98 | 1.2 | 11 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 171 | 2.0 |
| SE | 0 | 0.0 | 23 | 0.3 | 99 | 1.2 | 45 | 0.5 | 3 | 0.0 | 0 | 0.0 | 0 | 0.0 | 170 | 2.0 |
| SSE | 0 | 0.0 | 27 | 0.3 | 134 | 1.6 | 50 | 0.6 | 13 | 0.2 | 0 | 0.0 | 0 | 0.0 | 224 | 2.7 |
| S | 0 | 0.0 | 14 | 0.2 | 88 | 1.0 | 124 | 1.5 | 21 | 0.2 | 1 | 0.0 | 0 | 0.0 | 248 | 2.9 |
| SSW | 0 | 0.0 | 13 | 0.2 | 77 | 0.9 | 87 | 1.0 | 9 | 0.1 | 0 | 0.0 | 0 | 0.0 | 186 | 2.2 |
| SW | 0 | 0.0 | 9 | 0.1 | 45 | 0.5 | 49 | 0.6 | 18 | 0.2 | 1 | 0.0 | 0 | 0.0 | 122 | 1.4 |
| WSW | 0 | 0.0 | 20 | 0.2 | 43 | 0.5 | 52 | 0.6 | 8 | 0.1 | 0 | 0.0 | 0 | 0.0 | 125 | 1.5 |
| V | 0 | 0.0 | 19 | 0.2 | 60 | 0.7 | 73 | 0.9 | 41 | 0.5 | 3 | 0.0 | 0 | 0.0 | 196 | 2.3 |
| WNW | 0 | 0.0 | 18 | 0.2 | 44 | 0.5 | 168 | 2.0 | 67 | 0.8 | 13 | 0.2 | 0 | 0.0 | 310 | 3.7 |
| NW | 0 | 0.0 | 15 | 0.2 | 95 | 1.1 | 178 | 2.1 | 93 | 1.1 | 13 | 0.2 | 1 | 0.0 | 395 | 4.7 |
| NNW | 0 | 0.0 | 20 | 0.2 | 124 | 1.5 | 234 | 2.8 | 108 | 1.3 | 3 | 0.0 | 1 | 0.0 | 490 | 5.8 |
| | 1 | 0.0 | 605 | 7.2 | 1482 | 17.6 | 1346 | 16.0 | 438 | 5.2 | 40 | 0.5 | 2 | 0.0 | 3914 | 46.4 |

MEAN WIND SPEED: 7.7

MISSING: 12

PEACH BOTTOM

1/89-12/89

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASSWIND: 75 FT
DELTA T: (316-33FT)LAPSE RATE: -0.4 TO 1.5 DEG C/100M
CLASS E

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 | 42 | 0.5 | 69 | 0.8 | 24 | 0.3 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 135 | 1.6 |
| NNE | 0 | 0.0 | 47 | 0.6 | 82 | 1.0 | 24 | 0.3 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 153 | 1.8 |
| NE | 0 | 0.0 | 60 | 0.7 | 32 | 0.4 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 93 | 1.1 |
| ENE | 0 | 0.0 | 52 | 0.6 | 25 | 0.3 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 77 | 0.9 |
| E | 0 | 0.0 | 96 | 1.1 | 38 | 0.5 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 134 | 1.6 |
| ESE | 0 | 0.0 | 116 | 1.4 | 56 | 0.7 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 172 | 2.0 |
| SE | 0 | 0.0 | 97 | 1.1 | 104 | 1.2 | 10 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 211 | 2.5 |
| SSE | 0 | 0.0 | 81 | 1.0 | 145 | 1.7 | 30 | 0.4 | 2 | 0.0 | 2 | 0.0 | 1 | 0.0 | 261 | 3.1 |
| S | 0 | 0.0 | 89 | 1.1 | 151 | 1.8 | 54 | 0.6 | 7 | 0.1 | 1 | 0.0 | 0 | 0.0 | 302 | 3.6 |
| SSW | 0 | 0.0 | 70 | 0.8 | 148 | 1.8 | 42 | 0.5 | 5 | 0.1 | 0 | 0.0 | 0 | 0.0 | 265 | 3.1 |
| SW | 0 | 0.0 | 52 | 0.6 | 84 | 1.0 | 20 | 0.2 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 156 | 1.8 |
| WSW | 0 | 0.0 | 63 | 0.7 | 117 | 1.4 | 57 | 0.7 | 3 | 0.0 | 0 | 0.0 | 0 | 0.0 | 240 | 2.8 |
| W | 0 | 0.0 | 40 | 0.5 | 117 | 1.4 | 133 | 1.6 | 1 | 0.0 | 1 | 0.0 | 0 | 0.0 | 292 | 3.5 |
| WNW | 0 | 0.0 | 50 | 0.6 | 137 | 1.6 | 109 | 1.3 | 2 | 0.0 | 0 | 0.0 | 0 | 0.0 | 298 | 3.5 |
| NW | 0 | 0.0 | 34 | 0.4 | 154 | 1.8 | 95 | 1.1 | 2 | 0.0 | 0 | 0.0 | 0 | 0.0 | 285 | 3.4 |
| NNW | 0 | 0.0 | 36 | 0.4 | 127 | 1.5 | 76 | 0.9 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 240 | 2.8 |
| | 0 | 0.0 | 1025 | 12.1 | 1586 | 18.8 | 675 | 8.0 | 23 | 0.3 | 4 | 0.0 | 1 | 0.0 | 3314 | 39.3 |

MEAN WIND SPEED: 5.3

MISSING: 10

PEACH BOTTOM

1/89-12/89

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASSWIND: 75 FT
DELTA T: (316-33FT)LAPSE RATE: 1.6 TO 4.0 DEG C/100M
CLASS F

WIND SPEED GROUPS (MPH)

| | 0.0-0.5 | | 0.6-3.5 | | 3.6-7.5 | | 7.6-12.3 | | 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 | 22 | 0.3 | 5 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 27 | 0.3 |
| NNE | 0 | 0.0 | 19 | 0.2 | 4 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 23 | 0.3 |
| NE | 0 | 0.0 | 10 | 0.1 | 2 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 12 | 0.1 |
| ENE | 0 | 0.0 | 9 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 9 | 0.1 |
| E | 0 | 0.0 | 16 | 0.2 | 2 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 18 | 0.2 |
| ESE | 0 | 0.0 | 26 | 0.3 | 6 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 32 | 0.4 |
| SE | 0 | 0.0 | 35 | 0.4 | 10 | 0.1 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 46 | 0.5 |
| SSE | 0 | 0.0 | 26 | 0.3 | 7 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 33 | 0.4 |
| S | 0 | 0.0 | 22 | 0.3 | 7 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 29 | 0.3 |
| SSW | 0 | 0.0 | 24 | 0.3 | 12 | 0.1 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 37 | 0.4 |
| SW | 0 | 0.0 | 27 | 0.3 | 19 | 0.2 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 46 | 0.5 |
| WSW | 0 | 0.0 | 30 | 0.4 | 48 | 0.6 | 17 | 0.2 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 95 | 1.1 |
| W | 0 | 0.0 | 51 | 0.6 | 67 | 0.8 | 23 | 0.3 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 141 | 1.7 |
| WNW | 0 | 0.0 | 40 | 0.5 | 47 | 0.6 | 8 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 95 | 1.1 |
| NW | 0 | 0.0 | 41 | 0.5 | 26 | 0.3 | 4 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 71 | 0.8 |
| NNW | 0 | 0.0 | 34 | 0.4 | 15 | 0.2 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 50 | 0.6 |
| | 0 | 0.0 | 432 | 5.1 | 277 | 3.3 | 55 | 0.7 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 764 | 9.1 |

MEAN WIND SPEED: 3.8

MISSING: 1

PEACH BOTTOM

1/89-12/89

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASSWIND: 75 FT
DELTA T: (316-33FT)LAPSE RATE: GT 4.0 DEG C/100M
CLASS G

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 | 5 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 5 | 0.1 |
| NNE | 0 | 0.0 | 2 | 0.0 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 3 | 0.0 |
| NE | 0 | 0.0 | 3 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 3 | 0.0 |
| ENE | 0 | 0.0 | 5 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 5 | 0.1 |
| E | 0 | 0.0 | 2 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 2 | 0.0 |
| ESE | 0 | 0.0 | 7 | 0.1 | 2 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 9 | 0.1 |
| SE | 0 | 0.0 | 8 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 8 | 0.1 |
| SSE | 0 | 0.0 | 4 | 0.0 | 2 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 6 | 0.1 |
| S | 0 | 0.0 | 4 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 4 | 0.0 |
| SSW | 0 | 0.0 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 |
| SW | 0 | 0.0 | 9 | 0.1 | 2 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 11 | 0.1 |
| WSW | 0 | 0.0 | 7 | 0.1 | 3 | 0.0 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 11 | 0.1 |
| W | 0 | 0.0 | 36 | 0.4 | 21 | 0.2 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 57 | 0.7 |
| WNW | 0 | 0.0 | 65 | 0.8 | 18 | 0.2 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 83 | 1.0 |
| NW | 0 | 0.0 | 32 | 0.4 | 15 | 0.2 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 47 | 0.6 |
| NNW | 0 | 0.0 | 12 | 0.1 | 4 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 16 | 0.2 |
| | 0 | 0.0 | 202 | 2.4 | 68 | 0.8 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 271 | 3.2 |

MEAN WIND SPEED: 2.9

MISSING: 0

PEACH BOTTOM

1/89-12/89

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS

WIND: 75 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 | 1 | 0.0 | 97 | 1.1 | 219 | 2.6 | 160 | 1.9 | 41 | 0.5 | 6 | 0.1 | 0 | 0.0 | 524 | 6.2 |
| NNE | 0 | 0.0 | 140 | 1.7 | 264 | 3.1 | 139 | 1.6 | 16 | 0.2 | 0 | 0.0 | 0 | 0.0 | 559 | 6.6 |
| NE | 0 | 0.0 | 154 | 1.8 | 158 | 1.9 | 24 | 0.3 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 336 | 4.0 |
| ENE | 0 | 0.0 | 178 | 2.1 | 115 | 1.4 | 5 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 298 | 3.5 |
| E | 0 | 0.0 | 201 | 2.4 | 143 | 1.7 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 345 | 4.1 |
| ESE | 0 | 0.0 | 212 | 2.5 | 175 | 2.1 | 12 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 399 | 4.7 |
| SE | 0 | 0.0 | 163 | 1.9 | 223 | 2.6 | 59 | 0.7 | 3 | 0.0 | 0 | 0.0 | 0 | 0.0 | 448 | 5.3 |
| SSE | 0 | 0.0 | 138 | 1.6 | 289 | 3.4 | 82 | 1.0 | 15 | 0.2 | 2 | 0.0 | 1 | 0.0 | 527 | 6.2 |
| S | 0 | 0.0 | 130 | 1.5 | 247 | 2.9 | 186 | 2.2 | 28 | 0.3 | 2 | 0.0 | 0 | 0.0 | 593 | 7.0 |
| SSW | 0 | 0.0 | 108 | 1.3 | 237 | 2.8 | 135 | 1.6 | 16 | 0.2 | 0 | 0.0 | 0 | 0.0 | 496 | 5.9 |
| SW | 0 | 0.0 | 97 | 1.1 | 150 | 1.8 | 69 | 0.8 | 19 | 0.2 | 1 | 0.0 | 0 | 0.0 | 336 | 4.0 |
| WSW | 0 | 0.0 | 120 | 1.4 | 213 | 2.5 | 128 | 1.5 | 11 | 0.1 | 0 | 0.0 | 0 | 0.0 | 472 | 5.6 |
| W | 0 | 0.0 | 146 | 1.7 | 265 | 3.1 | 236 | 2.8 | 42 | 0.5 | 4 | 0.0 | 0 | 0.0 | 693 | 8.2 |
| WNW | 0 | 0.0 | 173 | 2.1 | 246 | 2.9 | 291 | 3.4 | 74 | 0.9 | 13 | 0.2 | 0 | 0.0 | 797 | 9.4 |
| NW | 0 | 0.0 | 123 | 1.5 | 290 | 3.4 | 283 | 3.4 | 102 | 1.2 | 13 | 0.2 | 1 | 0.0 | 812 | 9.6 |
| NNW | 0 | 0.0 | 102 | 1.2 | 271 | 3.2 | 315 | 3.7 | 110 | 1.3 | 3 | 0.0 | 1 | 0.0 | 802 | 9.5 |
| | 1 | 0.0 | 2282 | 27.0 | 3505 | 41.5 | 2125 | 25.2 | 477 | 5.7 | 44 | 0.5 | 3 | 0.0 | 8437 | 100.0 |

MISSING HOURS: 323

MEAN WIND SPEED: 6.3

PEACH BOTTOM

1/89-12/89

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS

WIND: 75 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 | 1 | 0.0 | 103 | 1.2 | 244 | 2.8 | 163 | 1.9 | 41 | 0.5 | 6 | 0.1 | 0 | 0.0 | 558 | 6.4 |
| NNE | 0 | 0.0 | 144 | 1.7 | 273 | 3.1 | 140 | 1.6 | 16 | 0.2 | 0 | 0.0 | 0 | 0.0 | 573 | 6.6 |
| NE | 0 | 0.0 | 162 | 1.9 | 161 | 1.8 | 24 | 0.3 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 347 | 4.0 |
| ENE | 0 | 0.0 | 185 | 2.1 | 115 | 1.3 | 5 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 305 | 3.5 |
| E | 0 | 0.0 | 211 | 2.4 | 147 | 1.7 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 359 | 4.1 |
| ESE | 0 | 0.0 | 215 | 2.5 | 182 | 2.1 | 16 | 0.2 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 413 | 4.7 |
| SE | 0 | 0.0 | 171 | 2.0 | 231 | 2.6 | 62 | 0.7 | 3 | 0.0 | 0 | 0.0 | 0 | 0.0 | 467 | 5.4 |
| SSE | 0 | 0.0 | 143 | 1.6 | 291 | 3.3 | 82 | 0.9 | 15 | 0.2 | 2 | 0.0 | 1 | 0.0 | 534 | 6.1 |
| S | 0 | 0.0 | 136 | 1.5 | 254 | 2.9 | 189 | 2.2 | 28 | 0.3 | 2 | 0.0 | 0 | 0.0 | 609 | 7.0 |
| SSW | 0 | 0.0 | 116 | 1.3 | 240 | 2.8 | 135 | 1.5 | 16 | 0.2 | 0 | 0.0 | 0 | 0.0 | 507 | 5.8 |
| SW | 0 | 0.0 | 110 | 1.3 | 156 | 1.8 | 75 | 0.9 | 19 | 0.2 | 1 | 0.0 | 0 | 0.0 | 361 | 4.1 |
| WSW | 0 | 0.0 | 129 | 1.5 | 226 | 2.6 | 133 | 1.5 | 11 | 0.1 | 0 | 0.0 | 0 | 0.0 | 499 | 5.7 |
| W | 0 | 0.0 | 152 | 1.7 | 278 | 3.2 | 237 | 2.7 | 42 | 0.5 | 4 | 0.0 | 0 | 0.0 | 713 | 8.2 |
| WNW | 0 | 0.0 | 177 | 2.0 | 261 | 3.0 | 291 | 3.3 | 74 | 0.8 | 13 | 0.1 | 0 | 0.0 | 816 | 9.4 |
| NW | 0 | 0.0 | 126 | 1.4 | 299 | 3.4 | 286 | 3.3 | 102 | 1.2 | 13 | 0.1 | 1 | 0.0 | 827 | 9.5 |
| NNW | 0 | 0.0 | 105 | 1.2 | 287 | 3.3 | 323 | 3.7 | 114 | 1.3 | 3 | 0.0 | 1 | 0.0 | 833 | 9.6 |
| | 1 | 0.0 | 2385 | 27.3 | 3645 | 41.8 | 2162 | 24.8 | 481 | 5.5 | 44 | 0.5 | 3 | 0.0 | 8721 | 100.0 |

MISSING HOURS: 39

MEAN WIND SPEED: 6.2

V. DATA FROM 320-FOOT LEVEL

PEACH BOTTOM

1/89-12/89

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASSWIND: 320 FT
DELTA T: (316-33FT)LAPSE RATE: LE -1.9 DEG C/100M
CLASS A

WIND SPEED GROUPS (KPH)

| | 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 | 0 | 0.0 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 |
| NNE | 0 | 0.0 | 0 | 0.0 | 2 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 2 | 0.0 |
| NE | 0 | 0.0 | 0 | 0.0 | 3 | 0.0 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 4 | 0.0 |
| ENE | 0 | 0.0 | 0 | 0.0 | 6 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 6 | 0.1 |
| E | 0 | 0.0 | 0 | 0.0 | 5 | 0.1 | 3 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 8 | 0.1 |
| ESE | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 3 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 3 | 0.0 |
| SE | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| SSE | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 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 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| SSW | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 |
| SW | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 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 | 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 | 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 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| NW | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| NNW | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 |
| | 0 | 0.0 | 0 | 0.0 | 18 | 0.2 | 8 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 26 | 0.3 |

MEAN WIND SPEED: 6.7

MISSING: 0

PEACH BOTTOM

1/89-12/89

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASSWIND: 320 FT
DELTA T: (316-33FT)LAPSE RATE: -1.8 TO -1.7 DEG C/100M
CLASS B

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 | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 |
| NNE | 0 | 0.0 | 0 | 0.0 | 2 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 2 | 0.0 |
| NE | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 |
| ENE | 0 | 0.0 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 |
| E | 0 | 0.0 | 0 | 0.0 | 4 | 0.0 | 2 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 6 | 0.1 |
| ESE | 0 | 0.2 | 0 | 0.0 | 3 | 0.0 | 3 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 6 | 0.1 |
| SE | 0 | 0.0 | 0 | 0.0 | 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 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 |
| S | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 |
| SSW | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 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 | 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 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| W | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 | 1 | 0.0 | 0 | 0.0 | 2 | 0.0 |
| WNW | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 | 0 | 0.0 | 1 | 0.0 | 0 | 0.0 | 2 | 0.0 |
| NW | 0 | 0.0 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 |
| NNW | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| | 0 | 0.0 | 2 | 0.0 | 11 | 0.1 | 11 | 0.1 | 3 | 0.0 | 2 | 0.0 | 0 | 0.0 | 29 | 0.3 |

MEAN WIND SPEED: 9.2

MISSING: 0

PEACH BOTTOM

1/89-12/89

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)

| | 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 | 0 | 0.0 | 5 | 0.1 | 1 | 0.0 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 7 | 0.1 |
| NNE | 0 | 0.0 | 0 | 0.0 | 6 | 0.1 | 2 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 8 | 0.1 |
| NE | 0 | 0.0 | 1 | 0.0 | 8 | 0.1 | 2 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 11 | 0.1 |
| ENE | 0 | 0.0 | 2 | 0.0 | 4 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 6 | 0.1 |
| E | 0 | 0.0 | 1 | 0.0 | 6 | 0.1 | 2 | 0.0 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 10 | 0.1 |
| ESE | 0 | 0.0 | 0 | 0.0 | 6 | 0.1 | 2 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 8 | 0.1 |
| SE | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 10 | 0.1 | 2 | 0.0 | 0 | 0.0 | 0 | 0.0 | 12 | 0.1 |
| SSE | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 |
| S | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 2 | 0.0 | 8 | 0.1 | 0 | 0.0 | 0 | 0.0 | 10 | 0.1 |
| SSW | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 2 | 0.0 | 2 | 0.0 | 0 | 0.0 | 0 | 0.0 | 4 | 0.0 |
| SV | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 |
| VSV | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 2 | 0.0 | 0 | 0.0 | 0 | 0.0 | 2 | 0.0 |
| V | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 | 1 | 0.0 | 8 | 0.1 | 1 | 0.0 | 0 | 0.0 | 11 | 0.1 |
| VNV | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 5 | 0.1 | 8 | 0.1 | 0 | 0.0 | 13 | 0.2 |
| NV | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 4 | 0.0 | 1 | 0.0 | 1 | 0.0 | 0 | 0.0 | 6 | 0.1 |
| NNV | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 | 3 | 0.0 | 4 | 0.0 | 0 | 0.0 | 0 | 0.0 | 8 | 0.1 |
| | 0 | 0.0 | 4 | 0.0 | 37 | 0.4 | 32 | 0.4 | 35 | 0.4 | 10 | 0.1 | 0 | 0.0 | 118 | 1.4 |

MEAN WIND SPEED: 10.7

MISSING: 1

PEACH BOTTOM

1/89-12/89

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASSWIND: 320 FT
DELTA T: (316-33FT)LAPSE RATE: -1.4 TO -0.5 DEG C/100M
CLASS D

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 | 13 | 0.2 | 75 | 0.9 | 100 | 1.2 | 91 | 1.1 | 15 | 0.2 | 0 | 0.0 | 294 | 3.5 |
| NNE | 0 | 0.0 | 14 | 0.2 | 102 | 1.2 | 75 | 0.9 | 52 | 0.6 | 7 | 0.1 | 0 | 0.0 | 250 | 3.0 |
| NE | 0 | 0.0 | 26 | 0.3 | 71 | 0.8 | 64 | 0.8 | 23 | 0.3 | 6 | 0.1 | 0 | 0.0 | 190 | 2.3 |
| ENE | 0 | 0.0 | 30 | 0.4 | 71 | 0.8 | 68 | 0.8 | 16 | 0.2 | 4 | 0.0 | 0 | 0.0 | 189 | 2.2 |
| E | 0 | 0.0 | 27 | 0.3 | 85 | 1.0 | 49 | 0.6 | 36 | 0.4 | 0 | 0.0 | 0 | 0.0 | 197 | 2.3 |
| ESE | 0 | 0.0 | 22 | 0.3 | 70 | 0.8 | 70 | 0.8 | 18 | 0.2 | 0 | 0.0 | 0 | 0.0 | 180 | 2.1 |
| SE | 0 | 0.0 | 10 | 0.1 | 62 | 0.7 | 97 | 1.2 | 37 | 0.4 | 10 | 0.1 | 0 | 0.0 | 216 | 2.6 |
| SSE | 0 | 0.0 | 3 | 0.0 | 60 | 0.7 | 94 | 1.1 | 33 | 0.4 | 7 | 0.1 | 2 | 0.0 | 199 | 2.4 |
| S | 0 | 0.0 | 3 | 0.0 | 36 | 0.4 | 126 | 1.5 | 89 | 1.1 | 13 | 0.2 | 2 | 0.0 | 269 | 3.2 |
| SSW | 0 | 0.0 | 10 | 0.1 | 25 | 0.3 | 67 | 0.8 | 44 | 0.5 | 8 | 0.1 | 1 | 0.0 | 155 | 1.8 |
| SW | 0 | 0.0 | 9 | 0.1 | 23 | 0.3 | 65 | 0.8 | 51 | 0.6 | 6 | 0.1 | 0 | 0.0 | 154 | 1.8 |
| WSW | 0 | 0.0 | 4 | 0.0 | 20 | 0.2 | 54 | 0.6 | 33 | 0.4 | 11 | 0.1 | 0 | 0.0 | 122 | 1.4 |
| W | 0 | 0.0 | 5 | 0.1 | 21 | 0.2 | 66 | 0.8 | 69 | 0.8 | 47 | 0.6 | 5 | 0.1 | 213 | 2.5 |
| WNW | 0 | 0.0 | 5 | 0.1 | 28 | 0.3 | 76 | 0.9 | 136 | 1.6 | 104 | 1.2 | 33 | 0.4 | 382 | 4.5 |
| NW | 0 | 0.0 | 7 | 0.1 | 57 | 0.7 | 93 | 1.1 | 200 | 2.4 | 90 | 1.1 | 18 | 0.2 | 465 | 5.5 |
| NNW | 0 | 0.0 | 9 | 0.1 | 81 | 1.0 | 124 | 1.5 | 145 | 1.7 | 51 | 0.6 | 15 | 0.2 | 425 | 5.0 |
| | 0 | 0.0 | 197 | 2.3 | 887 | 10.5 | 1288 | 15.3 | 1073 | 12.7 | 379 | 4.5 | 76 | 0.9 | 3900 | 46.3 |

MEAN WIND SPEED: 11.5

MISSING: 26

PEACH BOTTOM

1/89-12/89

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASSWIND: 320 FT
DELTA T: (316-33FT)LAPSE RATE: -0.4 TO 1.5 DEG C/100M
CLASS E

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 | 13 | 0.2 | 44 | 0.5 | 77 | 0.9 | 25 | 0.3 | 0 | 0.0 | 0 | 0.0 | 159 | 1.9 |
| NNE | 0 | 0.0 | 8 | 0.1 | 34 | 0.4 | 57 | 0.7 | 26 | 0.3 | 1 | 0.0 | 0 | 0.0 | 126 | 1.5 |
| NE | 0 | 0.0 | 12 | 0.1 | 43 | 0.5 | 40 | 0.5 | 9 | 0.1 | 0 | 0.0 | 0 | 0.0 | 104 | 1.2 |
| ENE | 0 | 0.0 | 15 | 0.2 | 43 | 0.5 | 28 | 0.3 | 5 | 0.1 | 0 | 0.0 | 0 | 0.0 | 91 | 1.1 |
| E | 0 | 0.0 | 19 | 0.2 | 62 | 0.7 | 66 | 0.8 | 7 | 0.1 | 1 | 0.0 | 0 | 0.0 | 155 | 1.8 |
| ESE | 0 | 0.0 | 18 | 0.2 | 56 | 0.7 | 72 | 0.9 | 15 | 0.2 | 0 | 0.0 | 0 | 0.0 | 161 | 1.9 |
| SE | 0 | 0.0 | 26 | 0.3 | 99 | 1.2 | 77 | 0.9 | 17 | 0.2 | 0 | 0.0 | 0 | 0.0 | 219 | 2.6 |
| SSE | 0 | 0.0 | 24 | 0.3 | 74 | 0.9 | 101 | 1.2 | 50 | 0.6 | 2 | 0.0 | 2 | 0.0 | 253 | 3.0 |
| S | 0 | 0.0 | 20 | 0.2 | 60 | 0.7 | 168 | 2.0 | 68 | 0.8 | 14 | 0.2 | 5 | 0.1 | 335 | 4.0 |
| SSW | 0 | 0.0 | 18 | 0.2 | 50 | 0.6 | 129 | 1.5 | 64 | 0.8 | 3 | 0.0 | 1 | 0.0 | 265 | 3.1 |
| SW | 0 | 0.0 | 17 | 0.2 | 73 | 0.9 | 108 | 1.3 | 48 | 0.6 | 8 | 0.1 | 0 | 0.0 | 254 | 3.0 |
| WSW | 0 | 0.0 | 10 | 0.1 | 26 | 0.3 | 71 | 0.8 | 57 | 0.7 | 8 | 0.1 | 1 | 0.0 | 173 | 2.1 |
| W | 0 | 0.0 | 10 | 0.1 | 30 | 0.4 | 74 | 0.9 | 132 | 1.6 | 18 | 0.2 | 1 | 0.0 | 265 | 3.1 |
| WNW | 0 | 0.0 | 5 | 0.1 | 29 | 0.3 | 79 | 0.9 | 132 | 1.6 | 28 | 0.3 | 0 | 0.0 | 273 | 3.2 |
| NW | 0 | 0.0 | 10 | 0.1 | 33 | 0.4 | 96 | 1.1 | 144 | 1.7 | 16 | 0.2 | 1 | 0.0 | 300 | 3.6 |
| NNW | 0 | 0.0 | 9 | 0.1 | 37 | 0.4 | 76 | 0.9 | 64 | 0.8 | 1 | 0.0 | 0 | 0.0 | 187 | 2.2 |
| | 0 | 0.0 | 234 | 2.8 | 793 | 9.4 | 1319 | 15.6 | 863 | 10.2 | 100 | 1.2 | 11 | 0.1 | 3320 | 39.4 |

MEAN WIND SPEED: 10.1

MISSING: 4

PEACH BOTTOM

1/89-12/89

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASSWIND: 320 FT
DELTA T: (316-33FT)LAPSE RATE: 1.6 TO 4.0 DEG C/100M
CLASS F

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 | 6 | 0.1 | 9 | 0.1 | 19 | 0.2 | 5 | 0.1 | 0 | 0.0 | 0 | 0.0 | 39 | 0.5 |
| NNE | 0 | 0.0 | 4 | 0.0 | 7 | 0.1 | 6 | 0.1 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 18 | 0.2 |
| NE | 0 | 0.0 | 2 | 0.0 | 13 | 0.2 | 3 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 18 | 0.2 |
| ENE | 0 | 0.0 | 4 | 0.0 | 14 | 0.2 | 3 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 21 | 0.2 |
| E | 0 | 0.0 | 7 | 0.1 | 15 | 0.2 | 3 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 25 | 0.3 |
| ESE | 0 | 0.0 | 4 | 0.0 | 9 | 0.1 | 3 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 16 | 0.2 |
| SE | 0 | 0.0 | 6 | 0.1 | 17 | 0.2 | 13 | 0.2 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 36 | 0.4 |
| SSE | 0 | 0.0 | 8 | 0.1 | 10 | 0.1 | 12 | 0.1 | 3 | 0.0 | 0 | 0.0 | 0 | 0.0 | 33 | 0.4 |
| S | 0 | 0.0 | 5 | 0.1 | 23 | 0.3 | 12 | 0.1 | 3 | 0.0 | 0 | 0.0 | 0 | 0.0 | 43 | 0.5 |
| SSW | 0 | 0.0 | 3 | 0.0 | 20 | 0.2 | 26 | 0.3 | 10 | 0.1 | 0 | 0.0 | 0 | 0.0 | 59 | 0.7 |
| SW | 0 | 0.0 | 6 | 0.1 | 40 | 0.5 | 42 | 0.5 | 12 | 0.1 | 0 | 0.0 | 0 | 0.0 | 100 | 1.2 |
| WSW | 0 | 0.0 | 2 | 0.0 | 15 | 0.2 | 32 | 0.4 | 19 | 0.2 | 1 | 0.0 | 0 | 0.0 | 69 | 0.8 |
| W | 0 | 0.0 | 6 | 0.1 | 23 | 0.3 | 35 | 0.4 | 38 | 0.5 | 2 | 0.0 | 0 | 0.0 | 106 | 1.3 |
| WNW | 0 | 0.0 | 5 | 0.1 | 19 | 0.2 | 11 | 0.1 | 29 | 0.3 | 3 | 0.0 | 0 | 0.0 | 67 | 0.8 |
| NW | 0 | 0.0 | 8 | 0.1 | 37 | 0.4 | 19 | 0.2 | 9 | 0.1 | 0 | 0.0 | 0 | 0.0 | 73 | 0.9 |
| NNW | 0 | 0.0 | 6 | 0.1 | 14 | 0.2 | 17 | 0.2 | 5 | 0.1 | 0 | 0.0 | 0 | 0.0 | 42 | 0.5 |
| | 0 | 0.0 | 84 | 1.0 | 285 | 3.4 | 256 | 3.0 | 134 | 1.6 | 6 | 0.1 | 0 | 0.0 | 765 | 9.1 |

MEAN WIND SPEED: 8.4

MISSING: 0

PEACH BOTTOM

1/89-12/89

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASSWIND: 320 FT
DELTA T: (316-33FT)LAPSE RATE: GT 4.0 DEG C/100M
CLASS G

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 | 7 | 0.1 | 13 | 0.2 | 2 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 22 | 0.3 |
| NNE | 0 | 0.0 | 1 | 0.0 | 7 | 0.1 | 2 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 10 | 0.1 |
| NE | 0 | 0.0 | 2 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 2 | 0.0 |
| ENE | 0 | 0.0 | 1 | 0.0 | 4 | 0.0 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 6 | 0.1 |
| E | 0 | 0.0 | 3 | 0.0 | 2 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 5 | 0.1 |
| ESE | 0 | 0.0 | 3 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 3 | 0.0 |
| SE | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| SSE | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| S | 0 | 0.0 | 2 | 0.0 | 5 | 0.1 | 2 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 9 | 0.1 |
| SSW | 0 | 0.0 | 1 | 0.0 | 12 | 0.1 | 6 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 19 | 0.2 |
| SW | 0 | 0.0 | 4 | 0.0 | 12 | 0.1 | 6 | 0.1 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 23 | 0.3 |
| WSW | 0 | 0.0 | 1 | 0.0 | 9 | 0.1 | 9 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 19 | 0.2 |
| W | 0 | 0.0 | 2 | 0.0 | 3 | 0.0 | 10 | 0.1 | 4 | 0.0 | 0 | 0.0 | 0 | 0.0 | 19 | 0.2 |
| WNW | 0 | 0.0 | 4 | 0.0 | 4 | 0.0 | 11 | 0.1 | 6 | 0.1 | 0 | 0.0 | 0 | 0.0 | 25 | 0.3 |
| NW | 0 | 0.0 | 4 | 0.0 | 19 | 0.2 | 11 | 0.1 | 4 | 0.0 | 0 | 0.0 | 0 | 0.0 | 38 | 0.5 |
| NNW | 0 | 0.0 | 7 | 0.1 | 12 | 0.1 | 48 | 0.6 | 4 | 0.0 | 0 | 0.0 | 0 | 0.0 | 71 | 0.8 |
| | 0 | 0.0 | 42 | 0.5 | 102 | 1.2 | 108 | 1.3 | 19 | 0.2 | 0 | 0.0 | 0 | 0.0 | 271 | 3.2 |

MEAN WIND SPEED: 7.5

MISSING: 0

PEACH BOTTOM

1/89-12/89

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 | 39 | 0.5 | 147 | 1.7 | 200 | 2.4 | 122 | 1.4 | 15 | 0.2 | 0 | 0.0 | 523 | 6.2 |
| NNE | 0 | 0.0 | 27 | 0.3 | 160 | 1.9 | 142 | 1.7 | 79 | 0.9 | 8 | 0.1 | 0 | 0.0 | 416 | 4.9 |
| NE | 0 | 0.0 | 43 | 0.5 | 139 | 1.6 | 110 | 1.3 | 32 | 0.4 | 6 | 0.1 | 0 | 0.0 | 330 | 3.9 |
| ENE | 0 | 0.0 | 53 | 0.6 | 142 | 1.7 | 100 | 1.2 | 21 | 0.2 | 4 | 0.0 | 0 | 0.0 | 320 | 3.8 |
| E | 0 | 0.0 | 57 | 0.7 | 179 | 2.1 | 125 | 1.5 | 44 | 0.5 | 1 | 0.0 | 0 | 0.0 | 406 | 4.8 |
| ESE | 0 | 0.0 | 47 | 0.6 | 144 | 1.7 | 153 | 1.8 | 33 | 0.4 | 0 | 0.0 | 0 | 0.0 | 377 | 4.5 |
| SE | 0 | 0.0 | 42 | 0.5 | 178 | 2.1 | 201 | 2.4 | 57 | 0.7 | 10 | 0.1 | 0 | 0.0 | 488 | 5.8 |
| SSE | 0 | 0.0 | 35 | 0.4 | 145 | 1.7 | 208 | 2.5 | 86 | 1.0 | 9 | 0.1 | 4 | 0.0 | 487 | 5.8 |
| S | 0 | 0.0 | 30 | 0.4 | 124 | 1.5 | 311 | 3.7 | 169 | 2.0 | 27 | 0.3 | 7 | 0.1 | 668 | 7.9 |
| SSW | 0 | 0.0 | 32 | 0.4 | 107 | 1.3 | 230 | 2.7 | 120 | 1.4 | 11 | 0.1 | 2 | 0.0 | 502 | 6.0 |
| SW | 0 | 0.0 | 36 | 0.4 | 148 | 1.8 | 221 | 2.6 | 113 | 1.3 | 14 | 0.2 | 0 | 0.0 | 532 | 6.3 |
| WSW | 0 | 0.0 | 17 | 0.2 | 70 | 0.8 | 166 | 2.0 | 111 | 1.3 | 20 | 0.2 | 1 | 0.0 | 385 | 4.6 |
| W | 0 | 0.0 | 25 | 0.3 | 78 | 0.9 | 186 | 2.2 | 252 | 3.0 | 69 | 0.8 | 6 | 0.1 | 616 | 7.3 |
| WNW | 0 | 0.0 | 19 | 0.2 | 80 | 0.9 | 178 | 2.1 | 308 | 3.7 | 144 | 1.7 | 33 | 0.4 | 762 | 9.0 |
| NW | 0 | 0.0 | 30 | 0.4 | 146 | 1.7 | 223 | 2.6 | 358 | 4.2 | 107 | 1.3 | 19 | 0.2 | 883 | 10.5 |
| NNW | 0 | 0.0 | 31 | 0.4 | 146 | 1.7 | 268 | 3.2 | 222 | 2.6 | 52 | 0.6 | 15 | 0.2 | 734 | 8.7 |
| | 0 | 0.0 | 563 | 6.7 | 2133 | 25.3 | 3022 | 35.9 | 2127 | 25.2 | 497 | 5.9 | 87 | 1.0 | 8429 | 100.0 |

MISSING HOURS: 331

MEAN WIND SPEED: 10.5

PEACH BOTTOM

1/89-12/89

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASSWIND: 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 | 40 | 0.5 | 160 | 1.8 | 208 | 2.4 | 127 | 1.5 | 15 | 0.2 | 0 | 0.0 | 550 | 6.3 |
| NNE | 0 | 0.0 | 28 | 0.3 | 167 | 1.9 | 154 | 1.8 | 79 | 0.9 | 8 | 0.1 | 0 | 0.0 | 436 | 5.0 |
| NE | 0 | 0.0 | 47 | 0.5 | 146 | 1.7 | 112 | 1.3 | 32 | 0.4 | 6 | 0.1 | 0 | 0.0 | 343 | 3.9 |
| ENE | 0 | 0.0 | 54 | 0.6 | 145 | 1.7 | 101 | 1.2 | 21 | 0.2 | 4 | 0.0 | 0 | 0.0 | 325 | 3.7 |
| E | 0 | 0.0 | 58 | 0.7 | 182 | 2.1 | 126 | 1.4 | 44 | 0.5 | 1 | 0.0 | 0 | 0.0 | 411 | 4.7 |
| ESE | 0 | 0.0 | 47 | 0.5 | 150 | 1.7 | 160 | 1.8 | 41 | 0.5 | 0 | 0.0 | 0 | 0.0 | 398 | 4.6 |
| SE | 0 | 0.0 | 45 | 0.5 | 185 | 2.1 | 204 | 2.3 | 60 | 0.7 | 10 | 0.1 | 0 | 0.0 | 504 | 5.8 |
| SSE | 0 | 0.0 | 38 | 0.4 | 149 | 1.7 | 209 | 2.4 | 86 | 1.0 | 9 | 0.1 | 4 | 0.0 | 495 | 5.7 |
| S | 0 | 0.0 | 30 | 0.3 | 127 | 1.5 | 319 | 3.7 | 170 | 1.9 | 27 | 0.3 | 7 | 0.1 | 680 | 7.8 |
| SSW | 0 | 0.0 | 33 | 0.4 | 113 | 1.3 | 235 | 2.7 | 120 | 1.4 | 11 | 0.1 | 2 | 0.0 | 514 | 5.9 |
| SW | 0 | 0.0 | 38 | 0.4 | 162 | 1.9 | 229 | 2.6 | 116 | 1.3 | 14 | 0.2 | 0 | 0.0 | 559 | 6.4 |
| WSW | 0 | 0.0 | 22 | 0.3 | 77 | 0.9 | 181 | 2.1 | 116 | 1.3 | 20 | 0.2 | 1 | 0.0 | 417 | 4.8 |
| W | 0 | 0.0 | 25 | 0.3 | 83 | 1.0 | 197 | 2.3 | 256 | 2.9 | 70 | 0.8 | 6 | 0.1 | 637 | 7.3 |
| WNW | 0 | 0.0 | 19 | 0.2 | 85 | 1.0 | 182 | 2.1 | 312 | 3.6 | 144 | 1.7 | 33 | 0.4 | 775 | 8.9 |
| NW | 0 | 0.0 | 30 | 0.3 | 153 | 1.8 | 239 | 2.7 | 360 | 4.1 | 107 | 1.2 | 19 | 0.2 | 908 | 10.4 |
| NNW | 0 | 0.0 | 32 | 0.4 | 154 | 1.8 | 285 | 3.3 | 231 | 2.6 | 52 | 0.6 | 15 | 0.2 | 769 | 8.8 |
| | 0 | 0.0 | 586 | 6.7 | 2238 | 25.7 | 3141 | 36.0 | 2171 | 24.9 | 498 | 5.7 | 87 | 1.0 | 8721 | 100.0 |

MISSING HOURS: 39

MEAN WIND SPEED: 10.4

REFERENCES

1. Philadelphia Electric Company, "Peach Bottom Atomic Power Station Units 2 and 3, Updated Final Safety Analysis Report".
2. Philadelphia Electric Company, "Peach Bottom Atomic Power Station Units 2 and 3, Offsite Dose Calculation Manual", Revision 3.