ATTACHMENT 2

PEACH BOTTOM ATOMIC POWER STATION
UNITS 2 AND 3

NRC Docket Nos. 50-277 and 50-278

Renewed Facility Operating License Nos.
DPR-44 and DPR-56

PBAPS Calculation PM-1055, Revision 1, *"Calculation of Alternative Source Term (AST) Onsite and Offsite X/Q Values"*

Design Analysis Major Revision Cover Sheet

Design Analysis (Major Revision)		**Last Page No.** [8] 31/Att N-1	
Analysis No.: [1]	PM-1055	**Revision:** [2]	1
Title: [3]	Calculation of Alternative Source Term (AST) Onsite and Offsite X/Q values		
EC/ECR No.: [4]	PB 07-00027	**Revision:** [5]	Ø1 Suk 01/9/08
Station(s): [7]	Peach Bottom Atomic Power	**Component(s):** [14]	
Unit No.: [8]	2 & 3	N/A	
Discipline: [9]	SEAQ		
Descrip. Code/Keyword: [10]	Dispersion		
Safety/QA Class: [11]	S		
System Code: [12]	912		
Structure: [13]	N/A		

CONTROLLED DOCUMENT REFERENCES [15]

Document No.:	From/To	Document No.:	From/To
Drawing No. M-7	From	UFSAR; Section 2.3	From/To
Drawing No. M-18	From	Calculation No. PM-1077	To
Drawing No. M-19	From	Calculation No. PM-1057	To
Calculation No. PM-1059	To		

Is this Design Analysis Safeguards Information? [16] Yes ☐ No ☒ If yes, see SY-AA-101-108

Does this Design Analysis contain Unverified Assumptions? [17] Yes ☐ No ☒ If yes, ATI/AR#

This Design Analysis SUPERCEDES: [18] PM-1055 Rev 0

Description of Revision (list affected pages for partials): [19] Rev. 1 to incorporate year 2008 NRC Requests, for Additional Information revisions for Regulatory Guide 1.23 Revision 1 compliance and development of the most conservative X/Q values.

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Method of Review: [21] Detailed Review ☒ Alternate Calculations (attached) Testing ☐

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Review Notes: [25] Independent review ☒ Peer review ☐ All inputs, assumptions, approaches, numerical analyses, and results were independently reviewed and checked.

(For External Analyses Only)

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Independent 3rd Party Review Reqd? [26] Yes ☒ No ☐ TPR completed D. Rusthoven 8/5/08

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CALCULATION TABLE OF CONTENTS

ATTACHMENTS:

1.0 PURPOSE/OBJECTIVE

This calculation, PM-1055 Revision 1, presents the atmospheric relative concentration (X/Q) values for Alternative Source Term (AST) accident evaluations. The purpose of this calculation is to determine the Control Room, Exclusion Area Boundary (EAB), and the outer boundary of the Low Population Zone (LPZ) relative concentration values (X/Q, in sec/m^3) resulting from certain postulated accidental radiological releases from the Peach Bottom Atomic Power Station (hereinafter, the Station). The values resulting from this calculation serve as input to the calculation of the radiological doses for use of the Alternative Source Terms (AST) per Regulatory Guide 1.183 (Reference 1).

Revision 1 was developed in response to year 2008 NRC Requests for Additional Information (RAIs) regarding the X/Q values used for the AST Application submitted by Exelon to the NRC by letter of July 13, 2007. These RAIs were issued by NRC e-mails dated April 14, 2008 (responded to by Exelon's letter of May 23, 2008) and July 25, 2008 (as additional draft RAIs). These RAIs were also discussed during teleconferences on July 21, July 22, July 24, July 25, 2008, and July 31, 2008) between NRC and Exelon.

This Revision 1 of calculation PM-1055 includes all X/Q values originally contained in Calculation PM-1055 Revision 0; and additionally provides the X/Q values requested in the NRC RAIs referred to above and designated AADB RAIs 12, 13, and 23. This additional information entailed 1) recalculating the LPZ X/Qs using a more conservative meteorological monitoring database; i.e., Peach Bottom Tower 1A; 2) recalculating the EAB and LPZ X/Qs using PAVAN meteorological input based on the finer, 11-bin, wind speed categories per NRC Regulatory Guide 1.23, Revision 1 issued March 7, 2007 (Reference 17); and 3) updating the elevated Off-Gas Stack Control Room X/Qs that are impacted by PAVAN's execution using the finer wind speed categorization. For conservatism, the EAB X/Q values for potential ground level release locations were also recalculated with the more conservative Peach Bottom Tower 1A meteorological monitoring database.

Sections 2 and 3 methodology, design input and calculations herein are unchanged from Sections 2 and 3 in PM-1055, Revision 0. The X/Q values resulting at the Control Room Intake are calculated using the NRC-sponsored computer codes ARCON96 (Reference 2) and PAVAN (Reference 3), consistent with the procedures in the then-Draft Regulatory Guide DG-1111 (Reference 4). This analysis is presented in Section 2 with the ARCON96 input and output files for each modeled scenario contained in Attachment I. Section 3 presents the X/Q values resulting at the EAB and LPZ, calculated using the NRC-sponsored computer code PAVAN, consistent with the procedures in Regulatory Guide 1.145 (Reference 5), with the PAVAN input and output files for each modeled scenario contained in Attachment J. In addition, Sheet 4 of Attachment H Joint Frequency Distributions for the Section 2 7-bin runs was edited to perform a spreadsheet correction.

Section 4 provides the additional X/Q values requested by RAI's 12, 13, and 23, and presents them on a comparative basis to those contained in Sections 2 and 3. These X/Q

values are calculated consistent with Regulatory Guide 1.194 (Reference 18), which superseded Draft Regulatory Guide 1111 in June 2003. None of the pertinent guidance in DG-1111 changed in Regulatory Guide 1.194.

Section 5 presents a summary of the controlling worst-case X/Q results for use in the AST dose calculation. Meteorological data utilized for this calculation were selected from the historical record of the Station meteorological monitoring tower network. Monitoring records dating back to 1967 and extending through 2001 were provided by Exelon (Reference 6) for Revision 0 of this calculation. Examination of the subject Station release locations and configurations in conjunction with the sharply varying topography (both in the vicinity of the release and at the receptor locations to be addressed) resulted in the selection of three (3) different towers from which representative data for the X/Q modeling analyses were used. The topography in the vicinity of the Station and the monitoring tower locations can be observed on the map that is contained in Attachment A (Reference 7). Topographic cross-sectional profiles depicting the meteorological monitoring towers and the station stacks are provided in Attachment B (Reference 8). It was desired that this calculation be based upon a continuous five-year period of data common to all three (3) towers, and for which available data meet NRC Regulatory Guide 1.23 (References 9 and 17) specifications. The period of 1984 through 1988 was selected.

2.0 ARCON96 MODELING ANALYSIS OF CONTROL ROOM X/Q

ARCON96 is a commercial software package designated by WGI as NU-830, an "active" program applicable to nuclear safety related analyses as well as non-safety related studies and evaluations. Its use is principally control room habitability assessments. The NU-830 code has been verified for 0-2 hour, 2-8 hour, and 8-24 hour centerline and sector X/Q averages and the 95% maximum X/Q. This verification is in accordance with Revision 4 of the Washington Group International Nuclear Engineering Standard or Computer Software Control, NEP-09. Revision 0 of NU-830 was verified for ground-level and zero exit velocity uncapped vents, and Revision 1 was verified for zero exit velocity stack releases.

2.1 Methodology and Acceptance Criteria

<u>ARCON96 Program Description</u> [excerpted from NUREG/CR-6331 Rev. 1]

ARCON96 is a straight line Gaussian dispersion model used in control room habitability assessments for estimating dispersion in the vicinity of buildings to calculate relative concentrations at control room air intakes that would be exceeded no more than five percent of the time. The basic diffusion model implemented in the ARCON96 code is a straight-line Gaussian model that assumes the release rate is constant for the entire period of release. This assumption is made to permit evaluation of potential effects of accidental releases without having to specify a complete release sequence. Ambient atmospheric conditions measured in accordance with Regulatory Guide 1.23 are input to ARCON96

by way of a sequential hour-by-hour meteorological database of jointly measured wind speed, wind direction, and Pasquill stability class, as derived from the vertical temperature difference recorded at a representative location and elevation (i.e., tower level).

ARCON96 permits evaluation of ground-level, vent, and elevated releases. Building wake effects are considered in the evaluation of relative concentrations from ground-level releases. The proportion of the mixture is determined by the ratio between the effluent vertical velocity and the release-height wind speed using the procedure included in the NRC XOQDOQ code (Reference 10). An elevated release, defined as a stack more than 2.5 times the height of structures in the immediate vicinity, is treated in the usual manner with correction for stack downwash and differences in terrain elevation between the stack and the control room intake. With an assumed zero (0) vertical exit velocity, vents are treated as ground-level releases. Otherwise, a vent release is treated as a mixed ground-level and elevated release.

Diffusion coefficients used in ARCON96 have three components. The first component is the diffusion coefficient used in other NRC models, for example XOQDOQ, and PAVAN. The other two components are corrections to account for enhanced dispersion under low wind speed conditions and in building wakes. Derivations of the low wind speed and building wake corrections are described by Ramsdell and Fosmire (Reference 11).

Parameter values for the correction factors are based on analysis of diffusion data collected in various building wake diffusion experiments. The experiments were conducted under a wide range of meteorological conditions. However, a large number of experiments were conducted during low wind speeds, when wake effects are minimal. The wake correction model included in ARCON96 treats diffusion under these conditions much better than previous models. Thus, the diffusion coefficients in ARCON96 account for both low-wind speed meander and wake effects.

ARCON96 calculates relative concentrations using hourly meteorological data. It then combines the hourly averages to estimate concentrations for periods ranging in duration from 2 hours to 30 days. Wind direction is considered as the averages are formed. As a result, the averages account for persistence in both diffusion conditions and wind direction. Cumulative frequency distributions are prepared from the average relative concentrations. Relative concentrations that are exceeded no more than five percent of the time (95th percentile relative concentrations) are determined from the cumulative frequency distributions for each averaging period. Finally, the relative concentrations for five standard averaging periods used in control room habitability assessments are calculated from the 95th percentile relative concentrations.

2.2 Design Input

2.2.1 Source Configuration

The Off-Gas Stack and the Units 2 and 3 Reactor Building Stacks are executed by ARCON96 as an elevated stack release and vent releases, respectively. As depicted in Attachments A and B, the Off-Gas Stack has a physical height of 500 ft and is located to the west-southwest of the Station on terrain that is 280 ft msl (164 ft above station grade of 116 ft msl, per Reference 16). This stack is greater than 2.5 times the 174 ft high Reactor Buildings (i.e., the highest adjacent building), and therefore, per Regulatory Guide 1.145, it is modeled as an 'elevated' release, which is not subject to building-induced downwash effects. The Reactor Building Stacks, both having a height of 189 ft above station grade, and located at the center of the east face of their respective 174 ft high Reactor Buildings, were modeled as 'vent releases'.

Both the Off-Gas Stack and the Reactor Building Stacks are conservatively assumed to have a zero (0) flow, for which ARCON96 requires that the exit velocity and stack diameter each be assigned an input value of zero (0). The Reactor Building vertical cross-sectional area of 2584 m^2 (calculated as height = 54.3 m, and w = 47.6 m, based on References 12 and 13), was required to be input to ARCON96.

Attachment C shows the location of the Off-Gas Stack (highlighted in green) and Attachment D shows the Units 2 and 3 Reactor Building Stacks (highlighted in pink and yellow, respectively).

2.2.2 Receptors

The model ARCON96 was executed for X/Q at the Control Room Intake (highlighted orange in Attachments C and D), which is centered on the west face of the Radwaste Building at a height of 69 ft above grade.

The direction, relative to true north (assumed 0°) of a straight line extending from the Control Room Intake towards the stack source location, is also an input parameter required by ARCON96. Attachments C and D depict the three (3) separate intake-to-stack direction scenarios analyzed in this calculation. They are as follows:

	Direction (degrees) Intake to Stack	Distance (m) Intake to Stack
• Off-Gas Stack (highlighted green)	244	209
• Unit 2 Reactor Building Stack (highlighted pink)	113	58.4
• Unit 3 Reactor Building Stack (highlighted yellow)	15	58.4

2.2.3 Meteorological Data

As described in Section 1.0, the Station's meteorological data from the five-year period, 1984-1988, as supplied by Exelon, were applied in the ARCON96 modeling analysis. Data measured at two meteorological towers were used.

Meteorological Tower 2 is seen in Attachments A and B to be located on a hill approximately 2600 ft (800) meters from the Reactor Building Stacks. Tower 2 has a grade elevation of 367 ft above mean sea level (msl), or 251 feet (76.5 meters) above station grade. Tower 1A, on the other hand, is located at 119 ft msl approximately 1300 m southeast of the Reactor Building stacks, and is also topographically situated very similarly to the Station; i.e., at the Susquehanna River's edge and immediately adjacent to the steeply higher terrain in the westerly, southwesterly, and southerly directions.

Attachment E, Sheets 1, 2, and 3 of 5, includes the five-year wind rose diagrams for each of the three (3) primary wind speed and direction databases used for the ARCON96 analysis identified below in Section 2.2.4, Table 2-1. These are as follows:

Wind

- Tower 2: 320 ft level
- Tower 2: 75 ft level
- Tower 1A: 92 ft level

The designation of 'calm' is made to all wind speed observations of less than 0.5 mph. The higher of the starting speeds of the Climatronics® wind vane and anemometer equipment on each of the towers (i.e. 0.50 mph) was used as the threshold for calm winds, per Regulatory Guide 1.145, Section 1.1.

Attachment F, Sheet 1 of 2, provides a bar chart for comparing the percentage occurrence frequencies of each wind direction sector with respect to the three different wind databases used in the ARCON96 analysis. This chart shows that the two Tower 2 levels are very similar, while the Tower 1A wind directions show much deviation from Tower 2. In particular, the location of Tower 1A, based in the River Valley near river level, experiences a noticeably higher frequency of east-southeast and southeast winds, reflective of the Valley's wind channeling effect. Also, the significantly higher frequency of west and west-southwesterly winds likely reflects the local channeling by the small contributory valley seen in Attachment A between two hills centered just several hundred feet to the southwest and west-northwest of Tower 1A.

The stability class percentage occurrence frequency distributions are presented as a bar chart in Attachment G, based on each of the three (3) five-year delta temperature databases used in the ARCON96 analysis.

Stability Class

- Tower 2: 316 - 33 ft level
- Tower 2: 150 - 33 ft level
- Tower 1A: 89 - 33 ft level

It must be noted that the 0 % occurrence of 'B' stability class associated with Tower 1A, as shown in Attachment G results from the fact that the temperature was recorded and reported with a precision of tenths (rather than hundredths) of a degree Fahrenheit. The range in the delta temperature value that is assigned to the 'B' stability class by NRC Regulatory Guide 1.23 is non-inclusive of a value that would result from the conversion from Fahrenheit, given in tenths precision, to Centigrade.

Attachment G shows an extremely high 'G' stability class occurrence frequency of 27.1%, which is derived from the Tower 1A delta temperature data. This value is much larger than those of Tower 2. This reflects the prevalent cold air drainage flow into the River Valley from the higher terrain during nocturnal, light wind speed, temperature inversion conditions. Some exaggeration of this difference in comparison to Tower 2 (e.g., 5.5 % G stability for 150-33 ft delta temperature) would also be expected, however, because of the larger vertical spread between the two lower temperature measurement levels of Tower 2 (i.e., 117 ft) versus the Tower 1A levels (i.e., 56 ft). (That is, within the atmosphere's surface boundary layer, vertical temperature gradient (positive or negative) normally increases with proximity to the ground.) This effect also partially accounts for the large difference in the percentage of 'A' stability occurrence between Tower 1A and Tower 2. The fact that no 'B' stability cases are possible in the Tower 1A database (as noted above), of course, also acts to somewhat inflate the 'A' and 'C' occurrences. It is important to note, however, that these unstable classes (A, B, and C) are relatively insignificant contributors in the design basis X/Q calculations for ground and vent releases.

Finally, Attachment H, Sheets 1, 2, and 3 of 5, contains the joint wind direction, wind speed, and stability class distribution tables, based on the five-year period for each of the following three joint wind-stability databases used in the ARCON96 modeling analysis.

Wind	Stability Class
• Tower 2: 320 ft level	Tower 2: 316 - 33 ft
• Tower 2: 75 ft level	Tower 2: 150 - 33 ft
• Tower 1A: 92 ft level	Tower 1A: 89 - 33 ft

The relatively high percentage of 'G' stability occurrences in the Tower 1A joint wind-stability distribution are very direction-dependent. A total of 91.5% of all 'G' stability occurrence frequencies in the Tower 1A data can be determined from Attachment H, Sheet 3, to be associated with winds from the southeast clockwise through the west-northwest 180° directional range from the Tower. This directional range essentially encloses the high terrain from which the relatively cold near-surface air during nocturnal inversion conditions drains into the Valley. (See Attachment A for the topographic map

of terrain in the vicinity of the Station.) Attachment H also reveals that nearly all of the total 'G' stability occurrences are associated with wind speed of less than 7.5 mph.

2.2.4 ARCON96 Run Scenarios

Control Room Intake X/Q values were calculated by ARCON96 for various source/receptor scenarios. Three (3) Off-Gas Stack and Reactor Building Stack release scenarios were analyzed using the five-year hourly meteorological joint wind and stability databases, as identified in Table 2-1.

TABLE 2-1

ARCON96 RELEASE SCENARIO	METEOROLOGICAL DATABASE SCENARIOS		
	Wind Speed and Direction		Stability Class (Delta Temperature)
	Primary	Secondary*	
1: Off-Gas Stack	Tower 2: 320'	Tower 2: 75'	Tower 2: 316 – 33'
Unit 2 Reactor Building Stack	Tower 1A: 92' Tower 2: 75'	Tower 1A: 34' Tower 2: 33'	Tower 1A: 89 – 33' Tower 2: 150 – 33'
Unit 3 Reactor Building Stack	Tower 1A: 92' Tower 2: 75'	Tower 1A: 34' Tower 2: 33'	Tower 1A: 89 – 33' Tower 2: 150 – 33'

* Secondary data used only for those hours when primary data are missing.

The upper level of Tower 2 is the obvious most representative location of choice for wind data representing the Off-Gas Stack release point, and the 316–33 foot delta temperature is the appropriate parameter for deriving stability class to represent the influence of atmospheric diffusion on such a release.

As noted in Section 2.2.1, the Reactor Building Stacks are not tall enough to avoid building-induced downwash; therefore, with zero (0) exit velocity having been assumed, ARCON96 treats their releases as a 'ground-level' type. Accordingly, the Tower 1A data would appear to be the representative database for the Reactor Building stacks. However, since these stack tops are at 305 ft msl, and thus, are actually nearer in the vertical to the Tower 2 grade elevation (367 ft msl) than they are to the Tower 1A grade elevation (119 ft msl), an ARCON96 analysis is also performed using the most appropriate Tower 2 data, as indicated in Table 2-1 above.

2.3 Calculations

The X/Q values resulting from the ARCON96 modeling analysis of each release and meteorological database scenario for the required time intervals are presented in Table 2-2 as follows:

TABLE 2-2

ARCON96 X/Q (sec/m^3) RESULTS*

RELEASE / INTAKE & METEOROLOGICAL SCENARIO	0-2 hour	2-8 hour	8-24 hour	1-4 day	4-30 day
Off-Gas Stack to Control Room Intake: Wind: Tower 2 320' Stability: Tower 2 316 – 33'	1.00E-15	1.00E-15	1.00E-15	7.25E-15	5.92E-15
Unit 2 Reactor Building Stack To Control Room Intake: Wind: Tower 1A 92' Stability: Tower 1A 89 – 33'	1.17E-03	**9.08E-04**	**4.14E-04**	**2.90E-04**	**2.26E-04**
Wind: Tower 2 75' Stability: Tower 2 150 – 33'	**1.18E-03**	8.55E-04	3.50E-04	2.36E-04	1.67E-04
Unit 3 Reactor Building Stack To Control Room Intake: Wind: Tower 1A 92' Stability: Tower 1A 89 – 33'	1.02E-03	5.02E-04	2.38E-04	1.62E-04	1.36E-04
Wind: Tower 2 75' Stability: Tower 2 150 – 33'	**1.18E-03**	**8.91E-04**	**4.00E-04**	**2.51E-04**	**1.98E-04**

* For the Units 2 and 3 stack release scenarios, the higher of the X/Q values associated with the two meteorological databases analyzed is in bold.

3.0 PAVAN MODELING ANALYSES OF CONTROL ROOM, EAB AND LPZ X/Q

The model PAVAN is a commercial software package designated by WGI as MC-131, an "active" program applicable to nuclear safety related analyses as well as non-safety related studies and evaluations. The PAVAN code Revision 0 verification was performed for the 0-2 hour, 0-8 hour, 8-24, 1-4 day, and 4-30 day 0.5-percentile, and annual average direction-specific X/Q values, and the overall site 95-percentile maximum X/Q for each of the 0-2 hour, 0-8 hour, 8-24 hour, 1-4 day, and 4-30 day time-averaging periods. This verification was performed with WGI (formerly Raytheon Engineers & Constructors, Inc.) corporate standards, and is consistent with Computer Software Control, NEP-09. Revision 0 of MC-131 was verified for ground-level (i.e., non-elevated) releases, as well as elevated releases, with zero (0) vertical exit velocity assumed.

While its use is principally for EAB and LPZ X/Q evaluations, PAVAN is also referenced for use in accordance with NRC DG-1111 methodology for control room habitability assessments of elevated releases. In supplement to the use of ARCON96 for this purpose, NRC recommends that PAVAN also be executed, and its results incorporated into the determination of the 0-2 hour, and the 1-4 and 4-30 day X/Q time intervals. The maximum PAVAN X/Q at ground-level (excluding the 'fumigation' condition) replaces the corresponding ARCON96 0-2 hour value if the PAVAN value is greater. For deriving the two longer interval X/Q values, the maximum PAVAN 1-4 day X/Q is added to the product of 23 times the maximum 1-4 day ARCON96 value, and then the total is divided by 24, resulting in the final X/Q value for the 1-4 day interval value; and similarly, the maximum PAVAN 4-30 day X/Q is added together with the product of 23 times the maximum 4-30 day ARCON96 value and then divided by 24 to obtain the X/Q value for the 4-30 day interval value.

3.1 Methodology and Acceptance Criteria

The computer code PAVAN is a straight line Gaussian dispersion model utilized to estimate relative ground-level air concentrations (X/Q) for potential accidental releases of radioactive material from nuclear facilities. Such assessment is required by 10 CFR 100 and 10 CFR 50. The program implements the NRC guidance provided in Regulatory Guide 1.145. The technical basis for the program is presented by Snell and Jubach (Reference 14). Utilizing joint frequency of occurrence distributions of wind direction, wind speed and Pasquill atmospheric stability class, PAVAN calculates X/Q values as a function of direction for various time-averaging periods at the EAB and the outer boundary of the LPZ. Calculations are made from assumed ground-level (i.e., non-elevated) releases (such as vents and building penetrations), which are less than 2.5 times the height of adjacent solid structures, and from elevated releases (i.e., stacks). Three (3) procedures are utilized for calculating X/Q: a direction-dependent approach, a direction-independent approach, and an overall site X/Q approach.

The PAVAN model contains certain model options for executing the program. Table 3-1 below summarizes the options invoked for the Control Room, EAB and LPZ X/Q calculations.

TABLE 3-1

Option No.	Description	Option Invoked?
1	Calculate σ_y and σ_x based on desert diffusion.	No
2	X/Q values include evaluation for no building wake.	No
3	ENVLOP calculations printed which describe upper envelope curve.	No
4	Print points used in upper envelope curve and calculation.	Yes
5	Null	---
6	Joint frequency distribution in % frequency format.	No
7	Print X/Q calculation details	Yes
8	Distribute calm winds observations into first wind speed category.	Yes
9	Use site-specific terrain adjustment factors for the annual average calculations.	Yes*
10	Assume a default terrain adjustment factor for the average annual calculations. Option 10 is applied, which together with application of Option 9 means that site specific terrain factors will be used.	Yes

* A uniform value of 1.0 is used.

3.2 Design Input

3.2.1 Source Configuration

3.2.1.1 Releases for Control Room Intake X/Q Evaluation

The Off-Gas Stack and the Units 2 and 3 Reactor Building Stacks are the assumed release points. Because the Units 2 and 3 Reactor Building Stacks do not qualify as 'elevated' releases as defined by Regulatory Guide 1.145, in accordance with DG-1111 methodology no PAVAN modeling (i.e., only ARCON96 modeling) is appropriate for the Control Room assessment.

The Off-Gas Stack, however, does qualify as an elevated release and was executed as such by PAVAN, per DG-1111. Also per DG-1111, the effective height of the stack was calculated from the height of the Control Room Intake instead of station grade. The Off-Gas Stack, as seen highlighted in green in Attachment C, has a height of 500 ft and is located 209 m on terrain that is 280 ft msl (i.e., 164 ft above station grade) to the west-northwest of the Control Room Intake. PAVAN does not have the capability to account for the difference between the station grade and the much higher Off-Gas Stack grade. Therefore, assuming zero (0) grade difference between release and intake is a very conservative measure.

The vertical cross-sectional area of 2584 m^2 for each Reactor Building calculated based on References 12 and 13, was utilized. A value of zero (0) meters above the assumed common grade elevation of the Off-Gas stack and the Station was input to PAVAN to represent the maximum terrain height for each of the downwind sectors at all modeled distances.

3.2.1.2 Releases for EAB and LPZ X/Q Evaluation

The Off-Gas Stack and the Units 2 and 3 Reactor Building Stacks were executed by PAVAN as a 'stack' type and 'ground' type releases, respectively.

As previously stated, the Off-Gas Stack has a physical height of 500 ft and is located to the west-southwest of the Station on terrain that is 280 ft msl (164 ft above station grade). As described in 3.2.1.1 for the Control Room Intake, in modeling the EAB and LPZ scenarios, the station grade was also assumed equal to the Off-Gas Stack grade.

The 189 ft Reactor Building Stacks for Units 2 and 3, located at the center of the east face of their respective Reactor Buildings, do not quality as elevated releases per Regulatory Guide 1.145. Therefore, PAVAN requires that each of these stack heights be assigned an input value of 10 m. The Reactor Building height of 54.3 m and calculated Reactor Building vertical cross-sectional area of 2584 m^2 were used for each of the scenarios.

3.2.2 Receptors

For the Off-Gas Stack to Control Room Intake scenario, PAVAN was executed in elevated release mode with a stack-to-intake horizontal distance of 209 m. For conservatism in modeling this scenario, the Off-Gas Stack was assumed to have the same grade elevation as the Station. Review of this output was then performed in accordance with NRC DG-1111 guidance to determine at which approximate distance the actual 0-2 hour maximum X/Q is predicted to occur in each given downwind sector. Following this, a new set of PAVAN runs was executed for several distances ranging out to and exceeding the approximated distance. The initial predicted approximate distance to the maximum 0-2 hour X/Q was 4000 m. Therefore, in all, the distances modeled to determine the actual maximum X/Q are as follows: 209 (actual), 280, 300, 500, 750, 1000, 1500, 2000, 3000, 4000, 5000, and 6000 meters.

The PAVAN model was also executed to determine the ground-level X/Q at the EAB and LPZ located at distances of 823 m and 7300 m, respectively, as defined in Reference 15. For the assumed non-elevated Reactor Building Stack scenario, receptor terrain is not considered. For the elevated Off-Gas Stack scenario, the highest terrain value within a given directional sector between the Station and the EAB was assigned to the EAB receptor in that given direction. The LPZ terrain heights were analogously assigned. These terrain heights are provided in Table 3-2 below.

TABLE 3-2

HIGHEST INTERVENING TERRAIN BETWEEN SITE AND EAB, AND LPZ
(Meters Above Off-Gas Stack Grade)

DOWNWIND DIRECTION	EAB (823 m)	LPZ (7300 m)	DOWNWIND DIRECTION	EAB (823 m)	LPZ (7300 m)
N	0	110	S	31	55
NNE	0	85	SSW	31	61
NE	0	85	SW	18	128
ENE	0	67	WSW	12	104
E	0	48	W	24	73
ESE	0	67	WNW	31	98
SE	0	43	NW	31	104
SSE	0	43	NNW	24	85

3.2.3 Meteorological Data

As described in Section 1.0, Peach Bottom meteorological data from the five-year period, 1984-1988, as supplied by Exelon, were used in the PAVAN analysis. Data monitored at three meteorological towers were used.

The format of PAVAN meteorological input consists of a joint wind direction (based on sixteen 22.5 degree sectors), wind speed (7 intervals), and stability class (7 classes) occurrence frequency distribution.

Each such meteorological joint frequency distribution for input to PAVAN was prepared by using the WGI pre-qualified program ARCONtoPAVANMET (Program Number NU-840) to transform the data to a joint wind-stability occurrence frequency distribution. The seven wind speed categories were defined according to Regulatory Guide 1.23 with the first category identified as "calm". The higher of the starting speeds of the Climatronics® wind vane and anemometer equipment on each of the towers (i.e. 0.50 mph) was used as the threshold for calm winds, per Regulatory Guide 1.145, Section 1.1. A midpoint was also assumed between each of the Regulatory Guide 1.23 wind speed categories, Nos. 2-6, as to be inclusive of all monitored wind speeds. The Regulatory Guide 1.23 wind speed categories have, therefore, been refined in Table 3-3 as follows:

TABLE 3-3

DEFINED WIND SPEED CATEGORY RANGES FOR PAVAN MODELING

Category No.	Regulatory Guide 1.23 Speed Interval (mph)	PAVAN-Assumed Speed Interval (mph)
1 (Calm)	0 to < 1	0 to<0.50
2	1 to 3	>=0.50 to <3.5
3	4 to 7	>=3.5 to <7.5
4	8 to 12	>=7.5 to <12.5
5	13 to 18	>=12.5 to <18.5
6	19 to 24	>=18.5 to <24
7	>24	>=24

Attachment E, Sheets 1, 4, and 5 includes the five-year wind rose diagrams for each of the following three wind speed and direction modeling databases applied in the PAVAN analysis:

- Tower 2: 320 ft level
- Tower 2: 33 ft level
- River Tower: 45 ft level

Attachment F, Sheet 2 provides a bar chart comparing the percentage occurrence frequencies of each wind direction sector with respect to the three wind databases. As expected, the Tower 2 upper (320 ft) and lower level (33 ft) wind direction occurrence distributions are very similar to each other, but the River Tower data are clearly much more indicative of the influence of the Valley in channeling air within it predominantly along a northwest – southeast orientation. The very high correspondence in the Tower 2 lower level with the upper level is strong evidence that the lower level conditions are far more representative of the air flow in the larger scale non-valley region surrounding the Station than within the local valley setting of the station proper.

The same three (3) delta temperature stability class databases utilized for the ARCON96 analysis described above in Section 2.2.3 were also adopted for the PAVAN analysis. These are the Tower 2 316 – 33 ft, the Tower 2 150 – 33 ft, and the Tower 1A 89 – 33 ft delta temperature databases. Attachment G presented earlier in Section 2.2.3 shows the percentage occurrence frequencies of each class.

Finally, Attachment H, Sheets 1, 4, and 5 of 5 provide the joint occurrence frequency distribution tables based on the five-year period for each of the following three joint wind-stability databases used in the PAVAN modeling analysis:

Wind	Stability Class
• Tower 2: 320 ft level	Tower 2: 316 - 33 ft
• Tower 2: 33 ft level	Tower 2: 150 - 33 ft
• River Tower: 45 ft level	Tower 1A: 89 - 33 ft

As discussed in Section 2.2.3 with respect to the ARCON96 X/Q analysis at the Control Room Intake, there is a relatively high percentage of G stability occurrences monitored at Tower 1A, reflecting the prevalent nocturnal drainage wind from directions of immediately adjacent higher terrain into the Valley. However, for the PAVAN modeling analysis of X/Q at receptors away from the immediate station site (i.e., that is, the two rings of receptors associated with the EAB and LPZ), the Tower 1A location is not well-located for monitoring representative wind data, particularly wind direction; and therefore, the Tower 2 data are primarily relied upon. One exception is for modeling the Reactor Building stack at the EAB distance in those downwind directions extending part-way over the River, the Tower 1A delta temperature-derived stability class may well be more representative than the Tower 2 stability data. Consequently, the River Tower wind data are adopted jointly with the Tower 1A stability data and used as an additional meteorological database scenario to be analyzed by PAVAN for the EAB. (See Section 3.2.4.2.)

3.2.4 PAVAN Run Scenarios

The following Off-Gas Stack and Reactor Building stack release scenarios were identified for the purpose of applying the PAVAN model using the selected representative meteorological wind and stability class databases to predict the X/Q values that result at the Control Room Intake as described in 3.2.1.1, and at the EAB and LPZ as described in Section 3.2.1.2. They are listed in Table 3-4 as follows:

TABLE 3-4

PAVAN X/Q SCENARIOS		
RELEASE/RECEPTOR SCENARIO	**METEOROLOGICAL DATABASE SCENARIOS (Tower ID: Measurement Height above Tower Grade)**	
	Wind Speed and Direction	**Stability Class (Delta Temperature)**
CONTROL ROOM:		
Off-Gas Stack	Tower 2: 320'	Tower 2: 316 – 33'
EAB:		
Off-Gas Stack	Tower 2: 320'	Tower 2: 316 – 33'
Unit 2 Reactor Building Stack	River Tower: 45'	Tower 1A: 89 – 33 '
	Tower 2: 33'	Tower 2: 150 –33 '
Unit 3 Reactor Building Stack	River Tower: 45'	Tower 1A: 89 – 33 '
	Tower 2: 33'	Tower 2: 150 –33 '
LPZ:		
Off-Gas Stack	Tower 2: 320'	Tower 2: 316 – 33'
Unit 2 Reactor Building Stack	Tower 2: 33'	Tower 2: 150 –33 '
Unit 3 Reactor Building Stack	Tower 2: 33'	Tower 2: 150 –33 '

3.2.4.1 Off-Gas Stack

The Meteorological Tower 2 upper level (320 ft) wind and 316 – 33 ft delta temperature data monitoring levels, as described in Section 2.2.3, are clearly appropriate representative locations from which to derive all required meteorological input for the PAVAN modeling of the Off-Gas Stack release X/Q for each subject receptor.

3.2.4.2 Reactor Building Stacks

<u>LPZ</u>

The vast majority of the region bounded by the LPZ distance of 7300 meters in all directions from the Station is removed from the local influences of the immediate river valley setting of the Station. Thus, Tower 1A, which is based at river level within the Valley and adjacent to the Station, is not appropriate for measuring the conditions that occur at the LPZ and most intervening distances. The top of the Reactor Building stacks at 305 ft msl is at an elevation vertically nearer to the Tower 2 grade elevation (367 ft msl) than to the River (116 ft msl), and is within an airflow regime more typical of overall wind and stability conditions in the region bounded by the LPZ than

the local station site conditions influenced by the River Valley. Therefore, the Tower 2 lower level (33 ft) winds and the 150 – 33 ft delta temperature-based stability class were used for all PAVAN model runs to predict the X/Q at the LPZ resulting from Reactor Building stack releases. It should also be noted that the Tower 2 33 ft level wind speeds were used instead of the Tower 2 75 ft winds, even though it might be otherwise expected that the 75 ft level winds would better represent the 189 ft Reactor Building stack tops. This is because PAVAN requires that any non-elevated release be assumed as a 'ground level' release, which accordingly requires that whatever the release elevation may actually be, it is reassigned a value of 10 meters above station grade. Thus, using actual 10-meter monitored data (i.e., data from the 33 ft level on Tower 2) is considered to be superior to using data from another level (i.e., 75 feet) that PAVAN would subsequently adjust (but imprecisely so, by power law extrapolation) down to 10 meters.

EAB

The choice of the appropriate meteorological database to best represent the dispersion of releases from the Reactor Building stacks out to the EAB distance, however, is not as straightforward as for the LPZ. As apparent in Attachment A, this is due to the great variation in local topography within the EAB radius (823 m) of the Station, which influences the dispersion of a release from these stacks. The EAB distance extends well into the River in a number of directions from the Station. Thus, winds measured 45 ft above the river level on the River Tower, approximately 1200 meters north-northeast of the Station as shown in Attachment A, would clearly be the most representative. Stability class based on the delta temperature parameter, in accordance with NRC Regulatory guide 1.23, is not monitored on the River Tower; however, Tower 1A prior to its decommissioning in 1993, monitored 89 – 34 ft delta temperature. Tower 1A is ideally situated adjacent to and based at essentially the same grade elevation as the Station so as to best represent the local dispersion conditions to which the Reactor Building stack releases are subject for over-river trajectories out to the EAB.

In other directions from the Station, the region enclosed by the EAB distance is likely best represented by the lower level of Tower 2 meteorology (i.e., 33 ft winds, and 150 – 33 ft delta temperature-based stability class), using the same reasoning as used immediately above in this section for the LPZ.

Thus, the joint wind-stability occurrence frequency distributions derived from both of the joint wind-stability databases are individually executed in the PAVAN analysis of the Reactor Building stacks at the EAB. The higher resulting X/Q values are adopted.

3.3 Calculations

The X/Q values predicted by PAVAN for the Control Room Intake, as resulting from a release by the Off-Gas Stack, are presented below in Table 3-5 for each time interval required by NRC Regulatory Guide 1.145. The highlighted values are the maxima with

respect to their indicated time periods. It is only the underlined subset of these values which are then incorporated with the ARCON96 results into the final determination of the Control Room Intake X/Q according to NRC DG-1111 prescribed methodology (see Section 3.0).

TABLE 3-5

PAVAN Maximum X/Q (sec/m^3) Results

Off-Gas Stack to Control Room Intake

	Modeled Horizontal Distance from Stack to Receptor (m)											
Averaging Period	**209 (Actual Distance)**	**280**	**300**	**500**	**750**	**1000**	**1500**	**2000**	**3000**	**4000**	**5000**	**6000**
0-2 hr	**2.72E-06**	**2.72E-06**	**2.72E-06**	**2.72E-06**	2.31E-06	2.06E-06	1.95E-06	1.83E-06	1.77E-06	1.71E-06	1.70E-06	1.60E-06
0-8 hr	4.10E-07	8.86E-07	9.80E-07	**1.23E-06**	1.02E-06	8.87E-07	8.16E-07	7.96E-07	8.02E-07	8.02E-07	7.97E-07	7.49E-07
8-24 hr	1.59E-07	5.06E-07	5.88E-07	**8.27E-07**	6.79E-07	5.83E-07	5.29E-07	5.26E-07	5.46E-07	5.49E-07	5.45E-07	5.23E-07
1-4 day	2.03E-08	1.50E-07	1.94E-07	**3.50E-07**	2.80E-07	2.34E-07	2.07E-07	2.15E-07	2.50E-07	2.59E-07	2.58E-07	2.47E-07
4-30 day	1.06E-09	2.60E-08	3.95E-08	**1.01E-07**	7.83E-08	6.31E-08	5.35E-08	6.38E-08	8.36E-08	8.93E-08	8.86E-08	8.43E-08

Notes:

1. Maxima indicated in bold.
2. Underlined values incorporated into ARCON96 determination of Control Room Intake per NRC DG-1111.
3. Maximum hourly X/Q (which is assigned to represent the 0-2 hour period) is actually predicted to occur at 500 m; however, in accordance with PAVAN model methodology for elevated releases, this maximum value is conservatively also assigned to any lesser desired boundary distance.

The X/Q values for the EAB and LPZ distances predicted by the PAVAN modeling analysis of each release scenario are presented below in Table 3-6 for each time interval required by NRC Regulatory Guide 1.145. These include the X/Q for the EAB and LPZ distances predicted for an Off-Gas Stack release under 'fumigation' conditions for 0 - 0.5 hours.

TABLE 3-6

PAVAN X/Q (sec/m^3) Results

Off-Gas Stack and Reactor Building Stacks to EAB and LPZ

RELEASE LOCATION	X/Q PARAMETER (sec/m^3)	0-0.5 hour	0-2 hour	0-8 hour	8-24 hour	1-4 day	4-30 day
EAB (823 m)							
Off Gas Stack	Direction-Specific Max	NA	5.50E-06 (N)	1.76E-06 (WSW)	1.06E-06 (WSW)	3.53E-07 (W)	8.86E-08 (W)
	Site Limit	NA	**8.89E-06**	**3.14E-06**	**1.87E-06**	**6.03E-07**	**1.19E-07**
	Max Fumigation	**5.30E-05 (S, W, WNW, SSE)**	N/A	N/A	N/A	N/A	N/A
Units 2 and 3 Reactor Building Stacks Tower 2 33' wind; 150'- 33' stability	Direction-Specific Max	NA	3.46E-04 (ENE)	1.79E-04 (ENE)	1.29E-04 (ENE)	6.33E-05 (ENE)	2.27E-05 (ENE)
	Site Limit	NA	2.45E-04	1.34E-04	9.95E-05	5.19E-05	2.04E-05
River Tower wind; Tower 1A stability	Direction-Specific Max	NA	**4.25E-04 (E)**	**2.26E-04 (SE)**	**1.66E-04 (SE)**	**8.45E-05 (SE)**	**3.22E-05 (SE)**
	Site Limit	NA	4.05E-04	2.19E-04	1.61E-04	8.28E-05	3.18E-05
LPZ (7300 m)							
Off Gas Stack	Direction-Specific Max	NA	5.29E-06 (N)	2.56E-06 (N)	1.78E-06 (N)	8.08E-07 (N)	2.60E-07 (N)
	Site Limit	NA	**8.87E-06**	**3.94E-06**	**2.62E-06**	**1.09E-06**	**3.06E-07**
	Max Fumigation	**1.75E-05 (SW, WSW, NW, N)**	N/A	N/A	N/A	N/A	N/A
Units 2 and 3 Reactor Building Stacks	Direction-Specific Max	NA	**4.81E-05 (ENE)**	**2.08E-05 (ENE)**	**1.37E-05 (ENE)**	**5.49E-06 (ENE)**	**1.49E-06 (ENE)**
	Site Limit	NA	3.07E-05	1.43E-05	9.74E-06	4.25E-06	1.29E-06

* The higher of the direction specific and the site limit values are indicated in bold.

4.0 ADDITIONAL PAVAN ANALYSIS OF CONTROL ROOM, EAB, AND LPZ

As stated in Section 1, this section provides the additional X/Q values calculated pursuant to the NRC RAI's (i.e., AADB RAI 12, 13, and 23) with respect to Calculation PM-1055 Revision 0, and presents these on a comparative basis to those contained in Sections 2 and 3 above. The additional analyses respond to the issues of the appropriateness of meteorological tower data utilized for the LPZ, and the revised wind speed categorization in Regulatory Guide 1.23 Revision 1. Results are presented at the end of this section.

4.1 LPZ (and EAB) Meteorological Database

As shown on Sheet 1 of both Attachments A and B, topography near the Peach Bottom Site is complex. The facility is located on the shore of the Susquehanna River adjacent to a bluff. Effluent releases are postulated from multiple locations, including from short stacks on top of facility structures, locations at or near ground-level at the facility, and from the 152 meter off-gas stack on the bluff. Meteorological data from all three towers were utilized to generate atmospheric dispersion factors (X/Q values), namely from Tower 2 on the bluff, Tower 1A near the shore in the vicinity of the Peach Bottom facility structures, and the River Tower based in the Susquehanna River. For the LPZ, the most limiting X/Q values were selected for use in the AST LPZ dose assessments.

In Revision 0 of this calculation, neither the River Tower nor Tower 1A meteorological data were utilized for the LPZ X/Q analysis of the RB Units 2 and 3 stacks. The RB stack tops are at 305 ft msl, essentially above the Valley's meteorological influences, and any release would be at even higher elevations resulting from its velocity at the stack exit. As discussed in Section 3.2.4.2, and depicted in Attachment B, the RB stack tops at 305 ft msl are vertically much nearer the Tower 2 grade elevation of 367 ft msl than the River at 116 ft msl. Accordingly, the wind direction at the Tower 2 location, only about 500 feet south-southwest of the RB Units 2 and 3 would also correspond more to the wind flow at the RB stack tops than either the River Tower or Tower 1A. Unlike the area within the 823-meter radius EAB, for much of which the elevation is at or near river-level, the great majority of area within the 7300-meter radius LPZ is well above the River.

Even though meteorological tower data measured on Towers 1A and the River Tower would not generally be representative of conditions at the LPZ, for purposes of conservatism additional LPZ X/Q values were generated by PAVAN. These additional PAVAN analyses are based on the meteorological data from Tower 1A located in the Valley immediately adjacent to the Peach Bottom Facility, for the postulated Units 2 and 3 release locations of the Reactor Building Stacks, Turbine Building (for Main Steam Line Isolation Valve leakage sources during a Loss of Coolant Accident and for the Control Rod Drop Accident analysis), and Personnel Access Doors, Railway Bay Doors, Roof Scuttle, and Ground-Level Hatches for the Fuel Handling Accident analysis (all considered as ground-level releases).

For the same meteorological data from Tower 1A, located in the Valley immediately adjacent to the Peach Bottom Facility, the corresponding EAB X/Q values for these accidents and release locations were generated by PAVAN as well, as these again represent the most limiting X/Qs.

4.2 RG 1.23 Revision 1 Wind Speed Categories

The joint wind speed, wind direction, and atmospheric stability frequency distributions based on Regulatory Guide 1.23 Revision 0 as described in Section 3 (used by PAVAN in generating the X/Q values presented in Section 3 and additional LPZ and EAB X/Q's described in Section 4.1) were revised based on the 11 wind speed categories listed in Regulatory Guide 1.23, Revision 1. A comparison of the Revision 0 and Revision 1 wind speed categories is shown in Table 4-1. Attachment K contains the joint frequency distributions revised for the 11 wind speed categories.

The 11-bin wind speed joint frequency distributions were then used to recalculate the X/Q values for each release-receptor scenario previously run with the 7-bin joint frequency distributions.

TABLE 4- 1

PAVAN X/Q Wind Speed Categories

Wind Speed Categories[a] (Regulatory Guide 1.23, Revision 0)	
Category	Wind Speed (mph)
1 (Calm)[b]	<0.5
2	>=0.5 to <3.5
3	>=3.5 to <7.5
4	>=7.5 to <12.5
5	>=12.5 to <18.5
6	>=18.5 to <24
7	>=24

Wind Speed Categories[a] (Regulatory Guide 1.23, Revision 1)	
Category	Wind Speed (mph)
1 (Calm)[b]	<0.5
2	>=0.5 to <2.35
3	>=2.35 to <3.47
4	>=3.47 to <4.59
5	>=4.59 to <6.82
6	>=6.82 to <9.06
7	>=9.06 to <11.30
8	>=11.30 to <13.53
9	>=13.53 to <18.01
10	>=18.01 to <22.37
11	>=22.37

[a] To be inclusive of all monitored wind speeds, a midpoint was assumed between each designated wind speed category.

[b] The higher of the starting speeds of the Climatronics® wind vane and anemometer equipment (i.e. 0.50 mph) was used as the threshold for calm winds, per Regulatory Guide 1.145, Section 1.1.

4.3 Results of Additional PAVAN X/Q Analysis

Tables 4-2 and 4-3 present a comparative summary of the PAVAN X/Q results based on Regulatory Guide 1.23, Revisions 0 and 1. Table 4-4 similarly presents the comparative PAVAN X/Q results for the Off-Gas Stack to Control Room Intake calculations. It can be seen that for each time-averaging period, the use of the 11-bin joint frequency distributions based on Regulatory Guide 1.23, Revision 1, results in somewhat higher X/Q values for the EAB and LPZ, and for the other modeled distance values in support of the Off-Gas Stack to Control Room X/Q.

Table 4-5 lists the higher of the Regulatory Guide 1.23 Revision 0 and Revision 1 PAVAN results for the Off-Gas Stack to Control Room Intake Scenario. Also presented are the ARCON96 X/Q results for the same scenario as taken from Table 2-2. The PAVAN results are used in conjunction with the ARCON96 results to produce the final Off-Gas Stack to Control Room Intake X/Q values according to the methodology in Regulatory Guide 1.194, Section 3.2.2.

Attachment L contains the PAVAN input files and output file summaries associated with each scenario.

TABLE 4- 2
PAVAN X/Q (sec/m^3)
Off-Gas Stack and Reactor Building Stacks EAB X/Q Values[1, 2]

RELEASE LOCATION	X/Q PARAMETER[3]	0-0.5 hour	0-2 hour	0-8 hour	8-24 hour	1-4 day	4-30 day	JFD Wind Speed Category Compliance[4]
EAB (823 m)								
Off-Gas Stack								
Tower 2 320' winds; Tower 2 316' - 33' stability	Direction-Specific Max	NA	5.50E-06 (N)	1.76E-06 (WSW)	1.06E-06 (WSW)	3.53E-07 (W)	8.86E-08 (W)	RG 1.23, Revision 0
		NA	6.02E-06 (SW)	1.88E-06 (SW)	1.08E-06 (WSW)	3.73E-07 (W)	9.29E-08 (W)	RG 1.23, Revision 1
	Site Limit	NA	8.89E-06	3.14E-06	1.87E-06	6.03E-07	1.19E-07	RG 1.23, Revision 0
		NA	**9.17E-06**	**3.24E-06**	**1.92E-06**	**6.22E-07**	**1.23E-07**	RG 1.23, Revision 1
	Max Fumigation	**5.30E-05 (S, W, WNW, SSE)**	NA	NA	NA	NA	NA	RG 1.23, Revision 0
		5.30E-05 (S, W, WNW, SSE)	NA	NA	NA	NA	NA	RG 1.23, Revision 1
Units 2 and 3 Reactor Building Stacks								
Tower 2 33' winds; Tower 2 150' - 33' stability	Direction-Specific Max	NA	3.46E-04 (ENE)	1.79E-04 (ENE)	1.29E-04 (ENE)	6.33E-05 (ENE)	2.27E-05 (ENE)	RG 1.23, Revision 0
		NA	3.54E-04 (E)	1.85E-04 (E)	1.34E-04 (E)	6.61E-05 (E)	2.40E-05 (E)	RG 1.23, Revision 1
	Site Limit	NA	2.45E-04	1.34E-04	9.95E-05	5.19E-05	2.04E-05	RG 1.23, Revision 0
		NA	2.95E-04	1.59E-04	1.16E-04	5.95E-05	2.27E-05	RG 1.23, Revision 1
Units 2 and 3 Reactor Building Stacks, Turbine Building Stacks, Reactor Building Personnel Access Doors, Railway Bay Doors, Roof Scuttle, and Ground-Level Hatch								
Tower 1A 92'winds; Tower 1A 89' - 33' stability	Direction-Specific Max	NA	7.35E-04 (NNW)	3.78E-04 (NNW)	2.71E-04 (NNW)	1.39E-04 (NW)	5.40E-05 (NW)	RG 1.23, Revision 0
		NA	**9.11E-04 (N)**	**4.67E-04 (NNW)**	**3.35E-04 (NNW)**	**1.64E-04 (NW)**	**6.26E-05 (NW)**	RG 1.23, Revision 1
	Site Limit	NA	6.53E-04	3.57E-04	2.64E-04	1.37E-04	5.36E-05	RG 1.23, Revision 0
		NA	7.45E-04	4.07E-04	3.01E-04	1.56E-04	6.11E-05	RG 1.23, Revision 1
River Tower 45'winds; Tower 1A 89' - 33' stability	Direction-Specific Max	NA	4.25E-04 (E)	2.26E-04 (SE)	1.66E-04 (SE)	8.45E-05 (SE)	3.22E-05 (SE)	RG 1.23, Revision 0
		NA	4.51E-04 (SE)	2.42E-04 (SE)	1.77E-04 (SE)	8.97E-05 (SE)	3.39E-05 (SE)	RG 1.23, Revision 1
	Site Limit	NA	4.05E-04	2.19E-04	1.61E-04	8.28E-05	3.18E-05	RG 1.23, Revision 0
		NA	4.08E-04	2.22E-04	1.64E-04	8.47E-05	3.28E-05	RG 1.23, Revision 1

[1] Blue highlighting indicates X/Q values obtained from Table 3-6 of the Calculation.
[2] Non-blue highlighting indicates X/Q values additionally generated for purpose of providing response to NRC RAI's as referenced in Section 1.0.
[3] The highest of the Direction-Specific and the Site Limit values are indicated in bold.
[4] RG 1.23, Revision 0 and RG 1.23, Revision 1 (March 2007) wind speed categories are shown in Tables 3-3 and 4-1, respectively.

TABLE 4- 3
PAVAN X/Q (sec/m^3)
Off-Gas Stack and Reactor Building Stacks LPZ X/Q Values[1, 2]

RELEASE LOCATION	X/Q PARAMETER[3]	0-0.5 hour	0-2 hour	0-8 hour	8-24 hour	1-4 day	4-30 day	JFD Wind Speed Category Compliance[4]
LPZ (7300 m)								
Off-Gas Stack								
Tower 2 320' winds; Tower 2 316' - 33' stability	**Direction-Specific Max**	NA	5.29E-06 (N)	2.56E-06 (N)	1.78E-06 (N)	8.08E-07 (N)	2.60E-07 (N)	RG 1.23, Revision 0
		NA	5.67E-06 (N)	2.71E-06 (N)	1.88E-06 (N)	8.44E-07 (N)	2.67E-07 (N)	RG 1.23, Revision 1
	Site Limit	NA	8.87E-06	3.94E-06	2.62E-06	1.09E-06	3.06E-07	RG 1.23, Revision 0
		NA	**9.05E-06**	**4.01E-06**	**2.67E-06**	**1.10E-06**	**3.10E-07**	RG 1.23, Revision 1
	Max Fumigation	**1.75E-05 (SW, WSW, NW, N)**	NA	NA	NA	NA	NA	RG 1.23, Revision 0
		1.75E-05 (SW, WSW, NW, N)	NA	NA	NA	NA	NA	RG 1.23, Revision 1
Units 2 and 3 Reactor Building Stacks								
Tower 2 33' winds; Tower 2 150' - 33' stability	**Direction-Specific Max**	NA	4.81E-05 (ENE)	2.08E-05 (ENE)	1.37E-05 (ENE)	5.49E-06 (ENE)	1.49E-06 (ENE)	RG 1.23, Revision 0
		NA	4.82E-05 (E)	2.10E-05 (E)	1.39E-05 (E)	5.66E-06 (E)	1.55E-06 (E)	RG 1.23, Revision 1
	Site Limit	NA	3.07E-05	1.43E-05	9.74E-06	4.25E-06	1.29E-06	RG 1.23, Revision 0
		NA	3.65E-05	1.67E-05	1.13E-05	4.82E-06	1.42E-06	RG 1.23, Revision 1
Units 2 and 3 Reactor Building Stacks, Reactor Building Personnel Access Doors, Railway Bay Doors, Roof Scuttle, and Ground-Level Hatch								
Tower 1A 92'winds; Tower 1A 89' - 33' stability	**Direction-Specific Max**	NA	1.11E-04 (NNW)	4.70E-05 (NNW)	3.06E-05 (NNW)	1.26E-05 (NW)	3.57E-06 (NW)	RG 1.23, Revision 0
		NA	**1.38E-04 (N and NNW)**	**5.81E-05 (NNW)**	**3.77E-05 (NNW)**	**1.48E-05 (NNW and NW)**	**4.15E-06 (NW)**	RG 1.23, Revision 1
	Site Limit	NA	9.89E-05	4.43E-05	2.96E-05	1.24E-05	3.55E-06	RG 1.23, Revision 0
		NA	1.13E-04	5.05E-05	3.38E-05	1.42E-05	4.05E-06	RG 1.23, Revision 1

[1] Blue highlighting indicates X/Q values obtained from Table 3-6 of the Calculation.
[2] Non-blue highlighting indicates X/Q values additionally generated for purpose of providing response to NRC RAI's as referenced in Section 1.0.
[3] The highest of the Direction-Specific and the Site Limit values are indicated in bold.
[4] RG 1.23, Revision 0 and RG 1.23, Revision 1 (March 2007) wind speed categories are shown in Tables 3-3 and 4-1, respectively.

TABLE 4- 4

PAVAN Results for Off-Gas Stack to Control Room Intake X/Q Calculations[1, 2]

Averaging Period	JFD Wind Speed Category Compliance	Modeled Horizontal Distance (m) from Stack to Control Room Intake											
		209 (Actual Distance)	280	300	500[3]	750	1000	1500	2000	3000	4000	5000	6000
		X/Q (sec/m^3) [6]											
0-2 hr[4, 5]	RG 1.23, Revision 0	2.72E-06	2.72E-06	2.72E-06	2.72E-06	2.31E-06	2.06E-06	1.95E-06	1.83E-06	1.77E-06	1.71E-06	1.70E-06	1.60E-06
	RG 1.23, Revision 1	**3.31E-06**	**3.31E-06**	**3.31E-06**	**3.31E-06**	2.60E-06	2.32E-06	2.18E-06	2.05E-06	1.95E-06	1.87E-06	1.86E-06	1.75E-06
1-4 day[4, 5]	RG 1.23, Revision 0	2.03E-08	1.50E-07	1.94E-07	3.50E-07	2.80E-07	2.34E-07	2.07E-07	2.15E-07	2.50E-07	2.59E-07	2.58E-07	2.47E-07
	RG 1.23, Revision 1	2.28E-08	1.68E-07	2.18E-07	**3.93E-07**	3.02E-07	2.55E-07	2.26E-07	2.34E-07	2.65E-07	2.74E-07	2.72E-07	2.62E-07
4-30 day[4, 5]	RG 1.23, Revision 0	1.06E-09	2.60E-08	3.95E-08	1.01E-07	7.83E-08	6.31E-08	5.35E-08	6.38E-08	8.36E-08	8.93E-08	8.86E-08	8.43E-08
	RG 1.23, Revision 1	1.14E-09	2.79E-08	4.23E-08	**1.09E-07**	8.26E-08	6.75E-08	5.77E-08	6.61E-08	8.60E-08	9.17E-08	9.07E-08	8.67E-08

[1] Blue highlighting indicates X/Q values obtained from Table 3-5 of the Calculation.
[2] Non-blue highlighting indicates X/Q values additionally generated for purpose of providing response to NRC RAI's as referenced in Section 1.0.
[3] Maximum hourly X/Q (which is assigned to represent the 0-2 hour period) is actually predicted to occur at 500 m; however, in accordance with PAVAN model methodology for elevated releases, this maximum value is conservatively also assigned to any lesser desired boundary distance.
[4] Averaging period maxima are indicated in bold.
[5] Underlined values are incorporated into ARCON96 determination of Control Room Intake per NRC RG 1.194, Section 3.2.2.
[6] The maximum of the Direction-Specific Max and Site Limit values is listed.

TABLE 4- 5

Off-Gas Stack to Control Room Intake X/Q Summary

(Calculated in accordance with RG 1.194, Section 3.2.2)

			X/Q Values (sec/m³)				
Model	Horizontal Distance (m)	Release Height (m)[1]	0-2 hr	2-8 hr	8-24 hrs	1-4 days	4-30 days
ARCON96[2]	209	112	1.00E-15	1.00E-15	1.00E-15	7.25E-15	5.92E-15
PAVAN [3,4]	209 (actual distance)	72.1	3.31E-06	NA[5]	NA	2.28E-08	1.14E-09
PAVAN [3,4]	280	72.1	3.31E-06	NA	NA	1.68E-07	2.79E-08
PAVAN [3,4]	300	72.1	3.31E-06	NA	NA	2.18E-07	4.23E-08
PAVAN [3,4]	500	72.1	3.31E-06	NA	NA	3.93E-07	1.09E-07
PAVAN [3,4]	750	72.1	2.60E-06	NA	NA	3.02E-07	8.26E-08
PAVAN [3,4]	1000	72.1	2.32E-06	NA	NA	2.55E-07	6.75E-08
PAVAN [3,4]	1500	72.1	2.18E-06	NA	NA	2.26E-07	5.77E-08
PAVAN [3,4]	2000	72.1	2.05E-06	NA	NA	2.34E-07	6.61E-08
PAVAN [3,4]	3000	72.1	1.95E-06	NA	NA	2.65E-07	8.60E-08
PAVAN [3,4]	4000	72.1	1.87E-06	NA	NA	2.74E-07	9.17E-08
PAVAN [3,4]	5000	72.1	1.86E-06	NA	NA	2.72E-07	9.07E-08
PAVAN [3,4]	6000	72.1	1.75E-06	NA	NA	2.62E-07	8.67E-08
X/Q values calculated according to RG 1.194, Section 3.2.2			**3.31E-06**	**1.00E-15**	**1.00E-15**	**1.64E-08**	**4.54E-09**

[1] The release height for PAVAN model runs is measured from the Control Room Intake elevation instead of plant grade per RG 1.194, Section 3.2.2.

[2] ARCON96 X/Q values, taken from Table 2-2 of the Calculation.

[3] The higher of the max sector X/Q and site limit value is selected.

[4] The higher of the RG 1.23, Revision 0 and RG 1.23, Revision 1 X/Q values was selected.

[5] Not applicable

5.0 SUMMARY AND CONCLUSIONS

The ARCON96 and PAVAN X/Q modeling calculation results are summarized below for the Control Room, EAB and LPZ for the regulated time-averaging periods. Control Room intake results are calculated using the ARCON96 model, supplemented with PAVAN according to NRC Regulatory Guide 1.194 methodology. The EAB and LPZ results have been calculated using the PAVAN model according to Regulatory Guide 1.145 and consistently for the most limiting meteorological data.

TABLE 5- 1

X/Q (sec/m^3) Results Summary

RECEPTOR	RELEASE POINT	0 – 0.5 hour	0-2 hour	2-8 hour	8-24 hour	1-4 day	4-30 day
Control Room Intake	Off-Gas Stack		3.31E-06	1.00E-15	1.00E-15	1.64E-08	4.54E-09
	Unit 2 Reactor Building Stack		1.18E-03	9.08E-04	4.14E-04	2.90E-04	2.26E-04
	Unit 3 Reactor Building Stack		1.18E-03	8.91E-04	4.00E-04	2.51E-04	1.98E-04
EAB (823 m)	Off-Gas Stack	5.30E-05	9.17E-06	3.24E-06*	1.92E-06	6.22E-07	1.23E-07
	Units 2 and 3 Reactor Building Stacks, Turbine Building, and Personnel Access Doors, Railway Bay Doors, Roof Scuttle, and Ground-Level Hatches		9.11E-04	4.67E-04*	3.35E-04	1.64E-04	6.26E-05
LPZ (7,300 m)	Off-Gas Stack	1.75E-05	9.05E-06	4.01E-06*	2.67E-06	1.10E-06	3.10E-07
	Units 2 and 3 Reactor Building Stacks, Turbine Building, and Personnel Access Doors, Railway Bay Doors, Roof Scuttle, and Ground-Level Hatches		1.38E-04	5.81E-05*	3.77E-05	1.48E-05	4.15E-06

*PAVAN result representing 0-8 hour time period.

Attachments M and N provide WGI Computer Disclosure Sheets associated with the ARCON96 and PAVAN analyses, respectively.

6.0 REFERENCES

1) *Regulatory Guide 1.183, "Alternative Radiological Source Terms For Evaluating Design Basis Accidents At Nuclear Power Reactors"*; U.S. Nuclear Regulatory Commission; July 2000

2) *Atmospheric Relative Concentrations in Building Wakes*; NUREG/CR-6331, PNNL-10521, Rev. 1; prepared by J. V. Ramsdell, Jr., C. A. Simmons, Pacific Northwest National Laboratory; prepared for U.S. Nuclear Regulatory Commission; May 1997 (Errata, July 1997).

3) *Atmospheric Dispersion Code System for Evaluating Accidental Radioactivity Releases from Nuclear Power Stations;* PAVAN, Version 2; Oak Ridge National Laboratory; U.S. Nuclear Regulatory Commission; December 1997.

4) *Draft Regulatory Guide DG-1111; Atmospheric Relative Concentrations for Control Room Radiological Habitability Assessments at Nuclear Power Plants*; U.S. Nuclear Regulatory Commission; December 2001.

5) *Regulatory Guide 1.145; Atmospheric Dispersion Models for Potential Accident Consequence Assessments at Nuclear Power Plants (Revison 1)*; U.S. Nuclear Regulatory Commission; November 1982.

6) Peach Bottom 1967-2001 Meteorological Tower data; provided on behalf of Exelon by Pat Brennen of MES under cover letters "PBAPS Meteorological Data, 1967-2001", October 22, 2002 and "PBAPS Tower 1A Meteorological Data, 1983-1992", November 13, 2002.

7) Peach Bottom UFSAR, Figure 2.3.1, Rev. 18; *Location of Meteorological Instruments.*

8) Peach Bottom UFSAR, Figure 2.3.2-A, Rev. 18; *Elevations of Meteorological Instruments and Gaseous Release Points-1983 System Upgrade.*

9) *Regulatory Guide 1.23 (Safety Guide 23), Onsite Meteorological Programs*; U. S. Nuclear Regulatory Commission; USNRC Office of Standards Development; Washington, D.C.; 1972.

10) *XOQDOQ: Computer Program for the Meteorological Evaluation of Routine Releases at Nuclear Power Stations*; NUREG/CR-2919; J. F. Sagendorf, J. T. Goll, and W. F. Sandusky, U.S. Nuclear Regulatory Commission; Washington, D.C; 1982.

11) *Atmospheric Dispersion Estimates in the Vicinity of Buildings*; J. V. Ramsdell and C. J. Fosmire, Pacific Northwest Laboratory; 1995.

12) Peach Bottom Atomic Power Station Drawing No. M-18, Rev. 11; Equipment Location-Reactor and Radwaste Building Unit No. 2, Plan at 234'.

13) Peach Bottom Atomic Power Station Drawing No.M-19, Rev. 9; Equipment Location-Reactor and Radwaste Building Unit No.2, Sec. C-C.

14) *Technical Basis for Regulatory Guide 1.145, Atmospheric Dispersion Models for Potential Accident Consequence Assessments at Nuclear Power Plants;* NUREG/CR-2260; W. G. Snell and R. W. Jubach, U.S. Nuclear Regulatory Commission, Washington, D.C; 1981.

15) Peach Bottom UFSAR, Section 2.3, Rev. 18.

16) Peach Bottom Atomic Power Station Drawing No.M-7, Rev. 13; Sections A-A, B-B, & C-C.

17) *Regulatory Guide 1.23, Revision 1; Meteorological Monitoring Programs for Nuclear Power Plants;* U. S. Nuclear Regulatory Commission; Office of Nuclear Regulatory Research; March 2007.

18) *Regulatory Guide 1.194; Atmospheric Relative concentrations for Control Room Radiological Habitability Assessments at Nuclear Power Plants;* U. S. Nuclear Regulatory Commission; Office of Nuclear Regulatory Research; June 2003.

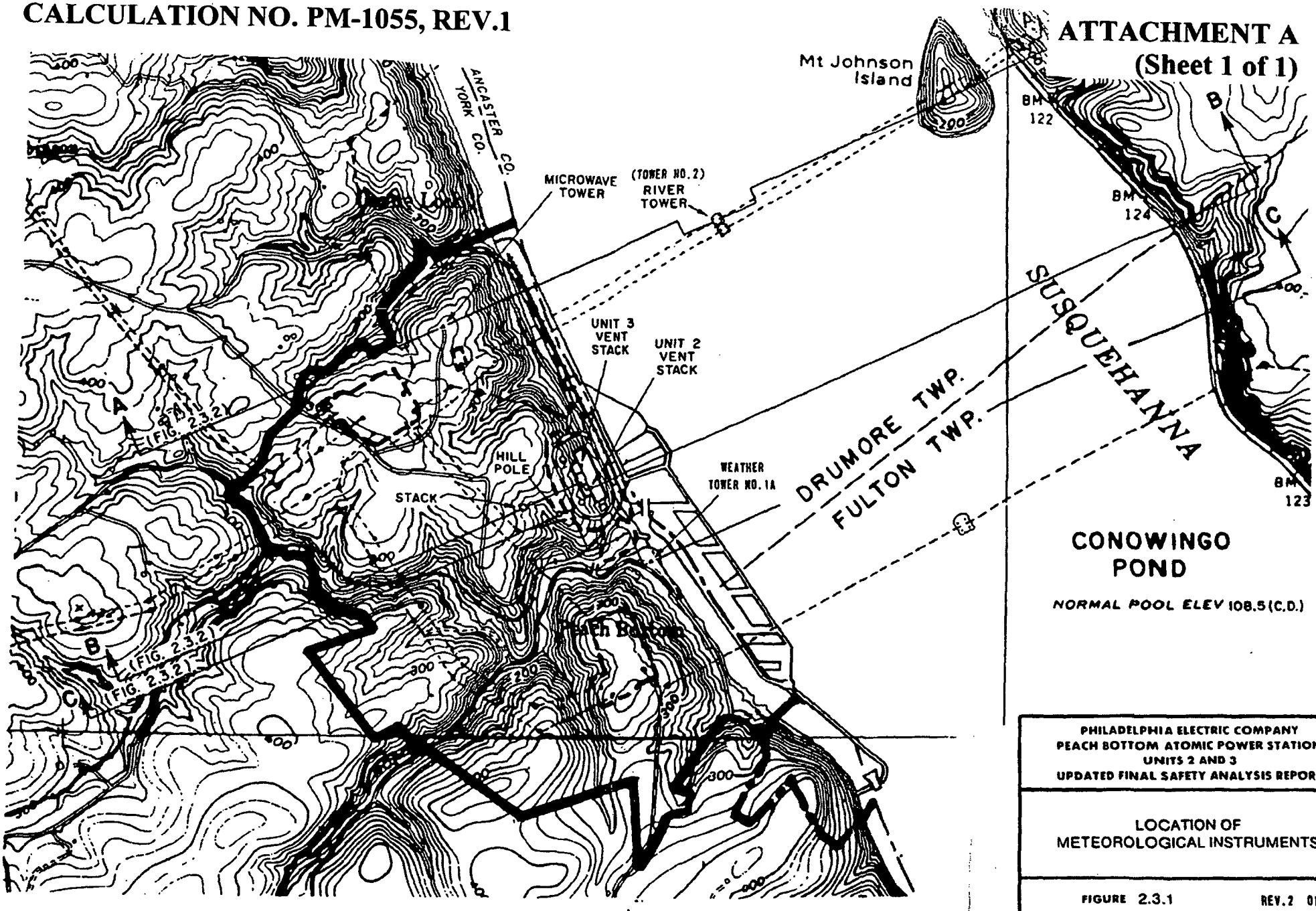
7.0 OWNER'S ACCEPTANCE REVIEW CHECKLIST FOR EXTERNAL DESIGN ANALYSIS

DESIGN ANALYSIS NO. PM-1055, REV.1

		Yes	No	N/A
1.	Do assumptions have sufficient rationale?	☑	☐	☐
2.	Are assumptions compatible with the way the plant is operated and with the licensing basis? For AST	☑	☐	☐
3.	Do the design inputs have sufficient rationale?	☑	☐	☐
4.	Are design inputs correct and reasonable?	☑	☐	☐
5.	Are design inputs compatible with the way the plant is operated and with the licensing basis? For AST	☑	☐	☐
6.	Are Engineering Judgments clearly documented and justified?	☑	☐	☐
7.	Are Engineering Judgments compatible with the way the plant is operated and with the licensing basis? For AST	☑	☐	☐
8.	Do the results and conclusions satisfy the purpose and objective of the Design Analysis?	☑	☐	☐
9.	Are the results and conclusions compatible with the way the plant is operated and with the licensing basis? For AST	☑	☐	☐
10.	Does the Design Analysis include the applicable design basis documentation?	☑	☐	☐
11.	Have any limitations on the use of the results been identified and transmitted to the appropriate organizations?	☐	☐	☑
12.	Are there any unverified assumptions?	☐	☑	☐
13.	Do all unverified assumptions have a tracking and closure mechanism in place?	☐	☐	☑
14.	Have all affected design analyses been documented on the Affected Documents List (ADL) for the associated Configuration Change?	☐	☐	☑
15.	Do the sources of inputs **and** analysis methodology used meet current technical requirements and regulatory commitments? (If the input sources **or** analysis methodology are based on an out-of-date methodology or code, additional reconciliation may be required if the site has since committed to a more recent code) For AST	☑	☐	☐
16.	Have vendor supporting technical documents and references (including GE DRFs) been reviewed when necessary?	☑	☐	☐

EXELON REVIEWER: T.J. Mscisz [signature] **DATE:** 8/04/08

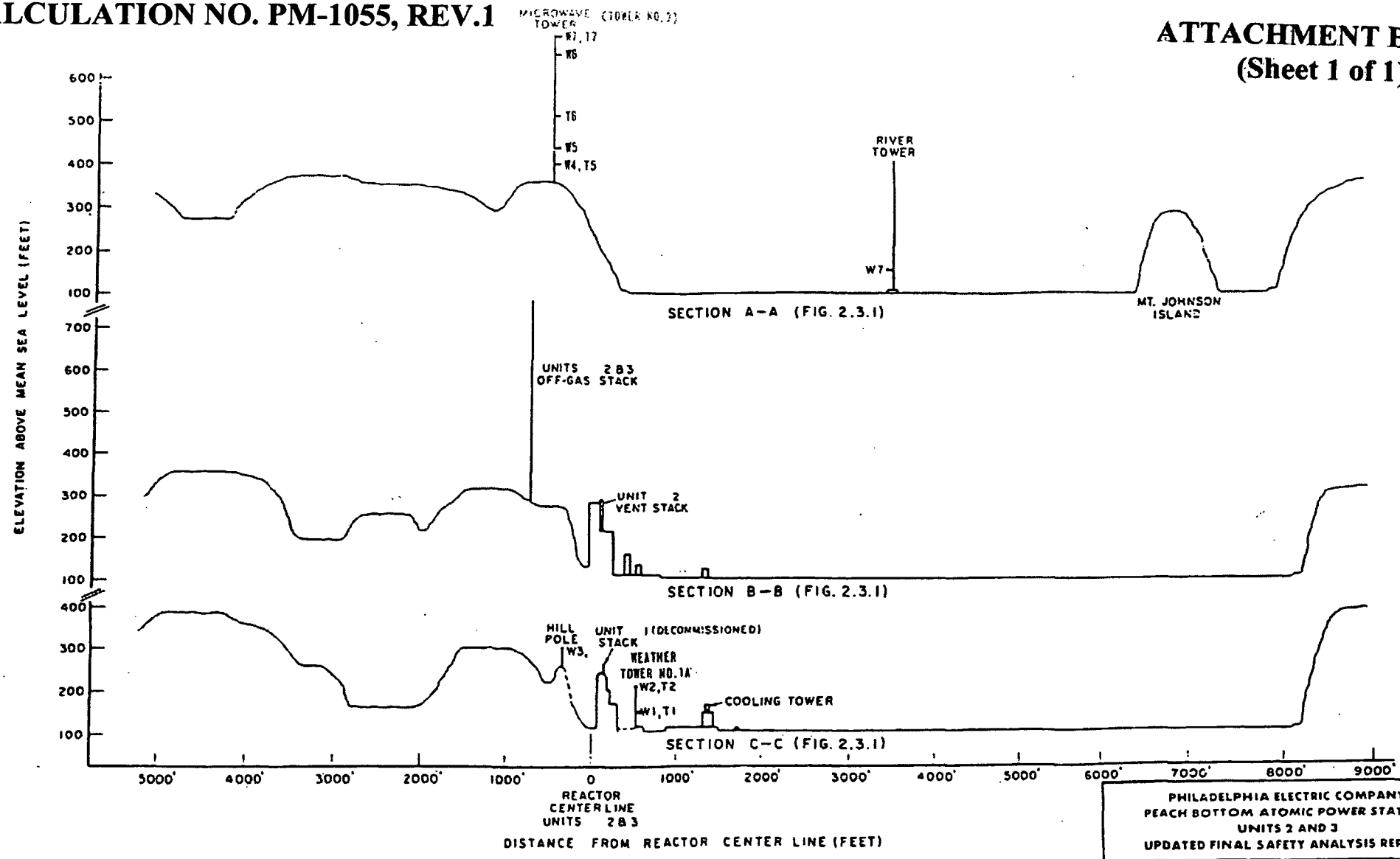
Print / Sign



PHILADELPHIA ELECTRIC COMPANY
PEACH BOTTOM ATOMIC POWER STATION
UNITS 2 AND 3
UPDATED FINAL SAFETY ANALYSIS REPORT

LOCATION OF
METEOROLOGICAL INSTRUMENTS

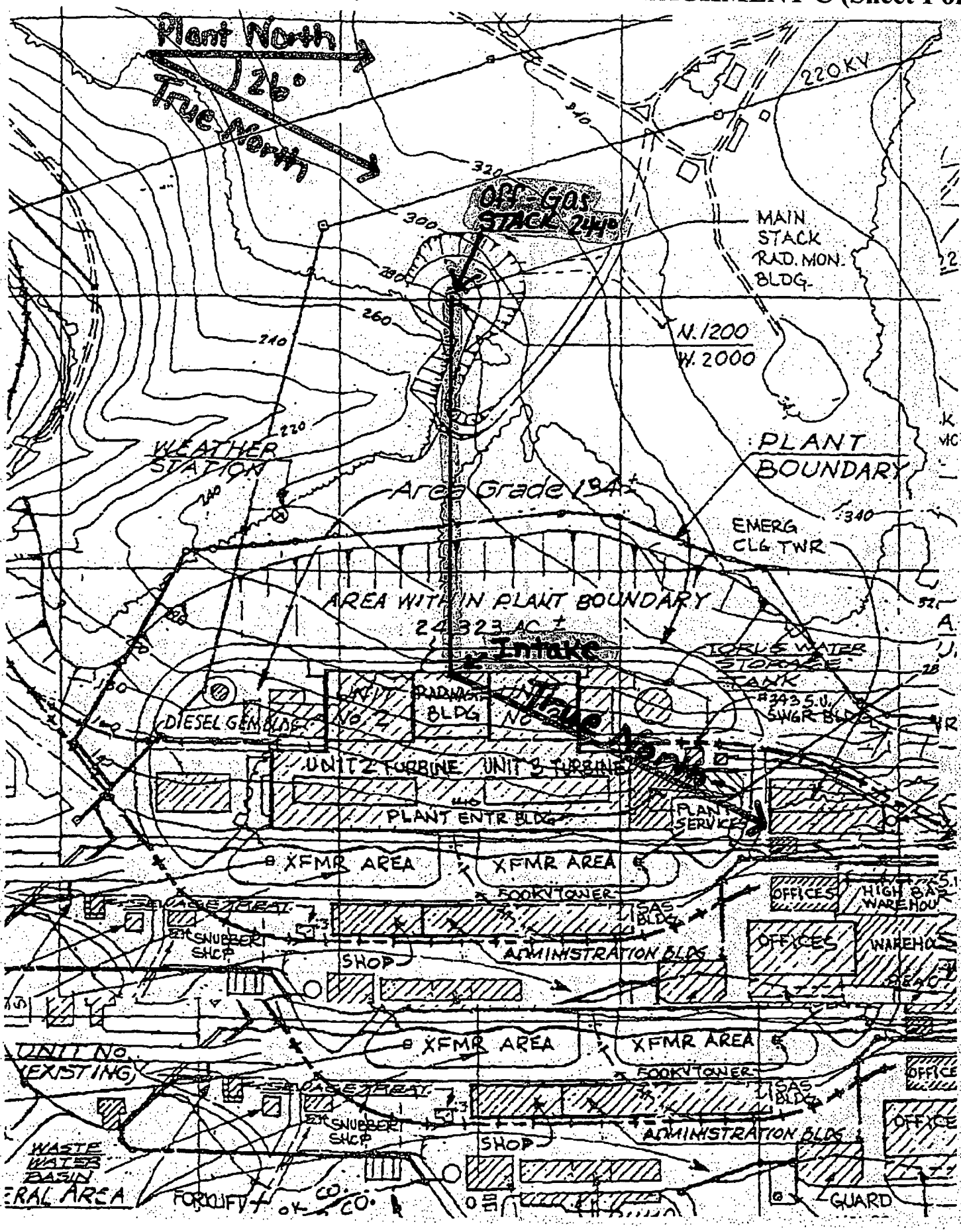
FIGURE 2.3.1 REV. 2 01/84

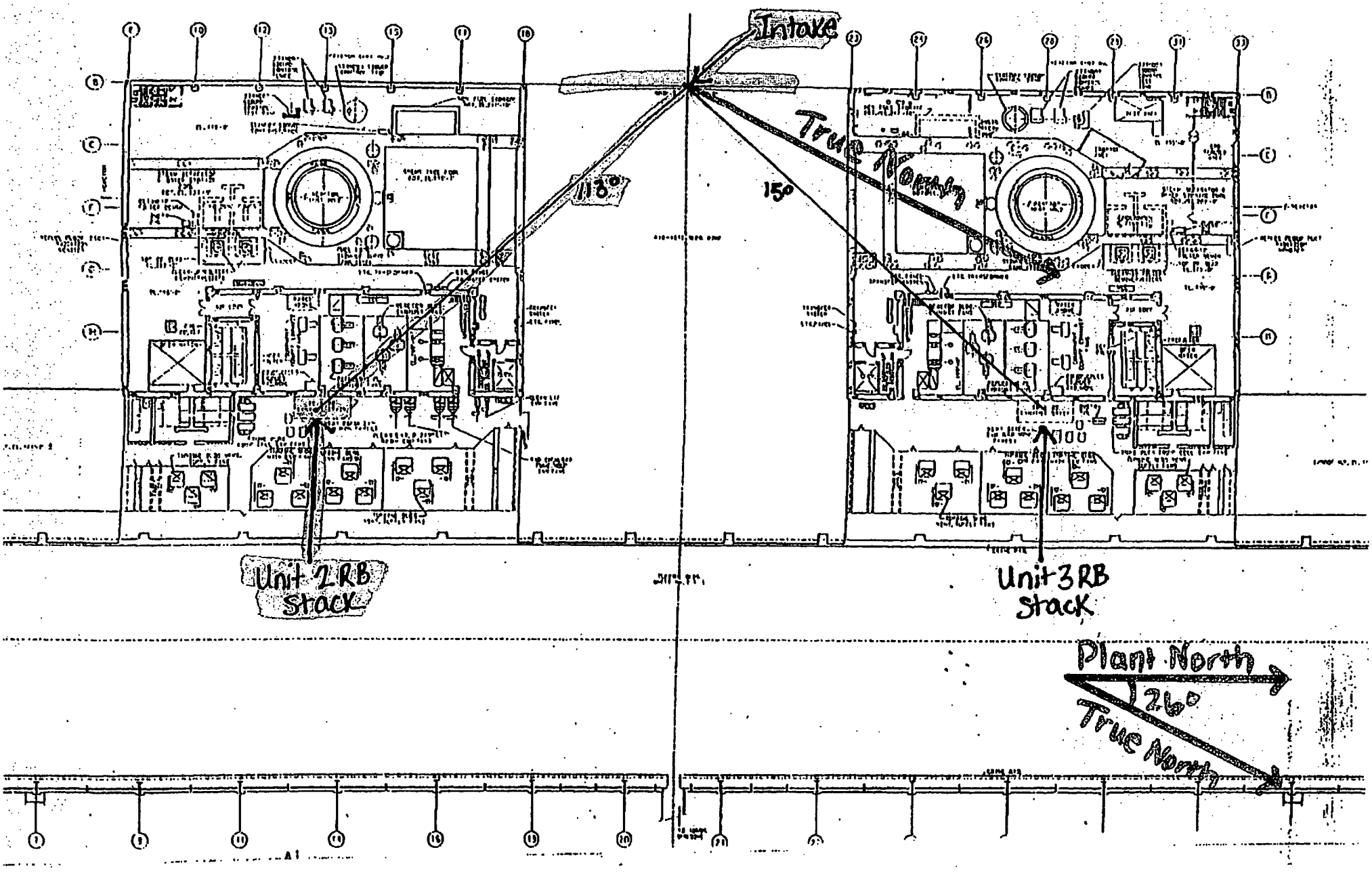


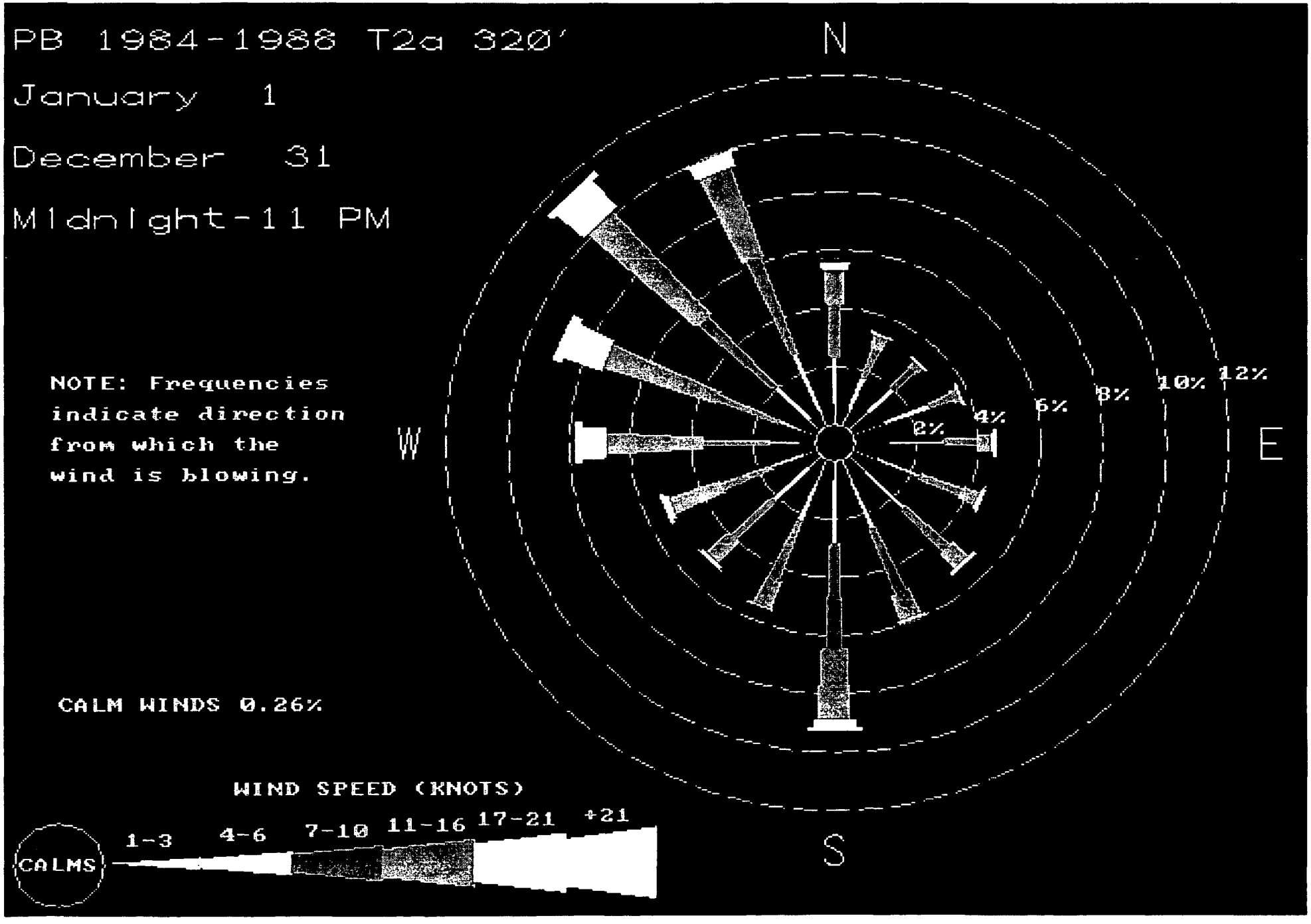
PHILADELPHIA ELECTRIC COMPANY
PEACH BOTTOM ATOMIC POWER STATION
UNITS 2 AND 3
UPDATED FINAL SAFETY ANALYSIS REPORT

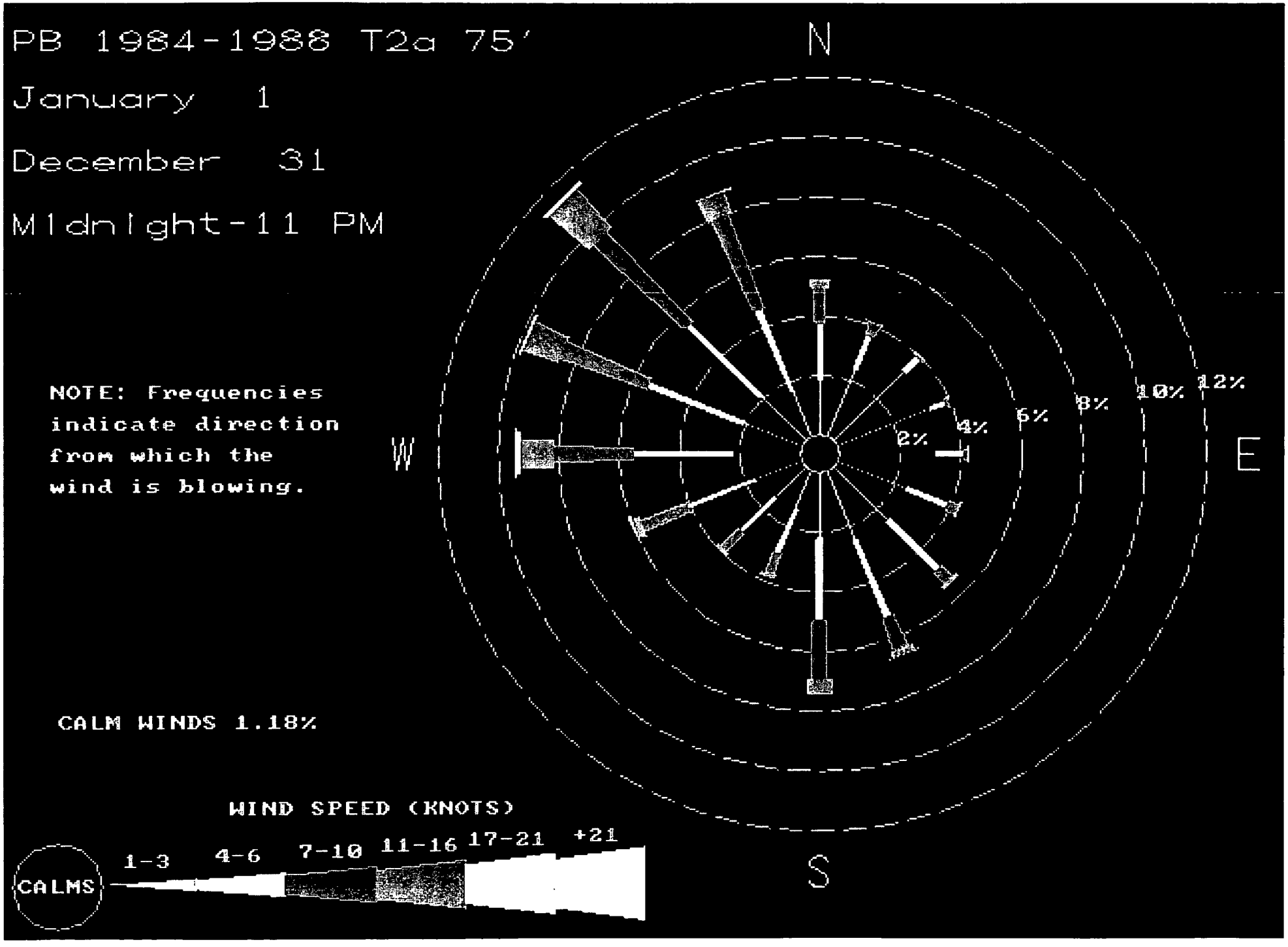
ELEVATIONS OF METEOROLOGICAL INSTRUMENTS AND GASEOUS RELEASE POINTS
1983 SYSTEM UPGRADE

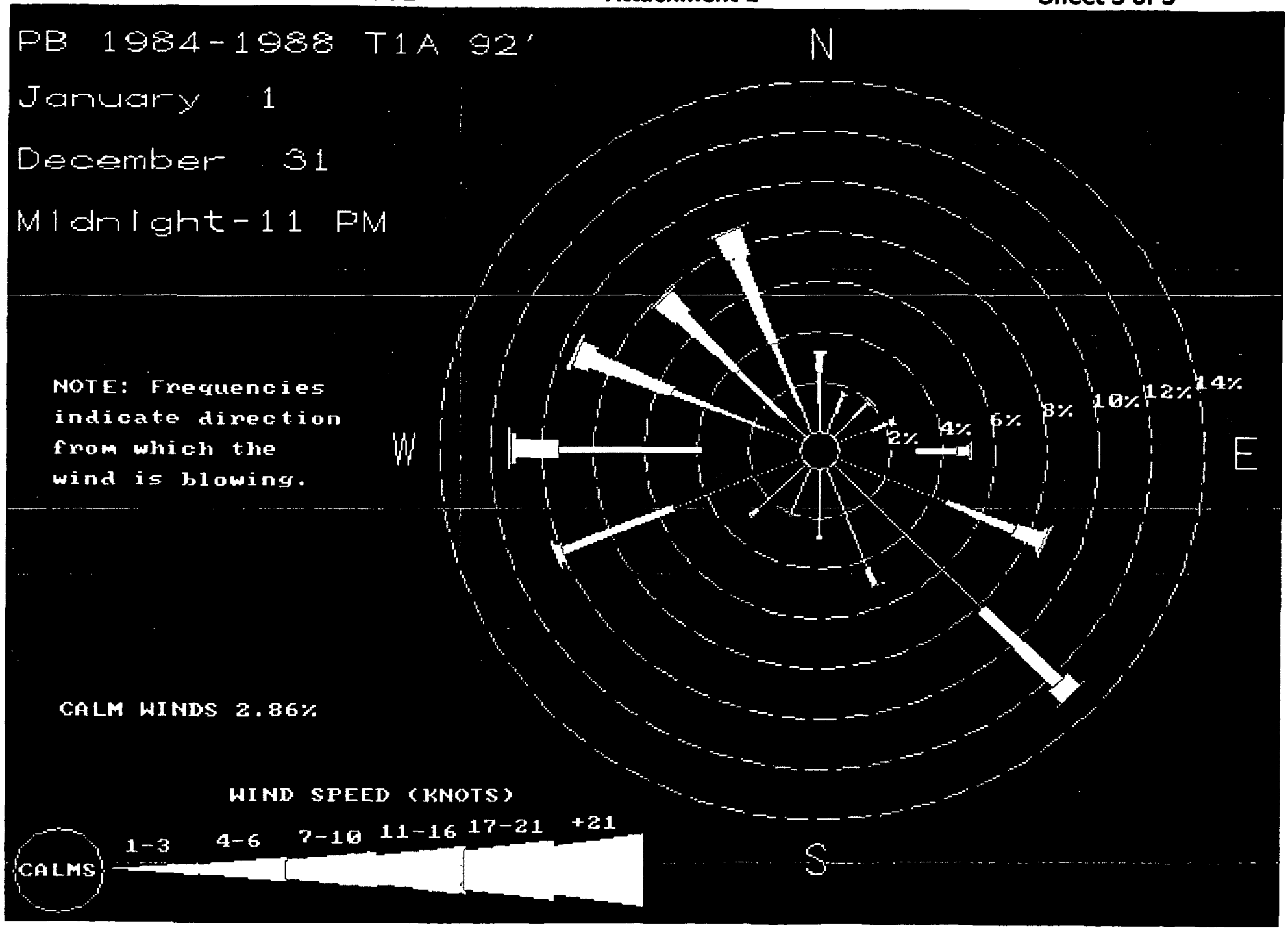
FIGURE 2.3.2-A REV.2 01/84

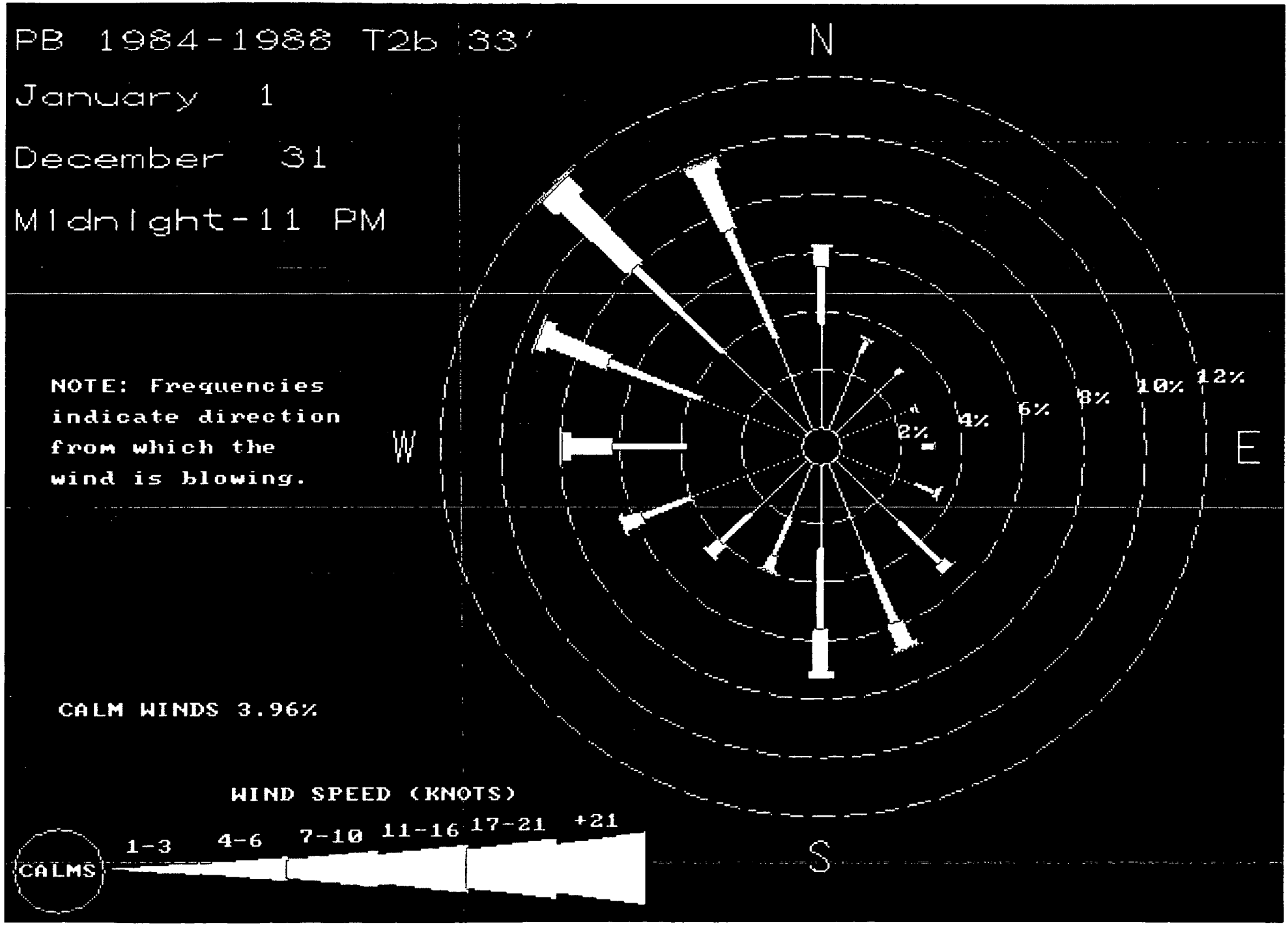

Plant North
26°
True North
220 KV
340
320
300
280
260
240
220
OBS. GAS STACK 244'
MAIN STACK RAD. MON. BLDG.
N. 1200
W. 2000
WEATHER STATION
PLANT BOUNDARY
Area Grade 194±
EMERG CLG TWR
AREA WITHIN PLANT BOUNDARY
24.323 AC ±
Intake
TORUS WATER STORAGE TANK
#343 S.U. SWGR BLDG
DIESEL GEN BLDG
UNIT No 2
RADWASTE BLDG
UNIT No 1
UNIT 2 TURBINE
UNIT 3 TURBINE
PLANT ENTR BLDG
PLANT SERVICES
XFMR AREA
XFMR AREA
BOOKY TOWER
OFFICES
HIGH BAY WAREHOUSE
LIGHT GAS BLDG
SNUBBER SHOP
SHOP
ADMINISTRATION BLDG
OFFICES
WAREHOUSE
XFMR AREA
XFMR AREA
UNIT No (EXISTING)
BOOKY TOWER
OFFICE
LIGHT GAS BLDG
SNUBBER SHOP
SHOP
ADMINISTRATION BLDG
OFFICE
WASTE WATER BASIN
GUARD

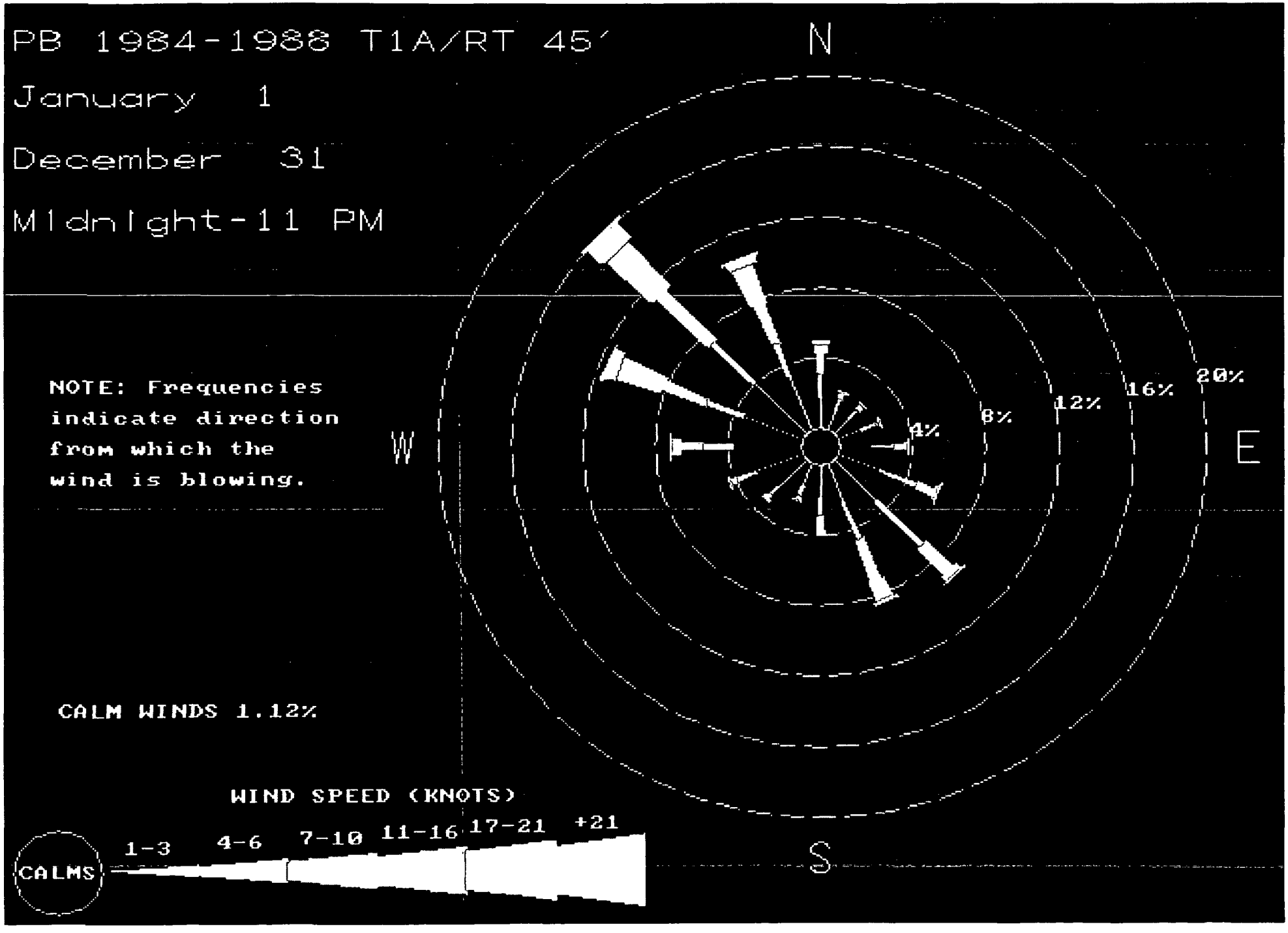

Intake
118°
150°
True North
Unit 2 RB Stack
Unit 3 RB Stack
Plant North
26°
True North

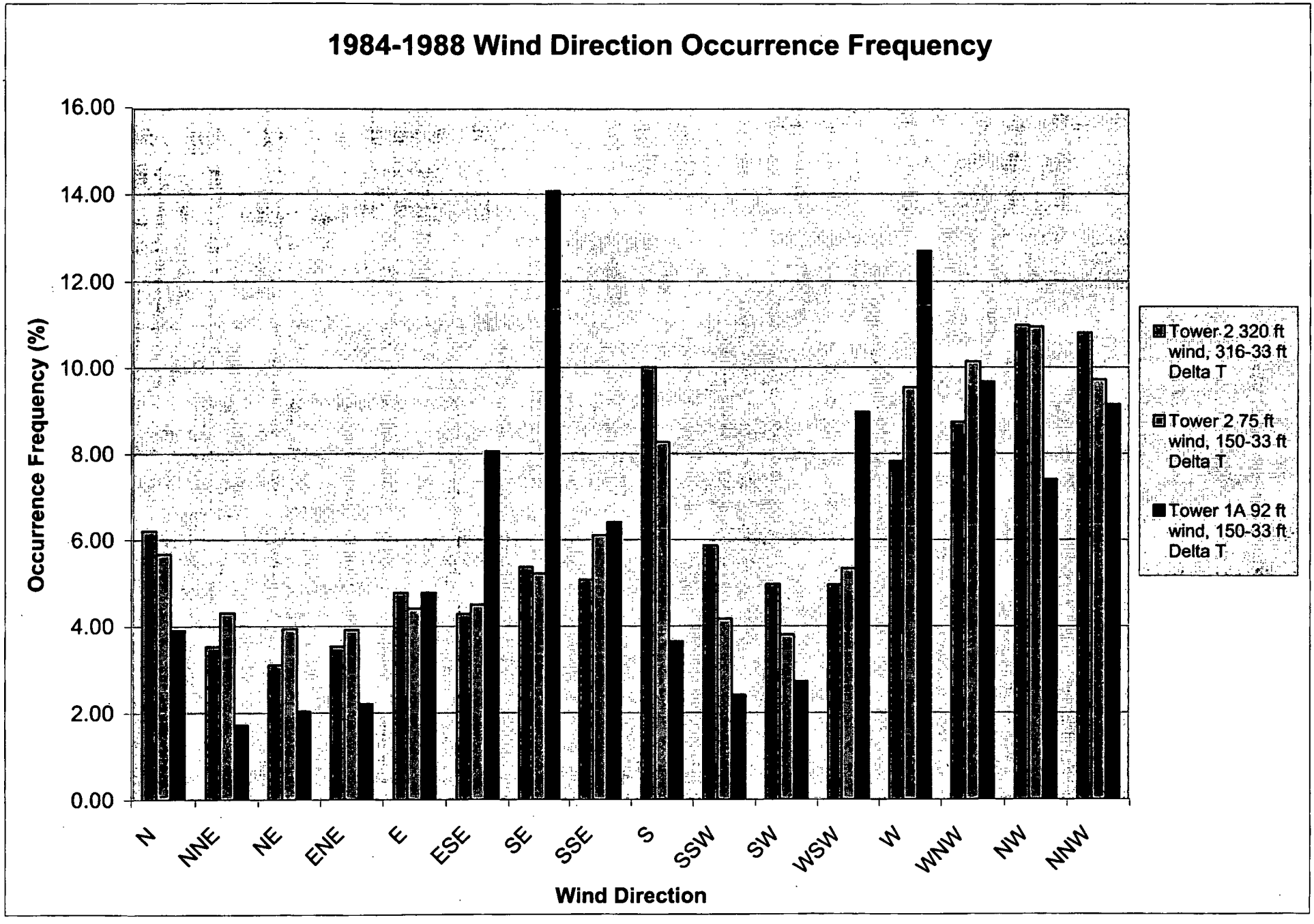

PB 1984-1988 T2a 320'
January 1
December 31
Midnight-11 PM
NOTE: Frequencies indicate direction from which the wind is blowing.
CALM WINDS 0.26%
N
E
S
W
2%
4%
6%
8%
10%
12%
WIND SPEED (KNOTS)
CALMS
1-3
4-6
7-10
11-16
17-21
+21

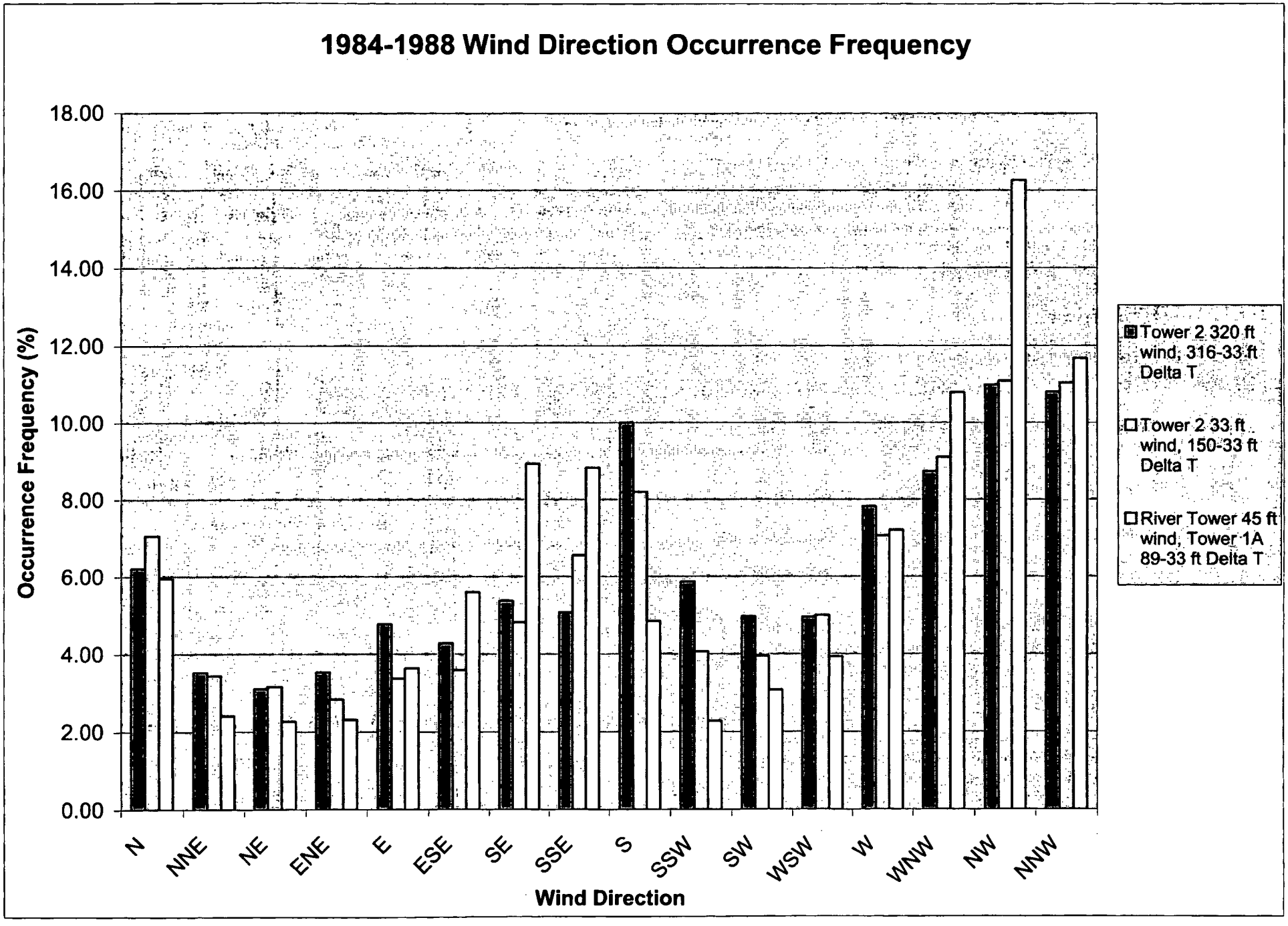

PB 1984-1988 T2a 75'
January 1
December 31
Midnight-11 PM
NOTE: Frequencies indicate direction from which the wind is blowing.
CALM WINDS 1.18%
N
E
S
W
2%
4%
6%
8%
10%
12%
WIND SPEED (KNOTS)
CALMS
1-3
4-6
7-10
11-16
17-21
+21

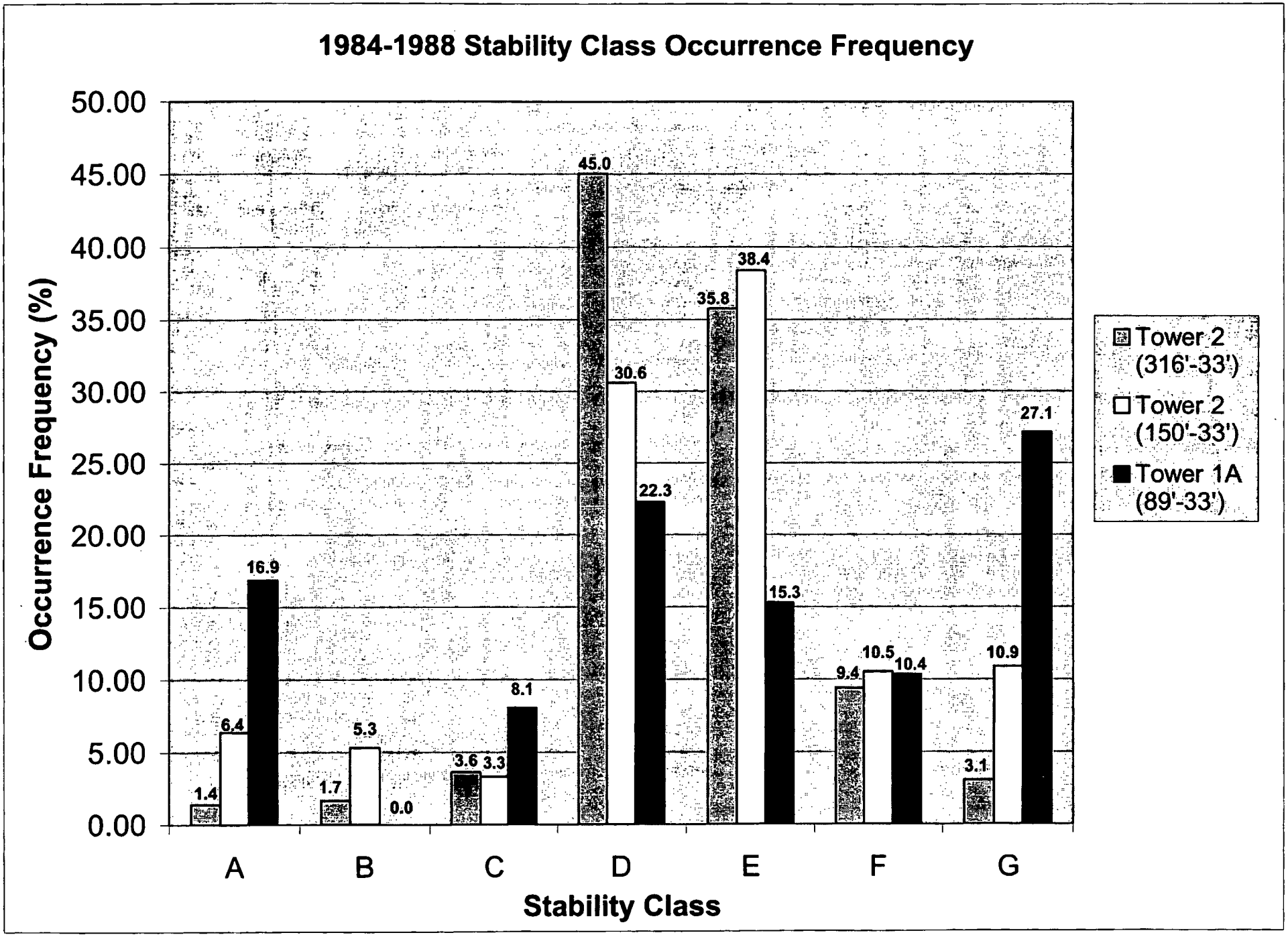

PB 1984-1988 T1A 92'
January 1
December 31
Midnight-11 PM
NOTE: Frequencies indicate direction from which the wind is blowing.
CALM WINDS 2.86%
N
E
S
W
2%
4%
6%
8%
10%
12%
14%
WIND SPEED (KNOTS)
CALMS
1-3
4-6
7-10
11-16
17-21
+21


PB 1984-1988 T2b 33'
January 1
December 31
Midnight-11 PM
N
W
E
S
2%
4%
6%
8%
10%
12%
NOTE: Frequencies indicate direction from which the wind is blowing.
CALM WINDS 3.96%
WIND SPEED (KNOTS)
CALMS
1-3
4-6
7-10
11-16
17-21
+21


PB 1984-1988 T1A/RT 45'
January 1
December 31
Midnight-11 PM
N
W
E
S
4%
8%
12%
16%
20%
NOTE: Frequencies indicate direction from which the wind is blowing.
CALM WINDS 1.12%
WIND SPEED (KNOTS)
CALMS
1-3
4-6
7-10
11-16
17-21
+21


1984-1988 Wind Direction Occurrence Frequency
Occurrence Frequency (%)
16.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
N
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
Wind Direction
Tower 2 320 ft wind, 316-33 ft Delta T
Tower 2 75 ft wind, 150-33 ft Delta T
Tower 1A 92 ft wind, 150-33 ft Delta T


1984-1988 Wind Direction Occurrence Frequency
Occurrence Frequency (%)
18.00
16.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
N
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
Wind Direction
Tower 2 320 ft wind, 316-33 ft Delta T
Tower 2 33 ft wind, 150-33 ft Delta T
River Tower 45 ft wind, Tower 1A 89-33 ft Delta T


1984-1988 Stability Class Occurrence Frequency
Occurrence Frequency (%)
50.00
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
1.4
6.4
16.9
1.7
5.3
0.0
3.6
3.3
8.1
45.0
30.6
22.3
35.8
38.4
15.3
9.4
10.5
10.4
3.1
10.9
27.1
A
B
C
D
E
F
G
Stability Class
Tower 2 (316'-33')
Tower 2 (150'-33')
Tower 1A (89'-33')

Peach Bottom

Joint Frequency Distribution

1984-1988
Tower 2
320' wind
316'-33' Delta T

	Wind Speed Category[1]	Wind Direction Category 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Calm	Total
A	1 (Calm)																	0.000	0.000
	2	0.000	0.000	0.000	0.000	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.007
	3	0.014	0.021	0.054	0.091	0.203	0.103	0.009	0.005	0.000	0.005	0.005	0.000	0.002	0.000	0.000	0.002		0.513
	4	0.000	0.021	0.047	0.068	0.107	0.103	0.047	0.005	0.028	0.016	0.012	0.016	0.019	0.021	0.005	0.019		0.532
	5	0.005	0.009	0.021	0.042	0.016	0.007	0.030	0.000	0.016	0.007	0.005	0.007	0.049	0.021	0.007	0.035		0.278
	6	0.005	0.005	0.000	0.002	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.005	0.033	0.005	0.000	0.002		0.058
	7	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.012	0.002	0.002		0.028
	Subtotal	0.023	0.056	0.121	0.203	0.334	0.217	0.088	0.009	0.044	0.028	0.021	0.033	0.107	0.058	0.014	0.061	0.000	1.416
B	1 (Calm)																	0.000	0.000
	2	0.000	0.005	0.005	0.021	0.012	0.000	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.047
	3	0.030	0.054	0.042	0.058	0.131	0.068	0.023	0.007	0.007	0.009	0.007	0.002	0.009	0.007	0.009	0.007		0.471
	4	0.009	0.035	0.030	0.035	0.028	0.058	0.063	0.019	0.058	0.033	0.030	0.019	0.049	0.021	0.005	0.051		0.543
	5	0.023	0.007	0.005	0.002	0.002	0.005	0.019	0.019	0.072	0.021	0.014	0.044	0.063	0.047	0.021	0.077		0.441
	6	0.002	0.005	0.002	0.000	0.000	0.002	0.002	0.002	0.012	0.005	0.002	0.005	0.028	0.033	0.009	0.012		0.121
	7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.002	0.014	0.016	0.000	0.000		0.035
	Subtotal	0.065	0.105	0.084	0.117	0.173	0.133	0.112	0.047	0.152	0.068	0.054	0.072	0.163	0.124	0.044	0.147	0.000	1.658
C	1 (Calm)																	0.000	0.000
	2	0.000	0.012	0.028	0.035	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.077
	3	0.072	0.051	0.065	0.086	0.117	0.152	0.033	0.028	0.044	0.012	0.016	0.007	0.012	0.012	0.007	0.051		0.765
	4	0.098	0.044	0.021	0.040	0.033	0.061	0.145	0.051	0.168	0.086	0.070	0.061	0.098	0.061	0.061	0.233		1.330
	5	0.042	0.019	0.009	0.007	0.007	0.009	0.026	0.023	0.156	0.056	0.049	0.072	0.131	0.138	0.082	0.217		1.043
	6	0.009	0.002	0.000	0.000	0.002	0.005	0.000	0.002	0.021	0.000	0.009	0.009	0.068	0.070	0.065	0.040		0.303
	7	0.002	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.002	0.002	0.030	0.063	0.014	0.000		0.126
	Subtotal	0.224	0.138	0.124	0.168	0.161	0.228	0.203	0.105	0.392	0.154	0.147	0.152	0.338	0.343	0.229	0.541	0.000	3.643
D	1 (Calm)																	0.005	0.005
	2	0.138	0.135	0.252	0.278	0.268	0.201	0.105	0.082	0.096	0.054	0.075	0.035	0.061	0.089	0.084	0.117		2.067
	3	0.770	0.492	0.555	0.784	1.015	0.709	0.791	0.567	0.700	0.446	0.362	0.299	0.329	0.226	0.450	0.898		9.391
	4	1.215	0.814	0.585	0.648	0.772	0.718	1.115	1.087	1.651	0.991	0.669	0.492	0.702	0.828	1.264	2.165		15.718
	5	0.924	0.359	0.198	0.156	0.308	0.327	0.376	0.275	1.124	0.387	0.294	0.443	0.921	1.572	2.423	2.141		12.229
	6	0.170	0.063	0.030	0.026	0.075	0.061	0.033	0.026	0.231	0.037	0.037	0.051	0.525	1.045	1.267	0.564		4.241
	7	0.035	0.016	0.028	0.005	0.019	0.005	0.016	0.016	0.068	0.021	0.007	0.014	0.210	0.352	0.429	0.147		1.388
	Subtotal*	3.252	1.880	1.649	1.898	2.456	2.020	2.435	2.053	3.870	1.936	1.444	1.334	2.748	4.112	5.918	6.032	0.005	45.039
E	1 (Calm)																	0.014	0.014
	2	0.140	0.103	0.084	0.142	0.140	0.140	0.142	0.138	0.163	0.131	0.138	0.126	0.126	0.084	0.091	0.079	0.000	1.956
	3	0.548	0.383	0.350	0.511	0.660	0.467	0.805	0.725	1.015	0.746	0.655	0.436	0.404	0.322	0.397	0.474		8.898
	4	0.856	0.469	0.364	0.236	0.376	0.599	0.814	1.033	2.078	1.346	0.826	0.693	0.921	0.826	1.211	1.199		13.846
	5	0.364	0.089	0.061	0.026	0.135	0.147	0.229	0.385	1.204	0.532	0.504	0.632	1.250	1.360	1.518	1.092		9.526
	6	0.054	0.019	0.019	0.009	0.028	0.049	0.037	0.026	0.149	0.044	0.042	0.070	0.182	0.259	0.208	0.100		1.295
	7	0.016	0.002	0.002	0.002	0.047	0.009	0.028	0.005	0.014	0.009	0.005	0.002	0.021	0.028	0.014	0.023		0.229
	Subtotal	1.978	1.084	0.879	0.926	1.386	1.411	2.055	2.312	4.623	2.808	2.169	1.959	2.904	2.878	3.438	2.967	0.014	35.772
F	1 (Calm)																	0.012	0.012
	2	0.061	0.044	0.051	0.061	0.072	0.054	0.065	0.075	0.054	0.075	0.075	0.077	0.070	0.065	0.061	0.051		1.010
	3	0.231	0.089	0.079	0.068	0.079	0.121	0.189	0.210	0.313	0.329	0.364	0.273	0.198	0.154	0.219	0.226		3.142
	4	0.189	0.058	0.030	0.019	0.030	0.056	0.112	0.184	0.303	0.259	0.366	0.413	0.462	0.327	0.415	0.294		3.517
	5	0.009	0.002	0.002	0.000	0.000	0.005	0.016	0.019	0.103	0.054	0.091	0.254	0.392	0.322	0.210	0.075		1.553
	6	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.007	0.000	0.042	0.056	0.042	0.000	0.012		0.161
	7	0.000	0.000	0.000	0.000	0.009	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.012
	Subtotal	0.492	0.194	0.163	0.147	0.191	0.238	0.383	0.487	0.772	0.723	0.896	1.059	1.178	0.910	0.905	0.658	0.012	9.407
G	1 (Calm)																	0.000	0.000
	2	0.026	0.033	0.026	0.023	0.030	0.012	0.009	0.021	0.040	0.021	0.014	0.042	0.030	0.033	0.030	0.044		0.434
	3	0.110	0.044	0.051	0.044	0.030	0.014	0.065	0.023	0.079	0.072	0.084	0.079	0.093	0.082	0.163	0.138		1.173
	4	0.037	0.012	0.009	0.005	0.005	0.005	0.019	0.014	0.023	0.049	0.119	0.163	0.161	0.103	0.215	0.198		1.136
	5	0.002	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.005	0.002	0.019	0.061	0.091	0.091	0.021	0.012		0.308
	6	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.005	0.000	0.000		0.009
	7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.002		0.005
	Subtotal	0.175	0.089	0.086	0.072	0.065	0.030	0.096	0.061	0.147	0.145	0.236	0.348	0.380	0.313	0.429	0.394	0.000	3.065
	Total	6.209	3.524	3.107	3.529	4.765	4.276	5.369	5.073	10.000	5.882	4.966	4.957	7.819	6.738	10.977	10.800	0.030	100.00

Notes:
1) Wind Speed Categories defined as follows:

Category	Wind Speed (mph)
1 (Calm)	<0.5
2	>=0.5 to <3.5
3	>=3.5 to <7.5
4	>=7.5 to <12.5
5	>=12.5 to <18.5
6	>=18.5 to <24
7	>=24

Peach Bottom

Joint Frequency Distribution

1984-1988
Tower 2
75' wind
150'-33' Delta T

		Wind Direction																	
	Wind Speed Category[1]	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Calm	Total
1 (A)	1 (Calm)																	0.000	0.000
	2	0.033	0.135	0.242	0.298	0.172	0.061	0.026	0.005	0.002	0.002	0.002	0.005	0.000	0.000	0.002	0.007		0.993
	3	0.193	0.322	0.352	0.301	0.368	0.364	0.168	0.086	0.082	0.047	0.086	0.061	0.091	0.054	0.037	0.165		2.776
	4	0.126	0.086	0.012	0.000	0.002	0.124	0.065	0.093	0.226	0.128	0.124	0.138	0.249	0.126	0.156	0.394		2.049
	5	0.021	0.012	0.000	0.000	0.000	0.005	0.002	0.016	0.072	0.012	0.021	0.028	0.133	0.058	0.051	0.082		0.513
	6	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.009	0.026	0.005	0.000	0.002		0.051
	7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.007	0.000	0.000	0.000		0.009
	Subtotal	0.375	0.555	0.606	0.599	0.543	0.552	0.261	0.200	0.385	0.191	0.235	0.242	0.506	0.242	0.247	0.650	0.000	6.391
2 (B)	1 (Calm)																	0.002	0.002
	2	0.035	0.065	0.144	0.128	0.114	0.049	0.026	0.019	0.007	0.002	0.002	0.005	0.007	0.007	0.007	0.012		0.629
	3	0.179	0.184	0.103	0.086	0.131	0.140	0.142	0.098	0.117	0.082	0.089	0.054	0.100	0.054	0.065	0.172		1.795
	4	0.168	0.070	0.000	0.000	0.012	0.014	0.058	0.119	0.333	0.126	0.110	0.114	0.163	0.193	0.205	0.473		2.158
	5	0.019	0.002	0.000	0.000	0.000	0.007	0.000	0.028	0.100	0.023	0.023	0.021	0.131	0.110	0.114	0.107		0.685
	6	0.005	0.002	0.000	0.000	0.000	0.000	0.000	0.002	0.005	0.000	0.002	0.000	0.007	0.023	0.007	0.005		0.056
	7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
	Subtotal	0.408	0.324	0.247	0.214	0.258	0.210	0.226	0.266	0.562	0.233	0.226	0.193	0.408	0.367	0.399	0.769	0.002	5.326
3 (C)	1 (Calm)																	0.000	0.000
	2	0.030	0.054	0.068	0.084	0.068	0.033	0.005	0.005	0.009	0.000	0.002	0.005	0.005	0.005	0.002	0.012		0.385
	3	0.086	0.070	0.047	0.049	0.065	0.075	0.075	0.096	0.105	0.049	0.033	0.035	0.061	0.033	0.072	0.144		1.093
	4	0.077	0.019	0.002	0.002	0.009	0.007	0.019	0.051	0.182	0.086	0.068	0.061	0.105	0.105	0.154	0.343		1.289
	5	0.016	0.007	0.000	0.000	0.000	0.000	0.000	0.016	0.047	0.007	0.014	0.014	0.084	0.103	0.110	0.089		0.508
	6	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.000	0.000	0.000	0.009	0.016	0.016	0.007		0.054
	7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002		0.002
	Subtotal	0.210	0.149	0.117	0.135	0.142	0.114	0.098	0.170	0.345	0.142	0.117	0.114	0.283	0.261	0.354	0.597	0.000	3.328
4 (D)	1 (Calm)																	0.012	0.012
	2	0.261	0.457	0.641	0.739	0.585	0.301	0.231	0.245	0.233	0.117	0.121	0.112	0.151	0.107	0.140	0.161		4.601
	3	0.823	0.757	0.636	0.468	0.508	0.557	0.862	1.119	1.042	0.492	0.326	0.347	0.468	0.562	0.797	1.023		10.788
	4	0.886	0.308	0.056	0.019	0.065	0.186	0.375	0.522	1.009	0.375	0.301	0.385	0.825	1.503	2.112	2.032		10.959
	5	0.142	0.077	0.007	0.000	0.000	0.016	0.023	0.061	0.196	0.056	0.037	0.082	0.527	0.860	1.168	0.687		3.918
	6	0.012	0.009	0.000	0.000	0.000	0.000	0.000	0.002	0.019	0.007	0.002	0.005	0.068	0.054	0.107	0.049		0.333
	7	0.005	0.000	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.002	0.005		0.019
	Subtotal	2.128	1.608	1.342	1.228	1.158	1.060	1.492	1.848	2.498	1.048	0.788	0.930	2.042	3.086	4.326	3.936	0.012	30.629
5 (E)	1 (Calm)																	0.033	0.033
	2	0.464	0.527	0.806	0.909	1.007	0.795	0.823	0.820	0.818	0.489	0.382	0.387	0.417	0.333	0.394	0.312		9.684
	3	0.977	0.655	0.473	0.510	0.722	0.825	1.212	1.729	1.997	1.212	0.841	0.921	1.287	1.487	1.545	1.100		17.494
	4	0.534	0.147	0.049	0.051	0.075	0.200	0.289	0.382	0.895	0.352	0.312	0.643	1.473	1.729	1.638	1.217		9.987
	5	0.033	0.026	0.000	0.000	0.005	0.023	0.019	0.030	0.135	0.019	0.014	0.033	0.172	0.177	0.184	0.149		1.018
	6	0.012	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.009	0.000	0.000	0.007	0.002	0.009	0.009	0.005		0.056
	7	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.016		0.021
	Subtotal	2.021	1.356	1.328	1.471	1.809	1.844	2.342	2.962	3.855	2.072	1.550	1.990	3.351	3.738	3.771	2.799	0.033	38.292
6 (F)	1 (Calm)																	0.012	0.012
	2	0.294	0.231	0.231	0.177	0.338	0.385	0.399	0.266	0.273	0.172	0.259	0.284	0.401	0.366	0.399	0.319		4.792
	3	0.105	0.037	0.019	0.012	0.040	0.161	0.198	0.163	0.247	0.198	0.333	0.594	0.881	0.678	0.618	0.315		4.598
	4	0.005	0.000	0.000	0.009	0.002	0.000	0.002	0.009	0.014	0.014	0.068	0.373	0.347	0.147	0.103	0.044		1.137
	5	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.000	0.000	0.002		0.009
	6	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
	7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
	Subtotal	0.403	0.268	0.249	0.198	0.380	0.548	0.599	0.438	0.534	0.385	0.660	1.254	1.631	1.191	1.119	0.681	0.012	10.548
7 (G)	1 (Calm)																	0.019	0.019
	2	0.093	0.044	0.047	0.063	0.107	0.126	0.149	0.086	0.070	0.070	0.131	0.184	0.431	0.487	0.452	0.207		2.748
	3	0.033	0.000	0.000	0.000	0.007	0.037	0.049	0.033	0.016	0.021	0.086	0.361	0.813	0.713	0.263	0.075		2.508
	4	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.002	0.007	0.063	0.089	0.033	0.012	0.002		0.210
	5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
	6	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
	7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
7 (G)	Subtotal	0.126	0.044	0.047	0.063	0.114	0.163	0.200	0.119	0.086	0.093	0.224	0.608	1.333	1.233	0.727	0.284	0.019	5.484
	Total	5.668	4.305	3.938	3.908	4.403	4.491	5.218	6.104	8.264	4.162	3.799	5.332	9.538	10.138	10.942	9.716	0.077	100.00

Notes:
(1) Wind Speed Categories defined as follows:

Category	Wind Speed (mph)
1 (Calm)	<0.5
2	>=0.5 to <3.5
3	>=3.5 to <7.5
4	>=7.5 to <12.5
5	>=12.5 to <18.5
6	>=18.5 to <24
7	>=24

Peach Bottom

Joint Frequency Distribution

1984-1988
Tower 2
33' wind
150'-33' Delta T

		Wind Direction																	
	Wind Speed Category[1]	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Calm	Total
1 (A)	1 (Calm)																	0.000	0.000
	2	0.206	0.313	0.330	0.334	0.238	0.185	0.117	0.075	0.019	0.007	0.009	0.016	0.035	0.037	0.056	0.094		2.071
	3	0.393	0.189	0.072	0.065	0.103	0.227	0.255	0.185	0.166	0.101	0.126	0.091	0.217	0.243	0.180	0.472		3.088
	4	0.065	0.002	0.002	0.000	0.000	0.019	0.014	0.068	0.229	0.072	0.091	0.065	0.136	0.084	0.058	0.210		1.118
	5	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.012	0.030	0.002	0.007	0.002	0.009	0.019	0.007	0.002		0.094
	6	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
	7	0.000	0.002	0.002	0.000	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.009
	Subtotal	0.666	0.507	0.407	0.400	0.346	0.430	0.386	0.339	0.444	0.182	0.234	0.175	0.397	0.383	0.302	0.779	0.000	6.378
2 (B)	1 (Calm)																	0.000	0.000
	2	0.140	0.131	0.150	0.157	0.143	0.103	0.054	0.030	0.028	0.005	0.014	0.014	0.035	0.028	0.021	0.089		1.141
	3	0.337	0.094	0.026	0.035	0.028	0.072	0.131	0.168	0.213	0.105	0.150	0.098	0.150	0.166	0.159	0.388		2.319
	4	0.089	0.005	0.000	0.000	0.002	0.014	0.021	0.079	0.339	0.108	0.065	0.056	0.119	0.166	0.208	0.393		1.665
	5	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.016	0.051	0.002	0.007	0.000	0.005	0.037	0.049	0.021		0.194
	6	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.000		0.002
	7	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.002
	Subtotal	0.570	0.229	0.176	0.192	0.173	0.189	0.208	0.295	0.631	0.220	0.236	0.168	0.309	0.400	0.437	0.891	0.000	5.323
3 (C)	1 (Calm)																	0.000	0.000
	2	0.075	0.108	0.061	0.112	0.082	0.063	0.026	0.012	0.014	0.000	0.012	0.009	0.014	0.016	0.021	0.077		0.701
	3	0.136	0.023	0.007	0.019	0.021	0.023	0.077	0.124	0.154	0.056	0.056	0.049	0.098	0.087	0.108	0.292		1.330
	4	0.037	0.002	0.000	0.000	0.002	0.002	0.012	0.040	0.175	0.072	0.051	0.051	0.082	0.124	0.187	0.292		1.132
	5	0.002	0.000	0.000	0.000	0.000	0.002	0.000	0.007	0.019	0.000	0.000	0.000	0.007	0.028	0.047	0.037		0.150
	6	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.002
	7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
	Subtotal	0.250	0.133	0.068	0.131	0.105	0.091	0.115	0.185	0.362	0.129	0.119	0.110	0.201	0.255	0.362	0.699	0.000	3.315
4 (D)	1 (Calm)																	0.019	0.019
	2	0.909	0.790	1.022	0.743	0.692	0.409	0.360	0.535	0.414	0.215	0.182	0.245	0.285	0.299	0.449	0.556		8.108
	3	1.335	0.374	0.154	0.082	0.152	0.339	0.891	1.384	1.272	0.545	0.440	0.409	0.694	1.010	1.730	2.156		12.966
	4	0.514	0.019	0.000	0.000	0.005	0.019	0.180	0.351	0.760	0.252	0.182	0.173	0.500	1.344	2.156	1.852		8.306
	5	0.054	0.000	0.000	0.000	0.000	0.000	0.005	0.028	0.105	0.023	0.012	0.009	0.101	0.133	0.395	0.309		1.174
	6	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.000	0.000	0.000	0.002	0.000	0.000		0.007
	7	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.007		0.012
	Subtotal	2.817	1.183	1.176	0.825	0.849	0.767	1.435	2.298	2.551	1.040	0.816	0.837	1.580	2.789	4.730	4.879	0.019	30.591
5 (E)	1 (Calm)																	0.126	0.126
	2	1.209	0.973	0.970	0.895	1.204	1.099	1.269	1.403	1.482	0.877	0.760	0.923	1.047	1.164	1.424	0.998		17.698
	3	1.047	0.215	0.178	0.173	0.248	0.414	0.923	1.583	1.802	0.914	0.757	1.015	1.562	2.347	2.216	1.779		17.174
	4	0.171	0.009	0.002	0.000	0.014	0.040	0.122	0.166	0.472	0.126	0.108	0.119	0.288	0.451	0.601	0.493		3.162
	5	0.009	0.000	0.000	0.000	0.000	0.000	0.002	0.014	0.058	0.009	0.000	0.000	0.014	0.019	0.021	0.023		0.171
	6	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.002		0.005
	7	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.014		0.016
	Subtotal	2.438	1.197	1.150	1.068	1.466	1.552	2.317	3.165	3.818	1.926	1.625	2.057	2.911	3.681	4.262	3.310	0.126	38.371
6 (F)	1 (Calm)																	0.061	0.061
	2	0.304	0.189	0.173	0.215	0.421	0.524	0.302	0.231	0.283	0.458	0.687	1.054	1.169	0.973	0.774	0.379		8.138
	3	0.016	0.000	0.012	0.005	0.007	0.033	0.056	0.042	0.115	0.108	0.227	0.589	0.498	0.318	0.213	0.089		2.326
	4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.007	0.000	0.002	0.002	0.005		0.018
	5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
	6	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
	7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
	Subtotal	0.320	0.189	0.185	0.220	0.428	0.556	0.358	0.274	0.397	0.566	0.916	1.651	1.667	1.293	0.989	0.472	0.061	10.541
7 (G)	1 (Calm)																	0.035	0.035
	2	0.082	0.070	0.068	0.115	0.206	0.129	0.075	0.063	0.054	0.077	0.388	1.150	0.994	0.547	0.278	0.136		4.430
	3	0.002	0.009	0.000	0.000	0.007	0.012	0.005	0.000	0.000	0.016	0.138	0.594	0.166	0.037	0.016	0.007		1.010
	4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.002		0.005
	5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
	6	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
	7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
	Subtotal	0.084	0.079	0.068	0.115	0.213	0.140	0.079	0.063	0.054	0.094	0.526	1.746	1.160	0.584	0.295	0.145	0.035	5.480
	Total	7.147	3.518	3.229	2.950	3.579	3.727	4.898	6.619	8.257	4.157	4.472	6.745	8.225	9.686	11.376	11.175	0.241	100.00

Category	Wind Speed (mph)
1 (Calm)	
2	<0.5
3	>=0.5 to <3.5
4	>=3.5 to <7.5
5	>=7.5 to <12.5
6	>=12.5 to <18.5
7	>=18.5 to <24
	>=24

Peach Bottom

Joint Frequency Distribution

1984-1988
Tower 1A
92' wind
89'-33' Delta T

	Wind Speed Category[1]	Wind Direction Category 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Calm	Total
1 (A)	1 (Calm)																	0.005	0.005
	2	0.136	0.180	0.263	0.397	0.795	0.524	0.180	0.046	0.021	0.000	0.014	0.018	0.025	0.005	0.016	0.042		2.663
	3	0.744	0.305	0.268	0.321	0.732	1.476	1.841	0.407	0.069	0.028	0.032	0.116	0.187	0.083	0.134	0.614		7.357
	4	0.511	0.074	0.044	0.060	0.111	0.511	0.467	0.009	0.000	0.000	0.000	0.000	0.275	0.344	0.513	2.261		6.179
	5	0.116	0.007	0.009	0.007	0.000	0.042	0.009	0.000	0.000	0.000	0.000	0.000	0.039	0.136	0.312	0.910		1.587
	6	0.014	0.000	0.002	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.051		0.069
	7	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.012		0.014
	Subtotal	1.520	0.566	0.587	0.785	1.638	2.557	2.497	0.462	0.090	0.028	0.046	0.134	0.527	0.568	0.975	3.890	0.005	16.875
2 (B)	1 (Calm)																	0.000	0.000
	2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
	4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
	5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
	6	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
	7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
	Subtotal	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3 (C)	1 (Calm)																	0.000	0.000
	2	0.053	0.074	0.079	0.109	0.224	0.233	0.118	0.049	0.012	0.009	0.007	0.016	0.018	0.009	0.009	0.025		1.044
	3	0.273	0.129	0.120	0.159	0.316	0.541	0.684	0.150	0.023	0.014	0.032	0.125	0.245	0.134	0.139	0.358		3.442
	4	0.166	0.014	0.072	0.023	0.090	0.213	0.164	0.002	0.000	0.000	0.000	0.002	0.291	0.476	0.487	0.767		2.767
	5	0.032	0.000	0.002	0.007	0.000	0.032	0.018	0.000	0.000	0.000	0.000	0.000	0.032	0.196	0.173	0.273		0.787
	6	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.007	0.018		0.032
	7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.000	0.000		0.005
	Subtotal	0.524	0.217	0.273	0.298	0.631	1.019	0.986	0.201	0.035	0.023	0.039	0.143	0.589	0.822	0.816	1.441	0.000	6.057
4 (D)	1 (Calm)																	0.002	0.002
	2	0.171	0.104	0.139	0.185	0.437	0.626	0.857	0.303	0.127	0.083	0.104	0.159	0.176	0.069	0.051	0.076		3.688
	3	0.434	0.330	0.377	0.379	0.705	0.961	1.954	0.573	0.092	0.046	0.060	0.360	1.120	0.836	0.788	0.804		9.820
	4	0.282	0.062	0.104	0.058	0.203	0.400	0.464	0.012	0.000	0.002	0.005	0.028	0.887	2.134	1.749	1.074		7.464
	5	0.042	0.009	0.012	0.002	0.035	0.065	0.032	0.002	0.000	0.000	0.000	0.000	0.085	0.383	0.377	0.217		1.261
	6	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.018	0.007	0.007	0.021		0.053
	7	0.000	0.002	0.005	0.000	0.002	0.000	0.002	0.000	0.000	0.000	0.000	0.002	0.000	0.002	0.000	0.002		0.018
	Subtotal	0.929	0.508	0.635	0.624	1.381	2.051	3.310	0.889	0.219	0.132	0.169	0.550	2.287	3.433	2.971	2.195	0.002	22.285
5 (E)	1 (Calm)																	0.021	0.021
	2	0.155	0.083	0.132	0.092	0.261	0.765	1.668	0.617	0.282	0.203	0.229	0.326	0.314	0.129	0.122	0.132		5.509
	3	0.213	0.125	0.178	0.146	0.231	0.286	1.287	0.483	0.083	0.037	0.060	0.444	1.157	1.146	0.640	0.353		6.868
	4	0.189	0.035	0.035	0.049	0.127	0.173	0.141	0.028	0.000	0.002	0.000	0.021	0.187	0.832	0.490	0.367		2.675
	5	0.023	0.000	0.000	0.000	0.032	0.032	0.012	0.000	0.000	0.000	0.000	0.000	0.009	0.035	0.035	0.021		0.199
	6	0.000	0.000	0.000	0.000	0.002	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.005	0.000	0.000		0.016
	7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.000	0.000	0.000	0.002	0.000	0.000	0.000		0.007
	Subtotal	0.580	0.243	0.344	0.286	0.654	1.264	3.107	1.127	0.370	0.243	0.289	0.790	1.672	2.146	1.287	0.873	0.021	15.296
6 (F)	1 (Calm)																	0.032	0.032
	2	0.099	0.062	0.060	0.090	0.180	0.550	1.481	0.783	0.397	0.277	0.316	0.390	0.407	0.199	0.166	0.152		5.611
	3	0.072	0.016	0.049	0.039	0.037	0.083	0.464	0.277	0.074	0.028	0.069	0.688	0.973	0.709	0.397	0.185		4.160
	4	0.014	0.002	0.005	0.005	0.039	0.014	0.000	0.000	0.000	0.000	0.002	0.032	0.113	0.152	0.079	0.058		0.515
	5	0.000	0.000	0.000	0.000	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.005		0.023
	6	0.000	0.000	0.000	0.000	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.005
	7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
	Subtotal	0.185	0.081	0.113	0.134	0.273	0.647	1.945	1.060	0.471	0.305	0.388	1.111	1.495	1.063	0.644	0.400	0.032	10.347
7 (G)	1 (Calm)																	0.113	0.113
	2	0.116	0.099	0.083	0.074	0.182	0.485	1.970	2.453	2.354	1.622	1.608	2.146	1.707	0.587	0.326	0.199		16.011
	3	0.037	0.007	0.002	0.009	0.012	0.028	0.243	0.215	0.109	0.067	0.182	3.883	3.987	0.908	0.349	0.118		10.155
	4	0.014	0.000	0.000	0.000	0.000	0.002	0.012	0.000	0.000	0.000	0.000	0.208	0.432	0.141	0.032	0.023		0.884
	5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
	6	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
	7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
	Subtotal	0.166	0.106	0.085	0.083	0.194	0.515	2.225	2.668	2.462	1.689	1.790	6.237	6.126	1.635	0.707	0.340	0.113	27.143
	Total	3.904	1.721	2.037	2.211	4.770	8.053	14.070	6.408	3.647	2.419	2.721	8.965	12.666	9.867	7.399	8.138	0.173	100.00

Notes:
(1) Wind Speed Categories defined as follows:

Category	Wind Speed (mph)
2	>=0.5 to <3.5
3	>=3.5 to <7.5
4	>=7.5 to <12.5
5	>=12.5 to <18.5
6	>=18.5 to <24
7	>=24

Peach Bottom

Joint Frequency Distribution
1984-1988
Tower 1A/River Tower
45' River Tower Wind
89'-33' Tower 1A Delta T

	Wind Speed Category(1)	Wind Direction Category 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Calm	Total
1 (A)	1 (Calm)																	0.000	
	2	0.209	0.197	0.193	0.209	0.290	0.314	0.293	0.119	0.138	0.074	0.069	0.078	0.088	0.100	0.076	0.169		2.616
	3	0.371	0.243	0.193	0.243	0.469	0.744	1.004	0.390	0.164	0.081	0.040	0.031	0.067	0.081	0.388	0.388		4.895
	4	0.530	0.105	0.086	0.086	0.157	0.207	0.685	0.692	0.373	0.083	0.076	0.074	0.126	0.166	0.828	0.994		5.268
	5	0.295	0.043	0.012	0.010	0.002	0.024	0.048	0.390	0.155	0.024	0.002	0.005	0.074	0.226	0.832	1.101		3.242
	6	0.069	0.000	0.002	0.000	0.000	0.005	0.000	0.029	0.000	0.002	0.000	0.000	0.000	0.059	0.350	0.276		0.792
	7	0.002	0.007	0.002	0.000	0.002	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.012	0.095	0.040		0.164
	Subtotal	1.477	0.595	0.488	0.547	0.920	1.294	2.031	1.620	0.630	0.264	0.188	0.188	0.354	0.645	2.569	2.968	0.000	16.977
2 (B)	1 (Calm)																	0.000	0.000
	2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
	4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
	5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
	6	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
	7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
	Subtotal	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3 (C)	1 (Calm)																	0.002	0.002
	2	0.083	0.078	0.078	0.069	0.086	0.105	0.114	0.045	0.031	0.010	0.012	0.024	0.024	0.031	0.057	0.074		0.920
	3	0.162	0.088	0.100	0.164	0.269	0.288	0.326	0.133	0.064	0.043	0.038	0.036	0.055	0.057	0.214	0.186		2.221
	4	0.238	0.081	0.083	0.024	0.109	0.193	0.245	0.226	0.143	0.040	0.100	0.076	0.145	0.226	0.354	0.326		2.609
	5	0.136	0.010	0.012	0.002	0.002	0.036	0.048	0.124	0.029	0.007	0.012	0.010	0.059	0.319	0.516	0.400		1.720
	6	0.007	0.000	0.002	0.000	0.000	0.005	0.002	0.019	0.000	0.002	0.000	0.002	0.002	0.140	0.197	0.126		0.507
	7	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.014	0.074	0.038		0.131
	Subtotal	0.626	0.257	0.278	0.259	0.466	0.626	0.735	0.549	0.266	0.102	0.162	0.147	0.285	0.787	1.413	1.149	0.002	8.110
4 (D)	1 (Calm)																	0.002	0.002
	2	0.219	0.147	0.166	0.193	0.219	0.221	0.245	0.114	0.081	0.040	0.059	0.067	0.076	0.095	0.145	0.166		2.265
	3	0.407	0.243	0.376	0.390	0.516	0.635	0.856	0.390	0.274	0.150	0.166	0.197	0.240	0.295	0.521	0.407		6.062
	4	0.495	0.205	0.124	0.114	0.290	0.499	0.704	0.873	0.354	0.136	0.171	0.202	0.459	0.854	1.163	0.685		7.328
	5	0.181	0.052	0.017	0.007	0.052	0.107	0.105	0.383	0.090	0.033	0.033	0.026	0.212	1.334	1.325	0.756		4.714
	6	0.021	0.005	0.000	0.000	0.005	0.010	0.017	0.088	0.002	0.000	0.000	0.000	0.014	0.293	0.642	0.274		1.370
	7	0.005	0.002	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.002	0.040	0.159	0.071		0.283
	Subtotal	1.327	0.654	0.683	0.704	1.082	1.472	1.929	1.848	0.802	0.359	0.430	0.492	1.004	2.911	3.955	2.359	0.002	22.014
5 (E)	1 (Calm)																	0.010	0.010
	2	0.250	0.143	0.107	0.133	0.152	0.259	0.369	0.188	0.088	0.107	0.145	0.117	0.155	0.147	0.195	0.383		2.937
	3	0.364	0.140	0.164	0.221	0.224	0.423	0.813	0.516	0.364	0.121	0.216	0.221	0.323	0.359	0.599	0.359		5.430
	4	0.390	0.095	0.071	0.055	0.100	0.283	0.469	0.790	0.233	0.057	0.071	0.050	0.174	0.728	0.909	0.428		4.902
	5	0.105	0.017	0.000	0.005	0.059	0.055	0.048	0.245	0.040	0.002	0.002	0.002	0.017	0.314	0.516	0.254		1.681
	6	0.005	0.000	0.000	0.000	0.012	0.000	0.002	0.052	0.014	0.000	0.000	0.000	0.000	0.031	0.105	0.045		0.266
	7	0.005	0.002	0.000	0.000	0.000	0.005	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.014	0.007	0.002		0.038
	Subtotal	1.118	0.397	0.342	0.414	0.547	1.025	1.703	1.781	0.740	0.288	0.435	0.380	0.668	1.593	2.331	1.472	0.010	15.264
6 (F)	1 (Calm)																	0.010	0.010
	2	0.216	0.124	0.114	0.100	0.143	0.228	0.397	0.283	0.235	0.121	0.178	0.209	0.288	0.235	0.411	0.419		3.703
	3	0.214	0.067	0.086	0.045	0.100	0.235	0.542	0.590	0.304	0.105	0.126	0.195	0.304	0.404	0.518	0.352		4.188
	4	0.083	0.012	0.019	0.019	0.012	0.071	0.159	0.435	0.157	0.033	0.010	0.026	0.050	0.369	0.542	0.221		2.219
	5	0.002	0.000	0.000	0.002	0.029	0.000	0.000	0.043	0.012	0.000	0.000	0.000	0.002	0.031	0.057	0.048		0.226
	6	0.000	0.000	0.000	0.000	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.002	0.005		0.014
	7	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.007	0.000	0.005	0.000		0.014
	Subtotal	0.516	0.202	0.219	0.166	0.288	0.538	1.099	1.351	0.709	0.259	0.314	0.430	0.654	1.039	1.538	1.044	0.010	10.374
7 (G)	1 (Calm)																	0.010	0.010
	2	0.459	0.181	0.150	0.193	0.212	0.314	0.637	0.747	0.849	0.649	1.056	1.413	2.195	1.900	2.174	1.403		14.532
	3	0.331	0.112	0.088	0.031	0.114	0.269	0.744	0.747	0.557	0.335	0.483	0.840	1.888	1.425	1.741	1.089		10.793
	4	0.098	0.007	0.014	0.000	0.000	0.059	0.052	0.147	0.076	0.017	0.007	0.017	0.143	0.447	0.509	0.169		1.762
	5	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.021	0.012	0.000	0.000	0.002	0.000	0.012	0.026	0.017		0.093
	6	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.007
	7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.002	0.010	0.019	0.021	0.007	0.002		0.064
	Subtotal	0.887	0.302	0.252	0.224	0.326	0.642	1.434	1.667	1.498	1.001	1.548	2.281	4.245	3.805	4.457	2.680	0.010	27.261
	Total	5.951	2.407	2.262	2.314	3.629	5.596	8.931	8.826	4.845	2.274	3.076	3.929	7.211	10.781	16.261	11.673	0.033	100.00

Notes:
(1) Wind Speed Categories defined as follows:

Category	Wind Speed (mph)
1 (Calm)	<0.5
2	>=0.5 to <3.5
3	>=3.5 to <7.5
4	>=7.5 to <12.5
5	>=12.5 to <18.5
6	>=18.5 to <24
7	>=24

ARCON96 Input

Off –Gas Stack to Control Room Intake (Tower 2 320'and 75' wind, Tower 2 316'-33' Delta T)

```
5
D:\TRACIP~1\ARCON\PEACHB~1\T2A84A~1.MET
D:\TRACIP~1\ARCON\PEACHB~1\T2A85A~1.MET
D:\TRACIP~1\ARCON\PEACHB~1\T2A86A~1.MET
D:\TRACIP~1\ARCON\PEACHB~1\T2A87A~1.MET
D:\TRACIP~1\ARCON\PEACHB~1\T2A88A~1.MET
   22.90
   97.50
  2
  3
  152.40
 2583.60
   0.00
   0.00
   0.00
 244  90
  208.80
   21.00
   49.90
OGStoCR.log
OGStoCR.cfd
 .1
   0.22
   4.00
  1  2  4  8  12  24  96 168 360 720
  1  2  4  8  11  22  87 152 324 648
   0.00    0.00
n
```

ARCON96 Output
Off –Gas Stack to Control Room Intake (Tower 2 320'and 75' wind, Tower 2 316'-33' Delta T)

Program Title: ARCON96.

Developed For: U.S. Nuclear Regulatory Commission
Office of Nuclear Reactor Regulation
Division of Reactor Program Management

Date: June 25, 1997 11:00 a.m.

NRC Contacts: J. Y. Lee Phone: (301) 415 1080
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Code Documentation: NUREG/CR-6331 Rev. 1

Program Run 12/30/2002 at 15:35:22

******* ARCON INPUT **********

Number of Meteorological Data Files = 5
Meteorological Data File Names
D:\TRACIP~1\ARCON\PEACHB~1\T2A84A~1.MET
D:\TRACIP~1\ARCON\PEACHB~1\T2A85A~1.MET
D:\TRACIP~1\ARCON\PEACHB~1\T2A86A~1.MET
D:\TRACIP~1\ARCON\PEACHB~1\T2A87A~1.MET

D:\TRACIP~1\ARCON\PEACHB~1\T2A88A~1.MET

Height of lower wind instrument (m) = 22.9
Height of upper wind instrument (m) = 97.5
Wind speeds entered as miles per hour

Elevated release
Release height (m) = 152.4
Building Area (m^2) = 2583.6
Effluent vertical velocity (m/s) = .00
Vent or stack flow (m^3/s) = .00
Vent or stack radius (m) = .00

Direction .. intake to source (deg) = 244
Wind direction sector width (deg) = 90
Wind direction window (deg) = 199 - 289
Distance to intake (m) = 208.8
Intake height (m) = 21.0
Terrain elevation difference (m) = 49.9

Output file names
OGStoCR.log
OGStoCR.cfd

Minimum Wind Speed (m/s) = .2
Surface roughness length (m) = .10
Sector averaging constant = 4.0

Initial value of sigma y = .00
Initial value of sigma z = .00

Expanded output for code testing not selected

Total number of hours of data processed = 43800
Hours of missing data = 559
Hours direction in window = 10538
Hours elevated plume w/ dir. in window = 525
Hours of calm winds = 13
Hours direction not in window or calm = 32690

DISTRIBUTION SUMMARY DATA BY AVERAGING INTERVAL

AVER. PER.	1	2	4	8	12	24	96	168	360	720

UPPER LIM.	1.00E-11	1.00E-11	1.00E-11	1.00E-11	1.00E-11	1.00E-11	1.00E-11	1.00E-11	1.00E-11	1.00E-11
LOW LIM.	1.00E-15	1.00E-15	1.00E-15	1.00E-15	1.00E-15	1.00E-15	1.00E-15	1.00E-15	1.00E-15	1.00E-15
ABOVE RANGE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
IN RANGE	83.	123.	202.	350.	497.	909.	2800.	4142.	6016.	6470.
BELOW RANGE	0.	0.	0.	0.	0.	0.	0.	0.	611.	2404.
ZERO	43158.	43061.	42868.	42496.	42408.	41837.	39284.	37296.	35868.	33254.
TOTAL X/Qs	43241.	43184.	43070.	42846.	42905.	42746.	42084.	41438.	42495.	42128.
% NON ZERO	.19	.28	.47	.82	1.16	2.13	6.65	10.00	15.59	21.06

95th PERCENTILE X/Q VALUES

1.00E-15 1.00E-15 1.00E-15 1.00E-15 1.00E-15 1.00E-15 5.69E-15 6.80E-15 6.04E-15 5.89E-15

95% X/Q for standard averaging intervals

0 to 2 hours	1.00E-15
2 to 8 hours	1.00E-15
8 to 24 hours	1.00E-15
1 to 4 days	7.25E-15
4 to 30 days	5.92E-15

HOURLY VALUE RANGE

	MAX X/Q	MIN X/Q
CENTERLINE	1.40E-12	3.10E-38
SECTOR-AVERAGE	8.78E-13	1.94E-38

NORMAL PROGRAM COMPLETION

X/Q CUMULATIVE FREQUENCY DISTRIBUTIONS

XOQ	1	2	4	8	XOQ	12	24	96	168	360	720
Abv. Lim.	0.	0.	0.	0.	Abv. Lim.	0.	0.	0.	0.	0.	0.
9.120E-12	0.	0.	0.	0.	9.120E-12	0.	0.	0.	0.	0.	0.
8.318E-12	0.	0.	0.	0.	8.318E-12	0.	0.	0.	0.	0.	0.
7.586E-12	0.	0.	0.	0.	7.586E-12	0.	0.	0.	0.	0.	0.
6.918E-12	0.	0.	0.	0.	6.918E-12	0.	0.	0.	0.	0.	0.
6.310E-12	0.	0.	0.	0.	6.310E-12	0.	0.	0.	0.	0.	0.
5.754E-12	0.	0.	0.	0.	5.754E-12	0.	0.	0.	0.	0.	0.
5.248E-12	0.	0.	0.	0.	5.248E-12	0.	0.	0.	0.	0.	0.
4.786E-12	0.	0.	0.	0.	4.786E-12	0.	0.	0.	0.	0.	0.
4.365E-12	0.	0.	0.	0.	4.365E-12	0.	0.	0.	0.	0.	0.
3.981E-12	0.	0.	0.	0.	3.981E-12	0.	0.	0.	0.	0.	0.
3.631E-12	0.	0.	0.	0.	3.631E-12	0.	0.	0.	0.	0.	0.
3.311E-12	0.	0.	0.	0.	3.311E-12	0.	0.	0.	0.	0.	0.
3.020E-12	0.	0.	0.	0.	3.020E-12	0.	0.	0.	0.	0.	0.
2.754E-12	0.	0.	0.	0.	2.754E-12	0.	0.	0.	0.	0.	0.
2.512E-12	0.	0.	0.	0.	2.512E-12	0.	0.	0.	0.	0.	0.
2.291E-12	0.	0.	0.	0.	2.291E-12	0.	0.	0.	0.	0.	0.
2.089E-12	0.	0.	0.	0.	2.089E-12	0.	0.	0.	0.	0.	0.
1.905E-12	0.	0.	0.	0.	1.905E-12	0.	0.	0.	0.	0.	0.
1.738E-12	0.	0.	0.	0.	1.738E-12	0.	0.	0.	0.	0.	0.
1.585E-12	0.	0.	0.	0.	1.585E-12	0.	0.	0.	0.	0.	0.
1.445E-12	0.	0.	0.	0.	1.445E-12	0.	0.	0.	0.	0.	0.
1.318E-12	2.	1.	0.	0.	1.318E-12	0.	0.	0.	0.	0.	0.
1.202E-12	3.	2.	0.	0.	1.202E-12	0.	0.	0.	0.	0.	0.
1.096E-12	4.	2.	0.	0.	1.096E-12	0.	0.	0.	0.	0.	0.
1.000E-12	6.	2.	0.	0.	1.000E-12	0.	0.	0.	0.	0.	0.
9.120E-13	10.	3.	2.	0.	9.120E-13	0.	0.	0.	0.	0.	0.
8.318E-13	11.	4.	2.	0.	8.318E-13	0.	0.	0.	0.	0.	0.
7.586E-13	19.	9.	2.	0.	7.586E-13	0.	0.	0.	0.	0.	0.
6.918E-13	22.	12.	4.	0.	6.918E-13	0.	0.	0.	0.	0.	0.
6.310E-13	35.	22.	5.	0.	6.310E-13	0.	0.	0.	0.	0.	0.
5.754E-13	45.	30.	10.	0.	5.754E-13	0.	0.	0.	0.	0.	0.
5.248E-13	52.	34.	15.	0.	5.248E-13	0.	0.	0.	0.	0.	0.
4.786E-13	56.	37.	21.	0.	4.786E-13	0.	0.	0.	0.	0.	0.
4.365E-13	62.	45.	27.	6.	4.365E-13	0.	0.	0.	0.	0.	0.
3.981E-13	72.	59.	30.	6.	3.981E-13	0.	0.	0.	0.	0.	0.
3.631E-13	74.	62.	44.	6.	3.631E-13	0.	0.	0.	0.	0.	0.
3.311E-13	79.	72.	53.	17.	3.311E-13	0.	0.	0.	0.	0.	0.
3.020E-13	82.	83.	64.	34.	3.020E-13	6.	0.	0.	0.	0.	0.
2.754E-13	83.	91.	70.	46.	2.754E-13	7.	0.	0.	0.	0.	0.

2.512E-13	83.	95.	75.	49.	2.512E-13	7.	0.	0.	0.	0.	0.
2.291E-13	83.	99.	86.	68.	2.291E-13	18.	0.	0.	0.	0.	0.
2.089E-13	83.	104.	93.	77.	2.089E-13	31.	0.	0.	0.	0.	0.
1.905E-13	83.	113.	112.	101.	1.905E-13	47.	0.	0.	0.	0.	0.
1.738E-13	83.	117.	117.	111.	1.738E-13	57.	0.	0.	0.	0.	0.
1.585E-13	83.	118.	139.	130.	1.585E-13	76.	0.	0.	0.	0.	0.
1.445E-13	83.	123.	152.	146.	1.445E-13	95.	6.	0.	0.	0.	0.
1.318E-13	83.	123.	160.	148.	1.318E-13	103.	7.	0.	0.	0.	0.
1.202E-13	83.	123.	168.	156.	1.202E-13	131.	7.	0.	0.	0.	0.
1.096E-13	83.	123.	175.	182.	1.096E-13	156.	18.	0.	0.	0.	0.
1.000E-13	83.	123.	187.	206.	1.000E-13	178.	38.	0.	0.	0.	0.
9.120E-14	83.	123.	189.	217.	9.120E-14	186.	69.	0.	0.	0.	0.
8.318E-14	83.	123.	193.	239.	8.318E-14	197.	75.	0.	0.	0.	0.
7.586E-14	83.	123.	201.	259.	7.586E-14	238.	107.	0.	0.	0.	0.
6.918E-14	83.	123.	202.	286.	6.918E-14	245.	144.	0.	0.	0.	0.
6.310E-14	83.	123.	202.	297.	6.310E-14	281.	206.	0.	0.	0.	0.
5.754E-14	83.	123.	202.	307.	5.754E-14	287.	248.	0.	0.	0.	0.
5.248E-14	83.	123.	202.	324.	5.248E-14	328.	278.	0.	0.	0.	0.
4.786E-14	83.	123.	202.	333.	4.786E-14	356.	326.	6.	0.	0.	0.
4.365E-14	83.	123.	202.	336.	4.365E-14	372.	345.	8.	0.	0.	0.
3.981E-14	83.	123.	202.	337.	3.981E-14	401.	406.	37.	0.	0.	0.
3.631E-14	83.	123.	202.	350.	3.631E-14	415.	440.	39.	0.	0.	0.
3.311E-14	83.	123.	202.	350.	3.311E-14	439.	490.	50.	0.	0.	0.
3.020E-14	83.	123.	202.	350.	3.020E-14	450.	519.	70.	6.	0.	0.
2.754E-14	83.	123.	202.	350.	2.754E-14	458.	537.	152.	24.	0.	0.
2.512E-14	83.	123.	202.	350.	2.512E-14	478.	569.	204.	31.	0.	0.
2.291E-14	83.	123.	202.	350.	2.291E-14	484.	643.	251.	224.	0.	0.
2.089E-14	83.	123.	202.	350.	2.089E-14	490.	683.	337.	234.	0.	0.
1.905E-14	83.	123.	202.	350.	1.905E-14	491.	709.	368.	260.	2.	0.
1.738E-14	83.	123.	202.	350.	1.738E-14	493.	746.	571.	274.	18.	0.
1.585E-14	83.	123.	202.	350.	1.585E-14	497.	781.	720.	417.	37.	0.
1.445E-14	83.	123.	202.	350.	1.445E-14	497.	827.	1061.	507.	369.	0.
1.318E-14	83.	123.	202.	350.	1.318E-14	497.	844.	1107.	565.	408.	0.
1.202E-14	83.	123.	202.	350.	1.202E-14	497.	869.	1249.	738.	452.	0.
1.096E-14	83.	123.	202.	350.	1.096E-14	497.	887.	1399.	759.	582.	0.
1.000E-14	83.	123.	202.	350.	1.000E-14	497.	890.	1486.	1170.	733.	7.
9.120E-15	83.	123.	202.	350.	9.120E-15	497.	892.	1667.	1326.	846.	407.
8.318E-15	83.	123.	202.	350.	8.318E-15	497.	893.	1803.	1775.	926.	509.
7.586E-15	83.	123.	202.	350.	7.586E-15	497.	909.	1886.	1851.	1465.	1202.
6.918E-15	83.	123.	202.	350.	6.918E-15	497.	909.	1908.	2021.	1636.	1477.
6.310E-15	83.	123.	202.	350.	6.310E-15	497.	909.	1941.	2280.	1953.	1670.
5.754E-15	83.	123.	202.	350.	5.754E-15	497.	909.	2099.	2359.	2308.	2248.

5.248E-15	83.	123.	202.	350.	5.248E-15	497.	909.	2138.	2492.	2394.	2463.
4.786E-15	83.	123.	202.	350.	4.786E-15	497.	909.	2235.	2732.	2840.	3284.
4.365E-15	83.	123.	202.	350.	4.365E-15	497.	909.	2424.	2784.	2971.	3609.
3.981E-15	83.	123.	202.	350.	3.981E-15	497.	909.	2540.	2806.	3540.	3881.
3.631E-15	83.	123.	202.	350.	3.631E-15	497.	909.	2572.	2851.	3780.	4377.
3.311E-15	83.	123.	202.	350.	3.311E-15	497.	909.	2594.	3046.	3783.	4553.
3.020E-15	83.	123.	202.	350.	3.020E-15	497.	909.	2682.	3085.	4187.	4819.
2.754E-15	83.	123.	202.	350.	2.754E-15	497.	909.	2770.	3252.	4336.	4837.
2.512E-15	83.	123.	202.	350.	2.512E-15	497.	909.	2772.	3585.	4355.	5216.
2.291E-15	83.	123.	202.	350.	2.291E-15	497.	909.	2775.	3748.	4648.	5480.
2.089E-15	83.	123.	202.	350.	2.089E-15	497.	909.	2796.	3779.	4663.	5640.
1.905E-15	83.	123.	202.	350.	1.905E-15	497.	909.	2800.	3801.	4663.	5969.
1.738E-15	83.	123.	202.	350.	1.738E-15	497.	909.	2800.	3961.	4799.	5970.
1.585E-15	83.	123.	202.	350.	1.585E-15	497.	909.	2800.	4121.	4890.	5970.
1.445E-15	83.	123.	202.	350.	1.445E-15	497.	909.	2800.	4123.	4892.	6170.
1.318E-15	83.	123.	202.	350.	1.318E-15	497.	909.	2800.	4125.	4935.	6170.
1.202E-15	83.	123.	202.	350.	1.202E-15	497.	909.	2800.	4136.	4943.	6172.
1.096E-15	83.	123.	202.	350.	1.096E-15	497.	909.	2800.	4142.	5999.	6470.
1.000E-15	83.	123.	202.	350.	1.000E-15	497.	909.	2800.	4142.	6016.	6470.
Belw. Lim.	0.	0.	0.	0.	Belw. Lim.	0.	0.	0.	0.	611.	2404.

ARCON96 Input

Unit 2 Reactor Building Stack to Control Room Intake (Tower 2 75'and 33' wind, Tower 2 150'-33' Delta T)

```
5
D:\TRACIP~1\ARCON\PEACHB~1\T2B84A~1.MET
D:\TRACIP~1\ARCON\PEACHB~1\T2B85A~1.MET
D:\TRACIP~1\ARCON\PEACHB~1\T2B86A~1.MET
D:\TRACIP~1\ARCON\PEACHB~1\T2B87A~1.MET
D:\TRACIP~1\ARCON\PEACHB~1\T2B88A~1.MET
   10.10
   22.90
  2
  2
   57.60
  2583.60
    0.00
    0.00
    0.00
 113  90
   58.40
   21.00
    0.00
2RBStoCR.log
2RBStoCR.cfd
 .1
    0.22
    4.00
  1  2  4  8  12  24  96 168 360 720
  1  2  4  8  11  22  87 152 324 648
    0.00    0.00
n
```

ARCON96 Output

Unit 2 Reactor Building Stack to Control Room Intake (Tower 2 75'and 33' wind, Tower 2 150'-33' Delta T)

Program Title: ARCON96.

Developed For: U.S. Nuclear Regulatory Commission
Office of Nuclear Reactor Regulation
Division of Reactor Program Management

Date: June 25, 1997 11:00 a.m.

NRC Contacts: J. Y. Lee Phone: (301) 415 1080
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Code Documentation: NUREG/CR-6331 Rev. 1

Program Run 12/30/2002 at 15:34:50

******* ARCON INPUT **********

Number of Meteorological Data Files = 5
Meteorological Data File Names
D:\TRACIP~1\ARCON\PEACHB~1\T2B84A~1.MET
D:\TRACIP~1\ARCON\PEACHB~1\T2B85A~1.MET
D:\TRACIP~1\ARCON\PEACHB~1\T2B86A~1.MET
D:\TRACIP~1\ARCON\PEACHB~1\T2B87A~1.MET
D:\TRACIP~1\ARCON\PEACHB~1\T2B88A~1.MET

Height of lower wind instrument (m) = 10.1
Height of upper wind instrument (m) = 22.9
Wind speeds entered as miles per hour

Vent release
Release height (m) = 57.6
Building Area (m^2) = 2583.6
Effluent vertical velocity (m/s) = .00
Vent or stack flow (m^3/s) = .00
Vent or stack radius (m) = .00

Direction .. intake to source (deg) = 113
Wind direction sector width (deg) = 90
Wind direction window (deg) = 068 - 158
Distance to intake (m) = 58.4
Intake height (m) = 21.0
Terrain elevation difference (m) = .0

Output file names
2RBStoCR.log
2RBStoCR.cfd

Minimum Wind Speed (m/s) = .2
Surface roughness length (m) = .10
Sector averaging constant = 4.0

Initial value of sigma y = .00
Initial value of sigma z = .00

Expanded output for code testing not selected

Total number of hours of data processed = 43800
Hours of missing data = 578
Hours direction in window = 8197
Hours elevated plume w/ dir. in window = 0
Hours of calm winds = 131
Hours direction not in window or calm = 34894

DISTRIBUTION SUMMARY DATA BY AVERAGING INTERVAL

AVER. PER.	1	2	4	8	12	24	96	168	360	720
UPPER LIM.	1.00E-02	1.00E-02	1.00E-02	1.00E-02	1.00E-02	1.00E-02	1.00E-02	1.00E-02	1.00E-02	1.00E-02

LOW LIM.	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06
ABOVE RANGE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
IN RANGE	8328.	10564.	13548.	17538.	20575.	27025.	40683.	41365.	42347.	42100.
BELOW RANGE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
ZERO	34894.	32600.	29500.	25282.	22292.	15663.	1283.	65.	0.	0.
TOTAL X/Qs	43222.	43164.	43048.	42820.	42867.	42688.	41966.	41430.	42347.	42100.
% NON ZERO	19.27	24.47	31.47	40.96	48.00	63.31	96.94	99.84	100.00	100.00

95th PERCENTILE X/Q VALUES

1.18E-03	1.14E-03	1.05E-03	9.36E-04	7.66E-04	5.45E-04	3.14E-04	2.56E-04	2.16E-04	1.86E-04

95% X/Q for standard averaging intervals

0 to 2 hours	1.18E-03
2 to 8 hours	8.55E-04
8 to 24 hours	3.50E-04
1 to 4 days	2.36E-04
4 to 30 days	1.67E-04

HOURLY VALUE RANGE

	MAX X/Q	MIN X/Q
CENTERLINE	1.70E-03	2.10E-04
SECTOR-AVERAGE	1.07E-03	1.31E-04

NORMAL PROGRAM COMPLETION

X/Q CUMULATIVE FREQUENCY DISTRIBUTIONS

XOQ	1	2	4	8	XOQ	12	24	96	168	360	720
Abv. Lim.	0.	0.	0.	0.	Abv. Lim.	0.	0.	0.	0.	0.	0.
9.120E-03	0.	0.	0.	0.	9.120E-03	0.	0.	0.	0.	0.	0.
8.318E-03	0.	0.	0.	0.	8.318E-03	0.	0.	0.	0.	0.	0.
7.586E-03	0.	0.	0.	0.	7.586E-03	0.	0.	0.	0.	0.	0.
6.918E-03	0.	0.	0.	0.	6.918E-03	0.	0.	0.	0.	0.	0.
6.310E-03	0.	0.	0.	0.	6.310E-03	0.	0.	0.	0.	0.	0.
5.754E-03	0.	0.	0.	0.	5.754E-03	0.	0.	0.	0.	0.	0.
5.248E-03	0.	0.	0.	0.	5.248E-03	0.	0.	0.	0.	0.	0.
4.786E-03	0.	0.	0.	0.	4.786E-03	0.	0.	0.	0.	0.	0.
4.365E-03	0.	0.	0.	0.	4.365E-03	0.	0.	0.	0.	0.	0.
3.981E-03	0.	0.	0.	0.	3.981E-03	0.	0.	0.	0.	0.	0.
3.631E-03	0.	0.	0.	0.	3.631E-03	0.	0.	0.	0.	0.	0.
3.311E-03	0.	0.	0.	0.	3.311E-03	0.	0.	0.	0.	0.	0.
3.020E-03	0.	0.	0.	0.	3.020E-03	0.	0.	0.	0.	0.	0.
2.754E-03	0.	0.	0.	0.	2.754E-03	0.	0.	0.	0.	0.	0.
2.512E-03	0.	0.	0.	0.	2.512E-03	0.	0.	0.	0.	0.	0.
2.291E-03	0.	0.	0.	0.	2.291E-03	0.	0.	0.	0.	0.	0.
2.089E-03	0.	0.	0.	0.	2.089E-03	0.	0.	0.	0.	0.	0.
1.905E-03	0.	0.	0.	0.	1.905E-03	0.	0.	0.	0.	0.	0.
1.738E-03	0.	0.	0.	0.	1.738E-03	0.	0.	0.	0.	0.	0.
1.585E-03	45.	15.	2.	0.	1.585E-03	0.	0.	0.	0.	0.	0.
1.445E-03	197.	107.	60.	19.	1.445E-03	0.	0.	0.	0.	0.	0.
1.318E-03	1215.	724.	365.	141.	1.318E-03	0.	0.	0.	0.	0.	0.
1.202E-03	1793.	1476.	991.	484.	1.202E-03	19.	0.	0.	0.	0.	0.
1.096E-03	3408.	2668.	1810.	1128.	1.096E-03	139.	0.	0.	0.	0.	0.
1.000E-03	4402.	3402.	2494.	1673.	1.000E-03	515.	10.	0.	0.	0.	0.
9.120E-04	4926.	3914.	3127.	2314.	9.120E-04	994.	34.	0.	0.	0.	0.
8.318E-04	5684.	4415.	3733.	2884.	8.318E-04	1565.	155.	0.	0.	0.	0.
7.586E-04	6058.	4810.	4272.	3564.	7.586E-04	2206.	377.	0.	0.	0.	0.
6.918E-04	6576.	5165.	4747.	4162.	6.918E-04	2855.	711.	0.	0.	0.	0.
6.310E-04	6822.	5803.	5417.	4827.	6.310E-04	3536.	1129.	0.	0.	0.	0.
5.754E-04	7182.	6430.	6123.	5529.	5.754E-04	4200.	1712.	10.	0.	0.	0.
5.248E-04	7332.	7035.	6771.	6127.	5.248E-04	4882.	2423.	61.	0.	0.	0.
4.786E-04	7825.	7691.	7312.	6873.	4.786E-04	5605.	3133.	114.	0.	0.	0.
4.365E-04	8084.	8335.	7841.	7587.	4.365E-04	6294.	3924.	256.	17.	0.	0.
3.981E-04	8192.	8773.	8241.	8257.	3.981E-04	7038.	4812.	449.	87.	0.	0.
3.631E-04	8263.	9245.	8658.	8856.	3.631E-04	7781.	5746.	963.	258.	0.	0.
3.311E-04	8289.	9551.	9139.	9420.	3.311E-04	8493.	6685.	1623.	635.	9.	0.
3.020E-04	8312.	9763.	9581.	10096.	3.020E-04	9192.	7660.	2410.	1130.	116.	0.

2.754E-04	8323.	9928.	10221.	10746.	2.754E-04	9886.	8599.	3218.	1517.	419.	0.
2.512E-04	8325.	10008.	10695.	11281.	2.512E-04	10553.	9546.	4382.	2205.	851.	0.
2.291E-04	8327.	10437.	11213.	11795.	2.291E-04	11187.	10478.	5646.	3418.	1520.	291.
2.089E-04	8328.	10524.	11729.	12260.	2.089E-04	11908.	11376.	7136.	5073.	2444.	646.
1.905E-04	8328.	10546.	12048.	12586.	1.905E-04	12496.	12261.	9171.	6587.	3879.	1441.
1.738E-04	8328.	10554.	12454.	12948.	1.738E-04	13131.	13082.	10930.	8560.	5876.	4018.
1.585E-04	8328.	10561.	12670.	13432.	1.585E-04	13663.	13846.	12904.	10712.	8249.	7279.
1.445E-04	8328.	10563.	12898.	13946.	1.445E-04	14203.	14686.	14787.	13498.	11202.	10467.
1.318E-04	8328.	10564.	13004.	14514.	1.318E-04	14639.	15567.	16647.	16143.	14814.	13905.
1.202E-04	8328.	10564.	13367.	14960.	1.202E-04	15016.	16308.	18331.	18612.	18853.	18075.
1.096E-04	8328.	10564.	13491.	15424.	1.096E-04	15521.	17108.	20086.	21520.	22927.	22633.
1.000E-04	8328.	10564.	13526.	15878.	1.000E-04	15962.	17863.	21964.	23653.	26460.	26747.
9.120E-05	8328.	10564.	13535.	16285.	9.120E-05	16522.	18607.	23413.	25807.	28796.	31046.
8.318E-05	8328.	10564.	13540.	16586.	8.318E-05	17043.	19190.	24761.	27627.	31187.	34182.
7.586E-05	8328.	10564.	13548.	16736.	7.586E-05	17413.	19786.	26230.	29431.	33562.	36411.
6.918E-05	8328.	10564.	13548.	16939.	6.918E-05	17942.	20308.	27497.	30845.	34989.	38084.
6.310E-05	8328.	10564.	13548.	17001.	6.310E-05	18257.	20862.	29041.	32008.	36558.	39832.
5.754E-05	8328.	10564.	13548.	17426.	5.754E-05	18680.	21355.	30172.	33028.	38126.	40841.
5.248E-05	8328.	10564.	13548.	17507.	5.248E-05	18906.	21827.	31223.	34088.	39118.	41281.
4.786E-05	8328.	10564.	13548.	17524.	4.786E-05	19203.	22330.	32122.	34872.	40068.	41881.
4.365E-05	8328.	10564.	13548.	17527.	4.365E-05	19501.	22893.	32991.	35830.	40746.	42032.
3.981E-05	8328.	10564.	13548.	17534.	3.981E-05	19816.	23281.	33633.	36797.	41390.	42081.
3.631E-05	8328.	10564.	13548.	17538.	3.631E-05	20072.	23707.	34211.	37437.	41726.	42100.
3.311E-05	8328.	10564.	13548.	17538.	3.311E-05	20187.	24104.	34866.	38163.	41910.	42100.
3.020E-05	8328.	10564.	13548.	17538.	3.020E-05	20282.	24532.	35485.	38631.	42019.	42100.
2.754E-05	8328.	10564.	13548.	17538.	2.754E-05	20385.	24957.	36173.	38833.	42175.	42100.
2.512E-05	8328.	10564.	13548.	17538.	2.512E-05	20519.	25231.	36745.	39165.	42266.	42100.
2.291E-05	8328.	10564.	13548.	17538.	2.291E-05	20562.	25560.	37087.	39428.	42278.	42100.
2.089E-05	8328.	10564.	13548.	17538.	2.089E-05	20571.	25882.	37469.	39747.	42303.	42100.
1.905E-05	8328.	10564.	13548.	17538.	1.905E-05	20572.	26260.	37718.	40011.	42330.	42100.
1.738E-05	8328.	10564.	13548.	17538.	1.738E-05	20572.	26483.	38056.	40187.	42347.	42100.
1.585E-05	8328.	10564.	13548.	17538.	1.585E-05	20575.	26566.	38384.	40347.	42347.	42100.
1.445E-05	8328.	10564.	13548.	17538.	1.445E-05	20575.	26756.	38538.	40521.	42347.	42100.
1.318E-05	8328.	10564.	13548.	17538.	1.318E-05	20575.	26800.	38732.	40669.	42347.	42100.
1.202E-05	8328.	10564.	13548.	17538.	1.202E-05	20575.	26971.	38992.	40728.	42347.	42100.
1.096E-05	8328.	10564.	13548.	17538.	1.096E-05	20575.	27014.	39335.	40842.	42347.	42100.
1.000E-05	8328.	10564.	13548.	17538.	1.000E-05	20575.	27022.	39409.	40939.	42347.	42100.
9.120E-06	8328.	10564.	13548.	17538.	9.120E-06	20575.	27022.	39472.	41020.	42347.	42100.
8.318E-06	8328.	10564.	13548.	17538.	8.318E-06	20575.	27025.	39530.	41034.	42347.	42100.
7.586E-06	8328.	10564.	13548.	17538.	7.586E-06	20575.	27025.	39688.	41134.	42347.	42100.
6.918E-06	8328.	10564.	13548.	17538.	6.918E-06	20575.	27025.	39952.	41189.	42347.	42100.
6.310E-06	8328.	10564.	13548.	17538.	6.310E-06	20575.	27025.	40026.	41229.	42347.	42100.

5.754E-06	8328.	10564.	13548.	17538.	5.754E-06	20575.	27025.	40176.	41232.	42347.	42100.
5.248E-06	8328.	10564.	13548.	17538.	5.248E-06	20575.	27025.	40305.	41248.	42347.	42100.
4.786E-06	8328.	10564.	13548.	17538.	4.786E-06	20575.	27025.	40456.	41264.	42347.	42100.
4.365E-06	8328.	10564.	13548.	17538.	4.365E-06	20575.	27025.	40567.	41272.	42347.	42100.
3.981E-06	8328.	10564.	13548.	17538.	3.981E-06	20575.	27025.	40570.	41329.	42347.	42100.
3.631E-06	8328.	10564.	13548.	17538.	3.631E-06	20575.	27025.	40614.	41333.	42347.	42100.
3.311E-06	8328.	10564.	13548.	17538.	3.311E-06	20575.	27025.	40634.	41334.	42347.	42100.
3.020E-06	8328.	10564.	13548.	17538.	3.020E-06	20575.	27025.	40659.	41334.	42347.	42100.
2.754E-06	8328.	10564.	13548.	17538.	2.754E-06	20575.	27025.	40683.	41341.	42347.	42100.
2.512E-06	8328.	10564.	13548.	17538.	2.512E-06	20575.	27025.	40683.	41361.	42347.	42100.
2.291E-06	8328.	10564.	13548.	17538.	2.291E-06	20575.	27025.	40683.	41361.	42347.	42100.
2.089E-06	8328.	10564.	13548.	17538.	2.089E-06	20575.	27025.	40683.	41361.	42347.	42100.
1.905E-06	8328.	10564.	13548.	17538.	1.905E-06	20575.	27025.	40683.	41361.	42347.	42100.
1.738E-06	8328.	10564.	13548.	17538.	1.738E-06	20575.	27025.	40683.	41365.	42347.	42100.
1.585E-06	8328.	10564.	13548.	17538.	1.585E-06	20575.	27025.	40683.	41365.	42347.	42100.
1.445E-06	8328.	10564.	13548.	17538.	1.445E-06	20575.	27025.	40683.	41365.	42347.	42100.
1.318E-06	8328.	10564.	13548.	17538.	1.318E-06	20575.	27025.	40683.	41365.	42347.	42100.
1.202E-06	8328.	10564.	13548.	17538.	1.202E-06	20575.	27025.	40683.	41365.	42347.	42100.
1.096E-06	8328.	10564.	13548.	17538.	1.096E-06	20575.	27025.	40683.	41365.	42347.	42100.
1.000E-06	8328.	10564.	13548.	17538.	1.000E-06	20575.	27025.	40683.	41365.	42347.	42100.
Belw. Lim.	0.	0.	0.	0.	Belw. Lim.	0.	0.	0.	0.	0.	0.

ARCON96 Input

Unit 2 Reactor Building Stack to Control Room Intake (Tower 1A 92'and 34' wind, Tower 1A 89'-33' Delta T)

```
5
D:\TRACIP~1\ARCON\PEACHB~1\T1AA84~1.MET
D:\TRACIP~1\ARCON\PEACHB~1\T1AA85~1.MET
D:\TRACIP~1\ARCON\PEACHB~1\T1AA86~1.MET
D:\TRACIP~1\ARCON\PEACHB~1\T1AA87~1.MET
D:\TRACIP~1\ARCON\PEACHB~1\T1AA88~1.MET
   10.36
   28.04
  2
  2
   57.60
  2583.60
    0.00
    0.00
    0.00
 113  90
   58.40
   21.00
    0.00
2RSCR1A.log
2RSCR1A.cfd
 .1
    0.22
    4.00
  1  2  4  8  12  24  96 168 360 720
  1  2  4  8  11  22  87 152 324 648
    0.00    0.00
n
```

ARCON96 Output

Unit 2 Reactor Building Stack to Control Room Intake (Tower 1A 92'and 34' wind, Tower 1A 89'-33' Delta T)

Program Title: ARCON96.

Developed For: U.S. Nuclear Regulatory Commission
Office of Nuclear Reactor Regulation
Division of Reactor Program Management

Date: June 25, 1997 11:00 a.m.

NRC Contacts: J. Y. Lee Phone: (301) 415 1080
e-mail: jyl1@nrc.gov
J. J. Hayes Phone: (301) 415 3167
e-mail: jjh@nrc.gov
L. A Brown Phone: (301) 415 1232
e-mail: lab2@nrc.gov

Code Developer: J. V. Ramsdell Phone: (509) 372 6316
e-mail: j_ramsdell@pnl.gov

Code Documentation: NUREG/CR-6331 Rev. 1

Program Run 1/ 9/2003 at 14:42:11

******* ARCON INPUT **********

Number of Meteorological Data Files = 5
Meteorological Data File Names
D:\TRACIP~1\ARCON\PEACHB~1\T1AA84~1.MET
D:\TRACIP~1\ARCON\PEACHB~1\T1AA85~1.MET
D:\TRACIP~1\ARCON\PEACHB~1\T1AA86~1.MET
D:\TRACIP~1\ARCON\PEACHB~1\T1AA87~1.MET
D:\TRACIP~1\ARCON\PEACHB~1\T1AA88~1.MET

Height of lower wind instrument (m) = 10.4
Height of upper wind instrument (m) = 28.0
Wind speeds entered as miles per hour

Vent release
Release height (m) = 57.6
Building Area (m^2) = 2583.6
Effluent vertical velocity (m/s) = .00
Vent or stack flow (m^3/s) = .00
Vent or stack radius (m) = .00

Direction .. intake to source (deg) = 113
Wind direction sector width (deg) = 90
Wind direction window (deg) = 068 - 158
Distance to intake (m) = 58.4
Intake height (m) = 21.0
Terrain elevation difference (m) = .0

Output file names
2RSCR1A.log
2RSCR1A.cfd

Minimum Wind Speed (m/s) = .2
Surface roughness length (m) = .10
Sector averaging constant = 4.0

Initial value of sigma y = .00
Initial value of sigma z = .00

Expanded output for code testing not selected

Total number of hours of data processed = 43800
Hours of missing data = 464
Hours direction in window = 13691
Hours elevated plume w/ dir. in window = 0
Hours of calm winds = 432
Hours direction not in window or calm = 29213

DISTRIBUTION SUMMARY DATA BY AVERAGING INTERVAL

AVER. PER.	1	2	4	8	12	24	96	168	360	720
UPPER LIM.	1.00E-02	1.00E-02	1.00E-02	1.00E-02	1.00E-02	1.00E-02	1.00E-02	1.00E-02	1.00E-02	1.00E-02
LOW LIM.	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06

ABOVE RANGE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
IN RANGE	14123.	16719.	19959.	23952.	26939.	32635.	42145.	42538.	42343.	41983.
BELOW RANGE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
ZERO	29213.	26557.	23198.	18969.	16044.	10067.	411.	0.	0.	0.
TOTAL X/Qs	43336.	43276.	43157.	42921.	42983.	42702.	42556.	42538.	42343.	41983.
% NON ZERO	32.59	38.63	46.25	55.80	62.67	76.42	99.03	100.00	100.00	100.00

95th PERCENTILE X/Q VALUES

1.17E-03 1.14E-03 1.07E-03 9.74E-04 8.05E-04 6.01E-04 3.67E-04 3.16E-04 2.73E-04 2.45E-04

95% X/Q for standard averaging intervals

0 to 2 hours	1.17E-03
2 to 8 hours	9.08E-04
8 to 24 hours	4.14E-04
1 to 4 days	2.90E-04
4 to 30 days	2.26E-04

HOURLY VALUE RANGE

	MAX X/Q	MIN X/Q
CENTERLINE	1.70E-03	1.55E-04
SECTOR-AVERAGE	1.07E-03	9.71E-05

NORMAL PROGRAM COMPLETION

X/Q CUMULATIVE FREQUENCY DISTRIBUTIONS

XOQ	1	2	4	8	XOQ	12	24	96	168	360	720
Abv. Lim.	0.	0.	0.	0.	Abv. Lim.	0.	0.	0.	0.	0.	0.
9.120E-03	0.	0.	0.	0.	9.120E-03	0.	0.	0.	0.	0.	0.
8.318E-03	0.	0.	0.	0.	8.318E-03	0.	0.	0.	0.	0.	0.
7.586E-03	0.	0.	0.	0.	7.586E-03	0.	0.	0.	0.	0.	0.
6.918E-03	0.	0.	0.	0.	6.918E-03	0.	0.	0.	0.	0.	0.
6.310E-03	0.	0.	0.	0.	6.310E-03	0.	0.	0.	0.	0.	0.
5.754E-03	0.	0.	0.	0.	5.754E-03	0.	0.	0.	0.	0.	0.
5.248E-03	0.	0.	0.	0.	5.248E-03	0.	0.	0.	0.	0.	0.
4.786E-03	0.	0.	0.	0.	4.786E-03	0.	0.	0.	0.	0.	0.
4.365E-03	0.	0.	0.	0.	4.365E-03	0.	0.	0.	0.	0.	0.
3.981E-03	0.	0.	0.	0.	3.981E-03	0.	0.	0.	0.	0.	0.
3.631E-03	0.	0.	0.	0.	3.631E-03	0.	0.	0.	0.	0.	0.
3.311E-03	0.	0.	0.	0.	3.311E-03	0.	0.	0.	0.	0.	0.
3.020E-03	0.	0.	0.	0.	3.020E-03	0.	0.	0.	0.	0.	0.
2.754E-03	0.	0.	0.	0.	2.754E-03	0.	0.	0.	0.	0.	0.
2.512E-03	0.	0.	0.	0.	2.512E-03	0.	0.	0.	0.	0.	0.
2.291E-03	0.	0.	0.	0.	2.291E-03	0.	0.	0.	0.	0.	0.
2.089E-03	0.	0.	0.	0.	2.089E-03	0.	0.	0.	0.	0.	0.
1.905E-03	0.	0.	0.	0.	1.905E-03	0.	0.	0.	0.	0.	0.
1.738E-03	0.	0.	0.	0.	1.738E-03	0.	0.	0.	0.	0.	0.
1.585E-03	72.	33.	9.	2.	1.585E-03	0.	0.	0.	0.	0.	0.
1.445E-03	291.	160.	56.	17.	1.445E-03	0.	0.	0.	0.	0.	0.
1.318E-03	1021.	593.	276.	108.	1.318E-03	2.	0.	0.	0.	0.	0.
1.202E-03	1620.	1309.	817.	380.	1.202E-03	25.	0.	0.	0.	0.	0.
1.096E-03	3555.	2696.	1849.	1043.	1.096E-03	157.	0.	0.	0.	0.	0.
1.000E-03	4736.	3774.	2853.	1864.	1.000E-03	415.	9.	0.	0.	0.	0.
9.120E-04	5762.	4818.	3864.	2830.	9.120E-04	972.	47.	0.	0.	0.	0.
8.318E-04	6963.	5718.	4999.	3942.	8.318E-04	1790.	169.	0.	0.	0.	0.
7.586E-04	8090.	6754.	6002.	5058.	7.586E-04	2785.	427.	0.	0.	0.	0.
6.918E-04	8912.	7500.	7013.	6242.	6.918E-04	3914.	846.	0.	0.	0.	0.
6.310E-04	9443.	8403.	7974.	7366.	6.310E-04	5130.	1564.	33.	0.	0.	0.
5.754E-04	9734.	9219.	8917.	8584.	5.754E-04	6382.	2621.	58.	0.	0.	0.
5.248E-04	10086.	9866.	9908.	9729.	5.248E-04	7668.	3815.	111.	0.	0.	0.
4.786E-04	11678.	11248.	10962.	10838.	4.786E-04	8978.	5041.	339.	34.	0.	0.
4.365E-04	12802.	12469.	11985.	11854.	4.365E-04	10254.	6400.	745.	90.	0.	0.
3.981E-04	13480.	13569.	12908.	12943.	3.981E-04	11466.	7921.	1396.	312.	0.	0.
3.631E-04	13788.	14178.	13764.	13813.	3.631E-04	12567.	9495.	2231.	646.	93.	0.
3.311E-04	13952.	14663.	14513.	14642.	3.311E-04	13561.	11011.	3558.	1515.	384.	0.
3.020E-04	14045.	15011.	15074.	15455.	3.020E-04	14513.	12482.	5294.	2675.	877.	22.

2.754E-04	14082.	15339.	15608.	16221.	2.754E-04	15442.	13861.	7338.	4493.	1977.	292.
2.512E-04	14102.	15522.	16064.	16922.	2.512E-04	16216.	15221.	9772.	7010.	3455.	1488.
2.291E-04	14114.	16419.	17025.	17592.	2.291E-04	16995.	16406.	12353.	9803.	6039.	3636.
2.089E-04	14118.	16622.	17425.	18079.	2.089E-04	17689.	17582.	14898.	13377.	9647.	7186.
1.905E-04	14120.	16684.	17866.	18585.	1.905E-04	18376.	18671.	17494.	16530.	14689.	11919.
1.738E-04	14121.	16706.	18247.	19178.	1.738E-04	19081.	19726.	20275.	20121.	19732.	20175.
1.585E-04	14122.	16711.	18481.	19656.	1.585E-04	19722.	20707.	22724.	23381.	24265.	26112.
1.445E-04	14123.	16717.	18719.	20087.	1.445E-04	20242.	21648.	24849.	26363.	28916.	31063.
1.318E-04	14123.	16718.	18957.	20476.	1.318E-04	20780.	22457.	26891.	29072.	31925.	34261.
1.202E-04	14123.	16718.	19529.	21101.	1.202E-04	21313.	23281.	28458.	31252.	34309.	37138.
1.096E-04	14123.	16718.	19848.	21560.	1.096E-04	21844.	24000.	30136.	33328.	36372.	38816.
1.000E-04	14123.	16719.	19917.	21936.	1.000E-04	22268.	24707.	31704.	35026.	37526.	39313.
9.120E-05	14123.	16719.	19936.	22263.	9.120E-05	22722.	25257.	32991.	36307.	38397.	39982.
8.318E-05	14123.	16719.	19949.	22524.	8.318E-05	23110.	26014.	34096.	37215.	39456.	40342.
7.586E-05	14123.	16719.	19957.	22723.	7.586E-05	23681.	26526.	35170.	38157.	40031.	40943.
6.918E-05	14123.	16719.	19958.	22970.	6.918E-05	24071.	27012.	35993.	38902.	41056.	41265.
6.310E-05	14123.	16719.	19958.	23095.	6.310E-05	24474.	27528.	36773.	39564.	41389.	41580.
5.754E-05	14123.	16719.	19958.	23707.	5.754E-05	24815.	28007.	37516.	40085.	41688.	41883.
5.248E-05	14123.	16719.	19959.	23882.	5.248E-05	25045.	28429.	38048.	40706.	42041.	41973.
4.786E-05	14123.	16719.	19959.	23931.	4.786E-05	25395.	28816.	38509.	41042.	42116.	41983.
4.365E-05	14123.	16719.	19959.	23939.	4.365E-05	25605.	29182.	38845.	41246.	42283.	41983.
3.981E-05	14123.	16719.	19959.	23944.	3.981E-05	26007.	29573.	39487.	41397.	42311.	41983.
3.631E-05	14123.	16719.	19959.	23950.	3.631E-05	26248.	29910.	39881.	41611.	42331.	41983.
3.311E-05	14123.	16719.	19959.	23951.	3.311E-05	26326.	30287.	40077.	41728.	42336.	41983.
3.020E-05	14123.	16719.	19959.	23951.	3.020E-05	26432.	30521.	40320.	41843.	42343.	41983.
2.754E-05	14123.	16719.	19959.	23951.	2.754E-05	26544.	30790.	40529.	41955.	42343.	41983.
2.512E-05	14123.	16719.	19959.	23952.	2.512E-05	26732.	31067.	40727.	42058.	42343.	41983.
2.291E-05	14123.	16719.	19959.	23952.	2.291E-05	26879.	31282.	40836.	42199.	42343.	41983.
2.089E-05	14123.	16719.	19959.	23952.	2.089E-05	26922.	31432.	40997.	42288.	42343.	41983.
1.905E-05	14123.	16719.	19959.	23952.	1.905E-05	26927.	31729.	41060.	42326.	42343.	41983.
1.738E-05	14123.	16719.	19959.	23952.	1.738E-05	26938.	31913.	41119.	42384.	42343.	41983.
1.585E-05	14123.	16719.	19959.	23952.	1.585E-05	26938.	31995.	41259.	42401.	42343.	41983.
1.445E-05	14123.	16719.	19959.	23952.	1.445E-05	26939.	32168.	41351.	42409.	42343.	41983.
1.318E-05	14123.	16719.	19959.	23952.	1.318E-05	26939.	32193.	41413.	42432.	42343.	41983.
1.202E-05	14123.	16719.	19959.	23952.	1.202E-05	26939.	32526.	41473.	42443.	42343.	41983.
1.096E-05	14123.	16719.	19959.	23952.	1.096E-05	26939.	32600.	41562.	42451.	42343.	41983.
1.000E-05	14123.	16719.	19959.	23952.	1.000E-05	26939.	32631.	41614.	42458.	42343.	41983.
9.120E-06	14123.	16719.	19959.	23952.	9.120E-06	26939.	32632.	41688.	42463.	42343.	41983.
8.318E-06	14123.	16719.	19959.	23952.	8.318E-06	26939.	32634.	41726.	42482.	42343.	41983.
7.586E-06	14123.	16719.	19959.	23952.	7.586E-06	26939.	32634.	41766.	42482.	42343.	41983.
6.918E-06	14123.	16719.	19959.	23952.	6.918E-06	26939.	32635.	41776.	42490.	42343.	41983.
6.310E-06	14123.	16719.	19959.	23952.	6.310E-06	26939.	32635.	41912.	42496.	42343.	41983.

5.754E-06	14123.	16719.	19959.	23952.	5.754E-06	26939.	32635.	41926.	42498.	42343.	41983.
5.248E-06	14123.	16719.	19959.	23952.	5.248E-06	26939.	32635.	41991.	42498.	42343.	41983.
4.786E-06	14123.	16719.	19959.	23952.	4.786E-06	26939.	32635.	42007.	42499.	42343.	41983.
4.365E-06	14123.	16719.	19959.	23952.	4.365E-06	26939.	32635.	42040.	42499.	42343.	41983.
3.981E-06	14123.	16719.	19959.	23952.	3.981E-06	26939.	32635.	42040.	42499.	42343.	41983.
3.631E-06	14123.	16719.	19959.	23952.	3.631E-06	26939.	32635.	42064.	42518.	42343.	41983.
3.311E-06	14123.	16719.	19959.	23952.	3.311E-06	26939.	32635.	42069.	42518.	42343.	41983.
3.020E-06	14123.	16719.	19959.	23952.	3.020E-06	26939.	32635.	42142.	42518.	42343.	41983.
2.754E-06	14123.	16719.	19959.	23952.	2.754E-06	26939.	32635.	42144.	42523.	42343.	41983.
2.512E-06	14123.	16719.	19959.	23952.	2.512E-06	26939.	32635.	42145.	42523.	42343.	41983.
2.291E-06	14123.	16719.	19959.	23952.	2.291E-06	26939.	32635.	42145.	42523.	42343.	41983.
2.089E-06	14123.	16719.	19959.	23952.	2.089E-06	26939.	32635.	42145.	42523.	42343.	41983.
1.905E-06	14123.	16719.	19959.	23952.	1.905E-06	26939.	32635.	42145.	42523.	42343.	41983.
1.738E-06	14123.	16719.	19959.	23952.	1.738E-06	26939.	32635.	42145.	42538.	42343.	41983.
1.585E-06	14123.	16719.	19959.	23952.	1.585E-06	26939.	32635.	42145.	42538.	42343.	41983.
1.445E-06	14123.	16719.	19959.	23952.	1.445E-06	26939.	32635.	42145.	42538.	42343.	41983.
1.318E-06	14123.	16719.	19959.	23952.	1.318E-06	26939.	32635.	42145.	42538.	42343.	41983.
1.202E-06	14123.	16719.	19959.	23952.	1.202E-06	26939.	32635.	42145.	42538.	42343.	41983.
1.096E-06	14123.	16719.	19959.	23952.	1.096E-06	26939.	32635.	42145.	42538.	42343.	41983.
1.000E-06	14123.	16719.	19959.	23952.	1.000E-06	26939.	32635.	42145.	42538.	42343.	41983.
Belw. Lim.	0.	0.	0.	0.	Belw. Lim.	0.	0.	0.	0.	0.	0.

ARCON96 Input

Unit 3 Reactor Building Stack to Control Room Intake (Tower 2 75'and 33' wind, Tower 2 150'-33' Delta T)

```
5
D:\TRACIP~1\ARCON\PEACHB~1\T2B84A~1.MET
D:\TRACIP~1\ARCON\PEACHB~1\T2B85A~1.MET
D:\TRACIP~1\ARCON\PEACHB~1\T2B86A~1.MET
D:\TRACIP~1\ARCON\PEACHB~1\T2B87A~1.MET
D:\TRACIP~1\ARCON\PEACHB~1\T2B88A~1.MET
   10.10
   22.90
  2
  2
   57.60
 2583.60
   0.00
   0.00
   0.00
 15  90
   58.40
   21.00
   0.00
3RBStoCR.log
3RBStoCR.cfd
 .1
   0.22
   4.00
  1  2  4  8  12  24  96 168 360 720
  1  2  4  8  11  22  87 152 324 648
   0.00    0.00
n
```

ARCON96 Output

Unit 3 Reactor Building Stack to Control Room Intake (Tower 2 75'and 33' wind, Tower 2 150'-33' Delta T)

Program Title: ARCON96.

Developed For: U.S. Nuclear Regulatory Commission
Office of Nuclear Reactor Regulation
Division of Reactor Program Management

Date: June 25, 1997 11:00 a.m.

NRC Contacts: J. Y. Lee Phone: (301) 415 1080
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J. J. Hayes Phone: (301) 415 3167
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Code Developer: J. V. Ramsdell Phone: (509) 372 6316
e-mail: j_ramsdell@pnl.gov

Code Documentation: NUREG/CR-6331 Rev. 1

Program Run 12/30/2002 at 15:35:08

******* ARCON INPUT **********

Number of Meteorological Data Files = 5
Meteorological Data File Names
D:\TRACIP~1\ARCON\PEACHB~1\T2B84A~1.MET
D:\TRACIP~1\ARCON\PEACHB~1\T2B85A~1.MET
D:\TRACIP~1\ARCON\PEACHB~1\T2B86A~1.MET
D:\TRACIP~1\ARCON\PEACHB~1\T2B87A~1.MET
D:\TRACIP~1\ARCON\PEACHB~1\T2B88A~1.MET

Height of lower wind instrument (m) = 10.1
Height of upper wind instrument (m) = 22.9
Wind speeds entered as miles per hour

Vent release
Release height (m) = 57.6
Building Area (m^2) = 2583.6
Effluent vertical velocity (m/s) = .00
Vent or stack flow (m^3/s) = .00
Vent or stack radius (m) = .00

Direction .. intake to source (deg) = 015
Wind direction sector width (deg) = 90
Wind direction window (deg) = 330 - 060
Distance to intake (m) = 58.4
Intake height (m) = 21.0
Terrain elevation difference (m) = .0

Output file names
3RBStoCR.log
3RBStoCR.cfd

Minimum Wind Speed (m/s) = .2
Surface roughness length (m) = .10
Sector averaging constant = 4.0

Initial value of sigma y = .00
Initial value of sigma z = .00

Expanded output for code testing not selected

Total number of hours of data processed = 43800
Hours of missing data = 578
Hours direction in window = 10033
Hours elevated plume w/ dir. in window = 0
Hours of calm winds = 131
Hours direction not in window or calm = 33058

DISTRIBUTION SUMMARY DATA BY AVERAGING INTERVAL

AVER. PER.	1	2	4	8	12	24	96	168	360	720
UPPER LIM.	1.00E-02	1.00E-02	1.00E-02	1.00E-02	1.00E-02	1.00E-02	1.00E-02	1.00E-02	1.00E-02	1.00E-02

LOW LIM.	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06
ABOVE RANGE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
IN RANGE	10164.	12645.	16085.	20803.	24391.	31021.	40989.	41419.	42347.	42100.
BELOW RANGE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
ZERO	33058.	30519.	26963.	22017.	18476.	11667.	977.	11.	0.	0.
TOTAL X/Qs	43222.	43164.	43048.	42820.	42867.	42688.	41966.	41430.	42347.	42100.
% NON ZERO	23.52	29.30	37.37	48.58	56.90	72.67	97.67	99.97	100.00	100.00

95th PERCENTILE X/Q VALUES

1.18E-03	1.15E-03	1.07E-03	9.64E-04	7.97E-04	5.88E-04	3.36E-04	2.94E-04	2.49E-04	2.16E-04

95% X/Q for standard averaging intervals

0 to 2 hours	1.18E-03
2 to 8 hours	8.91E-04
8 to 24 hours	4.00E-04
1 to 4 days	2.51E-04
4 to 30 days	1.98E-04

HOURLY VALUE RANGE

	MAX X/Q	MIN X/Q
CENTERLINE	1.70E-03	1.47E-04
SECTOR-AVERAGE	1.07E-03	9.19E-05

NORMAL PROGRAM COMPLETION

X/Q CUMULATIVE FREQUENCY DISTRIBUTIONS

XOQ	1	2	4	8	XOQ	12	24	96	168	360	720
Abv. Lim.	0.	0.	0.	0.	Abv. Lim.	0.	0.	0.	0.	0.	0.
9.120E-03	0.	0.	0.	0.	9.120E-03	0.	0.	0.	0.	0.	0.
8.318E-03	0.	0.	0.	0.	8.318E-03	0.	0.	0.	0.	0.	0.
7.586E-03	0.	0.	0.	0.	7.586E-03	0.	0.	0.	0.	0.	0.
6.918E-03	0.	0.	0.	0.	6.918E-03	0.	0.	0.	0.	0.	0.
6.310E-03	0.	0.	0.	0.	6.310E-03	0.	0.	0.	0.	0.	0.
5.754E-03	0.	0.	0.	0.	5.754E-03	0.	0.	0.	0.	0.	0.
5.248E-03	0.	0.	0.	0.	5.248E-03	0.	0.	0.	0.	0.	0.
4.786E-03	0.	0.	0.	0.	4.786E-03	0.	0.	0.	0.	0.	0.
4.365E-03	0.	0.	0.	0.	4.365E-03	0.	0.	0.	0.	0.	0.
3.981E-03	0.	0.	0.	0.	3.981E-03	0.	0.	0.	0.	0.	0.
3.631E-03	0.	0.	0.	0.	3.631E-03	0.	0.	0.	0.	0.	0.
3.311E-03	0.	0.	0.	0.	3.311E-03	0.	0.	0.	0.	0.	0.
3.020E-03	0.	0.	0.	0.	3.020E-03	0.	0.	0.	0.	0.	0.
2.754E-03	0.	0.	0.	0.	2.754E-03	0.	0.	0.	0.	0.	0.
2.512E-03	0.	0.	0.	0.	2.512E-03	0.	0.	0.	0.	0.	0.
2.291E-03	0.	0.	0.	0.	2.291E-03	0.	0.	0.	0.	0.	0.
2.089E-03	0.	0.	0.	0.	2.089E-03	0.	0.	0.	0.	0.	0.
1.905E-03	0.	0.	0.	0.	1.905E-03	0.	0.	0.	0.	0.	0.
1.738E-03	0.	0.	0.	0.	1.738E-03	0.	0.	0.	0.	0.	0.
1.585E-03	36.	11.	1.	0.	1.585E-03	0.	0.	0.	0.	0.	0.
1.445E-03	171.	82.	22.	0.	1.445E-03	0.	0.	0.	0.	0.	0.
1.318E-03	1168.	649.	326.	109.	1.318E-03	0.	0.	0.	0.	0.	0.
1.202E-03	1838.	1475.	993.	516.	1.202E-03	0.	0.	0.	0.	0.	0.
1.096E-03	3717.	2906.	1963.	1178.	1.096E-03	133.	0.	0.	0.	0.	0.
1.000E-03	4982.	3751.	2754.	1837.	1.000E-03	571.	0.	0.	0.	0.	0.
9.120E-04	5635.	4450.	3527.	2589.	9.120E-04	1131.	30.	0.	0.	0.	0.
8.318E-04	6508.	5042.	4290.	3344.	8.318E-04	1803.	198.	0.	0.	0.	0.
7.586E-04	6947.	5563.	4998.	4128.	7.586E-04	2522.	498.	0.	0.	0.	0.
6.918E-04	7460.	6013.	5603.	4884.	6.918E-04	3304.	975.	35.	0.	0.	0.
6.310E-04	7802.	6738.	6370.	5653.	6.310E-04	4109.	1595.	72.	0.	0.	0.
5.754E-04	8294.	7510.	7118.	6412.	5.754E-04	4876.	2296.	108.	0.	0.	0.
5.248E-04	8563.	8236.	7836.	7218.	5.248E-04	5678.	3076.	163.	0.	0.	0.
4.786E-04	9157.	9062.	8472.	7978.	4.786E-04	6490.	3898.	322.	64.	0.	0.
4.365E-04	9500.	9814.	9101.	8812.	4.365E-04	7347.	4800.	591.	102.	0.	0.
3.981E-04	9692.	10380.	9651.	9629.	3.981E-04	8164.	5720.	948.	284.	0.	0.
3.631E-04	9841.	10879.	10160.	10261.	3.631E-04	8960.	6696.	1472.	691.	0.	0.
3.311E-04	9918.	11247.	10805.	10999.	3.311E-04	9822.	7656.	2198.	1049.	41.	0.
3.020E-04	10014.	11556.	11248.	11686.	3.020E-04	10611.	8605.	3276.	1783.	348.	0.

2.754E-04	10056.	11774.	12004.	12411.	2.754E-04	11411.	9625.	4461.	2727.	1169.	43.
2.512E-04	10102.	11921.	12623.	12986.	2.512E-04	12201.	10650.	6003.	3878.	2000.	407.
2.291E-04	10125.	12369.	13220.	13623.	2.291E-04	12944.	11713.	7544.	5361.	3265.	1317.
2.089E-04	10146.	12491.	13822.	14169.	2.089E-04	13657.	12733.	9409.	7279.	4800.	2573.
1.905E-04	10153.	12531.	14230.	14626.	1.905E-04	14382.	13784.	11158.	9602.	6612.	4714.
1.738E-04	10158.	12562.	14659.	15116.	1.738E-04	15075.	14880.	13055.	11952.	9731.	7680.
1.585E-04	10160.	12581.	15031.	15708.	1.585E-04	15734.	15960.	15328.	14563.	14269.	11559.
1.445E-04	10164.	12602.	15271.	16371.	1.445E-04	16443.	17000.	17399.	16811.	17996.	16033.
1.318E-04	10164.	12613.	15417.	16938.	1.318E-04	17021.	17948.	19702.	19784.	21294.	21548.
1.202E-04	10164.	12625.	15818.	17589.	1.202E-04	17611.	18857.	21698.	22616.	25180.	26220.
1.096E-04	10164.	12639.	15910.	18110.	1.096E-04	18207.	19861.	23885.	25063.	28229.	30190.
1.000E-04	10164.	12641.	15974.	18680.	1.000E-04	18676.	20667.	25410.	27364.	30981.	34388.
9.120E-05	10164.	12642.	15995.	19163.	9.120E-05	19354.	21467.	26792.	29463.	33293.	37661.
8.318E-05	10164.	12644.	16028.	19588.	8.318E-05	19890.	22167.	28347.	31336.	35293.	39145.
7.586E-05	10164.	12645.	16043.	19881.	7.586E-05	20331.	22816.	29781.	32662.	37133.	39940.
6.918E-05	10164.	12645.	16053.	20045.	6.918E-05	21010.	23439.	30910.	33846.	38562.	40499.
6.310E-05	10164.	12645.	16066.	20162.	6.310E-05	21420.	24057.	31867.	34839.	39575.	41085.
5.754E-05	10164.	12645.	16077.	20600.	5.754E-05	21994.	24667.	32809.	35684.	40289.	41313.
5.248E-05	10164.	12645.	16083.	20690.	5.248E-05	22493.	25162.	33653.	36351.	40898.	41511.
4.786E-05	10164.	12645.	16083.	20707.	4.786E-05	22799.	25773.	34510.	37313.	41151.	41937.
4.365E-05	10164.	12645.	16084.	20730.	4.365E-05	23138.	26362.	35355.	37869.	41422.	42035.
3.981E-05	10164.	12645.	16085.	20739.	3.981E-05	23591.	26819.	35871.	38290.	41566.	42048.
3.631E-05	10164.	12645.	16085.	20759.	3.631E-05	23815.	27236.	36288.	38706.	41684.	42100.
3.311E-05	10164.	12645.	16085.	20770.	3.311E-05	23979.	27718.	36655.	39033.	41791.	42100.
3.020E-05	10164.	12645.	16085.	20783.	3.020E-05	24058.	28268.	37193.	39515.	41911.	42100.
2.754E-05	10164.	12645.	16085.	20803.	2.754E-05	24209.	28732.	37530.	39693.	42076.	42100.
2.512E-05	10164.	12645.	16085.	20803.	2.512E-05	24275.	29157.	37843.	39900.	42196.	42100.
2.291E-05	10164.	12645.	16085.	20803.	2.291E-05	24302.	29421.	37999.	40038.	42258.	42100.
2.089E-05	10164.	12645.	16085.	20803.	2.089E-05	24333.	29735.	38256.	40176.	42269.	42100.
1.905E-05	10164.	12645.	16085.	20803.	1.905E-05	24354.	30125.	38570.	40372.	42290.	42100.
1.738E-05	10164.	12645.	16085.	20803.	1.738E-05	24370.	30391.	38733.	40442.	42292.	42100.
1.585E-05	10164.	12645.	16085.	20803.	1.585E-05	24376.	30518.	38926.	40504.	42293.	42100.
1.445E-05	10164.	12645.	16085.	20803.	1.445E-05	24381.	30705.	39157.	40578.	42293.	42100.
1.318E-05	10164.	12645.	16085.	20803.	1.318E-05	24385.	30808.	39391.	40606.	42295.	42100.
1.202E-05	10164.	12645.	16085.	20803.	1.202E-05	24390.	30890.	39579.	40675.	42336.	42100.
1.096E-05	10164.	12645.	16085.	20803.	1.096E-05	24391.	30921.	39747.	40707.	42336.	42100.
1.000E-05	10164.	12645.	16085.	20803.	1.000E-05	24391.	30932.	39813.	40765.	42347.	42100.
9.120E-06	10164.	12645.	16085.	20803.	9.120E-06	24391.	30964.	39913.	40822.	42347.	42100.
8.318E-06	10164.	12645.	16085.	20803.	8.318E-06	24391.	30967.	39992.	40850.	42347.	42100.
7.586E-06	10164.	12645.	16085.	20803.	7.586E-06	24391.	31000.	40118.	40972.	42347.	42100.
6.918E-06	10164.	12645.	16085.	20803.	6.918E-06	24391.	31001.	40306.	41064.	42347.	42100.
6.310E-06	10164.	12645.	16085.	20803.	6.310E-06	24391.	31005.	40436.	41095.	42347.	42100.

5.754E-06	10164.	12645.	16085.	20803.	5.754E-06	24391.	31021.	40497.	41108.	42347.	42100.
5.248E-06	10164.	12645.	16085.	20803.	5.248E-06	24391.	31021.	40631.	41112.	42347.	42100.
4.786E-06	10164.	12645.	16085.	20803.	4.786E-06	24391.	31021.	40698.	41112.	42347.	42100.
4.365E-06	10164.	12645.	16085.	20803.	4.365E-06	24391.	31021.	40846.	41161.	42347.	42100.
3.981E-06	10164.	12645.	16085.	20803.	3.981E-06	24391.	31021.	40849.	41199.	42347.	42100.
3.631E-06	10164.	12645.	16085.	20803.	3.631E-06	24391.	31021.	40849.	41199.	42347.	42100.
3.311E-06	10164.	12645.	16085.	20803.	3.311E-06	24391.	31021.	40922.	41238.	42347.	42100.
3.020E-06	10164.	12645.	16085.	20803.	3.020E-06	24391.	31021.	40928.	41320.	42347.	42100.
2.754E-06	10164.	12645.	16085.	20803.	2.754E-06	24391.	31021.	40929.	41326.	42347.	42100.
2.512E-06	10164.	12645.	16085.	20803.	2.512E-06	24391.	31021.	40930.	41343.	42347.	42100.
2.291E-06	10164.	12645.	16085.	20803.	2.291E-06	24391.	31021.	40931.	41343.	42347.	42100.
2.089E-06	10164.	12645.	16085.	20803.	2.089E-06	24391.	31021.	40947.	41343.	42347.	42100.
1.905E-06	10164.	12645.	16085.	20803.	1.905E-06	24391.	31021.	40989.	41371.	42347.	42100.
1.738E-06	10164.	12645.	16085.	20803.	1.738E-06	24391.	31021.	40989.	41371.	42347.	42100.
1.585E-06	10164.	12645.	16085.	20803.	1.585E-06	24391.	31021.	40989.	41371.	42347.	42100.
1.445E-06	10164.	12645.	16085.	20803.	1.445E-06	24391.	31021.	40989.	41371.	42347.	42100.
1.318E-06	10164.	12645.	16085.	20803.	1.318E-06	24391.	31021.	40989.	41372.	42347.	42100.
1.202E-06	10164.	12645.	16085.	20803.	1.202E-06	24391.	31021.	40989.	41419.	42347.	42100.
1.096E-06	10164.	12645.	16085.	20803.	1.096E-06	24391.	31021.	40989.	41419.	42347.	42100.
1.000E-06	10164.	12645.	16085.	20803.	1.000E-06	24391.	31021.	40989.	41419.	42347.	42100.
Belw. Lim.	0.	0.	0.	0.	Belw. Lim.	0.	0.	0.	0.	0.	0.

ARCON96 Input

Unit 3 Reactor Building Stack to Control Room Intake (Tower 1A 92'and 34' wind, Tower 1A 89'-33' Delta T)

```
5
D:\TRACIP~1\ARCON\PEACHB~1\T1AA84~1.MET
D:\TRACIP~1\ARCON\PEACHB~1\T1AA85~1.MET
D:\TRACIP~1\ARCON\PEACHB~1\T1AA86~1.MET
D:\TRACIP~1\ARCON\PEACHB~1\T1AA87~1.MET
D:\TRACIP~1\ARCON\PEACHB~1\T1AA88~1.MET
  10.36
  28.04
 2
 2
  57.60
 2583.60
   0.00
   0.00
   0.00
 15  90
  58.40
  21.00
   0.00
3RSCR1A.log
3RSCR1A.cfd
 .1
   0.22
   4.00
 1  2  4  8  12  24  96 168 360 720
 1  2  4  8  11  22  87 152 324 648
   0.00    0.00
n
```

ARCON96 Output

Unit 3 Reactor Building Stack to Control Room Intake (Tower 1A 92'and 34' wind, Tower 1A 89'-33' Delta T)

Program Title: ARCON96.

Developed For: U.S. Nuclear Regulatory Commission
Office of Nuclear Reactor Regulation
Division of Reactor Program Management

Date: June 25, 1997 11:00 a.m.

NRC Contacts: J. Y. Lee Phone: (301) 415 1080
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e-mail: lab2@nrc.gov

Code Developer: J. V. Ramsdell Phone: (509) 372 6316
e-mail: j_ramsdell@pnl.gov

Code Documentation: NUREG/CR-6331 Rev. 1

Program Run 1/ 9/2003 at 14:43:12

******* ARCON INPUT **********

Number of Meteorological Data Files = 5
Meteorological Data File Names
D:\TRACIP~1\ARCON\PEACHB~1\T1AA84~1.MET
D:\TRACIP~1\ARCON\PEACHB~1\T1AA85~1.MET
D:\TRACIP~1\ARCON\PEACHB~1\T1AA86~1.MET
D:\TRACIP~1\ARCON\PEACHB~1\T1AA87~1.MET

D:\TRACIP~1\ARCON\PEACHB~1\T1AA88~1.MET

Height of lower wind instrument (m) = 10.4
Height of upper wind instrument (m) = 28.0
Wind speeds entered as miles per hour

Vent release
Release height (m) = 57.6
Building Area (m^2) = 2583.6
Effluent vertical velocity (m/s) = .00
Vent or stack flow (m^3/s) = .00
Vent or stack radius (m) = .00

Direction .. intake to source (deg) = 015
Wind direction sector width (deg) = 90
Wind direction window (deg) = 330 - 060
Distance to intake (m) = 58.4
Intake height (m) = 21.0
Terrain elevation difference (m) = .0

Output file names
3RSCR1A.log
3RSCR1A.cfd

Minimum Wind Speed (m/s) = .2
Surface roughness length (m) = .10
Sector averaging constant = 4.0

Initial value of sigma y = .00
Initial value of sigma z = .00

Expanded output for code testing not selected

Total number of hours of data processed = 43800
Hours of missing data = 464
Hours direction in window = 7064
Hours elevated plume w/ dir. in window = 0
Hours of calm winds = 432
Hours direction not in window or calm = 35840

DISTRIBUTION SUMMARY DATA BY AVERAGING INTERVAL

AVER. PER.	1	2	4	8	12	24	96	168	360	720

UPPER LIM.	1.00E-02	1.00E-02	1.00E-02	1.00E-02	1.00E-02	1.00E-02	1.00E-02	1.00E-02	1.00E-02	1.00E-02
LOW LIM.	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06
ABOVE RANGE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
IN RANGE	7496.	9643.	12870.	17912.	22214.	30298.	41597.	42453.	42343.	41983.
BELOW RANGE	0.	0.	0.	0.	0.	0.	0.	34.	0.	0.
ZERO	35840.	33633.	30287.	25009.	20769.	12404.	959.	51.	0.	0.
TOTAL X/Qs	43336.	43276.	43157.	42921.	42983.	42702.	42556.	42538.	42343.	41983.
% NON ZERO	17.30	22.28	29.82	41.73	51.68	70.95	97.75	99.88	100.00	100.00

95th PERCENTILE X/Q VALUES

1.02E-03	8.16E-04	7.23E-04	6.31E-04	5.16E-04	3.69E-04	2.14E-04	1.81E-04	1.56E-04	1.46E-04

95% X/Q for standard averaging intervals

0 to 2 hours	1.02E-03
2 to 8 hours	5.02E-04
8 to 24 hours	2.38E-04
1 to 4 days	1.62E-04
4 to 30 days	1.36E-04

HOURLY VALUE RANGE

	MAX X/Q	MIN X/Q
CENTERLINE	1.70E-03	9.95E-05
SECTOR-AVERAGE	1.07E-03	6.23E-05

NORMAL PROGRAM COMPLETION

X/Q CUMULATIVE FREQUENCY DISTRIBUTIONS

XOQ	1	2	4	8	XOQ	12	24	96	168	360	720
Abv. Lim.	0.	0.	0.	0.	Abv. Lim.	0.	0.	0.	0.	0.	0.
9.120E-03	0.	0.	0.	0.	9.120E-03	0.	0.	0.	0.	0.	0.
8.318E-03	0.	0.	0.	0.	8.318E-03	0.	0.	0.	0.	0.	0.
7.586E-03	0.	0.	0.	0.	7.586E-03	0.	0.	0.	0.	0.	0.
6.918E-03	0.	0.	0.	0.	6.918E-03	0.	0.	0.	0.	0.	0.
6.310E-03	0.	0.	0.	0.	6.310E-03	0.	0.	0.	0.	0.	0.
5.754E-03	0.	0.	0.	0.	5.754E-03	0.	0.	0.	0.	0.	0.
5.248E-03	0.	0.	0.	0.	5.248E-03	0.	0.	0.	0.	0.	0.
4.786E-03	0.	0.	0.	0.	4.786E-03	0.	0.	0.	0.	0.	0.
4.365E-03	0.	0.	0.	0.	4.365E-03	0.	0.	0.	0.	0.	0.
3.981E-03	0.	0.	0.	0.	3.981E-03	0.	0.	0.	0.	0.	0.
3.631E-03	0.	0.	0.	0.	3.631E-03	0.	0.	0.	0.	0.	0.
3.311E-03	0.	0.	0.	0.	3.311E-03	0.	0.	0.	0.	0.	0.
3.020E-03	0.	0.	0.	0.	3.020E-03	0.	0.	0.	0.	0.	0.
2.754E-03	0.	0.	0.	0.	2.754E-03	0.	0.	0.	0.	0.	0.
2.512E-03	0.	0.	0.	0.	2.512E-03	0.	0.	0.	0.	0.	0.
2.291E-03	0.	0.	0.	0.	2.291E-03	0.	0.	0.	0.	0.	0.
2.089E-03	0.	0.	0.	0.	2.089E-03	0.	0.	0.	0.	0.	0.
1.905E-03	0.	0.	0.	0.	1.905E-03	0.	0.	0.	0.	0.	0.
1.738E-03	0.	0.	0.	0.	1.738E-03	0.	0.	0.	0.	0.	0.
1.585E-03	39.	11.	0.	0.	1.585E-03	0.	0.	0.	0.	0.	0.
1.445E-03	164.	71.	19.	2.	1.445E-03	0.	0.	0.	0.	0.	0.
1.318E-03	529.	240.	80.	8.	1.318E-03	0.	0.	0.	0.	0.	0.
1.202E-03	758.	515.	257.	87.	1.202E-03	0.	0.	0.	0.	0.	0.
1.096E-03	1820.	1115.	622.	300.	1.096E-03	7.	0.	0.	0.	0.	0.
1.000E-03	2253.	1461.	928.	507.	1.000E-03	103.	0.	0.	0.	0.	0.
9.120E-04	2530.	1791.	1255.	789.	9.120E-04	241.	0.	0.	0.	0.	0.
8.318E-04	2970.	2090.	1593.	1095.	8.318E-04	437.	30.	0.	0.	0.	0.
7.586E-04	3421.	2442.	1987.	1435.	7.586E-04	693.	75.	0.	0.	0.	0.
6.918E-04	3732.	2672.	2308.	1785.	6.918E-04	1003.	152.	0.	0.	0.	0.
6.310E-04	3931.	3153.	2702.	2148.	6.310E-04	1343.	283.	0.	0.	0.	0.
5.754E-04	4040.	3725.	3160.	2505.	5.754E-04	1684.	473.	19.	0.	0.	0.
5.248E-04	4127.	4141.	3610.	2963.	5.248E-04	2073.	696.	59.	0.	0.	0.
4.786E-04	4915.	4804.	4099.	3448.	4.786E-04	2494.	984.	102.	0.	0.	0.
4.365E-04	5379.	5297.	4538.	4019.	4.365E-04	2934.	1335.	148.	0.	0.	0.
3.981E-04	5730.	5923.	5007.	4594.	3.981E-04	3386.	1733.	187.	7.	0.	0.
3.631E-04	6037.	6403.	5634.	5221.	3.631E-04	3945.	2223.	300.	92.	0.	0.
3.311E-04	6291.	6823.	6319.	5798.	3.311E-04	4562.	2784.	413.	182.	0.	0.
3.020E-04	6597.	7194.	6869.	6549.	3.020E-04	5231.	3428.	520.	341.	0.	0.

2.754E-04	6858.	7497.	7680.	7203.	2.754E-04	5920.	4051.	731.	504.	0.	0.
2.512E-04	7093.	7733.	8196.	7869.	2.512E-04	6614.	4728.	1146.	610.	78.	0.
2.291E-04	7245.	8716.	9039.	8539.	2.291E-04	7256.	5446.	1583.	759.	307.	0.
2.089E-04	7354.	8984.	9510.	9106.	2.089E-04	8071.	6223.	2291.	1121.	503.	0.
1.905E-04	7416.	9092.	9959.	9635.	1.905E-04	8780.	7038.	3092.	1716.	951.	14.
1.738E-04	7452.	9186.	10376.	10327.	1.738E-04	9552.	7923.	4054.	2408.	1402.	233.
1.585E-04	7474.	9270.	10689.	11089.	1.585E-04	10336.	8838.	5318.	3365.	1988.	1055.
1.445E-04	7489.	9361.	10898.	11817.	1.445E-04	11052.	9805.	6865.	4863.	2610.	2243.
1.318E-04	7490.	9439.	11055.	12376.	1.318E-04	11703.	10798.	8549.	6560.	3642.	3407.
1.202E-04	7491.	9502.	11860.	13229.	1.202E-04	12394.	11667.	10173.	8625.	5731.	4155.
1.096E-04	7493.	9565.	12273.	13785.	1.096E-04	13269.	12695.	11820.	10478.	8023.	5483.
1.000E-04	7495.	9591.	12391.	14388.	1.000E-04	13882.	13735.	13410.	12722.	10743.	7558.
9.120E-05	7496.	9616.	12470.	14811.	9.120E-05	14611.	14842.	15129.	15125.	13422.	10767.
8.318E-05	7496.	9634.	12530.	15222.	8.318E-05	15205.	15869.	16617.	17115.	16659.	14787.
7.586E-05	7496.	9639.	12608.	15548.	7.586E-05	16033.	16874.	18661.	19404.	20205.	19257.
6.918E-05	7496.	9640.	12664.	15781.	6.918E-05	16672.	17785.	20370.	21757.	23462.	25155.
6.310E-05	7496.	9640.	12717.	15931.	6.310E-05	17233.	18725.	22092.	24357.	26134.	30292.
5.754E-05	7496.	9640.	12761.	17050.	5.754E-05	17953.	19675.	23559.	26312.	29017.	33102.
5.248E-05	7496.	9643.	12805.	17393.	5.248E-05	18418.	20708.	25125.	27892.	31783.	35612.
4.786E-05	7496.	9643.	12832.	17477.	4.786E-05	18803.	21584.	26772.	29495.	33953.	37460.
4.365E-05	7496.	9643.	12851.	17548.	4.365E-05	19119.	22303.	28097.	31083.	36280.	38646.
3.981E-05	7496.	9643.	12869.	17608.	3.981E-05	20014.	22961.	29575.	32353.	37756.	40051.
3.631E-05	7496.	9643.	12869.	17655.	3.631E-05	20614.	23581.	31193.	33724.	38603.	41010.
3.311E-05	7496.	9643.	12869.	17710.	3.311E-05	20901.	24423.	32259.	35002.	39320.	41381.
3.020E-05	7496.	9643.	12869.	17776.	3.020E-05	21053.	25070.	33250.	36280.	39998.	41447.
2.754E-05	7496.	9643.	12869.	17832.	2.754E-05	21374.	25732.	34081.	37305.	40601.	41552.
2.512E-05	7496.	9643.	12870.	17851.	2.512E-05	21550.	26230.	35075.	38029.	40958.	41598.
2.291E-05	7496.	9643.	12870.	17884.	2.291E-05	21797.	26669.	35781.	39014.	41277.	41681.
2.089E-05	7496.	9643.	12870.	17909.	2.089E-05	21908.	27123.	36472.	39703.	41495.	41903.
1.905E-05	7496.	9643.	12870.	17911.	1.905E-05	21953.	27830.	37133.	40164.	41749.	41936.
1.738E-05	7496.	9643.	12870.	17911.	1.738E-05	21998.	28231.	37664.	40559.	41957.	41971.
1.585E-05	7496.	9643.	12870.	17911.	1.585E-05	22045.	28552.	38092.	40869.	42120.	41983.
1.445E-05	7496.	9643.	12870.	17911.	1.445E-05	22083.	29088.	38427.	41176.	42147.	41983.
1.318E-05	7496.	9643.	12870.	17912.	1.318E-05	22122.	29264.	39036.	41437.	42298.	41983.
1.202E-05	7496.	9643.	12870.	17912.	1.202E-05	22149.	29641.	39308.	41517.	42312.	41983.
1.096E-05	7496.	9643.	12870.	17912.	1.096E-05	22171.	29941.	39634.	41616.	42318.	41983.
1.000E-05	7496.	9643.	12870.	17912.	1.000E-05	22187.	29996.	39713.	41729.	42320.	41983.
9.120E-06	7496.	9643.	12870.	17912.	9.120E-06	22199.	30047.	39965.	41881.	42323.	41983.
8.318E-06	7496.	9643.	12870.	17912.	8.318E-06	22213.	30070.	40171.	41940.	42324.	41983.
7.586E-06	7496.	9643.	12870.	17912.	7.586E-06	22213.	30116.	40357.	42175.	42343.	41983.
6.918E-06	7496.	9643.	12870.	17912.	6.918E-06	22213.	30139.	40587.	42195.	42343.	41983.
6.310E-06	7496.	9643.	12870.	17912.	6.310E-06	22213.	30206.	40715.	42216.	42343.	41983.

5.754E-06	7496.	9643.	12870.	17912.	5.754E-06	22213.	30247.	40972.	42245.	42343.	41983.
5.248E-06	7496.	9643.	12870.	17912.	5.248E-06	22214.	30257.	41117.	42253.	42343.	41983.
4.786E-06	7496.	9643.	12870.	17912.	4.786E-06	22214.	30282.	41169.	42323.	42343.	41983.
4.365E-06	7496.	9643.	12870.	17912.	4.365E-06	22214.	30295.	41255.	42329.	42343.	41983.
3.981E-06	7496.	9643.	12870.	17912.	3.981E-06	22214.	30297.	41264.	42346.	42343.	41983.
3.631E-06	7496.	9643.	12870.	17912.	3.631E-06	22214.	30297.	41294.	42355.	42343.	41983.
3.311E-06	7496.	9643.	12870.	17912.	3.311E-06	22214.	30297.	41295.	42449.	42343.	41983.
3.020E-06	7496.	9643.	12870.	17912.	3.020E-06	22214.	30297.	41381.	42449.	42343.	41983.
2.754E-06	7496.	9643.	12870.	17912.	2.754E-06	22214.	30298.	41462.	42449.	42343.	41983.
2.512E-06	7496.	9643.	12870.	17912.	2.512E-06	22214.	30298.	41471.	42450.	42343.	41983.
2.291E-06	7496.	9643.	12870.	17912.	2.291E-06	22214.	30298.	41501.	42451.	42343.	41983.
2.089E-06	7496.	9643.	12870.	17912.	2.089E-06	22214.	30298.	41501.	42451.	42343.	41983.
1.905E-06	7496.	9643.	12870.	17912.	1.905E-06	22214.	30298.	41505.	42451.	42343.	41983.
1.738E-06	7496.	9643.	12870.	17912.	1.738E-06	22214.	30298.	41505.	42453.	42343.	41983.
1.585E-06	7496.	9643.	12870.	17912.	1.585E-06	22214.	30298.	41526.	42453.	42343.	41983.
1.445E-06	7496.	9643.	12870.	17912.	1.445E-06	22214.	30298.	41580.	42453.	42343.	41983.
1.318E-06	7496.	9643.	12870.	17912.	1.318E-06	22214.	30298.	41580.	42453.	42343.	41983.
1.202E-06	7496.	9643.	12870.	17912.	1.202E-06	22214.	30298.	41580.	42453.	42343.	41983.
1.096E-06	7496.	9643.	12870.	17912.	1.096E-06	22214.	30298.	41597.	42453.	42343.	41983.
1.000E-06	7496.	9643.	12870.	17912.	1.000E-06	22214.	30298.	41597.	42453.	42343.	41983.
Belw. Lim.	0.	0.	0.	0.	Belw. Lim.	0.	0.	0.	34.	0.	0.

PAVAN Input

Off Gas Stack to Control Room (Tower 2 320' wind and 316'-33' Delta T Stability Class; distances of 209 m and 280 m)

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1  1111
Peach Bottom                                  Stack Release
97.5 meters          10.1-96.3 meters

Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
    7    1
2584. 54.3131.4 97.5
    0    0    0    2    6    5    0
   0.   0.   0.   0.   3.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.
   6.   9.  23.  39.  87.  44.   4.   2.   0.   2.   2.   0.   1.   0.   0.   1.
   0.   9.  20.  29.  46.  44.  20.   2.  12.   7.   5.   7.   8.   9.   2.   8.
   2.   4.   9.  18.   7.   3.  13.   0.   7.   3.   2.   3.  21.   9.   3.  15.
   2.   2.   0.   1.   0.   1.   0.   0.   0.   0.   0.   2.  14.   2.   0.   1.
   0.   0.   0.   0.   0.   1.   0.   0.   0.   0.   0.   2.   2.   5.   1.   1.
   0.   2.   2.   9.   5.   0.   2.   0.   0.   0.   0.   0.   0.   0.   0.   0.
  13.  23.  18.  25.  56.  29.  10.   3.   3.   4.   3.   1.   4.   3.   4.   3.
   4.  15.  13.  15.  12.  25.  27.   8.  25.  14.  13.   8.  21.   9.   2.  22.
  10.   3.   2.   1.   1.   2.   8.   8.  31.   9.   6.  19.  27.  20.   9.  33.
   1.   2.   1.   0.   0.   1.   1.   1.   5.   2.   1.   2.  12.  14.   4.   5.
   0.   0.   0.   0.   0.   0.   0.   0.   1.   0.   0.   1.   6.   7.   0.   0.
   0.   5.  12.  15.   1.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.
  31.  22.  28.  37.  50.  65.  14.  12.  19.   5.   7.   3.   5.   5.   3.  22.
  42.  19.   9.  17.  14.  26.  62.  22.  72.  37.  30.  26.  42.  26.  26. 100.
  18.   8.   4.   3.   3.   4.  11.  10.  67.  24.  21.  31.  56.  59.  35.  93.
   4.   1.   0.   0.   1.   2.   0.   1.   9.   0.   4.   4.  29.  30.  28.  17.
   1.   4.   0.   0.   0.   0.   0.   0.   1.   0.   1.   1.  13.  27.   6.   0.
  59.  58. 108. 119. 115.  86.  45.  35.  41.  23.  32.  15.  26.  38.  36.  50.
 330. 211. 238. 336. 435. 304. 339. 243. 300. 191. 155. 128. 141.  97. 193. 385.
 521. 349. 251. 278. 331. 308. 478. 466. 708. 425. 287. 211. 301. 355. 542. 928.
 396. 154.  85.  67. 132. 140. 161. 118. 482. 166. 126. 190. 395. 674.1039. 918.
  73.  27.  13.  11.  32.  26.  14.  11.  99.  16.  16.  22. 225. 448. 543. 242.
  15.   7.  12.   2.   8.   2.   7.   7.  29.   9.   3.   6.  90. 151. 184.  63.
  60.  44.  36.  61.  60.  60.  61.  59.  70.  56.  59.  54.  54.  36.  39.  34.
 235. 164. 150. 219. 283. 200. 345. 311. 435. 320. 281. 187. 173. 138. 170. 203.
 367. 201. 156. 101. 161. 257. 349. 443. 891. 577. 354. 297. 395. 354. 519. 514.
 156.  38.  26.  11.  58.  63.  98. 165. 516. 228. 216. 271. 536. 583. 651. 468.
  23.   8.   8.   4.  12.  21.  16.  11.  64.  19.  18.  30.  78. 111.  89.  43.
   7.   1.   1.   1.  20.   4.  12.   2.   6.   4.   2.   1.   9.  12.   6.  10.
  26.  19.  22.  26.  31.  23.  28.  32.  23.  32.  32.  33.  30.  28.  26.  22.
  99.  38.  34.  29.  34.  52.  81.  90. 134. 141. 156. 117.  85.  66.  94.  97.
  81.  25.  13.   8.  13.  24.  48.  79. 130. 111. 157. 177. 198. 140. 178. 126.
   4.   1.   1.   0.   0.   2.   7.   8.  44.  23.  39. 109. 168. 138.  90.  32.
   1.   0.   0.   0.   0.   0.   0.   0.   0.   3.   0.  18.  24.  18.   0.   5.
   0.   0.   0.   0.   4.   1.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.
  11.  14.  11.  10.  13.   5.   4.   9.  17.   9.   6.  18.  13.  14.  13.  19.
  47.  19.  22.  19.  13.   6.  28.  10.  34.  31.  36.  34.  40.  35.  70.  59.
  16.   5.   4.   2.   2.   2.   8.   6.  10.  21.  51.  70.  69.  44.  92.  85.
   1.   0.   0.   0.   0.   0.   1.   1.   2.   1.   8.  26.  39.  39.   9.   5.
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   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   1.   1.   2.   0.   0.
   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   1.   0.   0.   1.
 101. 0.50 3.50 7.50 12.5 18.5 24.0 55.0
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   1.   1.   1.   1.   1.   1.   1.   1.   1.   1.   1.   1.   1.   1.   1.   1.
   1.   1.   1.   1.   1.   1.   1.   1.   1.   1.   1.   1.   1.   1.   1.   1.
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PAVAN Output

Off Gas Stack to Control Room (Tower 2 320' wind and 316'-33' Delta T Stability Class; distances of 209 m and 280 m)

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PRINTOUT OF INPUT CARDS

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   1     00010 01111 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000   2     Peach Bottom
Stack Release
   3     97.5 meters         10.1-96.3 meters
   4
   5     Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T          6          7 42872     1
   7          0.500  2584.000    54.300   131.400    97.500
   8       0.000  0.000  0.000  2.000  6.000  5.000  0.000
   9       0.000  0.000  0.000  0.000  3.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000
   9       6.000  9.000 23.000 39.000 87.000 44.000  4.000  2.000  0.000  2.000  2.000  0.000  1.000  0.000  0.000  1.000
   9       0.000  9.000 20.000 29.000 46.000 44.000 20.000  2.000 12.000  7.000  5.000  7.000  8.000  9.000  2.000  8.000
   9       2.000  4.000  9.000 18.000  7.000  3.000 13.000  0.000  7.000  3.000  2.000  3.000 21.000  9.000  3.000 15.000
   9       2.000  2.000  0.000  1.000  0.000  1.000  0.000  0.000  0.000  0.000  0.000  2.000 14.000  2.000  0.000  1.000
   9       0.000  0.000  0.000  0.000  0.000  1.000  0.000  0.000  0.000  0.000  0.000  2.000  2.000  5.000  1.000  1.000
   9       0.000  2.000  2.000  9.000  5.000  0.000  2.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000
   9      13.000 23.000 18.000 25.000 56.000 29.000 10.000  3.000  3.000  4.000  3.000  1.000  4.000  3.000  4.000  3.000
   9       4.000 15.000 13.000 15.000 12.000 25.000 27.000  8.000 25.000 14.000 13.000  8.000 21.000  9.000  2.000 22.000
   9      10.000  3.000  2.000  1.000  1.000  2.000  8.000  8.000 31.000  9.000  6.000 19.000 27.000 20.000  9.000 33.000
   9       1.000  2.000  1.000  0.000  0.000  1.000  1.000  1.000  5.000  2.000  1.000  2.000 12.000 14.000  4.000  5.000
   9       0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  1.000  0.000  0.000  1.000  6.000  7.000  0.000  0.000
   9       0.000  5.000 12.000 15.000  1.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000
   9      31.000 22.000 28.000 37.000 50.000 65.000 14.000 12.000 19.000  5.000  7.000  3.000  5.000  5.000  3.000 22.000
   9      42.000 19.000  9.000 17.000 14.000 26.000 62.000 22.000 72.000 37.000 30.000 26.000 42.000 26.000 26.000100.000
   9      18.000  8.000  4.000  3.000  3.000  4.000 11.000 10.000 67.000 24.000 21.000 31.000 56.000 59.000 35.000 93.000
   9       4.000  1.000  0.000  0.000  1.000  2.000  0.000  1.000  9.000  0.000  4.000  4.000 29.000 30.000 28.000 17.000
   9       1.000  4.000  0.000  0.000  0.000  0.000  0.000  0.000  1.000  0.000  1.000  1.000 13.000 27.000  6.000  0.000
   9      59.000 58.000108.000119.000115.000 86.000 45.000 35.000 41.000 23.000 32.000 15.000 26.000 38.000 36.000 50.000
   9     330.000211.000238.000336.000435.000304.000339.000243.000300.000191.000155.000128.000141.000 97.000193.000385.000
   9     521.000349.000251.000278.000331.000308.000478.000466.000708.000425.000287.000211.000301.000355.000542.000928.000
   9     396.000154.000 85.000 67.000132.000140.000161.000118.000482.000166.000126.000190.000395.000674.000*******918.000
   9      73.000 27.000 13.000 11.000 32.000 26.000 14.000 11.000 99.000 16.000 16.000 22.000225.000448.000543.000242.000
   9      15.000  7.000 12.000  2.000  8.000  2.000  7.000  7.000 29.000  9.000  3.000  6.000 90.000151.000184.000 63.000
   9      60.000 44.000 36.000 61.000 60.000 60.000 61.000 59.000 70.000 56.000 59.000 54.000 54.000 36.000 39.000 34.000
   9     235.000164.000150.000219.000283.000200.000345.000311.000435.000320.000281.000187.000173.000138.000170.000203.000
   9     367.000201.000156.000101.000161.000257.000349.000443.000891.000577.000354.000297.000395.000354.000519.000514.000
   9     156.000 38.000 26.000 11.000 58.000 63.000 98.000165.000516.000228.000216.000271.000536.000583.000651.000468.000
   9      23.000  8.000  8.000  4.000 12.000 21.000 16.000 11.000 64.000 19.000 18.000 30.000 78.000111.000 89.000 43.000
   9       7.000  1.000  1.000  1.000 20.000  4.000 12.000  2.000  6.000  4.000  2.000  1.000  9.000 12.000  6.000 10.000
   9      26.000 19.000 22.000 26.000 31.000 23.000 28.000 32.000 23.000 32.000 32.000 33.000 30.000 28.000 26.000 22.000
   9      99.000 38.000 34.000 29.000 34.000 52.000 81.000 90.000134.000141.000156.000117.000 85.000 66.000 94.000 97.000
   9      81.000 25.000 13.000  8.000 13.000 24.000 48.000 79.000130.000111.000157.000177.000198.000140.000178.000126.000
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  9       4.000  1.000  1.000  0.000  0.000  2.000  7.000  8.000 44.000 23.000 39.000109.000168.000138.000 90.000 32.000
  9       1.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  3.000  0.000 18.000 24.000 18.000  0.000  5.000
  9       0.000  0.000  0.000  0.000  4.000  1.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000
  9      11.000 14.000 11.000 10.000 13.000  5.000  4.000  9.000 17.000  9.000  6.000 18.000 13.000 14.000 13.000 19.000
  9      47.000 19.000 22.000 19.000 13.000  6.000 28.000 10.000 34.000 31.000 36.000 34.000 40.000 35.000 70.000 59.000
  9      16.000  5.000  4.000  2.000  2.000  2.000  8.000  6.000 10.000 21.000 51.000 70.000 69.000 44.000 92.000 85.000
  9       1.000  0.000  0.000  0.000  0.000  0.000  1.000  1.000  2.000  1.000  8.000 26.000 39.000 39.000  9.000  5.000
  9       0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  1.000  1.000  2.000  0.000  0.000
  9       0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  1.000  0.000  0.000  1.000  10        101.
0.500  3.500  7.500 12.500 18.500 24.000 55.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  11        209.   209.   209.   209.
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280.   280.   280.   280.   280.   280.   280.   280.   280.   280.  12         1.0    1.0    1.0    1.0    1.0    1.0    1.0    1.0
1.0    1.0    1.0    1.0    1.0    1.0    1.0    1.0
  12        1.0    1.0    1.0    1.0    1.0    1.0    1.0    1.0    1.0    1.0    1.0    1.0    1.0    1.0    1.0    1.0  13        500.
500.   500.   500.   500.   500.   500.   500.   500.   500.   500.   500.   500.   500.   500.   500.
  14        0.     0.     0.     0.     0.     0.     0.     0.     0.     0.     0.     0.     0.     0.     0.     0.
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USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS A
WIND SPEED (M/S)

TOWER	RELEASE	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
0.22	0.24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.56	1.69	0.000	0.000	0.000	0.000	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.007
3.35	3.61	0.014	0.021	0.054	0.091	0.203	0.103	0.009	0.005	0.000	0.005	0.005	0.000	0.002	0.000	0.000	0.002	0.513
5.59	6.02	0.000	0.021	0.047	0.068	0.107	0.103	0.047	0.005	0.028	0.016	0.012	0.016	0.019	0.021	0.005	0.019	0.532
8.27	8.91	0.005	0.009	0.021	0.042	0.016	0.007	0.030	0.000	0.016	0.007	0.005	0.007	0.049	0.021	0.007	0.035	0.278
10.73	11.56	0.005	0.005	0.000	0.002	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.005	0.033	0.005	0.000	0.002	0.058
24.59	26.49	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.012	0.002	0.002	0.028
TOTAL		0.02	0.06	0.12	0.20	0.33	0.22	0.09	0.01	0.04	0.03	0.02	0.03	0.11	0.06	0.01	0.06	1.42

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS B
WIND SPEED (M/S)

TOWER	RELEASE	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
0.22	0.24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.56	1.69	0.000	0.005	0.005	0.021	0.012	0.000	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.047
3.35	3.61	0.030	0.054	0.042	0.058	0.131	0.068	0.023	0.007	0.007	0.009	0.007	0.002	0.009	0.007	0.009	0.007	0.471
5.59	6.02	0.009	0.035	0.030	0.035	0.028	0.058	0.063	0.019	0.058	0.033	0.030	0.019	0.049	0.021	0.005	0.051	0.543
8.27	8.91	0.023	0.007	0.005	0.002	0.002	0.005	0.019	0.019	0.072	0.021	0.014	0.044	0.063	0.047	0.021	0.077	0.441
10.73	11.56	0.002	0.005	0.002	0.000	0.000	0.002	0.002	0.002	0.012	0.005	0.002	0.005	0.028	0.033	0.009	0.012	0.121
24.59	26.49	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.002	0.014	0.016	0.000	0.000	0.035
TOTAL		0.07	0.10	0.08	0.12	0.17	0.13	0.11	0.05	0.15	0.07	0.05	0.07	0.16	0.12	0.04	0.15	1.66

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS C
WIND SPEED (M/S)

TOWER	RELEASE	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
0.22	0.24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.56	1.69	0.000	0.012	0.028	0.035	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.077
3.35	3.61	0.072	0.051	0.065	0.086	0.117	0.152	0.033	0.028	0.044	0.012	0.016	0.007	0.012	0.012	0.007	0.051	0.765
5.59	6.02	0.098	0.044	0.021	0.040	0.033	0.061	0.145	0.051	0.168	0.086	0.070	0.061	0.098	0.061	0.061	0.233	1.330
8.27	8.91	0.042	0.019	0.009	0.007	0.007	0.009	0.026	0.023	0.156	0.056	0.049	0.072	0.131	0.138	0.082	0.217	1.043
10.73	11.56	0.009	0.002	0.000	0.000	0.002	0.005	0.000	0.002	0.021	0.000	0.009	0.009	0.068	0.070	0.065	0.040	0.303
24.59	26.49	0.002	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.002	0.002	0.030	0.063	0.014	0.000	0.126
TOTAL		0.22	0.14	0.12	0.17	0.16	0.23	0.20	0.10	0.39	0.15	0.15	0.15	0.34	0.34	0.23	0.54	3.64

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS D
WIND SPEED (M/S)

TOWER	RELEASE	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
0.22	0.24	0.000	0.000	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005
1.56	1.69	0.138	0.135	0.252	0.278	0.268	0.201	0.105	0.082	0.096	0.054	0.075	0.035	0.061	0.089	0.084	0.117	2.067

3.35	3.61	0.770	0.492	0.555	0.784	1.015	0.709	0.791	0.567	0.700	0.446	0.362	0.299	0.329	0.226	0.450	0.898	9.391
5.59	6.02	1.215	0.814	0.585	0.648	0.772	0.718	1.115	1.087	1.651	0.991	0.669	0.492	0.702	0.828	1.264	2.165	15.719
8.27	8.91	0.924	0.359	0.198	0.156	0.308	0.327	0.376	0.275	1.124	0.387	0.294	0.443	0.921	1.572	2.423	2.141	12.229
10.73	11.56	0.170	0.063	0.030	0.026	0.075	0.061	0.033	0.026	0.231	0.037	0.037	0.051	0.525	1.045	1.267	0.564	4.241
24.59	26.49	0.035	0.016	0.028	0.005	0.019	0.005	0.016	0.016	0.068	0.021	0.007	0.014	0.210	0.352	0.429	0.147	1.388
TOTAL		3.25	1.88	1.65	1.90	2.46	2.02	2.44	2.05	3.87	1.94	1.44	1.33	2.75	4.11	5.92	6.03	45.04

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS E

WIND SPEED (M/S)

TOWER	RELEASE	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
0.22	0.26	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.014
1.56	1.82	0.140	0.103	0.084	0.142	0.140	0.140	0.142	0.138	0.163	0.131	0.138	0.126	0.126	0.084	0.091	0.079	1.966
3.35	3.89	0.548	0.383	0.350	0.511	0.660	0.467	0.805	0.725	1.015	0.746	0.655	0.436	0.404	0.322	0.397	0.474	8.896
5.59	6.49	0.856	0.469	0.364	0.236	0.376	0.599	0.814	1.033	2.078	1.346	0.826	0.693	0.921	0.826	1.211	1.199	13.846
8.27	9.60	0.364	0.089	0.061	0.026	0.135	0.147	0.229	0.385	1.204	0.532	0.504	0.632	1.250	1.360	1.518	1.092	9.526
10.73	12.46	0.054	0.019	0.019	0.009	0.028	0.049	0.037	0.026	0.149	0.044	0.042	0.070	0.182	0.259	0.208	0.100	1.295
24.59	28.54	0.016	0.002	0.002	0.002	0.047	0.009	0.028	0.005	0.014	0.009	0.005	0.002	0.021	0.028	0.014	0.023	0.229
TOTAL		1.98	1.06	0.88	0.93	1.39	1.41	2.06	2.31	4.62	2.81	2.17	1.96	2.90	2.88	3.44	2.97	35.77

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS F

WIND SPEED (M/S)

TOWER	RELEASE	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
0.22	0.26	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.012
1.56	1.82	0.061	0.044	0.051	0.061	0.072	0.054	0.065	0.075	0.054	0.075	0.075	0.077	0.070	0.065	0.061	0.051	1.010
3.35	3.89	0.231	0.089	0.079	0.068	0.079	0.121	0.189	0.210	0.313	0.329	0.364	0.273	0.198	0.154	0.219	0.226	3.142
5.59	6.49	0.189	0.058	0.030	0.019	0.030	0.056	0.112	0.184	0.303	0.259	0.366	0.413	0.462	0.327	0.415	0.294	3.517
8.27	9.60	0.009	0.002	0.002	0.000	0.000	0.005	0.016	0.019	0.103	0.054	0.091	0.254	0.392	0.322	0.210	0.075	1.553
10.73	12.46	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.007	0.000	0.042	0.056	0.042	0.000	0.012	0.161
24.59	28.54	0.000	0.000	0.000	0.000	0.009	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.012
TOTAL		0.49	0.19	0.16	0.15	0.19	0.24	0.38	0.49	0.77	0.72	0.90	1.06	1.18	0.91	0.91	0.66	9.41

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS G

WIND SPEED (M/S)

TOWER	RELEASE	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
0.22	0.26	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.56	1.82	0.026	0.033	0.026	0.023	0.030	0.012	0.009	0.021	0.040	0.021	0.014	0.042	0.030	0.033	0.030	0.044	0.434
3.35	3.89	0.110	0.044	0.051	0.044	0.030	0.014	0.065	0.023	0.079	0.072	0.084	0.079	0.093	0.082	0.163	0.138	1.173
5.59	6.49	0.037	0.012	0.009	0.005	0.005	0.005	0.019	0.014	0.023	0.049	0.119	0.163	0.161	0.103	0.215	0.198	1.136
8.27	9.60	0.002	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.005	0.002	0.019	0.061	0.091	0.091	0.021	0.012	0.308
10.73	12.46	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.005	0.000	0.000	0.009
24.59	28.54	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.002	0.005
TOTAL		0.17	0.09	0.09	0.07	0.07	0.03	0.10	0.06	0.15	0.14	0.24	0.35	0.38	0.31	0.43	0.39	3.06

WIND MEASURED AT 97.5 METERS.
WIND SPEED CORRECTED TO THE RELEASE HEIGHT OF 131.4 METERS.

OVERALL WIND DIRECTION FREQUENCY

WIND DIRECTION:	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW
FREQUENCY:	6.2	3.5	3.1	3.5	4.8	4.3	5.4	5.1	10.0	5.9	5.0	5.0	7.8	8.7	11.0	10.8

OVERALL WIND SPEED FREQUENCY AS MEASURED ON THE TOWER:

MAX.WIND SPEED (M/S):	0.224	1.565	3.353	5.588	8.270	10.729	24.587
WIND SPEED FREQUENCY:	0.03	5.61	24.35	36.62	25.38	6.19	1.82

BUILDING AND RELEASE CHARACTERISTICS:

RELEASE HEIGHT: 131.40 METERS

MIXING VOLUME COEFFICIENT: 0.50

BUILDING CROSS-SECTIONAL AREA: 2584.00 SQUARE METERS

BOUNDARY DISTANCES (METERS) FROM THE SOURCE FOR EACH DOWNWIND SECTOR:

DOWNWIND SECTOR	S	SSW	SW	WSW	W	WNW	NW	NNW	N	NNE	NE	ENE	E	ESE	SE	SSE
BOUNDARY 1	209.	209.	209.	209.	209.	209.	209.	209.	209.	209.	209.	209.	209.	209.	209.	209.
BOUNDARY 2	280.	280.	280.	280.	280.	280.	280.	280.	280.	280.	280.	280.	280.	280.	280.	280.

DISTANCES AND TERRAIN HEIGHTS (IN METERS) AS A FUNCTION OF THE DOWNWIND SECTOR:

SECTOR	S	SSW	SW	WSW	W	WNW	NW	NNW	N	NNE	NE	ENE	E	ESE	SE	SSE
DISTANCE	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.
ELEVATION	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

THE CONVERSION FACTOR APPLIED TO THE WIND SPEED CLASSES IS 0.447

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

WINDSPEEDS ADJUSTED TO 131.4 METERS.

PERCENT OF THE TIME A GIVEN WINDSPEED IS LOWER:

WINDSPEED (METER/SEC)	CUMULATIVE FREQUENCY (PERCENT)
0.24	0.00
0.26	0.03
1.69	2.23
1.82	5.64
3.61	16.78
3.89	29.99
6.02	48.11
6.49	66.61
8.91	80.60
9.60	91.99
11.56	96.71
12.46	98.18
26.49	99.76
28.54	100.00

WINDSPEED (INTERPOLATED) (METER/SEC)	CUMULATIVE FREQUENCY (PERCENT)
0.26	0.03
1.77	5.64
3.76	29.99
6.26	66.61
9.22	91.99
11.77	98.18
26.77	100.00

LOG-NORMAL INTERPOLATION PERCENTILES

WINDSPEED (METER/SEC)	CUMULATIVE FREQUENCY (PERCENT)
0.81	1.00
1.30	3.00
1.66	5.00
2.19	10.00
2.61	15.00
3.00	20.00

3.38	25.00
3.76	30.00
4.05	35.00
4.35	40.00
4.66	45.00
4.98	50.00
5.32	55.00
5.70	60.00
6.11	65.00
6.50	70.00
6.90	75.00
7.37	80.00
8.11	85.00
8.78	90.00

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE S SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	3.6	0.23	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	4.045E-06
A	8.9	0.08	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
A	11.6	0.08	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.264E-06
B	3.6	0.49	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.15	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.38	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.04	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
C	3.6	1.16	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	1.58	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	0.68	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
C	11.6	0.15	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	6.230E-07
C	26.5	0.04	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	2.719E-07
D	0.2	0.01	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	2.22	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	12.39	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	19.57	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	14.87	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	2.74	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	0.56	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.02	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	2.25	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	8.83	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	13.78	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	5.86	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	0.86	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.26	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	0.98	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	3.72	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	3.04	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	0.15	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07
F	12.5	0.04	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.003E-07
G	1.8	0.41	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08

G	3.9	1.77	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08
G	6.5	0.60	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08
G	9.6	0.04	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.220E-08

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

SITE EXCLUSION BOUNDARY CALCULATIONS:

S SECTOR BOUNDARY DISTANCE = 209.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	4.813E-06	4.045E-06	2.858E-06	2.224E-06	1.994E-06	1.715E-06	1.640E-06	1.264E-06
0.005	0.021	0.032	0.258	0.746	2.961	4.126	4.276	4.351	4.426
0.00031	0.00131	0.00201	0.01600	0.04633	0.18394	0.25625	0.26558	0.27025	0.27491
1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07	6.875E-07	6.230E-07	6.226E-07	5.890E-07
6.679	8.257	8.632	21.025	21.062	21.738	22.715	22.865	42.430	51.255
0.41486	0.51283	0.53616	1.30589	1.30822	1.35021	1.41085	1.42018	2.63543	3.18357
4.207E-07	3.534E-07	3.243E-07	3.208E-07	2.719E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07	1.301E-07
66.127	79.909	82.650	86.368	86.406	92.264	95.306	96.170	96.733	96.883
4.10725	4.96329	5.13356	5.36448	5.36681	5.73069	5.91962	5.97327	6.00826	6.01759
1.003E-07	8.032E-08	6.449E-08	3.010E-08	1.806E-08	1.220E-08				
96.921	97.183	97.597	99.362	99.962	100.000				
6.01992	6.03625	6.06191	6.17153	6.20886	6.21119				

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(2)= 0.256
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(3)= 1.304

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(4)= 3.181
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(5)= 4.960

K	I	XQSAVE(K,I)	XQINT(K,I)	XQSLOP(K,I)
1	1	-11.07050	-16.47142	-1.19518
1	2	-13.12558	-16.30722	-1.13653
1	3	-13.77855	-17.18353	-1.53040
1	4	-14.34482	-18.94210	-2.47847
1	5	-14.85564	NUMXQ(K)= 5	

3.332E-06	0.062	1.000
2.250E-06	0.186	3.000
1.857E-06	0.311	5.000
1.419E-06	0.621	10.000
1.201E-06	0.932	15.000
1.061E-06	1.242	20.000
9.350E-07	1.553	25.000
8.354E-07	1.863	30.000
7.578E-07	2.174	35.000
6.951E-07	2.484	40.000
6.430E-07	2.795	45.000
5.990E-07	3.106	50.000
5.446E-07	3.416	55.000
4.938E-07	3.727	60.000
4.506E-07	4.037	65.000
4.134E-07	4.348	70.000
3.812E-07	4.658	75.000
1.547E-06	0.5	8.05

ANNUAL AVERAGE = 1.69E-12

K= 1 FIVEXQ(K)= 1.547E-06 FIVEPR(K)= 8.050

FUMIGATION X/Q AT THE BOUNDARY: 1.69E-04

EXPONENTIAL TERM AND FREQUENCIES

5.684E-01	5.200E-01	4.072E-01	3.613E-01	2.419E-01	2.081E-01	1.693E-02
0.376	3.981	5.032	12.967	65.322	97.183	100.000

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PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE SSW SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	3.6	0.60	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	4.045E-06
A	6.0	0.60	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	0.26	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
A	11.6	0.13	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.264E-06
B	1.7	0.13	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	6.124E-06
B	3.6	1.52	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.99	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.20	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.13	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
C	1.7	0.33	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	4.272E-06
C	3.6	1.46	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	1.26	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	0.53	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
C	11.6	0.07	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	6.230E-07
C	26.5	0.26	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	2.719E-07
D	0.2	0.01	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	3.84	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	13.96	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	23.09	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	10.19	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	1.79	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	0.46	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.02	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	2.91	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	10.85	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	13.30	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	2.51	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	0.53	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.07	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	1.26	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	2.51	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	1.65	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	0.07	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07

G	1.8	0.93	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	1.26	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08
G	6.5	0.33	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

SITE EXCLUSION BOUNDARY CALCULATIONS:

SSW SECTOR BOUNDARY DISTANCE = 209.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	6.124E-06	4.813E-06	4.272E-06	4.045E-06	2.858E-06	2.427E-06	2.224E-06	1.994E-06
0.009	0.029	0.162	0.176	0.507	1.102	2.624	3.219	7.056	8.511
0.00031	0.00104	0.00570	0.00621	0.01788	0.03887	0.09252	0.11351	0.24880	0.30011
1.715E-06	1.640E-06	1.264E-06	1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07	6.875E-07
9.504	9.768	9.901	12.811	14.068	14.267	28.225	28.357	28.886	30.143
0.33510	0.34443	0.34909	0.45172	0.49604	0.50304	0.99520	0.99987	1.01853	1.06285
6.230E-07	6.226E-07	5.890E-07	4.207E-07	3.534E-07	3.243E-07	3.208E-07	2.719E-07	2.388E-07	1.925E-07
30.209	53.296	64.145	74.333	87.630	89.416	91.929	92.194	94.708	96.362
1.06518	1.87923	2.26176	2.62097	3.08981	3.15279	3.24142	3.25075	3.33939	3.39770
1.841E-07	1.415E-07	1.301E-07	8.032E-08	6.449E-08	3.010E-08	1.806E-08			
96.891	97.354	97.420	97.486	98.412	99.669	100.000			
3.41636	3.43269	3.43502	3.43736	3.47001	3.51433	3.52599			

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(2)= 0.249
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(3)= 0.994

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HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   2.259
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   3.087

 K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
 2  1     -11.07050 -16.20624  -1.13559
 2  2     -13.01641 -17.47309  -1.58660
 2  3     -13.77855 -17.82714  -1.73864
 2  4     -14.34482 -21.93911  -3.79166
 2  5     -14.85564     NUMXQ(K)=  5
   4.290E-06              0.035              1.000
   3.004E-06              0.106              3.000
   2.517E-06              0.176              5.000
   1.855E-06              0.353             10.000
   1.490E-06              0.529             15.000
   1.268E-06              0.705             20.000
   1.115E-06              0.881             25.000
   9.970E-07              1.058             30.000
   9.001E-07              1.234             35.000
   8.223E-07              1.410             40.000
   7.583E-07              1.587             45.000
   7.044E-07              1.763             50.000
   6.583E-07              1.939             55.000
   6.184E-07              2.116             60.000
   5.767E-07              2.292             65.000
   5.119E-07              2.468             70.000
   4.575E-07              2.644             75.000
   4.114E-07              2.821             80.000
   3.719E-07              2.997             85.000

   1.537E-06              0.5               14.18

ANNUAL AVERAGE =   3.71E-12

K=  2     FIVEXQ(K)= 1.537E-06     FIVEPR(K)=14.180

FUMIGATION X/Q AT THE BOUNDARY:   1.69E-04

 EXPONENTIAL TERM AND FREQUENCIES

   5.684E-01   5.200E-01   4.072E-01   3.613E-01   2.419E-01   2.081E-01   1.693E-02
       1.588       5.491       8.467      13.973      67.300      97.486     100.000
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USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE SW SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	3.6	1.73	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	4.045E-06
A	6.0	1.50	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	0.68	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
B	1.7	0.15	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	6.124E-06
B	3.6	1.35	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.98	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.15	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.08	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
C	1.7	0.90	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	4.272E-06
C	3.6	2.10	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	0.68	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	0.30	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
D	0.2	0.02	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	8.10	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	17.86	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	18.83	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	6.38	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	0.98	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	0.90	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.02	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	2.70	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	11.25	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	11.71	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	1.95	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	0.60	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.08	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.02	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	1.65	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	2.55	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	0.98	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	0.08	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07
G	1.8	0.83	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	1.65	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08

G	6.5	0.30	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

SITE EXCLUSION BOUNDARY CALCULATIONS:

SW SECTOR BOUNDARY DISTANCE = 209.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	6.124E-06	4.813E-06	4.272E-06	4.045E-06	2.858E-06	2.427E-06	2.224E-06	1.994E-06
0.018	0.038	0.188	0.207	1.107	2.833	4.183	5.684	13.788	15.888
0.00057	0.00117	0.00583	0.00642	0.03441	0.08806	0.13005	0.17670	0.42861	0.49392
1.715E-06	1.640E-06	1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07	6.875E-07	6.226E-07
16.864	17.539	20.240	20.916	21.066	38.923	38.999	39.299	40.949	59.783
0.52424	0.54524	0.62921	0.65020	0.65487	1.21001	1.21234	1.22167	1.27298	1.85845
5.890E-07	4.207E-07	3.534E-07	3.243E-07	3.208E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07	1.301E-07
71.037	77.415	89.120	90.096	92.647	94.598	95.573	96.173	97.074	97.149
2.20833	2.40659	2.77047	2.80079	2.88009	2.94074	2.97106	2.98972	3.01771	3.02005
8.032E-08	6.449E-08	3.010E-08	1.806E-08						
97.224	98.049	99.700	100.000						
3.02238	3.04804	3.09935	3.10868						

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(2)= 0.088
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(3)= 0.428

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HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   1.209
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   2.206
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   2.768

 K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
 3  1     -11.07050 -15.76030  -1.06849
 3  2     -12.41800 -16.16917  -1.19920
 3  3     -13.01641 -18.36423  -2.03412
 3  4     -13.77855 -19.06598  -2.34541
 3  5     -14.34482 -24.96016  -5.27354
 3  6     -14.85564     NUMXQ(K)=  6
   5.539E-06              0.031              1.000
   3.964E-06              0.093              3.000
   3.295E-06              0.155              5.000
   2.529E-06              0.311             10.000
   2.097E-06              0.466             15.000
   1.710E-06              0.622             20.000
   1.453E-06              0.777             25.000
   1.268E-06              0.933             30.000
   1.127E-06              1.088             35.000
   1.012E-06              1.243             40.000
   9.092E-07              1.399             45.000
   8.246E-07              1.554             50.000
   7.539E-07              1.710             55.000
   6.940E-07              1.865             60.000
   6.424E-07              2.021             65.000
   5.976E-07              2.176             70.000
   5.221E-07              2.332             75.000
   4.518E-07              2.487             80.000
   3.938E-07              2.642             85.000

   1.997E-06              0.5               16.08

ANNUAL AVERAGE =   8.69E-12

K=  3     FIVEXQ(K)= 1.997E-06     FIVEPR(K)=16.084

FUMIGATION X/Q AT THE BOUNDARY:   1.69E-04

 EXPONENTIAL TERM AND FREQUENCIES

   5.684E-01   5.200E-01   4.072E-01   3.613E-01   2.419E-01   2.081E-01   1.693E-02
       3.902       7.878      10.580      15.851      68.917      97.224     100.000
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USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE WSW SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	3.6	2.58	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	4.045E-06
A	6.0	1.92	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	1.19	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
A	11.6	0.07	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.264E-06
B	1.7	0.59	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	6.124E-06
B	3.6	1.65	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.99	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.07	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
C	1.7	0.99	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	4.272E-06
C	3.6	2.44	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	1.12	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	0.20	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
D	0.2	0.02	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	7.86	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	22.19	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	18.36	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	4.43	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	0.73	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	0.13	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.03	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	4.03	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	14.46	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	6.67	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	0.73	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	0.26	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.07	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.02	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	1.72	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	1.92	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	0.53	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
G	1.8	0.66	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	1.25	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08
G	6.5	0.13	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

SITE EXCLUSION BOUNDARY CALCULATIONS:

WSW SECTOR BOUNDARY DISTANCE = 209.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	6.124E-06	4.813E-06	4.272E-06	4.045E-06	2.858E-06	2.427E-06	2.224E-06	1.994E-06
0.018	0.046	0.641	0.661	1.651	4.227	5.879	7.794	15.654	18.098
0.00063	0.00164	0.02263	0.02333	0.05832	0.14929	0.20760	0.27524	0.55282	0.63912
1.715E-06	1.640E-06	1.264E-06	1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.082E-07	6.875E-07	6.226E-07
19.089	20.278	20.344	24.373	25.496	25.562	47.754	47.953	49.670	68.032
0.67411	0.71609	0.71842	0.86071	0.90036	0.90269	1.68642	1.69342	1.75407	2.40251
5.890E-07	4.207E-07	3.534E-07	3.243E-07	3.208E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07	8.032E-08
82.497	86.922	93.593	94.320	96.235	96.962	97.490	97.754	97.886	97.952
2.91333	3.06961	3.30519	3.33085	3.39849	3.42415	3.44281	3.45214	3.45681	3.45914
6.449E-08	3.010E-08	1.806E-08							
98.613	99.868	100.000							
3.48247	3.52678	3.53145							

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(3)= 0.552
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(4)= 1.685

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(5)= 2.911

K	I	XQSAVE(K,I)	XQINT(K,I)	XQSLOP(K,I)
4	1	-11.07050	-15.27913	-0.96350
4	2	-12.41800	-16.56801	-1.39754
4	3	-13.01641	-17.65467	-1.82513
4	4	-13.77855	-19.01550	-2.46590
4	5	-14.34482	NUMXQ(K)= 5	

6.050E-06	0.035	1.000
4.471E-06	0.106	3.000
3.762E-06	0.177	5.000
2.753E-06	0.353	10.000
2.270E-06	0.530	15.000
1.898E-06	0.706	20.000
1.636E-06	0.883	25.000
1.445E-06	1.059	30.000
1.297E-06	1.236	35.000
1.180E-06	1.413	40.000
1.084E-06	1.589	45.000
9.912E-07	1.766	50.000
9.005E-07	1.942	55.000
8.240E-07	2.119	60.000
7.585E-07	2.295	65.000
7.019E-07	2.472	70.000
6.524E-07	2.649	75.000
6.089E-07	2.825	80.000
2.335E-06	0.5	14.16

ANNUAL AVERAGE = 1.44E-11

K= 4 FIVEXQ(K)= 2.335E-06 FIVEPR(K)=14.158

FUMIGATION X/Q AT THE BOUNDARY: 1.69E-04

EXPONENTIAL TERM AND FREQUENCIES

5.684E-01	5.200E-01	4.072E-01	3.613E-01	2.419E-01	2.081E-01	1.693E-02
5.746	10.502	13.804	17.985	71.702	97.952	100.000

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE W SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	1.7	0.15	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	8.668E-06
A	3.6	4.26	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	4.045E-06
A	6.0	2.25	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	0.34	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
B	1.7	0.24	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	6.124E-06
B	3.6	2.74	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.59	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.05	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
C	1.7	0.05	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	4.272E-06
C	3.6	2.45	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	0.68	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	0.15	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
C	11.6	0.05	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	6.230E-07
D	0.2	0.01	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	5.63	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	21.28	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	16.19	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	6.46	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	1.57	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	0.39	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.02	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	2.94	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	13.85	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	7.88	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	2.84	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	0.59	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.98	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.02	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	1.52	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	1.66	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	0.64	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	28.5	0.20	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.375E-08
G	1.8	0.64	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08

G	3.9	0.64	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08
G	6.5	0.10	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

SITE EXCLUSION BOUNDARY CALCULATIONS:

W SECTOR BOUNDARY DISTANCE = 209.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	8.668E-06	6.124E-06	4.813E-06	4.272E-06	4.045E-06	2.858E-06	2.427E-06	2.224E-06
0.013	0.034	0.180	0.425	0.442	0.491	4.748	7.487	9.738	15.364
0.00061	0.00160	0.00860	0.02026	0.02110	0.02343	0.22636	0.35698	0.46428	0.73252
1.994E-06	1.715E-06	1.640E-06	1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.082E-07	6.875E-07	6.230E-07
17.810	18.397	18.740	21.675	22.360	22.409	43.690	43.837	45.353	45.402
0.84914	0.87713	0.89346	1.03341	1.06607	1.06840	2.08305	2.09005	2.16235	2.16469
6.226E-07	5.890E-07	4.207E-07	3.534E-07	3.243E-07	3.208E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07
61.596	75.441	81.899	89.775	91.341	93.004	95.842	96.478	97.065	97.456
2.93675	3.59686	3.90475	4.28029	4.35493	4.43423	4.56952	4.59984	4.62783	4.64649
8.032E-08	6.449E-08	4.375E-08	3.010E-08	1.806E-08					
98.434	99.070	99.266	99.902	100.000					
4.69314	4.72347	4.73280	4.76312	4.76779					

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(3)= 0.732
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(4)= 2.081

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(5)= 3.594
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(6)= 4.431

K	I	XQSAVE(K,I)	XQINT(K,I)	XQSLOP(K,I)
5	1	-11.07050	-14.90832	-0.87711
5	2	-12.41800	-16.68802	-1.50394
5	3	-13.01641	-17.62189	-1.88646
5	4	-13.77855	-18.63791	-2.38516
5	5	-14.34482	-25.59808	-6.25210
5	6	-14.95230	NUMXQ(K)= 6	

6.082E-06	0.048	1.000
4.587E-06	0.143	3.000
3.946E-06	0.238	5.000
2.792E-06	0.477	10.000
2.253E-06	0.715	15.000
1.853E-06	0.954	20.000
1.580E-06	1.192	25.000
1.382E-06	1.430	30.000
1.231E-06	1.669	35.000
1.111E-06	1.907	40.000
1.008E-06	2.146	45.000
9.065E-07	2.384	50.000
8.225E-07	2.622	55.000
7.516E-07	2.861	60.000
6.910E-07	3.099	65.000
6.385E-07	3.337	70.000
5.928E-07	3.576	75.000
4.980E-07	3.814	80.000
4.178E-07	4.053	85.000
3.535E-07	4.291	90.000
2.724E-06	0.5	10.49

ANNUAL AVERAGE = 2.88E-11

K= 5 FIVEXQ(K)= 2.724E-06 FIVEPR(K)=10.487

FUMIGATION X/Q AT THE BOUNDARY: 1.69E-04

EXPONENTIAL TERM AND FREQUENCIES

5.684E-01	5.200E-01	4.072E-01	3.613E-01	2.419E-01	2.081E-01	1.693E-02
6.996	10.372	13.992	18.021	69.549	98.630	100.000

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE WNW SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	3.6	2.40	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	4.045E-06
A	6.0	2.40	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	0.16	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
A	11.6	0.05	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.264E-06
A	26.5	0.05	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	5.516E-07
B	3.6	1.58	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	1.36	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.11	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.05	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
C	3.6	3.54	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	1.42	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	0.22	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
C	11.6	0.11	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	6.230E-07
D	0.2	0.01	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	4.69	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	16.58	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	16.79	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	7.63	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	1.42	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	0.11	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.02	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	3.27	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	10.91	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	14.01	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	3.44	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	1.15	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.22	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	1.25	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	2.84	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	1.31	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	0.11	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07
F	28.5	0.05	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.375E-08

G	1.8	0.27	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	0.33	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08
G	6.5	0.11	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

SITE EXCLUSION BOUNDARY CALCULATIONS:

WNW SECTOR BOUNDARY DISTANCE = 209.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	4.813E-06	4.045E-06	2.858E-06	2.427E-06	2.224E-06	1.994E-06	1.715E-06	1.640E-06
0.011	0.034	0.048	2.448	4.029	6.428	11.118	14.662	16.025	16.189
0.00045	0.00145	0.00207	0.10470	0.17234	0.27497	0.47557	0.62719	0.68550	0.69250
1.264E-06	1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07	6.875E-07	6.230E-07	6.226E-07
16.243	19.515	20.933	21.042	37.619	37.673	37.891	39.146	39.255	56.050
0.69483	0.83478	0.89543	0.90009	1.60918	1.61151	1.62084	1.67449	1.67915	2.39757
5.890E-07	5.516E-07	4.207E-07	3.534E-07	3.243E-07	3.208E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07
66.955	67.010	74.644	88.658	90.076	92.911	96.347	97.655	98.800	98.909
2.86408	2.86641	3.19296	3.79242	3.85307	3.97436	4.12131	4.17729	4.22627	4.23094
1.301E-07	8.032E-08	6.449E-08	4.375E-08	3.010E-08	1.806E-08				
99.018	99.237	99.509	99.564	99.891	100.000				
4.23560	4.24493	4.25659	4.25893	4.27292	4.27759				

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(3)= 0.626
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(4)= 1.607

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HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   2.861
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   3.789

  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
  6  1     -11.07050 -15.46296  -0.98963
  6  2     -12.41800 -16.17186  -1.22003
  6  3     -13.12558 -17.72706  -1.84289
  6  4     -13.77855 -18.81308  -2.34976
  6  5     -14.34482 -22.06134  -4.05796
  6  6     -14.85564     NUMXQ(K)=  6
    5.219E-06              0.043              1.000
    3.754E-06              0.128              3.000
    3.094E-06              0.214              5.000
    2.344E-06              0.428             10.000
    1.964E-06              0.642             15.000
    1.621E-06              0.856             20.000
    1.391E-06              1.069             25.000
    1.223E-06              1.283             30.000
    1.094E-06              1.497             35.000
    9.792E-07              1.711             40.000
    8.749E-07              1.925             45.000
    7.896E-07              2.139             50.000
    7.187E-07              2.353             55.000
    6.586E-07              2.567             60.000
    6.072E-07              2.780             65.000
    5.441E-07              2.994             70.000
    4.806E-07              3.208             75.000
    4.273E-07              3.422             80.000
    3.822E-07              3.636             85.000

    2.196E-06              0.5               11.69

ANNUAL AVERAGE =   1.63E-11

K=  6     FIVEXQ(K)= 2.196E-06     FIVEPR(K)=11.689

FUMIGATION X/Q AT THE BOUNDARY:   1.69E-04

 EXPONENTIAL TERM AND FREQUENCIES

   5.684E-01   5.200E-01   4.072E-01   3.613E-01   2.419E-01   2.081E-01   1.693E-02
       5.071      10.361      13.469      19.045      66.278      99.291     100.000
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USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE NW SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	3.6	0.17	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	4.045E-06
A	6.0	0.87	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	0.56	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
B	1.7	0.09	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	6.124E-06
B	3.6	0.43	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	1.17	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.35	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.04	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
C	3.6	0.61	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	2.69	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	0.48	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
D	0.2	0.00	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	1.95	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	14.72	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	20.76	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	6.99	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	0.61	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	0.30	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.02	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	2.65	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	14.98	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	15.16	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	4.26	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	0.69	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.52	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	1.22	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	3.52	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	2.08	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	0.30	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07
G	1.8	0.17	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	1.22	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08
G	6.5	0.35	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08

G	9.6	0.04	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.220E-08

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

SITE EXCLUSION BOUNDARY CALCULATIONS:

NW SECTOR BOUNDARY DISTANCE = 209.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	6.124E-06	4.813E-06	4.045E-06	2.858E-06	2.427E-06	2.224E-06	1.994E-06	1.715E-06
0.004	0.023	0.110	0.124	0.298	0.732	1.601	3.555	4.163	5.335
0.00024	0.00125	0.00591	0.00667	0.01600	0.03932	0.08597	0.19094	0.22359	0.28657
1.640E-06	1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07	6.875E-07	6.226E-07	5.890E-07
5.900	8.548	11.241	11.588	26.309	26.352	26.830	28.046	48.803	63.784
0.31689	0.45918	0.60380	0.62246	1.41318	1.41551	1.44117	1.50648	2.62143	3.42615
4.207E-07	3.534E-07	3.243E-07	3.208E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07	1.301E-07	8.032E-08
70.775	85.931	86.538	90.056	94.311	96.396	97.091	97.395	97.698	98.220
3.80169	4.61574	4.64839	4.83733	5.06591	5.17788	5.21520	5.23152	5.24785	5.27584
6.449E-08	3.010E-08	1.806E-08	1.220E-08						
98.393	99.609	99.957	100.000						
5.28517	5.35048	5.36914	5.37148						

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(2)= 0.191
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(3)= 1.412

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HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   3.423
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   4.612

  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
  7  1     -11.07050 -16.36184  -1.15635
  7  2     -13.01641 -16.17063  -1.09026
  7  3     -13.77855 -17.11755  -1.52184
  7  4     -14.34482 -21.07552  -3.69421
  7  5     -14.85564     NUMXQ(K)=  5
    3.440E-06              0.054              1.000
    2.364E-06              0.161              3.000
    1.975E-06              0.269              5.000
    1.532E-06              0.537             10.000
    1.308E-06              0.806             15.000
    1.164E-06              1.074             20.000
    1.060E-06              1.343             25.000
    9.586E-07              1.611             30.000
    8.718E-07              1.880             35.000
    8.016E-07              2.149             40.000
    7.432E-07              2.417             45.000
    6.938E-07              2.686             50.000
    6.513E-07              2.954             55.000
    6.141E-07              3.223             60.000
    5.707E-07              3.491             65.000
    5.038E-07              3.760             70.000
    4.478E-07              4.029             75.000
    4.005E-07              4.297             80.000
    3.603E-07              4.566             85.000

    1.574E-06              0.5                9.31

ANNUAL AVERAGE =   4.58E-12

K=  7     FIVEXQ(K)= 1.574E-06     FIVEPR(K)= 9.308

FUMIGATION X/Q AT THE BOUNDARY:   1.69E-04

 EXPONENTIAL TERM AND FREQUENCIES

   5.684E-01   5.200E-01   4.072E-01   3.613E-01   2.419E-01   2.081E-01   1.693E-02
       1.607       5.385       7.469      14.605      59.944      98.220     100.000
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USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE NNW SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	3.6	0.09	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	4.045E-06
A	6.0	0.09	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
B	3.6	0.14	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.37	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.37	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.05	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
C	3.6	0.55	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	1.01	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	0.46	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
C	11.6	0.05	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	6.230E-07
D	0.2	0.00	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	1.61	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	11.17	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	21.42	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	5.42	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	0.51	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	0.32	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.02	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	2.71	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	14.29	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	20.36	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	7.58	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	0.51	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.09	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.02	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	1.47	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	4.14	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	3.63	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	0.37	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07
G	1.8	0.41	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	0.46	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08
G	6.5	0.28	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08
G	9.6	0.05	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.220E-08

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

SITE EXCLUSION BOUNDARY CALCULATIONS:

NNW SECTOR BOUNDARY DISTANCE = 209.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	4.813E-06	4.045E-06	2.858E-06	2.427E-06	2.224E-06	1.994E-06	1.715E-06	1.262E-06
0.004	0.023	0.040	0.132	0.270	0.362	1.970	2.522	2.889	5.601
0.00018	0.00116	0.00203	0.00669	0.01369	0.01835	0.09999	0.12798	0.14664	0.28426
1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07	6.875E-07	6.230E-07	6.226E-07	5.890E-07	4.207E-07
6.612	6.980	18.148	18.194	18.653	20.124	20.170	41.587	55.880	61.303
0.33558	0.35424	0.92104	0.92337	0.94670	1.02134	1.02367	2.11063	2.83604	3.11128
3.534E-07	3.243E-07	3.208E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07	1.301E-07	8.032E-08	6.449E-08
81.662	82.168	86.304	93.887	97.518	98.024	98.345	98.713	98.805	99.219
4.14459	4.17025	4.38017	4.76504	4.94931	4.97497	4.99130	5.00996	5.01462	5.03561
3.010E-08	1.806E-08	1.220E-08							
99.678	99.954	100.000							
5.05894	5.07293	5.07527							

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(2)= 0.100
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(3)= 0.920

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HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   2.833
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   4.141

  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
  8  1     -11.07050 -16.92746  -1.26549
  8  2     -13.01641 -16.22955  -1.03967
  8  3     -13.77855 -16.73458  -1.25389
  8  4     -14.34482 -20.02675  -2.98127
  8  5     -14.85564     NUMXQ(K)=  5
    2.850E-06              0.051              1.000
    1.948E-06              0.152              3.000
    1.648E-06              0.254              5.000
    1.296E-06              0.508             10.000
    1.116E-06              0.761             15.000
    9.915E-07              1.015             20.000
    8.911E-07              1.269             25.000
    8.147E-07              1.523             30.000
    7.539E-07              1.776             35.000
    7.039E-07              2.030             40.000
    6.618E-07              2.284             45.000
    6.256E-07              2.538             50.000
    5.941E-07              2.791             55.000
    5.366E-07              3.045             60.000
    4.825E-07              3.299             65.000
    4.367E-07              3.553             70.000
    3.975E-07              3.806             75.000
    3.637E-07              4.060             80.000

    1.303E-06              0.5                9.85

ANNUAL AVERAGE =   7.25E-13

K=  8     FIVEXQ(K)= 1.303E-06     FIVEPR(K)= 9.852

FUMIGATION X/Q AT THE BOUNDARY:   1.69E-04

 EXPONENTIAL TERM AND FREQUENCIES

   5.684E-01   5.200E-01   4.072E-01   3.613E-01   2.419E-01   2.081E-01   1.693E-02
       0.184       2.252       3.171      12.793      53.241      98.805     100.000
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USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE N SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	6.0	0.28	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	0.16	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
B	3.6	0.07	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.58	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.72	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.12	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
B	26.5	0.02	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	3.897E-07
C	3.6	0.44	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	1.68	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	1.56	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
C	11.6	0.21	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	6.230E-07
C	26.5	0.02	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	2.719E-07
D	0.2	0.00	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	0.96	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	7.00	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	16.51	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	11.24	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	2.31	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	0.68	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.01	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	1.63	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	10.14	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	20.78	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	12.03	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	1.49	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.14	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	0.54	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	3.13	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	3.03	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	1.03	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07
G	1.8	0.40	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	0.79	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08

G	6.5	0.23	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08
G	9.6	0.05	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.220E-08

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

SITE EXCLUSION BOUNDARY CALCULATIONS:

N SECTOR BOUNDARY DISTANCE = 209.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	4.813E-06	2.858E-06	2.427E-06	2.224E-06	1.994E-06	1.715E-06	1.640E-06	1.262E-06
0.002	0.014	0.020	0.090	0.370	1.326	1.769	2.352	2.515	4.148
0.00022	0.00138	0.00200	0.00900	0.03699	0.13262	0.17694	0.23525	0.25158	0.41485
1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07	6.875E-07	6.230E-07	6.226E-07	5.890E-07	4.207E-07
5.827	6.550	13.547	13.663	15.226	15.762	15.972	32.484	42.629	53.870
0.58280	0.65510	1.35486	1.36652	1.52280	1.57645	1.59744	3.24887	4.26352	5.38780
3.897E-07	3.534E-07	3.243E-07	3.208E-07	2.719E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07	1.301E-07
53.893	74.673	76.981	80.107	80.130	92.164	95.196	96.688	97.365	98.391
5.39013	7.46841	7.69933	8.01189	8.01422	9.21780	9.52103	9.67031	9.73795	9.84058
8.032E-08	6.449E-08	3.010E-08	1.806E-08	1.220E-08					
98.531	98.927	99.720	99.953	100.000					
9.85458	9.89423	9.97354	9.99686	10.00153					

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(2)= 0.132
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(4)= 4.260

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(5)= 7.465

K	I	XQSAVE(K,I)	XQINT(K,I)	XQSLOP(K,I)
9	1	-11.07050	-16.69575	-1.22412
9	2	-13.01641	-15.89735	-0.95849
9	3	-13.77855	-16.33691	-1.15733
9	4	-14.34482	-17.49364	-1.82936
9	5	-14.85564	NUMXQ(K)= 5	

2.467E-06	0.100	1.000
1.737E-06	0.300	3.000
1.473E-06	0.500	5.000
1.160E-06	1.000	10.000
9.906E-07	1.500	15.000
8.658E-07	2.000	20.000
7.767E-07	2.500	25.000
7.087E-07	3.000	30.000
6.544E-07	3.501	35.000
6.096E-07	4.001	40.000
5.621E-07	4.501	45.000
5.124E-07	5.001	50.000
4.705E-07	5.501	55.000
4.345E-07	6.001	60.000
4.034E-07	6.501	65.000
3.761E-07	7.001	70.000
1.473E-06	0.5	5.00

ANNUAL AVERAGE = 2.12E-12

K= 9 FIVEXQ(K)= 1.473E-06 FIVEPR(K)= 4.999

FUMIGATION X/Q AT THE BOUNDARY: 1.69E-04

EXPONENTIAL TERM AND FREQUENCIES

5.684E-01	5.200E-01	4.072E-01	3.613E-01	2.419E-01	2.081E-01	1.693E-02
0.443	4.361	5.877	13.603	52.296	98.531	100.000

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE NNE SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	3.6	0.08	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	4.045E-06
A	6.0	0.28	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	0.12	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
B	3.6	0.16	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.56	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.36	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.08	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
C	3.6	0.20	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	1.47	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	0.95	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
D	0.2	0.00	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	0.91	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	7.60	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	16.91	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	6.60	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	0.64	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	0.36	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.02	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	2.23	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	12.73	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	22.95	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	9.07	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	0.76	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.16	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	1.27	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	5.61	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	4.42	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	0.91	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07
F	12.5	0.12	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.003E-07
G	1.8	0.36	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	1.23	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08
G	6.5	0.84	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08

G	9.6	0.04	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.220E-08

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

SITE EXCLUSION BOUNDARY CALCULATIONS:

NNE SECTOR BOUNDARY DISTANCE = 209.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	4.813E-06	4.045E-06	2.858E-06	2.427E-06	2.224E-06	1.994E-06	1.715E-06	1.640E-06
0.002	0.018	0.033	0.112	0.271	0.550	1.465	1.664	2.221	2.340
0.00012	0.00105	0.00191	0.00658	0.01591	0.03224	0.08588	0.09755	0.13020	0.13720
1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07	6.875E-07	6.226E-07	5.890E-07	4.207E-07
4.568	6.039	6.397	13.995	14.075	15.030	16.303	33.209	45.939	52.542
0.26782	0.35412	0.37512	0.82063	0.82529	0.88127	0.95592	1.94724	2.69365	3.08085
3.534E-07	3.243E-07	3.208E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07	1.301E-07	1.003E-07	8.032E-08
75.495	76.132	81.741	90.811	95.226	95.982	96.340	97.255	97.375	97.534
4.42671	4.46403	4.79292	5.32473	5.58364	5.62796	5.64895	5.70260	5.70960	5.71893
6.449E-08	3.010E-08	1.806E-08	1.220E-08						
97.892	99.125	99.960	100.000						
5.73992	5.81223	5.86121	5.86355						

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(2)= 0.001
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(3)= 0.086

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HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   0.820
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   2.691
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   4.423

  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
 10  1     -11.07050 -16.86574  -1.22926
 10  2     -11.63677 -16.88443  -1.23365
 10  3     -13.01641 -16.26591  -1.03638
 10  4     -13.77855 -16.65940  -1.20033
 10  5     -14.34482 -18.72800  -2.27310
 10  6     -14.85564     NUMXQ(K)=  6
    2.548E-06              0.059              1.000
    1.776E-06              0.176              3.000
    1.500E-06              0.293              5.000
    1.176E-06              0.586             10.000
    1.006E-06              0.880             15.000
    8.839E-07              1.173             20.000
    7.964E-07              1.466             25.000
    7.297E-07              1.759             30.000
    6.764E-07              2.052             35.000
    6.325E-07              2.345             40.000
    5.954E-07              2.639             45.000
    5.416E-07              2.932             50.000
    4.920E-07              3.225             55.000
    4.501E-07              3.518             60.000
    4.142E-07              3.811             65.000
    3.831E-07              4.104             70.000
    3.559E-07              4.398             75.000

    1.246E-06              0.5                8.53

ANNUAL AVERAGE =   1.62E-12

K= 10     FIVEXQ(K)= 1.246E-06     FIVEPR(K)= 8.527

FUMIGATION X/Q AT THE BOUNDARY:   1.69E-04

 EXPONENTIAL TERM AND FREQUENCIES

   5.684E-01   5.200E-01   4.072E-01   3.613E-01   2.419E-01   2.081E-01   1.693E-02
       0.477       3.103       4.256      16.603      49.623      97.534     100.000
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USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE NE SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	3.6	0.09	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	4.045E-06
A	6.0	0.23	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	0.09	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
B	3.6	0.14	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.61	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.28	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.05	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
C	3.6	0.33	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	1.41	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	0.99	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
C	11.6	0.19	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	6.230E-07
C	26.5	0.05	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	2.719E-07
D	0.2	0.00	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	1.50	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	7.28	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	13.48	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	5.92	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	0.75	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	0.14	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.02	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	2.77	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	13.19	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	16.62	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	10.14	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	0.85	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.09	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.02	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	1.50	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	7.32	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	7.37	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	1.83	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07
G	1.8	0.28	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	1.69	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08

G	6.5	2.39	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08
G	9.6	0.38	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.220E-08

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

SITE EXCLUSION BOUNDARY CALCULATIONS:

NE SECTOR BOUNDARY DISTANCE = 209.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	4.813E-06	4.045E-06	2.858E-06	2.427E-06	2.224E-06	1.994E-06	1.715E-06	1.640E-06
0.003	0.023	0.040	0.134	0.275	0.510	2.012	2.341	2.951	3.045
0.00017	0.00115	0.00201	0.00667	0.01367	0.02534	0.09998	0.11630	0.14663	0.15129
1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07	6.875E-07	6.230E-07	6.226E-07	5.890E-07
5.815	7.224	7.506	14.783	14.830	15.816	17.319	17.506	30.981	44.175
0.28891	0.35889	0.37288	0.73442	0.73676	0.78574	0.86038	0.86971	1.53914	2.19458
4.207E-07	3.534E-07	3.243E-07	3.208E-07	2.719E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07	1.301E-07
50.091	66.711	67.463	74.787	74.834	84.976	92.347	93.192	93.333	95.164
2.48848	3.31419	3.35152	3.71539	3.71772	4.22155	4.58775	4.62974	4.63674	4.72770
8.032E-08	6.449E-08	3.010E-08	1.806E-08	1.220E-08					
95.258	95.540	97.230	99.624	100.000					
4.73237	4.74636	4.83034	4.94929	4.96795					

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(2)= 0.100
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(3)= 0.734

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(4)= 2.192
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(5)= 3.712

K	I	XQSAVE(K,I)	XQINT(K,I)	XQSLOP(K,I)
11	1	-11.07050	-16.88108	-1.25046
11	2	-13.01641	-16.63911	-1.17217
11	3	-13.77855	-17.03136	-1.33290
11	4	-14.34482	-19.65802	-2.63609
11	5	-14.95230	NUMXQ(K)= 5	

2.862E-06	0.050	1.000
1.931E-06	0.149	3.000
1.599E-06	0.248	5.000
1.220E-06	0.497	10.000
1.030E-06	0.745	15.000
8.947E-07	0.994	20.000
7.990E-07	1.242	25.000
7.266E-07	1.490	30.000
6.693E-07	1.739	35.000
6.223E-07	1.987	40.000
5.771E-07	2.236	45.000
5.130E-07	2.484	50.000
4.604E-07	2.732	55.000
4.164E-07	2.981	60.000
3.792E-07	3.229	65.000
3.474E-07	3.478	70.000
1.217E-06	0.5	10.06

ANNUAL AVERAGE = 1.28E-12

K= 11 FIVEXQ(K)= 1.217E-06 FIVEPR(K)=10.065

FUMIGATION X/Q AT THE BOUNDARY: 1.69E-04

EXPONENTIAL TERM AND FREQUENCIES

5.684E-01	5.200E-01	4.072E-01	3.613E-01	2.419E-01	2.081E-01	1.693E-02
0.423	3.381	4.460	22.507	51.573	95.258	100.000

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE ENE SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	6.0	0.33	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	0.14	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
A	11.6	0.09	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.264E-06
A	26.5	0.09	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	5.516E-07
B	3.6	0.05	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.38	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.89	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.09	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
B	26.5	0.05	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	3.897E-07
C	3.6	0.14	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	1.22	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	1.46	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
C	11.6	0.19	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	6.230E-07
C	26.5	0.05	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	2.719E-07
D	0.2	0.00	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	0.71	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	6.02	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	9.93	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	8.94	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	1.03	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	0.28	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.02	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	2.54	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	8.80	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	13.97	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	12.75	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	1.41	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.05	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.02	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	1.55	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	5.50	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	8.33	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	5.13	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07
F	12.5	0.85	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.003E-07

G	1.8	0.85	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	1.60	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08
G	6.5	3.29	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08
G	9.6	1.22	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.220E-08
G	12.5	0.05	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	9.405E-09

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

SITE EXCLUSION BOUNDARY CALCULATIONS:

ENE SECTOR BOUNDARY DISTANCE = 209.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	4.813E-06	2.858E-06	2.427E-06	2.224E-06	1.994E-06	1.715E-06	1.640E-06	1.264E-06
0.002	0.020	0.038	0.085	0.414	1.120	1.261	1.637	1.778	1.872
0.00008	0.00098	0.00186	0.00420	0.02052	0.05551	0.06251	0.08117	0.08817	0.09283
1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07	6.875E-07	6.230E-07	6.226E-07	5.890E-07
4.412	5.635	6.529	12.551	12.645	14.103	15.655	15.843	25.769	34.566
0.21879	0.27943	0.32375	0.62232	0.62698	0.69929	0.77626	0.78559	1.27776	1.71394
5.516E-07	4.207E-07	3.897E-07	3.534E-07	3.243E-07	3.208E-07	2.719E-07	2.388E-07	1.925E-07	1.841E-07
34.660	43.598	43.645	57.616	58.651	64.155	64.202	76.950	85.276	86.687
1.71860	2.16178	2.16411	2.85687	2.90819	3.18110	3.18343	3.81554	4.22840	4.29837
1.415E-07	1.301E-07	1.003E-07	8.032E-08	6.449E-08	3.010E-08	1.806E-08	1.220E-08	9.405E-09	
86.970	92.097	92.944	92.991	93.838	95.437	98.730	99.953	100.000	
4.31237	4.56662	4.60860	4.61093	4.65292	4.73222	4.89550	4.95615	4.95848	

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(2)= 0.001
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(3)= 0.055

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HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   0.622
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   1.712
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   3.178

 K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
12  1     -11.07050 -16.19649  -1.06775
12  2     -11.63677 -17.47494  -1.36713
12  3     -13.01641 -16.28004  -1.00073
12  4     -13.77855 -17.47979  -1.48070
12  5     -14.34482 -19.25415  -2.31876
12  6     -14.95230     NUMXQ(K)=  6
   2.323E-06              0.050              1.000
   1.662E-06              0.149              3.000
   1.416E-06              0.248              5.000
   1.124E-06              0.496             10.000
   9.441E-07              0.744             15.000
   8.070E-07              0.992             20.000
   7.118E-07              1.240             25.000
   6.405E-07              1.488             30.000
   5.822E-07              1.735             35.000
   5.130E-07              1.983             40.000
   4.579E-07              2.231             45.000
   4.128E-07              2.479             50.000
   3.754E-07              2.727             55.000
   3.437E-07              2.975             60.000

   1.120E-06              0.5               10.08

ANNUAL AVERAGE =   1.33E-12

K= 12     FIVEXQ(K)= 1.120E-06     FIVEPR(K)=10.084

FUMIGATION X/Q AT THE BOUNDARY:   1.69E-04

 EXPONENTIAL TERM AND FREQUENCIES

   5.684E-01   5.200E-01   4.072E-01   3.613E-01   2.419E-01   2.081E-01   1.693E-02
       0.659       3.716       5.175      26.549      53.458      92.991     100.000
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USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE E SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	3.6	0.03	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	4.045E-06
A	6.0	0.24	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	0.63	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
A	11.6	0.42	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.264E-06
A	26.5	0.06	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	5.516E-07
B	3.6	0.12	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.63	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.81	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.36	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
B	26.5	0.18	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	3.897E-07
C	3.6	0.15	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	1.25	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	1.67	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
C	11.6	0.86	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	6.230E-07
C	26.5	0.39	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	2.719E-07
D	0.2	0.00	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	0.78	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	4.21	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	8.98	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	11.78	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	6.71	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	2.68	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.01	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	1.61	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	5.16	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	11.78	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	15.99	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	2.33	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.27	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	0.89	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	2.54	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	5.91	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	5.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07

F	12.5	0.72	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.003E-07
G	1.8	0.39	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	1.19	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08
G	6.5	2.06	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08
G	9.6	1.16	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.220E-08
G	12.5	0.03	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	9.405E-09
G	28.5	0.03	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	4.104E-09

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

SITE EXCLUSION BOUNDARY CALCULATIONS:

E SECTOR BOUNDARY DISTANCE = 209.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	4.813E-06	4.045E-06	2.858E-06	2.427E-06	2.224E-06	1.994E-06	1.715E-06	1.640E-06
0.002	0.013	0.024	0.053	0.173	0.411	1.187	1.336	1.962	2.589
0.00014	0.00103	0.00184	0.00417	0.01350	0.03216	0.09281	0.10447	0.15346	0.20244
1.264E-06	1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07	6.875E-07	6.230E-07	6.226E-07
3.006	4.617	5.869	6.675	10.880	11.238	12.908	13.803	14.668	23.646
0.23509	0.36105	0.45902	0.52199	0.85088	0.87887	1.00949	1.07947	1.14711	1.84920
5.890E-07	5.516E-07	4.207E-07	3.897E-07	3.534E-07	3.243E-07	3.208E-07	2.719E-07	2.388E-07	1.925E-07
28.806	28.865	40.646	40.825	52.607	59.317	61.853	62.240	78.227	84.133
2.25273	2.25739	3.17874	3.19274	4.11408	4.63890	4.83717	4.86749	6.11772	6.57956
1.841E-07	1.415E-07	1.301E-07	1.003E-07	8.032E-08	6.449E-08	3.010E-08	1.806E-08	1.220E-08	9.405E-09
86.459	89.143	94.154	94.870	95.138	95.526	96.719	98.777	99.940	99.970
6.76150	6.97143	7.36329	7.41927	7.44026	7.47059	7.56389	7.72483	7.81580	7.81813
4.104E-09									
100.000									
7.82046									

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED
CHI/Q WITH RESPECT TO WHEN THE WIND BLOWS

SEC/CUBIC METER THE TOTAL TIME INTO THIS SECTOR ONLY

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HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=   0.093
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=   0.850
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   2.250
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   4.834

 K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
13  1     -11.07050 -16.85765  -1.23409
13  2     -13.01641 -16.28464  -1.05000
13  3     -13.77855 -17.31495  -1.48167
13  4     -14.34482 -17.89132  -1.76920
13  5     -14.95230     NUMXQ(K)=  5
   2.366E-06              0.078              1.000
   1.649E-06              0.235              3.000
   1.383E-06              0.391              5.000
   1.072E-06              0.782             10.000
   8.680E-07              1.173             15.000
   7.349E-07              1.564             20.000
   6.428E-07              1.955             25.000
   5.714E-07              2.346             30.000
   5.083E-07              2.737             35.000
   4.583E-07              3.128             40.000
   4.173E-07              3.519             45.000
   3.832E-07              3.910             50.000
   3.542E-07              4.301             55.000
   3.292E-07              4.692             60.000

   1.266E-06              0.5                6.39

ANNUAL AVERAGE =   3.92E-12

K= 13     FIVEXQ(K)= 1.266E-06     FIVEPR(K)= 6.393

FUMIGATION X/Q AT THE BOUNDARY:   1.69E-04

 EXPONENTIAL TERM AND FREQUENCIES

   5.684E-01   5.200E-01   4.072E-01   3.613E-01   2.419E-01   2.081E-01   1.693E-02
       1.372       5.697       7.785      22.857      57.994      95.138     100.000
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USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE ESE SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	6.0	0.24	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	0.24	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
A	11.6	0.05	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.264E-06
A	26.5	0.13	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	5.516E-07
B	3.6	0.08	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.24	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.53	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.37	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
B	26.5	0.19	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	3.897E-07
C	3.6	0.13	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	0.69	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	1.57	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
C	11.6	0.80	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	6.230E-07
C	26.5	0.72	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	2.719E-07
D	0.2	0.00	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	1.01	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	2.59	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	9.48	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	17.99	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	11.96	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	4.03	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.01	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	0.96	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	3.68	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	9.45	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	15.56	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	2.96	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.32	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	0.75	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	1.76	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	3.74	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	3.68	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07
F	12.5	0.48	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.003E-07

G	1.8	0.37	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	0.93	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08
G	6.5	1.17	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08
G	9.6	1.04	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.220E-08
G	12.5	0.05	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	9.405E-09

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

SITE EXCLUSION BOUNDARY CALCULATIONS:

ESE SECTOR BOUNDARY DISTANCE = 209.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	4.813E-06	2.858E-06	2.427E-06	2.224E-06	1.994E-06	1.715E-06	1.640E-06	1.264E-06
0.002	0.009	0.018	0.098	0.338	1.352	1.486	1.726	1.966	2.020
0.00020	0.00080	0.00155	0.00855	0.02954	0.11818	0.12984	0.15083	0.17183	0.17649
1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07	6.875E-07	6.230E-07	6.226E-07	5.890E-07
2.980	3.674	4.208	6.797	7.171	8.746	9.493	10.294	19.769	23.452
0.26046	0.32111	0.36776	0.59401	0.62667	0.76429	0.82960	0.89957	1.72762	2.04951
5.516E-07	4.207E-07	3.897E-07	3.534E-07	3.243E-07	3.208E-07	2.719E-07	2.388E-07	1.925E-07	1.841E-07
23.585	41.575	41.762	51.210	63.167	64.929	65.649	81.210	84.947	87.909
2.06117	3.63329	3.64962	4.47533	5.52030	5.67425	5.73723	7.09709	7.42365	7.68255
1.415E-07	1.301E-07	1.003E-07	8.032E-08	6.449E-08	3.010E-08	1.806E-08	1.220E-08	9.405E-09	
91.939	95.623	96.103	96.423	96.797	97.731	98.906	99.947	100.000	
8.03477	8.35665	8.39864	8.42663	8.45928	8.54092	8.64355	8.73452	8.73919	

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(2)= 0.118
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(3)= 0.593

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(4)= 2.047
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(5)= 5.670

K	I	XQSAVE(K,I)	XQINT(K,I)	XQSLOP(K,I)
14	1	-11.07050	-16.78363	-1.23898
14	2	-13.01641	-17.43472	-1.45311
14	3	-13.77855	-16.79696	-1.19964
14	4	-14.34482	-17.03831	-1.31771
14	5	-14.95230		

NUMXQ(K)= 5

2.485E-06	0.087	1.000
1.550E-06	0.262	3.000
1.211E-06	0.437	5.000
8.781E-07	0.874	10.000
7.304E-07	1.311	15.000
6.370E-07	1.748	20.000
5.687E-07	2.185	25.000
5.135E-07	2.622	30.000
4.699E-07	3.059	35.000
4.343E-07	3.496	40.000
4.045E-07	3.933	45.000
3.791E-07	4.370	50.000
3.571E-07	4.807	55.000
3.378E-07	5.244	60.000
1.132E-06	0.5	5.72

ANNUAL AVERAGE = 2.19E-12

K= 14 FIVEXQ(K)= 1.132E-06 FIVEPR(K)= 5.721

FUMIGATION X/Q AT THE BOUNDARY: 1.69E-04

EXPONENTIAL TERM AND FREQUENCIES

5.684E-01	5.200E-01	4.072E-01	3.613E-01	2.419E-01	2.081E-01	1.693E-02
0.667	4.591	6.005	16.423	63.481	96.423	100.000

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE SE SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	6.0	0.04	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	0.06	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
A	26.5	0.02	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	5.516E-07
B	3.6	0.08	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.04	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.19	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.08	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
C	3.6	0.06	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	0.55	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	0.74	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
C	11.6	0.59	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	6.230E-07
C	26.5	0.13	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	2.719E-07
D	0.2	0.00	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	0.76	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	4.10	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	11.52	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	22.08	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	11.54	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	3.91	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.01	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	0.83	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	3.61	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	11.03	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	13.83	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	1.89	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.13	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	0.55	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	2.00	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	3.78	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	1.91	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07
G	1.8	0.28	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	1.49	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08

G	6.5	1.95	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08
G	9.6	0.19	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.220E-08

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

SITE EXCLUSION BOUNDARY CALCULATIONS:

SE SECTOR BOUNDARY DISTANCE = 209.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	4.813E-06	2.858E-06	2.427E-06	2.224E-06	1.994E-06	1.715E-06	1.640E-06	1.262E-06
0.002	0.008	0.014	0.099	0.141	0.906	0.970	1.013	1.076	1.905
0.00019	0.00084	0.00154	0.01087	0.01553	0.09950	0.10650	0.11117	0.11816	0.20913
1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07	6.875E-07	6.230E-07	6.226E-07	5.890E-07	5.516E-07
2.457	2.649	6.749	6.834	7.578	8.130	8.725	20.241	23.853	23.874
0.26978	0.29077	0.74095	0.75028	0.83192	0.89256	0.95787	2.22210	2.61863	2.62096
4.207E-07	3.534E-07	3.243E-07	3.208E-07	2.719E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07	1.301E-07
45.949	56.976	68.513	70.510	70.637	84.469	88.251	90.142	94.051	95.963
5.04446	6.25504	7.52160	7.74085	7.75485	9.27332	9.68851	9.89611	10.32529	10.53522
8.032E-08	6.449E-08	3.010E-08	1.806E-08	1.220E-08					
96.091	96.367	97.854	99.809	100.000					
10.54921	10.57954	10.74281	10.95741	10.97840					

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(2)= 0.099
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(3)= 0.740

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(4)= 5.041
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(5)= 7.737

K	I	XQSAVE(K,I)	XQINT(K,I)	XQSLOP(K,I)
15	1	-11.07050	-16.94794	-1.27152
15	2	-13.01641	-16.61528	-1.16393
15	3	-13.77855	-16.54197	-1.13385
15	4	-14.68142	-16.72098	-1.24294
15	5	-14.95230	NUMXQ(K)= 5	

2.149E-06	0.110	1.000
1.438E-06	0.329	3.000
1.175E-06	0.549	5.000
8.797E-07	1.098	10.000
7.352E-07	1.647	15.000
6.432E-07	2.196	20.000
5.774E-07	2.745	25.000
5.270E-07	3.294	30.000
4.868E-07	3.842	35.000
4.536E-07	4.391	40.000
4.255E-07	4.940	45.000
3.996E-07	5.489	50.000
3.766E-07	6.038	55.000
3.564E-07	6.587	60.000
3.385E-07	7.136	65.000
3.224E-07	7.685	70.000
1.220E-06	0.5	4.55

ANNUAL AVERAGE = 5.38E-13

K= 15 FIVEXQ(K)= 1.220E-06 FIVEPR(K)= 4.554

FUMIGATION X/Q AT THE BOUNDARY: 1.69E-04

EXPONENTIAL TERM AND FREQUENCIES

5.684E-01	5.200E-01	4.072E-01	3.613E-01	2.419E-01	2.081E-01	1.693E-02
0.127	2.210	2.613	10.863	64.767	96.091	100.000

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE SSE SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	3.6	0.02	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	4.045E-06
A	6.0	0.17	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	0.32	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
A	11.6	0.02	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.264E-06
A	26.5	0.02	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	5.516E-07
B	3.6	0.06	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.48	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.71	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.11	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
C	3.6	0.48	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	2.16	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	2.01	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
C	11.6	0.37	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	6.230E-07
D	0.2	0.00	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	1.08	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	8.31	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	20.04	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	19.82	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	5.23	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	1.36	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.01	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	0.73	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	4.38	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	11.10	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	10.11	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	0.93	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.22	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	0.48	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	2.09	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	2.72	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	0.69	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07
F	12.5	0.11	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.003E-07

G	1.8	0.41	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	1.27	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08
G	6.5	1.84	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08
G	9.6	0.11	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.220E-08
G	28.5	0.02	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	4.104E-09

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

SITE EXCLUSION BOUNDARY CALCULATIONS:

SSE SECTOR BOUNDARY DISTANCE = 209.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	4.813E-06	4.045E-06	2.858E-06	2.427E-06	2.224E-06	1.994E-06	1.715E-06	1.640E-06
0.002	0.008	0.013	0.035	0.100	0.272	1.352	1.827	2.302	2.626
0.00026	0.00083	0.00142	0.00375	0.01075	0.02941	0.14604	0.19735	0.24867	0.28366
1.264E-06	1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07	6.875E-07	6.230E-07	6.226E-07
2.648	3.382	5.542	6.254	14.568	14.676	16.685	17.160	17.527	37.568
0.28599	0.36529	0.59855	0.67552	1.57354	1.58520	1.80213	1.85344	1.89310	4.05768
5.890E-07	5.516E-07	4.207E-07	3.534E-07	3.243E-07	3.208E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07
41.951	41.973	61.798	72.898	78.124	80.219	90.325	93.046	93.975	95.335
4.53118	4.53352	6.67477	7.87369	8.43816	8.66442	9.75604	10.04994	10.15024	10.29718
1.301E-07	1.003E-07	8.032E-08	6.449E-08	3.010E-08	1.806E-08	1.220E-08	4.104E-09		
96.026	96.134	96.350	96.761	98.035	99.870	99.978	100.000		
10.37183	10.38349	10.40681	10.45113	10.58875	10.78701	10.79868	10.80101		

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(2)= 0.197
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(4)= 4.528

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(5)= 6.671

K	I	XQSAVE(K,I)	XQINT(K,I)	XQSLOP(K,I)
16	1	-11.07050	-16.67065	-1.22977
16	2	-13.12558	-15.69990	-0.89302
16	3	-13.77855	-16.43273	-1.23363
16	4	-14.34482	-17.31614	-1.75559
16	5	-14.68142	NUMXQ(K)= 5	

2.502E-06	0.108	1.000
1.728E-06	0.324	3.000
1.480E-06	0.540	5.000
1.182E-06	1.080	10.000
1.023E-06	1.620	15.000
8.846E-07	2.160	20.000
7.868E-07	2.700	25.000
7.127E-07	3.240	30.000
6.539E-07	3.780	35.000
6.056E-07	4.320	40.000
5.553E-07	4.860	45.000
5.074E-07	5.401	50.000
4.669E-07	5.941	55.000
4.320E-07	6.481	60.000
1.516E-06	0.5	4.63

ANNUAL AVERAGE = 2.60E-12

K= 16 FIVEXQ(K)= 1.516E-06 FIVEPR(K)= 4.629

FUMIGATION X/Q AT THE BOUNDARY: 1.69E-04

EXPONENTIAL TERM AND FREQUENCIES

5.684E-01	5.200E-01	4.072E-01	3.613E-01	2.419E-01	2.081E-01	1.693E-02
0.561	5.572	6.932	13.028	68.876	96.350	100.000

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE ALL SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	1.7	0.01	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	8.668E-06
A	3.6	0.51	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	4.045E-06
A	6.0	0.53	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	0.28	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
A	11.6	0.06	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.264E-06
A	26.5	0.03	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	5.516E-07
B	1.7	0.05	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	6.124E-06
B	3.6	0.47	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.54	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.44	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.12	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
B	26.5	0.03	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	3.897E-07
C	1.7	0.08	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	4.272E-06
C	3.6	0.77	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	1.33	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	1.04	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
C	11.6	0.30	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	6.230E-07
C	26.5	0.13	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	2.719E-07
D	0.2	0.00	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	2.07	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	9.39	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	15.72	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	12.23	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	4.24	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	1.39	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.01	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	1.97	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	8.90	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	13.85	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	9.53	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	1.29	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.23	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	1.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07

F	3.9	3.14	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	3.52	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	1.55	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07
F	12.5	0.16	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.003E-07
F	28.5	0.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.375E-08
G	1.8	0.43	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	1.17	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08
G	6.5	1.14	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08
G	9.6	0.31	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.220E-08
G	12.5	0.01	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	9.405E-09
G	28.5	0.00	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	4.104E-09

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

SITE EXCLUSION BOUNDARY CALCULATIONS:
DIRECTION-INDEPENDENT (S.R.P 2.3.4) MODEL.
MINIMUM BOUNDARY DISTANCE = 209.0 METERS.
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	8.668E-06	6.124E-06	4.813E-06	4.272E-06	4.045E-06	2.858E-06	2.427E-06	2.224E-06
0.005	0.019	0.026	0.072	0.084	0.161	0.674	1.145	1.677	3.744
0.00467	0.01866	0.02566	0.07231	0.08397	0.16094	0.67410	1.14527	1.67709	3.74370
1.994E-06	1.715E-06	1.640E-06	1.264E-06	1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07
4.509	5.052	5.330	5.388	7.354	8.684	9.125	18.516	18.637	19.680
4.50877	5.05225	5.32982	5.38813	7.35445	8.68399	9.12484	18.51558	18.63687	19.67951
6.875E-07	6.230E-07	6.226E-07	5.890E-07	5.516E-07	4.207E-07	3.897E-07	3.534E-07	3.243E-07	3.208E-07
20.689	20.993	36.712	45.608	45.636	57.865	57.900	71.746	75.987	79.129
20.68949	20.99272	36.71161	45.60785	45.63584	57.86527	57.90026	71.74612	75.98666	79.12857
2.719E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07	1.301E-07	1.003E-07	8.032E-08	6.449E-08	4.375E-08
79.254	88.781	92.298	93.593	94.980	96.534	96.695	96.923	97.357	97.369
79.25452	88.78055	92.29800	93.59254	94.98039	96.53386	96.69480	96.92339	97.35724	97.36890
3.010E-08	1.806E-08	1.220E-08	9.405E-09	4.104E-09					
98.542	99.678	99.986	99.995	100.000					
98.54216	99.67810	99.98599	99.99532	99.99998					

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED
CHI/Q WITH RESPECT TO WHEN THE WIND BLOWS

SEC/CUBIC METER	THE TOTAL TIME	INTO THIS SECTOR ONLY
3.662E-06	1.000	1.000
2.436E-06	3.000	3.000
1.977E-06	5.000	5.000
1.446E-06	10.000	10.000
1.171E-06	15.000	15.000
9.978E-07	20.000	20.000
8.845E-07	25.000	25.000
7.938E-07	30.000	30.000
7.180E-07	35.000	35.000
6.529E-07	40.000	40.000
5.956E-07	45.000	45.000
5.478E-07	50.000	50.000
5.043E-07	55.000	55.000
4.636E-07	60.000	60.000
4.249E-07	65.000	65.000
3.877E-07	70.000	70.000
3.511E-07	75.000	75.000
1.977E-06	5.0	5.00

K= 17 FIVEXQ(K)= 1.977E-06 FIVEPR(K)= 5.000

FUMIGATION X/Q AT THE BOUNDARY: 1.69E-04

EXPONENTIAL TERM AND FREQUENCIES

5.684E-01	5.200E-01	4.072E-01	3.613E-01	2.419E-01	2.081E-01	1.693E-02
1.416	5.059	6.718	16.125	61.163	96.935	100.000

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

SITE EXCLUSION BOUNDARY CALCULATIONS:

FIVE PERCENT OVERALL SITE LIMIT
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	8.668E-06	6.124E-06	4.813E-06	4.272E-06	4.045E-06	2.858E-06	2.427E-06	2.224E-06
0.005	0.019	0.026	0.072	0.084	0.161	0.674	1.145	1.677	3.744
0.00467	0.01866	0.02566	0.07231	0.08397	0.16094	0.67410	1.14527	1.67709	3.74370
1.994E-06	1.715E-06	1.640E-06	1.264E-06	1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07
4.509	5.052	5.330	5.388	7.354	8.684	9.125	18.516	18.637	19.680
4.50877	5.05225	5.32982	5.38813	7.35445	8.68399	9.12484	18.51558	18.63688	19.67952
6.875E-07	6.230E-07	6.226E-07	5.890E-07	5.516E-07	4.207E-07	3.897E-07	3.534E-07	3.243E-07	3.208E-07
20.689	20.993	36.712	45.608	45.636	57.865	57.900	71.746	75.987	79.129
20.68950	20.99273	36.71161	45.60786	45.63585	57.86527	57.90026	71.74612	75.98665	79.12857
2.719E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07	1.301E-07	1.003E-07	8.032E-08	6.449E-08	4.375E-08
79.255	88.781	92.298	93.593	94.980	96.534	96.695	96.923	97.357	97.369
79.25453	88.78056	92.29800	93.59256	94.98041	96.53387	96.69481	96.92340	97.35724	97.36890
3.010E-08	1.806E-08	1.220E-08	9.405E-09	4.104E-09					
98.542	99.678	99.986	99.995	100.000					
98.54216	99.67809	99.98598	99.99532	99.99998					

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED
CHI/Q WITH RESPECT TO WHEN THE WIND BLOWS

SEC/CUBIC METER THE TOTAL TIME INTO THIS SECTOR ONLY

K	I	XQSAVE(K,I)	XQINT(K,I)	XQSLOP(K,I)
18	1	-11.07050	-14.64728	-0.91538
18	2	-13.01641	-14.54922	-0.86034
18	3	-13.77855	-14.42414	-0.72071
18	4	-14.34482	-14.41743	-0.65976
18	5	-14.95230	NUMXQ(K)=	5

3.662E-06	1.000	1.000
2.436E-06	3.000	3.000
1.977E-06	5.000	5.000
1.446E-06	10.000	10.000
1.171E-06	15.000	15.000
9.978E-07	20.000	20.000
8.845E-07	25.000	25.000
7.938E-07	30.000	30.000
7.180E-07	35.000	35.000
6.529E-07	40.000	40.000
5.956E-07	45.000	45.000
5.478E-07	50.000	50.000
5.043E-07	55.000	55.000
4.636E-07	60.000	60.000
4.249E-07	65.000	65.000
3.877E-07	70.000	70.000
3.511E-07	75.000	75.000

1.977E-06	5.0	5.00

K= 18 FIVEXQ(K)= 1.977E-06 FIVEPR(K)= 5.000

K	HIGHPR	PR	GRNDVT(K)
1	-3.06052	0.11048	6.21119
2	-2.00327	2.25740	3.52599
3	-2.79824	0.25691	3.10868
4	-2.68650	0.36103	3.53145
5	-2.57624	0.49942	4.76778
6	-2.75266	0.29557	4.27759
7	-3.06855	0.10756	5.37148
8	-3.25087	0.05753	5.07527
9	-3.17144	0.07585	10.00153
10	-3.29988	0.04837	5.86355
11	-3.25284	0.05714	4.96796
12	-3.40963	0.03253	4.95848
13	-3.27701	0.05246	7.82046
14	-3.20434	0.06769	8.73919
15	-3.25156	0.05739	10.97840
16	-3.13645	0.08551	10.80101

K	HOURS(K)	TOTHRS
1	9.67833	9.67833
2	197.74830	207.42660
3	22.50566	229.93230

4	31.62634	261.55860
5	43.74879	305.30740
6	25.89224	331.19960
7	9.42196	340.62160
8	5.03966	345.66130
9	6.64419	352.30550
10	4.23714	356.54260
11	5.00520	361.54780
12	2.84982	364.39760
13	4.59585	368.99350
14	5.92991	374.92340
15	5.02765	379.95100
16	7.49057	387.44160

K	FIVEXQ	SVANN	SLTIME	TIMINT	I	TIME	XQT
1	1.547E-06	1.689E-12	-1.6371	-12.2445			
					1	8.0	-15.64881
					2	16.0	-16.78359
					3	72.0	-19.24598
					4	624.0	-22.78136
2	1.537E-06	3.713E-12	-1.5425	-12.3165			
					1	8.0	-15.52392
					2	16.0	-16.59307
					3	72.0	-18.91303
					4	624.0	-22.24393
3	1.997E-06	8.692E-12	-1.4722	-12.1034			
					1	8.0	-15.16480
					2	16.0	-16.18528
					3	72.0	-18.39963
					4	624.0	-21.57890
4	2.335E-06	1.440E-11	-1.4307	-11.9759			
					1	8.0	-14.95100
					2	16.0	-15.94269
					3	72.0	-18.09457
					4	624.0	-21.18416
5	2.724E-06	2.875E-11	-1.3666	-11.8663			
					1	8.0	-14.70800
					2	16.0	-15.65523
					3	72.0	-17.71066
					4	624.0	-20.66175
6	2.196E-06	1.628E-11	-1.4087	-12.0523			
					1	8.0	-14.98169
					2	16.0	-15.95815
					3	72.0	-18.07700
					4	624.0	-21.11914
7	1.574E-06	4.584E-12	-1.5202	-12.3082			
					1	8.0	-15.46926
					2	16.0	-16.52296
					3	72.0	-18.80940
					4	624.0	-22.09217
8	1.303E-06	7.246E-13	-1.7176	-12.3606			
					1	8.0	-15.93221
					2	16.0	-17.12275

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                                                3   72.0   -19.70614
                                                4  624.0   -23.41525
 9 1.473E-06 2.123E-12   -1.6041  -12.3162
                                                1    8.0   -15.65174
                                                2   16.0   -16.76358
                                                3   72.0   -19.17620
                                                4  624.0   -22.64013
10 1.246E-06 1.616E-12   -1.6166  -12.4754
                                                1    8.0   -15.83700
                                                2   16.0   -16.95753
                                                3   72.0   -19.38899
                                                4  624.0   -22.87996
11 1.217E-06 1.276E-12   -1.6420  -12.4812
                                                1    8.0   -15.89557
                                                2   16.0   -17.03369
                                                3   72.0   -19.50333
                                                4  624.0   -23.04913
12 1.120E-06 1.335E-12   -1.6268  -12.5743
                                                1    8.0   -15.95707
                                                2   16.0   -17.08465
                                                3   72.0   -19.53142
                                                4  624.0   -23.04437
13 1.266E-06 3.916E-12   -1.5130  -12.5309
                                                1    8.0   -15.67704
                                                2   16.0   -16.72577
                                                3   72.0   -19.00142
                                                4  624.0   -22.26869
14 1.132E-06 2.187E-12   -1.5691  -12.6035
                                                1    8.0   -15.86645
                                                2   16.0   -16.95410
                                                3   72.0   -19.31421
                                                4  624.0   -22.70275
15 1.220E-06 5.385E-13   -1.7452  -12.4071
                                                1    8.0   -16.03603
                                                2   16.0   -17.24569
                                                3   72.0   -19.87056
                                                4  624.0   -23.63922
16 1.516E-06 2.599E-12   -1.5834  -12.3018
                                                1    8.0   -15.59427
                                                2   16.0   -16.69177
                                                3   72.0   -19.07328
                                                4  624.0   -22.49253
17 1.977E-06 2.875E-11   -1.3284  -12.2130
                                                1    8.0   -14.97530
                                                2   16.0   -15.89606
                                                3   72.0   -17.89405
                                                4  624.0   -20.76266
18 1.977E-06 2.875E-11   -1.3284  -12.2130
                                                1    8.0   -14.97530
                                                2   16.0   -15.89606
                                                3   72.0   -17.89404
                                                4  624.0   -20.76266
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USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

RELATIVE CONCENTRATION (X/Q) VALUES (SEC/CUBIC METER)
VERSUS
AVERAGING TIME

DOWNWIND SECTOR	DISTANCE (METERS)	0-2 HOURS	0-8 HOURS	8-24 HOURS	1-4 DAYS	4-30 DAYS	ANNUAL AVERAGE	HOURS PER YEAR MAX 0-2 HR X/Q IS EXCEEDED IN SECTOR	DOWNWIND SECTOR
S	209.	1.55E-06	1.60E-07	5.14E-08	4.38E-09	1.28E-10	1.69E-12	9.7	S
SSW	209.	1.54E-06	1.81E-07	6.22E-08	6.11E-09	2.19E-10	3.71E-12	197.7	SSW
SW	209.	2.00E-06	2.59E-07	9.35E-08	1.02E-08	4.25E-10	8.69E-12	22.5	SW
WSW	209.	2.33E-06	3.21E-07	1.19E-07	1.39E-08	6.31E-10	1.44E-11	31.6	WSW
W	209.	2.72E-06	4.10E-07	1.59E-07	2.03E-08	1.06E-09	2.88E-11	43.7	W
WNW	209.	2.20E-06	3.12E-07	1.17E-07	1.41E-08	6.73E-10	1.63E-11	25.9	WNW
NW	209.	1.57E-06	1.91E-07	6.67E-08	6.78E-09	2.54E-10	4.58E-12	9.4	NW
NNW	209.	1.30E-06	1.20E-07	3.66E-08	2.77E-09	6.77E-11	7.25E-13	5.0	NNW
N	209.	1.47E-06	1.59E-07	5.24E-08	4.70E-09	1.47E-10	2.12E-12	6.6	N
NNE	209.	1.25E-06	1.32E-07	4.32E-08	3.80E-09	1.16E-10	1.62E-12	4.2	NNE
NE	209.	1.22E-06	1.25E-07	4.00E-08	3.39E-09	9.77E-11	1.28E-12	5.0	NE
ENE	209.	1.12E-06	1.17E-07	3.80E-08	3.29E-09	9.82E-11	1.33E-12	2.8	ENE
E	209.	1.27E-06	1.55E-07	5.45E-08	5.59E-09	2.13E-10	3.92E-12	4.6	E
ESE	209.	1.13E-06	1.29E-07	4.33E-08	4.09E-09	1.38E-10	2.19E-12	5.9	ESE
SE	209.	1.22E-06	1.09E-07	3.24E-08	2.35E-09	5.42E-11	5.38E-13	5.0	SE
SSE	209.	1.52E-06	1.69E-07	5.63E-08	5.21E-09	1.70E-10	2.60E-12	7.5	SSE
MAX X/Q		2.72E-06				TOTAL HOURS AROUND SITE:		387.4	
SRP 2.3.4	209.	1.98E-06	3.14E-07	1.25E-07	1.69E-08	9.61E-10	2.88E-11		
SITE LIMIT		1.98E-06	3.14E-07	1.25E-07	1.69E-08	9.61E-10	2.88E-11		

0.5 PERCENT X/Q TO AN INDIVIDUAL IS LIMITING.

X/Q VALUES (SEC/CUBIC METER) FOR FUMIGATION AT THE BOUNDARY:

DOWNWIND SECTOR	DISTANCE (METERS)	FUMIGATION X/Q
S	209.	1.69E-04
SSW	209.	1.69E-04
SW	209.	1.69E-04
WSW	209.	1.69E-04
W	209.	1.69E-04
WNW	209.	1.69E-04
NW	209.	1.69E-04
NNW	209.	1.69E-04
N	209.	1.69E-04
NNE	209.	1.69E-04
NE	209.	1.69E-04
ENE	209.	1.69E-04
E	209.	1.69E-04

ESE	209.	1.69E-04
SE	209.	1.69E-04
SSE	209.	1.69E-04

NOTE: VALUES ON THIS PAGE ARE APPROXIMATIONS ONLY.
CHECK THE REASONABLENESS OF THE ENVELOPES
COMPUTED FOR THE 0-2 HOUR VALUES. FOR ANY
FAULTY ENVELOPES, ADJUST THE ABOVE VALUES.

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE S SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	3.6	0.23	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	4.045E-06
A	8.9	0.08	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
A	11.6	0.08	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.264E-06
B	3.6	0.49	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.15	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.38	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.04	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
C	3.6	1.16	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	1.58	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	0.68	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
C	11.6	0.15	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	6.230E-07
C	26.5	0.04	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	2.719E-07
D	0.2	0.01	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	2.22	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	12.39	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	19.57	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	14.87	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	2.74	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	0.56	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.02	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	2.25	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	8.83	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	13.78	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	5.86	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	0.86	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.26	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	0.98	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	3.72	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	3.04	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	0.15	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07
F	12.5	0.04	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.003E-07
G	1.8	0.41	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08

G	3.9	1.77	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08
G	6.5	0.60	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08
G	9.6	0.04	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.220E-08

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

LOW POPULATION ZONE CALCULATIONS:

S SECTOR BOUNDARY DISTANCE = 280.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	4.813E-06	4.045E-06	2.858E-06	2.224E-06	1.994E-06	1.715E-06	1.640E-06	1.264E-06
0.005	0.021	0.032	0.258	0.746	2.961	4.126	4.276	4.351	4.426
0.00031	0.00131	0.00201	0.01600	0.04633	0.18394	0.25625	0.26558	0.27025	0.27491
1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07	6.875E-07	6.230E-07	6.226E-07	5.890E-07
6.679	8.257	8.632	21.025	21.062	21.738	22.715	22.865	42.430	51.255
0.41486	0.51283	0.53616	1.30589	1.30822	1.35021	1.41085	1.42018	2.63543	3.18357
4.207E-07	3.534E-07	3.243E-07	3.208E-07	2.719E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07	1.301E-07
66.127	79.909	82.650	86.368	86.406	92.264	95.306	96.170	96.733	96.883
4.10725	4.96329	5.13356	5.36448	5.36681	5.73069	5.91962	5.97327	6.00826	6.01759
1.003E-07	8.032E-08	6.449E-08	3.010E-08	1.806E-08	1.220E-08				
96.921	97.183	97.597	99.362	99.962	100.000				
6.01992	6.03625	6.06191	6.17153	6.20886	6.21119				

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(2)= 0.256
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(3)= 1.304

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HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   3.181
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   4.960

  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
  1  1     -11.07050 -16.47142  -1.19518
  1  2     -13.12558 -16.30722  -1.13653
  1  3     -13.77855 -17.18353  -1.53040
  1  4     -14.34482 -18.94210  -2.47847
  1  5     -14.85564     NUMXQ(K)=  5
    3.332E-06              0.062              1.000
    2.250E-06              0.186              3.000
    1.857E-06              0.311              5.000
    1.419E-06              0.621             10.000
    1.201E-06              0.932             15.000
    1.061E-06              1.242             20.000
    9.350E-07              1.553             25.000
    8.354E-07              1.863             30.000
    7.578E-07              2.174             35.000
    6.951E-07              2.484             40.000
    6.430E-07              2.795             45.000
    5.990E-07              3.106             50.000
    5.446E-07              3.416             55.000
    4.938E-07              3.727             60.000
    4.506E-07              4.037             65.000
    4.134E-07              4.348             70.000
    3.812E-07              4.658             75.000

    1.547E-06              0.5                8.05

ANNUAL AVERAGE =   1.81E-10

K=  1     FIVEXQ(K)= 1.547E-06     FIVEPR(K)= 8.050

FUMIGATION X/Q AT THE BOUNDARY:   1.30E-04

 EXPONENTIAL TERM AND FREQUENCIES

   5.684E-01   5.200E-01   4.072E-01   3.613E-01   2.419E-01   2.081E-01   1.693E-02
       0.376       3.981       5.032      12.967      65.322      97.183     100.000
```

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE SSW SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	3.6	0.60	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	4.045E-06
A	6.0	0.60	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	0.26	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
A	11.6	0.13	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.264E-06
B	1.7	0.13	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	6.124E-06
B	3.6	1.52	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.99	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.20	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.13	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
C	1.7	0.33	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	4.272E-06
C	3.6	1.46	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	1.26	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	0.53	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
C	11.6	0.07	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	6.230E-07
C	26.5	0.26	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	2.719E-07
D	0.2	0.01	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	3.84	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	13.96	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	23.09	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	10.19	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	1.79	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	0.46	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.02	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	2.91	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	10.85	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	13.30	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	2.51	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	0.53	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.07	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	1.26	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	2.51	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	1.65	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	0.07	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07

G	1.8	0.93	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	1.26	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08
G	6.5	0.33	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

LOW POPULATION ZONE CALCULATIONS:

SSW SECTOR BOUNDARY DISTANCE = 280.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	6.124E-06	4.813E-06	4.272E-06	4.045E-06	2.858E-06	2.427E-06	2.224E-06	1.994E-06
0.009	0.029	0.162	0.176	0.507	1.102	2.624	3.219	7.056	8.511
0.00031	0.00104	0.00570	0.00621	0.01788	0.03887	0.09252	0.11351	0.24880	0.30011
1.715E-06	1.640E-06	1.264E-06	1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07	6.875E-07
9.504	9.768	9.901	12.811	14.068	14.267	28.225	28.357	28.886	30.143
0.33510	0.34443	0.34909	0.45172	0.49604	0.50304	0.99520	0.99987	1.01853	1.06285
6.230E-07	6.226E-07	5.890E-07	4.207E-07	3.534E-07	3.243E-07	3.208E-07	2.719E-07	2.388E-07	1.925E-07
30.209	53.296	64.145	74.333	87.630	89.416	91.929	92.194	94.708	96.362
1.06518	1.87923	2.26176	2.62097	3.08981	3.15279	3.24142	3.25075	3.33939	3.39770
1.841E-07	1.415E-07	1.301E-07	8.032E-08	6.449E-08	3.010E-08	1.806E-08			
96.891	97.354	97.420	97.486	98.412	99.669	100.000			
3.41636	3.43269	3.43502	3.43736	3.47001	3.51433	3.52599			

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(2)= 0.249
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(3)= 0.994

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HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   2.259
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   3.087

  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
  2  1     -11.07050 -16.20624  -1.13559
  2  2     -13.01641 -17.47309  -1.58660
  2  3     -13.77855 -17.82714  -1.73864
  2  4     -14.34482 -21.93911  -3.79166
  2  5     -14.85564     NUMXQ(K)=  5
    4.290E-06              0.035              1.000
    3.004E-06              0.106              3.000
    2.517E-06              0.176              5.000
    1.855E-06              0.353             10.000
    1.490E-06              0.529             15.000
    1.268E-06              0.705             20.000
    1.115E-06              0.881             25.000
    9.970E-07              1.058             30.000
    9.001E-07              1.234             35.000
    8.223E-07              1.410             40.000
    7.583E-07              1.587             45.000
    7.044E-07              1.763             50.000
    6.583E-07              1.939             55.000
    6.184E-07              2.116             60.000
    5.767E-07              2.292             65.000
    5.119E-07              2.468             70.000
    4.575E-07              2.644             75.000
    4.114E-07              2.821             80.000
    3.719E-07              2.997             85.000

    1.537E-06              0.5               14.18

ANNUAL AVERAGE =   3.97E-10

K=  2     FIVEXQ(K)= 1.537E-06     FIVEPR(K)=14.180

FUMIGATION X/Q AT THE BOUNDARY:   1.30E-04

 EXPONENTIAL TERM AND FREQUENCIES

   5.684E-01   5.200E-01   4.072E-01   3.613E-01   2.419E-01   2.081E-01   1.693E-02
       1.588       5.491       8.467      13.973      67.300      97.486     100.000
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USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE SW SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	3.6	1.73	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	4.045E-06
A	6.0	1.50	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	0.68	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
B	1.7	0.15	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	6.124E-06
B	3.6	1.35	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.98	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.15	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.08	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
C	1.7	0.90	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	4.272E-06
C	3.6	2.10	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	0.68	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	0.30	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
D	0.2	0.02	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	8.10	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	17.86	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	18.83	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	6.38	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	0.98	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	0.90	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.02	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	2.70	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	11.25	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	11.71	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	1.95	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	0.60	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.08	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.02	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	1.65	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	2.55	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	0.98	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	0.08	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07
G	1.8	0.83	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	1.65	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08

G	6.5	0.30	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

LOW POPULATION ZONE CALCULATIONS:

SW SECTOR BOUNDARY DISTANCE = 280.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	6.124E-06	4.813E-06	4.272E-06	4.045E-06	2.858E-06	2.427E-06	2.224E-06	1.994E-06
0.018	0.038	0.188	0.207	1.107	2.833	4.183	5.684	13.788	15.888
0.00057	0.00117	0.00583	0.00642	0.03441	0.08806	0.13005	0.17670	0.42861	0.49392
1.715E-06	1.640E-06	1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07	6.875E-07	6.226E-07
16.864	17.539	20.240	20.916	21.066	38.923	38.999	39.299	40.949	59.783
0.52424	0.54524	0.62921	0.65020	0.65487	1.21001	1.21234	1.22167	1.27298	1.85845
5.890E-07	4.207E-07	3.534E-07	3.243E-07	3.208E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07	1.301E-07
71.037	77.415	89.120	90.096	92.647	94.598	95.573	96.173	97.074	97.149
2.20833	2.40659	2.77047	2.80079	2.88009	2.94074	2.97106	2.98972	3.01771	3.02005
8.032E-08	6.449E-08	3.010E-08	1.806E-08						
97.224	98.049	99.700	100.000						
3.02238	3.04804	3.09935	3.10868						

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(2)= 0.088
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(3)= 0.428

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HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   1.209
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   2.206
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   2.768

 K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
 3  1     -11.07050 -15.76030  -1.06849
 3  2     -12.41800 -16.16917  -1.19920
 3  3     -13.01641 -18.36423  -2.03412
 3  4     -13.77855 -19.06598  -2.34541
 3  5     -14.34482 -24.96016  -5.27354
 3  6     -14.85564     NUMXQ(K)=  6
   5.539E-06              0.031              1.000
   3.964E-06              0.093              3.000
   3.295E-06              0.155              5.000
   2.529E-06              0.311             10.000
   2.097E-06              0.466             15.000
   1.710E-06              0.622             20.000
   1.453E-06              0.777             25.000
   1.268E-06              0.933             30.000
   1.127E-06              1.088             35.000
   1.012E-06              1.243             40.000
   9.092E-07              1.399             45.000
   8.246E-07              1.554             50.000
   7.539E-07              1.710             55.000
   6.940E-07              1.865             60.000
   6.424E-07              2.021             65.000
   5.976E-07              2.176             70.000
   5.221E-07              2.332             75.000
   4.518E-07              2.487             80.000
   3.938E-07              2.642             85.000

   1.997E-06              0.5               16.08

ANNUAL AVERAGE =   9.27E-10

K=  3     FIVEXQ(K)= 1.997E-06     FIVEPR(K)=16.084

FUMIGATION X/Q AT THE BOUNDARY:   1.30E-04

 EXPONENTIAL TERM AND FREQUENCIES

   5.684E-01   5.200E-01   4.072E-01   3.613E-01   2.419E-01   2.081E-01   1.693E-02
       3.902       7.878      10.580      15.851      68.917      97.224     100.000
```

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE WSW SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	3.6	2.58	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	4.045E-06
A	6.0	1.92	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	1.19	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
A	11.6	0.07	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.264E-06
B	1.7	0.59	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	6.124E-06
B	3.6	1.65	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.99	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.07	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
C	1.7	0.99	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	4.272E-06
C	3.6	2.44	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	1.12	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	0.20	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
D	0.2	0.02	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	7.86	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	22.19	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	18.36	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	4.43	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	0.73	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	0.13	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.03	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	4.03	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	14.46	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	6.67	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	0.73	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	0.26	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.07	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.02	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	1.72	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	1.92	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	0.53	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
G	1.8	0.66	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	1.25	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08
G	6.5	0.13	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

LOW POPULATION ZONE CALCULATIONS:

WSW SECTOR BOUNDARY DISTANCE = 280.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	6.124E-06	4.813E-06	4.272E-06	4.045E-06	2.858E-06	2.427E-06	2.224E-06	1.994E-06
0.018	0.046	0.641	0.661	1.651	4.227	5.879	7.794	15.654	18.098
0.00063	0.00164	0.02263	0.02333	0.05832	0.14929	0.20760	0.27524	0.55282	0.63912
1.715E-06	1.640E-06	1.264E-06	1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.082E-07	6.875E-07	6.226E-07
19.089	20.278	20.344	24.373	25.496	25.562	47.754	47.953	49.670	68.032
0.67411	0.71609	0.71842	0.86071	0.90036	0.90269	1.68642	1.69342	1.75407	2.40251
5.890E-07	4.207E-07	3.534E-07	3.243E-07	3.208E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07	8.032E-08
82.497	86.922	93.593	94.320	96.235	96.962	97.490	97.754	97.886	97.952
2.91333	3.06961	3.30519	3.33085	3.39849	3.42415	3.44281	3.45214	3.45681	3.45914
6.449E-08	3.010E-08	1.806E-08							
98.613	99.868	100.000							
3.48247	3.52678	3.53145							

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(3)= 0.552
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(4)= 1.685

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(5)= 2.911

K	I	XQSAVE(K,I)	XQINT(K,I)	XQSLOP(K,I)
4	1	-11.07050	-15.27913	-0.96350
4	2	-12.41800	-16.56801	-1.39754
4	3	-13.01641	-17.65467	-1.82513
4	4	-13.77855	-19.01550	-2.46590
4	5	-14.34482	NUMXQ(K)= 5	

6.050E-06	0.035	1.000
4.471E-06	0.106	3.000
3.762E-06	0.177	5.000
2.753E-06	0.353	10.000
2.270E-06	0.530	15.000
1.898E-06	0.706	20.000
1.636E-06	0.883	25.000
1.445E-06	1.059	30.000
1.297E-06	1.236	35.000
1.180E-06	1.413	40.000
1.084E-06	1.589	45.000
9.912E-07	1.766	50.000
9.005E-07	1.942	55.000
8.240E-07	2.119	60.000
7.585E-07	2.295	65.000
7.019E-07	2.472	70.000
6.524E-07	2.649	75.000
6.089E-07	2.825	80.000
2.335E-06	0.5	14.16

ANNUAL AVERAGE = 1.54E-09

K= 4 FIVEXQ(K)= 2.335E-06 FIVEPR(K)=14.158

FUMIGATION X/Q AT THE BOUNDARY: 1.30E-04

EXPONENTIAL TERM AND FREQUENCIES

5.684E-01	5.200E-01	4.072E-01	3.613E-01	2.419E-01	2.081E-01	1.693E-02
5.746	10.502	13.804	17.985	71.702	97.952	100.000

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE W SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	1.7	0.15	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	8.668E-06
A	3.6	4.26	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	4.045E-06
A	6.0	2.25	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	0.34	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
B	1.7	0.24	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	6.124E-06
B	3.6	2.74	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.59	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.05	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
C	1.7	0.05	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	4.272E-06
C	3.6	2.45	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	0.68	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	0.15	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
C	11.6	0.05	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	6.230E-07
D	0.2	0.01	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	5.63	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	21.28	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	16.19	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	6.46	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	1.57	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	0.39	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.02	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	2.94	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	13.85	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	7.88	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	2.84	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	0.59	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.98	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.02	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	1.52	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	1.66	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	0.64	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	28.5	0.20	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.375E-08
G	1.8	0.64	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08

G	3.9	0.64	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08
G	6.5	0.10	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

LOW POPULATION ZONE CALCULATIONS:

W SECTOR BOUNDARY DISTANCE = 280.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	8.668E-06	6.124E-06	4.813E-06	4.272E-06	4.045E-06	2.858E-06	2.427E-06	2.224E-06
0.013	0.034	0.180	0.425	0.442	0.491	4.748	7.487	9.738	15.364
0.00061	0.00160	0.00860	0.02026	0.02110	0.02343	0.22636	0.35698	0.46428	0.73252
1.994E-06	1.715E-06	1.640E-06	1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.082E-07	6.875E-07	6.230E-07
17.810	18.397	18.740	21.675	22.360	22.409	43.690	43.837	45.353	45.402
0.84914	0.87713	0.89346	1.03341	1.06607	1.06840	2.08305	2.09005	2.16235	2.16469
6.226E-07	5.890E-07	4.207E-07	3.534E-07	3.243E-07	3.208E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07
61.596	75.441	81.899	89.775	91.341	93.004	95.842	96.478	97.065	97.456
2.93675	3.59686	3.90475	4.28029	4.35493	4.43423	4.56952	4.59984	4.62783	4.64649
8.032E-08	6.449E-08	4.375E-08	3.010E-08	1.806E-08					
98.434	99.070	99.266	99.902	100.000					
4.69314	4.72347	4.73280	4.76312	4.76779					

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(3)= 0.732
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(4)= 2.081

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HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   3.594
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   4.431

 K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
 5  1     -11.07050 -14.90832  -0.87711
 5  2     -12.41800 -16.68802  -1.50394
 5  3     -13.01641 -17.62189  -1.88646
 5  4     -13.77855 -18.63791  -2.38516
 5  5     -14.34482 -25.59808  -6.25210
 5  6     -14.95230     NUMXQ(K)=  6
   6.082E-06              0.048              1.000
   4.587E-06              0.143              3.000
   3.946E-06              0.238              5.000
   2.792E-06              0.477             10.000
   2.253E-06              0.715             15.000
   1.853E-06              0.954             20.000
   1.580E-06              1.192             25.000
   1.382E-06              1.430             30.000
   1.231E-06              1.669             35.000
   1.111E-06              1.907             40.000
   1.008E-06              2.146             45.000
   9.065E-07              2.384             50.000
   8.225E-07              2.622             55.000
   7.516E-07              2.861             60.000
   6.910E-07              3.099             65.000
   6.385E-07              3.337             70.000
   5.928E-07              3.576             75.000
   4.980E-07              3.814             80.000
   4.178E-07              4.053             85.000
   3.535E-07              4.291             90.000

   2.724E-06              0.5               10.49

ANNUAL AVERAGE =   3.07E-09

K=  5     FIVEXQ(K)= 2.724E-06     FIVEPR(K)=10.487

FUMIGATION X/Q AT THE BOUNDARY:   1.30E-04

 EXPONENTIAL TERM AND FREQUENCIES

   5.684E-01   5.200E-01   4.072E-01   3.613E-01   2.419E-01   2.081E-01   1.693E-02
       6.996      10.372      13.992      18.021      69.549      98.630     100.000
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USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE WNW SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	3.6	2.40	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	4.045E-06
A	6.0	2.40	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	0.16	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
A	11.6	0.05	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.264E-06
A	26.5	0.05	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	5.516E-07
B	3.6	1.58	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	1.36	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.11	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.05	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
C	3.6	3.54	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	1.42	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	0.22	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
C	11.6	0.11	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	6.230E-07
D	0.2	0.01	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	4.69	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	16.58	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	16.79	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	7.63	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	1.42	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	0.11	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.02	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	3.27	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	10.91	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	14.01	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	3.44	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	1.15	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.22	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	1.25	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	2.84	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	1.31	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	0.11	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07
F	28.5	0.05	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.375E-08

G	1.8	0.27	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	0.33	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08
G	6.5	0.11	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

LOW POPULATION ZONE CALCULATIONS:

WNW SECTOR BOUNDARY DISTANCE = 280.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	4.813E-06	4.045E-06	2.858E-06	2.427E-06	2.224E-06	1.994E-06	1.715E-06	1.640E-06
0.011	0.034	0.048	2.448	4.029	6.428	11.118	14.662	16.025	16.189
0.00045	0.00145	0.00207	0.10470	0.17234	0.27497	0.47557	0.62719	0.68550	0.69250
1.264E-06	1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07	6.875E-07	6.230E-07	6.226E-07
16.243	19.515	20.933	21.042	37.619	37.673	37.891	39.146	39.255	56.050
0.69483	0.83478	0.89543	0.90009	1.60918	1.61151	1.62084	1.67449	1.67915	2.39757
5.890E-07	5.516E-07	4.207E-07	3.534E-07	3.243E-07	3.208E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07
66.955	67.010	74.644	88.658	90.076	92.911	96.347	97.655	98.800	98.909
2.86408	2.86641	3.19296	3.79242	3.85307	3.97436	4.12131	4.17729	4.22627	4.23094
1.301E-07	8.032E-08	6.449E-08	4.375E-08	3.010E-08	1.806E-08				
99.018	99.237	99.509	99.564	99.891	100.000				
4.23560	4.24493	4.25659	4.25893	4.27292	4.27759				

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(3)= 0.626
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(4)= 1.607

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HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   2.861
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   3.789

  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
  6  1     -11.07050 -15.46296  -0.98963
  6  2     -12.41800 -16.17186  -1.22003
  6  3     -13.12558 -17.72706  -1.84289
  6  4     -13.77855 -18.81308  -2.34976
  6  5     -14.34482 -22.06134  -4.05796
  6  6     -14.85564     NUMXQ(K)=  6
    5.219E-06              0.043              1.000
    3.754E-06              0.128              3.000
    3.094E-06              0.214              5.000
    2.344E-06              0.428             10.000
    1.964E-06              0.642             15.000
    1.621E-06              0.856             20.000
    1.391E-06              1.069             25.000
    1.223E-06              1.283             30.000
    1.094E-06              1.497             35.000
    9.792E-07              1.711             40.000
    8.749E-07              1.925             45.000
    7.896E-07              2.139             50.000
    7.187E-07              2.353             55.000
    6.586E-07              2.567             60.000
    6.072E-07              2.780             65.000
    5.441E-07              2.994             70.000
    4.806E-07              3.208             75.000
    4.273E-07              3.422             80.000
    3.822E-07              3.636             85.000

    2.196E-06              0.5               11.69

ANNUAL AVERAGE =   1.74E-09

K=  6     FIVEXQ(K)= 2.196E-06     FIVEPR(K)=11.689

FUMIGATION X/Q AT THE BOUNDARY:   1.30E-04

 EXPONENTIAL TERM AND FREQUENCIES

   5.684E-01   5.200E-01   4.072E-01   3.613E-01   2.419E-01   2.081E-01   1.693E-02
       5.071      10.361      13.469      19.045      66.278      99.291     100.000
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USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE NW SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	3.6	0.17	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	4.045E-06
A	6.0	0.87	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	0.56	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
B	1.7	0.09	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	6.124E-06
B	3.6	0.43	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	1.17	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.35	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.04	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
C	3.6	0.61	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	2.69	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	0.48	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
D	0.2	0.00	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	1.95	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	14.72	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	20.76	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	6.99	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	0.61	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	0.30	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.02	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	2.65	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	14.98	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	15.16	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	4.26	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	0.69	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.52	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	1.22	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	3.52	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	2.08	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	0.30	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07
G	1.8	0.17	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	1.22	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08
G	6.5	0.35	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08

G	9.6	0.04	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.220E-08

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

LOW POPULATION ZONE CALCULATIONS:

NW SECTOR BOUNDARY DISTANCE = 280.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	6.124E-06	4.813E-06	4.045E-06	2.858E-06	2.427E-06	2.224E-06	1.994E-06	1.715E-06
0.004	0.023	0.110	0.124	0.298	0.732	1.601	3.555	4.163	5.335
0.00024	0.00125	0.00591	0.00667	0.01600	0.03932	0.08597	0.19094	0.22359	0.28657
1.640E-06	1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07	6.875E-07	6.226E-07	5.890E-07
5.900	8.548	11.241	11.588	26.309	26.352	26.830	28.046	48.803	63.784
0.31689	0.45918	0.60380	0.62246	1.41318	1.41551	1.44117	1.50648	2.62143	3.42615
4.207E-07	3.534E-07	3.243E-07	3.208E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07	1.301E-07	8.032E-08
70.775	85.931	86.538	90.056	94.311	96.396	97.091	97.395	97.698	98.220
3.80169	4.61574	4.64839	4.83733	5.06591	5.17788	5.21520	5.23152	5.24785	5.27584
6.449E-08	3.010E-08	1.806E-08	1.220E-08						
98.393	99.609	99.957	100.000						
5.28517	5.35048	5.36914	5.37148						

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(2)= 0.191
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(3)= 1.412

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(4)= 3.423
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(5)= 4.612

K	I	XQSAVE(K,I)	XQINT(K,I)	XQSLOP(K,I)
7	1	-11.07050	-16.36184	-1.15635
7	2	-13.01641	-16.17063	-1.09026
7	3	-13.77855	-17.11755	-1.52184
7	4	-14.34482	-21.07552	-3.69421
7	5	-14.85564	NUMXQ(K)= 5	

3.440E-06	0.054	1.000
2.364E-06	0.161	3.000
1.975E-06	0.269	5.000
1.532E-06	0.537	10.000
1.308E-06	0.806	15.000
1.164E-06	1.074	20.000
1.060E-06	1.343	25.000
9.586E-07	1.611	30.000
8.718E-07	1.880	35.000
8.016E-07	2.149	40.000
7.432E-07	2.417	45.000
6.938E-07	2.686	50.000
6.513E-07	2.954	55.000
6.141E-07	3.223	60.000
5.707E-07	3.491	65.000
5.038E-07	3.760	70.000
4.478E-07	4.029	75.000
4.005E-07	4.297	80.000
3.603E-07	4.566	85.000
1.574E-06	0.5	9.31

ANNUAL AVERAGE = 4.90E-10

K= 7 FIVEXQ(K)= 1.574E-06 FIVEPR(K)= 9.308

FUMIGATION X/Q AT THE BOUNDARY: 1.30E-04

EXPONENTIAL TERM AND FREQUENCIES

5.684E-01	5.200E-01	4.072E-01	3.613E-01	2.419E-01	2.081E-01	1.693E-02
1.607	5.385	7.469	14.605	59.944	98.220	100.000

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE NNW SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	3.6	0.09	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	4.045E-06
A	6.0	0.09	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
B	3.6	0.14	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.37	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.37	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.05	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
C	3.6	0.55	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	1.01	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	0.46	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
C	11.6	0.05	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	6.230E-07
D	0.2	0.00	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	1.61	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	11.17	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	21.42	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	5.42	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	0.51	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	0.32	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.02	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	2.71	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	14.29	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	20.36	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	7.58	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	0.51	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.09	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.02	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	1.47	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	4.14	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	3.63	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	0.37	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07
G	1.8	0.41	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	0.46	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08
G	6.5	0.28	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08
G	9.6	0.05	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.220E-08

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

LOW POPULATION ZONE CALCULATIONS:

NNW SECTOR BOUNDARY DISTANCE = 280.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	4.813E-06	4.045E-06	2.858E-06	2.427E-06	2.224E-06	1.994E-06	1.715E-06	1.262E-06
0.004	0.023	0.040	0.132	0.270	0.362	1.970	2.522	2.889	5.601
0.00018	0.00116	0.00203	0.00669	0.01369	0.01835	0.09999	0.12798	0.14664	0.28426
1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07	6.875E-07	6.230E-07	6.226E-07	5.890E-07	4.207E-07
6.612	6.980	18.148	18.194	18.653	20.124	20.170	41.587	55.880	61.303
0.33558	0.35424	0.92104	0.92337	0.94670	1.02134	1.02367	2.11063	2.83604	3.11128
3.534E-07	3.243E-07	3.208E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07	1.301E-07	8.032E-08	6.449E-08
81.662	82.168	86.304	93.887	97.518	98.024	98.345	98.713	98.805	99.219
4.14459	4.17025	4.38017	4.76504	4.94931	4.97497	4.99130	5.00996	5.01462	5.03561
3.010E-08	1.806E-08	1.220E-08							
99.678	99.954	100.000							
5.05894	5.07293	5.07527							

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(2)= 0.100
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(3)= 0.920

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HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   2.833
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   4.141

  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
  8  1     -11.07050 -16.92746  -1.26549
  8  2     -13.01641 -16.22955  -1.03967
  8  3     -13.77855 -16.73458  -1.25389
  8  4     -14.34482 -20.02675  -2.98127
  8  5     -14.85564     NUMXQ(K)=  5
    2.850E-06              0.051              1.000
    1.948E-06              0.152              3.000
    1.648E-06              0.254              5.000
    1.296E-06              0.508             10.000
    1.116E-06              0.761             15.000
    9.915E-07              1.015             20.000
    8.911E-07              1.269             25.000
    8.147E-07              1.523             30.000
    7.539E-07              1.776             35.000
    7.039E-07              2.030             40.000
    6.618E-07              2.284             45.000
    6.256E-07              2.538             50.000
    5.941E-07              2.791             55.000
    5.366E-07              3.045             60.000
    4.825E-07              3.299             65.000
    4.367E-07              3.553             70.000
    3.975E-07              3.806             75.000
    3.637E-07              4.060             80.000

    1.303E-06              0.5                9.85

ANNUAL AVERAGE =   7.76E-11

K=  8     FIVEXQ(K)= 1.303E-06     FIVEPR(K)= 9.852

FUMIGATION X/Q AT THE BOUNDARY:   1.30E-04

 EXPONENTIAL TERM AND FREQUENCIES

   5.684E-01   5.200E-01   4.072E-01   3.613E-01   2.419E-01   2.081E-01   1.693E-02
       0.184       2.252       3.171      12.793      53.241      98.805     100.000
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USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE N SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	6.0	0.28	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	0.16	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
B	3.6	0.07	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.58	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.72	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.12	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
B	26.5	0.02	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	3.897E-07
C	3.6	0.44	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	1.68	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	1.56	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
C	11.6	0.21	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	6.230E-07
C	26.5	0.02	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	2.719E-07
D	0.2	0.00	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	0.96	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	7.00	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	16.51	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	11.24	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	2.31	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	0.68	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.01	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	1.63	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	10.14	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	20.78	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	12.03	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	1.49	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.14	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	0.54	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	3.13	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	3.03	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	1.03	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07
G	1.8	0.40	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	0.79	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08

G	6.5	0.23	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08
G	9.6	0.05	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.220E-08

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

LOW POPULATION ZONE CALCULATIONS:

N SECTOR BOUNDARY DISTANCE = 280.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	4.813E-06	2.858E-06	2.427E-06	2.224E-06	1.994E-06	1.715E-06	1.640E-06	1.262E-06
0.002	0.014	0.020	0.090	0.370	1.326	1.769	2.352	2.515	4.148
0.00022	0.00138	0.00200	0.00900	0.03699	0.13262	0.17694	0.23525	0.25158	0.41485
1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07	6.875E-07	6.230E-07	6.226E-07	5.890E-07	4.207E-07
5.827	6.550	13.547	13.663	15.226	15.762	15.972	32.484	42.629	53.870
0.58280	0.65510	1.35486	1.36652	1.52280	1.57645	1.59744	3.24887	4.26352	5.38780
3.897E-07	3.534E-07	3.243E-07	3.208E-07	2.719E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07	1.301E-07
53.893	74.673	76.981	80.107	80.130	92.164	95.196	96.688	97.365	98.391
5.39013	7.46841	7.69933	8.01189	8.01422	9.21780	9.52103	9.67031	9.73795	9.84058
8.032E-08	6.449E-08	3.010E-08	1.806E-08	1.220E-08					
98.531	98.927	99.720	99.953	100.000					
9.85458	9.89423	9.97354	9.99686	10.00153					

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(2)= 0.132
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(4)= 4.260

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(5)= 7.465

K	I	XQSAVE(K,I)	XQINT(K,I)	XQSLOP(K,I)
9	1	-11.07050	-16.69575	-1.22412
9	2	-13.01641	-15.89735	-0.95849
9	3	-13.77855	-16.33691	-1.15733
9	4	-14.34482	-17.49364	-1.82936
9	5	-14.85564	NUMXQ(K)= 5	

2.467E-06	0.100	1.000
1.737E-06	0.300	3.000
1.473E-06	0.500	5.000
1.160E-06	1.000	10.000
9.906E-07	1.500	15.000
8.658E-07	2.000	20.000
7.767E-07	2.500	25.000
7.087E-07	3.000	30.000
6.544E-07	3.501	35.000
6.096E-07	4.001	40.000
5.621E-07	4.501	45.000
5.124E-07	5.001	50.000
4.705E-07	5.501	55.000
4.345E-07	6.001	60.000
4.034E-07	6.501	65.000
3.761E-07	7.001	70.000
1.473E-06	0.5	5.00

ANNUAL AVERAGE = 2.27E-10

K= 9 FIVEXQ(K)= 1.473E-06 FIVEPR(K)= 4.999

FUMIGATION X/Q AT THE BOUNDARY: 1.30E-04

EXPONENTIAL TERM AND FREQUENCIES

5.684E-01	5.200E-01	4.072E-01	3.613E-01	2.419E-01	2.081E-01	1.693E-02
0.443	4.361	5.877	13.603	52.296	98.531	100.000

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE NNE SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	3.6	0.08	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	4.045E-06
A	6.0	0.28	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	0.12	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
B	3.6	0.16	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.56	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.36	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.08	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
C	3.6	0.20	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	1.47	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	0.95	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
D	0.2	0.00	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	0.91	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	7.60	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	16.91	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	6.60	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	0.64	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	0.36	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.02	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	2.23	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	12.73	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	22.95	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	9.07	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	0.76	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.16	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	1.27	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	5.61	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	4.42	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	0.91	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07
F	12.5	0.12	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.003E-07
G	1.8	0.36	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	1.23	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08
G	6.5	0.84	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08

G	9.6	0.04	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.220E-08

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

LOW POPULATION ZONE CALCULATIONS:

NNE SECTOR BOUNDARY DISTANCE = 280.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	4.813E-06	4.045E-06	2.858E-06	2.427E-06	2.224E-06	1.994E-06	1.715E-06	1.640E-06
0.002	0.018	0.033	0.112	0.271	0.550	1.465	1.664	2.221	2.340
0.00012	0.00105	0.00191	0.00658	0.01591	0.03224	0.08588	0.09755	0.13020	0.13720
1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07	6.875E-07	6.226E-07	5.890E-07	4.207E-07
4.568	6.039	6.397	13.995	14.075	15.030	16.303	33.209	45.939	52.542
0.26782	0.35412	0.37512	0.82063	0.82529	0.88127	0.95592	1.94724	2.69365	3.08085
3.534E-07	3.243E-07	3.208E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07	1.301E-07	1.003E-07	8.032E-08
75.495	76.132	81.741	90.811	95.226	95.982	96.340	97.255	97.375	97.534
4.42671	4.46403	4.79292	5.32473	5.58364	5.62796	5.64895	5.70260	5.70960	5.71893
6.449E-08	3.010E-08	1.806E-08	1.220E-08						
97.892	99.125	99.960	100.000						
5.73992	5.81223	5.86121	5.86355						

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(2)= 0.001
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(3)= 0.086

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HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   0.820
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   2.691
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   4.423

 K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
10  1     -11.07050 -16.86574  -1.22926
10  2     -11.63677 -16.88443  -1.23365
10  3     -13.01641 -16.26591  -1.03638
10  4     -13.77855 -16.65940  -1.20033
10  5     -14.34482 -18.72800  -2.27310
10  6     -14.85564     NUMXQ(K)=  6
   2.548E-06              0.059              1.000
   1.776E-06              0.176              3.000
   1.500E-06              0.293              5.000
   1.176E-06              0.586             10.000
   1.006E-06              0.880             15.000
   8.839E-07              1.173             20.000
   7.964E-07              1.466             25.000
   7.297E-07              1.759             30.000
   6.764E-07              2.052             35.000
   6.325E-07              2.345             40.000
   5.954E-07              2.639             45.000
   5.416E-07              2.932             50.000
   4.920E-07              3.225             55.000
   4.501E-07              3.518             60.000
   4.142E-07              3.811             65.000
   3.831E-07              4.104             70.000
   3.559E-07              4.398             75.000

   1.246E-06              0.5                8.53

ANNUAL AVERAGE =   1.73E-10

K= 10     FIVEXQ(K)= 1.246E-06     FIVEPR(K)= 8.527

FUMIGATION X/Q AT THE BOUNDARY:   1.30E-04

 EXPONENTIAL TERM AND FREQUENCIES

   5.684E-01   5.200E-01   4.072E-01   3.613E-01   2.419E-01   2.081E-01   1.693E-02
       0.477       3.103       4.256      16.603      49.623      97.534     100.000
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USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE NE SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	3.6	0.09	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	4.045E-06
A	6.0	0.23	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	0.09	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
B	3.6	0.14	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.61	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.28	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.05	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
C	3.6	0.33	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	1.41	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	0.99	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
C	11.6	0.19	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	6.230E-07
C	26.5	0.05	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	2.719E-07
D	0.2	0.00	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	1.50	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	7.28	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	13.48	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	5.92	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	0.75	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	0.14	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.02	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	2.77	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	13.19	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	16.62	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	10.14	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	0.85	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.09	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.02	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	1.50	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	7.32	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	7.37	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	1.83	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07
G	1.8	0.28	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	1.69	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08

G	6.5	2.39	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08
G	9.6	0.38	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.220E-08

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

LOW POPULATION ZONE CALCULATIONS:

NE SECTOR BOUNDARY DISTANCE = 280.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	4.813E-06	4.045E-06	2.858E-06	2.427E-06	2.224E-06	1.994E-06	1.715E-06	1.640E-06
0.003	0.023	0.040	0.134	0.275	0.510	2.012	2.341	2.951	3.045
0.00017	0.00115	0.00201	0.00667	0.01367	0.02534	0.09998	0.11630	0.14663	0.15129
1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07	6.875E-07	6.230E-07	6.226E-07	5.890E-07
5.815	7.224	7.506	14.783	14.830	15.816	17.319	17.506	30.981	44.175
0.28891	0.35889	0.37288	0.73442	0.73676	0.78574	0.86038	0.86971	1.53914	2.19458
4.207E-07	3.534E-07	3.243E-07	3.208E-07	2.719E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07	1.301E-07
50.091	66.711	67.463	74.787	74.834	84.976	92.347	93.192	93.333	95.164
2.48848	3.31419	3.35152	3.71539	3.71772	4.22155	4.58775	4.62974	4.63674	4.72770
8.032E-08	6.449E-08	3.010E-08	1.806E-08	1.220E-08					
95.258	95.540	97.230	99.624	100.000					
4.73237	4.74636	4.83034	4.94929	4.96795					

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(2)= 0.100
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(3)= 0.734

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HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   2.192
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   3.712

  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
 11  1     -11.07050 -16.88108  -1.25046
 11  2     -13.01641 -16.63911  -1.17217
 11  3     -13.77855 -17.03136  -1.33290
 11  4     -14.34482 -19.65802  -2.63609
 11  5     -14.95230     NUMXQ(K)=  5
    2.862E-06              0.050              1.000
    1.931E-06              0.149              3.000
    1.599E-06              0.248              5.000
    1.220E-06              0.497             10.000
    1.030E-06              0.745             15.000
    8.947E-07              0.994             20.000
    7.990E-07              1.242             25.000
    7.266E-07              1.490             30.000
    6.693E-07              1.739             35.000
    6.223E-07              1.987             40.000
    5.771E-07              2.236             45.000
    5.130E-07              2.484             50.000
    4.604E-07              2.732             55.000
    4.164E-07              2.981             60.000
    3.792E-07              3.229             65.000
    3.474E-07              3.478             70.000

    1.217E-06              0.5               10.06

ANNUAL AVERAGE =   1.36E-10

K= 11     FIVEXQ(K)= 1.217E-06     FIVEPR(K)=10.065

FUMIGATION X/Q AT THE BOUNDARY:   1.30E-04

 EXPONENTIAL TERM AND FREQUENCIES

   5.684E-01   5.200E-01   4.072E-01   3.613E-01   2.419E-01   2.081E-01   1.693E-02
       0.423       3.381       4.460      22.507      51.573      95.258     100.000
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USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE ENE SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	6.0	0.33	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	0.14	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
A	11.6	0.09	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.264E-06
A	26.5	0.09	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	5.516E-07
B	3.6	0.05	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.38	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.89	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.09	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
B	26.5	0.05	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	3.897E-07
C	3.6	0.14	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	1.22	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	1.46	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
C	11.6	0.19	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	6.230E-07
C	26.5	0.05	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	2.719E-07
D	0.2	0.00	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	0.71	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	6.02	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	9.93	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	8.94	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	1.03	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	0.28	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.02	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	2.54	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	8.80	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	13.97	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	12.75	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	1.41	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.05	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.02	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	1.55	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	5.50	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	8.33	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	5.13	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07
F	12.5	0.85	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.003E-07

G	1.8	0.85	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	1.60	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08
G	6.5	3.29	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08
G	9.6	1.22	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.220E-08
G	12.5	0.05	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	9.405E-09

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

LOW POPULATION ZONE CALCULATIONS:

ENE SECTOR BOUNDARY DISTANCE = 280.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	4.813E-06	2.858E-06	2.427E-06	2.224E-06	1.994E-06	1.715E-06	1.640E-06	1.264E-06
0.002	0.020	0.038	0.085	0.414	1.120	1.261	1.637	1.778	1.872
0.00008	0.00098	0.00186	0.00420	0.02052	0.05551	0.06251	0.08117	0.08817	0.09283
1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07	6.875E-07	6.230E-07	6.226E-07	5.890E-07
4.412	5.635	6.529	12.551	12.645	14.103	15.655	15.843	25.769	34.566
0.21879	0.27943	0.32375	0.62232	0.62698	0.69929	0.77626	0.78559	1.27776	1.71394
5.516E-07	4.207E-07	3.897E-07	3.534E-07	3.243E-07	3.208E-07	2.719E-07	2.388E-07	1.925E-07	1.841E-07
34.660	43.598	43.645	57.616	58.651	64.155	64.202	76.950	85.276	86.687
1.71860	2.16178	2.16411	2.85687	2.90819	3.18110	3.18343	3.81554	4.22840	4.29837
1.415E-07	1.301E-07	1.003E-07	8.032E-08	6.449E-08	3.010E-08	1.806E-08	1.220E-08	9.405E-09	
86.970	92.097	92.944	92.991	93.838	95.437	98.730	99.953	100.000	
4.31237	4.56662	4.60860	4.61093	4.65292	4.73222	4.89550	4.95615	4.95848	

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(2)= 0.001
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(3)= 0.055

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HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   0.622
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   1.712
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   3.178

 K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
12  1     -11.07050 -16.19649  -1.06775
12  2     -11.63677 -17.47494  -1.36713
12  3     -13.01641 -16.28004  -1.00073
12  4     -13.77855 -17.47979  -1.48070
12  5     -14.34482 -19.25415  -2.31876
12  6     -14.95230     NUMXQ(K)=  6
   2.323E-06              0.050              1.000
   1.662E-06              0.149              3.000
   1.416E-06              0.248              5.000
   1.124E-06              0.496             10.000
   9.441E-07              0.744             15.000
   8.070E-07              0.992             20.000
   7.118E-07              1.240             25.000
   6.405E-07              1.488             30.000
   5.822E-07              1.735             35.000
   5.130E-07              1.983             40.000
   4.579E-07              2.231             45.000
   4.128E-07              2.479             50.000
   3.754E-07              2.727             55.000
   3.437E-07              2.975             60.000

   1.120E-06              0.5               10.08

ANNUAL AVERAGE =   1.43E-10

K= 12     FIVEXQ(K)= 1.120E-06     FIVEPR(K)=10.084

FUMIGATION X/Q AT THE BOUNDARY:   1.30E-04

 EXPONENTIAL TERM AND FREQUENCIES

   5.684E-01   5.200E-01   4.072E-01   3.613E-01   2.419E-01   2.081E-01   1.693E-02
       0.659       3.716       5.175      26.549      53.458      92.991     100.000
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USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE E SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	3.6	0.03	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	4.045E-06
A	6.0	0.24	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	0.63	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
A	11.6	0.42	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.264E-06
A	26.5	0.06	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	5.516E-07
B	3.6	0.12	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.63	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.81	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.36	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
B	26.5	0.18	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	3.897E-07
C	3.6	0.15	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	1.25	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	1.67	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
C	11.6	0.86	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	6.230E-07
C	26.5	0.39	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	2.719E-07
D	0.2	0.00	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	0.78	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	4.21	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	8.98	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	11.78	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	6.71	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	2.68	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.01	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	1.61	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	5.16	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	11.78	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	15.99	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	2.33	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.27	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	0.89	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	2.54	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	5.91	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	5.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07

F	12.5	0.72	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.003E-07
G	1.8	0.39	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	1.19	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08
G	6.5	2.06	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08
G	9.6	1.16	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.220E-08
G	12.5	0.03	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	9.405E-09
G	28.5	0.03	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	4.104E-09

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

LOW POPULATION ZONE CALCULATIONS:

E SECTOR BOUNDARY DISTANCE = 280.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	4.813E-06	4.045E-06	2.858E-06	2.427E-06	2.224E-06	1.994E-06	1.715E-06	1.640E-06
0.002	0.013	0.024	0.053	0.173	0.411	1.187	1.336	1.962	2.589
0.00014	0.00103	0.00184	0.00417	0.01350	0.03216	0.09281	0.10447	0.15346	0.20244
1.264E-06	1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07	6.875E-07	6.230E-07	6.226E-07
3.006	4.617	5.869	6.675	10.880	11.238	12.908	13.803	14.668	23.646
0.23509	0.36105	0.45902	0.52199	0.85088	0.87887	1.00949	1.07947	1.14711	1.84920
5.890E-07	5.516E-07	4.207E-07	3.897E-07	3.534E-07	3.243E-07	3.208E-07	2.719E-07	2.388E-07	1.925E-07
28.806	28.865	40.646	40.825	52.607	59.317	61.853	62.240	78.227	84.133
2.25273	2.25739	3.17874	3.19274	4.11408	4.63890	4.83717	4.86749	6.11772	6.57956
1.841E-07	1.415E-07	1.301E-07	1.003E-07	8.032E-08	6.449E-08	3.010E-08	1.806E-08	1.220E-08	9.405E-09
86.459	89.143	94.154	94.870	95.138	95.526	96.719	98.777	99.940	99.970
6.76150	6.97143	7.36329	7.41927	7.44026	7.47059	7.56389	7.72483	7.81580	7.81813
4.104E-09									
100.000									
7.82046									

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED
CHI/Q WITH RESPECT TO WHEN THE WIND BLOWS

SEC/CUBIC METER THE TOTAL TIME INTO THIS SECTOR ONLY

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HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=   0.093
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=   0.850
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   2.250
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   4.834
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K	I	XQSAVE(K,I)	XQINT(K,I)	XQSLOP(K,I)
13	1	-11.07050	-16.85765	-1.23409
13	2	-13.01641	-16.28464	-1.05000
13	3	-13.77855	-17.31495	-1.48167
13	4	-14.34482	-17.89132	-1.76920
13	5	-14.95230	NUMXQ(K)= 5	

2.366E-06	0.078	1.000
1.649E-06	0.235	3.000
1.383E-06	0.391	5.000
1.072E-06	0.782	10.000
8.680E-07	1.173	15.000
7.349E-07	1.564	20.000
6.428E-07	1.955	25.000
5.714E-07	2.346	30.000
5.083E-07	2.737	35.000
4.583E-07	3.128	40.000
4.173E-07	3.519	45.000
3.832E-07	3.910	50.000
3.542E-07	4.301	55.000
3.292E-07	4.692	60.000
1.266E-06	0.5	6.39

ANNUAL AVERAGE = 4.18E-10

K= 13 FIVEXQ(K)= 1.266E-06 FIVEPR(K)= 6.393

FUMIGATION X/Q AT THE BOUNDARY: 1.30E-04

EXPONENTIAL TERM AND FREQUENCIES

5.684E-01	5.200E-01	4.072E-01	3.613E-01	2.419E-01	2.081E-01	1.693E-02
1.372	5.697	7.785	22.857	57.994	95.138	100.000

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE ESE SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	6.0	0.24	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	0.24	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
A	11.6	0.05	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.264E-06
A	26.5	0.13	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	5.516E-07
B	3.6	0.08	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.24	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.53	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.37	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
B	26.5	0.19	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	3.897E-07
C	3.6	0.13	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	0.69	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	1.57	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
C	11.6	0.80	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	6.230E-07
C	26.5	0.72	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	2.719E-07
D	0.2	0.00	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	1.01	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	2.59	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	9.48	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	17.99	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	11.96	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	4.03	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.01	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	0.96	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	3.68	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	9.45	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	15.56	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	2.96	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.32	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	0.75	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	1.76	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	3.74	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	3.68	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07
F	12.5	0.48	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.003E-07

G	1.8	0.37	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	0.93	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08
G	6.5	1.17	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08
G	9.6	1.04	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.220E-08
G	12.5	0.05	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	9.405E-09

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

LOW POPULATION ZONE CALCULATIONS:

ESE SECTOR BOUNDARY DISTANCE = 280.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	4.813E-06	2.858E-06	2.427E-06	2.224E-06	1.994E-06	1.715E-06	1.640E-06	1.264E-06
0.002	0.009	0.018	0.098	0.338	1.352	1.486	1.726	1.966	2.020
0.00020	0.00080	0.00155	0.00855	0.02954	0.11818	0.12984	0.15083	0.17183	0.17649
1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07	6.875E-07	6.230E-07	6.226E-07	5.890E-07
2.980	3.674	4.208	6.797	7.171	8.746	9.493	10.294	19.769	23.452
0.26046	0.32111	0.36776	0.59401	0.62667	0.76429	0.82960	0.89957	1.72762	2.04951
5.516E-07	4.207E-07	3.897E-07	3.534E-07	3.243E-07	3.208E-07	2.719E-07	2.388E-07	1.925E-07	1.841E-07
23.585	41.575	41.762	51.210	63.167	64.929	65.649	81.210	84.947	87.909
2.06117	3.63329	3.64962	4.47533	5.52030	5.67425	5.73723	7.09709	7.42365	7.68255
1.415E-07	1.301E-07	1.003E-07	8.032E-08	6.449E-08	3.010E-08	1.806E-08	1.220E-08	9.405E-09	
91.939	95.623	96.103	96.423	96.797	97.731	98.906	99.947	100.000	
8.03477	8.35665	8.39864	8.42663	8.45928	8.54092	8.64355	8.73452	8.73919	

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(2)= 0.118
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(3)= 0.593

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(4)= 2.047
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(5)= 5.670

K	I	XQSAVE(K,I)	XQINT(K,I)	XQSLOP(K,I)
14	1	-11.07050	-16.78363	-1.23898
14	2	-13.01641	-17.43472	-1.45311
14	3	-13.77855	-16.79696	-1.19964
14	4	-14.34482	-17.03831	-1.31771
14	5	-14.95230	NUMXQ(K)= 5	

2.485E-06	0.087	1.000
1.550E-06	0.262	3.000
1.211E-06	0.437	5.000
8.781E-07	0.874	10.000
7.304E-07	1.311	15.000
6.370E-07	1.748	20.000
5.687E-07	2.185	25.000
5.135E-07	2.622	30.000
4.699E-07	3.059	35.000
4.343E-07	3.496	40.000
4.045E-07	3.933	45.000
3.791E-07	4.370	50.000
3.571E-07	4.807	55.000
3.378E-07	5.244	60.000
1.132E-06	0.5	5.72

ANNUAL AVERAGE = 2.34E-10

K= 14 FIVEXQ(K)= 1.132E-06 FIVEPR(K)= 5.721

FUMIGATION X/Q AT THE BOUNDARY: 1.30E-04

EXPONENTIAL TERM AND FREQUENCIES

5.684E-01	5.200E-01	4.072E-01	3.613E-01	2.419E-01	2.081E-01	1.693E-02
0.667	4.591	6.005	16.423	63.481	96.423	100.000

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE SE SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	6.0	0.04	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	0.06	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
A	26.5	0.02	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	5.516E-07
B	3.6	0.08	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.04	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.19	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.08	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
C	3.6	0.06	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	0.55	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	0.74	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
C	11.6	0.59	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	6.230E-07
C	26.5	0.13	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	2.719E-07
D	0.2	0.00	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	0.76	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	4.10	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	11.52	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	22.08	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	11.54	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	3.91	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.01	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	0.83	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	3.61	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	11.03	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	13.83	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	1.89	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.13	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	0.55	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	2.00	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	3.78	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	1.91	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07
G	1.8	0.28	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	1.49	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08

G	6.5	1.95	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08
G	9.6	0.19	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.220E-08

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

LOW POPULATION ZONE CALCULATIONS:

SE SECTOR BOUNDARY DISTANCE = 280.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	4.813E-06	2.858E-06	2.427E-06	2.224E-06	1.994E-06	1.715E-06	1.640E-06	1.262E-06
0.002	0.008	0.014	0.099	0.141	0.906	0.970	1.013	1.076	1.905
0.00019	0.00084	0.00154	0.01087	0.01553	0.09950	0.10650	0.11117	0.11816	0.20913
1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07	6.875E-07	6.230E-07	6.226E-07	5.890E-07	5.516E-07
2.457	2.649	6.749	6.834	7.578	8.130	8.725	20.241	23.853	23.874
0.26978	0.29077	0.74095	0.75028	0.83192	0.89256	0.95787	2.22210	2.61863	2.62096
4.207E-07	3.534E-07	3.243E-07	3.208E-07	2.719E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07	1.301E-07
45.949	56.976	68.513	70.510	70.637	84.469	88.251	90.142	94.051	95.963
5.04446	6.25504	7.52160	7.74085	7.75485	9.27332	9.68851	9.89611	10.32529	10.53522
8.032E-08	6.449E-08	3.010E-08	1.806E-08	1.220E-08					
96.091	96.367	97.854	99.809	100.000					
10.54921	10.57954	10.74281	10.95741	10.97840					

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(2)= 0.099
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(3)= 0.740

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HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   5.041
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   7.737

 K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
15  1     -11.07050 -16.94794  -1.27152
15  2     -13.01641 -16.61528  -1.16393
15  3     -13.77855 -16.54197  -1.13385
15  4     -14.68142 -16.72098  -1.24294
15  5     -14.95230     NUMXQ(K)=  5
   2.149E-06              0.110              1.000
   1.438E-06              0.329              3.000
   1.175E-06              0.549              5.000
   8.797E-07              1.098             10.000
   7.352E-07              1.647             15.000
   6.432E-07              2.196             20.000
   5.774E-07              2.745             25.000
   5.270E-07              3.294             30.000
   4.868E-07              3.842             35.000
   4.536E-07              4.391             40.000
   4.255E-07              4.940             45.000
   3.996E-07              5.489             50.000
   3.766E-07              6.038             55.000
   3.564E-07              6.587             60.000
   3.385E-07              7.136             65.000
   3.224E-07              7.685             70.000

   1.220E-06              0.5                4.55

ANNUAL AVERAGE =   5.77E-11

K= 15     FIVEXQ(K)= 1.220E-06     FIVEPR(K)= 4.554

FUMIGATION X/Q AT THE BOUNDARY:   1.30E-04

 EXPONENTIAL TERM AND FREQUENCIES

   5.684E-01   5.200E-01   4.072E-01   3.613E-01   2.419E-01   2.081E-01   1.693E-02
       0.127       2.210       2.613      10.863      64.767      96.091     100.000
```

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE SSE SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	3.6	0.02	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	4.045E-06
A	6.0	0.17	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	0.32	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
A	11.6	0.02	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.264E-06
A	26.5	0.02	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	5.516E-07
B	3.6	0.06	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.48	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.71	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.11	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
C	3.6	0.48	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	2.16	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	2.01	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
C	11.6	0.37	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	6.230E-07
D	0.2	0.00	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	1.08	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	8.31	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	20.04	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	19.82	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	5.23	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	1.36	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.01	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	0.73	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	4.38	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	11.10	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	10.11	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	0.93	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.22	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	0.48	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	2.09	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	2.72	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	0.69	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07
F	12.5	0.11	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.003E-07

G	1.8	0.41	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	1.27	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08
G	6.5	1.84	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08
G	9.6	0.11	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.220E-08
G	28.5	0.02	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	4.104E-09

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

LOW POPULATION ZONE CALCULATIONS:

SSE SECTOR BOUNDARY DISTANCE = 280.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	4.813E-06	4.045E-06	2.858E-06	2.427E-06	2.224E-06	1.994E-06	1.715E-06	1.640E-06
0.002	0.008	0.013	0.035	0.100	0.272	1.352	1.827	2.302	2.626
0.00026	0.00083	0.00142	0.00375	0.01075	0.02941	0.14604	0.19735	0.24867	0.28366
1.264E-06	1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07	6.875E-07	6.230E-07	6.226E-07
2.648	3.382	5.542	6.254	14.568	14.676	16.685	17.160	17.527	37.568
0.28599	0.36529	0.59855	0.67552	1.57354	1.58520	1.80213	1.85344	1.89310	4.05768
5.890E-07	5.516E-07	4.207E-07	3.534E-07	3.243E-07	3.208E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07
41.951	41.973	61.798	72.898	78.124	80.219	90.325	93.046	93.975	95.335
4.53118	4.53352	6.67477	7.87369	8.43816	8.66442	9.75604	10.04994	10.15024	10.29718
1.301E-07	1.003E-07	8.032E-08	6.449E-08	3.010E-08	1.806E-08	1.220E-08	4.104E-09		
96.026	96.134	96.350	96.761	98.035	99.870	99.978	100.000		
10.37183	10.38349	10.40681	10.45113	10.58875	10.78701	10.79868	10.80101		

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(2)= 0.197
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(4)= 4.528

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(5)= 6.671

K	I	XQSAVE(K,I)	XQINT(K,I)	XQSLOP(K,I)
16	1	-11.07050	-16.67065	-1.22977
16	2	-13.12558	-15.69990	-0.89302
16	3	-13.77855	-16.43273	-1.23363
16	4	-14.34482	-17.31614	-1.75559
16	5	-14.68142	NUMXQ(K)= 5	

2.502E-06	0.108	1.000
1.728E-06	0.324	3.000
1.480E-06	0.540	5.000
1.182E-06	1.080	10.000
1.023E-06	1.620	15.000
8.846E-07	2.160	20.000
7.868E-07	2.700	25.000
7.127E-07	3.240	30.000
6.539E-07	3.780	35.000
6.056E-07	4.320	40.000
5.553E-07	4.860	45.000
5.074E-07	5.401	50.000
4.669E-07	5.941	55.000
4.320E-07	6.481	60.000
1.516E-06	0.5	4.63

ANNUAL AVERAGE = 2.78E-10

K= 16 FIVEXQ(K)= 1.516E-06 FIVEPR(K)= 4.629

FUMIGATION X/Q AT THE BOUNDARY: 1.30E-04

EXPONENTIAL TERM AND FREQUENCIES

5.684E-01	5.200E-01	4.072E-01	3.613E-01	2.419E-01	2.081E-01	1.693E-02
0.561	5.572	6.932	13.028	68.876	96.350	100.000

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE ALL SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	1.7	0.01	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	8.668E-06
A	3.6	0.51	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	4.045E-06
A	6.0	0.53	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	0.28	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
A	11.6	0.06	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.264E-06
A	26.5	0.03	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	5.516E-07
B	1.7	0.05	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	6.124E-06
B	3.6	0.47	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.54	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.44	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.12	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
B	26.5	0.03	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	3.897E-07
C	1.7	0.08	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	4.272E-06
C	3.6	0.77	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	1.33	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	1.04	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
C	11.6	0.30	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	6.230E-07
C	26.5	0.13	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	2.719E-07
D	0.2	0.00	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	2.07	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	9.39	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	15.72	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	12.23	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	4.24	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	1.39	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.01	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	1.97	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	8.90	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	13.85	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	9.53	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	1.29	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.23	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	1.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07

F	3.9	3.14	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	3.52	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	1.55	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07
F	12.5	0.16	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.003E-07
F	28.5	0.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.375E-08
G	1.8	0.43	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	1.17	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08
G	6.5	1.14	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08
G	9.6	0.31	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.220E-08
G	12.5	0.01	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	9.405E-09
G	28.5	0.00	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	4.104E-09

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

LOW POPULATION ZONE CALCULATIONS:
DIRECTION-INDEPENDENT (S.R.P 2.3.4) MODEL.
MINIMUM BOUNDARY DISTANCE = 280.0 METERS.
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	8.668E-06	6.124E-06	4.813E-06	4.272E-06	4.045E-06	2.858E-06	2.427E-06	2.224E-06
0.005	0.019	0.026	0.072	0.084	0.161	0.674	1.145	1.677	3.744
0.00467	0.01866	0.02566	0.07231	0.08397	0.16094	0.67410	1.14527	1.67709	3.74370
1.994E-06	1.715E-06	1.640E-06	1.264E-06	1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07
4.509	5.052	5.330	5.388	7.354	8.684	9.125	18.516	18.637	19.680
4.50877	5.05225	5.32982	5.38813	7.35445	8.68399	9.12484	18.51558	18.63687	19.67951
6.875E-07	6.230E-07	6.226E-07	5.890E-07	5.516E-07	4.207E-07	3.897E-07	3.534E-07	3.243E-07	3.208E-07
20.689	20.993	36.712	45.608	45.636	57.865	57.900	71.746	75.987	79.129
20.68949	20.99272	36.71161	45.60785	45.63584	57.86527	57.90026	71.74612	75.98666	79.12857
2.719E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07	1.301E-07	1.003E-07	8.032E-08	6.449E-08	4.375E-08
79.254	88.781	92.298	93.593	94.980	96.534	96.695	96.923	97.357	97.369
79.25452	88.78055	92.29800	93.59254	94.98039	96.53386	96.69480	96.92339	97.35724	97.36890
3.010E-08	1.806E-08	1.220E-08	9.405E-09	4.104E-09					
98.542	99.678	99.986	99.995	100.000					
98.54216	99.67810	99.98599	99.99532	99.99998					

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED
CHI/Q WITH RESPECT TO WHEN THE WIND BLOWS

SEC/CUBIC METER	THE TOTAL TIME	INTO THIS SECTOR ONLY
3.662E-06	1.000	1.000
2.436E-06	3.000	3.000
1.977E-06	5.000	5.000
1.446E-06	10.000	10.000
1.171E-06	15.000	15.000
9.978E-07	20.000	20.000
8.845E-07	25.000	25.000
7.938E-07	30.000	30.000
7.180E-07	35.000	35.000
6.529E-07	40.000	40.000
5.956E-07	45.000	45.000
5.478E-07	50.000	50.000
5.043E-07	55.000	55.000
4.636E-07	60.000	60.000
4.249E-07	65.000	65.000
3.877E-07	70.000	70.000
3.511E-07	75.000	75.000
1.977E-06	5.0	5.00

K= 17 FIVEXQ(K)= 1.977E-06 FIVEPR(K)= 5.000

FUMIGATION X/Q AT THE BOUNDARY: 1.30E-04

EXPONENTIAL TERM AND FREQUENCIES

5.684E-01	5.200E-01	4.072E-01	3.613E-01	2.419E-01	2.081E-01	1.693E-02
1.416	5.059	6.718	16.125	61.163	96.935	100.000

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

LOW POPULATION ZONE CALCULATIONS:

FIVE PERCENT OVERALL SITE LIMIT
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	8.668E-06	6.124E-06	4.813E-06	4.272E-06	4.045E-06	2.858E-06	2.427E-06	2.224E-06
0.005	0.019	0.026	0.072	0.084	0.161	0.674	1.145	1.677	3.744
0.00467	0.01866	0.02566	0.07231	0.08397	0.16094	0.67410	1.14527	1.67709	3.74370
1.994E-06	1.715E-06	1.640E-06	1.264E-06	1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07
4.509	5.052	5.330	5.388	7.354	8.684	9.125	18.516	18.637	19.680
4.50877	5.05225	5.32982	5.38813	7.35445	8.68399	9.12484	18.51558	18.63688	19.67952
6.875E-07	6.230E-07	6.226E-07	5.890E-07	5.516E-07	4.207E-07	3.897E-07	3.534E-07	3.243E-07	3.208E-07
20.689	20.993	36.712	45.608	45.636	57.865	57.900	71.746	75.987	79.129
20.68950	20.99273	36.71161	45.60786	45.63585	57.86527	57.90026	71.74612	75.98665	79.12857
2.719E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07	1.301E-07	1.003E-07	8.032E-08	6.449E-08	4.375E-08
79.255	88.781	92.298	93.593	94.980	96.534	96.695	96.923	97.357	97.369
79.25453	88.78056	92.29800	93.59256	94.98041	96.53387	96.69481	96.92340	97.35724	97.36890
3.010E-08	1.806E-08	1.220E-08	9.405E-09	4.104E-09					
98.542	99.678	99.986	99.995	100.000					
98.54216	99.67809	99.98598	99.99532	99.99998					

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED
CHI/Q WITH RESPECT TO WHEN THE WIND BLOWS

SEC/CUBIC METER THE TOTAL TIME INTO THIS SECTOR ONLY

K	I	XQSAVE(K,I)	XQINT(K,I)	XQSLOP(K,I)
18	1	-11.07050	-14.64728	-0.91538
18	2	-13.01641	-14.54922	-0.86034
18	3	-13.77855	-14.42414	-0.72071
18	4	-14.34482	-14.41743	-0.65976
18	5	-14.95230	NUMXQ(K)=	5

3.662E-06	1.000	1.000
2.436E-06	3.000	3.000
1.977E-06	5.000	5.000
1.446E-06	10.000	10.000
1.171E-06	15.000	15.000
9.978E-07	20.000	20.000
8.845E-07	25.000	25.000
7.938E-07	30.000	30.000
7.180E-07	35.000	35.000
6.529E-07	40.000	40.000
5.956E-07	45.000	45.000
5.478E-07	50.000	50.000
5.043E-07	55.000	55.000
4.636E-07	60.000	60.000
4.249E-07	65.000	65.000
3.877E-07	70.000	70.000
3.511E-07	75.000	75.000
1.977E-06	5.0	5.00

K= 18 FIVEXQ(K)= 1.977E-06 FIVEPR(K)= 5.000

K	HIGHPR	PR	GRNDVT(K)
1	-3.06052	0.11048	6.21119
2	-2.00327	2.25740	3.52599
3	-2.79824	0.25691	3.10868
4	-2.68650	0.36103	3.53145
5	-2.57624	0.49942	4.76778
6	-2.75266	0.29557	4.27759
7	-3.06855	0.10756	5.37148
8	-3.25087	0.05753	5.07527
9	-3.17144	0.07585	10.00153
10	-3.29988	0.04837	5.86355
11	-3.25284	0.05714	4.96796
12	-3.40963	0.03253	4.95848
13	-3.27701	0.05246	7.82046
14	-3.20434	0.06769	8.73919
15	-3.25156	0.05739	10.97840
16	-3.13645	0.08551	10.80101

K	HOURS(K)	TOTHRS
1	9.67833	9.67833
2	197.74830	207.42660
3	22.50566	229.93230

4	31.62634	261.55860
5	43.74879	305.30740
6	25.89224	331.19960
7	9.42196	340.62160
8	5.03966	345.66130
9	6.64419	352.30550
10	4.23714	356.54260
11	5.00520	361.54780
12	2.84982	364.39760
13	4.59585	368.99350
14	5.92991	374.92340
15	5.02765	379.95100
16	7.49057	387.44160

K	FIVEXQ	SVANN	SLTIME	TIMINT	I	TIME	XQT
1	1.547E-06	1.807E-10	-1.0799	-12.6307			
					1	8.0	-14.87630
					2	16.0	-15.62484
					3	72.0	-17.24909
					4	624.0	-19.58112
2	1.537E-06	3.970E-10	-0.9852	-12.7027			
					1	8.0	-14.75147
					2	16.0	-15.43440
					3	72.0	-16.91628
					4	624.0	-19.04391
3	1.997E-06	9.272E-10	-0.9153	-12.4894			
					1	8.0	-14.39275
					2	16.0	-15.02720
					3	72.0	-16.40390
					4	624.0	-18.38051
4	2.335E-06	1.536E-09	-0.8738	-12.3620			
					1	8.0	-14.17892
					2	16.0	-14.78457
					3	72.0	-16.09879
					4	624.0	-17.98567
5	2.724E-06	3.066E-09	-0.8097	-12.2523			
					1	8.0	-13.93600
					2	16.0	-14.49724
					3	72.0	-15.71508
					4	624.0	-17.46361
6	2.196E-06	1.736E-09	-0.8519	-12.4383			
					1	8.0	-14.20970
					2	16.0	-14.80016
					3	72.0	-16.08142
					4	624.0	-17.92100
7	1.574E-06	4.896E-10	-0.9631	-12.6943			
					1	8.0	-14.69699
					2	16.0	-15.36456
					3	72.0	-16.81311
					4	624.0	-18.89289
8	1.303E-06	7.759E-11	-1.1602	-12.7469			
					1	8.0	-15.15951
					2	16.0	-15.96371

```
                                                  3   72.0   -17.70876
                                                  4  624.0   -20.21421
 9 1.473E-06 2.273E-10   -1.0467  -12.7025
                                                  1    8.0   -14.87909
                                                  2   16.0   -15.60461
                                                  3   72.0   -17.17893
                                                  4  624.0   -19.43927
10 1.246E-06 1.728E-10   -1.0594  -12.8616
                                                  1    8.0   -15.06460
                                                  2   16.0   -15.79892
                                                  3   72.0   -17.39236
                                                  4  624.0   -19.68014
11 1.217E-06 1.364E-10   -1.0848  -12.8674
                                                  1    8.0   -15.12315
                                                  2   16.0   -15.87506
                                                  3   72.0   -17.50666
                                                  4  624.0   -19.84923
12 1.120E-06 1.427E-10   -1.0696  -12.9605
                                                  1    8.0   -15.18466
                                                  2   16.0   -15.92604
                                                  3   72.0   -17.53478
                                                  4  624.0   -19.84453
13 1.266E-06 4.183E-10   -0.9559  -12.9170
                                                  1    8.0   -14.90477
                                                  2   16.0   -15.56736
                                                  3   72.0   -17.00512
                                                  4  624.0   -19.06938
14 1.132E-06 2.337E-10   -1.0120  -12.9897
                                                  1    8.0   -15.09409
                                                  2   16.0   -15.79555
                                                  3   72.0   -17.31767
                                                  4  624.0   -19.50306
15 1.220E-06 5.772E-11   -1.1877  -12.7935
                                                  1    8.0   -15.26317
                                                  2   16.0   -16.08640
                                                  3   72.0   -17.87274
                                                  4  624.0   -20.43748
16 1.516E-06 2.780E-10   -1.0261  -12.6880
                                                  1    8.0   -14.82179
                                                  2   16.0   -15.53306
                                                  3   72.0   -17.07645
                                                  4  624.0   -19.29239
17 1.977E-06 3.066E-09   -0.7715  -12.5990
                                                  1    8.0   -14.20331
                                                  2   16.0   -14.73807
                                                  3   72.0   -15.89847
                                                  4  624.0   -17.56451
18 1.977E-06 3.066E-09   -0.7715  -12.5990
                                                  1    8.0   -14.20331
                                                  2   16.0   -14.73807
                                                  3   72.0   -15.89847
                                                  4  624.0   -17.56451
```

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

RELATIVE CONCENTRATION (X/Q) VALUES (SEC/CUBIC METER)
VERSUS
AVERAGING TIME

DOWNWIND SECTOR	DISTANCE (METERS)	0-2 HOURS	0-8 HOURS	8-24 HOURS	1-4 DAYS	4-30 DAYS	ANNUAL AVERAGE	HOURS PER YEAR MAX 0-2 HR X/Q IS EXCEEDED IN SECTOR	DOWNWIND SECTOR
S	280.	1.55E-06	3.46E-07	1.64E-07	3.23E-08	3.13E-09	1.81E-10	9.7	S
SSW	280.	1.54E-06	3.92E-07	1.98E-07	4.50E-08	5.36E-09	3.97E-10	197.7	SSW
SW	280.	2.00E-06	5.61E-07	2.98E-07	7.51E-08	1.04E-08	9.27E-10	22.5	SW
WSW	280.	2.33E-06	6.95E-07	3.79E-07	1.02E-07	1.54E-08	1.54E-09	31.6	WSW
W	280.	2.72E-06	8.86E-07	5.06E-07	1.50E-07	2.60E-08	3.07E-09	43.7	W
WNW	280.	2.20E-06	6.74E-07	3.74E-07	1.04E-07	1.65E-08	1.74E-09	25.9	WNW
NW	280.	1.57E-06	4.14E-07	2.12E-07	4.99E-08	6.24E-09	4.90E-10	9.4	NW
NNW	280.	1.30E-06	2.61E-07	1.17E-07	2.04E-08	1.66E-09	7.76E-11	5.0	NNW
N	280.	1.47E-06	3.45E-07	1.67E-07	3.46E-08	3.61E-09	2.27E-10	6.6	N
NNE	280.	1.25E-06	2.87E-07	1.38E-07	2.80E-08	2.84E-09	1.73E-10	4.2	NNE
NE	280.	1.22E-06	2.70E-07	1.28E-07	2.49E-08	2.40E-09	1.36E-10	5.0	NE
ENE	280.	1.12E-06	2.54E-07	1.21E-07	2.43E-08	2.41E-09	1.43E-10	2.8	ENE
E	280.	1.27E-06	3.36E-07	1.73E-07	4.12E-08	5.23E-09	4.18E-10	4.6	E
ESE	280.	1.13E-06	2.78E-07	1.38E-07	3.01E-08	3.39E-09	2.34E-10	5.9	ESE
SE	280.	1.22E-06	2.35E-07	1.03E-07	1.73E-08	1.33E-09	5.77E-11	5.0	SE
SSE	280.	1.52E-06	3.66E-07	1.80E-07	3.84E-08	4.18E-09	2.78E-10	7.5	SSE
MAX X/Q		2.72E-06				TOTAL HOURS AROUND SITE:		387.4	
SRP 2.3.4	280.	1.98E-06	6.79E-07	3.97E-07	1.25E-07	2.35E-08	3.07E-09		
SITE LIMIT		1.98E-06	6.79E-07	3.98E-07	1.25E-07	2.35E-08	3.07E-09		

0.5 PERCENT X/Q TO AN INDIVIDUAL IS LIMITING.

X/Q VALUES (SEC/CUBIC METER) FOR FUMIGATION AT THE BOUNDARY:

DOWNWIND SECTOR	DISTANCE (METERS)	FUMIGATION X/Q
S	280.	1.30E-04
SSW	280.	1.30E-04
SW	280.	1.30E-04
WSW	280.	1.30E-04
W	280.	1.30E-04
WNW	280.	1.30E-04
NW	280.	1.30E-04
NNW	280.	1.30E-04
N	280.	1.30E-04
NNE	280.	1.30E-04
NE	280.	1.30E-04
ENE	280.	1.30E-04
E	280.	1.30E-04

ESE	280.	1.30E-04
SE	280.	1.30E-04
SSE	280.	1.30E-04

NOTE: VALUES ON THIS PAGE ARE APPROXIMATIONS ONLY.
CHECK THE REASONABLENESS OF THE ENVELOPES
COMPUTED FOR THE 0-2 HOUR VALUES. FOR ANY
FAULTY ENVELOPES, ADJUST THE ABOVE VALUES.

PAVAN Input

Off Gas Stack to Control Room (Tower 2 320' wind and 316'-33' Delta T Stability Class; distances of 300 m and 500 m)

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1  1111
Peach Bottom                                    Stack Release
97.5 meters          10.1-96.3 meters

Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
    7    1
2584. 54.3131.4 97.5
    0    0    0    2    6    5    0
   0.   0.   0.   0.   3.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.
   6.   9.  23.  39.  87.  44.   4.   2.   0.   2.   2.   0.   1.   0.   0.   1.
   0.   9.  20.  29.  46.  44.  20.   2.  12.   7.   5.   7.   8.   9.   2.   8.
   2.   4.   9.  18.   7.   3.  13.   0.   7.   3.   2.   3.  21.   9.   3.  15.
   2.   2.   0.   1.   0.   1.   0.   0.   0.   0.   0.   2.  14.   2.   0.   1.
   0.   0.   0.   0.   0.   1.   0.   0.   0.   0.   0.   2.   2.   5.   1.   1.
   0.   2.   2.   9.   5.   0.   2.   0.   0.   0.   0.   0.   0.   0.   0.   0.
  13.  23.  18.  25.  56.  29.  10.   3.   3.   4.   3.   1.   4.   3.   4.   3.
   4.  15.  13.  15.  12.  25.  27.   8.  25.  14.  13.   8.  21.   9.   2.  22.
  10.   3.   2.   1.   1.   2.   8.   8.  31.   9.   6.  19.  27.  20.   9.  33.
   1.   2.   1.   0.   0.   1.   1.   1.   5.   2.   1.   2.  12.  14.   4.   5.
   0.   0.   0.   0.   0.   0.   0.   0.   1.   0.   0.   1.   6.   7.   0.   0.
   0.   5.  12.  15.   1.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.
  31.  22.  28.  37.  50.  65.  14.  12.  19.   5.   7.   3.   5.   5.   3.  22.
  42.  19.   9.  17.  14.  26.  62.  22.  72.  37.  30.  26.  42.  26.  26. 100.
  18.   8.   4.   3.   3.   4.  11.  10.  67.  24.  21.  31.  56.  59.  35.  93.
   4.   1.   0.   0.   1.   2.   0.   1.   9.   0.   4.   4.  29.  30.  28.  17.
   1.   4.   0.   0.   0.   0.   0.   0.   1.   0.   1.   1.  13.  27.   6.   0.
  59.  58. 108. 119. 115.  86.  45.  35.  41.  23.  32.  15.  26.  38.  36.  50.
 330. 211. 238. 336. 435. 304. 339. 243. 300. 191. 155. 128. 141.  97. 193. 385.
 521. 349. 251. 278. 331. 308. 478. 466. 708. 425. 287. 211. 301. 355. 542. 928.
 396. 154.  85.  67. 132. 140. 161. 118. 482. 166. 126. 190. 395. 674.1039. 918.
  73.  27.  13.  11.  32.  26.  14.  11.  99.  16.  16.  22. 225. 448. 543. 242.
  15.   7.  12.   2.   8.   2.   7.   7.  29.   9.   3.   6.  90. 151. 184.  63.
  60.  44.  36.  61.  60.  60.  61.  59.  70.  56.  59.  54.  54.  36.  39.  34.
 235. 164. 150. 219. 283. 200. 345. 311. 435. 320. 281. 187. 173. 138. 170. 203.
 367. 201. 156. 101. 161. 257. 349. 443. 891. 577. 354. 297. 395. 354. 519. 514.
 156.  38.  26.  11.  58.  63.  98. 165. 516. 228. 216. 271. 536. 583. 651. 468.
  23.   8.   8.   4.  12.  21.  16.  11.  64.  19.  18.  30.  78. 111.  89.  43.
   7.   1.   1.   1.  20.   4.  12.   2.   6.   4.   2.   1.   9.  12.   6.  10.
  26.  19.  22.  26.  31.  23.  28.  32.  23.  32.  32.  33.  30.  28.  26.  22.
  99.  38.  34.  29.  34.  52.  81.  90. 134. 141. 156. 117.  85.  66.  94.  97.
  81.  25.  13.   8.  13.  24.  48.  79. 130. 111. 157. 177. 198. 140. 178. 126.
   4.   1.   1.   0.   0.   2.   7.   8.  44.  23.  39. 109. 168. 138.  90.  32.
   1.   0.   0.   0.   0.   0.   0.   0.   0.   3.   0.  18.  24.  18.   0.   5.
   0.   0.   0.   0.   4.   1.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.
  11.  14.  11.  10.  13.   5.   4.   9.  17.   9.   6.  18.  13.  14.  13.  19.
  47.  19.  22.  19.  13.   6.  28.  10.  34.  31.  36.  34.  40.  35.  70.  59.
  16.   5.   4.   2.   2.   2.   8.   6.  10.  21.  51.  70.  69.  44.  92.  85.
   1.   0.   0.   0.   0.   0.   1.   1.   2.   1.   8.  26.  39.  39.   9.   5.
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   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   1.   1.   2.   0.   0.
   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   1.   0.   0.   1.
 101. 0.50 3.50 7.50 12.5 18.5 24.0 55.0
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   1.   1.   1.   1.   1.   1.   1.   1.   1.   1.   1.   1.   1.   1.   1.   1.
   1.   1.   1.   1.   1.   1.   1.   1.   1.   1.   1.   1.   1.   1.   1.   1.
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PAVAN Output

Off Gas Stack to Control Room (Tower 2 320' wind and 316'-33' Delta T Stability Class; distances of 300 m and 500 m)

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PRINTOUT OF INPUT CARDS

```
   1     00010 01111 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000   2     Peach Bottom
Stack Release
   3     97.5 meters         10.1-96.3 meters
   4
   5     Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T           6          7 42872     1
   7          0.500  2584.000    54.300   131.400    97.500
   8       0.000  0.000  0.000  2.000  6.000  5.000  0.000
   9       0.000  0.000  0.000  0.000  3.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000
   9       6.000  9.000 23.000 39.000 87.000 44.000  4.000  2.000  0.000  2.000  2.000  0.000  1.000  0.000  0.000  1.000
   9       0.000  9.000 20.000 29.000 46.000 44.000 20.000  2.000 12.000  7.000  5.000  7.000  8.000  9.000  2.000  8.000
   9       2.000  4.000  9.000 18.000  7.000  3.000 13.000  0.000  7.000  3.000  2.000  3.000 21.000  9.000  3.000 15.000
   9       2.000  2.000  0.000  1.000  0.000  1.000  0.000  0.000  0.000  0.000  0.000  2.000 14.000  2.000  0.000  1.000
   9       0.000  0.000  0.000  0.000  0.000  1.000  0.000  0.000  0.000  0.000  0.000  2.000  2.000  5.000  1.000  1.000
   9       0.000  2.000  2.000  9.000  5.000  0.000  2.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000
   9      13.000 23.000 18.000 25.000 56.000 29.000 10.000  3.000  3.000  4.000  3.000  1.000  4.000  3.000  4.000  3.000
   9       4.000 15.000 13.000 15.000 12.000 25.000 27.000  8.000 25.000 14.000 13.000  8.000 21.000  9.000  2.000 22.000
   9      10.000  3.000  2.000  1.000  1.000  2.000  8.000  8.000 31.000  9.000  6.000 19.000 27.000 20.000  9.000 33.000
   9       1.000  2.000  1.000  0.000  0.000  1.000  1.000  1.000  5.000  2.000  1.000  2.000 12.000 14.000  4.000  5.000
   9       0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  1.000  0.000  0.000  1.000  6.000  7.000  0.000  0.000
   9       0.000  5.000 12.000 15.000  1.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000
   9      31.000 22.000 28.000 37.000 50.000 65.000 14.000 12.000 19.000  5.000  7.000  3.000  5.000  5.000  3.000 22.000
   9      42.000 19.000  9.000 17.000 14.000 26.000 62.000 22.000 72.000 37.000 30.000 26.000 42.000 26.000 26.000100.000
   9      18.000  8.000  4.000  3.000  3.000  4.000 11.000 10.000 67.000 24.000 21.000 31.000 56.000 59.000 35.000 93.000
   9       4.000  1.000  0.000  0.000  1.000  2.000  0.000  1.000  9.000  0.000  4.000  4.000 29.000 30.000 28.000 17.000
   9       1.000  4.000  0.000  0.000  0.000  0.000  0.000  0.000  1.000  0.000  1.000  1.000 13.000 27.000  6.000  0.000
   9      59.000 58.000108.000119.000115.000 86.000 45.000 35.000 41.000 23.000 32.000 15.000 26.000 38.000 36.000 50.000
   9     330.000211.000238.000336.000435.000304.000339.000243.000300.000191.000155.000128.000141.000 97.000193.000385.000
   9     521.000349.000251.000278.000331.000308.000478.000466.000708.000425.000287.000211.000301.000355.000542.000928.000
   9     396.000154.000 85.000 67.000132.000140.000161.000118.000482.000166.000126.000190.000395.000674.000*******918.000
   9      73.000 27.000 13.000 11.000 32.000 26.000 14.000 11.000 99.000 16.000 16.000 22.000225.000448.000543.000242.000
   9      15.000  7.000 12.000  2.000  8.000  2.000  7.000  7.000 29.000  9.000  3.000  6.000 90.000151.000184.000 63.000
   9      60.000 44.000 36.000 61.000 60.000 60.000 61.000 59.000 70.000 56.000 59.000 54.000 54.000 36.000 39.000 34.000
   9     235.000164.000150.000219.000283.000200.000345.000311.000435.000320.000281.000187.000173.000138.000170.000203.000
   9     367.000201.000156.000101.000161.000257.000349.000443.000891.000577.000354.000297.000395.000354.000519.000514.000
   9     156.000 38.000 26.000 11.000 58.000 63.000 98.000165.000516.000228.000216.000271.000536.000583.000651.000468.000
   9      23.000  8.000  8.000  4.000 12.000 21.000 16.000 11.000 64.000 19.000 18.000 30.000 78.000111.000 89.000 43.000
   9       7.000  1.000  1.000  1.000 20.000  4.000 12.000  2.000  6.000  4.000  2.000  1.000  9.000 12.000  6.000 10.000
   9      26.000 19.000 22.000 26.000 31.000 23.000 28.000 32.000 23.000 32.000 32.000 33.000 30.000 28.000 26.000 22.000
   9      99.000 38.000 34.000 29.000 34.000 52.000 81.000 90.000134.000141.000156.000117.000 85.000 66.000 94.000 97.000
   9      81.000 25.000 13.000  8.000 13.000 24.000 48.000 79.000130.000111.000157.000177.000198.000140.000178.000126.000
   9       4.000  1.000  1.000  0.000  0.000  2.000  7.000  8.000 44.000 23.000 39.000109.000168.000138.000 90.000 32.000
   9       1.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  3.000  0.000 18.000 24.000 18.000  0.000  5.000
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   9       0.000  0.000  0.000  0.000  4.000  1.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000
   9      11.000 14.000 11.000 10.000 13.000  5.000  4.000  9.000 17.000  9.000  6.000 18.000 13.000 14.000 13.000 19.000
   9      47.000 19.000 22.000 19.000 13.000  6.000 28.000 10.000 34.000 31.000 36.000 34.000 40.000 35.000 70.000 59.000
   9      16.000  5.000  4.000  2.000  2.000  2.000  8.000  6.000 10.000 21.000 51.000 70.000 69.000 44.000 92.000 85.000
   9       1.000  0.000  0.000  0.000  0.000  0.000  1.000  1.000  2.000  1.000  8.000 26.000 39.000 39.000  9.000  5.000
   9       0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  1.000  1.000  2.000  0.000  0.000
   9       0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  1.000  0.000  0.000  1.000  10        101.
0.500  3.500  7.500 12.500 18.500 24.000 55.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  11        300.   300.   300.   300.
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1.0    1.0    1.0    1.0    1.0    1.0    1.0    1.0
  12        1.0    1.0    1.0    1.0    1.0    1.0    1.0    1.0    1.0    1.0    1.0    1.0    1.0    1.0    1.0    1.0  13        500.
500.   500.   500.   500.   500.   500.   500.   500.   500.   500.   500.   500.   500.   500.   500.
  14        0.     0.     0.     0.     0.     0.     0.     0.     0.     0.     0.     0.     0.     0.     0.     0.
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USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS A
WIND SPEED (M/S)

TOWER	RELEASE	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
0.22	0.24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.56	1.69	0.000	0.000	0.000	0.000	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.007
3.35	3.61	0.014	0.021	0.054	0.091	0.203	0.103	0.009	0.005	0.000	0.005	0.005	0.000	0.002	0.000	0.000	0.002	0.513
5.59	6.02	0.000	0.021	0.047	0.068	0.107	0.103	0.047	0.005	0.028	0.016	0.012	0.016	0.019	0.021	0.005	0.019	0.532
8.27	8.91	0.005	0.009	0.021	0.042	0.016	0.007	0.030	0.000	0.016	0.007	0.005	0.007	0.049	0.021	0.007	0.035	0.278
10.73	11.56	0.005	0.005	0.000	0.002	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.005	0.033	0.005	0.000	0.002	0.058
24.59	26.49	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.012	0.002	0.002	0.028
TOTAL		0.02	0.06	0.12	0.20	0.33	0.22	0.09	0.01	0.04	0.03	0.02	0.03	0.11	0.06	0.01	0.06	1.42

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS B
WIND SPEED (M/S)

TOWER	RELEASE	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
0.22	0.24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.56	1.69	0.000	0.005	0.005	0.021	0.012	0.000	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.047
3.35	3.61	0.030	0.054	0.042	0.058	0.131	0.068	0.023	0.007	0.007	0.009	0.007	0.002	0.009	0.007	0.009	0.007	0.471
5.59	6.02	0.009	0.035	0.030	0.035	0.028	0.058	0.063	0.019	0.058	0.033	0.030	0.019	0.049	0.021	0.005	0.051	0.543
8.27	8.91	0.023	0.007	0.005	0.002	0.002	0.005	0.019	0.019	0.072	0.021	0.014	0.044	0.063	0.047	0.021	0.077	0.441
10.73	11.56	0.002	0.005	0.002	0.000	0.000	0.002	0.002	0.002	0.012	0.005	0.002	0.005	0.028	0.033	0.009	0.012	0.121
24.59	26.49	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.002	0.014	0.016	0.000	0.000	0.035
TOTAL		0.07	0.10	0.08	0.12	0.17	0.13	0.11	0.05	0.15	0.07	0.05	0.07	0.16	0.12	0.04	0.15	1.66

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS C
WIND SPEED (M/S)

TOWER	RELEASE	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
0.22	0.24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.56	1.69	0.000	0.012	0.028	0.035	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.077
3.35	3.61	0.072	0.051	0.065	0.086	0.117	0.152	0.033	0.028	0.044	0.012	0.016	0.007	0.012	0.012	0.007	0.051	0.765
5.59	6.02	0.098	0.044	0.021	0.040	0.033	0.061	0.145	0.051	0.168	0.086	0.070	0.061	0.098	0.061	0.061	0.233	1.330
8.27	8.91	0.042	0.019	0.009	0.007	0.007	0.009	0.026	0.023	0.156	0.056	0.049	0.072	0.131	0.138	0.082	0.217	1.043
10.73	11.56	0.009	0.002	0.000	0.000	0.002	0.005	0.000	0.002	0.021	0.000	0.009	0.009	0.068	0.070	0.065	0.040	0.303
24.59	26.49	0.002	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.002	0.002	0.030	0.063	0.014	0.000	0.126
TOTAL		0.22	0.14	0.12	0.17	0.16	0.23	0.20	0.10	0.39	0.15	0.15	0.15	0.34	0.34	0.23	0.54	3.64

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS D
WIND SPEED (M/S)

TOWER	RELEASE	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
0.22	0.24	0.000	0.000	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005
1.56	1.69	0.138	0.135	0.252	0.278	0.268	0.201	0.105	0.082	0.096	0.054	0.075	0.035	0.061	0.089	0.084	0.117	2.067

3.35	3.61	0.770	0.492	0.555	0.784	1.015	0.709	0.791	0.567	0.700	0.446	0.362	0.299	0.329	0.226	0.450	0.898	9.391
5.59	6.02	1.215	0.814	0.585	0.648	0.772	0.718	1.115	1.087	1.651	0.991	0.669	0.492	0.702	0.828	1.264	2.165	15.719
8.27	8.91	0.924	0.359	0.198	0.156	0.308	0.327	0.376	0.275	1.124	0.387	0.294	0.443	0.921	1.572	2.423	2.141	12.229
10.73	11.56	0.170	0.063	0.030	0.026	0.075	0.061	0.033	0.026	0.231	0.037	0.037	0.051	0.525	1.045	1.267	0.564	4.241
24.59	26.49	0.035	0.016	0.028	0.005	0.019	0.005	0.016	0.016	0.068	0.021	0.007	0.014	0.210	0.352	0.429	0.147	1.388
TOTAL		3.25	1.88	1.65	1.90	2.46	2.02	2.44	2.05	3.87	1.94	1.44	1.33	2.75	4.11	5.92	6.03	45.04

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS E

WIND SPEED (M/S)

TOWER	RELEASE	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
0.22	0.26	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.014
1.56	1.82	0.140	0.103	0.084	0.142	0.140	0.140	0.142	0.138	0.163	0.131	0.138	0.126	0.126	0.084	0.091	0.079	1.966
3.35	3.89	0.548	0.383	0.350	0.511	0.660	0.467	0.805	0.725	1.015	0.746	0.655	0.436	0.404	0.322	0.397	0.474	8.896
5.59	6.49	0.856	0.469	0.364	0.236	0.376	0.599	0.814	1.033	2.078	1.346	0.826	0.693	0.921	0.826	1.211	1.199	13.846
8.27	9.60	0.364	0.089	0.061	0.026	0.135	0.147	0.229	0.385	1.204	0.532	0.504	0.632	1.250	1.360	1.518	1.092	9.526
10.73	12.46	0.054	0.019	0.019	0.009	0.028	0.049	0.037	0.026	0.149	0.044	0.042	0.070	0.182	0.259	0.208	0.100	1.295
24.59	28.54	0.016	0.002	0.002	0.002	0.047	0.009	0.028	0.005	0.014	0.009	0.005	0.002	0.021	0.028	0.014	0.023	0.229
TOTAL		1.98	1.06	0.88	0.93	1.39	1.41	2.06	2.31	4.62	2.81	2.17	1.96	2.90	2.88	3.44	2.97	35.77

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS F

WIND SPEED (M/S)

TOWER	RELEASE	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
0.22	0.26	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.012
1.56	1.82	0.061	0.044	0.051	0.061	0.072	0.054	0.065	0.075	0.054	0.075	0.075	0.077	0.070	0.065	0.061	0.051	1.010
3.35	3.89	0.231	0.089	0.079	0.068	0.079	0.121	0.189	0.210	0.313	0.329	0.364	0.273	0.198	0.154	0.219	0.226	3.142
5.59	6.49	0.189	0.058	0.030	0.019	0.030	0.056	0.112	0.184	0.303	0.259	0.366	0.413	0.462	0.327	0.415	0.294	3.517
8.27	9.60	0.009	0.002	0.002	0.000	0.000	0.005	0.016	0.019	0.103	0.054	0.091	0.254	0.392	0.322	0.210	0.075	1.553
10.73	12.46	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.007	0.000	0.042	0.056	0.042	0.000	0.012	0.161
24.59	28.54	0.000	0.000	0.000	0.000	0.009	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.012
TOTAL		0.49	0.19	0.16	0.15	0.19	0.24	0.38	0.49	0.77	0.72	0.90	1.06	1.18	0.91	0.91	0.66	9.41

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS G

WIND SPEED (M/S)

TOWER	RELEASE	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
0.22	0.26	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.56	1.82	0.026	0.033	0.026	0.023	0.030	0.012	0.009	0.021	0.040	0.021	0.014	0.042	0.030	0.033	0.030	0.044	0.434
3.35	3.89	0.110	0.044	0.051	0.044	0.030	0.014	0.065	0.023	0.079	0.072	0.084	0.079	0.093	0.082	0.163	0.138	1.173
5.59	6.49	0.037	0.012	0.009	0.005	0.005	0.005	0.019	0.014	0.023	0.049	0.119	0.163	0.161	0.103	0.215	0.198	1.136
8.27	9.60	0.002	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.005	0.002	0.019	0.061	0.091	0.091	0.021	0.012	0.308
10.73	12.46	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.005	0.000	0.000	0.009
24.59	28.54	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.002	0.005
TOTAL		0.17	0.09	0.09	0.07	0.07	0.03	0.10	0.06	0.15	0.14	0.24	0.35	0.38	0.31	0.43	0.39	3.06

WIND MEASURED AT 97.5 METERS.
WIND SPEED CORRECTED TO THE RELEASE HEIGHT OF 131.4 METERS.

OVERALL WIND DIRECTION FREQUENCY

WIND DIRECTION:	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW
FREQUENCY:	6.2	3.5	3.1	3.5	4.8	4.3	5.4	5.1	10.0	5.9	5.0	5.0	7.8	8.7	11.0	10.8

OVERALL WIND SPEED FREQUENCY AS MEASURED ON THE TOWER:

MAX.WIND SPEED (M/S):	0.224	1.565	3.353	5.588	8.270	10.729	24.587
WIND SPEED FREQUENCY:	0.03	5.61	24.35	36.62	25.38	6.19	1.82

BUILDING AND RELEASE CHARACTERISTICS:

RELEASE HEIGHT: 131.40 METERS
MIXING VOLUME COEFFICIENT: 0.50
BUILDING CROSS-SECTIONAL AREA: 2584.00 SQUARE METERS

BOUNDARY DISTANCES (METERS) FROM THE SOURCE FOR EACH DOWNWIND SECTOR:

DOWNWIND SECTOR	S	SSW	SW	WSW	W	WNW	NW	NNW	N	NNE	NE	ENE	E	ESE	SE	SSE
BOUNDARY 1	300.	300.	300.	300.	300.	300.	300.	300.	300.	300.	300.	300.	300.	300.	300.	300.
BOUNDARY 2	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.

DISTANCES AND TERRAIN HEIGHTS (IN METERS) AS A FUNCTION OF THE DOWNWIND SECTOR:

SECTOR	S	SSW	SW	WSW	W	WNW	NW	NNW	N	NNE	NE	ENE	E	ESE	SE	SSE
DISTANCE	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.
ELEVATION	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

THE CONVERSION FACTOR APPLIED TO THE WIND SPEED CLASSES IS 0.447

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

WINDSPEEDS ADJUSTED TO 131.4 METERS.

PERCENT OF THE TIME A GIVEN WINDSPEED IS LOWER:

WINDSPEED (METER/SEC)	CUMULATIVE FREQUENCY (PERCENT)
0.24	0.00
0.26	0.03
1.69	2.23
1.82	5.64
3.61	16.78
3.89	29.99
6.02	48.11
6.49	66.61
8.91	80.60
9.60	91.99
11.56	96.71
12.46	98.18
26.49	99.76
28.54	100.00

WINDSPEED (INTERPOLATED) (METER/SEC)	CUMULATIVE FREQUENCY (PERCENT)
0.26	0.03
1.77	5.64
3.76	29.99
6.26	66.61
9.22	91.99
11.77	98.18
26.77	100.00

LOG-NORMAL INTERPOLATION PERCENTILES

WINDSPEED (METER/SEC)	CUMULATIVE FREQUENCY (PERCENT)
0.81	1.00
1.30	3.00
1.66	5.00
2.19	10.00
2.61	15.00
3.00	20.00

3.38	25.00
3.76	30.00
4.05	35.00
4.35	40.00
4.66	45.00
4.98	50.00
5.32	55.00
5.70	60.00
6.11	65.00
6.50	70.00
6.90	75.00
7.37	80.00
8.11	85.00
8.78	90.00

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE S SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	3.6	0.23	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	4.045E-06
A	8.9	0.08	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
A	11.6	0.08	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.264E-06
B	3.6	0.49	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.15	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.38	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.04	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
C	3.6	1.16	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	1.58	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	0.68	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
C	11.6	0.15	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	6.230E-07
C	26.5	0.04	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	2.719E-07
D	0.2	0.01	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	2.22	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	12.39	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	19.57	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	14.87	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	2.74	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	0.56	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.02	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	2.25	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	8.83	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	13.78	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	5.86	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	0.86	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.26	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	0.98	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	3.72	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	3.04	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	0.15	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07
F	12.5	0.04	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.003E-07
G	1.8	0.41	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08

G	3.9	1.77	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08
G	6.5	0.60	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08
G	9.6	0.04	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.220E-08

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

SITE EXCLUSION BOUNDARY CALCULATIONS:

S SECTOR BOUNDARY DISTANCE = 300.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	4.813E-06	4.045E-06	2.858E-06	2.224E-06	1.994E-06	1.715E-06	1.640E-06	1.264E-06
0.005	0.021	0.032	0.258	0.746	2.961	4.126	4.276	4.351	4.426
0.00031	0.00131	0.00201	0.01600	0.04633	0.18394	0.25625	0.26558	0.27025	0.27491
1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07	6.875E-07	6.230E-07	6.226E-07	5.890E-07
6.679	8.257	8.632	21.025	21.062	21.738	22.715	22.865	42.430	51.255
0.41486	0.51283	0.53616	1.30589	1.30822	1.35021	1.41085	1.42018	2.63543	3.18357
4.207E-07	3.534E-07	3.243E-07	3.208E-07	2.719E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07	1.301E-07
66.127	79.909	82.650	86.368	86.406	92.264	95.306	96.170	96.733	96.883
4.10725	4.96329	5.13356	5.36448	5.36681	5.73069	5.91962	5.97327	6.00826	6.01759
1.003E-07	8.032E-08	6.449E-08	3.010E-08	1.806E-08	1.220E-08				
96.921	97.183	97.597	99.362	99.962	100.000				
6.01992	6.03625	6.06191	6.17153	6.20886	6.21119				

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(2)= 0.256
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(3)= 1.304

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HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   3.181
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   4.960

  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
  1  1     -11.07050 -16.47142  -1.19518
  1  2     -13.12558 -16.30722  -1.13653
  1  3     -13.77855 -17.18353  -1.53040
  1  4     -14.34482 -18.94210  -2.47847
  1  5     -14.85564     NUMXQ(K)=  5
    3.332E-06              0.062              1.000
    2.250E-06              0.186              3.000
    1.857E-06              0.311              5.000
    1.419E-06              0.621             10.000
    1.201E-06              0.932             15.000
    1.061E-06              1.242             20.000
    9.350E-07              1.553             25.000
    8.354E-07              1.863             30.000
    7.578E-07              2.174             35.000
    6.951E-07              2.484             40.000
    6.430E-07              2.795             45.000
    5.990E-07              3.106             50.000
    5.446E-07              3.416             55.000
    4.938E-07              3.727             60.000
    4.506E-07              4.037             65.000
    4.134E-07              4.348             70.000
    3.812E-07              4.658             75.000

    1.547E-06              0.5                8.05

ANNUAL AVERAGE =   3.32E-10

K=  1     FIVEXQ(K)= 1.547E-06     FIVEPR(K)= 8.050

FUMIGATION X/Q AT THE BOUNDARY:   1.22E-04

 EXPONENTIAL TERM AND FREQUENCIES

   5.684E-01   5.200E-01   4.072E-01   3.613E-01   2.419E-01   2.081E-01   1.693E-02
       0.376       3.981       5.032      12.967      65.322      97.183     100.000
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USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
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PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE SSW SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	3.6	0.60	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	4.045E-06
A	6.0	0.60	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	0.26	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
A	11.6	0.13	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.264E-06
B	1.7	0.13	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	6.124E-06
B	3.6	1.52	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.99	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.20	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.13	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
C	1.7	0.33	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	4.272E-06
C	3.6	1.46	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	1.26	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	0.53	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
C	11.6	0.07	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	6.230E-07
C	26.5	0.26	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	2.719E-07
D	0.2	0.01	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	3.84	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	13.96	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	23.09	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	10.19	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	1.79	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	0.46	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.02	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	2.91	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	10.85	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	13.30	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	2.51	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	0.53	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.07	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	1.26	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	2.51	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	1.65	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	0.07	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07

G	1.8	0.93	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	1.26	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08
G	6.5	0.33	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

SITE EXCLUSION BOUNDARY CALCULATIONS:

SSW SECTOR BOUNDARY DISTANCE = 300.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	6.124E-06	4.813E-06	4.272E-06	4.045E-06	2.858E-06	2.427E-06	2.224E-06	1.994E-06
0.009	0.029	0.162	0.176	0.507	1.102	2.624	3.219	7.056	8.511
0.00031	0.00104	0.00570	0.00621	0.01788	0.03887	0.09252	0.11351	0.24880	0.30011
1.715E-06	1.640E-06	1.264E-06	1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07	6.875E-07
9.504	9.768	9.901	12.811	14.068	14.267	28.225	28.357	28.886	30.143
0.33510	0.34443	0.34909	0.45172	0.49604	0.50304	0.99520	0.99987	1.01853	1.06285
6.230E-07	6.226E-07	5.890E-07	4.207E-07	3.534E-07	3.243E-07	3.208E-07	2.719E-07	2.388E-07	1.925E-07
30.209	53.296	64.145	74.333	87.630	89.416	91.929	92.194	94.708	96.362
1.06518	1.87923	2.26176	2.62097	3.08981	3.15279	3.24142	3.25075	3.33939	3.39770
1.841E-07	1.415E-07	1.301E-07	8.032E-08	6.449E-08	3.010E-08	1.806E-08			
96.891	97.354	97.420	97.486	98.412	99.669	100.000			
3.41636	3.43269	3.43502	3.43736	3.47001	3.51433	3.52599			

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(2)= 0.249
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(3)= 0.994

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(4)= 2.259
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(5)= 3.087

K	I	XQSAVE(K,I)	XQINT(K,I)	XQSLOP(K,I)
2	1	-11.07050	-16.20624	-1.13559
2	2	-13.01641	-17.47309	-1.58660
2	3	-13.77855	-17.82714	-1.73864
2	4	-14.34482	-21.93911	-3.79166
2	5	-14.85564	NUMXQ(K)= 5	

4.290E-06	0.035	1.000
3.004E-06	0.106	3.000
2.517E-06	0.176	5.000
1.855E-06	0.353	10.000
1.490E-06	0.529	15.000
1.268E-06	0.705	20.000
1.115E-06	0.881	25.000
9.970E-07	1.058	30.000
9.001E-07	1.234	35.000
8.223E-07	1.410	40.000
7.583E-07	1.587	45.000
7.044E-07	1.763	50.000
6.583E-07	1.939	55.000
6.184E-07	2.116	60.000
5.767E-07	2.292	65.000
5.119E-07	2.468	70.000
4.575E-07	2.644	75.000
4.114E-07	2.821	80.000
3.719E-07	2.997	85.000
1.537E-06	0.5	14.18

ANNUAL AVERAGE = 7.30E-10

K= 2 FIVEXQ(K)= 1.537E-06 FIVEPR(K)=14.180

FUMIGATION X/Q AT THE BOUNDARY: 1.22E-04

EXPONENTIAL TERM AND FREQUENCIES

5.684E-01	5.200E-01	4.072E-01	3.613E-01	2.419E-01	2.081E-01	1.693E-02
1.588	5.491	8.467	13.973	67.300	97.486	100.000

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE SW SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	3.6	1.73	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	4.045E-06
A	6.0	1.50	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	0.68	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
B	1.7	0.15	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	6.124E-06
B	3.6	1.35	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.98	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.15	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.08	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
C	1.7	0.90	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	4.272E-06
C	3.6	2.10	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	0.68	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	0.30	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
D	0.2	0.02	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	8.10	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	17.86	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	18.83	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	6.38	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	0.98	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	0.90	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.02	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	2.70	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	11.25	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	11.71	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	1.95	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	0.60	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.08	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.02	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	1.65	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	2.55	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	0.98	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	0.08	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07
G	1.8	0.83	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	1.65	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08

G	6.5	0.30	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

SITE EXCLUSION BOUNDARY CALCULATIONS:

SW SECTOR BOUNDARY DISTANCE = 300.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	6.124E-06	4.813E-06	4.272E-06	4.045E-06	2.858E-06	2.427E-06	2.224E-06	1.994E-06
0.018	0.038	0.188	0.207	1.107	2.833	4.183	5.684	13.788	15.888
0.00057	0.00117	0.00583	0.00642	0.03441	0.08806	0.13005	0.17670	0.42861	0.49392
1.715E-06	1.640E-06	1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07	6.875E-07	6.226E-07
16.864	17.539	20.240	20.916	21.066	38.923	38.999	39.299	40.949	59.783
0.52424	0.54524	0.62921	0.65020	0.65487	1.21001	1.21234	1.22167	1.27298	1.85845
5.890E-07	4.207E-07	3.534E-07	3.243E-07	3.208E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07	1.301E-07
71.037	77.415	89.120	90.096	92.647	94.598	95.573	96.173	97.074	97.149
2.20833	2.40659	2.77047	2.80079	2.88009	2.94074	2.97106	2.98972	3.01771	3.02005
8.032E-08	6.449E-08	3.010E-08	1.806E-08						
97.224	98.049	99.700	100.000						
3.02238	3.04804	3.09935	3.10868						

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(2)= 0.088
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(3)= 0.428

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HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   1.209
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   2.206
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   2.768

 K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
 3  1     -11.07050 -15.76030  -1.06849
 3  2     -12.41800 -16.16917  -1.19920
 3  3     -13.01641 -18.36423  -2.03412
 3  4     -13.77855 -19.06598  -2.34541
 3  5     -14.34482 -24.96016  -5.27354
 3  6     -14.85564     NUMXQ(K)=  6
   5.539E-06              0.031              1.000
   3.964E-06              0.093              3.000
   3.295E-06              0.155              5.000
   2.529E-06              0.311             10.000
   2.097E-06              0.466             15.000
   1.710E-06              0.622             20.000
   1.453E-06              0.777             25.000
   1.268E-06              0.933             30.000
   1.127E-06              1.088             35.000
   1.012E-06              1.243             40.000
   9.092E-07              1.399             45.000
   8.246E-07              1.554             50.000
   7.539E-07              1.710             55.000
   6.940E-07              1.865             60.000
   6.424E-07              2.021             65.000
   5.976E-07              2.176             70.000
   5.221E-07              2.332             75.000
   4.518E-07              2.487             80.000
   3.938E-07              2.642             85.000

   1.997E-06              0.5               16.08

ANNUAL AVERAGE =   1.70E-09

K=  3     FIVEXQ(K)= 1.997E-06     FIVEPR(K)=16.084

FUMIGATION X/Q AT THE BOUNDARY:   1.22E-04

 EXPONENTIAL TERM AND FREQUENCIES

   5.684E-01   5.200E-01   4.072E-01   3.613E-01   2.419E-01   2.081E-01   1.693E-02
       3.902       7.878      10.580      15.851      68.917      97.224     100.000
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USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE WSW SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	3.6	2.58	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	4.045E-06
A	6.0	1.92	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	1.19	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
A	11.6	0.07	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.264E-06
B	1.7	0.59	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	6.124E-06
B	3.6	1.65	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.99	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.07	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
C	1.7	0.99	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	4.272E-06
C	3.6	2.44	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	1.12	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	0.20	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
D	0.2	0.02	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	7.86	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	22.19	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	18.36	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	4.43	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	0.73	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	0.13	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.03	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	4.03	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	14.46	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	6.67	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	0.73	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	0.26	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.07	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.02	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	1.72	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	1.92	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	0.53	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
G	1.8	0.66	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	1.25	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08
G	6.5	0.13	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

SITE EXCLUSION BOUNDARY CALCULATIONS:

WSW SECTOR BOUNDARY DISTANCE = 300.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	6.124E-06	4.813E-06	4.272E-06	4.045E-06	2.858E-06	2.427E-06	2.224E-06	1.994E-06
0.018	0.046	0.641	0.661	1.651	4.227	5.879	7.794	15.654	18.098
0.00063	0.00164	0.02263	0.02333	0.05832	0.14929	0.20760	0.27524	0.55282	0.63912
1.715E-06	1.640E-06	1.264E-06	1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.082E-07	6.875E-07	6.226E-07
19.089	20.278	20.344	24.373	25.496	25.562	47.754	47.953	49.670	68.032
0.67411	0.71609	0.71842	0.86071	0.90036	0.90269	1.68642	1.69342	1.75407	2.40251
5.890E-07	4.207E-07	3.534E-07	3.243E-07	3.208E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07	8.032E-08
82.497	86.922	93.593	94.320	96.235	96.962	97.490	97.754	97.886	97.952
2.91333	3.06961	3.30519	3.33085	3.39849	3.42415	3.44281	3.45214	3.45681	3.45914
6.449E-08	3.010E-08	1.806E-08							
98.613	99.868	100.000							
3.48247	3.52678	3.53145							

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(3)= 0.552
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(4)= 1.685

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(5)= 2.911

K	I	XQSAVE(K,I)	XQINT(K,I)	XQSLOP(K,I)
4	1	-11.07050	-15.27913	-0.96350
4	2	-12.41800	-16.56801	-1.39754
4	3	-13.01641	-17.65467	-1.82513
4	4	-13.77855	-19.01550	-2.46590
4	5	-14.34482	NUMXQ(K)= 5	

6.050E-06	0.035	1.000
4.471E-06	0.106	3.000
3.762E-06	0.177	5.000
2.753E-06	0.353	10.000
2.270E-06	0.530	15.000
1.898E-06	0.706	20.000
1.636E-06	0.883	25.000
1.445E-06	1.059	30.000
1.297E-06	1.236	35.000
1.180E-06	1.413	40.000
1.084E-06	1.589	45.000
9.912E-07	1.766	50.000
9.005E-07	1.942	55.000
8.240E-07	2.119	60.000
7.585E-07	2.295	65.000
7.019E-07	2.472	70.000
6.524E-07	2.649	75.000
6.089E-07	2.825	80.000
2.335E-06	0.5	14.16

ANNUAL AVERAGE = 2.82E-09

K= 4 FIVEXQ(K)= 2.335E-06 FIVEPR(K)=14.158

FUMIGATION X/Q AT THE BOUNDARY: 1.22E-04

EXPONENTIAL TERM AND FREQUENCIES

5.684E-01	5.200E-01	4.072E-01	3.613E-01	2.419E-01	2.081E-01	1.693E-02
5.746	10.502	13.804	17.985	71.702	97.952	100.000

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE W SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	1.7	0.15	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	8.668E-06
A	3.6	4.26	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	4.045E-06
A	6.0	2.25	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	0.34	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
B	1.7	0.24	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	6.124E-06
B	3.6	2.74	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.59	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.05	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
C	1.7	0.05	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	4.272E-06
C	3.6	2.45	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	0.68	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	0.15	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
C	11.6	0.05	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	6.230E-07
D	0.2	0.01	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	5.63	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	21.28	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	16.19	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	6.46	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	1.57	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	0.39	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.02	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	2.94	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	13.85	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	7.88	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	2.84	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	0.59	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.98	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.02	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	1.52	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	1.66	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	0.64	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	28.5	0.20	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.375E-08
G	1.8	0.64	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08

G	3.9	0.64	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08
G	6.5	0.10	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

SITE EXCLUSION BOUNDARY CALCULATIONS:

W SECTOR BOUNDARY DISTANCE = 300.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	8.668E-06	6.124E-06	4.813E-06	4.272E-06	4.045E-06	2.858E-06	2.427E-06	2.224E-06
0.013	0.034	0.180	0.425	0.442	0.491	4.748	7.487	9.738	15.364
0.00061	0.00160	0.00860	0.02026	0.02110	0.02343	0.22636	0.35698	0.46428	0.73252
1.994E-06	1.715E-06	1.640E-06	1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.082E-07	6.875E-07	6.230E-07
17.810	18.397	18.740	21.675	22.360	22.409	43.690	43.837	45.353	45.402
0.84914	0.87713	0.89346	1.03341	1.06607	1.06840	2.08305	2.09005	2.16235	2.16469
6.226E-07	5.890E-07	4.207E-07	3.534E-07	3.243E-07	3.208E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07
61.596	75.441	81.899	89.775	91.341	93.004	95.842	96.478	97.065	97.456
2.93675	3.59686	3.90475	4.28029	4.35493	4.43423	4.56952	4.59984	4.62783	4.64649
8.032E-08	6.449E-08	4.375E-08	3.010E-08	1.806E-08					
98.434	99.070	99.266	99.902	100.000					
4.69314	4.72347	4.73280	4.76312	4.76779					

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(3)= 0.732
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(4)= 2.081

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HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   3.594
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   4.431

  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
  5  1     -11.07050 -14.90832  -0.87711
  5  2     -12.41800 -16.68802  -1.50394
  5  3     -13.01641 -17.62189  -1.88646
  5  4     -13.77855 -18.63791  -2.38516
  5  5     -14.34482 -25.59808  -6.25210
  5  6     -14.95230     NUMXQ(K)=  6
    6.082E-06              0.048              1.000
    4.587E-06              0.143              3.000
    3.946E-06              0.238              5.000
    2.792E-06              0.477             10.000
    2.253E-06              0.715             15.000
    1.853E-06              0.954             20.000
    1.580E-06              1.192             25.000
    1.382E-06              1.430             30.000
    1.231E-06              1.669             35.000
    1.111E-06              1.907             40.000
    1.008E-06              2.146             45.000
    9.065E-07              2.384             50.000
    8.225E-07              2.622             55.000
    7.516E-07              2.861             60.000
    6.910E-07              3.099             65.000
    6.385E-07              3.337             70.000
    5.928E-07              3.576             75.000
    4.980E-07              3.814             80.000
    4.178E-07              4.053             85.000
    3.535E-07              4.291             90.000

    2.724E-06              0.5               10.49

ANNUAL AVERAGE =   5.62E-09

K=  5     FIVEXQ(K)= 2.724E-06     FIVEPR(K)=10.487

FUMIGATION X/Q AT THE BOUNDARY:   1.22E-04

 EXPONENTIAL TERM AND FREQUENCIES

   5.684E-01   5.200E-01   4.072E-01   3.613E-01   2.419E-01   2.081E-01   1.693E-02
       6.996      10.372      13.992      18.021      69.549      98.630     100.000
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USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE WNW SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	3.6	2.40	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	4.045E-06
A	6.0	2.40	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	0.16	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
A	11.6	0.05	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.264E-06
A	26.5	0.05	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	5.516E-07
B	3.6	1.58	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	1.36	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.11	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.05	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
C	3.6	3.54	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	1.42	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	0.22	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
C	11.6	0.11	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	6.230E-07
D	0.2	0.01	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	4.69	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	16.58	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	16.79	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	7.63	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	1.42	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	0.11	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.02	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	3.27	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	10.91	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	14.01	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	3.44	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	1.15	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.22	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	1.25	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	2.84	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	1.31	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	0.11	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07
F	28.5	0.05	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.375E-08

G	1.8	0.27	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	0.33	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08
G	6.5	0.11	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

SITE EXCLUSION BOUNDARY CALCULATIONS:

WNW SECTOR BOUNDARY DISTANCE = 300.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	4.813E-06	4.045E-06	2.858E-06	2.427E-06	2.224E-06	1.994E-06	1.715E-06	1.640E-06
0.011	0.034	0.048	2.448	4.029	6.428	11.118	14.662	16.025	16.189
0.00045	0.00145	0.00207	0.10470	0.17234	0.27497	0.47557	0.62719	0.68550	0.69250
1.264E-06	1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07	6.875E-07	6.230E-07	6.226E-07
16.243	19.515	20.933	21.042	37.619	37.673	37.891	39.146	39.255	56.050
0.69483	0.83478	0.89543	0.90009	1.60918	1.61151	1.62084	1.67449	1.67915	2.39757
5.890E-07	5.516E-07	4.207E-07	3.534E-07	3.243E-07	3.208E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07
66.955	67.010	74.644	88.658	90.076	92.911	96.347	97.655	98.800	98.909
2.86408	2.86641	3.19296	3.79242	3.85307	3.97436	4.12131	4.17729	4.22627	4.23094
1.301E-07	8.032E-08	6.449E-08	4.375E-08	3.010E-08	1.806E-08				
99.018	99.237	99.509	99.564	99.891	100.000				
4.23560	4.24493	4.25659	4.25893	4.27292	4.27759				

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(3)= 0.626
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(4)= 1.607

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HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   2.861
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   3.789

  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
  6  1     -11.07050 -15.46296  -0.98963
  6  2     -12.41800 -16.17186  -1.22003
  6  3     -13.12558 -17.72706  -1.84289
  6  4     -13.77855 -18.81308  -2.34976
  6  5     -14.34482 -22.06134  -4.05796
  6  6     -14.85564     NUMXQ(K)=  6
    5.219E-06              0.043              1.000
    3.754E-06              0.128              3.000
    3.094E-06              0.214              5.000
    2.344E-06              0.428             10.000
    1.964E-06              0.642             15.000
    1.621E-06              0.856             20.000
    1.391E-06              1.069             25.000
    1.223E-06              1.283             30.000
    1.094E-06              1.497             35.000
    9.792E-07              1.711             40.000
    8.749E-07              1.925             45.000
    7.896E-07              2.139             50.000
    7.187E-07              2.353             55.000
    6.586E-07              2.567             60.000
    6.072E-07              2.780             65.000
    5.441E-07              2.994             70.000
    4.806E-07              3.208             75.000
    4.273E-07              3.422             80.000
    3.822E-07              3.636             85.000

    2.196E-06              0.5               11.69

ANNUAL AVERAGE =   3.18E-09

K=  6     FIVEXQ(K)= 2.196E-06     FIVEPR(K)=11.689

FUMIGATION X/Q AT THE BOUNDARY:   1.22E-04

 EXPONENTIAL TERM AND FREQUENCIES

   5.684E-01   5.200E-01   4.072E-01   3.613E-01   2.419E-01   2.081E-01   1.693E-02
       5.071      10.361      13.469      19.045      66.278      99.291     100.000
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USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE NW SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	3.6	0.17	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	4.045E-06
A	6.0	0.87	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	0.56	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
B	1.7	0.09	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	6.124E-06
B	3.6	0.43	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	1.17	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.35	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.04	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
C	3.6	0.61	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	2.69	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	0.48	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
D	0.2	0.00	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	1.95	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	14.72	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	20.76	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	6.99	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	0.61	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	0.30	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.02	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	2.65	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	14.98	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	15.16	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	4.26	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	0.69	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.52	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	1.22	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	3.52	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	2.08	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	0.30	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07
G	1.8	0.17	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	1.22	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08
G	6.5	0.35	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08

G	9.6	0.04	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.220E-08

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

SITE EXCLUSION BOUNDARY CALCULATIONS:

NW SECTOR BOUNDARY DISTANCE = 300.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	6.124E-06	4.813E-06	4.045E-06	2.858E-06	2.427E-06	2.224E-06	1.994E-06	1.715E-06
0.004	0.023	0.110	0.124	0.298	0.732	1.601	3.555	4.163	5.335
0.00024	0.00125	0.00591	0.00667	0.01600	0.03932	0.08597	0.19094	0.22359	0.28657
1.640E-06	1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07	6.875E-07	6.226E-07	5.890E-07
5.900	8.548	11.241	11.588	26.309	26.352	26.830	28.046	48.803	63.784
0.31689	0.45918	0.60380	0.62246	1.41318	1.41551	1.44117	1.50648	2.62143	3.42615
4.207E-07	3.534E-07	3.243E-07	3.208E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07	1.301E-07	8.032E-08
70.775	85.931	86.538	90.056	94.311	96.396	97.091	97.395	97.698	98.220
3.80169	4.61574	4.64839	4.83733	5.06591	5.17788	5.21520	5.23152	5.24785	5.27584
6.449E-08	3.010E-08	1.806E-08	1.220E-08						
98.393	99.609	99.957	100.000						
5.28517	5.35048	5.36914	5.37148						

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(2)= 0.191
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(3)= 1.412

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HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   3.423
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   4.612

  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
  7  1     -11.07050 -16.36184  -1.15635
  7  2     -13.01641 -16.17063  -1.09026
  7  3     -13.77855 -17.11755  -1.52184
  7  4     -14.34482 -21.07552  -3.69421
  7  5     -14.85564     NUMXQ(K)=  5
    3.440E-06              0.054              1.000
    2.364E-06              0.161              3.000
    1.975E-06              0.269              5.000
    1.532E-06              0.537             10.000
    1.308E-06              0.806             15.000
    1.164E-06              1.074             20.000
    1.060E-06              1.343             25.000
    9.586E-07              1.611             30.000
    8.718E-07              1.880             35.000
    8.016E-07              2.149             40.000
    7.432E-07              2.417             45.000
    6.938E-07              2.686             50.000
    6.513E-07              2.954             55.000
    6.141E-07              3.223             60.000
    5.707E-07              3.491             65.000
    5.038E-07              3.760             70.000
    4.478E-07              4.029             75.000
    4.005E-07              4.297             80.000
    3.603E-07              4.566             85.000

    1.574E-06              0.5                9.31

ANNUAL AVERAGE =   9.00E-10

K=  7     FIVEXQ(K)= 1.574E-06     FIVEPR(K)= 9.308

FUMIGATION X/Q AT THE BOUNDARY:   1.22E-04

 EXPONENTIAL TERM AND FREQUENCIES

   5.684E-01   5.200E-01   4.072E-01   3.613E-01   2.419E-01   2.081E-01   1.693E-02
       1.607       5.385       7.469      14.605      59.944      98.220     100.000
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USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE NNW SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	3.6	0.09	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	4.045E-06
A	6.0	0.09	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
B	3.6	0.14	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.37	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.37	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.05	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
C	3.6	0.55	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	1.01	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	0.46	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
C	11.6	0.05	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	6.230E-07
D	0.2	0.00	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	1.61	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	11.17	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	21.42	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	5.42	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	0.51	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	0.32	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.02	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	2.71	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	14.29	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	20.36	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	7.58	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	0.51	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.09	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.02	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	1.47	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	4.14	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	3.63	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	0.37	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07
G	1.8	0.41	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	0.46	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08
G	6.5	0.28	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08
G	9.6	0.05	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.220E-08

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

SITE EXCLUSION BOUNDARY CALCULATIONS:

NNW SECTOR BOUNDARY DISTANCE = 300.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	4.813E-06	4.045E-06	2.858E-06	2.427E-06	2.224E-06	1.994E-06	1.715E-06	1.262E-06
0.004	0.023	0.040	0.132	0.270	0.362	1.970	2.522	2.889	5.601
0.00018	0.00116	0.00203	0.00669	0.01369	0.01835	0.09999	0.12798	0.14664	0.28426
1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07	6.875E-07	6.230E-07	6.226E-07	5.890E-07	4.207E-07
6.612	6.980	18.148	18.194	18.653	20.124	20.170	41.587	55.880	61.303
0.33558	0.35424	0.92104	0.92337	0.94670	1.02134	1.02367	2.11063	2.83604	3.11128
3.534E-07	3.243E-07	3.208E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07	1.301E-07	8.032E-08	6.449E-08
81.662	82.168	86.304	93.887	97.518	98.024	98.345	98.713	98.805	99.219
4.14459	4.17025	4.38017	4.76504	4.94931	4.97497	4.99130	5.00996	5.01462	5.03561
3.010E-08	1.806E-08	1.220E-08							
99.678	99.954	100.000							
5.05894	5.07293	5.07527							

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(2)= 0.100
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(3)= 0.920

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HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   2.833
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   4.141

  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
  8  1     -11.07050 -16.92746  -1.26549
  8  2     -13.01641 -16.22955  -1.03967
  8  3     -13.77855 -16.73458  -1.25389
  8  4     -14.34482 -20.02675  -2.98127
  8  5     -14.85564     NUMXQ(K)=  5
    2.850E-06              0.051              1.000
    1.948E-06              0.152              3.000
    1.648E-06              0.254              5.000
    1.296E-06              0.508             10.000
    1.116E-06              0.761             15.000
    9.915E-07              1.015             20.000
    8.911E-07              1.269             25.000
    8.147E-07              1.523             30.000
    7.539E-07              1.776             35.000
    7.039E-07              2.030             40.000
    6.618E-07              2.284             45.000
    6.256E-07              2.538             50.000
    5.941E-07              2.791             55.000
    5.366E-07              3.045             60.000
    4.825E-07              3.299             65.000
    4.367E-07              3.553             70.000
    3.975E-07              3.806             75.000
    3.637E-07              4.060             80.000

    1.303E-06              0.5                9.85

ANNUAL AVERAGE =   1.43E-10

K=  8     FIVEXQ(K)= 1.303E-06     FIVEPR(K)= 9.852

FUMIGATION X/Q AT THE BOUNDARY:   1.22E-04

 EXPONENTIAL TERM AND FREQUENCIES

   5.684E-01   5.200E-01   4.072E-01   3.613E-01   2.419E-01   2.081E-01   1.693E-02
       0.184       2.252       3.171      12.793      53.241      98.805     100.000
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USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE N SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	6.0	0.28	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	0.16	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
B	3.6	0.07	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.58	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.72	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.12	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
B	26.5	0.02	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	3.897E-07
C	3.6	0.44	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	1.68	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	1.56	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
C	11.6	0.21	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	6.230E-07
C	26.5	0.02	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	2.719E-07
D	0.2	0.00	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	0.96	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	7.00	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	16.51	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	11.24	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	2.31	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	0.68	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.01	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	1.63	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	10.14	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	20.78	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	12.03	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	1.49	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.14	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	0.54	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	3.13	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	3.03	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	1.03	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07
G	1.8	0.40	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	0.79	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08

G	6.5	0.23	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08
G	9.6	0.05	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.220E-08

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

SITE EXCLUSION BOUNDARY CALCULATIONS:

N SECTOR BOUNDARY DISTANCE = 300.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	4.813E-06	2.858E-06	2.427E-06	2.224E-06	1.994E-06	1.715E-06	1.640E-06	1.262E-06
0.002	0.014	0.020	0.090	0.370	1.326	1.769	2.352	2.515	4.148
0.00022	0.00138	0.00200	0.00900	0.03699	0.13262	0.17694	0.23525	0.25158	0.41485
1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07	6.875E-07	6.230E-07	6.226E-07	5.890E-07	4.207E-07
5.827	6.550	13.547	13.663	15.226	15.762	15.972	32.484	42.629	53.870
0.58280	0.65510	1.35486	1.36652	1.52280	1.57645	1.59744	3.24887	4.26352	5.38780
3.897E-07	3.534E-07	3.243E-07	3.208E-07	2.719E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07	1.301E-07
53.893	74.673	76.981	80.107	80.130	92.164	95.196	96.688	97.365	98.391
5.39013	7.46841	7.69933	8.01189	8.01422	9.21780	9.52103	9.67031	9.73795	9.84058
8.032E-08	6.449E-08	3.010E-08	1.806E-08	1.220E-08					
98.531	98.927	99.720	99.953	100.000					
9.85458	9.89423	9.97354	9.99686	10.00153					

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(2)= 0.132
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(4)= 4.260

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(5)= 7.465

K	I	XQSAVE(K,I)	XQINT(K,I)	XQSLOP(K,I)
9	1	-11.07050	-16.69575	-1.22412
9	2	-13.01641	-15.89735	-0.95849
9	3	-13.77855	-16.33691	-1.15733
9	4	-14.34482	-17.49364	-1.82936
9	5	-14.85564	NUMXQ(K)= 5	

2.467E-06	0.100	1.000
1.737E-06	0.300	3.000
1.473E-06	0.500	5.000
1.160E-06	1.000	10.000
9.906E-07	1.500	15.000
8.658E-07	2.000	20.000
7.767E-07	2.500	25.000
7.087E-07	3.000	30.000
6.544E-07	3.501	35.000
6.096E-07	4.001	40.000
5.621E-07	4.501	45.000
5.124E-07	5.001	50.000
4.705E-07	5.501	55.000
4.345E-07	6.001	60.000
4.034E-07	6.501	65.000
3.761E-07	7.001	70.000
1.473E-06	0.5	5.00

ANNUAL AVERAGE = 4.19E-10

K= 9 FIVEXQ(K)= 1.473E-06 FIVEPR(K)= 4.999

FUMIGATION X/Q AT THE BOUNDARY: 1.22E-04

EXPONENTIAL TERM AND FREQUENCIES

5.684E-01	5.200E-01	4.072E-01	3.613E-01	2.419E-01	2.081E-01	1.693E-02
0.443	4.361	5.877	13.603	52.296	98.531	100.000

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE NNE SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	3.6	0.08	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	4.045E-06
A	6.0	0.28	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	0.12	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
B	3.6	0.16	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.56	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.36	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.08	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
C	3.6	0.20	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	1.47	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	0.95	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
D	0.2	0.00	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	0.91	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	7.60	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	16.91	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	6.60	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	0.64	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	0.36	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.02	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	2.23	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	12.73	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	22.95	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	9.07	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	0.76	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.16	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	1.27	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	5.61	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	4.42	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	0.91	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07
F	12.5	0.12	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.003E-07
G	1.8	0.36	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	1.23	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08
G	6.5	0.84	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08

G	9.6	0.04	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.220E-08

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

SITE EXCLUSION BOUNDARY CALCULATIONS:

NNE SECTOR BOUNDARY DISTANCE = 300.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	4.813E-06	4.045E-06	2.858E-06	2.427E-06	2.224E-06	1.994E-06	1.715E-06	1.640E-06
0.002	0.018	0.033	0.112	0.271	0.550	1.465	1.664	2.221	2.340
0.00012	0.00105	0.00191	0.00658	0.01591	0.03224	0.08588	0.09755	0.13020	0.13720
1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07	6.875E-07	6.226E-07	5.890E-07	4.207E-07
4.568	6.039	6.397	13.995	14.075	15.030	16.303	33.209	45.939	52.542
0.26782	0.35412	0.37512	0.82063	0.82529	0.88127	0.95592	1.94724	2.69365	3.08085
3.534E-07	3.243E-07	3.208E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07	1.301E-07	1.003E-07	8.032E-08
75.495	76.132	81.741	90.811	95.226	95.982	96.340	97.255	97.375	97.534
4.42671	4.46403	4.79292	5.32473	5.58364	5.62796	5.64895	5.70260	5.70960	5.71893
6.449E-08	3.010E-08	1.806E-08	1.220E-08						
97.892	99.125	99.960	100.000						
5.73992	5.81223	5.86121	5.86355						

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(2)= 0.001
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(3)= 0.086

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HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   0.820
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   2.691
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   4.423

 K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
10  1     -11.07050 -16.86574  -1.22926
10  2     -11.63677 -16.88443  -1.23365
10  3     -13.01641 -16.26591  -1.03638
10  4     -13.77855 -16.65940  -1.20033
10  5     -14.34482 -18.72800  -2.27310
10  6     -14.85564     NUMXQ(K)=  6
   2.548E-06              0.059              1.000
   1.776E-06              0.176              3.000
   1.500E-06              0.293              5.000
   1.176E-06              0.586             10.000
   1.006E-06              0.880             15.000
   8.839E-07              1.173             20.000
   7.964E-07              1.466             25.000
   7.297E-07              1.759             30.000
   6.764E-07              2.052             35.000
   6.325E-07              2.345             40.000
   5.954E-07              2.639             45.000
   5.416E-07              2.932             50.000
   4.920E-07              3.225             55.000
   4.501E-07              3.518             60.000
   4.142E-07              3.811             65.000
   3.831E-07              4.104             70.000
   3.559E-07              4.398             75.000

   1.246E-06              0.5                8.53

ANNUAL AVERAGE =   3.18E-10

K= 10     FIVEXQ(K)= 1.246E-06     FIVEPR(K)= 8.527

FUMIGATION X/Q AT THE BOUNDARY:   1.22E-04

 EXPONENTIAL TERM AND FREQUENCIES

   5.684E-01   5.200E-01   4.072E-01   3.613E-01   2.419E-01   2.081E-01   1.693E-02
       0.477       3.103       4.256      16.603      49.623      97.534     100.000
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USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE NE SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	3.6	0.09	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	4.045E-06
A	6.0	0.23	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	0.09	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
B	3.6	0.14	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.61	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.28	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.05	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
C	3.6	0.33	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	1.41	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	0.99	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
C	11.6	0.19	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	6.230E-07
C	26.5	0.05	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	2.719E-07
D	0.2	0.00	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	1.50	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	7.28	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	13.48	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	5.92	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	0.75	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	0.14	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.02	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	2.77	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	13.19	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	16.62	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	10.14	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	0.85	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.09	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.02	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	1.50	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	7.32	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	7.37	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	1.83	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07
G	1.8	0.28	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	1.69	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08

G	6.5	2.39	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08
G	9.6	0.38	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.220E-08

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

SITE EXCLUSION BOUNDARY CALCULATIONS:

NE SECTOR BOUNDARY DISTANCE = 300.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	4.813E-06	4.045E-06	2.858E-06	2.427E-06	2.224E-06	1.994E-06	1.715E-06	1.640E-06
0.003	0.023	0.040	0.134	0.275	0.510	2.012	2.341	2.951	3.045
0.00017	0.00115	0.00201	0.00667	0.01367	0.02534	0.09998	0.11630	0.14663	0.15129
1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07	6.875E-07	6.230E-07	6.226E-07	5.890E-07
5.815	7.224	7.506	14.783	14.830	15.816	17.319	17.506	30.981	44.175
0.28891	0.35889	0.37288	0.73442	0.73676	0.78574	0.86038	0.86971	1.53914	2.19458
4.207E-07	3.534E-07	3.243E-07	3.208E-07	2.719E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07	1.301E-07
50.091	66.711	67.463	74.787	74.834	84.976	92.347	93.192	93.333	95.164
2.48848	3.31419	3.35152	3.71539	3.71772	4.22155	4.58775	4.62974	4.63674	4.72770
8.032E-08	6.449E-08	3.010E-08	1.806E-08	1.220E-08					
95.258	95.540	97.230	99.624	100.000					
4.73237	4.74636	4.83034	4.94929	4.96795					

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(2)= 0.100
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(3)= 0.734

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HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   2.192
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   3.712

  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
 11  1     -11.07050 -16.88108  -1.25046
 11  2     -13.01641 -16.63911  -1.17217
 11  3     -13.77855 -17.03136  -1.33290
 11  4     -14.34482 -19.65802  -2.63609
 11  5     -14.95230     NUMXQ(K)=  5
    2.862E-06              0.050              1.000
    1.931E-06              0.149              3.000
    1.599E-06              0.248              5.000
    1.220E-06              0.497             10.000
    1.030E-06              0.745             15.000
    8.947E-07              0.994             20.000
    7.990E-07              1.242             25.000
    7.266E-07              1.490             30.000
    6.693E-07              1.739             35.000
    6.223E-07              1.987             40.000
    5.771E-07              2.236             45.000
    5.130E-07              2.484             50.000
    4.604E-07              2.732             55.000
    4.164E-07              2.981             60.000
    3.792E-07              3.229             65.000
    3.474E-07              3.478             70.000

    1.217E-06              0.5               10.06

ANNUAL AVERAGE =   2.51E-10

K= 11     FIVEXQ(K)= 1.217E-06     FIVEPR(K)=10.065

FUMIGATION X/Q AT THE BOUNDARY:   1.22E-04

 EXPONENTIAL TERM AND FREQUENCIES

   5.684E-01   5.200E-01   4.072E-01   3.613E-01   2.419E-01   2.081E-01   1.693E-02
       0.423       3.381       4.460      22.507      51.573      95.258     100.000
```

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE ENE SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	6.0	0.33	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	0.14	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
A	11.6	0.09	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.264E-06
A	26.5	0.09	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	5.516E-07
B	3.6	0.05	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.38	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.89	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.09	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
B	26.5	0.05	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	3.897E-07
C	3.6	0.14	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	1.22	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	1.46	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
C	11.6	0.19	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	6.230E-07
C	26.5	0.05	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	2.719E-07
D	0.2	0.00	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	0.71	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	6.02	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	9.93	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	8.94	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	1.03	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	0.28	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.02	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	2.54	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	8.80	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	13.97	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	12.75	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	1.41	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.05	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.02	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	1.55	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	5.50	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	8.33	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	5.13	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07
F	12.5	0.85	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.003E-07

G	1.8	0.85	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	1.60	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08
G	6.5	3.29	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08
G	9.6	1.22	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.220E-08
G	12.5	0.05	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	9.405E-09

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

SITE EXCLUSION BOUNDARY CALCULATIONS:

ENE SECTOR BOUNDARY DISTANCE = 300.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	4.813E-06	2.858E-06	2.427E-06	2.224E-06	1.994E-06	1.715E-06	1.640E-06	1.264E-06
0.002	0.020	0.038	0.085	0.414	1.120	1.261	1.637	1.778	1.872
0.00008	0.00098	0.00186	0.00420	0.02052	0.05551	0.06251	0.08117	0.08817	0.09283
1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07	6.875E-07	6.230E-07	6.226E-07	5.890E-07
4.412	5.635	6.529	12.551	12.645	14.103	15.655	15.843	25.769	34.566
0.21879	0.27943	0.32375	0.62232	0.62698	0.69929	0.77626	0.78559	1.27776	1.71394
5.516E-07	4.207E-07	3.897E-07	3.534E-07	3.243E-07	3.208E-07	2.719E-07	2.388E-07	1.925E-07	1.841E-07
34.660	43.598	43.645	57.616	58.651	64.155	64.202	76.950	85.276	86.687
1.71860	2.16178	2.16411	2.85687	2.90819	3.18110	3.18343	3.81554	4.22840	4.29837
1.415E-07	1.301E-07	1.003E-07	8.032E-08	6.449E-08	3.010E-08	1.806E-08	1.220E-08	9.405E-09	
86.970	92.097	92.944	92.991	93.838	95.437	98.730	99.953	100.000	
4.31237	4.56662	4.60860	4.61093	4.65292	4.73222	4.89550	4.95615	4.95848	

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(2)= 0.001
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(3)= 0.055

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HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   0.622
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   1.712
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   3.178

 K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
12  1     -11.07050 -16.19649  -1.06775
12  2     -11.63677 -17.47494  -1.36713
12  3     -13.01641 -16.28004  -1.00073
12  4     -13.77855 -17.47979  -1.48070
12  5     -14.34482 -19.25415  -2.31876
12  6     -14.95230     NUMXQ(K)=  6
   2.323E-06              0.050              1.000
   1.662E-06              0.149              3.000
   1.416E-06              0.248              5.000
   1.124E-06              0.496             10.000
   9.441E-07              0.744             15.000
   8.070E-07              0.992             20.000
   7.118E-07              1.240             25.000
   6.405E-07              1.488             30.000
   5.822E-07              1.735             35.000
   5.130E-07              1.983             40.000
   4.579E-07              2.231             45.000
   4.128E-07              2.479             50.000
   3.754E-07              2.727             55.000
   3.437E-07              2.975             60.000

   1.120E-06              0.5               10.08

ANNUAL AVERAGE =   2.62E-10

K= 12     FIVEXQ(K)= 1.120E-06     FIVEPR(K)=10.084

FUMIGATION X/Q AT THE BOUNDARY:   1.22E-04

 EXPONENTIAL TERM AND FREQUENCIES

   5.684E-01   5.200E-01   4.072E-01   3.613E-01   2.419E-01   2.081E-01   1.693E-02
       0.659       3.716       5.175      26.549      53.458      92.991     100.000
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USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE E SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	3.6	0.03	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	4.045E-06
A	6.0	0.24	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	0.63	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
A	11.6	0.42	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.264E-06
A	26.5	0.06	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	5.516E-07
B	3.6	0.12	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.63	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.81	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.36	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
B	26.5	0.18	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	3.897E-07
C	3.6	0.15	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	1.25	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	1.67	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
C	11.6	0.86	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	6.230E-07
C	26.5	0.39	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	2.719E-07
D	0.2	0.00	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	0.78	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	4.21	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	8.98	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	11.78	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	6.71	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	2.68	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.01	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	1.61	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	5.16	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	11.78	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	15.99	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	2.33	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.27	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	0.89	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	2.54	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	5.91	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	5.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07

F	12.5	0.72	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.003E-07
G	1.8	0.39	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	1.19	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08
G	6.5	2.06	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08
G	9.6	1.16	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.220E-08
G	12.5	0.03	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	9.405E-09
G	28.5	0.03	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	4.104E-09

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

SITE EXCLUSION BOUNDARY CALCULATIONS:

E SECTOR BOUNDARY DISTANCE = 300.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	4.813E-06	4.045E-06	2.858E-06	2.427E-06	2.224E-06	1.994E-06	1.715E-06	1.640E-06
0.002	0.013	0.024	0.053	0.173	0.411	1.187	1.336	1.962	2.589
0.00014	0.00103	0.00184	0.00417	0.01350	0.03216	0.09281	0.10447	0.15346	0.20244
1.264E-06	1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07	6.875E-07	6.230E-07	6.226E-07
3.006	4.617	5.869	6.675	10.880	11.238	12.908	13.803	14.668	23.646
0.23509	0.36105	0.45902	0.52199	0.85088	0.87887	1.00949	1.07947	1.14711	1.84920
5.890E-07	5.516E-07	4.207E-07	3.897E-07	3.534E-07	3.243E-07	3.208E-07	2.719E-07	2.388E-07	1.925E-07
28.806	28.865	40.646	40.825	52.607	59.317	61.853	62.240	78.227	84.133
2.25273	2.25739	3.17874	3.19274	4.11408	4.63890	4.83717	4.86749	6.11772	6.57956
1.841E-07	1.415E-07	1.301E-07	1.003E-07	8.032E-08	6.449E-08	3.010E-08	1.806E-08	1.220E-08	9.405E-09
86.459	89.143	94.154	94.870	95.138	95.526	96.719	98.777	99.940	99.970
6.76150	6.97143	7.36329	7.41927	7.44026	7.47059	7.56389	7.72483	7.81580	7.81813
4.104E-09									
100.000									
7.82046									

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED
CHI/Q WITH RESPECT TO WHEN THE WIND BLOWS

SEC/CUBIC METER THE TOTAL TIME INTO THIS SECTOR ONLY

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HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=   0.093
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=   0.850
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   2.250
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   4.834
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K	I	XQSAVE(K,I)	XQINT(K,I)	XQSLOP(K,I)
13	1	-11.07050	-16.85765	-1.23409
13	2	-13.01641	-16.28464	-1.05000
13	3	-13.77855	-17.31495	-1.48167
13	4	-14.34482	-17.89132	-1.76920
13	5	-14.95230	NUMXQ(K)= 5	

2.366E-06	0.078	1.000
1.649E-06	0.235	3.000
1.383E-06	0.391	5.000
1.072E-06	0.782	10.000
8.680E-07	1.173	15.000
7.349E-07	1.564	20.000
6.428E-07	1.955	25.000
5.714E-07	2.346	30.000
5.083E-07	2.737	35.000
4.583E-07	3.128	40.000
4.173E-07	3.519	45.000
3.832E-07	3.910	50.000
3.542E-07	4.301	55.000
3.292E-07	4.692	60.000
1.266E-06	0.5	6.39

ANNUAL AVERAGE = 7.69E-10

K= 13 FIVEXQ(K)= 1.266E-06 FIVEPR(K)= 6.393

FUMIGATION X/Q AT THE BOUNDARY: 1.22E-04

EXPONENTIAL TERM AND FREQUENCIES

5.684E-01	5.200E-01	4.072E-01	3.613E-01	2.419E-01	2.081E-01	1.693E-02
1.372	5.697	7.785	22.857	57.994	95.138	100.000

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE ESE SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	6.0	0.24	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	0.24	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
A	11.6	0.05	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.264E-06
A	26.5	0.13	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	5.516E-07
B	3.6	0.08	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.24	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.53	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.37	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
B	26.5	0.19	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	3.897E-07
C	3.6	0.13	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	0.69	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	1.57	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
C	11.6	0.80	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	6.230E-07
C	26.5	0.72	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	2.719E-07
D	0.2	0.00	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	1.01	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	2.59	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	9.48	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	17.99	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	11.96	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	4.03	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.01	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	0.96	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	3.68	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	9.45	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	15.56	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	2.96	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.32	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	0.75	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	1.76	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	3.74	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	3.68	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07
F	12.5	0.48	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.003E-07

G	1.8	0.37	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	0.93	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08
G	6.5	1.17	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08
G	9.6	1.04	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.220E-08
G	12.5	0.05	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	9.405E-09

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

SITE EXCLUSION BOUNDARY CALCULATIONS:

ESE SECTOR BOUNDARY DISTANCE = 300.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	4.813E-06	2.858E-06	2.427E-06	2.224E-06	1.994E-06	1.715E-06	1.640E-06	1.264E-06
0.002	0.009	0.018	0.098	0.338	1.352	1.486	1.726	1.966	2.020
0.00020	0.00080	0.00155	0.00855	0.02954	0.11818	0.12984	0.15083	0.17183	0.17649
1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07	6.875E-07	6.230E-07	6.226E-07	5.890E-07
2.980	3.674	4.208	6.797	7.171	8.746	9.493	10.294	19.769	23.452
0.26046	0.32111	0.36776	0.59401	0.62667	0.76429	0.82960	0.89957	1.72762	2.04951
5.516E-07	4.207E-07	3.897E-07	3.534E-07	3.243E-07	3.208E-07	2.719E-07	2.388E-07	1.925E-07	1.841E-07
23.585	41.575	41.762	51.210	63.167	64.929	65.649	81.210	84.947	87.909
2.06117	3.63329	3.64962	4.47533	5.52030	5.67425	5.73723	7.09709	7.42365	7.68255
1.415E-07	1.301E-07	1.003E-07	8.032E-08	6.449E-08	3.010E-08	1.806E-08	1.220E-08	9.405E-09	
91.939	95.623	96.103	96.423	96.797	97.731	98.906	99.947	100.000	
8.03477	8.35665	8.39864	8.42663	8.45928	8.54092	8.64355	8.73452	8.73919	

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(2)= 0.118
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(3)= 0.593

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(4)= 2.047
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(5)= 5.670

K	I	XQSAVE(K,I)	XQINT(K,I)	XQSLOP(K,I)
14	1	-11.07050	-16.78363	-1.23898
14	2	-13.01641	-17.43472	-1.45311
14	3	-13.77855	-16.79696	-1.19964
14	4	-14.34482	-17.03831	-1.31771
14	5	-14.95230	NUMXQ(K)= 5	

2.485E-06	0.087	1.000
1.550E-06	0.262	3.000
1.211E-06	0.437	5.000
8.781E-07	0.874	10.000
7.304E-07	1.311	15.000
6.370E-07	1.748	20.000
5.687E-07	2.185	25.000
5.135E-07	2.622	30.000
4.699E-07	3.059	35.000
4.343E-07	3.496	40.000
4.045E-07	3.933	45.000
3.791E-07	4.370	50.000
3.571E-07	4.807	55.000
3.378E-07	5.244	60.000
1.132E-06	0.5	5.72

ANNUAL AVERAGE = 4.30E-10

K= 14 FIVEXQ(K)= 1.132E-06 FIVEPR(K)= 5.721

FUMIGATION X/Q AT THE BOUNDARY: 1.22E-04

EXPONENTIAL TERM AND FREQUENCIES

5.684E-01	5.200E-01	4.072E-01	3.613E-01	2.419E-01	2.081E-01	1.693E-02
0.667	4.591	6.005	16.423	63.481	96.423	100.000

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE SE SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	6.0	0.04	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	0.06	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
A	26.5	0.02	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	5.516E-07
B	3.6	0.08	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.04	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.19	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.08	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
C	3.6	0.06	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	0.55	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	0.74	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
C	11.6	0.59	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	6.230E-07
C	26.5	0.13	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	2.719E-07
D	0.2	0.00	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	0.76	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	4.10	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	11.52	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	22.08	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	11.54	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	3.91	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.01	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	0.83	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	3.61	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	11.03	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	13.83	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	1.89	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.13	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	0.55	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	2.00	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	3.78	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	1.91	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07
G	1.8	0.28	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	1.49	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08

G	6.5	1.95	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08
G	9.6	0.19	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.220E-08

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

SITE EXCLUSION BOUNDARY CALCULATIONS:

SE SECTOR BOUNDARY DISTANCE = 300.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	4.813E-06	2.858E-06	2.427E-06	2.224E-06	1.994E-06	1.715E-06	1.640E-06	1.262E-06
0.002	0.008	0.014	0.099	0.141	0.906	0.970	1.013	1.076	1.905
0.00019	0.00084	0.00154	0.01087	0.01553	0.09950	0.10650	0.11117	0.11816	0.20913
1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07	6.875E-07	6.230E-07	6.226E-07	5.890E-07	5.516E-07
2.457	2.649	6.749	6.834	7.578	8.130	8.725	20.241	23.853	23.874
0.26978	0.29077	0.74095	0.75028	0.83192	0.89256	0.95787	2.22210	2.61863	2.62096
4.207E-07	3.534E-07	3.243E-07	3.208E-07	2.719E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07	1.301E-07
45.949	56.976	68.513	70.510	70.637	84.469	88.251	90.142	94.051	95.963
5.04446	6.25504	7.52160	7.74085	7.75485	9.27332	9.68851	9.89611	10.32529	10.53522
8.032E-08	6.449E-08	3.010E-08	1.806E-08	1.220E-08					
96.091	96.367	97.854	99.809	100.000					
10.54921	10.57954	10.74281	10.95741	10.97840					

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(2)= 0.099
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(3)= 0.740

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HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   5.041
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   7.737

  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
 15  1     -11.07050 -16.94794  -1.27152
 15  2     -13.01641 -16.61528  -1.16393
 15  3     -13.77855 -16.54197  -1.13385
 15  4     -14.68142 -16.72098  -1.24294
 15  5     -14.95230     NUMXQ(K)=  5
    2.149E-06              0.110              1.000
    1.438E-06              0.329              3.000
    1.175E-06              0.549              5.000
    8.797E-07              1.098             10.000
    7.352E-07              1.647             15.000
    6.432E-07              2.196             20.000
    5.774E-07              2.745             25.000
    5.270E-07              3.294             30.000
    4.868E-07              3.842             35.000
    4.536E-07              4.391             40.000
    4.255E-07              4.940             45.000
    3.996E-07              5.489             50.000
    3.766E-07              6.038             55.000
    3.564E-07              6.587             60.000
    3.385E-07              7.136             65.000
    3.224E-07              7.685             70.000

    1.220E-06              0.5                4.55

ANNUAL AVERAGE =   1.06E-10

K= 15     FIVEXQ(K)= 1.220E-06     FIVEPR(K)= 4.554

FUMIGATION X/Q AT THE BOUNDARY:   1.22E-04

 EXPONENTIAL TERM AND FREQUENCIES

   5.684E-01   5.200E-01   4.072E-01   3.613E-01   2.419E-01   2.081E-01   1.693E-02
       0.127       2.210       2.613      10.863      64.767      96.091     100.000
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USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE SSE SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	3.6	0.02	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	4.045E-06
A	6.0	0.17	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	0.32	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
A	11.6	0.02	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.264E-06
A	26.5	0.02	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	5.516E-07
B	3.6	0.06	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.48	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.71	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.11	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
C	3.6	0.48	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	2.16	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	2.01	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
C	11.6	0.37	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	6.230E-07
D	0.2	0.00	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	1.08	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	8.31	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	20.04	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	19.82	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	5.23	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	1.36	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.01	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	0.73	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	4.38	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	11.10	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	10.11	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	0.93	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.22	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	0.48	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	2.09	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	2.72	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	0.69	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07
F	12.5	0.11	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.003E-07

G	1.8	0.41	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	1.27	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08
G	6.5	1.84	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08
G	9.6	0.11	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.220E-08
G	28.5	0.02	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	4.104E-09

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

SITE EXCLUSION BOUNDARY CALCULATIONS:

SSE SECTOR BOUNDARY DISTANCE = 300.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	4.813E-06	4.045E-06	2.858E-06	2.427E-06	2.224E-06	1.994E-06	1.715E-06	1.640E-06
0.002	0.008	0.013	0.035	0.100	0.272	1.352	1.827	2.302	2.626
0.00026	0.00083	0.00142	0.00375	0.01075	0.02941	0.14604	0.19735	0.24867	0.28366
1.264E-06	1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07	6.875E-07	6.230E-07	6.226E-07
2.648	3.382	5.542	6.254	14.568	14.676	16.685	17.160	17.527	37.568
0.28599	0.36529	0.59855	0.67552	1.57354	1.58520	1.80213	1.85344	1.89310	4.05768
5.890E-07	5.516E-07	4.207E-07	3.534E-07	3.243E-07	3.208E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07
41.951	41.973	61.798	72.898	78.124	80.219	90.325	93.046	93.975	95.335
4.53118	4.53352	6.67477	7.87369	8.43816	8.66442	9.75604	10.04994	10.15024	10.29718
1.301E-07	1.003E-07	8.032E-08	6.449E-08	3.010E-08	1.806E-08	1.220E-08	4.104E-09		
96.026	96.134	96.350	96.761	98.035	99.870	99.978	100.000		
10.37183	10.38349	10.40681	10.45113	10.58875	10.78701	10.79868	10.80101		

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(2)= 0.197
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(4)= 4.528

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(5)= 6.671

K	I	XQSAVE(K,I)	XQINT(K,I)	XQSLOP(K,I)
16	1	-11.07050	-16.67065	-1.22977
16	2	-13.12558	-15.69990	-0.89302
16	3	-13.77855	-16.43273	-1.23363
16	4	-14.34482	-17.31614	-1.75559
16	5	-14.68142	NUMXQ(K)= 5	

2.502E-06	0.108	1.000
1.728E-06	0.324	3.000
1.480E-06	0.540	5.000
1.182E-06	1.080	10.000
1.023E-06	1.620	15.000
8.846E-07	2.160	20.000
7.868E-07	2.700	25.000
7.127E-07	3.240	30.000
6.539E-07	3.780	35.000
6.056E-07	4.320	40.000
5.553E-07	4.860	45.000
5.074E-07	5.401	50.000
4.669E-07	5.941	55.000
4.320E-07	6.481	60.000
1.516E-06	0.5	4.63

ANNUAL AVERAGE = 5.11E-10

K= 16 FIVEXQ(K)= 1.516E-06 FIVEPR(K)= 4.629

FUMIGATION X/Q AT THE BOUNDARY: 1.22E-04

EXPONENTIAL TERM AND FREQUENCIES

5.684E-01	5.200E-01	4.072E-01	3.613E-01	2.419E-01	2.081E-01	1.693E-02
0.561	5.572	6.932	13.028	68.876	96.350	100.000

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE ALL SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	1.7	0.01	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	8.668E-06
A	3.6	0.51	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	4.045E-06
A	6.0	0.53	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	0.28	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
A	11.6	0.06	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.264E-06
A	26.5	0.03	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	5.516E-07
B	1.7	0.05	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	6.124E-06
B	3.6	0.47	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.54	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.44	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.12	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
B	26.5	0.03	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	3.897E-07
C	1.7	0.08	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	4.272E-06
C	3.6	0.77	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	1.33	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	1.04	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
C	11.6	0.30	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	6.230E-07
C	26.5	0.13	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	2.719E-07
D	0.2	0.00	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	2.07	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	9.39	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	15.72	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	12.23	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	4.24	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	1.39	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.01	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	1.97	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	8.90	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	13.85	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	9.53	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	1.29	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.23	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	1.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07

F	3.9	3.14	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	3.52	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	1.55	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07
F	12.5	0.16	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.003E-07
F	28.5	0.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.375E-08
G	1.8	0.43	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	1.17	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08
G	6.5	1.14	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08
G	9.6	0.31	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.220E-08
G	12.5	0.01	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	9.405E-09
G	28.5	0.00	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	4.104E-09

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

SITE EXCLUSION BOUNDARY CALCULATIONS:
DIRECTION-INDEPENDENT (S.R.P 2.3.4) MODEL.
MINIMUM BOUNDARY DISTANCE = 300.0 METERS.
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	8.668E-06	6.124E-06	4.813E-06	4.272E-06	4.045E-06	2.858E-06	2.427E-06	2.224E-06
0.005	0.019	0.026	0.072	0.084	0.161	0.674	1.145	1.677	3.744
0.00467	0.01866	0.02566	0.07231	0.08397	0.16094	0.67410	1.14527	1.67709	3.74370
1.994E-06	1.715E-06	1.640E-06	1.264E-06	1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07
4.509	5.052	5.330	5.388	7.354	8.684	9.125	18.516	18.637	19.680
4.50877	5.05225	5.32982	5.38813	7.35445	8.68399	9.12484	18.51558	18.63687	19.67951
6.875E-07	6.230E-07	6.226E-07	5.890E-07	5.516E-07	4.207E-07	3.897E-07	3.534E-07	3.243E-07	3.208E-07
20.689	20.993	36.712	45.608	45.636	57.865	57.900	71.746	75.987	79.129
20.68949	20.99272	36.71161	45.60785	45.63584	57.86527	57.90026	71.74612	75.98666	79.12857
2.719E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07	1.301E-07	1.003E-07	8.032E-08	6.449E-08	4.375E-08
79.254	88.781	92.298	93.593	94.980	96.534	96.695	96.923	97.357	97.369
79.25452	88.78055	92.29800	93.59254	94.98039	96.53386	96.69480	96.92339	97.35724	97.36890
3.010E-08	1.806E-08	1.220E-08	9.405E-09	4.104E-09					
98.542	99.678	99.986	99.995	100.000					
98.54216	99.67810	99.98599	99.99532	99.99998					

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED
CHI/Q WITH RESPECT TO WHEN THE WIND BLOWS

SEC/CUBIC METER	THE TOTAL TIME	INTO THIS SECTOR ONLY
3.662E-06	1.000	1.000
2.436E-06	3.000	3.000
1.977E-06	5.000	5.000
1.446E-06	10.000	10.000
1.171E-06	15.000	15.000
9.978E-07	20.000	20.000
8.845E-07	25.000	25.000
7.938E-07	30.000	30.000
7.180E-07	35.000	35.000
6.529E-07	40.000	40.000
5.956E-07	45.000	45.000
5.478E-07	50.000	50.000
5.043E-07	55.000	55.000
4.636E-07	60.000	60.000
4.249E-07	65.000	65.000
3.877E-07	70.000	70.000
3.511E-07	75.000	75.000
1.977E-06	5.0	5.00

K= 17 FIVEXQ(K)= 1.977E-06 FIVEPR(K)= 5.000

FUMIGATION X/Q AT THE BOUNDARY: 1.22E-04

EXPONENTIAL TERM AND FREQUENCIES

5.684E-01	5.200E-01	4.072E-01	3.613E-01	2.419E-01	2.081E-01	1.693E-02
1.416	5.059	6.718	16.125	61.163	96.935	100.000

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

SITE EXCLUSION BOUNDARY CALCULATIONS:

FIVE PERCENT OVERALL SITE LIMIT
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	8.668E-06	6.124E-06	4.813E-06	4.272E-06	4.045E-06	2.858E-06	2.427E-06	2.224E-06
0.005	0.019	0.026	0.072	0.084	0.161	0.674	1.145	1.677	3.744
0.00467	0.01866	0.02566	0.07231	0.08397	0.16094	0.67410	1.14527	1.67709	3.74370
1.994E-06	1.715E-06	1.640E-06	1.264E-06	1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07
4.509	5.052	5.330	5.388	7.354	8.684	9.125	18.516	18.637	19.680
4.50877	5.05225	5.32982	5.38813	7.35445	8.68399	9.12484	18.51558	18.63688	19.67952
6.875E-07	6.230E-07	6.226E-07	5.890E-07	5.516E-07	4.207E-07	3.897E-07	3.534E-07	3.243E-07	3.208E-07
20.689	20.993	36.712	45.608	45.636	57.865	57.900	71.746	75.987	79.129
20.68950	20.99273	36.71161	45.60786	45.63585	57.86527	57.90026	71.74612	75.98665	79.12857
2.719E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07	1.301E-07	1.003E-07	8.032E-08	6.449E-08	4.375E-08
79.255	88.781	92.298	93.593	94.980	96.534	96.695	96.923	97.357	97.369
79.25453	88.78056	92.29800	93.59256	94.98041	96.53387	96.69481	96.92340	97.35724	97.36890
3.010E-08	1.806E-08	1.220E-08	9.405E-09	4.104E-09					
98.542	99.678	99.986	99.995	100.000					
98.54216	99.67809	99.98598	99.99532	99.99998					

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED
CHI/Q WITH RESPECT TO WHEN THE WIND BLOWS

SEC/CUBIC METER THE TOTAL TIME INTO THIS SECTOR ONLY

K	I	XQSAVE(K,I)	XQINT(K,I)	XQSLOP(K,I)
18	1	-11.07050	-14.64728	-0.91538
18	2	-13.01641	-14.54922	-0.86034
18	3	-13.77855	-14.42414	-0.72071
18	4	-14.34482	-14.41743	-0.65976
18	5	-14.95230	NUMXQ(K)= 5	

3.662E-06	1.000	1.000
2.436E-06	3.000	3.000
1.977E-06	5.000	5.000
1.446E-06	10.000	10.000
1.171E-06	15.000	15.000
9.978E-07	20.000	20.000
8.845E-07	25.000	25.000
7.938E-07	30.000	30.000
7.180E-07	35.000	35.000
6.529E-07	40.000	40.000
5.956E-07	45.000	45.000
5.478E-07	50.000	50.000
5.043E-07	55.000	55.000
4.636E-07	60.000	60.000
4.249E-07	65.000	65.000
3.877E-07	70.000	70.000
3.511E-07	75.000	75.000
1.977E-06	5.0	5.00

K= 18 FIVEXQ(K)= 1.977E-06 FIVEPR(K)= 5.000

K	HIGHPR	PR	GRNDVT(K)
1	-3.06052	0.11048	6.21119
2	-2.00327	2.25740	3.52599
3	-2.79824	0.25691	3.10868
4	-2.68650	0.36103	3.53145
5	-2.57624	0.49942	4.76778
6	-2.75266	0.29557	4.27759
7	-3.06855	0.10756	5.37148
8	-3.25087	0.05753	5.07527
9	-3.17144	0.07585	10.00153
10	-3.29988	0.04837	5.86355
11	-3.25284	0.05714	4.96796
12	-3.40963	0.03253	4.95848
13	-3.27701	0.05246	7.82046
14	-3.20434	0.06769	8.73919
15	-3.25156	0.05739	10.97840
16	-3.13645	0.08551	10.80101

K	HOURS(K)	TOTHRS
1	9.67833	9.67833
2	197.74830	207.42660
3	22.50566	229.93230

4	31.62634	261.55860
5	43.74879	305.30740
6	25.89224	331.19960
7	9.42196	340.62160
8	5.03966	345.66130
9	6.64419	352.30550
10	4.23714	356.54260
11	5.00520	361.54780
12	2.84982	364.39760
13	4.59585	368.99350
14	5.92991	374.92340
15	5.02765	379.95100
16	7.49057	387.44160

K	FIVEXQ	SVANN	SLTIME	TIMINT	I	TIME	XQT
1	1.547E-06	3.325E-10	-1.0072	-12.6811			
					1	8.0	-14.77549
					2	16.0	-15.47361
					3	72.0	-16.98848
					4	624.0	-19.16346
2	1.537E-06	7.303E-10	-0.9126	-12.7531			
					1	8.0	-14.65071
					2	16.0	-15.28325
					3	72.0	-16.65582
					4	624.0	-18.62648
3	1.997E-06	1.701E-09	-0.8429	-12.5396			
					1	8.0	-14.29239
					2	16.0	-14.87667
					3	72.0	-16.14449
					4	624.0	-17.96477
4	2.335E-06	2.819E-09	-0.8014	-12.4122			
					1	8.0	-14.07854
					2	16.0	-14.63400
					3	72.0	-15.83930
					4	624.0	-17.56982
5	2.724E-06	5.624E-09	-0.7373	-12.3024			
					1	8.0	-13.83571
					2	16.0	-14.34680
					3	72.0	-15.45582
					4	624.0	-17.04811
6	2.196E-06	3.184E-09	-0.7795	-12.4885			
					1	8.0	-14.10940
					2	16.0	-14.64971
					3	72.0	-15.82215
					4	624.0	-17.50549
7	1.574E-06	8.996E-10	-0.8905	-12.7446			
					1	8.0	-14.59642
					2	16.0	-15.21369
					3	72.0	-16.55312
					4	624.0	-18.47622
8	1.303E-06	1.429E-10	-1.0873	-12.7974			
					1	8.0	-15.05850
					2	16.0	-15.81219

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                                                3   72.0   -17.44764
                                                4  624.0   -19.79574
 9 1.473E-06 4.186E-10   -0.9739  -12.7530
                                                1    8.0   -14.77812
                                                2   16.0   -15.45316
                                                3   72.0   -16.91793
                                                4  624.0   -19.02099
10 1.246E-06 3.177E-10   -0.9868  -12.9120
                                                1    8.0   -14.96388
                                                2   16.0   -15.64785
                                                3   72.0   -17.13202
                                                4  624.0   -19.26291
11 1.217E-06 2.509E-10   -1.0121  -12.9178
                                                1    8.0   -15.02242
                                                2   16.0   -15.72397
                                                3   72.0   -17.24627
                                                4  624.0   -19.43192
12 1.120E-06 2.624E-10   -0.9969  -13.0109
                                                1    8.0   -15.08395
                                                2   16.0   -15.77497
                                                3   72.0   -17.27443
                                                4  624.0   -19.42728
13 1.266E-06 7.685E-10   -0.8834  -12.9673
                                                1    8.0   -14.80418
                                                2   16.0   -15.41648
                                                3   72.0   -16.74510
                                                4  624.0   -18.65269
14 1.132E-06 4.297E-10   -0.9394  -13.0400
                                                1    8.0   -14.99341
                                                2   16.0   -15.64453
                                                3   72.0   -17.05742
                                                4  624.0   -19.08597
15 1.220E-06 1.065E-10   -1.1147  -12.8441
                                                1    8.0   -15.16199
                                                2   16.0   -15.93462
                                                3   72.0   -17.61118
                                                4  624.0   -20.01830
16 1.516E-06 5.114E-10   -0.9534  -12.7384
                                                1    8.0   -14.72100
                                                2   16.0   -15.38187
                                                3   72.0   -16.81591
                                                4  624.0   -18.87483
17 1.977E-06 5.624E-09   -0.6992  -12.6492
                                                1    8.0   -14.10301
                                                2   16.0   -14.58763
                                                3   72.0   -15.63921
                                                4  624.0   -17.14902
18 1.977E-06 5.624E-09   -0.6992  -12.6492
                                                1    8.0   -14.10301
                                                2   16.0   -14.58763
                                                3   72.0   -15.63921
                                                4  624.0   -17.14902
```

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

RELATIVE CONCENTRATION (X/Q) VALUES (SEC/CUBIC METER)
VERSUS
AVERAGING TIME

DOWNWIND SECTOR	DISTANCE (METERS)	0-2 HOURS	0-8 HOURS	8-24 HOURS	1-4 DAYS	4-30 DAYS	ANNUAL AVERAGE	HOURS PER YEAR MAX 0-2 HR X/Q IS EXCEEDED IN SECTOR	DOWNWIND SECTOR
S	300.	1.55E-06	3.83E-07	1.91E-07	4.19E-08	4.76E-09	3.32E-10	9.7	S
SSW	300.	1.54E-06	4.34E-07	2.30E-07	5.84E-08	8.14E-09	7.30E-10	197.7	SSW
SW	300.	2.00E-06	6.21E-07	3.46E-07	9.74E-08	1.58E-08	1.70E-09	22.5	SW
WSW	300.	2.33E-06	7.69E-07	4.41E-07	1.32E-07	2.34E-08	2.82E-09	31.6	WSW
W	300.	2.72E-06	9.80E-07	5.88E-07	1.94E-07	3.95E-08	5.62E-09	43.7	W
WNW	300.	2.20E-06	7.45E-07	4.34E-07	1.34E-07	2.50E-08	3.18E-09	25.9	WNW
NW	300.	1.57E-06	4.58E-07	2.47E-07	6.47E-08	9.46E-09	9.00E-10	9.4	NW
NNW	300.	1.30E-06	2.89E-07	1.36E-07	2.65E-08	2.53E-09	1.43E-10	5.0	NNW
N	300.	1.47E-06	3.82E-07	1.94E-07	4.49E-08	5.49E-09	4.19E-10	6.6	N
NNE	300.	1.25E-06	3.17E-07	1.60E-07	3.63E-08	4.31E-09	3.18E-10	4.2	NNE
NE	300.	1.22E-06	2.99E-07	1.48E-07	3.24E-08	3.64E-09	2.51E-10	5.0	NE
ENE	300.	1.12E-06	2.81E-07	1.41E-07	3.15E-08	3.65E-09	2.62E-10	2.8	ENE
E	300.	1.27E-06	3.72E-07	2.02E-07	5.34E-08	7.93E-09	7.69E-10	4.6	E
ESE	300.	1.13E-06	3.08E-07	1.61E-07	3.91E-08	5.14E-09	4.30E-10	5.9	ESE
SE	300.	1.22E-06	2.60E-07	1.20E-07	2.25E-08	2.02E-09	1.06E-10	5.0	SE
SSE	300.	1.52E-06	4.04E-07	2.09E-07	4.98E-08	6.35E-09	5.11E-10	7.5	SSE
MAX X/Q		2.72E-06				TOTAL HOURS AROUND SITE:		387.4	
SRP 2.3.4	300.	1.98E-06	7.50E-07	4.62E-07	1.61E-07	3.57E-08	5.62E-09		
SITE LIMIT		1.98E-06	7.50E-07	4.62E-07	1.61E-07	3.57E-08	5.62E-09		

0.5 PERCENT X/Q TO AN INDIVIDUAL IS LIMITING.

X/Q VALUES (SEC/CUBIC METER) FOR FUMIGATION AT THE BOUNDARY:

DOWNWIND SECTOR	DISTANCE (METERS)	FUMIGATION X/Q
S	300.	1.22E-04
SSW	300.	1.22E-04
SW	300.	1.22E-04
WSW	300.	1.22E-04
W	300.	1.22E-04
WNW	300.	1.22E-04
NW	300.	1.22E-04
NNW	300.	1.22E-04
N	300.	1.22E-04
NNE	300.	1.22E-04
NE	300.	1.22E-04
ENE	300.	1.22E-04
E	300.	1.22E-04

ESE	300.	1.22E-04
SE	300.	1.22E-04
SSE	300.	1.22E-04

NOTE: VALUES ON THIS PAGE ARE APPROXIMATIONS ONLY.
CHECK THE REASONABLENESS OF THE ENVELOPES
COMPUTED FOR THE 0-2 HOUR VALUES. FOR ANY
FAULTY ENVELOPES, ADJUST THE ABOVE VALUES.

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE S SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	3.6	0.23	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	4.045E-06
A	8.9	0.08	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
A	11.6	0.08	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.264E-06
B	3.6	0.49	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.15	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.38	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.04	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
C	3.6	1.16	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	1.58	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	0.68	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
C	11.6	0.15	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	6.230E-07
C	26.5	0.04	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	2.719E-07
D	0.2	0.01	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	2.22	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	12.39	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	19.57	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	14.87	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	2.74	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	0.56	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.02	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	2.25	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	8.83	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	13.78	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	5.86	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	0.86	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.26	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	0.98	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	3.72	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	3.04	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	0.15	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07
F	12.5	0.04	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.003E-07
G	1.8	0.41	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08

G	3.9	1.77	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08
G	6.5	0.60	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08
G	9.6	0.04	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.220E-08

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

LOW POPULATION ZONE CALCULATIONS:

S SECTOR BOUNDARY DISTANCE = 500.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	4.813E-06	4.045E-06	2.858E-06	2.224E-06	1.994E-06	1.715E-06	1.640E-06	1.264E-06
0.005	0.021	0.032	0.258	0.746	2.961	4.126	4.276	4.351	4.426
0.00031	0.00131	0.00201	0.01600	0.04633	0.18394	0.25625	0.26558	0.27025	0.27491
1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07	6.875E-07	6.230E-07	6.226E-07	5.890E-07
6.679	8.257	8.632	21.025	21.062	21.738	22.715	22.865	42.430	51.255
0.41486	0.51283	0.53616	1.30589	1.30822	1.35021	1.41085	1.42018	2.63543	3.18357
4.207E-07	3.534E-07	3.243E-07	3.208E-07	2.719E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07	1.301E-07
66.127	79.909	82.650	86.368	86.406	92.264	95.306	96.170	96.733	96.883
4.10725	4.96329	5.13356	5.36448	5.36681	5.73069	5.91962	5.97327	6.00826	6.01759
1.003E-07	8.032E-08	6.449E-08	3.010E-08	1.806E-08	1.220E-08				
96.921	97.183	97.597	99.362	99.962	100.000				
6.01992	6.03625	6.06191	6.17153	6.20886	6.21119				

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(2)= 0.256
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(3)= 1.304

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HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   3.181
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   4.960

  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
  1  1     -11.07050 -16.47142  -1.19518
  1  2     -13.12558 -16.30722  -1.13653
  1  3     -13.77855 -17.18353  -1.53040
  1  4     -14.34482 -18.94210  -2.47847
  1  5     -14.85564     NUMXQ(K)=  5
    3.332E-06              0.062              1.000
    2.250E-06              0.186              3.000
    1.857E-06              0.311              5.000
    1.419E-06              0.621             10.000
    1.201E-06              0.932             15.000
    1.061E-06              1.242             20.000
    9.350E-07              1.553             25.000
    8.354E-07              1.863             30.000
    7.578E-07              2.174             35.000
    6.951E-07              2.484             40.000
    6.430E-07              2.795             45.000
    5.990E-07              3.106             50.000
    5.446E-07              3.416             55.000
    4.938E-07              3.727             60.000
    4.506E-07              4.037             65.000
    4.134E-07              4.348             70.000
    3.812E-07              4.658             75.000

    1.547E-06              0.5                8.05

ANNUAL AVERAGE =   1.72E-09

K=  1     FIVEXQ(K)= 1.547E-06     FIVEPR(K)= 8.050

FUMIGATION X/Q AT THE BOUNDARY:   7.68E-05

 EXPONENTIAL TERM AND FREQUENCIES

   5.684E-01   5.200E-01   4.072E-01   3.613E-01   2.419E-01   2.081E-01   1.693E-02
       0.376       3.981       5.032      12.967      65.322      97.183     100.000
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USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE SSW SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	3.6	0.60	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	4.045E-06
A	6.0	0.60	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	0.26	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
A	11.6	0.13	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.264E-06
B	1.7	0.13	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	6.124E-06
B	3.6	1.52	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.99	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.20	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.13	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
C	1.7	0.33	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	4.272E-06
C	3.6	1.46	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	1.26	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	0.53	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
C	11.6	0.07	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	6.230E-07
C	26.5	0.26	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	2.719E-07
D	0.2	0.01	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	3.84	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	13.96	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	23.09	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	10.19	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	1.79	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	0.46	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.02	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	2.91	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	10.85	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	13.30	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	2.51	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	0.53	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.07	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	1.26	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	2.51	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	1.65	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	0.07	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07

G	1.8	0.93	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	1.26	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08
G	6.5	0.33	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

LOW POPULATION ZONE CALCULATIONS:

SSW SECTOR BOUNDARY DISTANCE = 500.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	6.124E-06	4.813E-06	4.272E-06	4.045E-06	2.858E-06	2.427E-06	2.224E-06	1.994E-06
0.009	0.029	0.162	0.176	0.507	1.102	2.624	3.219	7.056	8.511
0.00031	0.00104	0.00570	0.00621	0.01788	0.03887	0.09252	0.11351	0.24880	0.30011
1.715E-06	1.640E-06	1.264E-06	1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07	6.875E-07
9.504	9.768	9.901	12.811	14.068	14.267	28.225	28.357	28.886	30.143
0.33510	0.34443	0.34909	0.45172	0.49604	0.50304	0.99520	0.99987	1.01853	1.06285
6.230E-07	6.226E-07	5.890E-07	4.207E-07	3.534E-07	3.243E-07	3.208E-07	2.719E-07	2.388E-07	1.925E-07
30.209	53.296	64.145	74.333	87.630	89.416	91.929	92.194	94.708	96.362
1.06518	1.87923	2.26176	2.62097	3.08981	3.15279	3.24142	3.25075	3.33939	3.39770
1.841E-07	1.415E-07	1.301E-07	8.032E-08	6.449E-08	3.010E-08	1.806E-08			
96.891	97.354	97.420	97.486	98.412	99.669	100.000			
3.41636	3.43269	3.43502	3.43736	3.47001	3.51433	3.52599			

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(2)= 0.249
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(3)= 0.994

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HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   2.259
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   3.087

  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
  2  1     -11.07050 -16.20624  -1.13559
  2  2     -13.01641 -17.47309  -1.58660
  2  3     -13.77855 -17.82714  -1.73864
  2  4     -14.34482 -21.93911  -3.79166
  2  5     -14.85564     NUMXQ(K)=  5
    4.290E-06              0.035              1.000
    3.004E-06              0.106              3.000
    2.517E-06              0.176              5.000
    1.855E-06              0.353             10.000
    1.490E-06              0.529             15.000
    1.268E-06              0.705             20.000
    1.115E-06              0.881             25.000
    9.970E-07              1.058             30.000
    9.001E-07              1.234             35.000
    8.223E-07              1.410             40.000
    7.583E-07              1.587             45.000
    7.044E-07              1.763             50.000
    6.583E-07              1.939             55.000
    6.184E-07              2.116             60.000
    5.767E-07              2.292             65.000
    5.119E-07              2.468             70.000
    4.575E-07              2.644             75.000
    4.114E-07              2.821             80.000
    3.719E-07              2.997             85.000

    1.537E-06              0.5               14.18

ANNUAL AVERAGE =   3.66E-09

K=  2     FIVEXQ(K)= 1.537E-06     FIVEPR(K)=14.180

FUMIGATION X/Q AT THE BOUNDARY:   7.68E-05

 EXPONENTIAL TERM AND FREQUENCIES

   5.684E-01   5.200E-01   4.072E-01   3.613E-01   2.419E-01   2.081E-01   1.693E-02
       1.588       5.491       8.467      13.973      67.300      97.486     100.000
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USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE SW SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	3.6	1.73	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	4.045E-06
A	6.0	1.50	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	0.68	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
B	1.7	0.15	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	6.124E-06
B	3.6	1.35	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.98	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.15	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.08	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
C	1.7	0.90	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	4.272E-06
C	3.6	2.10	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	0.68	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	0.30	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
D	0.2	0.02	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	8.10	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	17.86	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	18.83	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	6.38	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	0.98	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	0.90	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.02	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	2.70	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	11.25	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	11.71	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	1.95	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	0.60	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.08	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.02	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	1.65	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	2.55	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	0.98	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	0.08	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07
G	1.8	0.83	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	1.65	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08

G	6.5	0.30	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

LOW POPULATION ZONE CALCULATIONS:

SW SECTOR BOUNDARY DISTANCE = 500.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	6.124E-06	4.813E-06	4.272E-06	4.045E-06	2.858E-06	2.427E-06	2.224E-06	1.994E-06
0.018	0.038	0.188	0.207	1.107	2.833	4.183	5.684	13.788	15.888
0.00057	0.00117	0.00583	0.00642	0.03441	0.08806	0.13005	0.17670	0.42861	0.49392
1.715E-06	1.640E-06	1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07	6.875E-07	6.226E-07
16.864	17.539	20.240	20.916	21.066	38.923	38.999	39.299	40.949	59.783
0.52424	0.54524	0.62921	0.65020	0.65487	1.21001	1.21234	1.22167	1.27298	1.85845
5.890E-07	4.207E-07	3.534E-07	3.243E-07	3.208E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07	1.301E-07
71.037	77.415	89.120	90.096	92.647	94.598	95.573	96.173	97.074	97.149
2.20833	2.40659	2.77047	2.80079	2.88009	2.94074	2.97106	2.98972	3.01771	3.02005
8.032E-08	6.449E-08	3.010E-08	1.806E-08						
97.224	98.049	99.700	100.000						
3.02238	3.04804	3.09935	3.10868						

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(2)= 0.088
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(3)= 0.428

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HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   1.209
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   2.206
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   2.768

 K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
 3  1     -11.07050 -15.76030  -1.06849
 3  2     -12.41800 -16.16917  -1.19920
 3  3     -13.01641 -18.36423  -2.03412
 3  4     -13.77855 -19.06598  -2.34541
 3  5     -14.34482 -24.96016  -5.27354
 3  6     -14.85564     NUMXQ(K)=  6
   5.539E-06              0.031              1.000
   3.964E-06              0.093              3.000
   3.295E-06              0.155              5.000
   2.529E-06              0.311             10.000
   2.097E-06              0.466             15.000
   1.710E-06              0.622             20.000
   1.453E-06              0.777             25.000
   1.268E-06              0.933             30.000
   1.127E-06              1.088             35.000
   1.012E-06              1.243             40.000
   9.092E-07              1.399             45.000
   8.246E-07              1.554             50.000
   7.539E-07              1.710             55.000
   6.940E-07              1.865             60.000
   6.424E-07              2.021             65.000
   5.976E-07              2.176             70.000
   5.221E-07              2.332             75.000
   4.518E-07              2.487             80.000
   3.938E-07              2.642             85.000

   1.997E-06              0.5               16.08

ANNUAL AVERAGE =   6.99E-09

K=  3     FIVEXQ(K)= 1.997E-06     FIVEPR(K)=16.084

FUMIGATION X/Q AT THE BOUNDARY:   7.68E-05

 EXPONENTIAL TERM AND FREQUENCIES

   5.684E-01   5.200E-01   4.072E-01   3.613E-01   2.419E-01   2.081E-01   1.693E-02
       3.902       7.878      10.580      15.851      68.917      97.224     100.000
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USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE WSW SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	3.6	2.58	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	4.045E-06
A	6.0	1.92	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	1.19	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
A	11.6	0.07	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.264E-06
B	1.7	0.59	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	6.124E-06
B	3.6	1.65	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.99	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.07	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
C	1.7	0.99	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	4.272E-06
C	3.6	2.44	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	1.12	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	0.20	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
D	0.2	0.02	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	7.86	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	22.19	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	18.36	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	4.43	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	0.73	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	0.13	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.03	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	4.03	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	14.46	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	6.67	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	0.73	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	0.26	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.07	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.02	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	1.72	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	1.92	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	0.53	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
G	1.8	0.66	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	1.25	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08
G	6.5	0.13	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

LOW POPULATION ZONE CALCULATIONS:

WSW SECTOR BOUNDARY DISTANCE = 500.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	6.124E-06	4.813E-06	4.272E-06	4.045E-06	2.858E-06	2.427E-06	2.224E-06	1.994E-06
0.018	0.046	0.641	0.661	1.651	4.227	5.879	7.794	15.654	18.098
0.00063	0.00164	0.02263	0.02333	0.05832	0.14929	0.20760	0.27524	0.55282	0.63912
1.715E-06	1.640E-06	1.264E-06	1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.082E-07	6.875E-07	6.226E-07
19.089	20.278	20.344	24.373	25.496	25.562	47.754	47.953	49.670	68.032
0.67411	0.71609	0.71842	0.86071	0.90036	0.90269	1.68642	1.69342	1.75407	2.40251
5.890E-07	4.207E-07	3.534E-07	3.243E-07	3.208E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07	8.032E-08
82.497	86.922	93.593	94.320	96.235	96.962	97.490	97.754	97.886	97.952
2.91333	3.06961	3.30519	3.33085	3.39849	3.42415	3.44281	3.45214	3.45681	3.45914
6.449E-08	3.010E-08	1.806E-08							
98.613	99.868	100.000							
3.48247	3.52678	3.53145							

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(3)= 0.552
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(4)= 1.685

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(5)= 2.911

K	I	XQSAVE(K,I)	XQINT(K,I)	XQSLOP(K,I)
4	1	-11.07050	-15.27913	-0.96350
4	2	-12.41800	-16.56801	-1.39754
4	3	-13.01641	-17.65467	-1.82513
4	4	-13.77855	-19.01550	-2.46590
4	5	-14.34482	NUMXQ(K)= 5	

6.050E-06	0.035	1.000
4.471E-06	0.106	3.000
3.762E-06	0.177	5.000
2.753E-06	0.353	10.000
2.270E-06	0.530	15.000
1.898E-06	0.706	20.000
1.636E-06	0.883	25.000
1.445E-06	1.059	30.000
1.297E-06	1.236	35.000
1.180E-06	1.413	40.000
1.084E-06	1.589	45.000
9.912E-07	1.766	50.000
9.005E-07	1.942	55.000
8.240E-07	2.119	60.000
7.585E-07	2.295	65.000
7.019E-07	2.472	70.000
6.524E-07	2.649	75.000
6.089E-07	2.825	80.000
2.335E-06	0.5	14.16

ANNUAL AVERAGE = 1.17E-08

K= 4 FIVEXQ(K)= 2.335E-06 FIVEPR(K)=14.158

FUMIGATION X/Q AT THE BOUNDARY: 7.68E-05

EXPONENTIAL TERM AND FREQUENCIES

5.684E-01	5.200E-01	4.072E-01	3.613E-01	2.419E-01	2.081E-01	1.693E-02
5.746	10.502	13.804	17.985	71.702	97.952	100.000

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE W SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	1.7	0.15	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	8.668E-06
A	3.6	4.26	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	4.045E-06
A	6.0	2.25	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	0.34	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
B	1.7	0.24	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	6.124E-06
B	3.6	2.74	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.59	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.05	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
C	1.7	0.05	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	4.272E-06
C	3.6	2.45	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	0.68	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	0.15	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
C	11.6	0.05	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	6.230E-07
D	0.2	0.01	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	5.63	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	21.28	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	16.19	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	6.46	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	1.57	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	0.39	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.02	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	2.94	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	13.85	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	7.88	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	2.84	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	0.59	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.98	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.02	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	1.52	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	1.66	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	0.64	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	28.5	0.20	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.375E-08
G	1.8	0.64	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08

G	3.9	0.64	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08
G	6.5	0.10	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

LOW POPULATION ZONE CALCULATIONS:

W SECTOR BOUNDARY DISTANCE = 500.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	8.668E-06	6.124E-06	4.813E-06	4.272E-06	4.045E-06	2.858E-06	2.427E-06	2.224E-06
0.013	0.034	0.180	0.425	0.442	0.491	4.748	7.487	9.738	15.364
0.00061	0.00160	0.00860	0.02026	0.02110	0.02343	0.22636	0.35698	0.46428	0.73252
1.994E-06	1.715E-06	1.640E-06	1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.082E-07	6.875E-07	6.230E-07
17.810	18.397	18.740	21.675	22.360	22.409	43.690	43.837	45.353	45.402
0.84914	0.87713	0.89346	1.03341	1.06607	1.06840	2.08305	2.09005	2.16235	2.16469
6.226E-07	5.890E-07	4.207E-07	3.534E-07	3.243E-07	3.208E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07
61.596	75.441	81.899	89.775	91.341	93.004	95.842	96.478	97.065	97.456
2.93675	3.59686	3.90475	4.28029	4.35493	4.43423	4.56952	4.59984	4.62783	4.64649
8.032E-08	6.449E-08	4.375E-08	3.010E-08	1.806E-08					
98.434	99.070	99.266	99.902	100.000					
4.69314	4.72347	4.73280	4.76312	4.76779					

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(3)= 0.732
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(4)= 2.081

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HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   3.594
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   4.431

  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
  5  1     -11.07050 -14.90832  -0.87711
  5  2     -12.41800 -16.68802  -1.50394
  5  3     -13.01641 -17.62189  -1.88646
  5  4     -13.77855 -18.63791  -2.38516
  5  5     -14.34482 -25.59808  -6.25210
  5  6     -14.95230     NUMXQ(K)=  6
    6.082E-06              0.048              1.000
    4.587E-06              0.143              3.000
    3.946E-06              0.238              5.000
    2.792E-06              0.477             10.000
    2.253E-06              0.715             15.000
    1.853E-06              0.954             20.000
    1.580E-06              1.192             25.000
    1.382E-06              1.430             30.000
    1.231E-06              1.669             35.000
    1.111E-06              1.907             40.000
    1.008E-06              2.146             45.000
    9.065E-07              2.384             50.000
    8.225E-07              2.622             55.000
    7.516E-07              2.861             60.000
    6.910E-07              3.099             65.000
    6.385E-07              3.337             70.000
    5.928E-07              3.576             75.000
    4.980E-07              3.814             80.000
    4.178E-07              4.053             85.000
    3.535E-07              4.291             90.000

    2.724E-06              0.5               10.49

ANNUAL AVERAGE =   2.23E-08

K=  5     FIVEXQ(K)= 2.724E-06     FIVEPR(K)=10.487

FUMIGATION X/Q AT THE BOUNDARY:   7.68E-05

 EXPONENTIAL TERM AND FREQUENCIES

   5.684E-01   5.200E-01   4.072E-01   3.613E-01   2.419E-01   2.081E-01   1.693E-02
       6.996      10.372      13.992      18.021      69.549      98.630     100.000
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USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE WNW SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	3.6	2.40	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	4.045E-06
A	6.0	2.40	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	0.16	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
A	11.6	0.05	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.264E-06
A	26.5	0.05	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	5.516E-07
B	3.6	1.58	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	1.36	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.11	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.05	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
C	3.6	3.54	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	1.42	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	0.22	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
C	11.6	0.11	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	6.230E-07
D	0.2	0.01	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	4.69	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	16.58	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	16.79	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	7.63	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	1.42	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	0.11	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.02	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	3.27	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	10.91	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	14.01	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	3.44	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	1.15	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.22	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	1.25	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	2.84	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	1.31	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	0.11	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07
F	28.5	0.05	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.375E-08

G	1.8	0.27	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	0.33	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08
G	6.5	0.11	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

LOW POPULATION ZONE CALCULATIONS:

WNW SECTOR BOUNDARY DISTANCE = 500.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	4.813E-06	4.045E-06	2.858E-06	2.427E-06	2.224E-06	1.994E-06	1.715E-06	1.640E-06
0.011	0.034	0.048	2.448	4.029	6.428	11.118	14.662	16.025	16.189
0.00045	0.00145	0.00207	0.10470	0.17234	0.27497	0.47557	0.62719	0.68550	0.69250
1.264E-06	1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07	6.875E-07	6.230E-07	6.226E-07
16.243	19.515	20.933	21.042	37.619	37.673	37.891	39.146	39.255	56.050
0.69483	0.83478	0.89543	0.90009	1.60918	1.61151	1.62084	1.67449	1.67915	2.39757
5.890E-07	5.516E-07	4.207E-07	3.534E-07	3.243E-07	3.208E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07
66.955	67.010	74.644	88.658	90.076	92.911	96.347	97.655	98.800	98.909
2.86408	2.86641	3.19296	3.79242	3.85307	3.97436	4.12131	4.17729	4.22627	4.23094
1.301E-07	8.032E-08	6.449E-08	4.375E-08	3.010E-08	1.806E-08				
99.018	99.237	99.509	99.564	99.891	100.000				
4.23560	4.24493	4.25659	4.25893	4.27292	4.27759				

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(3)= 0.626
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(4)= 1.607

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HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   2.861
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   3.789

  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
  6  1     -11.07050 -15.46296  -0.98963
  6  2     -12.41800 -16.17186  -1.22003
  6  3     -13.12558 -17.72706  -1.84289
  6  4     -13.77855 -18.81308  -2.34976
  6  5     -14.34482 -22.06134  -4.05796
  6  6     -14.85564     NUMXQ(K)=  6
    5.219E-06              0.043              1.000
    3.754E-06              0.128              3.000
    3.094E-06              0.214              5.000
    2.344E-06              0.428             10.000
    1.964E-06              0.642             15.000
    1.621E-06              0.856             20.000
    1.391E-06              1.069             25.000
    1.223E-06              1.283             30.000
    1.094E-06              1.497             35.000
    9.792E-07              1.711             40.000
    8.749E-07              1.925             45.000
    7.896E-07              2.139             50.000
    7.187E-07              2.353             55.000
    6.586E-07              2.567             60.000
    6.072E-07              2.780             65.000
    5.441E-07              2.994             70.000
    4.806E-07              3.208             75.000
    4.273E-07              3.422             80.000
    3.822E-07              3.636             85.000

    2.196E-06              0.5               11.69

ANNUAL AVERAGE =   1.27E-08

K=  6     FIVEXQ(K)= 2.196E-06     FIVEPR(K)=11.689

FUMIGATION X/Q AT THE BOUNDARY:   7.68E-05

 EXPONENTIAL TERM AND FREQUENCIES

   5.684E-01   5.200E-01   4.072E-01   3.613E-01   2.419E-01   2.081E-01   1.693E-02
       5.071      10.361      13.469      19.045      66.278      99.291     100.000
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USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE NW SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	3.6	0.17	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	4.045E-06
A	6.0	0.87	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	0.56	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
B	1.7	0.09	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	6.124E-06
B	3.6	0.43	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	1.17	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.35	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.04	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
C	3.6	0.61	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	2.69	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	0.48	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
D	0.2	0.00	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	1.95	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	14.72	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	20.76	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	6.99	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	0.61	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	0.30	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.02	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	2.65	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	14.98	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	15.16	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	4.26	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	0.69	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.52	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	1.22	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	3.52	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	2.08	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	0.30	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07
G	1.8	0.17	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	1.22	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08
G	6.5	0.35	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08

G	9.6	0.04	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.220E-08

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

LOW POPULATION ZONE CALCULATIONS:

NW SECTOR BOUNDARY DISTANCE = 500.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	6.124E-06	4.813E-06	4.045E-06	2.858E-06	2.427E-06	2.224E-06	1.994E-06	1.715E-06
0.004	0.023	0.110	0.124	0.298	0.732	1.601	3.555	4.163	5.335
0.00024	0.00125	0.00591	0.00667	0.01600	0.03932	0.08597	0.19094	0.22359	0.28657
1.640E-06	1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07	6.875E-07	6.226E-07	5.890E-07
5.900	8.548	11.241	11.588	26.309	26.352	26.830	28.046	48.803	63.784
0.31689	0.45918	0.60380	0.62246	1.41318	1.41551	1.44117	1.50648	2.62143	3.42615
4.207E-07	3.534E-07	3.243E-07	3.208E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07	1.301E-07	8.032E-08
70.775	85.931	86.538	90.056	94.311	96.396	97.091	97.395	97.698	98.220
3.80169	4.61574	4.64839	4.83733	5.06591	5.17788	5.21520	5.23152	5.24785	5.27584
6.449E-08	3.010E-08	1.806E-08	1.220E-08						
98.393	99.609	99.957	100.000						
5.28517	5.35048	5.36914	5.37148						

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(2)= 0.191
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(3)= 1.412

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(4)= 3.423
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(5)= 4.612

K	I	XQSAVE(K,I)	XQINT(K,I)	XQSLOP(K,I)
7	1	-11.07050	-16.36184	-1.15635
7	2	-13.01641	-16.17063	-1.09026
7	3	-13.77855	-17.11755	-1.52184
7	4	-14.34482	-21.07552	-3.69421
7	5	-14.85564	NUMXQ(K)= 5	

3.440E-06	0.054	1.000
2.364E-06	0.161	3.000
1.975E-06	0.269	5.000
1.532E-06	0.537	10.000
1.308E-06	0.806	15.000
1.164E-06	1.074	20.000
1.060E-06	1.343	25.000
9.586E-07	1.611	30.000
8.718E-07	1.880	35.000
8.016E-07	2.149	40.000
7.432E-07	2.417	45.000
6.938E-07	2.686	50.000
6.513E-07	2.954	55.000
6.141E-07	3.223	60.000
5.707E-07	3.491	65.000
5.038E-07	3.760	70.000
4.478E-07	4.029	75.000
4.005E-07	4.297	80.000
3.603E-07	4.566	85.000
1.574E-06	0.5	9.31

ANNUAL AVERAGE = 4.14E-09

K= 7 FIVEXQ(K)= 1.574E-06 FIVEPR(K)= 9.308

FUMIGATION X/Q AT THE BOUNDARY: 7.68E-05

EXPONENTIAL TERM AND FREQUENCIES

5.684E-01	5.200E-01	4.072E-01	3.613E-01	2.419E-01	2.081E-01	1.693E-02
1.607	5.385	7.469	14.605	59.944	98.220	100.000

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE NNW SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	3.6	0.09	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	4.045E-06
A	6.0	0.09	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
B	3.6	0.14	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.37	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.37	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.05	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
C	3.6	0.55	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	1.01	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	0.46	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
C	11.6	0.05	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	6.230E-07
D	0.2	0.00	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	1.61	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	11.17	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	21.42	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	5.42	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	0.51	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	0.32	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.02	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	2.71	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	14.29	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	20.36	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	7.58	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	0.51	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.09	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.02	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	1.47	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	4.14	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	3.63	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	0.37	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07
G	1.8	0.41	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	0.46	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08
G	6.5	0.28	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08
G	9.6	0.05	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.220E-08

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

LOW POPULATION ZONE CALCULATIONS:

NNW SECTOR BOUNDARY DISTANCE = 500.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	4.813E-06	4.045E-06	2.858E-06	2.427E-06	2.224E-06	1.994E-06	1.715E-06	1.262E-06
0.004	0.023	0.040	0.132	0.270	0.362	1.970	2.522	2.889	5.601
0.00018	0.00116	0.00203	0.00669	0.01369	0.01835	0.09999	0.12798	0.14664	0.28426
1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07	6.875E-07	6.230E-07	6.226E-07	5.890E-07	4.207E-07
6.612	6.980	18.148	18.194	18.653	20.124	20.170	41.587	55.880	61.303
0.33558	0.35424	0.92104	0.92337	0.94670	1.02134	1.02367	2.11063	2.83604	3.11128
3.534E-07	3.243E-07	3.208E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07	1.301E-07	8.032E-08	6.449E-08
81.662	82.168	86.304	93.887	97.518	98.024	98.345	98.713	98.805	99.219
4.14459	4.17025	4.38017	4.76504	4.94931	4.97497	4.99130	5.00996	5.01462	5.03561
3.010E-08	1.806E-08	1.220E-08							
99.678	99.954	100.000							
5.05894	5.07293	5.07527							

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(2)= 0.100
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(3)= 0.920

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HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   2.833
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   4.141

  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
  8  1     -11.07050 -16.92746  -1.26549
  8  2     -13.01641 -16.22955  -1.03967
  8  3     -13.77855 -16.73458  -1.25389
  8  4     -14.34482 -20.02675  -2.98127
  8  5     -14.85564     NUMXQ(K)=  5
    2.850E-06              0.051              1.000
    1.948E-06              0.152              3.000
    1.648E-06              0.254              5.000
    1.296E-06              0.508             10.000
    1.116E-06              0.761             15.000
    9.915E-07              1.015             20.000
    8.911E-07              1.269             25.000
    8.147E-07              1.523             30.000
    7.539E-07              1.776             35.000
    7.039E-07              2.030             40.000
    6.618E-07              2.284             45.000
    6.256E-07              2.538             50.000
    5.941E-07              2.791             55.000
    5.366E-07              3.045             60.000
    4.825E-07              3.299             65.000
    4.367E-07              3.553             70.000
    3.975E-07              3.806             75.000
    3.637E-07              4.060             80.000

    1.303E-06              0.5                9.85

ANNUAL AVERAGE =   8.01E-10

K=  8     FIVEXQ(K)= 1.303E-06     FIVEPR(K)= 9.852

FUMIGATION X/Q AT THE BOUNDARY:   7.68E-05

 EXPONENTIAL TERM AND FREQUENCIES

   5.684E-01   5.200E-01   4.072E-01   3.613E-01   2.419E-01   2.081E-01   1.693E-02
       0.184       2.252       3.171      12.793      53.241      98.805     100.000
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USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE N SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	6.0	0.28	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	0.16	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
B	3.6	0.07	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.58	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.72	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.12	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
B	26.5	0.02	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	3.897E-07
C	3.6	0.44	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	1.68	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	1.56	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
C	11.6	0.21	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	6.230E-07
C	26.5	0.02	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	2.719E-07
D	0.2	0.00	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	0.96	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	7.00	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	16.51	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	11.24	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	2.31	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	0.68	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.01	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	1.63	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	10.14	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	20.78	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	12.03	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	1.49	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.14	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	0.54	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	3.13	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	3.03	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	1.03	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07
G	1.8	0.40	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	0.79	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08

G	6.5	0.23	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08
G	9.6	0.05	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.220E-08

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

LOW POPULATION ZONE CALCULATIONS:

N SECTOR BOUNDARY DISTANCE = 500.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	4.813E-06	2.858E-06	2.427E-06	2.224E-06	1.994E-06	1.715E-06	1.640E-06	1.262E-06
0.002	0.014	0.020	0.090	0.370	1.326	1.769	2.352	2.515	4.148
0.00022	0.00138	0.00200	0.00900	0.03699	0.13262	0.17694	0.23525	0.25158	0.41485
1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07	6.875E-07	6.230E-07	6.226E-07	5.890E-07	4.207E-07
5.827	6.550	13.547	13.663	15.226	15.762	15.972	32.484	42.629	53.870
0.58280	0.65510	1.35486	1.36652	1.52280	1.57645	1.59744	3.24887	4.26352	5.38780
3.897E-07	3.534E-07	3.243E-07	3.208E-07	2.719E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07	1.301E-07
53.893	74.673	76.981	80.107	80.130	92.164	95.196	96.688	97.365	98.391
5.39013	7.46841	7.69933	8.01189	8.01422	9.21780	9.52103	9.67031	9.73795	9.84058
8.032E-08	6.449E-08	3.010E-08	1.806E-08	1.220E-08					
98.531	98.927	99.720	99.953	100.000					
9.85458	9.89423	9.97354	9.99686	10.00153					

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(2)= 0.132
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(4)= 4.260

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(5)= 7.465

K	I	XQSAVE(K,I)	XQINT(K,I)	XQSLOP(K,I)
9	1	-11.07050	-16.69575	-1.22412
9	2	-13.01641	-15.89735	-0.95849
9	3	-13.77855	-16.33691	-1.15733
9	4	-14.34482	-17.49364	-1.82936
9	5	-14.85564	NUMXQ(K)= 5	

2.467E-06	0.100	1.000
1.737E-06	0.300	3.000
1.473E-06	0.500	5.000
1.160E-06	1.000	10.000
9.906E-07	1.500	15.000
8.658E-07	2.000	20.000
7.767E-07	2.500	25.000
7.087E-07	3.000	30.000
6.544E-07	3.501	35.000
6.096E-07	4.001	40.000
5.621E-07	4.501	45.000
5.124E-07	5.001	50.000
4.705E-07	5.501	55.000
4.345E-07	6.001	60.000
4.034E-07	6.501	65.000
3.761E-07	7.001	70.000
1.473E-06	0.5	5.00

ANNUAL AVERAGE = 2.30E-09

K= 9 FIVEXQ(K)= 1.473E-06 FIVEPR(K)= 4.999

FUMIGATION X/Q AT THE BOUNDARY: 7.68E-05

EXPONENTIAL TERM AND FREQUENCIES

5.684E-01	5.200E-01	4.072E-01	3.613E-01	2.419E-01	2.081E-01	1.693E-02
0.443	4.361	5.877	13.603	52.296	98.531	100.000

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE NNE SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	3.6	0.08	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	4.045E-06
A	6.0	0.28	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	0.12	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
B	3.6	0.16	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.56	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.36	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.08	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
C	3.6	0.20	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	1.47	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	0.95	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
D	0.2	0.00	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	0.91	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	7.60	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	16.91	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	6.60	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	0.64	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	0.36	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.02	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	2.23	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	12.73	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	22.95	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	9.07	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	0.76	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.16	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	1.27	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	5.61	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	4.42	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	0.91	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07
F	12.5	0.12	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.003E-07
G	1.8	0.36	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	1.23	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08
G	6.5	0.84	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08

G	9.6	0.04	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.220E-08

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

LOW POPULATION ZONE CALCULATIONS:

NNE SECTOR BOUNDARY DISTANCE = 500.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	4.813E-06	4.045E-06	2.858E-06	2.427E-06	2.224E-06	1.994E-06	1.715E-06	1.640E-06
0.002	0.018	0.033	0.112	0.271	0.550	1.465	1.664	2.221	2.340
0.00012	0.00105	0.00191	0.00658	0.01591	0.03224	0.08588	0.09755	0.13020	0.13720
1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07	6.875E-07	6.226E-07	5.890E-07	4.207E-07
4.568	6.039	6.397	13.995	14.075	15.030	16.303	33.209	45.939	52.542
0.26782	0.35412	0.37512	0.82063	0.82529	0.88127	0.95592	1.94724	2.69365	3.08085
3.534E-07	3.243E-07	3.208E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07	1.301E-07	1.003E-07	8.032E-08
75.495	76.132	81.741	90.811	95.226	95.982	96.340	97.255	97.375	97.534
4.42671	4.46403	4.79292	5.32473	5.58364	5.62796	5.64895	5.70260	5.70960	5.71893
6.449E-08	3.010E-08	1.806E-08	1.220E-08						
97.892	99.125	99.960	100.000						
5.73992	5.81223	5.86121	5.86355						

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(2)= 0.001
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(3)= 0.086

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HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   0.820
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   2.691
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   4.423

 K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
10  1     -11.07050 -16.86574  -1.22926
10  2     -11.63677 -16.88443  -1.23365
10  3     -13.01641 -16.26591  -1.03638
10  4     -13.77855 -16.65940  -1.20033
10  5     -14.34482 -18.72800  -2.27310
10  6     -14.85564     NUMXQ(K)=  6
   2.548E-06              0.059              1.000
   1.776E-06              0.176              3.000
   1.500E-06              0.293              5.000
   1.176E-06              0.586             10.000
   1.006E-06              0.880             15.000
   8.839E-07              1.173             20.000
   7.964E-07              1.466             25.000
   7.297E-07              1.759             30.000
   6.764E-07              2.052             35.000
   6.325E-07              2.345             40.000
   5.954E-07              2.639             45.000
   5.416E-07              2.932             50.000
   4.920E-07              3.225             55.000
   4.501E-07              3.518             60.000
   4.142E-07              3.811             65.000
   3.831E-07              4.104             70.000
   3.559E-07              4.398             75.000

   1.246E-06              0.5                8.53

ANNUAL AVERAGE =   1.56E-09

K= 10     FIVEXQ(K)= 1.246E-06     FIVEPR(K)= 8.527

FUMIGATION X/Q AT THE BOUNDARY:   7.68E-05

 EXPONENTIAL TERM AND FREQUENCIES

   5.684E-01   5.200E-01   4.072E-01   3.613E-01   2.419E-01   2.081E-01   1.693E-02
       0.477       3.103       4.256      16.603      49.623      97.534     100.000
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USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE NE SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	3.6	0.09	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	4.045E-06
A	6.0	0.23	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	0.09	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
B	3.6	0.14	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.61	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.28	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.05	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
C	3.6	0.33	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	1.41	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	0.99	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
C	11.6	0.19	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	6.230E-07
C	26.5	0.05	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	2.719E-07
D	0.2	0.00	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	1.50	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	7.28	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	13.48	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	5.92	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	0.75	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	0.14	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.02	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	2.77	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	13.19	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	16.62	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	10.14	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	0.85	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.09	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.02	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	1.50	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	7.32	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	7.37	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	1.83	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07
G	1.8	0.28	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	1.69	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08

G	6.5	2.39	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08
G	9.6	0.38	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.220E-08

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

LOW POPULATION ZONE CALCULATIONS:

NE SECTOR BOUNDARY DISTANCE = 500.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	4.813E-06	4.045E-06	2.858E-06	2.427E-06	2.224E-06	1.994E-06	1.715E-06	1.640E-06
0.003	0.023	0.040	0.134	0.275	0.510	2.012	2.341	2.951	3.045
0.00017	0.00115	0.00201	0.00667	0.01367	0.02534	0.09998	0.11630	0.14663	0.15129
1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07	6.875E-07	6.230E-07	6.226E-07	5.890E-07
5.815	7.224	7.506	14.783	14.830	15.816	17.319	17.506	30.981	44.175
0.28891	0.35889	0.37288	0.73442	0.73676	0.78574	0.86038	0.86971	1.53914	2.19458
4.207E-07	3.534E-07	3.243E-07	3.208E-07	2.719E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07	1.301E-07
50.091	66.711	67.463	74.787	74.834	84.976	92.347	93.192	93.333	95.164
2.48848	3.31419	3.35152	3.71539	3.71772	4.22155	4.58775	4.62974	4.63674	4.72770
8.032E-08	6.449E-08	3.010E-08	1.806E-08	1.220E-08					
95.258	95.540	97.230	99.624	100.000					
4.73237	4.74636	4.83034	4.94929	4.96795					

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(2)= 0.100
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(3)= 0.734

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HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   2.192
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   3.712

  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
 11  1     -11.07050 -16.88108  -1.25046
 11  2     -13.01641 -16.63911  -1.17217
 11  3     -13.77855 -17.03136  -1.33290
 11  4     -14.34482 -19.65802  -2.63609
 11  5     -14.95230     NUMXQ(K)=  5
    2.862E-06              0.050              1.000
    1.931E-06              0.149              3.000
    1.599E-06              0.248              5.000
    1.220E-06              0.497             10.000
    1.030E-06              0.745             15.000
    8.947E-07              0.994             20.000
    7.990E-07              1.242             25.000
    7.266E-07              1.490             30.000
    6.693E-07              1.739             35.000
    6.223E-07              1.987             40.000
    5.771E-07              2.236             45.000
    5.130E-07              2.484             50.000
    4.604E-07              2.732             55.000
    4.164E-07              2.981             60.000
    3.792E-07              3.229             65.000
    3.474E-07              3.478             70.000

    1.217E-06              0.5               10.06

ANNUAL AVERAGE =   1.24E-09

K= 11     FIVEXQ(K)= 1.217E-06     FIVEPR(K)=10.065

FUMIGATION X/Q AT THE BOUNDARY:   7.68E-05

 EXPONENTIAL TERM AND FREQUENCIES

   5.684E-01   5.200E-01   4.072E-01   3.613E-01   2.419E-01   2.081E-01   1.693E-02
       0.423       3.381       4.460      22.507      51.573      95.258     100.000
```

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE ENE SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	6.0	0.33	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	0.14	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
A	11.6	0.09	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.264E-06
A	26.5	0.09	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	5.516E-07
B	3.6	0.05	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.38	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.89	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.09	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
B	26.5	0.05	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	3.897E-07
C	3.6	0.14	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	1.22	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	1.46	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
C	11.6	0.19	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	6.230E-07
C	26.5	0.05	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	2.719E-07
D	0.2	0.00	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	0.71	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	6.02	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	9.93	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	8.94	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	1.03	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	0.28	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.02	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	2.54	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	8.80	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	13.97	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	12.75	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	1.41	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.05	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.02	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	1.55	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	5.50	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	8.33	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	5.13	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07
F	12.5	0.85	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.003E-07

G	1.8	0.85	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	1.60	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08
G	6.5	3.29	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08
G	9.6	1.22	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.220E-08
G	12.5	0.05	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	9.405E-09

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

LOW POPULATION ZONE CALCULATIONS:

ENE SECTOR BOUNDARY DISTANCE = 500.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	4.813E-06	2.858E-06	2.427E-06	2.224E-06	1.994E-06	1.715E-06	1.640E-06	1.264E-06
0.002	0.020	0.038	0.085	0.414	1.120	1.261	1.637	1.778	1.872
0.00008	0.00098	0.00186	0.00420	0.02052	0.05551	0.06251	0.08117	0.08817	0.09283
1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07	6.875E-07	6.230E-07	6.226E-07	5.890E-07
4.412	5.635	6.529	12.551	12.645	14.103	15.655	15.843	25.769	34.566
0.21879	0.27943	0.32375	0.62232	0.62698	0.69929	0.77626	0.78559	1.27776	1.71394
5.516E-07	4.207E-07	3.897E-07	3.534E-07	3.243E-07	3.208E-07	2.719E-07	2.388E-07	1.925E-07	1.841E-07
34.660	43.598	43.645	57.616	58.651	64.155	64.202	76.950	85.276	86.687
1.71860	2.16178	2.16411	2.85687	2.90819	3.18110	3.18343	3.81554	4.22840	4.29837
1.415E-07	1.301E-07	1.003E-07	8.032E-08	6.449E-08	3.010E-08	1.806E-08	1.220E-08	9.405E-09	
86.970	92.097	92.944	92.991	93.838	95.437	98.730	99.953	100.000	
4.31237	4.56662	4.60860	4.61093	4.65292	4.73222	4.89550	4.95615	4.95848	

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(2)= 0.001
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(3)= 0.055

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HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   0.622
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   1.712
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   3.178
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 K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
12  1     -11.07050 -16.19649  -1.06775
12  2     -11.63677 -17.47494  -1.36713
12  3     -13.01641 -16.28004  -1.00073
12  4     -13.77855 -17.47979  -1.48070
12  5     -14.34482 -19.25415  -2.31876
12  6     -14.95230     NUMXQ(K)=  6
   2.323E-06              0.050              1.000
   1.662E-06              0.149              3.000
   1.416E-06              0.248              5.000
   1.124E-06              0.496             10.000
   9.441E-07              0.744             15.000
   8.070E-07              0.992             20.000
   7.118E-07              1.240             25.000
   6.405E-07              1.488             30.000
   5.822E-07              1.735             35.000
   5.130E-07              1.983             40.000
   4.579E-07              2.231             45.000
   4.128E-07              2.479             50.000
   3.754E-07              2.727             55.000
   3.437E-07              2.975             60.000

   1.120E-06              0.5               10.08

ANNUAL AVERAGE =   1.29E-09

K= 12     FIVEXQ(K)= 1.120E-06     FIVEPR(K)=10.084

FUMIGATION X/Q AT THE BOUNDARY:   7.68E-05

 EXPONENTIAL TERM AND FREQUENCIES

   5.684E-01   5.200E-01   4.072E-01   3.613E-01   2.419E-01   2.081E-01   1.693E-02
       0.659       3.716       5.175      26.549      53.458      92.991     100.000
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USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE E SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	3.6	0.03	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	4.045E-06
A	6.0	0.24	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	0.63	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
A	11.6	0.42	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.264E-06
A	26.5	0.06	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	5.516E-07
B	3.6	0.12	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.63	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.81	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.36	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
B	26.5	0.18	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	3.897E-07
C	3.6	0.15	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	1.25	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	1.67	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
C	11.6	0.86	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	6.230E-07
C	26.5	0.39	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	2.719E-07
D	0.2	0.00	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	0.78	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	4.21	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	8.98	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	11.78	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	6.71	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	2.68	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.01	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	1.61	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	5.16	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	11.78	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	15.99	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	2.33	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.27	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	0.89	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	2.54	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	5.91	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	5.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07

F	12.5	0.72	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.003E-07
G	1.8	0.39	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	1.19	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08
G	6.5	2.06	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08
G	9.6	1.16	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.220E-08
G	12.5	0.03	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	9.405E-09
G	28.5	0.03	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	4.104E-09

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

LOW POPULATION ZONE CALCULATIONS:

E SECTOR BOUNDARY DISTANCE = 500.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	4.813E-06	4.045E-06	2.858E-06	2.427E-06	2.224E-06	1.994E-06	1.715E-06	1.640E-06
0.002	0.013	0.024	0.053	0.173	0.411	1.187	1.336	1.962	2.589
0.00014	0.00103	0.00184	0.00417	0.01350	0.03216	0.09281	0.10447	0.15346	0.20244
1.264E-06	1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07	6.875E-07	6.230E-07	6.226E-07
3.006	4.617	5.869	6.675	10.880	11.238	12.908	13.803	14.668	23.646
0.23509	0.36105	0.45902	0.52199	0.85088	0.87887	1.00949	1.07947	1.14711	1.84920
5.890E-07	5.516E-07	4.207E-07	3.897E-07	3.534E-07	3.243E-07	3.208E-07	2.719E-07	2.388E-07	1.925E-07
28.806	28.865	40.646	40.825	52.607	59.317	61.853	62.240	78.227	84.133
2.25273	2.25739	3.17874	3.19274	4.11408	4.63890	4.83717	4.86749	6.11772	6.57956
1.841E-07	1.415E-07	1.301E-07	1.003E-07	8.032E-08	6.449E-08	3.010E-08	1.806E-08	1.220E-08	9.405E-09
86.459	89.143	94.154	94.870	95.138	95.526	96.719	98.777	99.940	99.970
6.76150	6.97143	7.36329	7.41927	7.44026	7.47059	7.56389	7.72483	7.81580	7.81813
4.104E-09									
100.000									
7.82046									

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED
CHI/Q WITH RESPECT TO WHEN THE WIND BLOWS

SEC/CUBIC METER THE TOTAL TIME INTO THIS SECTOR ONLY

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HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=   0.093
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=   0.850
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   2.250
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   4.834
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 K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
13  1     -11.07050 -16.85765  -1.23409
13  2     -13.01641 -16.28464  -1.05000
13  3     -13.77855 -17.31495  -1.48167
13  4     -14.34482 -17.89132  -1.76920
13  5     -14.95230     NUMXQ(K)=  5
   2.366E-06              0.078              1.000
   1.649E-06              0.235              3.000
   1.383E-06              0.391              5.000
   1.072E-06              0.782             10.000
   8.680E-07              1.173             15.000
   7.349E-07              1.564             20.000
   6.428E-07              1.955             25.000
   5.714E-07              2.346             30.000
   5.083E-07              2.737             35.000
   4.583E-07              3.128             40.000
   4.173E-07              3.519             45.000
   3.832E-07              3.910             50.000
   3.542E-07              4.301             55.000
   3.292E-07              4.692             60.000

   1.266E-06              0.5                6.39

ANNUAL AVERAGE =   3.55E-09

K= 13     FIVEXQ(K)= 1.266E-06     FIVEPR(K)= 6.393

FUMIGATION X/Q AT THE BOUNDARY:   7.68E-05

 EXPONENTIAL TERM AND FREQUENCIES

   5.684E-01   5.200E-01   4.072E-01   3.613E-01   2.419E-01   2.081E-01   1.693E-02
       1.372       5.697       7.785      22.857      57.994      95.138     100.000
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USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE ESE SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	6.0	0.24	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	0.24	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
A	11.6	0.05	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.264E-06
A	26.5	0.13	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	5.516E-07
B	3.6	0.08	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.24	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.53	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.37	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
B	26.5	0.19	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	3.897E-07
C	3.6	0.13	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	0.69	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	1.57	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
C	11.6	0.80	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	6.230E-07
C	26.5	0.72	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	2.719E-07
D	0.2	0.00	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	1.01	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	2.59	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	9.48	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	17.99	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	11.96	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	4.03	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.01	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	0.96	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	3.68	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	9.45	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	15.56	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	2.96	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.32	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	0.75	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	1.76	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	3.74	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	3.68	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07
F	12.5	0.48	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.003E-07

G	1.8	0.37	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	0.93	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08
G	6.5	1.17	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08
G	9.6	1.04	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.220E-08
G	12.5	0.05	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	9.405E-09

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

LOW POPULATION ZONE CALCULATIONS:

ESE SECTOR BOUNDARY DISTANCE = 500.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	4.813E-06	2.858E-06	2.427E-06	2.224E-06	1.994E-06	1.715E-06	1.640E-06	1.264E-06
0.002	0.009	0.018	0.098	0.338	1.352	1.486	1.726	1.966	2.020
0.00020	0.00080	0.00155	0.00855	0.02954	0.11818	0.12984	0.15083	0.17183	0.17649
1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07	6.875E-07	6.230E-07	6.226E-07	5.890E-07
2.980	3.674	4.208	6.797	7.171	8.746	9.493	10.294	19.769	23.452
0.26046	0.32111	0.36776	0.59401	0.62667	0.76429	0.82960	0.89957	1.72762	2.04951
5.516E-07	4.207E-07	3.897E-07	3.534E-07	3.243E-07	3.208E-07	2.719E-07	2.388E-07	1.925E-07	1.841E-07
23.585	41.575	41.762	51.210	63.167	64.929	65.649	81.210	84.947	87.909
2.06117	3.63329	3.64962	4.47533	5.52030	5.67425	5.73723	7.09709	7.42365	7.68255
1.415E-07	1.301E-07	1.003E-07	8.032E-08	6.449E-08	3.010E-08	1.806E-08	1.220E-08	9.405E-09	
91.939	95.623	96.103	96.423	96.797	97.731	98.906	99.947	100.000	
8.03477	8.35665	8.39864	8.42663	8.45928	8.54092	8.64355	8.73452	8.73919	

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(2)= 0.118
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(3)= 0.593

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(4)= 2.047
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(5)= 5.670

K	I	XQSAVE(K,I)	XQINT(K,I)	XQSLOP(K,I)
14	1	-11.07050	-16.78363	-1.23898
14	2	-13.01641	-17.43472	-1.45311
14	3	-13.77855	-16.79696	-1.19964
14	4	-14.34482	-17.03831	-1.31771
14	5	-14.95230	NUMXQ(K)= 5	

2.485E-06	0.087	1.000
1.550E-06	0.262	3.000
1.211E-06	0.437	5.000
8.781E-07	0.874	10.000
7.304E-07	1.311	15.000
6.370E-07	1.748	20.000
5.687E-07	2.185	25.000
5.135E-07	2.622	30.000
4.699E-07	3.059	35.000
4.343E-07	3.496	40.000
4.045E-07	3.933	45.000
3.791E-07	4.370	50.000
3.571E-07	4.807	55.000
3.378E-07	5.244	60.000
1.132E-06	0.5	5.72

ANNUAL AVERAGE = 2.08E-09

K= 14 FIVEXQ(K)= 1.132E-06 FIVEPR(K)= 5.721

FUMIGATION X/Q AT THE BOUNDARY: 7.68E-05

EXPONENTIAL TERM AND FREQUENCIES

5.684E-01	5.200E-01	4.072E-01	3.613E-01	2.419E-01	2.081E-01	1.693E-02
0.667	4.591	6.005	16.423	63.481	96.423	100.000

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE SE SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	6.0	0.04	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	0.06	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
A	26.5	0.02	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	5.516E-07
B	3.6	0.08	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.04	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.19	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.08	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
C	3.6	0.06	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	0.55	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	0.74	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
C	11.6	0.59	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	6.230E-07
C	26.5	0.13	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	2.719E-07
D	0.2	0.00	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	0.76	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	4.10	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	11.52	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	22.08	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	11.54	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	3.91	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.01	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	0.83	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	3.61	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	11.03	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	13.83	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	1.89	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.13	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	0.55	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	2.00	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	3.78	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	1.91	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07
G	1.8	0.28	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	1.49	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08

G	6.5	1.95	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08
G	9.6	0.19	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.220E-08

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

LOW POPULATION ZONE CALCULATIONS:

SE SECTOR BOUNDARY DISTANCE = 500.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	4.813E-06	2.858E-06	2.427E-06	2.224E-06	1.994E-06	1.715E-06	1.640E-06	1.262E-06
0.002	0.008	0.014	0.099	0.141	0.906	0.970	1.013	1.076	1.905
0.00019	0.00084	0.00154	0.01087	0.01553	0.09950	0.10650	0.11117	0.11816	0.20913
1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07	6.875E-07	6.230E-07	6.226E-07	5.890E-07	5.516E-07
2.457	2.649	6.749	6.834	7.578	8.130	8.725	20.241	23.853	23.874
0.26978	0.29077	0.74095	0.75028	0.83192	0.89256	0.95787	2.22210	2.61863	2.62096
4.207E-07	3.534E-07	3.243E-07	3.208E-07	2.719E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07	1.301E-07
45.949	56.976	68.513	70.510	70.637	84.469	88.251	90.142	94.051	95.963
5.04446	6.25504	7.52160	7.74085	7.75485	9.27332	9.68851	9.89611	10.32529	10.53522
8.032E-08	6.449E-08	3.010E-08	1.806E-08	1.220E-08					
96.091	96.367	97.854	99.809	100.000					
10.54921	10.57954	10.74281	10.95741	10.97840					

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(2)= 0.099
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(3)= 0.740

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HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   5.041
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   7.737

  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
 15  1     -11.07050 -16.94794  -1.27152
 15  2     -13.01641 -16.61528  -1.16393
 15  3     -13.77855 -16.54197  -1.13385
 15  4     -14.68142 -16.72098  -1.24294
 15  5     -14.95230     NUMXQ(K)=  5
    2.149E-06              0.110              1.000
    1.438E-06              0.329              3.000
    1.175E-06              0.549              5.000
    8.797E-07              1.098             10.000
    7.352E-07              1.647             15.000
    6.432E-07              2.196             20.000
    5.774E-07              2.745             25.000
    5.270E-07              3.294             30.000
    4.868E-07              3.842             35.000
    4.536E-07              4.391             40.000
    4.255E-07              4.940             45.000
    3.996E-07              5.489             50.000
    3.766E-07              6.038             55.000
    3.564E-07              6.587             60.000
    3.385E-07              7.136             65.000
    3.224E-07              7.685             70.000

    1.220E-06              0.5                4.55

ANNUAL AVERAGE =   6.41E-10

K= 15     FIVEXQ(K)= 1.220E-06     FIVEPR(K)= 4.554

FUMIGATION X/Q AT THE BOUNDARY:   7.68E-05

 EXPONENTIAL TERM AND FREQUENCIES

   5.684E-01   5.200E-01   4.072E-01   3.613E-01   2.419E-01   2.081E-01   1.693E-02
       0.127       2.210       2.613      10.863      64.767      96.091     100.000
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USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE SSE SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	3.6	0.02	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	4.045E-06
A	6.0	0.17	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	0.32	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
A	11.6	0.02	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.264E-06
A	26.5	0.02	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	5.516E-07
B	3.6	0.06	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.48	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.71	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.11	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
C	3.6	0.48	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	2.16	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	2.01	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
C	11.6	0.37	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	6.230E-07
D	0.2	0.00	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	1.08	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	8.31	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	20.04	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	19.82	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	5.23	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	1.36	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.01	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	0.73	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	4.38	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	11.10	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	10.11	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	0.93	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.22	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	0.48	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	2.09	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	2.72	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	0.69	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07
F	12.5	0.11	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.003E-07

G	1.8	0.41	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	1.27	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08
G	6.5	1.84	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08
G	9.6	0.11	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.220E-08
G	28.5	0.02	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	4.104E-09

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

LOW POPULATION ZONE CALCULATIONS:

SSE SECTOR BOUNDARY DISTANCE = 500.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	4.813E-06	4.045E-06	2.858E-06	2.427E-06	2.224E-06	1.994E-06	1.715E-06	1.640E-06
0.002	0.008	0.013	0.035	0.100	0.272	1.352	1.827	2.302	2.626
0.00026	0.00083	0.00142	0.00375	0.01075	0.02941	0.14604	0.19735	0.24867	0.28366
1.264E-06	1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07	6.875E-07	6.230E-07	6.226E-07
2.648	3.382	5.542	6.254	14.568	14.676	16.685	17.160	17.527	37.568
0.28599	0.36529	0.59855	0.67552	1.57354	1.58520	1.80213	1.85344	1.89310	4.05768
5.890E-07	5.516E-07	4.207E-07	3.534E-07	3.243E-07	3.208E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07
41.951	41.973	61.798	72.898	78.124	80.219	90.325	93.046	93.975	95.335
4.53118	4.53352	6.67477	7.87369	8.43816	8.66442	9.75604	10.04994	10.15024	10.29718
1.301E-07	1.003E-07	8.032E-08	6.449E-08	3.010E-08	1.806E-08	1.220E-08	4.104E-09		
96.026	96.134	96.350	96.761	98.035	99.870	99.978	100.000		
10.37183	10.38349	10.40681	10.45113	10.58875	10.78701	10.79868	10.80101		

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(2)= 0.197
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(4)= 4.528

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(5)= 6.671

K	I	XQSAVE(K,I)	XQINT(K,I)	XQSLOP(K,I)
16	1	-11.07050	-16.67065	-1.22977
16	2	-13.12558	-15.69990	-0.89302
16	3	-13.77855	-16.43273	-1.23363
16	4	-14.34482	-17.31614	-1.75559
16	5	-14.68142	NUMXQ(K)= 5	

2.502E-06	0.108	1.000
1.728E-06	0.324	3.000
1.480E-06	0.540	5.000
1.182E-06	1.080	10.000
1.023E-06	1.620	15.000
8.846E-07	2.160	20.000
7.868E-07	2.700	25.000
7.127E-07	3.240	30.000
6.539E-07	3.780	35.000
6.056E-07	4.320	40.000
5.553E-07	4.860	45.000
5.074E-07	5.401	50.000
4.669E-07	5.941	55.000
4.320E-07	6.481	60.000
1.516E-06	0.5	4.63

ANNUAL AVERAGE = 2.62E-09

K= 16 FIVEXQ(K)= 1.516E-06 FIVEPR(K)= 4.629

FUMIGATION X/Q AT THE BOUNDARY: 7.68E-05

EXPONENTIAL TERM AND FREQUENCIES

5.684E-01	5.200E-01	4.072E-01	3.613E-01	2.419E-01	2.081E-01	1.693E-02
0.561	5.572	6.932	13.028	68.876	96.350	100.000

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE ALL SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	1.7	0.01	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	8.668E-06
A	3.6	0.51	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	4.045E-06
A	6.0	0.53	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	2.427E-06
A	8.9	0.28	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.640E-06
A	11.6	0.06	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	1.264E-06
A	26.5	0.03	500.	0.	131.	100.2	123.6	0.0	0.000E+00	0.000E+00	5.516E-07
B	1.7	0.05	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	6.124E-06
B	3.6	0.47	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.54	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.44	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.12	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
B	26.5	0.03	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	3.897E-07
C	1.7	0.08	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	4.272E-06
C	3.6	0.77	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	1.33	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	1.04	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
C	11.6	0.30	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	6.230E-07
C	26.5	0.13	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	2.719E-07
D	0.2	0.00	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	2.07	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	9.39	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	15.72	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	12.23	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	4.24	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	1.39	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.01	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	1.97	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	8.90	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	13.85	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	9.53	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	1.29	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.23	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	1.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07

F	3.9	3.14	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	3.52	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	1.55	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07
F	12.5	0.16	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.003E-07
F	28.5	0.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.375E-08
G	1.8	0.43	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08
G	3.9	1.17	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08
G	6.5	1.14	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08
G	9.6	0.31	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.220E-08
G	12.5	0.01	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	9.405E-09
G	28.5	0.00	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	4.104E-09

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

LOW POPULATION ZONE CALCULATIONS:
DIRECTION-INDEPENDENT (S.R.P 2.3.4) MODEL.
MINIMUM BOUNDARY DISTANCE = 500.0 METERS.
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	8.668E-06	6.124E-06	4.813E-06	4.272E-06	4.045E-06	2.858E-06	2.427E-06	2.224E-06
0.005	0.019	0.026	0.072	0.084	0.161	0.674	1.145	1.677	3.744
0.00467	0.01866	0.02566	0.07231	0.08397	0.16094	0.67410	1.14527	1.67709	3.74370
1.994E-06	1.715E-06	1.640E-06	1.264E-06	1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07
4.509	5.052	5.330	5.388	7.354	8.684	9.125	18.516	18.637	19.680
4.50877	5.05225	5.32982	5.38813	7.35445	8.68399	9.12484	18.51558	18.63687	19.67951
6.875E-07	6.230E-07	6.226E-07	5.890E-07	5.516E-07	4.207E-07	3.897E-07	3.534E-07	3.243E-07	3.208E-07
20.689	20.993	36.712	45.608	45.636	57.865	57.900	71.746	75.987	79.129
20.68949	20.99272	36.71161	45.60785	45.63584	57.86527	57.90026	71.74612	75.98666	79.12857
2.719E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07	1.301E-07	1.003E-07	8.032E-08	6.449E-08	4.375E-08
79.254	88.781	92.298	93.593	94.980	96.534	96.695	96.923	97.357	97.369
79.25452	88.78055	92.29800	93.59254	94.98039	96.53386	96.69480	96.92339	97.35724	97.36890
3.010E-08	1.806E-08	1.220E-08	9.405E-09	4.104E-09					
98.542	99.678	99.986	99.995	100.000					
98.54216	99.67810	99.98599	99.99532	99.99998					

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED
CHI/Q WITH RESPECT TO WHEN THE WIND BLOWS

SEC/CUBIC METER	THE TOTAL TIME	INTO THIS SECTOR ONLY
3.662E-06	1.000	1.000
2.436E-06	3.000	3.000
1.977E-06	5.000	5.000
1.446E-06	10.000	10.000
1.171E-06	15.000	15.000
9.978E-07	20.000	20.000
8.845E-07	25.000	25.000
7.938E-07	30.000	30.000
7.180E-07	35.000	35.000
6.529E-07	40.000	40.000
5.956E-07	45.000	45.000
5.478E-07	50.000	50.000
5.043E-07	55.000	55.000
4.636E-07	60.000	60.000
4.249E-07	65.000	65.000
3.877E-07	70.000	70.000
3.511E-07	75.000	75.000
1.977E-06	5.0	5.00

K= 17 FIVEXQ(K)= 1.977E-06 FIVEPR(K)= 5.000

FUMIGATION X/Q AT THE BOUNDARY: 7.68E-05

EXPONENTIAL TERM AND FREQUENCIES

5.684E-01	5.200E-01	4.072E-01	3.613E-01	2.419E-01	2.081E-01	1.693E-02
1.416	5.059	6.718	16.125	61.163	96.935	100.000

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

LOW POPULATION ZONE CALCULATIONS:

FIVE PERCENT OVERALL SITE LIMIT
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	8.668E-06	6.124E-06	4.813E-06	4.272E-06	4.045E-06	2.858E-06	2.427E-06	2.224E-06
0.005	0.019	0.026	0.072	0.084	0.161	0.674	1.145	1.677	3.744
0.00467	0.01866	0.02566	0.07231	0.08397	0.16094	0.67410	1.14527	1.67709	3.74370
1.994E-06	1.715E-06	1.640E-06	1.264E-06	1.262E-06	1.196E-06	1.159E-06	1.038E-06	8.931E-07	8.082E-07
4.509	5.052	5.330	5.388	7.354	8.684	9.125	18.516	18.637	19.680
4.50877	5.05225	5.32982	5.38813	7.35445	8.68399	9.12484	18.51558	18.63688	19.67952
6.875E-07	6.230E-07	6.226E-07	5.890E-07	5.516E-07	4.207E-07	3.897E-07	3.534E-07	3.243E-07	3.208E-07
20.689	20.993	36.712	45.608	45.636	57.865	57.900	71.746	75.987	79.129
20.68950	20.99273	36.71161	45.60786	45.63585	57.86527	57.90026	71.74612	75.98665	79.12857
2.719E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07	1.301E-07	1.003E-07	8.032E-08	6.449E-08	4.375E-08
79.255	88.781	92.298	93.593	94.980	96.534	96.695	96.923	97.357	97.369
79.25453	88.78056	92.29800	93.59256	94.98041	96.53387	96.69481	96.92340	97.35724	97.36890
3.010E-08	1.806E-08	1.220E-08	9.405E-09	4.104E-09					
98.542	99.678	99.986	99.995	100.000					
98.54216	99.67809	99.98598	99.99532	99.99998					

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED
CHI/Q WITH RESPECT TO WHEN THE WIND BLOWS

SEC/CUBIC METER THE TOTAL TIME INTO THIS SECTOR ONLY

K	I	XQSAVE(K,I)	XQINT(K,I)	XQSLOP(K,I)
18	1	-11.07050	-14.64728	-0.91538
18	2	-13.01641	-14.54922	-0.86034
18	3	-13.77855	-14.42414	-0.72071
18	4	-14.34482	-14.41743	-0.65976
18	5	-14.95230	NUMXQ(K)=	5

3.662E-06	1.000	1.000
2.436E-06	3.000	3.000
1.977E-06	5.000	5.000
1.446E-06	10.000	10.000
1.171E-06	15.000	15.000
9.978E-07	20.000	20.000
8.845E-07	25.000	25.000
7.938E-07	30.000	30.000
7.180E-07	35.000	35.000
6.529E-07	40.000	40.000
5.956E-07	45.000	45.000
5.478E-07	50.000	50.000
5.043E-07	55.000	55.000
4.636E-07	60.000	60.000
4.249E-07	65.000	65.000
3.877E-07	70.000	70.000
3.511E-07	75.000	75.000
1.977E-06	5.0	5.00

K= 18 FIVEXQ(K)= 1.977E-06 FIVEPR(K)= 5.000

K	HIGHPR	PR	GRNDVT(K)
1	-3.06052	0.11048	6.21119
2	-2.00327	2.25740	3.52599
3	-2.79824	0.25691	3.10868
4	-2.68650	0.36103	3.53145
5	-2.57624	0.49942	4.76778
6	-2.75266	0.29557	4.27759
7	-3.06855	0.10756	5.37148
8	-3.25087	0.05753	5.07527
9	-3.17144	0.07585	10.00153
10	-3.29988	0.04837	5.86355
11	-3.25284	0.05714	4.96796
12	-3.40963	0.03253	4.95848
13	-3.27701	0.05246	7.82046
14	-3.20434	0.06769	8.73919
15	-3.25156	0.05739	10.97840
16	-3.13645	0.08551	10.80101

K	HOURS(K)	TOTHRS
1	9.67833	9.67833
2	197.74830	207.42660
3	22.50566	229.93230

4	31.62634	261.55860
5	43.74879	305.30740
6	25.89224	331.19960
7	9.42196	340.62160
8	5.03966	345.66130
9	6.64419	352.30550
10	4.23714	356.54260
11	5.00520	361.54780
12	2.84982	364.39760
13	4.59585	368.99350
14	5.92991	374.92340
15	5.02765	379.95100
16	7.49057	387.44160

K	FIVEXQ	SVANN	SLTIME	TIMINT	I	TIME	XQT
1	1.547E-06	1.719E-09	-0.8113	-12.8169			
					1	8.0	-14.50390
					2	16.0	-15.06623
					3	72.0	-16.28644
					4	624.0	-18.03836
2	1.537E-06	3.659E-09	-0.7204	-12.8863			
					1	8.0	-14.38432
					2	16.0	-14.88366
					3	72.0	-15.96719
					4	624.0	-17.52288
3	1.997E-06	6.989E-09	-0.6744	-12.6564			
					1	8.0	-14.05880
					2	16.0	-14.52627
					3	72.0	-15.54065
					4	624.0	-16.99704
4	2.335E-06	1.173E-08	-0.6313	-12.5300			
					1	8.0	-13.84281
					2	16.0	-14.28041
					3	72.0	-15.22995
					4	624.0	-16.59327
5	2.724E-06	2.232E-08	-0.5729	-12.4164			
					1	8.0	-13.60780
					2	16.0	-14.00494
					3	72.0	-14.86670
					4	624.0	-16.10397
6	2.196E-06	1.266E-08	-0.6149	-12.6026			
					1	8.0	-13.88121
					2	16.0	-14.30743
					3	72.0	-15.23229
					4	624.0	-16.56017
7	1.574E-06	4.141E-09	-0.7085	-12.8708			
					1	8.0	-14.34400
					2	16.0	-14.83506
					3	72.0	-15.90064
					4	624.0	-17.43054
8	1.303E-06	8.006E-10	-0.8819	-12.9398			
					1	8.0	-14.77367
					2	16.0	-15.38494

```
                                                3   72.0   -16.71135
                                                4  624.0   -18.61576
 9 1.473E-06 2.304E-09   -0.7705  -12.8940
                                                1    8.0   -14.49614
                                                2   16.0   -15.03019
                                                3   72.0   -16.18902
                                                4  624.0   -17.85283
10 1.246E-06 1.562E-09   -0.7968  -13.0436
                                                1    8.0   -14.70058
                                                2   16.0   -15.25289
                                                3   72.0   -16.45137
                                                4  624.0   -18.17210
11 1.217E-06 1.245E-09   -0.8211  -13.0502
                                                1    8.0   -14.75760
                                                2   16.0   -15.32674
                                                3   72.0   -16.56173
                                                4  624.0   -18.33486
12 1.120E-06 1.292E-09   -0.8068  -13.1427
                                                1    8.0   -14.82034
                                                2   16.0   -15.37956
                                                3   72.0   -16.59302
                                                4  624.0   -18.33525
13 1.266E-06 3.555E-09   -0.7007  -13.0939
                                                1    8.0   -14.55097
                                                2   16.0   -15.03666
                                                3   72.0   -16.09056
                                                4  624.0   -17.60370
14 1.132E-06 2.083E-09   -0.7511  -13.1705
                                                1    8.0   -14.73245
                                                2   16.0   -15.25309
                                                3   72.0   -16.38285
                                                4  624.0   -18.00490
15 1.220E-06 6.412E-10   -0.9005  -12.9925
                                                1    8.0   -14.86511
                                                2   16.0   -15.48930
                                                3   72.0   -16.84375
                                                4  624.0   -18.78841
16 1.516E-06 2.620E-09   -0.7586  -12.8734
                                                1    8.0   -14.45091
                                                2   16.0   -14.97674
                                                3   72.0   -16.11773
                                                4  624.0   -17.75593
17 1.977E-06 2.232E-08   -0.5348  -12.7631
                                                1    8.0   -13.87511
                                                2   16.0   -14.24577
                                                3   72.0   -15.05008
                                                4  624.0   -16.20488
18 1.977E-06 2.232E-08   -0.5348  -12.7631
                                                1    8.0   -13.87511
                                                2   16.0   -14.24577
                                                3   72.0   -15.05008
                                                4  624.0   -16.20488
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USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom
DATA PERIOD:
TYPE OF RELEASE: Stack Release
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

METEOROLOGICAL INSTRUMENTATION
WIND SENSORS HEIGHT: 97.5 meters
DELTA-T HEIGHTS: 10.1-96.3 meters

RELATIVE CONCENTRATION (X/Q) VALUES (SEC/CUBIC METER)
VERSUS
AVERAGING TIME

DOWNWIND SECTOR	DISTANCE (METERS)	0-2 HOURS	0-8 HOURS	8-24 HOURS	1-4 DAYS	4-30 DAYS	ANNUAL AVERAGE	HOURS PER YEAR MAX 0-2 HR X/Q IS EXCEEDED IN SECTOR	DOWNWIND SECTOR
S	500.	1.55E-06	5.02E-07	2.86E-07	8.45E-08	1.47E-08	1.72E-09	9.7	S
SSW	500.	1.54E-06	5.66E-07	3.44E-07	1.16E-07	2.45E-08	3.66E-09	197.7	SSW
SW	500.	2.00E-06	7.84E-07	4.91E-07	1.78E-07	4.15E-08	6.99E-09	22.5	SW
WSW	500.	2.33E-06	9.73E-07	6.28E-07	2.43E-07	6.22E-08	1.17E-08	31.6	WSW
W	500.	2.72E-06	1.23E-06	8.27E-07	3.50E-07	1.01E-07	2.23E-08	43.7	W
WNW	500.	2.20E-06	9.36E-07	6.11E-07	2.42E-07	6.43E-08	1.27E-08	25.9	WNW
NW	500.	1.57E-06	5.89E-07	3.61E-07	1.24E-07	2.69E-08	4.14E-09	9.4	NW
NNW	500.	1.30E-06	3.84E-07	2.08E-07	5.53E-08	8.23E-09	8.01E-10	5.0	NNW
N	500.	1.47E-06	5.06E-07	2.97E-07	9.32E-08	1.76E-08	2.30E-09	6.6	N
NNE	500.	1.25E-06	4.13E-07	2.38E-07	7.17E-08	1.28E-08	1.56E-09	4.2	NNE
NE	500.	1.22E-06	3.90E-07	2.21E-07	6.42E-08	1.09E-08	1.24E-09	5.0	NE
ENE	500.	1.12E-06	3.66E-07	2.09E-07	6.22E-08	1.09E-08	1.29E-09	2.8	ENE
E	500.	1.27E-06	4.79E-07	2.95E-07	1.03E-07	2.26E-08	3.55E-09	4.6	E
ESE	500.	1.13E-06	4.00E-07	2.38E-07	7.67E-08	1.52E-08	2.08E-09	5.9	ESE
SE	500.	1.22E-06	3.50E-07	1.88E-07	4.84E-08	6.92E-09	6.41E-10	5.0	SE
SSE	500.	1.52E-06	5.30E-07	3.13E-07	1.00E-07	1.94E-08	2.62E-09	7.5	SSE
MAX X/Q		2.72E-06				TOTAL HOURS AROUND SITE:		387.4	
SRP 2.3.4	500.	1.98E-06	9.42E-07	6.50E-07	2.91E-07	9.17E-08	2.23E-08		
SITE LIMIT		1.98E-06	9.42E-07	6.50E-07	2.91E-07	9.17E-08	2.23E-08		

0.5 PERCENT X/Q TO AN INDIVIDUAL IS LIMITING.

X/Q VALUES (SEC/CUBIC METER) FOR FUMIGATION AT THE BOUNDARY:

DOWNWIND SECTOR	DISTANCE (METERS)	FUMIGATION X/Q
S	500.	7.68E-05
SSW	500.	7.68E-05
SW	500.	7.68E-05
WSW	500.	7.68E-05
W	500.	7.68E-05
WNW	500.	7.68E-05
NW	500.	7.68E-05
NNW	500.	7.68E-05
N	500.	7.68E-05
NNE	500.	7.68E-05
NE	500.	7.68E-05
ENE	500.	7.68E-05
E	500.	7.68E-05

ESE	500.	7.68E-05
SE	500.	7.68E-05
SSE	500.	7.68E-05

NOTE: VALUES ON THIS PAGE ARE APPROXIMATIONS ONLY.
CHECK THE REASONABLENESS OF THE ENVELOPES
COMPUTED FOR THE 0-2 HOUR VALUES. FOR ANY
FAULTY ENVELOPES, ADJUST THE ABOVE VALUES.

PAVAN Input

Off Gas Stack to Control Room (Tower 2 320' wind and 316'-33' Delta T Stability Class; distances of 750 m and 1000 m)

```
1  1111
Peach Bottom                                   Stack Release
97.5 meters          10.1-96.3 meters

Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
    7    1
2584. 54.3131.4 97.5
    0    0    0    2    6    5    0
   0.   0.   0.   0.   3.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.
   6.   9.  23.  39.  87.  44.   4.   2.   0.   2.   2.   0.   1.   0.   0.   1.
   0.   9.  20.  29.  46.  44.  20.   2.  12.   7.   5.   7.   8.   9.   2.   8.
   2.   4.   9.  18.   7.   3.  13.   0.   7.   3.   2.   3.  21.   9.   3.  15.
   2.   2.   0.   1.   0.   1.   0.   0.   0.   0.   0.   2.  14.   2.   0.   1.
   0.   0.   0.   0.   0.   1.   0.   0.   0.   0.   0.   2.   2.   5.   1.   1.
   0.   2.   2.   9.   5.   0.   2.   0.   0.   0.   0.   0.   0.   0.   0.   0.
  13.  23.  18.  25.  56.  29.  10.   3.   3.   4.   3.   1.   4.   3.   4.   3.
   4.  15.  13.  15.  12.  25.  27.   8.  25.  14.  13.   8.  21.   9.   2.  22.
  10.   3.   2.   1.   1.   2.   8.   8.  31.   9.   6.  19.  27.  20.   9.  33.
   1.   2.   1.   0.   0.   1.   1.   1.   5.   2.   1.   2.  12.  14.   4.   5.
   0.   0.   0.   0.   0.   0.   0.   0.   1.   0.   0.   1.   6.   7.   0.   0.
   0.   5.  12.  15.   1.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.
  31.  22.  28.  37.  50.  65.  14.  12.  19.   5.   7.   3.   5.   5.   3.  22.
  42.  19.   9.  17.  14.  26.  62.  22.  72.  37.  30.  26.  42.  26.  26. 100.
  18.   8.   4.   3.   3.   4.  11.  10.  67.  24.  21.  31.  56.  59.  35.  93.
   4.   1.   0.   0.   1.   2.   0.   1.   9.   0.   4.   4.  29.  30.  28.  17.
   1.   4.   0.   0.   0.   0.   0.   0.   1.   0.   1.   1.  13.  27.   6.   0.
  59.  58. 108. 119. 115.  86.  45.  35.  41.  23.  32.  15.  26.  38.  36.  50.
 330. 211. 238. 336. 435. 304. 339. 243. 300. 191. 155. 128. 141.  97. 193. 385.
 521. 349. 251. 278. 331. 308. 478. 466. 708. 425. 287. 211. 301. 355. 542. 928.
 396. 154.  85.  67. 132. 140. 161. 118. 482. 166. 126. 190. 395. 674.1039. 918.
  73.  27.  13.  11.  32.  26.  14.  11.  99.  16.  16.  22. 225. 448. 543. 242.
  15.   7.  12.   2.   8.   2.   7.   7.  29.   9.   3.   6.  90. 151. 184.  63.
  60.  44.  36.  61.  60.  60.  61.  59.  70.  56.  59.  54.  54.  36.  39.  34.
 235. 164. 150. 219. 283. 200. 345. 311. 435. 320. 281. 187. 173. 138. 170. 203.
 367. 201. 156. 101. 161. 257. 349. 443. 891. 577. 354. 297. 395. 354. 519. 514.
 156.  38.  26.  11.  58.  63.  98. 165. 516. 228. 216. 271. 536. 583. 651. 468.
  23.   8.   8.   4.  12.  21.  16.  11.  64.  19.  18.  30.  78. 111.  89.  43.
   7.   1.   1.   1.  20.   4.  12.   2.   6.   4.   2.   1.   9.  12.   6.  10.
  26.  19.  22.  26.  31.  23.  28.  32.  23.  32.  32.  33.  30.  28.  26.  22.
  99.  38.  34.  29.  34.  52.  81.  90. 134. 141. 156. 117.  85.  66.  94.  97.
  81.  25.  13.   8.  13.  24.  48.  79. 130. 111. 157. 177. 198. 140. 178. 126.
   4.   1.   1.   0.   0.   2.   7.   8.  44.  23.  39. 109. 168. 138.  90.  32.
   1.   0.   0.   0.   0.   0.   0.   0.   0.   3.   0.  18.  24.  18.   0.   5.
   0.   0.   0.   0.   4.   1.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.
  11.  14.  11.  10.  13.   5.   4.   9.  17.   9.   6.  18.  13.  14.  13.  19.
  47.  19.  22.  19.  13.   6.  28.  10.  34.  31.  36.  34.  40.  35.  70.  59.
  16.   5.   4.   2.   2.   2.   8.   6.  10.  21.  51.  70.  69.  44.  92.  85.
   1.   0.   0.   0.   0.   0.   1.   1.   2.   1.   8.  26.  39.  39.   9.   5.
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   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   1.   1.   2.   0.   0.
   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   1.   0.   0.   1.
 101. 0.50 3.50 7.50 12.5 18.5 24.0 55.0
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1000.1000.1000.1000.1000.1000.1000.1000.1000.1000.1000.1000.1000.1000.1000.1000.
   1.   1.   1.   1.   1.   1.   1.   1.   1.   1.   1.   1.   1.   1.   1.   1.
   1.   1.   1.   1.   1.   1.   1.   1.   1.   1.   1.   1.   1.   1.   1.   1.
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PAVAN Output

Off Gas Stack to Control Room (Tower 2 320' wind and 316'-33' Delta T Stability Class; distances of 750 m and 1000 m)

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PRINTOUT OF INPUT CARDS

```
   1     00010 01111 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000   2     Peach Bottom
Stack Release
   3     97.5 meters         10.1-96.3 meters
   4
   5     Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T          6          7 42872     1
   7          0.500  2584.000    54.300   131.400    97.500
   8       0.000  0.000  0.000  2.000  6.000  5.000  0.000
   9       0.000  0.000  0.000  0.000  3.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000
   9       6.000  9.000 23.000 39.000 87.000 44.000  4.000  2.000  0.000  2.000  2.000  0.000  1.000  0.000  0.000  1.000
   9       0.000  9.000 20.000 29.000 46.000 44.000 20.000  2.000 12.000  7.000  5.000  7.000  8.000  9.000  2.000  8.000
   9       2.000  4.000  9.000 18.000  7.000  3.000 13.000  0.000  7.000  3.000  2.000  3.000 21.000  9.000  3.000 15.000
   9       2.000  2.000  0.000  1.000  0.000  1.000  0.000  0.000  0.000  0.000  0.000  2.000 14.000  2.000  0.000  1.000
   9       0.000  0.000  0.000  0.000  0.000  1.000  0.000  0.000  0.000  0.000  0.000  2.000  2.000  5.000  1.000  1.000
   9       0.000  2.000  2.000  9.000  5.000  0.000  2.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000
   9      13.000 23.000 18.000 25.000 56.000 29.000 10.000  3.000  3.000  4.000  3.000  1.000  4.000  3.000  4.000  3.000
   9       4.000 15.000 13.000 15.000 12.000 25.000 27.000  8.000 25.000 14.000 13.000  8.000 21.000  9.000  2.000 22.000
   9      10.000  3.000  2.000  1.000  1.000  2.000  8.000  8.000 31.000  9.000  6.000 19.000 27.000 20.000  9.000 33.000
   9       1.000  2.000  1.000  0.000  0.000  1.000  1.000  1.000  5.000  2.000  1.000  2.000 12.000 14.000  4.000  5.000
   9       0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  1.000  0.000  0.000  1.000  6.000  7.000  0.000  0.000
   9       0.000  5.000 12.000 15.000  1.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000
   9      31.000 22.000 28.000 37.000 50.000 65.000 14.000 12.000 19.000  5.000  7.000  3.000  5.000  5.000  3.000 22.000
   9      42.000 19.000  9.000 17.000 14.000 26.000 62.000 22.000 72.000 37.000 30.000 26.000 42.000 26.000 26.000100.000
   9      18.000  8.000  4.000  3.000  3.000  4.000 11.000 10.000 67.000 24.000 21.000 31.000 56.000 59.000 35.000 93.000
   9       4.000  1.000  0.000  0.000  1.000  2.000  0.000  1.000  9.000  0.000  4.000  4.000 29.000 30.000 28.000 17.000
   9       1.000  4.000  0.000  0.000  0.000  0.000  0.000  0.000  1.000  0.000  1.000  1.000 13.000 27.000  6.000  0.000
   9      59.000 58.000108.000119.000115.000 86.000 45.000 35.000 41.000 23.000 32.000 15.000 26.000 38.000 36.000 50.000
   9     330.000211.000238.000336.000435.000304.000339.000243.000300.000191.000155.000128.000141.000 97.000193.000385.000
   9     521.000349.000251.000278.000331.000308.000478.000466.000708.000425.000287.000211.000301.000355.000542.000928.000
   9     396.000154.000 85.000 67.000132.000140.000161.000118.000482.000166.000126.000190.000395.000674.000*******918.000
   9      73.000 27.000 13.000 11.000 32.000 26.000 14.000 11.000 99.000 16.000 16.000 22.000225.000448.000543.000242.000
   9      15.000  7.000 12.000  2.000  8.000  2.000  7.000  7.000 29.000  9.000  3.000  6.000 90.000151.000184.000 63.000
   9      60.000 44.000 36.000 61.000 60.000 60.000 61.000 59.000 70.000 56.000 59.000 54.000 54.000 36.000 39.000 34.000
   9     235.000164.000150.000219.000283.000200.000345.000311.000435.000320.000281.000187.000173.000138.000170.000203.000
   9     367.000201.000156.000101.000161.000257.000349.000443.000891.000577.000354.000297.000395.000354.000519.000514.000
   9     156.000 38.000 26.000 11.000 58.000 63.000 98.000165.000516.000228.000216.000271.000536.000583.000651.000468.000
   9      23.000  8.000  8.000  4.000 12.000 21.000 16.000 11.000 64.000 19.000 18.000 30.000 78.000111.000 89.000 43.000
   9       7.000  1.000  1.000  1.000 20.000  4.000 12.000  2.000  6.000  4.000  2.000  1.000  9.000 12.000  6.000 10.000
   9      26.000 19.000 22.000 26.000 31.000 23.000 28.000 32.000 23.000 32.000 32.000 33.000 30.000 28.000 26.000 22.000
   9      99.000 38.000 34.000 29.000 34.000 52.000 81.000 90.000134.000141.000156.000117.000 85.000 66.000 94.000 97.000
   9      81.000 25.000 13.000  8.000 13.000 24.000 48.000 79.000130.000111.000157.000177.000198.000140.000178.000126.000
   9       4.000  1.000  1.000  0.000  0.000  2.000  7.000  8.000 44.000 23.000 39.000109.000168.000138.000 90.000 32.000
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   9       1.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  3.000  0.000 18.000 24.000 18.000  0.000  5.000
   9       0.000  0.000  0.000  0.000  4.000  1.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000
   9      11.000 14.000 11.000 10.000 13.000  5.000  4.000  9.000 17.000  9.000  6.000 18.000 13.000 14.000 13.000 19.000
   9      47.000 19.000 22.000 19.000 13.000  6.000 28.000 10.000 34.000 31.000 36.000 34.000 40.000 35.000 70.000 59.000
   9      16.000  5.000  4.000  2.000  2.000  2.000  8.000  6.000 10.000 21.000 51.000 70.000 69.000 44.000 92.000 85.000
   9       1.000  0.000  0.000  0.000  0.000  0.000  1.000  1.000  2.000  1.000  8.000 26.000 39.000 39.000  9.000  5.000
   9       0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  1.000  1.000  2.000  0.000  0.000
   9       0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  1.000  0.000  0.000  1.000  10        101.
0.500  3.500  7.500 12.500 18.500 24.000 55.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  11        750.  750.   750.   750.
750.   750.   750.   750.   750.   750.   750.   750.   750.   750.   750.   750.  11       1000.  1000.  1000.  1000.  1000.  1000.
1000.  1000.  1000.  1000.  1000.  1000.  1000.  1000.  1000.  1000.  12         1.0    1.0    1.0    1.0    1.0    1.0    1.0    1.0
1.0    1.0    1.0    1.0    1.0    1.0    1.0    1.0
  12         1.0    1.0    1.0    1.0    1.0    1.0    1.0    1.0    1.0    1.0    1.0    1.0    1.0    1.0    1.0    1.0  13        500.
500.   500.   500.   500.   500.   500.   500.   500.   500.   500.   500.   500.   500.   500.   500.
  14         0.     0.     0.     0.     0.     0.     0.     0.     0.     0.     0.     0.     0.     0.     0.     0.
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USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS A
WIND SPEED (M/S)

TOWER	RELEASE	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
0.22	0.24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.56	1.69	0.000	0.000	0.000	0.000	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.007
3.35	3.61	0.014	0.021	0.054	0.091	0.203	0.103	0.009	0.005	0.000	0.005	0.005	0.000	0.002	0.000	0.000	0.002	0.513
5.59	6.02	0.000	0.021	0.047	0.068	0.107	0.103	0.047	0.005	0.028	0.016	0.012	0.016	0.019	0.021	0.005	0.019	0.532
8.27	8.91	0.005	0.009	0.021	0.042	0.016	0.007	0.030	0.000	0.016	0.007	0.005	0.007	0.049	0.021	0.007	0.035	0.278
10.73	11.56	0.005	0.005	0.000	0.002	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.005	0.033	0.005	0.000	0.002	0.058
24.59	26.49	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.012	0.002	0.002	0.028
TOTAL		0.02	0.06	0.12	0.20	0.33	0.22	0.09	0.01	0.04	0.03	0.02	0.03	0.11	0.06	0.01	0.06	1.42

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS B
WIND SPEED (M/S)

TOWER	RELEASE	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
0.22	0.24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.56	1.69	0.000	0.005	0.005	0.021	0.012	0.000	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.047
3.35	3.61	0.030	0.054	0.042	0.058	0.131	0.068	0.023	0.007	0.007	0.009	0.007	0.002	0.009	0.007	0.009	0.007	0.471
5.59	6.02	0.009	0.035	0.030	0.035	0.028	0.058	0.063	0.019	0.058	0.033	0.030	0.019	0.049	0.021	0.005	0.051	0.543
8.27	8.91	0.023	0.007	0.005	0.002	0.002	0.005	0.019	0.019	0.072	0.021	0.014	0.044	0.063	0.047	0.021	0.077	0.441
10.73	11.56	0.002	0.005	0.002	0.000	0.000	0.002	0.002	0.002	0.012	0.005	0.002	0.005	0.028	0.033	0.009	0.012	0.121
24.59	26.49	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.002	0.014	0.016	0.000	0.000	0.035
TOTAL		0.07	0.10	0.08	0.12	0.17	0.13	0.11	0.05	0.15	0.07	0.05	0.07	0.16	0.12	0.04	0.15	1.66

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS C
WIND SPEED (M/S)

TOWER	RELEASE	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
0.22	0.24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.56	1.69	0.000	0.012	0.028	0.035	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.077
3.35	3.61	0.072	0.051	0.065	0.086	0.117	0.152	0.033	0.028	0.044	0.012	0.016	0.007	0.012	0.012	0.007	0.051	0.765
5.59	6.02	0.098	0.044	0.021	0.040	0.033	0.061	0.145	0.051	0.168	0.086	0.070	0.061	0.098	0.061	0.061	0.233	1.330
8.27	8.91	0.042	0.019	0.009	0.007	0.007	0.009	0.026	0.023	0.156	0.056	0.049	0.072	0.131	0.138	0.082	0.217	1.043
10.73	11.56	0.009	0.002	0.000	0.000	0.002	0.005	0.000	0.002	0.021	0.000	0.009	0.009	0.068	0.070	0.065	0.040	0.303
24.59	26.49	0.002	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.002	0.002	0.030	0.063	0.014	0.000	0.126
TOTAL		0.22	0.14	0.12	0.17	0.16	0.23	0.20	0.10	0.39	0.15	0.15	0.15	0.34	0.34	0.23	0.54	3.64

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS D
WIND SPEED (M/S)

TOWER	RELEASE	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
0.22	0.24	0.000	0.000	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005
1.56	1.69	0.138	0.135	0.252	0.278	0.268	0.201	0.105	0.082	0.096	0.054	0.075	0.035	0.061	0.089	0.084	0.117	2.067

3.35	3.61	0.770	0.492	0.555	0.784	1.015	0.709	0.791	0.567	0.700	0.446	0.362	0.299	0.329	0.226	0.450	0.898	9.391
5.59	6.02	1.215	0.814	0.585	0.648	0.772	0.718	1.115	1.087	1.651	0.991	0.669	0.492	0.702	0.828	1.264	2.165	15.719
8.27	8.91	0.924	0.359	0.198	0.156	0.308	0.327	0.376	0.275	1.124	0.387	0.294	0.443	0.921	1.572	2.423	2.141	12.229
10.73	11.56	0.170	0.063	0.030	0.026	0.075	0.061	0.033	0.026	0.231	0.037	0.037	0.051	0.525	1.045	1.267	0.564	4.241
24.59	26.49	0.035	0.016	0.028	0.005	0.019	0.005	0.016	0.016	0.068	0.021	0.007	0.014	0.210	0.352	0.429	0.147	1.388
TOTAL		3.25	1.88	1.65	1.90	2.46	2.02	2.44	2.05	3.87	1.94	1.44	1.33	2.75	4.11	5.92	6.03	45.04

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS E

WIND SPEED (M/S)

TOWER	RELEASE	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
0.22	0.26	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.014
1.56	1.82	0.140	0.103	0.084	0.142	0.140	0.140	0.142	0.138	0.163	0.131	0.138	0.126	0.126	0.084	0.091	0.079	1.966
3.35	3.89	0.548	0.383	0.350	0.511	0.660	0.467	0.805	0.725	1.015	0.746	0.655	0.436	0.404	0.322	0.397	0.474	8.896
5.59	6.49	0.856	0.469	0.364	0.236	0.376	0.599	0.814	1.033	2.078	1.346	0.826	0.693	0.921	0.826	1.211	1.199	13.846
8.27	9.60	0.364	0.089	0.061	0.026	0.135	0.147	0.229	0.385	1.204	0.532	0.504	0.632	1.250	1.360	1.518	1.092	9.526
10.73	12.46	0.054	0.019	0.019	0.009	0.028	0.049	0.037	0.026	0.149	0.044	0.042	0.070	0.182	0.259	0.208	0.100	1.295
24.59	28.54	0.016	0.002	0.002	0.002	0.047	0.009	0.028	0.005	0.014	0.009	0.005	0.002	0.021	0.028	0.014	0.023	0.229
TOTAL		1.98	1.06	0.88	0.93	1.39	1.41	2.06	2.31	4.62	2.81	2.17	1.96	2.90	2.88	3.44	2.97	35.77

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS F

WIND SPEED (M/S)

TOWER	RELEASE	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
0.22	0.26	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.012
1.56	1.82	0.061	0.044	0.051	0.061	0.072	0.054	0.065	0.075	0.054	0.075	0.075	0.077	0.070	0.065	0.061	0.051	1.010
3.35	3.89	0.231	0.089	0.079	0.068	0.079	0.121	0.189	0.210	0.313	0.329	0.364	0.273	0.198	0.154	0.219	0.226	3.142
5.59	6.49	0.189	0.058	0.030	0.019	0.030	0.056	0.112	0.184	0.303	0.259	0.366	0.413	0.462	0.327	0.415	0.294	3.517
8.27	9.60	0.009	0.002	0.002	0.000	0.000	0.005	0.016	0.019	0.103	0.054	0.091	0.254	0.392	0.322	0.210	0.075	1.553
10.73	12.46	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.007	0.000	0.042	0.056	0.042	0.000	0.012	0.161
24.59	28.54	0.000	0.000	0.000	0.000	0.009	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.012
TOTAL		0.49	0.19	0.16	0.15	0.19	0.24	0.38	0.49	0.77	0.72	0.90	1.06	1.18	0.91	0.91	0.66	9.41

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION ATMOSPHERIC STABILITY CLASS G

WIND SPEED (M/S)

TOWER	RELEASE	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
0.22	0.26	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.56	1.82	0.026	0.033	0.026	0.023	0.030	0.012	0.009	0.021	0.040	0.021	0.014	0.042	0.030	0.033	0.030	0.044	0.434
3.35	3.89	0.110	0.044	0.051	0.044	0.030	0.014	0.065	0.023	0.079	0.072	0.084	0.079	0.093	0.082	0.163	0.138	1.173
5.59	6.49	0.037	0.012	0.009	0.005	0.005	0.005	0.019	0.014	0.023	0.049	0.119	0.163	0.161	0.103	0.215	0.198	1.136
8.27	9.60	0.002	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.005	0.002	0.019	0.061	0.091	0.091	0.021	0.012	0.308
10.73	12.46	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.005	0.000	0.000	0.009
24.59	28.54	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.002	0.005
TOTAL		0.17	0.09	0.09	0.07	0.07	0.03	0.10	0.06	0.15	0.14	0.24	0.35	0.38	0.31	0.43	0.39	3.06

WIND MEASURED AT 97.5 METERS.
WIND SPEED CORRECTED TO THE RELEASE HEIGHT OF 131.4 METERS.

OVERALL WIND DIRECTION FREQUENCY

WIND DIRECTION:	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW
FREQUENCY:	6.2	3.5	3.1	3.5	4.8	4.3	5.4	5.1	10.0	5.9	5.0	5.0	7.8	8.7	11.0	10.8

OVERALL WIND SPEED FREQUENCY AS MEASURED ON THE TOWER:

MAX.WIND SPEED (M/S):	0.224	1.565	3.353	5.588	8.270	10.729	24.587
WIND SPEED FREQUENCY:	0.03	5.61	24.35	36.62	25.38	6.19	1.82

BUILDING AND RELEASE CHARACTERISTICS:

RELEASE HEIGHT: 131.40 METERS
MIXING VOLUME COEFFICIENT: 0.50
BUILDING CROSS-SECTIONAL AREA: 2584.00 SQUARE METERS

BOUNDARY DISTANCES (METERS) FROM THE SOURCE FOR EACH DOWNWIND SECTOR:

DOWNWIND SECTOR	S	SSW	SW	WSW	W	WNW	NW	NNW	N	NNE	NE	ENE	E	ESE	SE	SSE
BOUNDARY 1	750.	750.	750.	750.	750.	750.	750.	750.	750.	750.	750.	750.	750.	750.	750.	750.
BOUNDARY 2	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.

DISTANCES AND TERRAIN HEIGHTS (IN METERS) AS A FUNCTION OF THE DOWNWIND SECTOR:

SECTOR	S	SSW	SW	WSW	W	WNW	NW	NNW	N	NNE	NE	ENE	E	ESE	SE	SSE
DISTANCE	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.
ELEVATION	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

THE CONVERSION FACTOR APPLIED TO THE WIND SPEED CLASSES IS 0.447

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

PLANT NAME: Peach Bottom METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: WIND SENSORS HEIGHT: 97.5 meters
TYPE OF RELEASE: Stack Release DELTA-T HEIGHTS: 10.1-96.3 meters
SOURCE OF DATA:
COMMENTS: Peach Bottom, Tower 2 1984-1988 met data, 320 ft wind, 33-316 ft Delta T
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

WINDSPEEDS ADJUSTED TO 131.4 METERS.

PERCENT OF THE TIME A GIVEN WINDSPEED IS LOWER:

WINDSPEED (METER/SEC)	CUMULATIVE FREQUENCY (PERCENT)
0.24	0.00
0.26	0.03
1.69	2.23
1.82	5.64
3.61	16.78
3.89	29.99
6.02	48.11
6.49	66.61
8.91	80.60
9.60	91.99
11.56	96.71
12.46	98.18
26.49	99.76
28.54	100.00

WINDSPEED (INTERPOLATED) (METER/SEC)	CUMULATIVE FREQUENCY (PERCENT)
0.26	0.03
1.77	5.64
3.76	29.99
6.26	66.61
9.22	91.99
11.77	98.18
26.77	100.00

LOG-NORMAL INTERPOLATION PERCENTILES

WINDSPEED (METER/SEC)	CUMULATIVE FREQUENCY (PERCENT)
0.81	1.00
1.30	3.00
1.66	5.00
2.19	10.00
2.61	15.00
3.00	20.00

3.38	25.00
3.76	30.00
4.05	35.00
4.35	40.00
4.66	45.00
4.98	50.00
5.32	55.00
5.70	60.00
6.11	65.00
6.50	70.00
6.90	75.00
7.37	80.00
8.11	85.00
8.78	90.00

USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 12/29/02

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SOURCE OF DATA:
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PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE S SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 131.4 METERS	FREQUENCY PERCENT	DISTANCE METERS	TERRAIN HT METERS	EFF PLUME HT METERS	SIGMA-Y METERS	SIGMA-Z METERS	MEANDER-SY METERS	** CHI/Q VALUES (SEC/CUBIC METER) MEANDER	BLDG WAKE CA=1292.SQ.METERS	USED
A	3.6	0.23	750.	0.	131.	144.4	260.5	0.0	0.000E+00	0.000E+00	2.062E-06
A	8.9	0.08	750.	0.	131.	144.4	260.5	0.0	0.000E+00	0.000E+00	8.360E-07
A	11.6	0.08	750.	0.	131.	144.4	260.5	0.0	0.000E+00	0.000E+00	6.444E-07
B	3.6	0.49	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	2.858E-06
B	6.0	0.15	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.715E-06
B	8.9	0.38	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	1.159E-06
B	11.6	0.04	900.	0.	131.	128.1	98.0	0.0	0.000E+00	0.000E+00	8.931E-07
C	3.6	1.16	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.994E-06
C	6.0	1.58	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	1.196E-06
C	8.9	0.68	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	8.082E-07
C	11.6	0.15	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	6.230E-07
C	26.5	0.04	2000.	0.	131.	200.0	114.9	0.0	0.000E+00	0.000E+00	2.719E-07
D	0.2	0.01	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.556E-05
D	1.7	2.22	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	2.224E-06
D	3.6	12.39	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.038E-06
D	6.0	19.57	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	6.226E-07
D	8.9	14.87	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	4.207E-07
D	11.6	2.74	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	3.243E-07
D	26.5	0.56	4000.	0.	131.	263.4	78.0	0.0	0.000E+00	0.000E+00	1.415E-07
E	0.3	0.02	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.835E-06
E	1.8	2.25	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.262E-06
E	3.9	8.83	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	5.890E-07
E	6.5	13.78	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	3.534E-07
E	9.6	5.86	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	2.388E-07
E	12.5	0.86	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	1.841E-07
E	28.5	0.26	9000.	0.	131.	389.6	74.2	0.0	0.000E+00	0.000E+00	8.032E-08
F	0.3	0.01	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	4.813E-06
F	1.8	0.98	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	6.875E-07
F	3.9	3.72	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	3.208E-07
F	6.5	3.04	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.925E-07
F	9.6	0.15	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.301E-07
F	12.5	0.04	90000.	0.	131.	1000.0	92.1	0.0	0.000E+00	0.000E+00	1.003E-07
G	1.8	0.41	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	6.449E-08

G	3.9	1.77	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	3.010E-08
G	6.5	0.60	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.806E-08
G	9.6	0.04	90000.	0.	131.	1000.0	46.0	0.0	0.000E+00	0.000E+00	1.220E-08

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SITE EXCLUSION BOUNDARY CALCULATIONS:

S SECTOR BOUNDARY DISTANCE = 750.0 METERS
BUILDING WAKE CREDIT IS NOT INCLUDED.
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.

BELOW ARE PRINTED THE ORDERED VALUES OF CHI/Q AND THE FREQUENCY WITH WHICH THAT VALUE IS REACHED OR EXCEEDED.
THE TOP NUMBER IS THE CHI/Q. THE MIDDLE NUMBER IS THE FREQUENCY NORMALIZED TO THIS SECTOR.
THE THIRD NUMBER IS THE FREQUENCY WITH RESPECT TO ALL TIME.

1.556E-05	8.835E-06	4.813E-06	2.858E-06	2.224E-06	2.062E-06	1.994E-06	1.715E-06	1.262E-06	1.196E-06
0.005	0.021	0.032	0.521	2.736	2.961	4.126	4.276	6.529	8.106
0.00031	0.00131	0.00201	0.03233	0.16995	0.18394	0.25625	0.26558	0.40553	0.50350
1.159E-06	1.038E-06	8.931E-07	8.360E-07	8.082E-07	6.875E-07	6.444E-07	6.230E-07	6.226E-07	5.890E-07
8.482	20.875	20.912	20.987	21.663	22.640	22.715	22.865	42.430	51.255
0.52683	1.29656	1.29889	1.30356	1.34554	1.40619	1.41085	1.42018	2.63543	3.18357
4.207E-07	3.534E-07	3.243E-07	3.208E-07	2.719E-07	2.388E-07	1.925E-07	1.841E-07	1.415E-07	1.301E-07
66.127	79.909	82.650	86.368	86.406	92.264	95.306	96.170	96.733	96.883
4.10725	4.96329	5.13356	5.36448	5.36681	5.73069	5.91962	5.97327	6.00826	6.01759
1.003E-07	8.032E-08	6.449E-08	3.010E-08	1.806E-08	1.220E-08				
96.921	97.183	97.597	99.362	99.962	100.000				
6.01992	6.03625	6.06191	6.17153	6.20886	6.21119				

BELOW IS PRINTED THE MAXIMUM VALUE OF CHI/Q AND THE DISTANCE IN METERS FROM THE STACK AT WHICH THE VALUE OCCURRED.
THIS DISTANCE MAY BE WITHIN THE SITE BOUNDARY.

CHI/Q = 1.556E-05 DISTANCE = 4000.000

X/Q PERCENTILES
(BASED ON THE UPPER ENVELOPE OF THE
ORDERED X/Q-FREQUENCY VALUES, AND AS
PLOTTED ON A LOG-NORMAL GRAPH.)

PERCENT OF TIME CHI/Q IS EQUALED OR EXCEEDED

CHI/Q SEC/CUBIC METER	WITH RESPECT TO THE TOTAL TIME	WHEN THE WIND BLOWS INTO THIS SECTOR ONLY

HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(2)= 0.256
HANDCHECK GRAPH: SLOPE LT -1.0 FOR LOW PERCENTAGES. XSAVE(3)= 1.295

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HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   3.181
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   4.960

  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
  1  1     -11.07050 -16.47142  -1.19518
  1  2     -13.12558 -16.32272  -1.14207
  1  3     -13.77855 -17.16233  -1.51897
  1  4     -14.34482 -18.94210  -2.47847
  1  5     -14.85564     NUMXQ(K)=  5
    3.332E-06              0.062              1.000
    2.250E-06              0.186              3.000
    1.856E-06              0.311              5.000
    1.417E-06              0.621             10.000
    1.198E-06              0.932             15.000
    1.057E-06              1.242             20.000
    9.317E-07              1.553             25.000
    8.333E-07              1.863             30.000
    7.564E-07              2.174             35.000
    6.942E-07              2.484             40.000
    6.426E-07              2.795             45.000
    5.990E-07              3.106             50.000
    5.446E-07              3.416             55.000
    4.938E-07              3.727             60.000
    4.506E-07              4.037             65.000
    4.134E-07              4.348             70.000
    3.812E-07              4.658             75.000

    1.545E-06              0.5                8.05

ANNUAL AVERAGE =   2.69E-09

K=  1     FIVEXQ(K)= 1.545E-06     FIVEPR(K)= 8.050

FUMIGATION X/Q AT THE BOUNDARY:   5.32E-05

 EXPONENTIAL TERM AND FREQUENCIES

   8.805E-01   5.200E-01   4.072E-01   3.613E-01   2.419E-01   2.081E-01   1.693E-02
       0.376       3.981       5.032      12.967      65.322      97.183     100.000
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