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To: Energy Northwest P.O. Box 968 Richland, WA. 99352 **Attention: Records Management M/D 964Y**	1. Transmittal No.	2. Page 1 of 1
	9. Initiating Doc. No. PDC 2406	21. Priority 1
3. From Robin Feuerbacher	4. Purchase Order/Contract No.	
5. Energy Northwest Cognizant Engineer Mohammed Abu-Shehadeh Mohammed Abu-Shehadeh 5/6/04	14. Receipt Acknowledged	
6. Originator Remarks Please make a copy for Mohammed		

7. ITEM NO.	8. DOCUMENT OR DRAWING NO.	6. SHEET NO.	6. REV. NO.	10. DOCUMENT TITLE OR ITEM SUBMITTED	Submitted For 11. APPROVE	12. RELEASE	13. INFO	15. OFFICIAL DISPOS.
1	NE-02-03-16	305	0	Calculation of EAB and LPZ X/Q values using PAVAN with the 1996 – 1999 meteorological data	X			A

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16. Energy Northwest Disposition

Engineering Manager Robin L. Feuerbacher 5/30/04 Plant Technical Services Manager (if required)

6. Engr. Req. Response Date ACTION PARTIES	19. REQ APPROVE	19. REQ REVIEW	20. RESPONSE APPROVE	20. RESPONSE APPROVED AS NOTED	20. RESPONSE DISAPPROVE	SIGNATURE AND DATE	ACTION PARTIES	19. REQ APPROVE	19. REQ REVIEW	20. RESPONSE APPROVE	20. RESPONSE APPROVED AS NOTED	20. RESPONSE DISAPPROVE	SIGNATURE AND DATE
5. Cognizant Engineer Mohammed Abu-Shehadeh	X		X			5/6/04 Mohammed	18. Design ALARA						
17. Component/System Anal.							18. Penetrations						
17. Mechanical Engineering							18. ASME Code Compliance						
17. Electrical/I&C Engineering							18. Control Sys. Failure						
18. Overall Design Verif. Ted Messler	X	X	X			J.A. Messler 5-7-04	18. Pipe Break.Missile						
18. Equip. Engineering							18. App. R/Electrical Sep.						
18. Human Factors							18. ~~Health Safety Fire Prot~~ Larry Link SUPV.	x		x			[signature] 20 May 04
18. Emergency Prep.							~~18. Security~~ Approve to Tim Powell file in records	x	x	x			JJP 5/18/04
18. Environmental							18. Quality Assurance						
18. MEL Input Coord.							18. Project Engineer Abbas Mostala	X		X			A. Mostala 5/30/04

968-12310 R7 (12/00)

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DMS REFERENCE DOCUMENT INDEX SHEET

EC Number
PDC 2406

Primary Document Identification	AED	CAL	NE-02-03-16		1
	Document Type	Document Sub-Type	Document Number	Sheet Number	Document Revision

Input References

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2	☒	☐	AED	ARC	A504	
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Note:

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CALCULATION COVER SHEET

BDC/PDC Page
PDC 2406

Equipment Piece No.	Project	Page / Cont'd on Page
	Columbia	1.0
	Discipline: Nuclear	Calculation No.: NE-02-03-16
		Quality Class: I
	Remarks	

TITLE/SUBJECT/PURPOSE

Title/Subject
Calculation of the EAB and LPZ X/Q values using PAVAN with the 1996 - 1999 meteorological data

Purpose
The purpose of this calculation is to determine the X/Q values for the Exclusion Area Boundary (EAB) and Low Population Zone (LPZ) using PAVAN in compliance with the regulatory guide 1.145.

CALCULATION REVISION RECORD

REV NO.	STATUS/ F,P, OR S	REVISION DESCRIPTION	INITIATING DOCUMENTS	TRANSMITTAL NO.
0	F	New Calculation	PDC 2406	

PERFORMANCE/VERIFICATION RECORD

REV NO.	PERFORMED BY/DATE	VERIFIED BY/DATE	APPROVED BY/DATE
0	Mohammed Abu-Shehadeh 5/6/04	Ted Messier 5-7-04	Larry Linik 28 May 04

* Study Calculations shall be used only for the purpose of evaluating alternate design options or assisting the engineer in performing assessments.

ENERGY NORTHWEST	CALCULATION INDEX	Page No. 1.1
Prepared by/Date: Mohammed Abu-Shehadeh	Verified by/Date: Ted Messier	Calculation No. NE-02-03-16 Revision No. 0

ITEM	PAGE NO. SEQUENCE
Calculation Cover Sheet	1.0
Calculation Index	1.1
Verification Checklist for Calculations and CMRs	1.2
Comment Resolution	1.3
Calculation Reference List	1.4
Calculation Output Interface Document Revision Index	1.5
Calculation Output Summary	2.0
Calculation Method	3.0
Sketches	4.0 / NA
Calculations	5.0 – 5.1

APPENDICES:

Meteorological data from 1996-1999	Appendix A (pages A.0 - A.12)
PAVAN output with X/Q values for the EAB and LPZ	Appendix B (pages B.0 - B.283)
	Appendix C
	Appendix D
	Appendix E
	Appendix F
	Appendix G
Historical/Information	Appendix H
Superseded Pages	Appendix S

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Calculation/CMR NE-02-03-16 **Revision** 0

was verified using the following methods:

☒ Checklist Below ☐ Alternate Calculation(s)

Checklist Item	Verifier Initials
Clear statement of purpose of analysis	JAM
Methodology is clearly stated, sufficiently detailed, and appropriate for the proposed application	JAM
Does the analysis/calculation methodology (including criteria and assumptions) differ from that described in the Plant or ISFSI FSAR or NRC Safety Evaluation Report, or are the results of the analysis/calculation as described in the Plant or ISFSI FSAR or NRC Safety Evaluation Report affected? ☒ Yes ☐ No	LSW
If Yes, ensure that the requirements of 10 CFR 50.59 and/or 10 CFR 72.48 have been processed in accordance with SWP-LIC-02.	LSW
Does the analysis/calculation result require revising any existing output interface document as identified in DES-4-1, Attachment 7.3? ☒ Yes ☐ No	JAM LSW
If Yes, ensure that the appropriate actions are taken to revise the output interface documents per DES-4-1, section 3.1.8 (i.e., document change is initiated in accordance with applicable procedures).	JAM LSW
Logical consistency of analysis	JAM
• Completeness of documenting references	JAM
• Completeness of input	JAM
• Accuracy of input data	JAM
• Consistency of input data with approved criteria	JAM
• Completeness in stating assumptions	JAM
• Validity of assumptions	JAM
• Calculation sufficiently detailed	JAM
• Arithmetical accuracy	JAM
• Physical units specified and correctly used	JAM
• Reasonableness of output conclusion	JAM
Supervisor independency check (if acting as Verifier)	
- Did not specify analysis approach - Did not rule out specific analysis options - Did not establish analysis inputs	
If a computer program was used:	JAM
- Is the program appropriate for the proposed application? - Have the program error notices been reviewed to determine if they pose any limitations for this application? - Is the program name, revision number, and date of run inscribed on the output? - Is the program identified on the Calculation Method Form? If so, is it listed in Chapter 10 of the Engineering Standards Manual?	JAM
Other elements considered:	

If separate Verifiers were used for validating these functions or a portion of these functions, each sign and initial below.

Based on the foregoing, the Calculation/CMR is adequate for the purpose intended.

Verifier Signature(s)/Date	Verifier Initials
Theodore A. Messier 5-7-04	JAM
Mark S. Whitney 5-28-04	LSW

ENERGY NORTHWEST People·Vision·Solutions	CALCULATION REFERENCE LIST	Page No. 1.3	Cont'd on page
		Calculation No. NE-02-03-16	
:		Revision No. 0	

NO	AUTHOR	ISSUE DATE/ EDITION OR REV.	TITLE	DOCUMENT NO.
1	NRC	February 1983 Rev. 1	Atmospheric Dispersion Models for Potential Accident Consequence Assessments at Nuclear Power Plants	Reg. Guide 1.145
2	T. J. Bander for NRC	November 1982	PAVAN: An Atmospheric Dispersion Program for Evaluating Design Basis Accidental Releases of Radioactive Materials from Nuclear Power Stations	NUREG/CR-2858 PNL-4413
3	CGS FSAR	November 1998	Final Safety Analysis Report	NA
4	Burns & Roe	5/6/1983 Rev. 5	West Elevation (Reactor Building)	DWG. A504
5	Burns and Roe, Inc	5/26/1983 Rev.19	Structural Reactor Building Exterior Walls	DWG. S737
6	Framatome ANP, Inc. By: Ted Messier	12/19/2003 Rev. 1	Generation of CGS Meteorological Data Input Files for Computer Code PAVAN	32-5032044-01

ENERGY NORTHWEST People · Vision · Solutions	CALCULATION OUTPUT INTERFACE DOCUMENT REVISION INDEX	Page No. 1.4	Cont'd on page
		Calculation No. NE-02-03-16	
Prepared by / Date: 5/6/04 Mohammed Abu-Shehadeh	Verified by/Date: J.A. Messier 5-7-04 Ted Messier	Revision No. 0	

The below listed output interface calculations and/or documents are impacted by the current revision of the subject calculation. The listed output interfaces require revision as a result of this calculation. The documents have been revised, or the revision deferred with Manager approval, as indicated below.

AFFECTED DOCUMENT NO.	CHANGED BY (e.g., BDC, SCN, CMR, Rev.)	CHANGED DEFERRED (e.g., RFTS, LETTER NO.)	DEPT. MANAGER *
NE-02-99-13	PDC 2406	PTL – 213161	
NE-02-01-13	PDC 2406	PTL – 213161	
NE-02-01-15	PDC 2406	PTL - 213161	

* Required for deferred changes only.

Discussion of Results

The X/Q values for the Exclusion Area Boundary (EAB) and Low Population Zone (LPZ) have been calculated using the PAVAN computer program which complies with the requirements of regulatory guide 1.145. Four years (1996-1999) worth of meteorological data have been used in the calculations. Two sets of dispersion coefficients (Pasquill/Gifford and Desert sigma) were activated in running PAVAN, then the highest X/Q values were selected to represent the EAB and LPZ X/Q. The desert sigma X/Q values were slightly higher than the Pasquill-Gifford ones, therefore, the desert sigma X/Q values were selected from the 0.5-percent model (which generated slightly higher results than the 5-percent overall site limit model).

Conclusions

The X/Q values generated by PAVAN are listed in Table 1 and are compared to those values currently in the FSAR.

ENERGY NORTHWEST People·Vision·Solutions	CALCULATION METHOD	Page No. 3.0	Cont'd on page
		Calculation No. NE-02-03-16	
Prepared by / Date: 5/6/04 Mohammed Abu-Shehadeh	Verified by/Date: Ted Messier T. A. Messier 5-7-04	Revision No. 0	

REV BAR.

Analysis Method (Check appropriate boxes)

☐ Manual (As required, document source of equations in Reference List)

☒ Computer ☐ Main Frame ☒ Personal

☐ In-House Program
☐ Computer Service Bureau Program

☐ BCS ☐ CDC ☐ PCC ☐ OTHER _____

☒ Verified Program: Code name/Revision PAVAN 2.0

☐ Unverified Program: _____

_____

Approach/Methodology

In order to calculate X/Q for the exclusion area boundary (EAB) and low population zone (LPZ) around CGS the PAVAN code was used to comply with regulatory guide 1.145. The following data were used:

1- Four hourly joint frequency data (JFD) files for the years 1996 - 1999 have been added up to generate a single hourly JFD file representing that period of time.

2- The calm wind category was distributed.

3- The option to use both desert sigma and Pasquill - Gifford sigma was activated in PAVAN, then the highest X/Q values were selected.

Purpose

To calculate X/Q for the exclusion area boundary (EAB) and low population zone (LPZ) around CGS using the PAVAN code to comply with regulatory guide 1.145.

Methodology

Regulatory guide 1.145 (Ref. 1) recommends the use of two methods for calculating EAB and LPZ X/Q values. The highest X/Q value among the two methods should be selected (these methods are briefly discussed below). PAVAN (Ref. 2) is a computer program designed to comply with the requirements of regulatory guide 1.145 and has been used in this analysis.

Input Data

The following data were used as input to PAVAN.

1- Since CGS is not releasing from a stack that is 2 1/2 times higher than adjacent buildings, the ground level release mode was used.

2- Distance to EAB is 1950 m (Ref. 3, section 2.1.2)

3- Distance to LPZ is 4827 m (Ref. 3, section 2.1.3.4)

4- Reactor building height is 229 ft, or 69.8 m (Ref. 4, A504)

5- Reactor building cross-sectional area is 2861 m2. The smallest width of the wall is 135 ft (41 m), Ref. 5. Therefore, the area is (Height x Width = Area, 69.8 x 41 = 2861 m^2).

6- Four hourly joint frequency data (JFD) files (Ref. 6) for the years 1996 - 1999 have been added up (using an excel spreadsheet) to generate a single hourly JFD file representing that period of time. Eleven wind-speed categories were used in those JFDs (see Appendix A).

7- The calm wind category was distributed separately from the other 11 wind speed categories. The annual hourly calm distributions as well as the total 4-year hourly calm distribution are presented in Appendix A.

8- The option to use both desert sigma and Pasquill - Gifford sigma was activated in PAVAN, then the highest X/Q was selected.

9- The default terrain adjustment factor was used

Results

PAVAN uses three procedures to calculate X/Q for the EAB and LPZ (see Ref. 2 for details). These are:

a- The 0.5-percent procedure

b- The SRP 2.3.4 procedure, and

c- The 5-percent site limit procedure.

Regulatory guide 1.145 requires the use of only two procedures (a and c), therefore the SRP results were ignored in selecting the appropriate X/Q values. The other two procedures were compared and the highest X/Q values were selected for the EAB and LPZ. X/Q values from the 0.5-percent procedure were slightly higher than those from the 5-percent site-limit procedure, therefore the 0.5-percent X/Q values were selected.

Table 1 summarizes the results of X/Q values obtained from the PAVAN output (see Appendix B, pp B.75 and B.143), and provides a comparison to the X/Q values currently in the CGS FSAR (Ref. 3, Table 15.6-2).

Table 1. X/Q (s/m^3) values using PAVAN for the EAB and LPZ with comparison to the FSAR values

	Current Analysis		FSAR (Table 15.6-2)	
	EAB	LPZ	EAB	LPZ
0 - 2 hrs	1.81E-4	-	2.62 E-4	-
0 - 8 hrs	-	4.95 E-5	-	4.47 E-5
8 - 24 hrs	-	3.69 E-5	-	2.91 E-5
1 - 4 d	-	1.95 E-5	-	1.14 E-5
4 - 30 d	-	7.81 E-6	-	2.97 E-6

APPENDIX A

Meteorological data from 1996-1999

Annual and Total Hourly Calm Distributions for 1996 – 1999

St. Class / Year	A	B	C	D	E	F	G
1996	21	4	8	35	45	60	81
1997	24	11	8	36	40	60	75
1998	40	12	7	25	56	65	100
1999	25	2	5	19	51	55	75
Total	110	29	28	115	192	240	331

1996 JFD

Stab. Class	(MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW
A	0.95 - 2.25	7	2	2	3	2	5	6	2	8	5	5	6	1	4	4	8
	2.25- 4.55	14	8	4	2	2	5	4	6	20	10	3	5	2	6	10	15
	4.55 - 6.75	7	6	3	0	2	2	4	15	18	7	9	6	0	5	5	7
	6.75 - 8.95	1	5	0	0	0	2	6	10	9	10	6	3	1	1	2	1
	8.95 - 11.25	2	3	1	0	0	1	3	3	10	9	0	0	1	0	0	1
	11.25 - 13.45	0	1	0	0	0	0	0	2	7	5	3	1	1	0	0	0
	13.45 - 17.95	3	1	0	0	0	0	0	0	1	4	1	0	0	0	0	0
	17.95 - 22.45	0	0	0	0	0	0	0	0	0	1	3	1	0	0	1	0
	22.45 - 29.15	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	29.15 - 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	> 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
B	0.95 - 2.25	1	1	0	1	2	0	0	0	0	1	0	0	1	1	3	2
	2.25- 4.55	4	2	3	1	1	1	1	0	3	1	1	3	3	1	3	2
	4.55 - 6.75	4	4	1	0	2	1	5	5	4	2	4	1	2	3	1	3
	6.75 - 8.95	5	4	2	0	0	1	3	1	3	5	3	0	1	3	5	2
	8.95 - 11.25	0	0	0	0	0	0	0	1	3	4	1	1	2	1	1	0
	11.25 - 13.45	0	1	0	0	0	0	0	0	3	1	1	0	3	1	1	1
	13.45 - 17.95	1	0	0	0	0	0	0	0	1	10	2	0	1	0	1	2
	17.95 - 22.45	0	0	0	0	0	0	0	0	0	1	2	2	0	0	0	0
	22.45 - 29.15	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	29.15 - 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	> 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C	0.95 - 2.25	1	3	1	1	0	0	0	0	0	1	1	0	0	0	2	2
	2.25- 4.55	5	4	3	0	0	1	0	2	5	2	1	2	1	1	1	4
	4.55 - 6.75	6	1	1	0	0	0	5	7	2	3	2	2	2	0	1	5
	6.75 - 8.95	5	2	2	0	0	0	4	8	6	4	2	0	1	0	0	4
	8.95 - 11.25	2	1	1	0	0	0	1	0	4	1	1	2	1	1	2	3
	11.25 - 13.45	1	1	2	0	0	0	0	3	7	5	3	1	3	1	1	0
	13.45 - 17.95	0	0	0	0	0	0	0	0	3	9	5	5	4	0	0	4
	17.95 - 22.45	0	2	0	0	0	0	0	0	0	2	3	4	1	1	0	0
	22.45 - 29.15	0	0	0	0	0	0	0	0	0	3	1	1	0	0	0	0
	29.15 - 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	> 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D	0.95 - 2.25	15	7	6	5	3	4	6	11	8	5	13	2	10	13	6	14
	2.25- 4.55	22	18	8	4	1	9	18	29	25	28	12	12	9	19	48	39
	4.55 - 6.75	32	17	13	2	2	6	14	46	23	22	12	13	9	14	54	48
	6.75 - 8.95	19	8	12	1	1	4	11	39	33	13	14	10	7	16	53	31
	8.95 - 11.25	16	5	13	1	0	0	12	24	21	29	11	1	9	12	37	26
	11.25 - 13.45	10	7	3	0	0	0	4	12	20	15	8	7	9	21	26	13
	13.45 - 17.95	0	2	0	0	0	0	0	5	17	23	16	18	8	28	23	18
	17.95 - 22.45	0	4	0	0	0	0	0	0	3	8	10	16	7	6	10	0
	22.45 - 29.15	0	0	2	0	0	0	0	0	2	12	3	0	0	1	7	0
	29.15 - 40.35	0	0	0	0	0	0	0	0	0	3	0	0	0	0	1	0
	> 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

1996 JFD (Cont.)

E	0.95 - 2.25	13	7	3	4	7	1	9	6	18	12	13	13	17	30	30	11
	2.25- 4.55	22	21	9	7	5	12	19	32	37	38	19	23	24	45	68	51
	4.55 - 6.75	20	14	14	5	8	7	29	46	46	20	22	17	20	36	96	46
	6.75 - 8.95	8	7	18	4	1	3	28	47	38	12	11	12	20	35	56	47
	8.95 - 11.25	6	2	4	2	0	1	27	39	43	20	15	11	14	42	52	9
	11.25 - 13.45	2	1	0	1	0	0	10	14	30	22	11	8	10	30	33	4
	13.45 - 17.95	3	5	0	1	1	0	0	18	24	41	13	12	7	55	45	14
	17.95 - 22.45	1	6	0	0	0	0	0	1	3	28	14	3	3	27	16	3
	22.45 - 29.15	0	0	0	0	0	0	0	0	0	7	0	1	0	4	7	0
	29.15 - 40.35	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0
	> 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
F	0.95 - 2.25	28	17	10	4	5	2	5	7	20	17	11	24	25	29	29	26
	2.25- 4.55	34	33	13	5	3	6	18	37	48	36	26	22	27	44	66	64
	4.55 - 6.75	22	15	10	0	0	1	15	41	67	32	15	19	22	27	47	44
	6.75 - 8.95	6	3	5	3	0	1	19	48	41	24	9	8	20	38	36	10
	8.95 - 11.25	0	0	0	0	0	1	10	34	24	13	5	3	2	22	17	0
	11.25 - 13.45	0	0	0	0	0	0	0	8	16	6	4	0	3	10	3	1
	13.45 - 17.95	0	0	0	0	0	0	1	3	10	10	4	4	0	3	0	0
	17.95 - 22.45	0	0	0	0	0	0	0	1	0	6	0	0	0	0	0	0
	22.45 - 29.15	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0
	29.15 - 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	> 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
G	0.95 - 2.25	33	19	6	7	0	1	5	12	16	9	18	11	26	16	29	37
	2.25- 4.55	94	78	24	7	1	1	8	42	39	32	18	6	12	23	68	61
	4.55 - 6.75	30	28	20	3	0	0	10	46	41	16	5	5	4	17	36	29
	6.75 - 8.95	0	2	5	1	0	0	3	28	19	5	2	2	4	5	19	3
	8.95 - 11.25	0	0	1	0	0	0	1	12	6	1	0	1	1	1	3	0
	11.25 - 13.45	0	0	0	0	0	0	0	3	1	1	0	0	0	0	1	0
	13.45 - 17.95	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
	17.95 - 22.45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	22.45 - 29.15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	29.15 - 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	> 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

1997 JFD

Stab. Class	(MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW
A	0.95 - 2.25	8	7	9	8	9	7	8	7	10	5	2	6	5	5	4	6
	2.25- 4.55	16	18	14	12	10	3	20	20	10	15	10	3	6	11	5	24
	4.55 - 6.75	10	9	15	9	2	5	8	16	9	12	7	6	2	2	8	9
	6.75 - 8.95	2	3	7	2	2	2	11	10	10	11	7	2	4	1	5	4
	8.95 - 11.25	2	2	6	0	0	0	3	1	6	13	9	4	1	1	1	10
	11.25 - 13.45	2	1	2	1	0	0	1	0	2	6	4	0	1	1	1	1
	13.45 - 17.95	4	3	6	0	0	0	0	0	4	3	10	2	2	3	1	8
	17.95 - 22.45	0	0	2	0	0	0	0	0	0	2	3	1	0	0	0	0
	22.45 - 29.15	0	0	0	0	0	0	0	0	0	0	1	0	2	4	0	1
	29.15 - 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	> 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
B	0.95 - 2.25	0	4	1	2	3	2	4	2	2	1	2	0	1	2	1	1
	2.25- 4.55	5	7	3	1	1	5	4	2	5	5	3	3	1	4	2	7
	4.55 - 6.75	5	3	7	1	0	1	2	5	10	6	2	3	1	1	1	6
	6.75 - 8.95	2	8	6	1	1	1	0	7	6	2	2	4	3	2	2	0
	8.95 - 11.25	2	4	3	1	0	0	0	1	6	5	5	1	1	1	3	3
	11.25 - 13.45	2	0	1	1	0	0	0	1	2	2	1	0	3	2	2	0
	13.45 - 17.95	0	1	1	1	0	0	0	1	4	0	6	1	4	2	0	1
	17.95 - 22.45	1	0	0	0	0	0	0	0	0	5	1	2	0	1	0	0
	22.45 - 29.15	0	0	0	0	0	0	0	0	0	1	2	0	2	2	0	0
	29.15 - 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	> 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C	0.95 - 2.25	1	2	1	0	1	1	1	1	2	1	4	2	1	1	0	0
	2.25- 4.55	9	5	2	1	4	0	5	4	3	7	5	4	2	1	2	4
	4.55 - 6.75	8	3	3	6	3	0	1	8	9	4	4	3	1	3	4	7
	6.75 - 8.95	8	6	1	0	1	0	0	2	5	3	4	2	7	0	1	3
	8.95 - 11.25	5	3	4	0	0	0	2	4	1	4	4	5	1	2	0	0
	11.25 - 13.45	2	1	1	0	0	0	0	0	3	3	2	1	4	3	2	6
	13.45 - 17.95	1	2	2	0	0	0	1	2	0	2	6	3	4	0	3	2
	17.95 - 22.45	0	0	0	0	0	0	0	0	0	1	6	5	1	5	0	1
	22.45 - 29.15	0	0	0	0	0	0	0	0	0	2	0	0	1	1	0	1
	29.15 - 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	> 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D	0.95 - 2.25	9	11	9	4	3	4	7	5	5	7	6	6	4	5	6	10
	2.25- 4.55	27	26	22	12	19	7	12	30	32	17	6	9	10	8	34	31
	4.55 - 6.75	43	27	17	15	8	12	14	26	32	20	18	9	8	16	36	48
	6.75 - 8.95	20	28	17	8	6	10	15	39	30	20	20	5	9	20	24	47
	8.95 - 11.25	15	13	13	5	2	2	4	16	31	22	15	8	10	10	19	26
	11.25 - 13.45	14	4	6	0	0	0	1	4	8	18	11	6	11	9	14	16
	13.45 - 17.95	4	2	3	2	0	0	0	7	11	19	18	19	14	30	12	20
	17.95 - 22.45	0	2	3	0	0	0	0	0	1	16	20	13	6	10	6	15
	22.45 - 29.15	1	1	2	0	0	0	0	0	0	15	13	6	4	2	4	3
	29.15 - 40.35	0	0	2	0	0	0	0	0	0	0	1	0	2	0	1	3
	> 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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E	0.95 - 2.25	11	10	6	8	4	4	6	7	18	16	13	10	16	10	11	21
	2.25- 4.55	36	26	28	14	5	6	18	27	53	31	28	19	29	34	49	64
	4.55 - 6.75	34	32	15	13	7	1	14	36	35	30	13	12	9	35	56	53
	6.75 - 8.95	23	16	7	2	3	4	10	47	40	18	22	9	13	22	48	46
	8.95 - 11.25	11	4	5	2	0	5	11	35	39	25	18	4	9	22	37	40
	11.25 - 13.45	3	2	2	4	0	1	7	24	18	28	15	9	4	12	38	27
	13.45 - 17.95	2	2	3	0	0	0	6	18	21	41	24	10	11	16	33	36
	17.95 - 22.45	1	0	0	0	0	0	0	1	7	37	14	6	5	7	8	16
	22.45 - 29.15	1	0	1	0	0	0	0	0	3	13	4	2	3	4	2	4
	29.15 - 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	> 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
F	0.95 - 2.25	15	15	11	6	6	5	3	13	17	12	15	15	16	13	11	14
	2.25- 4.55	52	53	30	17	5	3	7	32	49	39	35	22	22	35	49	35
	4.55 - 6.75	36	21	13	12	8	1	5	36	64	40	19	19	7	20	35	43
	6.75 - 8.95	4	3	8	6	2	0	8	43	51	28	10	4	5	16	42	28
	8.95 - 11.25	1	0	0	3	0	0	2	36	23	9	4	5	7	7	14	12
	11.25 - 13.45	1	0	0	0	0	0	2	11	8	21	2	4	2	6	14	2
	13.45 - 17.95	0	0	0	0	0	0	2	10	7	9	3	1	2	5	1	0
	17.95 - 22.45	0	0	0	0	0	0	0	1	3	8	1	0	0	0	0	0
	22.45 - 29.15	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0
	29.15 - 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	> 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
G	0.95 - 2.25	18	27	13	8	6	9	4	14	17	10	16	15	12	16	11	15
	2.25- 4.55	65	61	36	15	3	1	5	13	33	26	23	15	13	23	29	54
	4.55 - 6.75	29	17	16	10	1	0	0	12	43	15	11	5	4	8	24	28
	6.75 - 8.95	3	1	5	4	1	0	2	21	25	21	6	3	1	3	10	10
	8.95 - 11.25	0	0	1	2	0	0	0	10	11	5	0	1	3	0	0	1
	11.25 - 13.45	0	0	0	1	0	0	0	5	6	3	0	1	0	0	1	0
	13.45 - 17.95	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0
	17.95 - 22.45	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
	22.45 - 29.15	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	29.15 - 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	> 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Stab. Class	(MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW
A	0.95 - 2.25	9	16	9	7	9	6	8	6	5	7	1	2	6	9	6	7
	2.25- 4.55	18	13	24	13	9	17	39	21	26	12	13	2	9	3	20	20
	4.55 - 6.75	18	17	13	2	4	16	17	31	22	9	3	4	4	4	2	11
	6.75 - 8.95	16	15	6	4	2	3	16	37	24	8	9	1	2	1	1	1
	8.95 - 11.25	11	15	2	2	3	2	6	19	30	11	5	0	1	0	1	2
	11.25 - 13.45	5	7	2	0	0	1	3	8	23	6	2	0	0	0	0	3
	13.45 - 17.95	6	13	3	0	0	0	0	3	35	12	5	0	0	2	1	0
	17.95 - 22.45	1	1	0	0	0	0	0	2	13	1	0	0	0	1	2	0
	22.45 - 29.15	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0
	29.15 - 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	> 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
B	0.95 - 2.25	2	1	0	0	0	3	1	2	3	2	1	2	1	0	1	7
	2.25- 4.55	6	3	2	1	2	2	1	3	6	9	6	2	4	2	3	6
	4.55 - 6.75	13	11	4	3	1	1	4	9	12	0	2	1	0	0	2	8
	6.75 - 8.95	7	4	1	1	0	2	5	11	12	3	0	0	0	2	1	3
	8.95 - 11.25	4	4	4	0	0	1	1	4	11	3	2	0	1	1	0	2
	11.25 - 13.45	0	1	0	0	0	0	0	0	6	6	2	0	0	1	0	0
	13.45 - 17.95	2	1	1	2	0	0	0	0	5	2	4	1	1	0	1	0
	17.95 - 22.45	0	0	0	0	0	0	0	0	2	0	2	0	0	1	0	0
	22.45 - 29.15	0	0	0	0	0	0	0	0	0	1	1	0	1	1	0	0
	29.15 - 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	> 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C	0.95 - 2.25	2	4	2	2	1	0	1	1	3	3	1	1	0	0	0	2
	2.25- 4.55	5	8	1	2	2	2	2	6	4	5	1	6	1	1	2	6
	4.55 - 6.75	5	7	4	3	3	1	4	8	10	5	2	0	3	3	3	4
	6.75 - 8.95	3	6	0	1	1	3	2	10	13	4	2	1	0	0	2	4
	8.95 - 11.25	4	4	0	0	0	1	2	8	6	8	5	2	2	1	2	6
	11.25 - 13.45	1	1	0	0	0	0	1	4	4	6	0	0	0	3	0	0
	13.45 - 17.95	2	0	0	0	0	0	0	0	6	3	6	0	0	1	0	2
	17.95 - 22.45	0	0	0	0	0	0	0	0	1	1	0	1	2	0	3	0
	22.45 - 29.15	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0
	29.15 - 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	> 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D	0.95 - 2.25	13	11	8	9	4	0	9	5	12	2	10	9	6	12	9	8
	2.25- 4.55	32	12	13	8	8	9	17	23	26	16	11	5	10	13	32	33
	4.55 - 6.75	35	16	13	3	5	5	20	32	30	14	12	9	7	8	28	35
	6.75 - 8.95	15	12	7	7	6	3	25	26	43	22	4	2	7	11	33	33
	8.95 - 11.25	19	4	7	0	1	2	13	29	29	22	3	3	8	10	27	24
	11.25 - 13.45	8	4	6	0	0	1	4	6	18	25	5	4	4	10	20	14
	13.45 - 17.95	3	6	0	0	0	0	2	6	26	39	12	5	3	11	13	7
	17.95 - 22.45	1	2	3	0	0	0	0	0	6	26	13	5	1	6	5	0
	22.45 - 29.15	0	0	0	0	0	0	0	0	0	5	14	5	0	4	4	0
	29.15 - 40.35	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0
	> 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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E	0.95 - 2.25	15	10	7	7	4	6	5	9	13	15	15	17	16	27	21	10
	2.25- 4.55	32	33	18	5	3	8	15	21	35	30	14	22	16	35	47	43
	4.55 - 6.75	24	16	11	2	2	6	22	52	47	22	20	16	21	25	46	52
	6.75 - 8.95	7	3	10	1	0	1	29	69	44	18	20	7	15	39	54	28
	8.95 - 11.25	3	1	3	0	0	2	13	48	49	18	5	10	7	34	38	17
	11.25 - 13.45	5	0	0	0	0	0	3	33	49	22	25	4	8	48	35	1
	13.45 - 17.95	3	6	3	0	0	0	4	18	46	47	29	8	8	29	17	7
	17.95 - 22.45	1	7	7	0	0	0	0	0	8	28	30	2	3	12	3	1
	22.45 - 29.15	0	0	0	0	0	0	0	0	3	15	16	1	3	7	1	0
	29.15 - 40.35	0	0	0	0	0	0	0	0	0	2	4	0	0	0	0	0
	> 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
F	0.95 - 2.25	17	17	11	3	2	5	6	11	14	15	20	17	18	27	29	27
	2.25- 4.55	47	33	20	8	2	7	10	38	53	45	17	25	25	34	66	67
	4.55 - 6.75	22	15	14	3	0	3	11	57	66	30	19	13	13	24	38	50
	6.75 - 8.95	1	1	7	1	0	0	22	51	74	21	9	4	5	15	38	13
	8.95 - 11.25	0	0	1	0	0	1	2	25	27	9	2	1	5	10	15	6
	11.25 - 13.45	0	0	0	0	0	0	2	5	4	4	3	0	2	9	3	1
	13.45 - 17.95	0	0	0	0	0	0	1	4	11	1	2	0	0	2	0	4
	17.95 - 22.45	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0
	22.45 - 29.15	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0
	29.15 - 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	> 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
G	0.95 - 2.25	29	35	29	9	4	3	7	11	15	17	18	21	13	21	20	40
	2.25- 4.55	52	58	31	4	0	2	15	29	39	36	17	10	18	26	58	67
	4.55 - 6.75	16	7	17	1	0	0	7	56	49	15	6	5	1	4	28	38
	6.75 - 8.95	5	2	5	1	0	0	2	24	36	7	3	0	2	0	19	16
	8.95 - 11.25	0	0	1	0	0	0	0	7	8	2	0	1	0	1	2	0
	11.25 - 13.45	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
	13.45 - 17.95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	17.95 - 22.45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	22.45 - 29.15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	29.15 - 40.35	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	> 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

1999 JFD

Stab.	(MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW
A	0.95 - 2.25	8	14	10	5	7	7	6	1	4	2	6	4	3	4	11	6
	2.25- 4.55	25	21	9	9	9	14	15	10	15	12	5	10	13	11	14	26
	4.55 - 6.75	25	14	10	0	2	7	21	16	17	6	4	1	3	6	12	27
	6.75 - 8.95	34	14	6	1	1	2	11	26	14	5	2	6	4	2	11	21
	8.95 - 11.25	21	8	2	0	1	1	10	13	16	4	9	4	5	5	2	18
	11.25 - 13.45	9	0	1	0	0	0	2	5	25	8	2	3	3	5	4	13
	13.45 - 17.95	12	1	1	0	0	0	1	4	22	10	5	11	7	6	4	3
	17.95 - 22.45	0	0	0	0	0	0	0	0	7	1	5	6	7	5	1	0
	22.45 - 29.15	0	0	0	0	0	0	0	1	7	0	0	3	1	3	1	0
	29.15 - 40.35	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	> 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
B	0.95 - 2.25	4	2	0	2	2	0	1	2	0	1	0	1	1	0	3	2
	2.25- 4.55	5	1	3	1	2	3	6	3	8	3	6	1	1	1	4	5
	4.55 - 6.75	5	0	3	0	0	2	9	5	4	0	2	0	2	3	5	5
	6.75 - 8.95	1	2	1	0	1	3	4	8	3	5	2	2	2	0	4	5
	8.95 - 11.25	5	2	1	0	0	1	2	10	9	3	2	2	2	3	1	3
	11.25 - 13.45	4	0	0	0	0	0	2	5	4	4	1	0	3	3	1	2
	13.45 - 17.95	1	0	0	0	0	0	3	3	11	7	4	0	4	3	0	1
	17.95 - 22.45	0	0	0	0	0	0	0	1	1	2	3	0	1	0	1	0
	22.45 - 29.15	0	0	0	0	0	0	0	0	0	2	4	0	1	1	0	0
	29.15 - 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	> 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C	0.95 - 2.25	2	1	4	2	1	3	3	0	1	2	1	0	2	2	1	2
	2.25- 4.55	5	2	5	1	0	0	1	3	2	4	2	2	3	6	11	3
	4.55 - 6.75	6	7	3	0	1	0	10	8	5	2	1	1	3	6	9	9
	6.75 - 8.95	1	1	0	0	0	1	5	4	5	3	6	4	0	3	4	5
	8.95 - 11.25	5	3	0	0	0	1	2	6	9	2	5	2	3	3	3	2
	11.25 - 13.45	3	0	0	0	0	0	0	4	6	4	2	3	0	0	1	1
	13.45 - 17.95	4	0	0	0	0	0	4	3	6	6	0	1	2	4	0	1
	17.95 - 22.45	0	0	0	0	0	0	0	0	5	6	4	4	0	3	4	0
	22.45 - 29.15	0	0	0	0	0	0	0	0	2	1	2	0	0	3	0	0
	29.15 - 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	> 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D	0.95 - 2.25	8	3	3	5	6	5	5	2	7	5	11	8	15	9	15	8
	2.25- 4.55	24	12	10	9	9	7	18	20	19	16	14	13	21	10	35	25
	4.55 - 6.75	23	13	11	5	8	6	13	23	22	11	11	16	5	26	30	13
	6.75 - 8.95	15	11	4	3	5	9	18	21	20	10	13	8	9	17	21	18
	8.95 - 11.25	11	10	1	0	2	3	13	27	22	16	16	5	13	15	15	8
	11.25 - 13.45	9	0	1	0	0	4	7	21	26	18	10	9	5	14	13	4
	13.45 - 17.95	3	2	1	0	0	1	2	20	52	36	18	7	9	34	3	4
	17.95 - 22.45	0	0	0	0	0	0	1	3	29	18	2	8	4	29	7	0
	22.45 - 29.15	0	0	0	0	0	0	0	0	11	6	2	0	1	11	1	0
	29.15 - 40.35	0	0	0	0	0	0	0	0	2	3	2	0	0	2	0	0
	> 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

1999 JFD (Cont.)

E	0.95 - 2.25	6	8	7	7	7	5	10	13	13	10	14	12	13	23	18	13
	2.25- 4.55	27	12	8	4	9	5	26	50	30	25	28	33	29	27	42	56
	4.55 - 6.75	19	17	14	7	2	6	26	38	25	19	17	24	31	56	43	20
	6.75 - 8.95	13	7	11	1	1	17	43	49	31	14	10	17	38	48	35	10
	8.95 - 11.25	5	3	3	5	0	4	27	44	44	16	14	9	13	63	27	8
	11.25 - 13.45	1	1	1	0	0	1	12	20	39	28	12	12	21	50	17	2
	13.45 - 17.95	0	0	0	0	0	0	12	17	43	35	5	8	15	51	17	0
	17.95 - 22.45	0	0	0	0	0	0	1	1	6	17	4	1	1	18	4	1
	22.45 - 29.15	0	0	0	0	0	0	0	0	2	7	6	2	0	5	0	0
	29.15 - 40.35	0	0	0	0	0	0	0	0	2	4	1	0	0	1	0	0
	> 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
F	0.95 - 2.25	26	14	11	5	5	4	9	9	13	3	10	10	16	12	27	16
	2.25- 4.55	35	22	7	0	4	8	31	55	49	24	18	15	28	27	51	46
	4.55 - 6.75	17	14	3	1	0	5	24	57	35	21	12	7	10	30	42	30
	6.75 - 8.95	2	1	2	0	0	3	36	42	17	18	9	12	15	34	24	5
	8.95 - 11.25	1	1	2	0	0	0	21	36	20	7	5	7	18	15	5	5
	11.25 - 13.45	2	0	0	0	0	0	5	5	13	3	1	1	9	3	0	0
	13.45 - 17.95	0	0	0	0	0	0	0	4	5	7	1	0	0	4	1	0
	17.95 - 22.45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	22.45 - 29.15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
	29.15 - 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	> 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
G	0.95 - 2.25	25	22	15	4	9	7	9	13	7	8	10	10	11	13	27	32
	2.25- 4.55	61	52	15	3	2	2	16	29	18	12	17	7	11	25	56	70
	4.55 - 6.75	14	23	4	0	0	0	19	42	24	3	4	1	6	15	37	33
	6.75 - 8.95	0	3	4	0	0	0	2	24	19	2	4	1	6	6	22	3
	8.95 - 11.25	0	0	0	0	0	0	2	14	2	0	0	1	1	3	1	0
	11.25 - 13.45	0	0	0	0	0	0	0	2	1	2	0	0	0	0	0	0
	13.45 - 17.95	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	17.95 - 22.45	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
	22.45 - 29.15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	29.15 - 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	> 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Total 1996 - 1999 JFD[1]

Stab.	(MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WN	NW	NNW
A	0.95 - 2.25	32	39	30	23	27	25	28	16	27	19	14	18	15	22	25	27
	2.25- 4.55	73	60	51	36	30	39	78	57	71	49	31	20	30	31	49	85
	4.55 - 6.75	60	46	41	11	10	30	50	78	66	34	23	17	9	17	27	54
	6.75 - 8.95	53	37	19	7	5	9	44	83	57	34	24	12	11	5	19	27
	8.95 - 11.25	36	28	11	2	4	4	22	36	62	37	23	8	8	6	4	31
	11.25 - 13.45	16	9	5	1	0	1	6	15	57	25	11	4	5	6	5	17
	13.45 - 17.95	25	18	10	0	0	0	1	7	62	29	21	13	9	11	6	11
	17.95 - 22.45	1	1	2	0	0	0	0	2	20	5	11	8	7	6	4	0
	22.45 - 29.15	0	2	0	0	0	0	0	1	7	2	1	3	3	7	3	1
	29.15 - 40.35	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
	> 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
B	0.95 - 2.25	7	8	1	5	7	5	6	6	5	5	3	3	4	3	8	12
	2.25- 4.55	20	13	11	4	6	11	12	8	22	18	16	9	9	8	12	20
	4.55 - 6.75	27	18	15	4	3	5	20	24	30	8	10	5	5	7	9	22
	6.75 - 8.95	15	18	10	2	2	7	12	27	24	15	7	6	6	7	12	10
	8.95 - 11.25	11	10	8	1	0	2	3	16	29	15	10	4	6	6	5	8
	11.25 - 13.45	6	2	1	1	0	0	2	6	15	13	5	0	9	7	4	3
	13.45 - 17.95	4	2	2	3	0	0	3	4	21	19	16	2	10	5	2	4
	17.95 - 22.45	1	0	0	0	0	0	0	1	3	8	8	4	1	2	1	0
	22.45 - 29.15	0	2	0	0	0	0	0	0	0	4	8	0	4	4	0	0
	29.15 - 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	> 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C	0.95 - 2.25	6	10	8	5	3	4	5	2	6	7	7	3	3	3	3	6
	2.25- 4.55	24	19	11	4	6	3	8	15	14	18	9	14	7	9	16	17
	4.55 - 6.75	25	18	11	9	7	1	20	31	26	14	9	6	9	12	17	25
	6.75 - 8.95	17	15	3	1	2	4	11	24	29	14	14	7	8	3	7	16
	8.95 - 11.25	16	11	5	0	0	2	7	18	20	15	15	11	7	7	7	11
	11.25 - 13.45	7	3	3	0	0	0	1	11	20	18	7	5	7	7	4	7
	13.45 - 17.95	7	2	2	0	0	0	5	5	15	20	17	9	10	5	3	9
	17.95 - 22.45	0	2	0	0	0	0	0	0	6	10	13	14	4	9	7	1
	22.45 - 29.15	0	0	0	0	0	0	0	0	2	6	3	1	1	8	0	1
	29.15 - 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	> 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D	0.95 - 2.25	45	32	26	23	16	13	27	23	32	19	40	25	35	39	36	40
	2.25- 4.55	105	68	53	33	37	32	65	102	102	77	43	39	50	50	149	128
	4.55 - 6.75	133	73	54	25	23	29	61	127	107	67	53	47	29	64	148	144
	6.75 - 8.95	69	59	40	19	18	26	69	125	126	65	51	25	32	64	131	129
	8.95 - 11.25	61	32	34	6	5	7	42	96	103	89	45	17	40	47	98	84
	11.25 - 13.45	41	15	16	0	0	5	16	43	72	76	34	26	29	54	73	47
	13.45 - 17.95	10	12	4	2	0	1	4	38	106	117	64	49	34	103	51	49
	17.95 - 22.45	1	8	6	0	0	0	1	3	39	68	45	42	18	51	28	15
	22.45 - 29.15	1	1	4	0	0	0	0	0	13	38	32	11	5	18	16	3
	29.15 - 40.35	0	0	2	0	0	0	0	0	2	7	5	0	2	2	2	3
	> 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Total 1996 - 1999 JFD (Cont.)

E	0.95 - 2.25	45	35	23	26	22	16	30	35	62	53	55	52	62	90	80	55
	2.25- 4.55	117	92	63	30	22	31	78	130	155	124	89	97	98	141	206	214
	4.55 - 6.75	97	79	54	27	19	20	91	172	153	91	72	69	81	152	241	171
	6.75 - 8.95	51	33	46	8	5	25	110	212	153	62	63	45	86	144	193	131
	8.95 - 11.25	25	10	15	9	0	12	78	166	175	79	52	34	43	161	154	74
	11.25 - 13.45	11	4	3	5	0	2	32	91	136	100	63	33	43	140	123	34
	13.45 - 17.95	8	13	6	1	1	0	22	71	134	164	71	38	41	151	112	57
	17.95 - 22.45	3	13	7	0	0	0	1	3	24	110	62	12	12	64	31	21
	22.45 - 29.15	1	0	1	0	0	0	0	0	8	42	26	6	6	20	10	4
	29.15 - 40.35	0	0	0	0	0	0	0	0	2	8	5	0	0	2	0	0
	> 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
F	0.95 - 2.25	86	63	43	18	18	16	23	40	64	47	56	66	75	81	96	83
	2.25- 4.55	168	141	70	30	14	24	66	162	199	144	96	84	102	140	232	212
	4.55 - 6.75	97	65	40	16	8	10	55	191	232	123	65	58	52	101	162	167
	6.75 - 8.95	13	8	22	10	2	4	85	184	183	91	37	28	45	103	140	56
	8.95 - 11.25	2	1	3	3	0	2	35	131	94	38	16	16	32	54	51	23
	11.25 - 13.45	3	0	0	0	0	0	9	29	41	34	10	5	16	28	20	4
	13.45 - 17.95	0	0	0	0	0	0	4	21	33	27	10	5	2	14	2	4
	17.95 - 22.45	0	0	0	0	0	0	0	2	3	15	1	0	1	0	0	0
	22.45 - 29.15	0	0	0	0	0	0	0	0	2	3	2	1	0	0	0	0
	29.15 - 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	> 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
G	0.95 - 2.25	105	103	63	28	19	20	25	50	55	44	62	57	62	66	87	124
	2.25- 4.55	272	249	106	29	6	6	44	113	129	106	75	38	54	97	211	252
	4.55 - 6.75	89	75	57	14	1	0	36	156	157	49	26	16	15	44	125	128
	6.75 - 8.95	8	8	19	6	1	0	9	97	99	35	15	6	13	14	70	32
	8.95 - 11.25	0	0	3	2	0	0	3	43	27	8	0	4	5	5	6	1
	11.25 - 13.45	0	0	0	1	0	0	0	10	9	6	0	1	0	0	2	0
	13.45 - 17.95	0	0	0	0	0	0	0	2	3	1	0	0	0	0	0	0
	17.95 - 22.45	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0
	22.45 - 29.15	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	29.15 - 40.35	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	> 40.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

[1]Each entry in this combined file is the sum of the four corresponding entries from the 4 annual files (1996-1999). For example the number of hours in the combines file for the north direction, stability class A, and wind speed category 0.95-2.25 is 32 obtained follows:

Year	Hrs	
1996	7	Dir = N, ST =A, WSC = 0.95-2.25
1997	8	Dir = N, ST =A, WSC = 0.95-2.25
1998	9	Dir = N, ST =A, WSC = 0.95-2.25
1999	8	Dir = N, ST =A, WSC = 0.95-2.25
1996-1999	32	Dir = N, ST =A, WSC = 0.95-2.25

Mohammed Abu-Shehadeh

APPENDIX B

PAVAN output with X/Q values for the EAB and LPZ

```
1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
0PRINTOUT OF INPUT CARDS

    1     10010 01101 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000
    2       CGS                JFD 1996-1999       GROUND LEVEL RELEASE
    3      10.0 METERS             10 - 75 METERS
    4      MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
    5      input file: P96-99-F.inp   output file: P96-99-F.out  sigma=desert + P-G
    6         12 31640      0
    7            .500  2861.000     70.000     10.000     10.000
    8     110.000 29.000 28.000115.000192.000240.000331.000
    9      32.000 39.000 30.000 23.000 27.000 25.000 28.000 16.000 27.000 19.000 14.000 18.000 15.000 22.000 25.000 27.000
    9      73.000 60.000 51.000 36.000 30.000 39.000 78.000 57.000 71.000 49.000 31.000 20.000 30.000 31.000 49.000 85.000
    9      60.000 46.000 41.000 11.000 10.000 30.000 50.000 78.000 66.000 34.000 23.000 17.000  9.000 17.000 27.000 54.000
    9      53.000 37.000 19.000  7.000  5.000  9.000 44.000 83.000 57.000 34.000 24.000 12.000 11.000  5.000 19.000 27.000
    9      36.000 28.000 11.000  2.000  4.000  4.000 22.000 36.000 62.000 37.000 23.000  8.000  8.000  6.000  4.000 31.000
    9      16.000  9.000  5.000  1.000   .000  1.000  6.000 15.000 57.000 25.000 11.000  4.000  5.000  6.000  5.000 17.000
    9      25.000 18.000 10.000   .000   .000   .000  1.000  7.000 62.000 29.000 21.000 13.000  9.000 11.000  6.000 11.000
    9       1.000  1.000  2.000   .000   .000   .000   .000  2.000 20.000  5.000 11.000  8.000  7.000  6.000  4.000   .000
    9        .000  2.000   .000   .000   .000   .000   .000  1.000  7.000  2.000  1.000  3.000  3.000  7.000  3.000  1.000
    9        .000   .000   .000   .000   .000   .000   .000   .000   .000  1.000   .000   .000   .000   .000   .000  1.000
    9        .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000
    9       7.000  8.000  1.000  5.000  7.000  5.000  6.000  6.000  5.000  5.000  3.000  3.000  4.000  3.000  8.000 12.000
    9      20.000 13.000 11.000  4.000  6.000 11.000 12.000  8.000 22.000 18.000 16.000  9.000  9.000  8.000 12.000 20.000
    9      27.000 18.000 15.000  4.000  3.000  5.000 20.000 24.000 30.000  8.000 10.000  5.000  5.000  7.000  9.000 22.000
    9      15.000 18.000 10.000  2.000  2.000  7.000 12.000 27.000 24.000 15.000  7.000  6.000  6.000  7.000 12.000 10.000
    9      11.000 10.000  8.000  1.000   .000  2.000  3.000 16.000 29.000 15.000 10.000  4.000  6.000  6.000  5.000  8.000
    9       6.000  2.000  1.000  1.000   .000   .000  2.000  6.000 15.000 13.000  5.000   .000  9.000  7.000  4.000  3.000
    9       4.000  2.000  2.000  3.000   .000   .000  3.000  4.000 21.000 19.000 16.000  2.000 10.000  5.000  2.000  4.000
    9       1.000   .000   .000   .000   .000   .000   .000  1.000  3.000  8.000  8.000  4.000  1.000  2.000  1.000   .000
    9        .000  2.000   .000   .000   .000   .000   .000   .000   .000  4.000  8.000   .000  4.000  4.000   .000   .000
    9        .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000
    9        .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000
    9       6.000 10.000  8.000  5.000  3.000  4.000  5.000  2.000  6.000  7.000  7.000  3.000  3.000  3.000  3.000  6.000
    9      24.000 19.000 11.000  4.000  6.000  3.000  8.000 15.000 14.000 18.000  9.000 14.000  7.000  9.000 16.000 17.000
    9      25.000 18.000 11.000  9.000  7.000  1.000 20.000 31.000 26.000 14.000  9.000  6.000  9.000 12.000 17.000 25.000
    9      17.000 15.000  3.000  1.000  2.000  4.000 11.000 24.000 29.000 14.000 14.000  7.000  8.000  3.000  7.000 16.000
    9      16.000 11.000  5.000   .000   .000  2.000  7.000 18.000 20.000 15.000 15.000 11.000  7.000  7.000  7.000 11.000
    9       7.000  3.000  3.000   .000   .000   .000  1.000 11.000 20.000 18.000  7.000  5.000  7.000  7.000  4.000  7.000
    9       7.000  2.000  2.000   .000   .000   .000  5.000  5.000 15.000 20.000 17.000  9.000 10.000  5.000  3.000  9.000
    9        .000  2.000   .000   .000   .000   .000   .000   .000  6.000 10.000 13.000 14.000  4.000  9.000  7.000  1.000
    9        .000   .000   .000   .000   .000   .000   .000   .000  2.000  6.000  3.000  1.000  1.000  8.000   .000  1.000
    9        .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000
    9        .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000
    9      45.000 32.000 26.000 23.000 16.000 13.000 27.000 23.000 32.000 19.000 40.000 25.000 35.000 39.000 36.000 40.000
    9     105.000 68.000 53.000 33.000 37.000 32.000 65.000102.000102.000 77.000 43.000 39.000 50.000 50.000149.000128.000
    9     133.000 73.000 54.000 25.000 23.000 29.000 61.000127.000107.000 67.000 53.000 47.000 29.000 64.000148.000144.000
    9      69.000 59.000 40.000 19.000 18.000 26.000 69.000125.000126.000 65.000 51.000 25.000 32.000 64.000131.000129.000
    9      61.000 32.000 34.000  6.000  5.000  7.000 42.000 96.000103.000 89.000 45.000 17.000 40.000 47.000 98.000 84.000
    9      41.000 15.000 16.000   .000   .000  5.000 16.000 43.000 72.000 76.000 34.000 26.000 29.000 54.000 73.000 47.000
```

9	10.000	12.000	4.000	2.000	.000	1.000	4.000	38.000	106.000	117.000	64.000	49.000	34.000	103.000	51.000	49.000
9	1.000	8.000	6.000	.000	.000	.000	1.000	3.000	39.000	68.000	45.000	42.000	18.000	51.000	28.000	15.000
9	1.000	1.000	4.000	.000	.000	.000	.000	.000	13.000	38.000	32.000	11.000	5.000	18.000	16.000	3.000
9	.000	.000	2.000	.000	.000	.000	.000	.000	2.000	7.000	5.000	.000	2.000	2.000	2.000	3.000
9	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
9	45.000	35.000	23.000	26.000	22.000	16.000	30.000	35.000	62.000	53.000	55.000	52.000	62.000	90.000	80.000	55.000
9	117.000	92.000	63.000	30.000	22.000	31.000	78.000	130.000	155.000	124.000	89.000	97.000	98.000	141.000	206.000	214.000
9	97.000	79.000	54.000	27.000	19.000	20.000	91.000	172.000	153.000	91.000	72.000	69.000	81.000	152.000	241.000	171.000
9	51.000	33.000	46.000	8.000	5.000	25.000	110.000	212.000	153.000	62.000	63.000	45.000	86.000	144.000	193.000	131.000
9	25.000	10.000	15.000	9.000	.000	12.000	78.000	166.000	175.000	79.000	52.000	34.000	43.000	161.000	154.000	74.000
9	11.000	4.000	3.000	5.000	.000	2.000	32.000	91.000	136.000	100.000	63.000	33.000	43.000	140.000	123.000	34.000
9	8.000	13.000	6.000	1.000	1.000	.000	22.000	71.000	134.000	164.000	71.000	38.000	41.000	151.000	112.000	57.000
9	3.000	13.000	7.000	.000	.000	.000	1.000	3.000	24.000	110.000	62.000	12.000	12.000	64.000	31.000	21.000
9	1.000	.000	1.000	.000	.000	.000	.000	.000	8.000	42.000	26.000	6.000	6.000	20.000	10.000	4.000
9	.000	.000	.000	.000	.000	.000	.000	.000	2.000	8.000	5.000	.000	.000	2.000	.000	.000
9	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
9	86.000	63.000	43.000	18.000	18.000	16.000	23.000	40.000	64.000	47.000	56.000	66.000	75.000	81.000	96.000	83.000
9	168.000	141.000	70.000	30.000	14.000	24.000	66.000	162.000	199.000	144.000	96.000	84.000	102.000	140.000	232.000	212.000
9	97.000	65.000	40.000	16.000	8.000	10.000	55.000	191.000	232.000	123.000	65.000	58.000	52.000	101.000	162.000	167.000
9	13.000	8.000	22.000	10.000	2.000	4.000	85.000	184.000	183.000	91.000	37.000	28.000	45.000	103.000	140.000	56.000
9	2.000	1.000	3.000	3.000	.000	2.000	35.000	131.000	94.000	38.000	16.000	16.000	32.000	54.000	51.000	23.000
9	3.000	.000	.000	.000	.000	.000	9.000	29.000	41.000	34.000	10.000	5.000	16.000	28.000	20.000	4.000
9	.000	.000	.000	.000	.000	.000	4.000	21.000	33.000	27.000	10.000	5.000	2.000	14.000	2.000	4.000
9	.000	.000	.000	.000	.000	.000	.000	2.000	3.000	15.000	1.000	.000	1.000	.000	.000	.000
9	.000	.000	.000	.000	.000	.000	.000	.000	2.000	3.000	2.000	1.000	.000	.000	.000	.000
9	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
9	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
9	105.000	103.000	63.000	28.000	19.000	20.000	25.000	50.000	55.000	44.000	62.000	57.000	62.000	66.000	87.000	124.000
9	272.000	249.000	106.000	29.000	6.000	6.000	44.000	113.000	129.000	106.000	75.000	38.000	54.000	97.000	211.000	252.000
9	89.000	75.000	57.000	14.000	1.000	.000	36.000	156.000	157.000	49.000	26.000	16.000	15.000	44.000	125.000	128.000
9	8.000	8.000	19.000	6.000	1.000	.000	9.000	97.000	99.000	35.000	15.000	6.000	13.000	14.000	70.000	32.000
9	.000	.000	3.000	2.000	.000	.000	3.000	43.000	27.000	8.000	.000	4.000	5.000	5.000	6.000	1.000
9	.000	.000	.000	1.000	.000	.000	.000	10.000	9.000	6.000	.000	1.000	.000	.000	2.000	.000
9	.000	.000	.000	.000	.000	.000	.000	2.000	3.000	1.000	.000	.000	.000	.000	.000	.000
9	.000	.000	.000	.000	.000	.000	.000	1.000	2.000	.000	.000	.000	.000	.000	.000	.000
9	.000	.000	.000	.000	.000	.000	.000	.000	.000	1.000	.000	.000	.000	.000	.000	.000
9	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	1.000	.000	.000	.000	.000	.000
9	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10	200.	.950	2.250	4.550	6.750	8.950	11.250	13.450	17.950	22.450	29.150	40.350	100.000	.000	.000	
11	1950.	1950.	1950.	1950.	1950.	1950.	1950.	1950.	1950.	1950.	1950.	1950.	1950.	1950.	1950.	1950.
11	4827.	4827.	4827.	4827.	4827.	4827.	4827.	4827.	4827.	4827.	4827.	4827.	4827.	4827.	4827.	4827.

1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23: 4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma-desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145

0JOINT 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
.42	.42	.029	.035	.027	.021	.024	.022	.025	.014	.024	.017	.013	.016	.013	.020	.022	.024	.348
1.01	1.01	.101	.123	.095	.073	.085	.079	.088	.051	.085	.060	.044	.057	.047	.070	.079	.085	1.223
2.03	2.03	.231	.190	.161	.114	.095	.123	.247	.180	.224	.155	.098	.063	.095	.098	.155	.269	2.497
3.02	3.02	.190	.145	.130	.035	.032	.095	.158	.247	.209	.107	.073	.054	.028	.054	.085	.171	1.811
4.00	4.00	.168	.117	.060	.022	.016	.028	.139	.262	.180	.107	.076	.038	.035	.016	.060	.085	1.410
5.03	5.03	.114	.088	.035	.006	.013	.013	.070	.114	.196	.117	.073	.025	.025	.019	.013	.098	1.018
6.01	6.01	.051	.028	.016	.003	.000	.003	.019	.047	.180	.079	.035	.013	.016	.019	.016	.054	.578
8.02	8.02	.079	.057	.032	.000	.000	.000	.003	.022	.196	.092	.066	.041	.028	.035	.019	.035	.705
10.04	10.04	.003	.003	.006	.000	.000	.000	.000	.006	.063	.016	.035	.025	.022	.019	.013	.000	.212
13.03	13.03	.000	.006	.000	.000	.000	.000	.000	.003	.022	.006	.003	.009	.009	.022	.009	.003	.095
18.04	18.04	.000	.000	.000	.000	.000	.000	.000	.000	.000	.003	.000	.000	.000	.000	.000	.003	.006
44.70	44.70	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
TOTAL		.96	.79	.56	.27	.26	.36	.75	.95	1.38	.76	.52	.34	.32	.37	.47	.83	9.90

0JOINT 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
.42	.42	.007	.008	.001	.005	.007	.005	.006	.006	.005	.005	.003	.003	.004	.003	.008	.012	.092
1.01	1.01	.022	.025	.003	.016	.022	.016	.019	.019	.016	.016	.009	.009	.013	.009	.025	.038	.278
2.03	2.03	.063	.041	.035	.013	.019	.035	.038	.025	.070	.057	.051	.028	.028	.025	.038	.063	.629
3.02	3.02	.085	.057	.047	.013	.009	.016	.063	.076	.095	.025	.032	.016	.016	.022	.028	.070	.670
4.00	4.00	.047	.057	.032	.006	.006	.022	.038	.085	.076	.047	.022	.019	.019	.022	.038	.032	.569
5.03	5.03	.035	.032	.025	.003	.000	.006	.009	.051	.092	.047	.032	.013	.019	.019	.016	.025	.424
6.01	6.01	.019	.006	.003	.003	.000	.000	.006	.019	.047	.041	.016	.000	.028	.022	.013	.009	.234
8.02	8.02	.013	.006	.006	.009	.000	.000	.009	.013	.066	.060	.051	.006	.032	.016	.006	.013	.307
10.04	10.04	.003	.000	.000	.000	.000	.000	.000	.003	.009	.025	.025	.013	.003	.006	.003	.000	.092
13.03	13.03	.000	.006	.000	.000	.000	.000	.000	.000	.000	.013	.025	.000	.013	.013	.000	.000	.070
18.04	18.04	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
44.70	44.70	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
TOTAL		.29	.24	.15	.07	.06	.10	.19	.30	.48	.34	.27	.11	.17	.16	.18	.26	3.36

0JOINT 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
.42	.42	.007	.011	.009	.005	.003	.004	.005	.002	.007	.008	.008	.003	.003	.003	.003	.007	.088
1.01	1.01	.019	.032	.025	.016	.009	.013	.016	.006	.019	.022	.022	.009	.009	.009	.009	.019	.256
2.03	2.03	.076	.060	.035	.013	.019	.009	.025	.047	.044	.057	.028	.044	.022	.028	.051	.054	.613
3.02	3.02	.079	.057	.035	.028	.022	.003	.063	.098	.082	.044	.028	.019	.028	.038	.054	.079	.759
4.00	4.00	.054	.047	.009	.003	.006	.013	.035	.076	.092	.044	.044	.022	.025	.009	.022	.051	.553
5.03	5.03	.051	.035	.016	.000	.000	.006	.022	.057	.063	.047	.047	.035	.022	.022	.022	.035	.480
6.01	6.01	.022	.009	.009	.000	.000	.000	.003	.035	.063	.057	.022	.016	.022	.022	.013	.022	.316
8.02	8.02	.022	.006	.006	.000	.000	.000	.016	.016	.047	.063	.054	.028	.032	.016	.009	.028	.345
10.04	10.04	.000	.006	.000	.000	.000	.000	.000	.000	.019	.032	.041	.044	.013	.028	.022	.003	.209
13.03	13.03	.000	.000	.000	.000	.000	.000	.000	.000	.006	.019	.009	.003	.003	.025	.000	.003	.070
18.04	18.04	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
44.70	44.70	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
TOTAL		.33	.26	.14	.07	.06	.05	.19	.34	.44	.39	.30	.22	.18	.20	.21	.30	3.69

0JOINT 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
.42	.42	.035	.025	.020	.018	.012	.010	.021	.018	.025	.015	.031	.019	.027	.030	.028	.031	.363
1.01	1.01	.142	.101	.082	.073	.051	.041	.085	.073	.101	.060	.126	.079	.111	.123	.114	.126	1.489
2.03	2.03	.332	.215	.168	.104	.117	.101	.205	.322	.322	.243	.136	.123	.158	.158	.471	.405	3.581
3.02	3.02	.420	.231	.171	.079	.073	.092	.193	.401	.338	.212	.168	.149	.092	.202	.468	.455	3.742
4.00	4.00	.218	.186	.126	.060	.057	.082	.218	.395	.398	.205	.161	.079	.101	.202	.414	.408	3.312
5.03	5.03	.193	.101	.107	.019	.016	.022	.133	.303	.326	.281	.142	.054	.126	.149	.310	.265	2.547
6.01	6.01	.130	.047	.051	.000	.000	.016	.051	.136	.228	.240	.107	.082	.092	.171	.231	.149	1.729
8.02	8.02	.032	.038	.013	.006	.000	.003	.013	.120	.335	.370	.202	.155	.107	.326	.161	.155	2.035
10.04	10.04	.003	.025	.019	.000	.000	.000	.003	.009	.123	.215	.142	.133	.057	.161	.088	.047	1.027
13.03	13.03	.003	.003	.013	.000	.000	.000	.000	.000	.041	.120	.101	.035	.016	.057	.051	.009	.449
18.04	18.04	.000	.000	.006	.000	.000	.000	.000	.000	.006	.022	.016	.000	.006	.006	.006	.009	.079
44.70	44.70	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
TOTAL		1.51	.97	.78	.36	.33	.37	.92	1.78	2.24	1.98	1.33	.91	.89	1.59	2.34	2.06	20.35

0JOINT 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
.42	.42	.037	.029	.019	.021	.018	.013	.025	.029	.051	.043	.045	.043	.051	.074	.066	.045	.607
1.01	1.01	.142	.111	.073	.082	.070	.051	.095	.111	.196	.168	.174	.164	.196	.284	.253	.174	2.342
2.03	2.03	.370	.291	.199	.095	.070	.098	.247	.411	.490	.392	.281	.307	.310	.446	.651	.676	5.332
3.02	3.02	.307	.250	.171	.085	.060	.063	.288	.544	.484	.288	.228	.218	.256	.480	.762	.540	5.022
4.00	4.00	.161	.104	.145	.025	.016	.079	.348	.670	.484	.196	.199	.142	.272	.455	.610	.414	4.320
5.03	5.03	.079	.032	.047	.028	.000	.038	.247	.525	.553	.250	.164	.107	.136	.509	.487	.234	3.436
6.01	6.01	.035	.013	.009	.016	.000	.006	.101	.288	.430	.316	.199	.104	.136	.442	.389	.107	2.592
8.02	8.02	.025	.041	.019	.003	.003	.000	.070	.224	.424	.518	.224	.120	.130	.477	.354	.180	2.813
10.04	10.04	.009	.041	.022	.000	.000	.000	.003	.009	.076	.348	.196	.038	.038	.202	.098	.066	1.147
13.03	13.03	.003	.000	.003	.000	.000	.000	.000	.000	.025	.133	.082	.019	.019	.063	.032	.013	.392
18.04	18.04	.000	.000	.000	.000	.000	.000	.000	.000	.006	.025	.016	.000	.000	.006	.000	.000	.054
44.70	44.70	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
TOTAL		1.17	.91	.71	.36	.24	.35	1.42	2.81	3.22	2.68	1.81	1.26	1.54	3.44	3.70	2.45	28.06

0JOINT 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
.42	.42	.075	.055	.037	.016	.016	.014	.020	.035	.055	.041	.049	.057	.065	.070	.083	.072	.759
1.01	1.01	.272	.199	.136	.057	.057	.051	.073	.126	.202	.149	.177	.209	.237	.256	.303	.262	2.765
2.03	2.03	.531	.446	.221	.095	.044	.076	.209	.512	.629	.455	.303	.265	.322	.442	.733	.670	5.954
3.02	3.02	.307	.205	.126	.051	.025	.032	.174	.604	.733	.389	.205	.183	.164	.319	.512	.528	4.558
4.00	4.00	.041	.025	.070	.032	.006	.013	.269	.582	.578	.288	.117	.088	.142	.326	.442	.177	3.195
5.03	5.03	.006	.003	.009	.009	.000	.006	.111	.414	.297	.120	.051	.051	.101	.171	.161	.073	1.583
6.01	6.01	.009	.000	.000	.000	.000	.000	.028	.092	.130	.107	.032	.016	.051	.088	.063	.013	.629
8.02	8.02	.000	.000	.000	.000	.000	.000	.013	.066	.104	.085	.032	.016	.006	.044	.006	.013	.386
10.04	10.04	.000	.000	.000	.000	.000	.000	.000	.006	.009	.047	.003	.000	.003	.000	.000	.000	.070
13.03	13.03	.000	.000	.000	.000	.000	.000	.000	.000	.006	.009	.006	.003	.000	.000	.000	.000	.025
18.04	18.04	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
44.70	44.70	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
TOTAL		1.24	.93	.60	.26	.15	.19	.90	2.44	2.75	1.69	.97	.89	1.09	1.72	2.31	1.81	19.92

0JOINT 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
.42	.42	.113	.111	.068	.030	.020	.022	.027	.054	.059	.047	.067	.061	.067	.071	.094	.134	1.046
1.01	1.01	.332	.326	.199	.088	.060	.063	.079	.158	.174	.139	.196	.180	.196	.209	.275	.392	3.066
2.03	2.03	.860	.787	.335	.092	.019	.019	.139	.357	.408	.335	.237	.120	.171	.307	.667	.796	5.648
3.02	3.02	.281	.237	.180	.044	.003	.000	.114	.493	.496	.155	.082	.051	.047	.139	.395	.405	3.123
4.00	4.00	.025	.025	.060	.019	.003	.000	.028	.307	.313	.111	.047	.019	.041	.044	.221	.101	1.365
5.03	5.03	.000	.000	.009	.006	.000	.000	.009	.136	.085	.025	.000	.013	.016	.016	.019	.003	.338
6.01	6.01	.000	.000	.000	.003	.000	.000	.000	.032	.028	.019	.000	.003	.000	.000	.006	.000	.092
8.02	8.02	.000	.000	.000	.000	.000	.000	.000	.006	.009	.003	.000	.000	.000	.000	.000	.000	.019
10.04	10.04	.000	.000	.000	.000	.000	.000	.000	.003	.006	.000	.000	.000	.000	.000	.000	.000	.009
13.03	13.03	.000	.000	.000	.000	.000	.000	.000	.000	.000	.003	.000	.000	.000	.000	.000	.000	.003
18.04	18.04	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.003	.000	.000	.000	.000	.000	.003
44.70	44.70	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
TOTAL		1.61	1.49	.85	.28	.11	.10	.40	1.55	1.58	.84	.63	.45	.54	.79	1.68	1.83	14.71

```
0WIND MEASURED AT  10.0 METERS.
 WIND SPEED CORRECTED TO THE RELEASE HEIGHT OF  10.0 METERS.
0OVERALL WIND DIRECTION FREQUENCY
 WIND DIRECTION:          N   NNE    NE   ENE     E   ESE    SE   SSE     S   SSW    SW   WSW     W   WNW    NW   NNW
 FREQUENCY:             7.1   5.6   3.8   1.7   1.2   1.5   4.8  10.2  12.1   8.7   5.8   4.2   4.7   8.3  10.9   9.5
0OVERALL WIND SPEED FREQUENCY AS MEASURED ON THE TOWER:
 MAX.WIND SPEED (M/S):      .425  1.006  2.034  3.018  4.001  5.029  6.013  8.024 10.036 13.031 18.038 44.704
 WIND SPEED FREQUENCY:     3.30  11.42  24.25  19.68  14.73   9.83   6.17   6.61   2.77   1.10    .14    .00
0BUILDING AND RELEASE CHARACTERISTICS:
 RELEASE HEIGHT:                  10.00 METERS
 MIXING VOLUME COEFFICIENT:         .50
 BUILDING CROSS-SECTIONAL AREA: 2861.00 SQUARE METERS
0BOUNDARY 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       1950.  1950.  1950.  1950.  1950.  1950.  1950.  1950.  1950.  1950.  1950.  1950.  1950.  1950.  1950.  1950.
 BOUNDARY 2       4827.  4827.  4827.  4827.  4827.  4827.  4827.  4827.  4827.  4827.  4827.  4827.  4827.  4827.  4827.  4827.
 THE CONVERSION FACTOR APPLIED TO THE WIND SPEED CLASSES IS      .447
1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:   CGS                               METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10   75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma=desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0WINDSPEEDS ADJUSTED TO  10.0 METERS.
0PERCENT OF THE TIME A GIVEN WINDSPEED IS LOWER:
0WINDSPEED    CUMULATIVE FREQUENCY
 (METER/SEC)        (PERCENT)
       .42             3.30
      1.01            14.72
      2.03            38.98
      3.02            58.66
      4.00            73.38
      5.03            83.21
      6.01            89.38
      8.02            95.99
     10.04            98.75
     13.03            99.86
     18.04           100.00
     44.70           100.00
0
```

0LOG-NORMAL INTERPOLATION PERCENTILES

0WINDSPEED (METER/SEC)	CUMULATIVE FREQUENCY (PERCENT)
.25	1.00
.41	3.00
.52	5.00
.78	10.00
1.02	15.00
1.22	20.00
1.42	25.00
1.63	30.00
1.85	35.00
2.08	40.00
2.30	45.00
2.54	50.00
2.80	55.00
3.09	60.00
3.39	65.00
3.73	70.00
4.14	75.00
4.63	80.00
5.42	85.00
6.13	90.00

1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23: 4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96 99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE S SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 10.0 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=1431.SQ.METERS	USED
A	.4	.40	1950.	0.	0.	556.3	364.0	556.3	3.701E-06	3.693E-06	3.693E-06
A	1.0	1.42	1950.	0.	0.	556.3	364.0	556.3	1.563E-06	1.559E-06	1.559E-06
A	2.0	3.24	1950.	0.	0.	556.3	364.0	556.3	7.728E-07	7.711E-07	7.711E-07
A	3.0	2.66	1950.	0.	0.	556.3	364.0	556.3	5.209E-07	5.198E-07	5.198E-07
A	4.0	2.35	1950.	0.	0.	556.3	364.0	556.3	3.929E-07	3.920E-07	3.920E-07
A	5.0	1.60	1950.	0.	0.	556.3	364.0	556.3	3.126E-07	3.119E-07	3.119E-07
A	6.0	.71	1950.	0.	0.	556.3	364.0	556.3	2.614E-07	2.609E-07	2.609E-07
A	8.0	1.11	1950.	0.	0.	556.3	364.0	556.3	1.959E-07	1.955E-07	1.955E-07
A	10.0	.04	1950.	0.	0.	556.3	364.0	556.3	1.566E-07	1.563E-07	1.563E-07
B	.4	.10	1950.	0.	0.	320.6	240.6	320.6	9.719E-06	9.662E-06	9.662E-06
B	1.0	.31	1950.	0.	0.	320.6	240.6	320.6	4.104E-06	4.080E-06	4.080E-06
B	2.0	.89	1950.	0.	0.	320.6	240.6	320.6	2.029E-06	2.017E-06	2.017E-06
B	3.0	1.20	1950.	0.	0.	320.6	240.6	320.6	1.368E-06	1.360E-06	1.360E-06
B	4.0	.67	1950.	0.	0.	320.6	240.6	320.6	1.032E-06	1.026E-06	1.026E-06
B	5.0	.49	1950.	0.	0.	320.6	240.6	320.6	8.208E-07	8.159E-07	8.159E-07
B	6.0	.27	1950.	0.	0.	320.6	240.6	320.6	6.865E-07	6.825E-07	6.825E-07
B	8.0	.18	1950.	0.	0.	320.6	240.6	320.6	5.144E-07	5.114E-07	5.114E-07
B	10.0	.04	1950.	0.	0.	320.6	240.6	320.6	4.113E-07	4.089E-07	4.089E-07
C	.4	.09	1950.	0.	0.	253.6	154.7	253.6	1.910E-05	1.888E-05	1.888E-05
C	1.0	.27	1950.	0.	0.	253.6	154.7	253.6	8.064E-06	7.972E-06	7.972E-06
C	2.0	1.07	1950.	0.	0.	253.6	154.7	253.6	3.988E-06	3.942E-06	3.942E-06
C	3.0	1.11	1950.	0.	0.	253.6	154.7	253.6	2.688E-06	2.657E-06	2.657E-06
C	4.0	.76	1950.	0.	0.	253.6	154.7	253.6	2.027E-06	2.004E-06	2.004E-06
C	5.0	.71	1950.	0.	0.	253.6	154.7	253.6	1.613E-06	1.594E 06	1.594E-06
C	6.0	.31	1950.	0.	0.	253.6	154.7	253.6	1.349E-06	1.334E-06	1.334E-06
C	8.0	.31	1950.	0.	0.	253.6	154.7	253.6	1.011E-06	9.992E-07	9.992E-07
D	.4	.49	1950.	0.	0.	114.1	75.2	114.1	8.742E-05	8.301E-05	8.301E-05
D	1.0	2.00	1950.	0.	0.	114.1	75.2	114.1	3.691E-05	3.505E-05	3.505E-05
D	2.0	4.66	1950.	0.	0.	114.1	75.2	114.1	1.825E-05	1.733E-05	1.733E-05
D	3.0	5.91	1950.	0.	0.	114.1	75.2	114.1	1.230E-05	1.168E-05	1.168E-05
D	4.0	3.06	1950.	0.	0.	114.1	75.2	114.1	9.279E-06	8.811E-06	8.811E-06
D	5.0	2.71	1950.	0.	0.	114.1	75.2	114.1	7.382E-06	7.009E-06	7.009E-06
D	6.0	1.82	1950.	0.	0.	114.1	75.2	114.1	6.174E-06	5.863E-06	5.863E-06
D	8.0	.44	1950.	0.	0.	114.1	75.2	114.1	4.626E-06	4.393E-06	4.393E-06
D	10.0	.04	1950.	0.	0.	114.1	75.2	114.1	3.699E-06	3.513E-06	3.513E-06
D	13.0	.04	1950.	0.	0.	114.1	75.2	114.1	2.849E-06	2.705E-06	2.705E-06

E	.4	.52	1950.	0.	0.	195.7	22.3	195.7	1.722E-04	1.559E-04	1.559E-04
E	1.0	2.00	1950.	0.	0.	195.7	22.3	195.7	7.269E-05	6.581E-05	6.581E-05
E	2.0	5.20	1950.	0.	0.	195.7	22.3	195.7	3.595E-05	3.254E-05	3.254E-05
E	3.0	4.31	1950.	0.	0.	195.7	22.3	195.7	2.423E-05	2.194E-05	2.194E-05
E	4.0	2.27	1950.	0.	0.	195.7	22.3	195.7	1.827E-05	1.654E-05	1.654E-05
E	5.0	1.11	1950.	0.	0.	195.7	22.3	195.7	1.454E-05	1.316E-05	1.316E-05
E	6.0	.49	1950.	0.	0.	195.7	22.3	195.7	1.216E-05	1.101E-05	1.101E-05
E	8.0	.36	1950.	0.	0.	195.7	22.3	195.7	9.112E-06	8.249E-06	8.249E-06
E	10.0	.13	1950.	0.	0.	195.7	22.3	195.7	7.285E-06	6.596E-06	6.596E-06
E	13.0	.04	1950.	0.	0.	195.7	22.3	195.7	5.611E-06	5.080E-06	5.080E-06
F	.4	1.05	1950.	0.	0.	303.4	8.4	303.4	2.935E-04	2.491E-04	2.491E-04
F	1.0	3.82	1950.	0.	0.	303.4	8.4	303.4	1.239E-04	1.052E-04	1.052E-04
F	2.0	7.46	1950.	0.	0.	303.4	8.4	303.4	6.128E-05	5.201E-05	5.201E-05
F	3.0	4.31	1950.	0.	0.	303.4	8.4	303.4	4.131E-05	3.506E-05	3.506E-05
F	4.0	.58	1950.	0.	0.	303.4	8.4	303.4	3.115E-05	2.644E-05	2.644E-05
F	5.0	.09	1950.	0.	0.	303.4	8.4	303.4	2.478E-05	2.103E-05	2.103E-05
F	6.0	.13	1950.	0.	0.	303.4	8.4	303.4	2.073E-05	1.759E-05	1.759E-05
G	.4	1.59	1950.	0.	0.	488.9	3.2	488.9	4.828E-04	3.733E-04	3.733E-04
G	1.0	4.66	1950.	0.	0.	488.9	3.2	488.9	2.039E-04	1.576E-04	1.576E-04
G	2.0	12.08	1950.	0.	0.	488.9	3.2	488.9	1.008E-04	7.794E-05	7.794E-05
G	3.0	3.95	1950.	0.	0.	488.9	3.2	488.9	6.795E-05	5.254E-05	5.254E-05
G	4.0	.36	1950.	0.	0.	488.9	3.2	488.9	5.125E-05	3.962E-05	3.962E-05

1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23: 4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0SITE EXCLUSION BOUNDARY CALCULATIONS:
0 S SECTOR BOUNDARY DISTANCE = 1950.0 METERS
0DESERT SIGMA VALUES USED. MEANDER IS INCLUDED IN THESE VALUES- RG 1.145 MEANDER FACTORS ARE NOT USED.
BUILDING WAKE CREDIT ALLOWED: C= .5 A= 2861. D= 70.0
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.

0	3.733E-04	2.491E-04	1.576E-04	1.559E-04	1.052E-04	8.301E-05	7.794E-05	6.581E-05	5.254E-05	5.201E-05
	1.591	2.639	7.302	7.820	11.640	12.128	24.209	26.207	30.160	37.622
	.11324	.18780	.51965	.55651	.82831	.86304	1.72271	1.86494	2.14623	2.67720
0	3.962E-05	3.506E-05	3.505E-05	3.254E-05	2.644E-05	2.194E-05	2.103E-05	1.888E-05	1.759E-05	1.733E-05
	37.977	42.285	44.284	49.480	50.057	54.366	54.454	54.547	54.680	59.343
	2.70248	3.00906	3.15128	3.52107	3.56215	3.86873	3.87505	3.88160	3.89109	4.22295
0	1.654E-05	1.316E-05	1.168E-05	1.101E-05	9.662E-06	8.811E-06	8.243E-06	7.972E-06	7.009E-06	6.596E-06
	61.608	62.719	68.626	69.114	69.217	72.281	72.637	72.903	75.612	75.746
	4.38413	4.46315	4.88350	4.91827	4.92556	5.14364	5.16892	5.18788	5.38068	5.39016
0	5.863E-06	5.080E-06	4.393E-06	4.080E-06	3.942E-06	3.693E-06	3.513E-06	2.705E-06	2.657E-06	2.017E-06
	77.567	77.611	78.055	78.366	79.432	79.836	79.880	79.925	81.035	81.923
	5.51974	5.52290	5.55451	5.57663	5.65249	5.68123	5.68439	5.68755	5.76657	5.82978
0	2.004E-06	1.594E-06	1.559E-06	1.360E-06	1.334E-06	1.026E-06	9.992E-07	8.159E-07	7.711E-07	6.825E-07
	82.679	83.389	84.810	86.010	86.320	86.987	87.298	87.786	91.028	91.295
	5.88351	5.93408	6.03521	6.12055	6.14267	6.19008	6.21221	6.24697	6.47769	6.49666
0	5.198E-07	5.114E-07	4.089E-07	3.920E-07	3.119E-07	2.609E-07	1.955E-07	1.563E-07		
	93.960	94.137	94.182	96.536	98.135	98.845	99.956	100.000		
	6.68629	6.69893	6.70209	6.86960	6.98338	7.03395	7.11297	7.11613		

```
0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

                                                                HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=   1.721
                                                                HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=   2.675
                                                                HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   3.518
                                                                HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   4.381
                                                                HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   4.880
                                                                HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   5.377
                                                                HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 8)=   5.516
                                                                HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 9)=   6.866
0  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
   1  1      -7.89311 -12.99081  -1.66951
   1  2      -9.45953 -14.10528  -2.19641
   1  3      -9.86416 -17.32444  -3.86356
   1  4     -10.33296 -22.39834  -6.66745
   1  5     -11.00948 -22.54719  -6.75459
   1  6     -11.35742 -29.26353 -10.80884
   1  7     -11.86825 -34.68799 -14.17941
   1  8     -12.04686 -50.99743 -24.39349
   1  9     -14.75199     NUMXQ(K)=  9

                                                                BACK EXTRAPOLATION FOR  1 PERCENTILE.
     4.691E-04              .071              1.000
     2.693E-04              .213              3.000
     2.041E-04              .356              5.000
     1.367E-04              .712             10.000
     1.065E-04             1.067             15.000
     8.850E-05             1.423             20.000
     7.574E-05             1.779             25.000
     6.424E-05             2.135             30.000
     5.568E-05             2.491             35.000
     4.692E-05             2.846             40.000
     3.838E-05             3.202             45.000
     3.153E-05             3.558             50.000
     2.356E-05             3.914             55.000
     1.798E-05             4.270             60.000
     1.393E-05             4.625             65.000
     1.053E-05             4.981             70.000
     7.319E-06             5.337             75.000
     4.033E-06             5.693             80.000
     1.921E-06             6.049             85.000
     9.461E-07             6.405             90.000
0    1.683E-04             0.5                7.03
0ANNUAL AVERAGE =   1.17E-05
0K=  1     FIVEXQ(K)= 1.683E-04     FIVEPR(K)= 7.026
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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23: 4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE SSW SECTOR.

STABILITY CLASS	WINDSPEED AT 10.0 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=1431.SQ.METERS	USRD
A	.4	.63	1950.	0.	0.	556.3	364.0	556.3	3.701E-06	3.693E-06	3.693E-06
A	1.0	2.20	1950.	0.	0.	556.3	364.0	556.3	1.563E-06	1.559E-06	1.559E-06
A	2.0	3.39	1950.	0.	0.	556.3	364.0	556.3	7.728E-07	7.711E-07	7.711E-07
A	3.0	2.60	1950.	0.	0.	556.3	364.0	556.3	5.209E-07	5.198E-07	5.198E-07
A	4.0	2.09	1950.	0.	0.	556.3	364.0	556.3	3.929E-07	3.920E-07	3.920E-07
A	5.0	1.58	1950.	0.	0.	556.3	364.0	556.3	3.126E-07	3.119E-07	3.119E-07
A	6.0	.51	1950.	0.	0.	556.3	364.0	556.3	2.614E-07	2.609E-07	2.609E-07
A	8.0	1.02	1950.	0.	0.	556.3	364.0	556.3	1.959E-07	1.955E-07	1.955E-07
A	10.0	.06	1950.	0.	0.	556.3	364.0	556.3	1.566E-07	1.563E-07	1.563E-07
A	13.0	.11	1950.	0.	0.	556.3	364.0	556.3	1.206E-07	1.204E-07	1.204E-07
B	.4	.15	1950.	0.	0.	320.6	240.6	320.6	9.719E-06	9.662E-06	9.662E-06
B	1.0	.45	1950.	0.	0.	320.6	240.6	320.6	4.104E-06	4.080E-06	4.080E-06
B	2.0	.73	1950.	0.	0.	320.6	240.6	320.6	2.029E-06	2.017E-06	2.017E-06
B	3.0	1.02	1950.	0.	0.	320.6	240.6	320.6	1.368E-06	1.360E-06	1.360E-06
B	4.0	1.02	1950.	0.	0.	320.6	240.6	320.6	1.032E-06	1.026E-06	1.026E-06
B	5.0	.56	1950.	0.	0.	320.6	240.6	320.6	8.208E-07	8.159E-07	8.159E-07
B	6.0	.11	1950.	0.	0.	320.6	240.6	320.6	6.865E-07	6.825E-07	6.825E-07
B	8.0	.11	1950.	0.	0.	320.6	240.6	320.6	5.144E-07	5.114E-07	5.114E-07
B	13.0	.11	1950.	0.	0.	320.6	240.6	320.6	3.168E-07	3.149E-07	3.149E-07
C	.4	.20	1950.	0.	0.	253.6	154.7	253.6	1.910E-05	1.888E-05	1.888E-05
C	1.0	.56	1950.	0.	0.	253.6	154.7	253.6	8.064E-06	7.972E-06	7.972E-06
C	2.0	1.07	1950.	0.	0.	253.6	154.7	253.6	3.988E-06	3.942E-06	3.942E-06
C	3.0	1.02	1950.	0.	0.	253.6	154.7	253.6	2.688E-06	2.657E 06	2.657E 06
C	4.0	.85	1950.	0.	0.	253.6	154.7	253.6	2.027E-06	2.004E-06	2.004E-06
C	5.0	.62	1950.	0.	0.	253.6	154.7	253.6	1.613E-06	1.594E-06	1.594E-06
C	6.0	.17	1950.	0.	0.	253.6	154.7	253.6	1.349E-06	1.334E-06	1.334E-06
C	8.0	.11	1950.	0.	0.	253.6	154.7	253.6	1.011E-06	9.992E-07	9.992E-07
C	10.0	.11	1950.	0.	0.	253.6	154.7	253.6	8.082E-07	7.989E-07	7.989E-07

D	.4	.44	1950.	0.	0.	114.1	75.2	114.1	8.742E-05	8.301E-05	8.301E-05
D	1.0	1.81	1950.	0.	0.	114.1	75.2	114.1	3.691E-05	3.505E-05	3.505E-05
D	2.0	3.84	1950.	0.	0.	114.1	75.2	114.1	1.825E-05	1.733E-05	1.733E-05
D	3.0	4.12	1950.	0.	0.	114.1	75.2	114.1	1.230E-05	1.168E-05	1.168E-05
D	4.0	3.33	1950.	0.	0.	114.1	75.2	114.1	9.279E-06	8.811E-06	8.811E-06
D	5.0	1.81	1950.	0.	0.	114.1	75.2	114.1	7.382E-06	7.009E-06	7.009E-06
D	6.0	.85	1950.	0.	0.	114.1	75.2	114.1	6.174E-06	5.863E-06	5.863E-06
D	8.0	.68	1950.	0.	0.	114.1	75.2	114.1	4.626E-06	4.393E-06	4.393E-06
D	10.0	.45	1950.	0.	0.	114.1	75.2	114.1	3.699E-06	3.513E-06	3.513E-06
D	13.0	.06	1950.	0.	0.	114.1	75.2	114.1	2.849E-06	2.705E-06	2.705E-06
E	.4	.51	1950.	0.	0.	195.7	22.3	195.7	1.722E-04	1.559E-04	1.559E-04
E	1.0	1.98	1950.	0.	0.	195.7	22.3	195.7	7.269E-05	6.581E-05	6.581E-05
E	2.0	5.19	1950.	0.	0.	195.7	22.3	195.7	3.595E-05	3.254E-05	3.254E-05
E	3.0	4.46	1950.	0.	0.	195.7	22.3	195.7	2.423E-05	2.194E-05	2.194E-05
E	4.0	1.86	1950.	0.	0.	195.7	22.3	195.7	1.827E-05	1.654E-05	1.654E-05
E	5.0	.56	1950.	0.	0.	195.7	22.3	195.7	1.454E-05	1.316E-05	1.316E-05
E	6.0	.23	1950.	0.	0.	195.7	22.3	195.7	1.216E-05	1.101E-05	1.101E-05
E	8.0	.73	1950.	0.	0.	195.7	22.3	195.7	9.112E-06	8.249E-06	8.249E-06
E	10.0	.73	1950.	0.	0.	195.7	22.3	195.7	7.285E-06	6.596E-06	6.596E-06
F	.4	.98	1950.	0.	0.	303.4	8.4	303.4	2.935E-04	2.491E-04	2.491E-04
F	1.0	3.56	1950.	0.	0.	303.4	8.4	303.4	1.239E-04	1.052E-04	1.052E-04
F	2.0	7.96	1950.	0.	0.	303.4	8.4	303.4	6.128E-05	5.201E-05	5.201E-05
F	3.0	3.67	1950.	0.	0.	303.4	8.4	303.4	4.131E-05	3.506E-05	3.506E-05
F	4.0	.45	1950.	0.	0.	303.4	8.4	303.4	3.115E-05	2.644E-05	2.644E-05
F	5.0	.06	1950.	0.	0.	303.4	8.4	303.4	2.478E-05	2.103E-05	2.103E-05
G	.4	1.98	1950.	0.	0.	488.9	3.2	488.9	4.828E-04	3.733E-04	3.733E-04
G	1.0	5.81	1950.	0.	0.	488.9	3.2	488.9	2.039E-04	1.576E-04	1.576E-04
G	2.0	14.06	1950.	0.	0.	488.9	3.2	488.9	1.008E-04	7.794E-05	7.794E-05
G	3.0	4.23	1950.	0.	0.	488.9	3.2	488.9	6.795E-05	5.254E-05	5.254E-05
G	4.0	.45	1950.	0.	0.	488.9	3.2	488.9	5.125E-05	3.962E-05	3.962E-05

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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:  CGS                                METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma=desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0SITE EXCLUSION BOUNDARY CALCULATIONS:
0 SSW SECTOR      BOUNDARY DISTANCE = 1950.0 METERS
0DESERT SIGMA VALUES USED.  MEANDER IS INCLUDED IN THESE VALUES- RG 1.145 MEANDER FACTORS ARE NOT USED.
 BUILDING WAKE CREDIT ALLOWED:   C=   .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0   3.733E-04   2.491E-04   1.576E-04   1.559E-04   1.052E-04   8.301E-05   7.794E-05   6.581E-05   5.254E-05   5.201E-05
        1.984       2.960       8.774       9.286      12.842      13.283      27.339      29.315      33.549      41.508
        .11109      .16570      .49124      .51990      .71901      .74371     1.53069     1.64131     1.87835     2.32399
0   3.962E-05   3.506E 05   3.505E 05   3.254E-05   2.644E-05   2.194E-05   2.103E-05   1.888E 05   1.733E-05   1.654E-05
       41.960      45.629      47.435      52.629      53.080      57.540      57.596      57.791      61.630      63.493
       2.34927     2.55471     2.65585     2.94662     2.97190     3.22159     3.22475     3.23567     3.45059     3.55489
0   1.316E-05   1.168E-05   1.101E-05   9.662E-06   8.811E-06   8.249E-06   7.972E-06   7.009E-06   6.596E-06   5.863E-06
       64.057      68.178      68.404      68.553      71.883      72.617      73.182      74.988      75.722      76.569
       3.58649     3.81721     3.82986     3.83819     4.02466     4.06575     4.09735     4.19849     4.23958     4.28699
0   4.393E-06   4.080E-06   3.942E-06   3.693E-06   3.513E-06   2.705E-06   2.657E-06   2.017E-06   2.004E-06   1.594E-06
       77.246      77.698      78.770      79.396      79.847      79.904      80.920      81.654      82.501      83.122
       4.32491     4.35020     4.41025     4.44529     4.47057     4.47373     4.53062     4.57171     4.61912     4.65388
0   1.559E-06   1.360E-06   1.334E-06   1.026E-06   9.992E-07   8.159E-07   7.989E-07   7.711E-07   6.825E-07   5.198E-07
       85.323      86.339      86.509      87.525      87.638      88.202      88.315      91.702      91.815      94.412
       4.77714     4.83403     4.84352     4.90041     4.90673     4.93833     4.94465     5.13429     5.14061     5.28599
0   5.114E-07   3.920E-07   3.149E-07   3.119E-07   2.609E-07   1.955E-07   1.563E-07   1.204E-07
       94.524      96.613      96.726      98.307      98.815      99.831      99.887     100.000
       5.29232     5.40926     5.41558     5.50407     5.53252     5.58941     5.59257     5.59889
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0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

                                                                HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=   1.529
                                                                HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=   2.322
                                                                HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   2.944
                                                                HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   3.552
                                                                HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   3.814
                                                                HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   4.021
                                                                HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 8)=   4.195
                                                                HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 9)=   4.236
                                                                HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(10)=   4.284
                                                                HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(11)=   5.131
0  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
   2  1      -7.89311 -13.23726  -1.74693
   2  2      -9.45953 -14.57489  -2.36548
   2  3      -9.86416 -18.98779  -4.58141
   2  4     -10.33296 -25.57276  -8.06715
   2  5     -11.00948 -30.30216 -10.68695
   2  6     -11.35742 -31.78788 -11.52505
   2  7     -11.63953 -31.90096 -11.58974
   2  8     -11.86825 -34.90391 -13.32707
   2  9     -11.92912 -50.76847 -22.52968
   2 10     -12.04686 -52.41453 -23.48742
   2 11     -14.07546     NUMXQ(K)= 11
                                                                BACK EXTRAPOLATION FOR  1 PERCENTILE.
     5.291E-04              .056              1.000
     2.995E-04              .168              3.000
     2.256E-04              .280              5.000
     1.499E-04              .560             10.000
     1.163E-04              .840             15.000
     9.638E-05             1.120             20.000
     8.290E-05             1.400             25.000
     7.139E-05             1.680             30.000
     6.154E-05             1.960             35.000
     5.396E-05             2.240             40.000
     4.443E-05             2.519             45.000
     3.606E-05             2.799             50.000
     2.782E-05             3.079             55.000
     2.034E-05             3.359             60.000
     1.476E-05             3.639             65.000
     1.015E-05             3.919             70.000
     7.002E-06             4.199             75.000
     3.604E-06             4.479             80.000
     1.827E-06             4.759             85.000
     9.552E-07             5.039             90.000
0    1.606E-04             0.5                8.93
0ANNUAL AVERAGE =   1.05E-05
0K=  2     FIVEXQ(K)= 1.606E-04     FIVEPR(K)= 8.930
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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23:4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE SW SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 10.0 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=1431.SQ.METERS	USED
A	.4	.71	1950.	0.	0.	556.3	364.0	556.3	3.701E-06	3.693E-06	3.693E-06
A	1.0	2.50	1950.	0.	0.	556.3	364.0	556.3	1.563E-06	1.559E-06	1.559E-06
A	2.0	4.25	1950.	0.	0.	556.3	364.0	556.3	7.728E-07	7.711E-07	7.711E-07
A	3.0	3.42	1950.	0.	0.	556.3	364.0	556.3	5.209E-07	5.198E-07	5.198E-07
A	4.0	1.58	1950.	0.	0.	556.3	364.0	556.3	3.929E-07	3.920E-07	3.920E-07
A	5.0	.92	1950.	0.	0.	556.3	364.0	556.3	3.126E-07	3.119E-07	3.119E-07
A	6.0	.42	1950.	0.	0.	556.3	364.0	556.3	2.614E-07	2.609E-07	2.609E-07
A	8.0	.83	1950.	0.	0.	556.3	364.0	556.3	1.959E-07	1.955E-07	1.955E-07
A	10.0	.17	1950.	0.	0.	556.3	364.0	556.3	1.566E-07	1.563E-07	1.563E-07
B	.4	.03	1950.	0.	0.	320.6	240.6	320.6	9.719E-06	9.662E-06	9.662E-06
B	1.0	.08	1950.	0.	0.	320.6	240.6	320.6	4.104E-06	4.080E-06	4.080E-06
B	2.0	.92	1950.	0.	0.	320.6	240.6	320.6	2.029E-06	2.017E-06	2.017E-06
B	3.0	1.25	1950.	0.	0.	320.6	240.6	320.6	1.368E-06	1.360E-06	1.360E-06
B	4.0	.83	1950.	0.	0.	320.6	240.6	320.6	1.032E-06	1.026E-06	1.026E-06
B	5.0	.67	1950.	0.	0.	320.6	240.6	320.6	8.208E-07	8.159E-07	8.159E-07
B	6.0	.08	1950.	0.	0.	320.6	240.6	320.6	6.865E-07	6.825E-07	6.825E-07
B	8.0	.17	1950.	0.	0.	320.6	240.6	320.6	5.144E 07	5.114E-07	5.114E-07
C	.4	.23	1950.	0.	0.	253.6	154.7	253.6	1.910E-05	1.888E-05	1.888E-05
C	1.0	.67	1950.	0.	0.	253.6	154.7	253.6	8.064E-06	7.972E-06	7.972E-06
C	2.0	.92	1950.	0.	0.	253.6	154.7	253.6	3.988E-06	3.942E-06	3.942E-06
C	3.0	.92	1950.	0.	0.	253.6	154.7	253.6	2.688E-06	2.657E-06	2.657E-06
C	4.0	.25	1950.	0.	0.	253.6	154.7	253.6	2.027E-06	2.004E-06	2.004E-06
C	5.0	.42	1950.	0.	0.	253.6	154.7	253.6	1.613E-06	1.594E-06	1.594E-06
C	6.0	.25	1950.	0.	0.	253.6	154.7	253.6	1.349E-06	1.334E-06	1.334E-06
C	8.0	.17	1950.	0.	0.	253.6	154.7	253.6	1.011E-06	9.992E-07	9.992E-07

D	.4	.53	1950.	0.	0.	114.1	75.2	114.1	8.742E-05	8.301E-05	8.301E-05
D	1.0	2.17	1950.	0.	0.	114.1	75.2	114.1	3.691E-05	3.505E-05	3.505E-05
D	2.0	4.42	1950.	0.	0.	114.1	75.2	114.1	1.825E-05	1.733E-05	1.733E-05
D	3.0	4.50	1950.	0.	0.	114.1	75.2	114.1	1.230E-05	1.168E-05	1.168E-05
D	4.0	3.33	1950.	0.	0.	114.1	75.2	114.1	9.279E-06	8.811E 06	8.811E-06
D	5.0	2.83	1950.	0.	0.	114.1	75.2	114.1	7.382E-06	7.009E-06	7.009E-06
D	6.0	1.33	1950.	0.	0.	114.1	75.2	114.1	6.174E-06	5.863E-06	5.863E-06
D	8.0	.33	1950.	0.	0.	114.1	75.2	114.1	4.626E-06	4.393E-06	4.393E-06
D	10.0	.50	1950.	0.	0.	114.1	75.2	114.1	3.699E-06	3.513E-06	3.513E-06
D	13.0	.33	1950.	0.	0.	114.1	75.2	114.1	2.849E-06	2.705E-06	2.705E-06
D	18.0	.17	1950.	0.	0.	114.1	75.2	114.1	2.058E-06	1.954E-06	1.954E-06
E	.4	.50	1950.	0.	0.	195.7	22.3	195.7	1.722E-04	1.559E-04	1.559E-04
E	1.0	1.92	1950.	0.	0.	195.7	22.3	195.7	7.269E-05	6.581E-05	6.581E-05
E	2.0	5.25	1950.	0.	0.	195.7	22.3	195.7	3.595E-05	3.254E-05	3.254E-05
E	3.0	4.50	1950.	0.	0.	195.7	22.3	195.7	2.423E-05	2.194E-05	2.194E-05
E	4.0	3.83	1950.	0.	0.	195.7	22.3	195.7	1.827E-05	1.654E-05	1.654E-05
E	5.0	1.25	1950.	0.	0.	195.7	22.3	195.7	1.454E-05	1.316E-05	1.316E-05
E	6.0	.25	1950.	0.	0.	195.7	22.3	195.7	1.216E-05	1.101E-05	1.101E-05
E	8.0	.50	1950.	0.	0.	195.7	22.3	195.7	9.112E-06	8.249E-06	8.249E-06
E	10.0	.58	1950.	0.	0.	195.7	22.3	195.7	7.285E-06	6.596E-06	6.596E-06
E	13.0	.08	1950.	0.	0.	195.7	22.3	195.7	5.611E-06	5.080E-06	5.080E-06
F	.4	.98	1950.	0.	0.	303.4	8.4	303.4	2.935E-04	2.491E-04	2.491E-04
F	1.0	3.58	1950.	0.	0.	303.4	8.4	303.4	1.239E-04	1.052E-04	1.052E-04
F	2.0	5.83	1950.	0.	0.	303.4	8.4	303.4	6.128E-05	5.201E-05	5.201E-05
F	3.0	3.33	1950.	0.	0.	303.4	8.4	303.4	4.131E-05	3.506E-05	3.506E-05
F	4.0	1.83	1950.	0.	0.	303.4	8.4	303.4	3.115E-05	2.644E-05	2.644E-05
F	5.0	.25	1950.	0.	0.	303.4	8.4	303.4	2.478E-05	2.103E-05	2.103E-05
G	.4	1.79	1950.	0.	0.	488.9	3.2	488.9	4.828E-04	3.733E-04	3.733E-04
G	1.0	5.25	1950.	0.	0.	488.9	3.2	488.9	2.039E-04	1.576E-04	1.576E-04
G	2.0	8.83	1950.	0.	0.	488.9	3.2	488.9	1.008E-04	7.794E-05	7.794E-05
G	3.0	4.75	1950.	0.	0.	488.9	3.2	488.9	6.795E-05	5.254E-05	5.254E-05
G	4.0	1.58	1950.	0.	0.	488.9	3.2	488.9	5.125E-05	3.962E-05	3.962E-05
G	5.0	.25	1950.	0.	0.	488.9	3.2	488.9	4.077E-05	3.152E-05	3.152E-05

```
1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:   CGS                               METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma=desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0SITE EXCLUSION BOUNDARY CALCULATIONS:
0  SW SECTOR     BOUNDARY DISTANCE = 1950.0 METERS
0DESERT SIGMA VALUES USED.  MEANDER IS INCLUDED IN THESE VALUES- RG 1.145 MEANDER FACTORS ARE NOT USED.
 BUILDING WAKE CREDIT ALLOWED:   C=   .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0   3.733E-04   2.491E-04   1.576E-04   1.559E-04   1.052E-04   8.301E-05   7.794E-05   6.581E-05   5.254E-05   5.201E-05
        1.791       2.774       8.023       8.519      12.102      12.631      21.463      23.379      28.128      33.960
      .06795      .10522      .30434      .32317      .45908      .47914      .81416      .88685     1.06700     1.28824
0   3.962E-05   3.506E-05   3.505E-05   3.254E-05   3.152E-05   2.644E-05   2.194E-05   2.103E-05   1.888E-05   1.733E-05
       35.543      38.876      41.042      46.291      46.541      48.374      52.874      53.124      53.354      57.770
      1.34829     1.47472     1.55689     1.75601     1.76549     1.83502     2.00569     2.01517     2.02391     2.19142
0   1.654E-05   1.316E-05   1.168E-05   1.101E-05   9.662E-06   8.811E-06   8.249E-06   7.972E-06   7.009E-06   6.596E-06
       61.602      62.852      67.351      67.601      67.629      70.961      71.461      72.128      74.961      75.544
      2.33681     2.38421     2.55488     2.56437     2.56541     2.69183     2.71079     2.73608     2.84354     2.86566
0   5.863E-06   5.080E-06   4.393E-06   4.080E-06   3.942E-06   3.693E-06   3.513E-06   2.705E-06   2.657E-06   2.017E-06
       76.877      76.960      77.294      77.377      78.293      79.004      79.504      79.837      80.754      81.670
      2.91623     2.91939     2.93203     2.93519     2.96996     2.99691     3.01587     3.02852     3.06328     3.09805
0   2.004E-06   1.954E-06   1.594E-06   1.559E-06   1.360E-06   1.334E-06   1.026E-06   9.992E-07   8.159E-07   7.711E-07
       81.920      82.087      82.503      85.003      86.253      86.503      87.336      87.502      88.169      92.418
      3.10753     3.11385     3.12965     3.22447     3.27188     3.28136     3.31297     3.31929     3.34457     3.50576
0   6.825E-07   5.198E-07   5.114E-07   3.920E-07   3.119E-07   2.609E-07   1.955E-07   1.563E-07
       92.501      95.917      96.084      97.667      98.584      99.000      99.833     100.000
      3.50892     3.63850     3.64482     3.70487     3.73964     3.75544     3.78705     3.79337
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0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=    .323
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=    .813
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   1.287
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   1.754
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   2.334
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   2.552
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 8)=   2.841
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 9)=   2.913
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(10)=   3.642
0  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
   3  1     -7.89311 -13.72447  -1.82031
   3  2     -8.76654 -14.65135  -2.16062
   3  3     -9.45953 -15.08770  -2.34220
   3  4     -9.86416 -18.38037  -3.81862
   3  5     10.33296 -22.38516  -5.71895
   3  6    -11.00948 -29.20814  -9.14911
   3  7    -11.35742 -32.85490 -11.01820
   3  8    -11.86825 -42.64309 -16.15710
   3  9    -12.04686 -58.33539 -24.44380
   3 10    -14.48615     NUMXQ(K)= 10

                                                  BACK EXTRAPOLATION FOR  1 PERCENTILE.
    5.033E-04              .038             1.000
    2.833E-04              .114             3.000
    2.130E-04              .190             5.000
    1.389E-04              .379            10.000
    1.028E-04              .569            15.000
    8.239E-05              .759            20.000
    6.831E-05              .948            25.000
    5.815E-05             1.138            30.000
    4.973E-05             1.328            35.000
    4.070E-05             1.517            40.000
    3.400E 05             1.707            45.000
    2.719E-05             1.897            50.000
    2.171E-05             2.086            55.000
    1.763E-05             2.276            60.000
    1.343E-05             2.466            65.000
    9.728E-06             2.655            70.000
    6.984E-06             2.845            75.000
    3.819E-06             3.035            80.000
    1.977E-06             3.224            85.000
    1.056E 06             3.414            90.000
0   1.133E-04             0.5              13.18
0ANNUAL AVERAGE =   6.20E-06
0K=  3     FIVEXQ(K)= 1.133E-04     FIVEPR(K)=13.181
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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23: 4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE WSW SECTOR.

STABILITY CLASS	WINDSPEED AT 10.0 METERS METER/SEC	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=1431.SQ.METERS	USED
A	.4	1.24	1950.	0.	0.	556.3	364.0	556.3	3.701E-06	3.693E-06	3.693E-06
A	1.0	4.37	1950.	0.	0.	556.3	364.0	556.3	1.563E-06	1.559E-06	1.559E-06
A	2.0	6.83	1950.	0.	0.	556.3	364.0	556.3	7.728E-07	7.711E-07	7.711E-07
A	3.0	2.09	1950.	0.	0.	556.3	364.0	556.3	5.209E-07	5.198E-07	5.198E-07
A	4.0	1.33	1950.	0.	0.	556.3	364.0	556.3	3.929E-07	3.920E-07	3.920E-07
A	5.0	.38	1950.	0.	0.	556.3	364.0	556.3	3.126E-07	3.119E-07	3.119E-07
A	6.0	.19	1950.	0.	0.	556.3	364.0	556.3	2.614E-07	2.609E-07	2.609E-07
B	.4	.31	1950.	0.	0.	320.6	240.6	320.6	9.719E-06	9.662E-06	9.662E-06
B	1.0	.95	1950.	0.	0.	320.6	240.6	320.6	4.104E-06	4.080E-06	4.080E-06
B	2.0	.76	1950.	0.	0.	320.6	240.6	320.6	2.029E-06	2.017E-06	2.017E-06
B	3.0	.76	1950.	0.	0.	320.6	240.6	320.6	1.368E-06	1.360E-06	1.360E-06
B	4.0	.38	1950.	0.	0.	320.6	240.6	320.6	1.032E-06	1.026E-06	1.026E-06
B	5.0	.19	1950.	0.	0.	320.6	240.6	320.6	8.208E-07	8.159E-07	8.159E-07
B	6.0	.19	1950.	0.	0.	320.6	240.6	320.6	6.865E-07	6.825E-07	6.825E-07
B	8.0	.57	1950.	0.	0.	320.6	240.6	320.6	5.144E-07	5.114E-07	5.114E-07
C	.4	.33	1950.	0.	0.	253.6	154.7	253.6	1.910E-05	1.888E-05	1.888E-05
C	1.0	.95	1950.	0.	0.	253.6	154.7	253.6	8.064E-06	7.972E-06	7.972E-06
C	2.0	.76	1950.	0.	0.	253.6	154.7	253.6	3.988E-06	3.942E-06	3.942E-06
C	3.0	1.71	1950.	0.	0.	253.6	154.7	253.6	2.688E-06	2.657E-06	2.657E-06
C	4.0	.19	1950.	0.	0.	253.6	154.7	253.6	2.027E-06	2.004E-06	2.004E-06

D	.4	1.07	1950.	0.	0.	114.1	75.2	114.1	8.742E-05	8.301E-05	8.301E-05
D	1.0	4.37	1950.	0.	0.	114.1	75.2	114.1	3.691E-05	3.505E-05	3.505E-05
D	2.0	6.26	1950.	0.	0.	114.1	75.2	114.1	1.825E-05	1.733E-05	1.733E-05
D	3.0	4.75	1950.	0.	0.	114.1	75.2	114.1	1.230E-05	1.168E-05	1.168E-05
D	4.0	3.61	1950.	0.	0.	114.1	75.2	114.1	9.279E-06	8.811E-06	8.811E-06
D	5.0	1.14	1950.	0.	0.	114.1	75.2	114.1	7.382E-06	7.009E-06	7.009E-06
D	8.0	.38	1950.	0.	0.	114.1	75.2	114.1	4.626E-06	4.393E-06	4.393E-06
E	.4	1.28	1950.	0.	0.	195.7	22.3	195.7	1.722E-04	1.559E-04	1.559E-04
E	1.0	4.94	1950.	0.	0.	195.7	22.3	195.7	7.269E-05	6.581E-05	6.581E-05
E	2.0	5.70	1950.	0.	0.	195.7	22.3	195.7	3.595E-05	3.254E-05	3.254E-05
E	3.0	5.13	1950.	0.	0.	195.7	22.3	195.7	2.423E-05	2.194E-05	2.194E-05
E	4.0	1.52	1950.	0.	0.	195.7	22.3	195.7	1.827E-05	1.654E-05	1.654E-05
E	5.0	1.71	1950.	0.	0.	195.7	22.3	195.7	1.454E-05	1.316E-05	1.316E-05
E	6.0	.95	1950.	0.	0.	195.7	22.3	195.7	1.216E-05	1.101E-05	1.101E-05
E	8.0	.19	1950.	0.	0.	195.7	22.3	195.7	9.112E-06	8.249E-06	8.249E-06
F	.4	.94	1950.	0.	0.	303.4	8.4	303.4	2.935E-04	2.491E-04	2.491E-04
F	1.0	3.42	1950.	0.	0.	303.4	8.4	303.4	1.239E-04	1.052E-04	1.052E-04
F	2.0	5.70	1950.	0.	0.	303.4	8.4	303.4	6.128E-05	5.201E-05	5.201E-05
F	3.0	3.04	1950.	0.	0.	303.4	8.4	303.4	4.131E-05	3.506E-05	3.506E-05
F	4.0	1.90	1950.	0.	0.	303.4	8.4	303.4	3.115E-05	2.644E-05	2.644E-05
F	5.0	.57	1950.	0.	0.	303.4	8.4	303.4	2.478E-05	2.103E-05	2.103E-05
G	.4	1.81	1950.	0.	0.	488.9	3.2	488.9	4.828E-04	3.733E-04	3.733E-04
G	1.0	5.32	1950.	0.	0.	488.9	3.2	488.9	2.039E-04	1.576E-04	1.576E-04
G	2.0	5.51	1950.	0.	0.	488.9	3.2	488.9	1.008E-04	7.794E-05	7.794E-05
G	3.0	2.66	1950.	0.	0.	488.9	3.2	488.9	6.795E-05	5.254E-05	5.254E-05
G	4.0	1.14	1950.	0.	0.	488.9	3.2	488.9	5.125E-05	3.962E-05	3.962E-05
G	5.0	.38	1950.	0.	0.	488.9	3.2	488.9	4.077E-05	3.152E-05	3.152E-05
G	6.0	.19	1950.	0.	0.	488.9	3.2	488.9	3.410E-05	2.637E-05	2.637E-05

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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE: 11/19/2003     TIME:  23: 4:56
/PLANT NAME:   CGS                               METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM PRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma-desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0SITE EXCLUSION BOUNDARY CALCULATIONS:
0 WSW SECTOR     BOUNDARY DISTANCE = 1950.0 METERS
0DESERT SIGMA VALUES USED.  MEANDER IS INCLUDED IN THESE VALUES- RG 1.145 MEANDER FACTORS ARE NOT USED.
 BUILDING WAKE CREDIT ALLOWED:   C=   .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0   3.733E-04  2.491E-04  1.576E-04  1.559E-04  1.052E-04  8.301E-05  7.794E-05  6.581E-05  5.254E-05  5.201E-05
        1.814      2.751      8.067      9.346     12.763     13.829     19.334     24.270     26.928     32.623
      .03020     .04580     .13430     .15559     .21248     .23023     .32188     .40406     .44831     .54312
0   3.962E-05  3.506E-05  3.505E-05  3.254E-05  3.152E-05  2.644E-05  2.637E-05  2.194E-05  2.103E-05  1.888E-05
       33.762     36.800     41.166     46.861     47.241     49.139     49.329     54.455     55.024     55.352
      .56209     .61266     .68535     .78017     .78649     .81809     .82125     .90659     .91607     .92153
0   1.733E-05  1.654E-05  1.316E-05  1.168E-05  1.101E-05  9.662E-06  8.811E-06  8.249E-06  7.972E-06  7.009E-06
       61.617     63.136     64.844     69.590     70.540     70.852     74.459     74.649     75.598     76.737
      1.02583    1.05111    1.07956    1.15857    1.17438    1.17958    1.23963    1.24280    1.25860    1.27756
0   4.393E-06  4.080E-06  3.942E-06  3.693E-06  2.657E-06  2.017E-06  2.004E-06  1.559E-06  1.360E-06  1.026E-06
       77.117     78.066     78.826     80.067     81.775     82.535     82.725     87.091     87.850     88.230
      1.28388    1.29969    1.31233    1.33299    1.36143    1.37408    1.37724    1.44993    1.46257    1.46889
0   8.159E-07  7.711E-07  6.825E-07  5.198E-07  5.114E-07  3.920E-07  3.119E-07  2.609E-07
       88.420     95.254     95.444     97.532     98.102     99.430     99.810    100.000
      1.47205    1.58583    1.58900    1.62376    1.63324    1.65537    1.66169    1.66485
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0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=    .155
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=    .542
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=    .779
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   1.050
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   1.157
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   1.238
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 8)=   1.257
0  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
   4  1      -7.89311 -14.22389  -1.84570
   4  2      -8.76654 -16.69590  -2.68174
   4  3      -9.86416 -19.12134  -3.63383
   4  4     -10.33296 -25.14385  -6.12401
   4  5     -11.00948 -32.72177   9.40731
   4  6     -11.35742 -36.02084 -10.85998
   4  7     -11.63953 -49.95643 -17.06721
   4  8     -11.73961      NUMXQ(K)=  8

                                                  BACK EXTRAPOLATION FOR  1 PERCENTILE.
     5.000E-04               .017              1.000
     2.889E-04               .050              3.000
     2.204E-04               .083              5.000
     1.474E-04               .166             10.000
     1.045E-04               .250             15.000
     8.123E-05               .333             20.000
     6.647E-05               .416             25.000
     5.623E-05               .499             30.000
     4.755E-05               .583             35.000
     4.004E-05               .666             40.000
     3.433E-05               .749             45.000
     2.815E-05               .832             50.000
     2.270E-05               .916             55.000
     1.861E-05               .999             60.000
     1.492E-05              1.082             65.000
     1.140E-05              1.165             70.000
     8.401E-06              1.249             75.000
0    5.617E-05              0.5               30.03
0ANNUAL AVERAGE =   2.62E-06
0K=  4     FIVEXQ(K)= 5.617E-05     FIVEPR(K)=30.033
```

1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23:4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE W SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 10.0 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=1431.SQ.METERS	USED
A	.4	2.01	1950.	0.	0.	556.3	364.0	556.3	3.701E-06	3.693E-06	3.693E-06
A	1.0	7.09	1950.	0.	0.	556.3	364.0	556.3	1.563E-06	1.559E-06	1.559E-06
A	2.0	7.87	1950.	0.	0.	556.3	364.0	556.3	7.728E-07	7.711E-07	7.711E-07
A	3.0	2.62	1950.	0.	0.	556.3	364.0	556.3	5.209E-07	5.198E-07	5.198E-07
A	4.0	1.31	1950.	0.	0.	556.3	364.0	556.3	3.929E-07	3.920E-07	3.920E-07
A	5.0	1.05	1950.	0.	0.	556.3	364.0	556.3	3.126E-07	3.119E-07	3.119E-07
B	.4	.61	1950.	0.	0.	320.6	240.6	320.6	9.719E-06	9.662E-06	9.662E-06
B	1.0	1.84	1950.	0.	0.	320.6	240.6	320.6	4.104E-06	4.080E-06	4.080E-06
B	2.0	1.57	1950.	0.	0.	320.6	240.6	320.6	2.029E-06	2.017E-06	2.017E-06
B	3.0	.79	1950.	0.	0.	320.6	240.6	320.6	1.368E-06	1.360E-06	1.360E-06
B	4.0	.52	1950.	0.	0.	320.6	240.6	320.6	1.032E-06	1.026E-06	1.026E-06
C	.4	.27	1950.	0.	0.	253.6	154.7	253.6	1.910E-05	1.888E-05	1.888E-05
C	1.0	.79	1950.	0.	0.	253.6	154.7	253.6	8.064E-06	7.972E-06	7.972E-06
C	2.0	1.57	1950.	0.	0.	253.6	154.7	253.6	3.988E-06	3.942E-06	3.942E-06
C	3.0	1.84	1950.	0.	0.	253.6	154.7	253.6	2.688E-06	2.657E-06	2.657E-06
C	4.0	.52	1950.	0.	0.	253.6	154.7	253.6	2.027E-06	2.004E-06	2.004E-06
D	.4	1.03	1950.	0.	0.	114.1	75.2	114.1	8.742E-05	8.301E-05	8.301E-05
D	1.0	4.20	1950.	0.	0.	114.1	75.2	114.1	3.691E-05	3.505E-05	3.505E-05
D	2.0	9.71	1950.	0.	0.	114.1	75.2	114.1	1.825E-05	1.733E-05	1.733E-05
D	3.0	6.04	1950.	0.	0.	114.1	75.2	114.1	1.230E-05	1.168E-05	1.168E-05
D	4.0	4.72	1950.	0.	0.	114.1	75.2	114.1	9.279E-06	8.811E-06	8.811E-06
D	5.0	1.31	1950.	0.	0.	114.1	75.2	114.1	7.382E-06	7.009E-06	7.009E-06
E	.4	1.50	1950.	0.	0.	195.7	22.3	195.7	1.722E-04	1.559E-04	1.559E-04
E	1.0	5.77	1950.	0.	0.	195.7	22.3	195.7	7.269E-05	6.581E-05	6.581E-05
E	2.0	5.77	1950.	0.	0.	195.7	22.3	195.7	3.595E-05	3.254E-05	3.254E-05
E	3.0	4.99	1950.	0.	0.	195.7	22.3	195.7	2.423E-05	2.194E-05	2.194E-05
E	4.0	1.31	1950.	0.	0.	195.7	22.3	195.7	1.827E-05	1.654E-05	1.654E-05
E	8.0	.26	1950.	0.	0.	195.7	22.3	195.7	9.112E-06	8.249E-06	8.249E-06
F	.4	1.30	1950.	0.	0.	303.4	8.4	303.4	2.935E-04	2.491E-04	2.491E-04
F	1.0	4.72	1950.	0.	0.	303.4	8.4	303.4	1.239E-04	1.052E-04	1.052E-04
F	2.0	3.67	1950.	0.	0.	303.4	8.4	303.4	6.128E-05	5.201E-05	5.201E-05
F	3.0	2.10	1950.	0.	0.	303.4	8.4	303.4	4.131E-05	3.506E-05	3.506E-05
F	4.0	.52	1950.	0.	0.	303.4	8.4	303.4	3.115E-05	2.644E-05	2.644E-05
G	.4	1.70	1950.	0.	0.	488.9	3.2	488.9	4.828E-04	3.733E-04	3.733E-04
G	1.0	4.99	1950.	0.	0.	488.9	3.2	488.9	2.039E-04	1.576E-04	1.576E-04
G	2.0	1.57	1950.	0.	0.	488.9	3.2	488.9	1.008E-04	7.794E-05	7.794E-05
G	3.0	.26	1950.	0.	0.	488.9	3.2	488.9	6.795E-05	5.254E-05	5.254E-05
G	4.0	.26	1950.	0.	0.	488.9	3.2	488.9	5.125E-05	3.962E-05	3.962E-05

```
1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:  CGS                                METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma=desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0SITE EXCLUSION BOUNDARY CALCULATIONS:
0   W SECTOR     BOUNDARY DISTANCE = 1950.0 METERS
0DESERT SIGMA VALUES USED.  MEANDER IS INCLUDED IN THESE VALUES- RG 1.145 MEANDER FACTORS ARE NOT USED.
 BUILDING WAKE CREDIT ALLOWED:  C=   .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0  3.733E-04  2.491E-04  1.576E-04  1.559E-04  1.052E-04  8.301E-05  7.794E-05  6.581E-05  5.254E-05  5.201E-05
       1.702      2.997      7.983      9.479     14.203     15.229     16.803     22.577     22.839     26.513
      .02049     .03610     .09615     .11416     .17105     .18340     .20236     .27190     .27506     .31930
0  3.962E-05  3.506E-05  3.505E-05  3.254E-05  2.644E-05  2.194E-05  1.888E-05  1.733E-05  1.654E-05  1.168E-05
      26.776     28.875     33.074     38.848     39.373     44.359     44.631     54.341     55.653     61.689
      .32246     .34775     .39832     .46785     .47417     .53422     .53750     .65444     .67024     .74294
0  9.662E-06  8.811E-06  8.249E-06  7.972E-06  7.009E-06  4.080E-06  3.942E-06  3.693E-06  2.657E-06  2.017E-06
      62.295     67.019     67.281     68.068     69.381     71.218     72.792     74.806     76.643     78.218
      .75023     .80712     .81028     .81976     .83556     .85769     .87665     .90090     .92303     .94199
0  2.004E-06  1.559E-06  1.360E-06  1.026E-06  7.711E-07  5.198E-07  3.920E-07  3.119E-07
      78.743     85.829     86.616     87.141     95.014     97.638     98.950    100.000
      .94831    1.03365    1.04313    1.04945    1.14427    1.17587    1.19168    1.20432
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0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=    .114
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=    .272
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=    .467
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=    .654
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=    .669
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=    .806
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 8)=    .819
0  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
   5  1     -7.89311 -14.28541  -1.80889
   5  2     -8.76654 -18.48326  -3.18479
   5  3     -9.62876 -20.43863  -3.88810
   5  4    -10.33296 -24.28579  -5.36827
   5  5     10.96301 -24.50976  -5.45852
   5  6     11.00948 -34.21918  -9.38429
   5  7    -11.63953 -54.01101 -17.60993
   5  8     11.73961      NUMXQ(K)=  8
                                                  BACK EXTRAPOLATION FOR  1 PERCENTILE.
    4.792E-04                .012               1.000
    2.832E-04                .036               3.000
    2.186E-04                .060               5.000
    1.481E-04                .120              10.000
    9.963E-05                .181              15.000
    7.454E-05                .241              20.000
    5.782E-05                .301              25.000
    4.573E-05                .361              30.000
    3.737E-05                .422              35.000
    3.083E-05                .482              40.000
    2.477E-05                .542              45.000
    2.031E-05                .602              50.000
    1.693E-05                .662              55.000
    1.284E-05                .723              60.000
    9.783E-06                .783              65.000
0   2.878E-05              3.5                 41.52
0ANNUAL AVERAGE =   1.67E-06
0K=  5     FIVEXQ(K)= 2.878E-05     FIVEPR(K)=41.517
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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23:4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE WNW SECTOR.

STABILITY CLASS	WINDSPEED AT 10.0 METERS METER/SEC	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=1431.SQ.METERS	USED
A	.4	1.48	1950.	0.	0.	556.3	364.0	556.3	3.701E-06	3.693E-06	3.693E-06
A	1.0	5.19	1950.	0.	0.	556.3	364.0	556.3	1.563E-06	1.559E-06	1.559E-06
A	2.0	8.10	1950.	0.	0.	556.3	364.0	556.3	7.728E-07	7.711E-07	7.711E-07
A	3.0	6.23	1950.	0.	0.	556.3	364.0	556.3	5.209E-07	5.198E-07	5.198E-07
A	4.0	1.87	1950.	0.	0.	556.3	364.0	556.3	3.929E-07	3.920E-07	3.920E-07
A	5.0	.83	1950.	0.	0.	556.3	364.0	556.3	3.126E-07	3.119E-07	3.119E-07
A	6.0	.21	1950.	0.	0.	556.3	364.0	556.3	2.614E-07	2.609E-07	2.609E-07
B	.4	.34	1950.	0.	0.	320.6	240.6	320.6	9.719E-06	9.662E-06	9.662E-06
B	1.0	1.04	1950.	0.	0.	320.6	240.6	320.6	4.104E-06	4.080E-06	4.080E-06
B	2.0	2.28	1950.	0.	0.	320.6	240.6	320.6	2.029E-06	2.017E-06	2.017E-06
B	3.0	1.04	1950.	0.	0.	320.6	240.6	320.6	1.368E-06	1.360E-06	1.360E-06
B	4.0	1.45	1950.	0.	0.	320.6	240.6	320.6	1.032E-06	1.026E-06	1.026E-06
B	5.0	.42	1950.	0.	0.	320.6	240.6	320.6	8.208E-07	8.159E-07	8.159E-07
C	.4	.29	1950.	0.	0.	253.6	154.7	253.6	1.910E-05	1.888E-05	1.888E-05
C	1.0	.83	1950.	0.	0.	253.6	154.7	253.6	8.064E-06	7.972E-06	7.972E-06
C	2.0	.62	1950.	0.	0.	253.6	154.7	253.6	3.988E-06	3.942E-06	3.942E-06
C	3.0	.21	1950.	0.	0.	253.6	154.7	253.6	2.688E-06	2.657E-06	2.657E-06
C	4.0	.83	1950.	0.	0.	253.6	154.7	253.6	2.027E-06	2.004E-06	2.004E-06
C	5.0	.42	1950.	0.	0.	253.6	154.7	253.6	1.613E-06	1.594E-06	1.594E-06

D	.4	.66	1950.	0.	0.	114.1	75.2	114.1	8.742E-05	8.301E-05	8.301E-05
D	1.0	2.70	1950.	0.	0.	114.1	75.2	114.1	3.691E-05	3.505E-05	3.505E-05
D	2.0	6.64	1950.	0.	0.	114.1	75.2	114.1	1.825E-05	1.733E-05	1.733E-05
D	3.0	6.02	1950.	0.	0.	114.1	75.2	114.1	1.230E-05	1.168E-05	1.168E-05
D	4.0	5.40	1950.	0.	0.	114.1	75.2	114.1	9.279E-06	8.811E-06	8.811E-06
D	5.0	1.45	1950.	0.	0.	114.1	75.2	114.1	7.382E-06	7.009E-06	7.009E-06
D	6.0	1.04	1950.	0.	0.	114.1	75.2	114.1	6.174E-06	5.863E-06	5.863E-06
D	8.0	.21	1950.	0.	0.	114.1	75.2	114.1	4.626E-06	4.393E-06	4.393E-06
E	.4	.86	1950.	0.	0.	195.7	22.3	195.7	1.722E-04	1.559E-04	1.559E-04
E	1.0	3.32	1950.	0.	0.	195.7	22.3	195.7	7.269E-05	6.581E-05	6.581E-05
E	2.0	6.44	1950.	0.	0.	195.7	22.3	195.7	3.595E-05	3.254E-05	3.254E-05
E	3.0	4.15	1950.	0.	0.	195.7	22.3	195.7	2.423E-05	2.194E-05	2.194E-05
E	4.0	5.19	1950.	0.	0.	195.7	22.3	195.7	1.827E-05	1.654E-05	1.654E-05
E	5.0	2.49	1950.	0.	0.	195.7	22.3	195.7	1.454E-05	1.316E-05	1.316E-05
E	6.0	.42	1950.	0.	0.	195.7	22.3	195.7	1.216E-05	1.101E-05	1.101E-05
F	.4	.91	1950.	0.	0.	303.4	8.4	303.4	2.935E-04	2.491E-04	2.491E-04
F	1.0	3.32	1950.	0.	0.	303.4	8.4	303.4	1.239E-04	1.052E-04	1.052E-04
F	2.0	4.98	1950.	0.	0.	303.4	8.4	303.4	6.128E-05	5.201E-05	5.201E-05
F	3.0	2.08	1950.	0.	0.	303.4	8.4	303.4	4.131E-05	3.506E-05	3.506E-05
F	4.0	.83	1950.	0.	0.	303.4	8.4	303.4	3.115E-05	2.644E-05	2.644E-05
F	5.0	.42	1950.	0.	0.	303.4	8.4	303.4	2.478E-05	2.103E-05	2.103E-05
G	.4	1.42	1950.	0.	0.	488.9	3.2	488.9	4.828E-04	3.733E-04	3.733E-04
G	1.0	4.15	1950.	0.	0.	488.9	3.2	488.9	2.039E-04	1.576E-04	1.576E-04
G	2.0	1.25	1950.	0.	0.	488.9	3.2	488.9	1.008E-04	7.794E-05	7.794E-05

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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:   CGS                               METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10   75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRANATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma=desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0SITE EXCLUSION BOUNDARY CALCULATIONS:
0 WNW SECTOR     BOUNDARY DISTANCE = 1950.0 METERS
0DESERT SIGMA VALUES USED.  MEANDER IS INCLUDED IN THESE VALUES- RG 1.145 MEANDER FACTORS ARE NOT USED.
 BUILDING WAKE CREDIT ALLOWED:   C=   .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0   3.733E-04   2.491E-04   1.576E-04   1.559E-04   1.052E-04   8.301E-05   7.794E-05   6.581E-05   5.201E-05   3.506E-05
        1.417       2.328       6.480       7.341      10.663      11.322      12.567      15.889      20.872      22.948
       .02157      .03544      .09865      .11175      .16232      .17236      .19132      .24189      .31774      .34935
0   3.505E-05   3.254E-05   2.644E-05   2.194E-05   2.103E-05   1.888E-05   1.733E-05   1.654E-05   1.316E-05   1.168E-05
       25.647      32.083      32.913      37.065      37.481      37.768      44.411      49.602      52.093      58.114
       .39043      .48841      .50105      .56426      .57059      .57496      .67609      .75511      .79303      .88469
0   1.101E-05   9.662E-06   8.811E-06   7.972E-06   7.009E-06   5.863E-06   4.393E-06   4.080E-06   3.942E-06   3.693E-06
       58.529      58.871      64.269      65.099      66.553      67.591      67.798      68.836      69.459      70.934
       .89101      .89622      .97839      .99104     1.01316     1.02896     1.03212     1.04793     1.05741     1.07987
0   2.657E-06   2.017E-06   2.004E-06   1.594E-06   1.559E-06   1.360E-06   1.026E-06   8.159E-07   7.711E-07   5.198E-07
       71.142      73.426      74.256      74.671      79.862      80.900      82.353      82.768      90.865      97.093
      1.08303     1.11779     1.13043     1.13676     1.21577     1.23157     1.25370     1.26002     1.38328     1.47810
0   3.920E-07   3.119E-07   2.609E-07
       98.962      99.792     100.000
      1.50654     1.51918     1.52234
```

```
0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=    .112
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=    .488
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=    .754
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=    .884
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=    .977
                                                    HANDCHECK GRAPH:  SLOPE LT  1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   1.012
0  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
   6  1      -7.89311 -14.53560  -1.88693
   6  2      -8.76654 -18.89070  -3.31139
   6  3     -10.33296 -21.68706  -4.39343
   6  4     -11.00948 -25.60153  -6.00410
   6  5     -11.35742 -29.23881  -7.53726
   6  6     -11.63953 -52.42868 -17.46881
   6  7     -11.86825      NUMXQ(K)=  7
                                                    BACK EXTRAPOLATION FOR  1 PERCENTILE.
    4.435E-04                .015               1.000
    2.540E-04                .046               3.000
    1.930E-04                .076               5.000
    1.142E-04                .152              10.000
    7.499E-05                .228              15.000
    5.509E-05                .304              20.000
    4.310E-05                .381              25.000
    3.513E-05                .457              30.000
    2.850E-05                .533              35.000
    2.320E-05                .609              40.000
    1.930E-05                .685              45.000
    1.626E-05                .761              50.000
    1.319E-05                .837              55.000
    1.069E-05                .913              60.000
    8.182E-06                .990              65.000
0   3.141E-05               0.5                32.84
0ANNUAL AVERAGE =   1.72E-06
0K=  6     FIVEXQ(K)= 3.141E-05     FIVEPR(K)=32.844
```

1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23:4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE NW SECTOR.

STABILITY CLASS	WINDSPEED FREQUENCY AT 10.0 METERS METER/SEC	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=1431.SQ.METERS	USED
A	.4	.53	1950.	0.	0.	556.3	364.0	556.3	3.701E-06	3.693E-06	3.693E-06
A	1.0	1.86	1950.	0.	0.	556.3	364.0	556.3	1.563E-06	1.559E-06	1.559E-06
A	2.0	5.18	1950.	0.	0.	556.3	364.0	556.3	7.728E 07	7.711E-07	7.711E-07
A	3.0	3.32	1950.	0.	0.	556.3	364.0	556.3	5.209E-07	5.198E-07	5.198E-07
A	4.0	2.92	1950.	0.	0.	556.3	364.0	556.3	3.929E-07	3.920E-07	3.920E-07
A	5.0	1.46	1950.	0.	0.	556.3	364.0	556.3	3.126E-07	3.119E-07	3.119E-07
A	6.0	.40	1950.	0.	0.	556.3	364.0	556.3	2.614E-07	2.609E-07	2.609E-07
A	8.0	.07	1950.	0.	0.	556.3	364.0	556.3	1.959E-07	1.955E-07	1.955E-07
B	.4	.13	1950.	0.	0.	320.6	240.6	320.6	9.719E-06	9.662E-06	9.662E-06
B	1.0	.40	1950.	0.	0.	320.6	240.6	320.6	4.104E-06	4.080E-06	4.080E-06
B	2.0	.80	1950.	0.	0.	320.6	240.6	320.6	2.029E-06	2.017E-06	2.017E-06
B	3.0	1.33	1950.	0.	0.	320.6	240.6	320.6	1.368E-06	1.360E-06	1.360E-06
B	4.0	.80	1950.	0.	0.	320.6	240.6	320.6	1.032E-06	1.026E-06	1.026E-06
B	5.0	.20	1950.	0.	0.	320.6	240.6	320.6	8.208E-07	8.159E-07	8.159E-07
B	6.0	.13	1950.	0.	0.	320.6	240.6	320.6	6.865E-07	6.825E-07	6.825E-07
B	8.0	.20	1950.	0.	0.	320.6	240.6	320.6	5.144E-07	5.114E-07	5.114E-07
C	.4	.11	1950.	0.	0.	253.6	154.7	253.6	1.910E-05	1.888E-05	1.888E-05
C	1.0	.33	1950.	0.	0.	253.6	154.7	253.6	8.064E-06	7.972E-06	7.972E-06
C	2.0	.53	1950.	0.	0.	253.6	154.7	253.6	3.988E-06	3.942E-06	3.942E-06
C	3.0	1.33	1950.	0.	0.	253.6	154.7	253.6	2.688E-06	2.657E-06	2.657E-06
C	4.0	.73	1950.	0.	0.	253.6	154.7	253.6	2.027E-06	2.004E-06	2.004E-06
C	5.0	.46	1950.	0.	0.	253.6	154.7	253.6	1.613E-06	1.594E-06	1.594E-06
C	6.0	.07	1950.	0.	0.	253.6	154.7	253.6	1.349E-06	1.334E-06	1.334E-06
C	8.0	.33	1950.	0.	0.	253.6	154.7	253.6	1.011E-06	9.992E-07	9.992E-07

D	.4	.44	1950.	0.	0.	114.1	75.2	114.1	8.742E-05	8.301E-05	8.301E-05
D	1.0	1.79	1950.	0.	0.	114.1	75.2	114.1	3.691E-05	3.505E-05	3.505E-05
D	2.0	4.32	1950.	0.	0.	114.1	75.2	114.1	1.825E-05	1.733E-05	1.733E-05
D	3.0	4.05	1950.	0.	0.	114.1	75.2	114.1	1.230E-05	1.168E-05	1.168E-05
D	4.0	4.58	1950.	0.	0.	114.1	75.2	114.1	9.279E-06	8.811E-06	8.811E-06
D	5.0	2.79	1950.	0.	0.	114.1	75.2	114.1	7.382E-06	7.009E-06	7.009E-06
D	6.0	1.06	1950.	0.	0.	114.1	75.2	114.1	6.174E-06	5.863E-06	5.863E-06
D	8.0	.27	1950.	0.	0.	114.1	75.2	114.1	4.626E-06	4.393E-06	4.393E-06
D	10.0	.07	1950.	0.	0.	114.1	75.2	114.1	3.699E-06	3.513E-06	3.513E-06
E	.4	.52	1950.	0.	0.	195.7	22.3	195.7	1.722E-04	1.559E-04	1.559E-04
E	1.0	1.99	1950.	0.	0.	195.7	22.3	195.7	7.269E-05	6.581E-05	6.581E-05
E	2.0	5.18	1950.	0.	0.	195.7	22.3	195.7	3.595E-05	3.254E 05	3.254E-05
E	3.0	6.04	1950.	0.	0.	195.7	22.3	195.7	2.423E-05	2.194E-05	2.194E-05
E	4.0	7.30	1950.	0.	0.	195.7	22.3	195.7	1.827E-05	1.654E-05	1.654E-05
E	5.0	5.18	1950.	0.	0.	195.7	22.3	195.7	1.454E-05	1.316E-05	1.316E-05
E	6.0	2.13	1950.	0.	0.	195.7	22.3	195.7	1.216E-05	1.101E-05	1.101E-05
E	8.0	1.46	1950.	0.	0.	195.7	22.3	195.7	9.112E-06	8.249E-06	8.249E-06
E	10.0	.07	1950.	0.	0.	195.7	22.3	195.7	7.285E-06	6.596E-06	6.596E-06
F	.4	.42	1950.	0.	0.	303.4	8.4	303.4	2.935E-04	2.491E-04	2.491E-04
F	1.0	1.53	1950.	0.	0.	303.4	8.4	303.4	1.239E-04	1.052E-04	1.052E-04
F	2.0	4.38	1950.	0.	0.	303.4	8.4	303.4	6.128E-05	5.201E-05	5.201E-05
F	3.0	3.65	1950.	0.	0.	303.4	8.4	303.4	4.131E-05	3.506E-05	3.506E-05
F	4.0	5.64	1950.	0.	0.	303.4	8.4	303.4	3.115E-05	2.644E-05	2.644E-05
F	5.0	2.32	1950.	0.	0.	303.4	8.4	303.4	2.478E-05	2.103E-05	2.103E-05
F	6.0	.60	1950.	0.	0.	303.4	8.4	303.4	2.073E-05	1.759E-05	1.759E-05
F	8.0	.27	1950.	0.	0.	303.4	8.4	303.4	1.553E-05	1.318E-05	1.318E-05
G	.4	.57	1950.	0.	0.	488.9	3.2	488.9	4.828E-04	3.733E-04	3.733E-04
G	1.0	1.66	1950.	0.	0.	488.9	3.2	488.9	2.039E-04	1.576E-04	1.576E-04
G	2.0	2.92	1950.	0.	0.	488.9	3.2	488.9	1.008E-04	7.794E-05	7.794E-05
G	3.0	2.39	1950.	0.	0.	488.9	3.2	488.9	6.795E-05	5.254E-05	5.254E-05
G	4.0	.60	1950.	0.	0.	488.9	3.2	488.9	5.125E-05	3.962E-05	3.962E-05
G	5.0	.20	1950.	0.	0.	488.9	3.2	488.9	4.077E-05	3.152E-05	3.152E-05

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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:  CGS                                METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma=desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0SITE EXCLUSION BOUNDARY CALCULATIONS:
0  NW SECTOR      BOUNDARY DISTANCE = 1950.0 METERS
0DESERT SIGMA VALUES USED.  MEANDER IS INCLUDED IN THESE VALUES- RG 1.145 MEANDER FACTORS ARE NOT USED.
 BUILDING WAKE CREDIT ALLOWED:  C=   .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0  3.733E-04  2.491E-04  1.576E-04  1.559E-04  1.052E-04  8.301E-05  7.794E-05  6.581E-05  5.254E-05  5.201E-05
        .567       .985      2.646      3.162      4.689      5.127      8.049     10.041     12.432     16.815
     .02696     .04690     .12591     .15048     .22318     .24401     .38308     .47789     .59167     .80027
0  3.962E-05  3.506E-05  3.505E-05  3.254E-05  3.152E-05  2.644E-05  2.194E-05  2.103E-05  1.888E-05  1.759E-05
       17.412     21.065     22.858     28.037     28.237     33.881     39.924     42.248     42.363     42.961
      .82871    1.00254    1.08788    1.33440    1.34388    1.61253    1.90014    2.01076    2.01622    2.04467
0  1.733E-05  1.654E-05  1.318E-05  1.316E-05  1.168E-05  1.101E-05  9.662E-06  8.811E-06  8.249E-06  7.972E-06
       47.277     54.582     54.848     60.027     64.078     66.203     66.334     70.917     72.378     72.710
      2.25011    2.59777    2.61041    2.85693    3.04973    3.15086    3.15711    3.37519    3.44472    3.46053
0  7.009E-06  6.596E-06  5.863E-06  4.393E-06  4.080E-06  3.942E-06  3.693E-06  3.513E-06  2.657E-06  2.017E-06
       75.499     75.565     76.628     76.893     77.292     77.823     78.351     78.418     79.746     80.543
      3.59327    3.59643    3.64700    3.65964    3.67860    3.70389    3.72904    3.73220    3.79541    3.83334
0  2.004E-06  1.594E-06  1.559E-06  1.360E-06  1.334E-06  1.026E-06  9.992E-07  8.159E-07  7.711E-07  6.825E-07
       81.273     81.738     83.598     84.926     84.992     85.789     86.121     86.320     91.500     91.633
      3.86811    3.89023    3.97873    4.04194    4.04510    4.08303    4.09883    4.10831    4.35483    4.36115
0  5.198E-07  5.114E-07  3.920E-07  3.119E-07  2.609E-07  1.955E-07
       94.953     95.152     98.074     99.535     99.934    100.000
      4.51918    4.52866    4.66773    4.73726    4.75622    4.75938
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0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=    .150
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=    .799
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   1.333
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   2.595
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   3.148
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   3.442
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 8)=   3.590
0  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
   7  1      -7.89311 -14.01708  -1.76960
   7  2      -8.76654 -14.60453  -1.96759
   7  3      -9.86416 -15.72441  -2.43242
   7  4     -10.33296 -15.83454  -2.48211
   7  5     -11.00948 -20.38589  -4.82342
   7  6     -11.41681 -24.84470  -7.22130
   7  7     -11.70542 -27.17987  -8.50469
   7  8     -11.86825      NUMXQ(K)=  8
    2.832E-04                .048              1.000
    1.604E-04                .143              3.000
    1.174E-04                .238              5.000
    7.470E-05                .476             10.000
    5.642E-05                .714             15.000
    4.451E-05                .952             20.000
    3.625E-05               1.190             25.000
    3.047E-05               1.428             30.000
    2.617E-05               1.666             35.000
    2.288E-05               1.904             40.000
    2.027E-05               2.142             45.000
    1.816E-05               2.380             50.000
    1.628E-05               2.618             55.000
    1.357E-05               2.856             60.000
    1.145E-05               3.094             65.000
    9.196E-06               3.332             70.000
    7.192E-06               3.570             75.000
0   7.224E-05               0.5               10.51
0ANNUAL AVERAGE =   3.67E-06
0K=  7     FIVEXQ(K)= 7.224E-05     FIVEPR(K)=10.506
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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23: 4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma-desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE NNW SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 10.0 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=1431.SQ.METERS	USED
A	.4	.14	1950.	0.	0.	556.3	364.0	556.3	3.701E-06	3.693E-06	3.693E-06
A	1.0	.50	1950.	0.	0.	556.3	364.0	556.3	1.563E-06	1.559E-06	1.559E-06
A	2.0	1.77	1950.	0.	0.	556.3	364.0	556.3	7.728E-07	7.711E-07	7.711E-07
A	3.0	2.43	1950.	0.	0.	556.3	364.0	556.3	5.209E-07	5.198E-07	5.198E-07
A	4.0	2.58	1950.	0.	0.	556.3	364.0	556.3	3.929E-07	3.920E-07	3.920E-07
A	5.0	1.12	1950.	0.	0.	556.3	364.0	556.3	3.126E-07	3.119E-07	3.119E-07
A	6.0	.47	1950.	0.	0.	556.3	364.0	556.3	2.614E-07	2.609E-07	2.609E-07
A	8.0	.22	1950.	0.	0.	556.3	364.0	556.3	1.959E-07	1.955E-07	1.955E-07
A	10.0	.06	1950.	0.	0.	556.3	364.0	556.3	1.566E-07	1.563E-07	1.563E-07
A	13.0	.03	1950.	0.	0.	556.3	364.0	556.3	1.206E-07	1.204E-07	1.204E-07
B	.4	.06	1950.	0.	0.	320.6	240.6	320.6	9.719E-06	9.662E-06	9.662E-06
B	1.0	.19	1950.	0.	0.	320.6	240.6	320.6	4.104E-06	4.080E-06	4.080E-06
B	2.0	.25	1950.	0.	0.	320.6	240.6	320.6	2.029E-06	2.017E-06	2.017E-06
B	3.0	.75	1950.	0.	0.	320.6	240.6	320.6	1.368E-06	1.360E-06	1.360E-06
B	4.0	.84	1950.	0.	0.	320.6	240.6	320.6	1.032E-06	1.026E-06	1.026E-06
B	5.0	.50	1950.	0.	0.	320.6	240.6	320.6	8.208E-07	8.159E-07	8.159E-07
B	6.0	.19	1950.	0.	0.	320.6	240.6	320.6	6.865E-07	6.825E-07	6.825E-07
B	8.0	.12	1950.	0.	0.	320.6	240.6	320.6	5.144E-07	5.114E-07	5.114E-07
B	10.0	.03	1950.	0.	0.	320.6	240.6	320.6	4.113E-07	4.089E-07	4.089E-07
C	.4	.02	1950.	0.	0.	253.6	154.7	253.6	1.910E-05	1.888E-05	1.888E-05
C	1.0	.06	1950.	0.	0.	253.6	154.7	253.6	8.064E-06	7.972E-06	7.972E-06
C	2.0	.47	1950.	0.	0.	253.6	154.7	253.6	3.988E-06	3.942E-06	3.942E-06
C	3.0	.97	1950.	0.	0.	253.6	154.7	253.6	2.688E-06	2.657E-06	2.657E-06
C	4.0	.75	1950.	0.	0.	253.6	154.7	253.6	2.027E-06	2.004E-06	2.004E-06
C	5.0	.56	1950.	0.	0.	253.6	154.7	253.6	1.613E-06	1.594E-06	1.594E-06
C	6.0	.34	1950.	0.	0.	253.6	154.7	253.6	1.349E-06	1.334E-06	1.334E-06
C	8.0	.16	1950.	0.	0.	253.6	154.7	253.6	1.011E-06	9.992E-07	9.992E-07
D	.4	.17	1950.	0.	0.	114.1	75.2	114.1	8.742E-05	8.301E-05	8.301E-05
D	1.0	.72	1950.	0.	0.	114.1	75.2	114.1	3.691E-05	3.505E-05	3.505E-05
D	2.0	3.18	1950.	0.	0.	114.1	75.2	114.1	1.825E-05	1.733E-05	1.733E-05
D	3.0	3.95	1950.	0.	0.	114.1	75.2	114.1	1.230E-05	1.168E-05	1.168E-05
D	4.0	3.89	1950.	0.	0.	114.1	75.2	114.1	9.279E-06	8.811E-06	8.811E-06
D	5.0	2.99	1950.	0.	0.	114.1	75.2	114.1	7.382E-06	7.009E-06	7.009E-06
D	6.0	1.34	1950.	0.	0.	114.1	75.2	114.1	6.174E-06	5.863E-06	5.863E-06
D	8.0	1.18	1950.	0.	0.	114.1	75.2	114.1	4.626E-06	4.393E-06	4.393E-06
D	10.0	.09	1950.	0.	0.	114.1	75.2	114.1	3.699E-06	3.513E-06	3.513E-06

E	.4	.28	1950.	0.	0.	195.7	22.3	195.7	1.722E-04	1.559E-04	1.559E-04
E	1.0	1.09	1950.	0.	0.	195.7	22.3	195.7	7.269E-05	6.581E-05	6.581E-05
E	2.0	4.05	1950.	0.	0.	195.7	22.3	195.7	3.595E-05	3.254E 05	3.254E-05
E	3.0	5.36	1950.	0.	0.	195.7	22.3	195.7	2.423E-05	2.194E-05	2.194E-05
E	4.0	6.60	1950.	0.	0.	195.7	22.3	195.7	1.827E-05	1.654E-05	1.654E-05
E	5.0	5.17	1950.	0.	0.	195.7	22.3	195.7	1.454E-05	1.316E-05	1.316E-05
E	6.0	2.83	1950.	0.	0.	195.7	22.3	195.7	1.216E-05	1.101E-05	1.101E-05
E	8.0	2.21	1950.	0.	0.	195.7	22.3	195.7	9.112E-06	8.249E-06	8.249E-06
E	10.0	.09	1950.	0.	0.	195.7	22.3	195.7	7.285E-06	6.596E-06	6.596E-06
F	.4	.34	1950.	0.	0.	303.4	8.4	303.4	2.935E-04	2.491E-04	2.491E-04
F	1.0	1.25	1950.	0.	0.	303.4	8.4	303.4	1.239E-04	1.052E-04	1.052E-04
F	2.0	5.04	1950.	0.	0.	303.4	8.4	303.4	6.128E-05	5.201E-05	5.201E-05
F	3.0	5.95	1950.	0.	0.	303.4	8.4	303.4	4.131E-05	3.506E-05	3.506E-05
F	4.0	5.73	1950.	0.	0.	303.4	8.4	303.4	3.115E-05	2.644E-05	2.644E-05
F	5.0	4.08	1950.	0.	0.	303.4	8.4	303.4	2.478E-05	2.103E-05	2.103E-05
F	6.0	.90	1950.	0.	0.	303.4	8.4	303.4	2.073E-05	1.759E-05	1.759E-05
F	8.0	.65	1950.	0.	0.	303.4	8.4	303.4	1.553E-05	1.318E-05	1.318E-05
F	10.0	.06	1950.	0.	0.	303.4	8.4	303.4	1.242E-05	1.054E-05	1.054E-05
G	.4	.53	1950.	0.	0.	488.9	3.2	488.9	4.828E-04	3.733E 04	3.733E-04
G	1.0	1.56	1950.	0.	0.	488.9	3.2	488.9	2.039E-04	1.576E-04	1.576E-04
G	2.0	3.52	1950.	0.	0.	488.9	3.2	488.9	1.008E-04	7.794E-05	7.794E-05
G	3.0	4.86	1950.	0.	0.	488.9	3.2	488.9	6.795E-05	5.254E-05	5.254E-05
G	4.0	3.02	1950.	0.	0.	488.9	3.2	488.9	5.125E-05	3.962E-05	3.962E-05
G	5.0	1.34	1950.	0.	0.	488.9	3.2	488.9	4.077E-05	3.152E-05	3.152E-05
G	6.0	.31	1950.	0.	0.	488.9	3.2	488.9	3.410E-05	2.637E-05	2.637E-05
G	8.0	.06	1950.	0.	0.	488.9	3.2	488.9	2.555E-05	1.976E-05	1.976E-05
G	10.0	.03	1950.	0.	0.	488.9	3.2	488.9	2.043E-05	1.580E-05	1.580E-05

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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:  CGS                                METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma=desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0SITE EXCLUSION BOUNDARY CALCULATIONS:
0 NNW SECTOR      BOUNDARY DISTANCE = 1950.0 METERS
0DESERT SIGMA VALUES USED.  MEANDER IS INCLUDED IN THESE VALUES- RG 1.145 MEANDER FACTORS ARE NOT USED.
 BUILDING WAKE CREDIT ALLOWED:   C=    .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0  3.733E-04  2.491E-04  1.576E-04  1.559E-04  1.052E-04  8.301E-05  7.794E-05  6.581E-05  5.254E-05  5.201E-05
       .531       .873      2.429      2.712      3.957      4.132      7.650      8.740     13.597     18.640
      .05392     .08860     .24663     .27529     .40171     .41946     .77661     .88722    1.38027    1.89228
0  3.962E-05  3.506E-05  3.505E-05  3.254E-05  3.152E-05  2.644E-05  2.637E-05  2.194E-05  2.103E-05  1.976E-05
     21.660     27.607     28.323     32.370     33.709     39.438     39.749     45.104     49.183     49.245
     2.19886    2.80252    2.87521    3.28609    3.42199    4.00353    4.03514    4.57875    4.99279    4.99911
0  1.888E-05  1.759E-05  1.733E-05  1.654E-05  1.580E-05  1.318E-05  1.316E-05  1.168E-05  1.101E-05  1.054E-05
     49.267     50.169     53.345     59.945     59.977     60.630     65.799     69.753     72.586     72.648
     5.00129    5.09295    5.41533    6.08536    6.08852    6.15490    6.67955    7.08094    7.36855    7.37487
0  9.662E-06  8.811E-06  8.249E-06  7.972E-06  7.009E-06  6.596E-06  5.863E-06  4.393E-06  4.080E-06  3.942E-06
     72.710     76.601     78.812     78.874     81.863     81.956     83.295     84.478     84.665     85.132
     7.38112    7.77619    8.00059    8.00691    8.31033    8.31981    8.45571    8.57581    8.59478    8.64218
0  3.693E-06  3.513E-06  2.657E-06  2.017E-06  2.004E-06  1.594E-06  1.559E-06  1.360E-06  1.334E-06  1.026E-06
     85.274     85.367     86.332     86.581     87.329     87.889     88.387     89.134     89.477     90.317
     8.65656    8.66604    8.76402    8.78930    8.86515    8.92204    8.97261    9.04847    9.08323    9.16857
0  9.992E-07  8.159E-07  7.711E-07  6.825E-07  5.198E-07  5.114E-07  4.089E-07  3.920E-07  3.119E-07  2.609E-07
     90.473     90.971     92.746     92.933     95.361     95.486     95.517     98.101     99.222     99.689
     9.18437    9.23494    9.41509    9.43406    9.68058    9.69322    9.69638    9.95871   10.07249   10.11990
0  1.955E-07  1.563E-07  1.204E-07
     99.907     99.969    100.000
    10.14202   10.14834   10.15150
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0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=   1.890
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=   3.419
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   4.989
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   6.082
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   7.365
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   7.997
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 8)=   8.307

0  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
   8  1      -7.89311 -13.29717  -1.65290
   8  2      -9.86416 -13.95033  -1.96738
   8  3     -10.36477 -14.54063  -2.29127
   8  4     -10.76940 -14.80393  -2.45124
   8  5      11.00948 -17.39050  -4.12219
   8  6      11.41681 -20.95011  -6.57852
   8  7     -11.70542 -22.84182  -7.92467
   8  8     -11.86825     NUMXQ(K)=  8
     2.757E-04                .102             1.000
     1.564E-04                .305             3.000
     1.177E-04                .508             5.000
     7.786E-05               1.015            10.000
     6.011E-05               1.523            15.000
     4.912E-05               2.030            20.000
     4.083E-05               2.538            25.000
     3.492E-05               3.045            30.000
     3.032E-05               3.553            35.000
     2.634E-05               4.061            40.000
     2.320E-05               4.568            45.000
     2.062E-05               5.076            50.000
     1.839E-05               5.583            55.000
     1.651E-05               6.091            60.000
     1.396E-05               6.598            65.000
     1.191E-05               7.106            70.000
     9.822E-06               7.614            75.000
     7.738E-06               8.121            80.000
0    1.187E-04               0.5               4.93
0ANNUAL AVERAGE =   8.64E-06
0K=  8     FIVEXQ(K)= 1.187E-04     FIVEPR(K)= 4.925
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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23:4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE N SECTOR.

STABILITY CLASS	WINDSPEED AT 10.0 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	USED CA=1431.SQ.METERS
A	.4	.20	1950.	0.	0.	556.3	364.0	556.3	3.701E-06	3.693E-06	3.693E-06
A	1.0	.71	1950.	0.	0.	556.3	364.0	556.3	1.563E-06	1.559E-06	1.559E-06
A	2.0	1.86	1950.	0.	0.	556.3	364.0	556.3	7.728E-07	7.711E-07	7.711E-07
A	3.0	1.73	1950.	0.	0.	556.3	364.0	556.3	5.209E-07	5.198E-07	5.198E-07
A	4.0	1.49	1950.	0.	0.	556.3	364.0	556.3	3.929E-07	3.920E-07	3.920E-07
A	5.0	1.62	1950.	0.	0.	556.3	364.0	556.3	3.126E-07	3.119E-07	3.119E-07
A	6.0	1.49	1950.	0.	0.	556.3	364.0	556.3	2.614E-07	2.609E-07	2.609E-07
A	8.0	1.62	1950.	0.	0.	556.3	364.0	556.3	1.959E-07	1.955E-07	1.955E-07
A	10.0	.52	1950.	0.	0.	556.3	364.0	556.3	1.566E-07	1.563E-07	1.563E-07
A	13.0	.18	1950.	0.	0.	556.3	364.0	556.3	1.206E-07	1.204E-07	1.204E-07
B	.4	.04	1950.	0.	0.	320.6	240.6	320.6	9.719E-06	9.662E-06	9.662E-06
B	1.0	.13	1950.	0.	0.	320.6	240.6	320.6	4.104E-06	4.080E-06	4.080E-06
B	2.0	.58	1950.	0.	0.	320.6	240.6	320.6	2.029E-06	2.017E-06	2.017E-06
B	3.0	.78	1950.	0.	0.	320.6	240.6	320.6	1.368E-06	1.360E-06	1.360E-06
B	4.0	.63	1950.	0.	0.	320.6	240.6	320.6	1.032E-06	1.026E-06	1.026E-06
B	5.0	.76	1950.	0.	0.	320.6	240.6	320.6	8.208E-07	8.159E-07	8.159E-07
B	6.0	.39	1950.	0.	0.	320.6	240.6	320.6	6.865E-07	6.825E-07	6.825E-07
B	8.0	.55	1950.	0.	0.	320.6	240.6	320.6	5.144E-07	5.114E-07	5.114E-07
B	10.0	.08	1950.	0.	0.	320.6	240.6	320.6	4.113E-07	4.089E-07	4.089E-07
C	.4	.05	1950.	0.	0.	253.6	154.7	253.6	1.910E-05	1.888E-05	1.888E-05
C	1.0	.16	1950.	0.	0.	253.6	154.7	253.6	8.064E-06	7.972E-06	7.972E-06
C	2.0	.37	1950.	0.	0.	253.6	154.7	253.6	3.988E-06	3.942E-06	3.942E-06
C	3.0	.68	1950.	0.	0.	253.6	154.7	253.6	2.688E-06	2.657E-06	2.657E-06
C	4.0	.76	1950.	0.	0.	253.6	154.7	253.6	2.027E-06	2.004E-06	2.004E-06
C	5.0	.52	1950.	0.	0.	253.6	154.7	253.6	1.613E-06	1.594E-06	1.594E-06
C	6.0	.52	1950.	0.	0.	253.6	154.7	253.6	1.349E-06	1.334E-06	1.334E-06
C	8.0	.39	1950.	0.	0.	253.6	154.7	253.6	1.011E-06	9.992E-07	9.992E-07
C	10.0	.16	1950.	0.	0.	253.6	154.7	253.6	8.082E-07	7.989E-07	7.989E-07
C	13.0	.05	1950.	0.	0.	253.6	154.7	253.6	6.225E-07	6.153E-07	6.153E-07
D	.4	.20	1950.	0.	0.	114.1	75.2	114.1	8.742E-05	8.301E-05	8.301E-05
D	1.0	.84	1950.	0.	0.	114.1	75.2	114.1	3.691E-05	3.505E-05	3.505E-05
D	2.0	2.67	1950.	0.	0.	114.1	75.2	114.1	1.825E-05	1.733E-05	1.733E-05
D	3.0	2.80	1950.	0.	0.	114.1	75.2	114.1	1.230E-05	1.168E-05	1.168E-05
D	4.0	3.30	1950.	0.	0.	114.1	75.2	114.1	9.279E-06	8.811E-06	8.811E-06
D	5.0	2.69	1950.	0.	0.	114.1	75.2	114.1	7.382E-06	7.009E-06	7.009E-06
D	6.0	1.88	1950.	0.	0.	114.1	75.2	114.1	6.174E-06	5.863E-06	5.863E-06
D	8.0	2.77	1950.	0.	0.	114.1	75.2	114.1	4.626E-06	4.393E-06	4.393E-06
D	10.0	1.02	1950.	0.	0.	114.1	75.2	114.1	3.699E-06	3.513E-06	3.513E-06
D	13.0	.34	1950.	0.	0.	114.1	75.2	114.1	2.849E-06	2.705E-06	2.705E-06
D	18.0	.05	1950.	0.	0.	114.1	75.2	114.1	2.058E-06	1.954E-06	1.954E-06

E	.4	.42	1950.	0.	0.	195.7	22.3	195.7	1.722E-04	1.559E-04	1.559E-04
E	1.0	1.62	1950.	0.	0.	195.7	22.3	195.7	7.269E-05	6.581E-05	6.581E-05
E	2.0	4.05	1950.	0.	0.	195.7	22.3	195.7	3.595E-05	3.254E-05	3.254E-05
E	3.0	4.00	1950.	0.	0.	195.7	22.3	195.7	2.423E-05	2.194E-05	2.194E-05
E	4.0	4.00	1950.	0.	0.	195.7	22.3	195.7	1.827E 05	1.654E-05	1.654E-05
E	5.0	4.58	1950.	0.	0.	195.7	22.3	195.7	1.454E-05	1.316E-05	1.316E-05
E	6.0	3.56	1950.	0.	0.	195.7	22.3	195.7	1.216E-05	1.101E-05	1.101E-05
E	8.0	3.50	1950.	0.	0.	195.7	22.3	195.7	9.112E-06	8.249E-06	8.249E-06
E	10.0	.63	1950.	0.	0.	195.7	22.3	195.7	7.285E-06	6.596E-06	6.596E-06
E	13.0	.21	1950.	0.	0.	195.7	22.3	195.7	5.611E-06	5.080E-06	5.080E-06
E	18.0	.05	1950.	0.	0.	195.7	22.3	195.7	4.053E-06	3.670E-06	3.670E-06
F	.4	.46	1950.	0.	0.	303.4	8.4	303.4	2.935E-04	2.491E-04	2.491E-04
F	1.0	1.67	1950.	0.	0.	303.4	8.4	303.4	1.239E-04	1.052E-04	1.052E-04
F	2.0	5.20	1950.	0.	0.	303.4	8.4	303.4	6.128E-05	5.201E-05	5.201E-05
F	3.0	6.07	1950.	0.	0.	303.4	8.4	303.4	4.131E-05	3.506E-05	3.506E-05
F	4.0	4.79	1950.	0.	0.	303.4	8.4	303.4	3.115E-05	2.644E-05	2.644E-05
F	5.0	2.46	1950.	0.	0.	303.4	8.4	303.4	2.478E-05	2.103E-05	2.103E-05
F	6.0	1.07	1950.	0.	0.	303.4	8.4	303.4	2.073E-05	1.759E-05	1.759E-05
F	8.0	.86	1950.	0.	0.	303.4	8.4	303.4	1.553E-05	1.318E-05	1.318E-05
F	10.0	.08	1950.	0.	0.	303.4	8.4	303.4	1.242E-05	1.054E-05	1.054E-05
F	13.0	.05	1950.	0.	0.	303.4	8.4	303.4	9.565E-06	8.118E-06	8.118E-06
G	.4	.49	1950.	0.	0.	488.9	3.2	488.9	4.828E-04	3.733E-04	3.733E-04
G	1.0	1.44	1950.	0.	0.	488.9	3.2	488.9	2.039E-04	1.576E-04	1.576E-04
G	2.0	3.37	1950.	0.	0.	488.9	3.2	488.9	1.008E-04	7.794E-05	7.794E-05
G	3.0	4.11	1950.	0.	0.	488.9	3.2	488.9	6.795E-05	5.254E-05	5.254E-05
G	4.0	2.59	1950.	0.	0.	488.9	3.2	488.9	5.125E-05	3.962E-05	3.962E-05
G	5.0	.71	1950.	0.	0.	488.9	3.2	488.9	4.077E-05	3.152E-05	3.152E-05
G	6.0	.24	1950.	0.	0.	488.9	3.2	488.9	3.410E-05	2.637E-05	2.637E-05
G	8.0	.08	1950.	0.	0.	488.9	3.2	488.9	2.555E-05	1.976E-05	1.976E-05
G	10.0	.05	1950.	0.	0.	488.9	3.2	488.9	2.043E-05	1.580E-05	1.580E-05

```
1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  12/19/2003     TIME:  23: 4:56
/PLANT NAME:   CGS                               METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma=desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0SITE EXCLUSION BOUNDARY CALCULATIONS:
0   N SECTOR      BOUNDARY DISTANCE = 1950.0 METERS
0DESERT SIGMA VALUES USED.  MEANDER IS INCLUDED IN THESE VALUES- RG 1.145 MEANDER FACTORS ARE NOT USED.
 BUILDING WAKE CREDIT ALLOWED:   C=   .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0  3.733E-04  2.491E-04  1.576E-04  1.559E-04  1.052E-04  8.301E-05  7.794E-05  6.581E-05  5.254E-05  5.201E-05
       .491       .950      2.388      2.809      4.482      4.687      8.060      9.682     13.788     18.993
      .05932     .11480     .28863     .33940     .54168     .56637     .97408    1.17004    1.66625    2.29520
0  3.962E-05  3.506E-05  3.505E-05  3.254E-05  3.152E-05  2.644E-05  2.637E-05  2.194E-05  2.103E-05  1.976E-05
      21.582     27.649     28.486     32.540     33.246     38.032     38.268     42.269     44.728     44.806
      2.60809    3.34134    3.44248    3.93236    4.01770    4.59608    4.62453    5.10809    5.40518    5.41467
0  1.888E-05  1.759E-05  1.733E-05  1.654E-05  1.580E-05  1.318E-05  1.316E-05  1.168E-05  1.101E-05  1.054E-05
      44.860     45.933     48.600     52.602     52.654     53.517     58.094     60.892     64.449     64.528
      5.42122    5.55080    5.87318    6.35675    6.36307    6.46737    7.02046    7.35864    7.78848    7.79796
0  9.662E-06  8.811E-06  8.249E-06  8.118E-06  7.972E-06  7.009E-06  6.596E-06  5.863E-06  5.080E-06  4.393E-06
      64.571     67.866     71.371     71.423     71.580     74.274     74.901     76.784     76.994     79.766
      7.80317    8.20140    8.62491    8.63123    8.65020    8.97573    9.05159    9.27915    9.30443    9.63945
0  4.080E-06  3.942E-06  3.693E-06  3.670E-06  3.513E-06  2.705E-06  2.657E-06  2.017E-06  2.004E-06  1.954E-06
      79.897     80.263     80.463     80.516     81.536     81.876     82.556     83.131     83.890     83.942
      9.65525    9.69950    9.72376    9.73008    9.85334    9.89443    9.97660   10.04613   10.13779   10.14411
0  1.594E-06  1.559E-06  1.360E-06  1.334E-06  1.026E-06  9.992E-07  8.159E-07  7.989E-07  7.711E-07  6.825E-07
      84.465     85.171     85.956     86.479     87.106     87.499     88.257     88.414     90.271     90.663
     10.20732   10.29266   10.38747   10.45069   10.52654   10.57395   10.66560   10.68457   10.90897   10.95637
0  6.153E-07  5.198E-07  5.114E-07  4.089E-07  3.920E-07  3.119E-07  2.609E-07  1.955E-07  1.563E-07  1.204E-07
      90.716     92.442     92.991     93.069     94.560     96.182     97.672     99.294     99.817    100.000
     10.96270   11.17129   11.23766   11.24715   11.42730   11.62325   11.60340   11.99936   12.06257   12.08469
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0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=   2.293
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=   3.929
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   4.621
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   6.353
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   7.785
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   8.621
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 8)=   8.972
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 9)=   9.276

0  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
   9  1      -7.89311 -13.02357  -1.58231
   9  2      -9.86416 -13.80166  -1.97200
   9  3     -10.33296 -15.18981  -2.76117
   9  4     -10.54338 -15.54032  -2.96946
   9  5      11.00948 -16.86686   3.83886
   9  6     -11.41681 -18.83233  -5.22329
   9  7     -11.70542 -21.81211  -7.40716
   9  8     -11.86825  24.82745  -9.65329
   9  9     -12.04686      NUMXQ(K)=  9
     2.684E-04                .121              1.000
     1.547E-04                .363              3.000
     1.172E 04                .604              5.000
     7.824E-05               1.208             10.000
     6.071E-05               1.813             15.000
     4.981E-05               2.417             20.000
     4.116E-05               3.021             25.000
     3.503E-05               3.625             30.000
     2.963E-05               4.230             35.000
     2.476E-05               4.834             40.000
     2.088E-05               5.438             45.000
     1.786E-05               6.042             50.000
     1.515E-05               6.647             55.000
     1.273E-05               7.251             60.000
     1.075E-05               7.855             65.000
     8.719E-06               8.459             70.000
     6.653E-06               9.064             75.000
0    1.301E-04               0.5                4.14
0ANNUAL AVERAGE =   9.87E-06
0K=  9     FIVEXQ(K)= 1.301E-04     FIVEPR(K)= 4.137
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1UGNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23: 4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE NNE SECTOR.

STABILITY CLASS	WINDSPEED AT 10.0 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-1431.SQ.METERS	USED
A	.4	.20	1950.	0.	0.	556.3	364.0	556.3	3.701E-06	3.693E-06	3.693E-06
A	1.0	.69	1950.	0.	0.	556.3	364.0	556.3	1.563E-06	1.559E-06	1.559E-06
A	2.0	1.78	1950.	0.	0.	556.3	364.0	556.3	7.728E-07	7.711E-07	7.711E-07
A	3.0	1.24	1950.	0.	0.	556.3	364.0	556.3	5.209E-07	5.198E-07	5.198E-07
A	4.0	1.24	1950.	0.	0.	556.3	364.0	556.3	3.929E-07	3.920E-07	3.920E-07
A	5.0	1.35	1950.	0.	0.	556.3	364.0	556.3	3.126E-07	3.119E-07	3.119E-07
A	6.0	.91	1950.	0.	0.	556.3	364.0	556.3	2.614E-07	2.609E-07	2.609E-07
A	8.0	1.06	1950.	0.	0.	556.3	364.0	556.3	1.959E-07	1.955E-07	1.955E-07
A	10.0	.18	1950.	0.	0.	556.3	364.0	556.3	1.566E-07	1.563E 07	1.563E-07
A	13.0	.07	1950.	0.	0.	556.3	364.0	556.3	1.206E-07	1.204E-07	1.204E-07
A	18.0	.04	1950.	0.	0.	556.3	364.0	556.3	8.715E-08	8.695E-08	8.695E-08
B	.4	.06	1950.	0.	0.	320.6	240.6	320.6	9.719E-06	9.662E-06	9.662E-06
B	1.0	.18	1950.	0.	0.	320.6	240.6	320.6	4.104E-06	4.080E-06	4.080E-06
B	2.0	.66	1950.	0.	0.	320.6	240.6	320.6	2.029E-06	2.017E-06	2.017E-06
B	3.0	.29	1950.	0.	0.	320.6	240.6	320.6	1.368E-06	1.360E-06	1.360E-06
B	4.0	.55	1950.	0.	0.	320.6	240.6	320.6	1.032E-06	1.026E-06	1.026E-06
B	5.0	.55	1950.	0.	0.	320.6	240.6	320.6	8.208E-07	8.159E-07	8.159E-07
B	6.0	.47	1950.	0.	0.	320.6	240.6	320.6	6.865E-07	6.825E-07	6.825E-07
B	8.0	.69	1950.	0.	0.	320.6	240.6	320.6	5.144E-07	5.114E-07	5.114E-07
B	10.0	.29	1950.	0.	0.	320.6	240.6	320.6	4.113E-07	4.089E-07	4.089E-07
B	13.0	.15	1950.	0.	0.	320.6	240.6	320.6	3.168E-07	3.149E-07	3.149E-07
C	.4	.09	1950.	0.	0.	253.6	154.7	253.6	1.910E-05	1.888E-05	1.888E-05
C	1.0	.25	1950.	0.	0.	253.6	154.7	253.6	8.064E-06	7.972E-06	7.972E-06
C	2.0	.66	1950.	0.	0.	253.6	154.7	253.6	3.988E-06	3.942E-06	3.942E-06
C	3.0	.51	1950.	0.	0.	253.6	154.7	253.6	2.688E-06	2.657E-06	2.657E-06
C	4.0	.51	1950.	0.	0.	253.6	154.7	253.6	2.027E-06	2.004E-06	2.004E-06
C	5.0	.55	1950.	0.	0.	253.6	154.7	253.6	1.613E-06	1.594E-06	1.594E-06
C	6.0	.66	1950.	0.	0.	253.6	154.7	253.6	1.349E-06	1.334E-06	1.334E-06
C	8.0	.73	1950.	0.	0.	253.6	154.7	253.6	1.011E-06	9.992E-07	9.992E-07
C	10.0	.36	1950.	0.	0.	253.6	154.7	253.6	8.082E-07	7.989E-07	7.989E-07
C	13.0	.22	1950.	0.	0.	253.6	154.7	253.6	6.225E-07	6.153E-07	6.153E-07
D	.4	.17	1950.	0.	0.	114.1	75.2	114.1	8.742E-05	8.301E-05	8.301E-05
D	1.0	.69	1950.	0.	0.	114.1	75.2	114.1	3.691E-05	3.505E-05	3.505E-05
D	2.0	2.80	1950.	0.	0.	114.1	75.2	114.1	1.825E-05	1.733E-05	1.733E-05
D	3.0	2.44	1950.	0.	0.	114.1	75.2	114.1	1.230E-05	1.168E-05	1.168E-05
D	4.0	2.37	1950.	0.	0.	114.1	75.2	114.1	9.279E-06	8.811E-06	8.811E-06
D	5.0	3.24	1950.	0.	0.	114.1	75.2	114.1	7.382E-06	7.009E-06	7.009E-06
D	6.0	2.77	1950.	0.	0.	114.1	75.2	114.1	6.174E-06	5.863E-06	5.863E-06
D	8.0	4.26	1950.	0.	0.	114.1	75.2	114.1	4.626E-06	4.393E-06	4.393E-06
D	10.0	2.48	1950.	0.	0.	114.1	75.2	114.1	3.699E-06	3.513E-06	3.513E-06
D	13.0	1.38	1950.	0.	0.	114.1	75.2	114.1	2.849E-06	2.705E-06	2.705E-06
D	18.0	.25	1950.	0.	0.	114.1	75.2	114.1	2.058E-06	1.954E-06	1.954E-06

E	.4	.50	1950.	0.	0.	195.7	22.3	195.7	1.722E-04	1.559E-04	1.559E-04
E	1.0	1.93	1950.	0.	0.	195.7	22.3	195.7	7.269E-05	6.581E-05	6.581E-05
E	2.0	4.52	1950.	0.	0.	195.7	22.3	195.7	3.595E-05	3.254E-05	3.254E-05
E	3.0	3.31	1950.	0.	0.	195.7	22.3	195.7	2.423E-05	2.194E-05	2.194E-05
E	4.0	2.26	1950.	0.	0.	195.7	22.3	195.7	1.827E-05	1.654E-05	1.654E-05
E	5.0	2.88	1950.	0.	0.	195.7	22.3	195.7	1.454E-05	1.316E-05	1.316E-05
E	6.0	3.64	1950.	0.	0.	195.7	22.3	195.7	1.216E-05	1.101E-05	1.101E-05
E	8.0	5.97	1950.	0.	0.	195.7	22.3	195.7	9.112E-06	8.249E-06	8.249E 06
E	10.0	4.01	1950.	0.	0.	195.7	22.3	195.7	7.285E-06	6.596E-06	6.596E-06
E	13.0	1.53	1950.	0.	0.	195.7	22.3	195.7	5.611E-06	5.080E-06	5.080E-06
E	18.0	.29	1950.	0.	0.	195.7	22.3	195.7	4.053E-06	3.670E-06	3.670E-06
F	.4	.47	1950.	0.	0.	303.4	8.4	303.4	2.935E-04	2.491E-04	2.491E-04
F	1.0	1.71	1950.	0.	0.	303.4	8.4	303.4	1.239E-04	1.052E-04	1.052E-04
F	2.0	5.24	1950.	0.	0.	303.4	8.4	303.4	6.128E-05	5.201E-05	5.201E-05
F	3.0	4.48	1950.	0.	0.	303.4	8.4	303.4	4.131E-05	3.506E-05	3.506E-05
F	4.0	3.31	1950.	0.	0.	303.4	8.4	303.4	3.215E-05	2.644E-05	2.644E-05
F	5.0	1.38	1950.	0.	0.	303.4	8.4	303.4	2.478E-05	2.103E-05	2.103E-05
F	6.0	1.24	1950.	0.	0.	303.4	8.4	303.4	2.073E-05	1.759E-05	1.759E-05
F	8.0	.98	1950.	0.	0.	303.4	8.4	303.4	1.553E-05	1.318E-05	1.318E-05
F	10.0	.55	1950.	0.	0.	303.4	8.4	303.4	1.242E-05	1.054E-05	1.054E-05
F	13.0	.11	1950.	0.	0.	303.4	8.4	303.4	9.565E-06	8.118E-06	8.118E-06
G	.4	.55	1950.	0.	0.	488.9	3.2	488.9	4.828E-04	3.733E-04	3.733E-04
G	1.0	1.60	1950.	0.	0.	488.9	3.2	488.9	2.039E-04	1.576E-04	1.576E-04
G	2.0	3.86	1950.	0.	0.	488.9	3.2	488.9	1.008E-04	7.794E-05	7.794E-05
G	3.0	1.78	1950.	0.	0.	488.9	3.2	488.9	6.795E-05	5.254E-05	5.254E-05
G	4.0	1.27	1950.	0.	0.	488.9	3.2	488.9	5.125E-05	3.962E-05	3.962E-05
G	5.0	.29	1950.	0.	0.	488.9	3.2	488.9	4.077E-05	3.152E-05	3.152E-05
G	6.0	.22	1950.	0.	0.	488.9	3.2	488.9	3.410E-05	2.637E-05	2.637E-05
G	8.0	.04	1950.	0.	0.	488.9	3.2	488.9	2.555E-05	1.976E-05	1.976E-05
G	13.0	.04	1950.	0.	0.	488.9	3.2	488.9	1.573E-05	1.217E-05	1.217E-05

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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:   CGS                               METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma-desert + P G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0SITE EXCLUSION BOUNDARY CALCULATIONS:
0 NNE SECTOR     BOUNDARY DISTANCE = 1950.0 METERS
0DESERT SIGMA VALUES USED.  MEANDER IS INCLUDED IN THESE VALUES- RG 1.145 MEANDER FACTORS ARE NOT USED.
 BUILDING WAKE CREDIT ALLOWED:   C=   .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0  3.733E-04  2.491E-04  1.576E-04  1.559E-04  1.052E-04  8.301E-05  7.794E-05  6.581E-05  5.254E-05  5.201E-05
        .547       1.016      2.619      3.119      4.831      5.000      8.860     10.790     12.575     17.819
      .04745     .08820     .22726     .27067     .41921     .43387     .76889     .93640    1.09127    1.54639
0  3.962E-05  3.506E-05  3.505E-05  3.254E-05  3.152E-05  2.644E-05  2.637E-05  2.194E-05  2.103E-05  1.976E-05
      19.094     23.574     24.266     28.782     29.073     32.387     32.606     35.920     37.304     37.341
     1.65701    2.04576    2.10581    2.49772    2.52300    2.81061    2.82958    3.11719    3.23729    3.24045
0  1.888E-05  1.759E-05  1.733E-05  1.654E-05  1.318E-05  1.316E-05  1.217E-05  1.168E-05  1.101E-05  1.054E-05
      37.429     38.667     41.471     43.729     44.713     47.590     47.626     50.066     53.708     54.255
     3.24810    3.35555    3.59892    3.79487    3.88021    4.12989    4.13305    4.34481    4.66086    4.70827
0  9.662E-06  8.811E-06  8.249E-06  8.118E-06  7.972E-06  7.009E-06  6.596E-06  5.863E-06  5.080E-06  4.393E-06
      54.315     56.682     62.655     62.764     63.019     66.261     70.267     73.035     74.564     78.825
     4.71348    4.91892    5.43725    5.44673    5.46885    5.75014    6.09780    6.33801    6.47075    6.84053
0  4.080E-06  3.942E-06  3.693E-06  3.670E-06  3.513E-06  2.705E-06  2.657E-06  2.017E-06  2.004E-06  1.954E-06
      79.008     79.663     79.860     80.151     82.628     84.012     84.522     85.177     85.687     85.942
     6.85634    6.91323    6.93030    6.95558    7.17050    7.29060    7.33485    7.39174    7.43598    7.45811
0  1.594E-06  1.559E-06  1.360E-06  1.334E-06  1.026E-06  9.992E-07  8.255E-07  7.989E-07  7.711E-07  6.825E-07
      86.488     87.180     87.472     88.127     88.673     89.402     85.948     90.312     92.097     92.570
     7.50552    7.56557    7.59085    7.64774    7.69515    7.75836    7.80577    7.83738    7.99224    8.03333
0  6.153E-07  5.198E-07  5.114E-07  4.089E-07  3.920E-07  3.149E-07  3.119E-07  2.609E-07  1.955E-07  1.563E-07
      92.789     94.027     94.719     95.010     96.249     96.394     97.742     98.652     99.709     99.891
     8.05229    8.15975    8.21980    8.24509    8.35255    8.36519    8.48213    8.56114    8.65280    8.66860
    1.204E-07  8.695E-08
      99.964    100.000
     8.67492    8.67808
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          X/Q PERCENTILES
  (BASED ON THE UPPER ENVELOPE OF THE
  ORDERED X/Q-FREQUENCY VALUES, AND AS
  PLOTTED ON A LOG-NORMAL GRAPH.)
0 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)=    .270
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=   1.545
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   2.495
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   3.234
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   3.792
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   5.433
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 8)=   6.094
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 9)=   6.334
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0  K   I    XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
  10   1      -7.89311 -13.40578  -1.66776
  10   2      -8.76654 -13.66530   1.76106
  10   3      -9.86416 -14.98350  -2.37177
  10   4     -10.33296 -17.88185  -3.84993
  10   5     -10.76940 -16.92771  -3.33346
  10   6      11.00948 -18.22671  -4.06513
  10   7     -11.70542 -17.97172  -3.90618
  10   8     -11.92912 -21.21210  -6.00089
  10   9     -12.04686      NUMXQ(K)=  9
     2.797E-04                .087              1.000
     1.592E-04                .260              3.000
     1.182E-04                .434              5.000
     7.676E-05                .868             10.000
     5.859E-05               1.302             15.000
     4.660E-05               1.736             20.000
     3.748E-05               2.170             25.000
     3.039E-05               2.603             30.000
     2.346E-05               3.037             35.000
     1.895E-05               3.471             40.000
     1.568E-05               3.905             45.000
     1.284E-05               4.339             50.000
     1.068E-05               4.773             55.000
     8.994E-06               5.207             60.000
     7.683E-06               5.641             65.000
     6.645E-06               6.075             70.000
0    1.085E-04               0.5                5.76
0ANNUAL AVERAGE =   6.73E-06
0X= 10      FIVEXQ(K)= 1.085E-04      FIVEPR(K)= 5.762
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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23:4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE NE SECTOR.

STABILITY CLASS	WINDSPEED AT 10.0 METER/SEC	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=1431.SQ.METERS	USED
A	.4	.22	1950.	0.	0.	556.3	364.0	556.3	3.701E-06	3.693E-06	3.693E-06
A	1.0	.76	1950.	0.	0.	556.3	364.0	556.3	1.563E-06	1.559E-06	1.559E-06
A	2.0	1.68	1950.	0.	0.	556.3	364.0	556.3	7.728E-07	7.711E-07	7.711E-07
A	3.0	1.25	1950.	0.	0.	556.3	364.0	556.3	5.209E-07	5.198E-07	5.198E-07
A	4.0	1.30	1950.	0.	0.	556.3	364.0	556.3	3.929E-07	3.920E-07	3.920E-07
A	5.0	1.25	1950.	0.	0.	556.3	364.0	556.3	3.126E-07	3.119E-07	3.119E-07
A	6.0	.60	1950.	0.	0.	556.3	364.0	556.3	2.614E-07	2.609E-07	2.609E-07
A	8.0	1.14	1950.	0.	0.	556.3	364.0	556.3	1.959E-07	1.955E-07	1.955E-07
A	10.0	.60	1950.	0.	0.	556.3	364.0	556.3	1.566E-07	1.563E-07	1.563E-07
A	13.0	.05	1950.	0.	0.	556.3	364.0	556.3	1.206E-07	1.204E-07	1.204E-07
B	.4	.05	1950.	0.	0.	320.6	240.6	320.6	9.719E-06	9.662E-06	9.662E-06
B	1.0	.16	1950.	0.	0.	320.6	240.6	320.6	4.104E-06	4.080E-06	4.080E-06
B	2.0	.87	1950.	0.	0.	320.6	240.6	320.6	2.029E-06	2.017E-06	2.017E-06
B	3.0	.54	1950.	0.	0.	320.6	240.6	320.6	1.368E-06	1.360E-06	1.360E-06
B	4.0	.38	1950.	0.	0.	320.6	240.6	320.6	1.032E-06	1.026E-06	1.026E-06
B	5.0	.54	1950.	0.	0.	320.6	240.6	320.6	8.208E-07	8.159E-07	8.159E-07
B	6.0	.27	1950.	0.	0.	320.6	240.6	320.6	6.865E-07	6.825E-07	6.825E-07
B	8.0	.87	1950.	0.	0.	320.6	240.6	320.6	5.144E-07	5.114E-07	5.114E-07
B	10.0	.43	1950.	0.	0.	320.6	240.6	320.6	4.113E-07	4.089E-07	4.089E-07
B	13.0	.43	1950.	0.	0.	320.6	240.6	320.6	3.168E-07	3.149E-07	3.149E-07
C	.4	.13	1950.	0.	0.	253.6	154.7	253.6	1.910E-05	1.888E-05	1.888E-05
C	1.0	.38	1950.	0.	0.	253.6	154.7	253.6	8.064E-06	7.972E-06	7.972E-06
C	2.0	.49	1950.	0.	0.	253.6	154.7	253.6	3.988E-06	3.942E-06	3.942E-06
C	3.0	.49	1950.	0.	0.	253.6	154.7	253.6	2.688E-06	2.657E-06	2.657E 06
C	4.0	.76	1950.	0.	0.	253.6	154.7	253.6	2.027E-06	2.004E-06	2.004E-06
C	5.0	.81	1950.	0.	0.	253.6	154.7	253.6	1.613E-06	1.594E-06	1.594E-06
C	6.0	.38	1950.	0.	0.	253.6	154.7	253.6	1.349E-06	1.334E-06	1.334E-06
C	8.0	.92	1950.	0.	0.	253.6	154.7	253.6	1.011E-06	9.992E-07	9.992E-07
C	10.0	.70	1950.	0.	0.	253.6	154.7	253.6	8.082E-07	7.989E-07	7.989E-07
C	13.0	.16	1950.	0.	0.	253.6	154.7	253.6	6.225E-07	6.153E-07	6.153E-07
D	.4	.53	1950.	0.	0.	114.1	75.2	114.1	8.742E-05	8.301E-05	8.301E-05
D	1.0	2.17	1950.	0.	0.	114.1	75.2	114.1	3.691E-05	3.505E-05	3.505E-05
D	2.0	2.33	1950.	0.	0.	114.1	75.2	114.1	1.825E-05	1.733E-05	1.733E-05
D	3.0	2.87	1950.	0.	0.	114.1	75.2	114.1	1.230E-05	1.168E-05	1.168E-05
D	4.0	2.76	1950.	0.	0.	114.1	75.2	114.1	9.279E-06	8.811E-06	8.811E-06
D	5.0	2.44	1950.	0.	0.	114.1	75.2	114.1	7.382E-06	7.009E-06	7.009E-06
D	6.0	1.84	1950.	0.	0.	114.1	75.2	114.1	6.174E-06	5.863E-06	5.863E-06
D	8.0	3.47	1950.	0.	0.	114.1	75.2	114.1	4.626E-06	4.393E-06	4.393E-06
D	10.0	2.44	1950.	0.	0.	114.1	75.2	114.1	3.699E-06	3.513E-06	3.513E-06
D	13.0	1.73	1950.	0.	0.	114.1	75.2	114.1	2.849E-06	2.705E-06	2.705E-06
D	18.0	.27	1950.	0.	0.	114.1	75.2	114.1	2.058E 06	1.954E-06	1.954E-06
E	.4	.77	1950.	0.	0.	195.7	22.3	195.7	1.722E-04	1.559E-04	1.559E-04
E	1.0	2.98	1950.	0.	0.	195.7	22.3	195.7	7.269E-05	6.581E-05	6.581E-05
E	2.0	4.82	1950.	0.	0.	195.7	22.3	195.7	3.595E-05	3.254E-05	3.254E-05
E	3.0	3.90	1950.	0.	0.	195.7	22.3	195.7	2.423E-05	2.194E-05	2.194E-05
E	4.0	3.41	1950.	0.	0.	195.7	22.3	195.7	1.827E-05	1.654E-05	1.654E-05
E	5.0	2.82	1950.	0.	0.	195.7	22.3	195.7	1.454E-05	1.316E-05	1.316E-05
E	6.0	3.41	1950.	0.	0.	195.7	22.3	195.7	1.216E-05	1.101E-05	1.101E-05
E	8.0	3.85	1950.	0.	0.	195.7	22.3	195.7	9.112E-06	8.249E-06	8.249E-06
E	10.0	3.36	1950.	0.	0.	195.7	22.3	195.7	7.285E-06	6.596E-06	6.596E-06
E	13.0	1.41	1950.	0.	0.	195.7	22.3	195.7	5.611E-06	5.080E-06	5.080E-06
E	18.0	.27	1950.	0.	0.	195.7	22.3	195.7	4.053E-06	3.670E-06	3.670E-06
F	.4	.83	1950.	0.	0.	303.4	8.4	303.4	2.935E-04	2.491E-04	2.491E-04
F	1.0	3.03	1950.	0.	0.	303.4	8.4	303.4	1.239E-04	1.052E-04	1.052E-04
F	2.0	5.20	1950.	0.	0.	303.4	8.4	303.4	6.128E-05	5.201E-05	5.201E-05
F	3.0	3.52	1950.	0.	0.	303.4	8.4	303.4	4.131E-05	3.506E-05	3.506E-05
F	4.0	2.00	1950.	0.	0.	303.4	8.4	303.4	3.115E-05	2.644E-05	2.644E-05
F	5.0	.87	1950.	0.	0.	303.4	8.4	303.4	2.478E-05	2.103E-05	2.103E-05
F	6.0	.54	1950.	0.	0.	303.4	8.4	303.4	2.073E-05	1.759E-05	1.759E-05
F	8.0	.54	1950.	0.	0.	303.4	8.4	303.4	1.553E-05	1.318E-05	1.318E-05
F	10.0	.05	1950.	0.	0.	303.4	8.4	303.4	1.242E-05	1.054E-05	1.054E-05
F	13.0	.11	1950.	0.	0.	303.4	8.4	303.4	9.565E-06	8.118E-06	8.118E-06
G	.4	1.15	1950.	0.	0.	488.9	3.2	488.9	4.828E-04	3.733E-04	3.733E-04
G	1.0	3.36	1950.	0.	0.	488.9	3.2	488.9	2.039E-04	1.576E-04	1.576E-04
G	2.0	4.06	1950.	0.	0.	488.9	3.2	488.9	1.008E-04	7.794E-05	7.794E-05
G	3.0	1.41	1950.	0.	0.	488.9	3.2	488.9	6.795E-05	5.254E-05	5.254E-05
G	4.0	.81	1950.	0.	0.	488.9	3.2	488.9	5.125E-05	3.962E-05	3.962E-05
G	18.0	.05	1950.	0.	0.	488.9	3.2	488.9	1.137E-05	8.789E-06	8.789E-06

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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:   CGS                               METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10    75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-P.inp   output file: P96-99-P.out  sigma=desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0SITE EXCLUSION BOUNDARY CALCULATIONS:
0  NE SECTOR      BOUNDARY DISTANCE = 1950.0 METERS
0DESERT SIGMA VALUES USED.  MEANDER IS INCLUDED IN THESE VALUES- RG 1.145 MEANDER FACTORS ARE NOT USED.
 BUILDING WAKE CREDIT ALLOWED:   C=    .5     A=  2861.     D=    70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0   3.733E-04  2.491E-04  1.576E-04  1.559E-04  1.052E-04  8.301E-05  7.794E-05  6.581E-05  5.254E-05  5.201E-05
        1.146      1.978      5.337      6.109      9.143      9.672     13.735     16.714     18.123     23.324
      .06687     .11541     .31137     .35641     .53340     .56427     .80131     .97514    1.05731    1.36073
0   3.962E-05  3.506E-05  3.505E-05  3.254E-05  2.644E-05  2.194E-05  2.103E-05  1.888E-05  1.759E-05  1.733E-05
       24.136     27.657     29.824     34.646     36.650     40.551     41.417     41.549     42.090     44.420
      1.40814    1.61357    1.73999    2.02128    2.13822    2.36578    2.41635    2.42400    2.45561    2.59151
0   1.654E-05  1.318E-05  1.316E-05  1.168E-05  1.101E-05  1.054E-05  9.662E-06  8.811E-06  8.789E-06  8.249E-06
       47.833     48.374     51.191     54.063     57.476     57.530     57.583     60.346     60.400     64.247
      2.79063    2.82223    2.98658    3.15409    3.35320    3.35637    3.35949    3.52068    3.52384    3.74824
0   8.118E-06  7.972E-06  7.009E-06  6.596E-06  5.863E-06  5.080E-06  4.393E-06  4.080E-06  3.942E-06  3.693E-06
       64.355     64.734     67.172     70.531     72.373     73.781     77.248     77.411     77.898     78.114
      3.75456    3.77668    3.91891    4.11486    4.22232    4.30450    4.50677    4.51625    4.54470    4.55728
0   3.670E-06  3.513E-06  2.705E-06  2.657E-06  2.017E-06  2.004E-06  1.954E-06  1.594E-06  1.559E-06  1.360E-06
       78.385     80.823     82.556     83.044     83.910     84.669     84.940     85.752     86.511     87.053
      4.57308    4.71530    4.81644    4.84489    4.89545    4.93970    4.95551    5.00291    5.04716    5.07877
0   1.334E-06  1.026E-06  9.992E-07  8.159E-07  7.989E-07  7.711E-07  6.825E-07  6.153E-07  5.198E-07  5.114E-07
       87.432     87.811     88.732     89.274     89.978     91.657     91.928     92.091     93.337     94.203
      5.10089    5.12301    5.17674    5.20835    5.24944    5.34741    5.36322    5.37270    5.44539    5.49596
0   4.089E-07  3.920E-07  3.149E-07  3.119E-07  2.609E-07  1.955E-07  1.563E-07  1.204E-07
       94.637     95.937     96.370     97.616     98.212     99.350     95.946    100.000
      5.52124    5.59710    5.62238    5.69508    5.72984    5.79621    5.83098    5.83414
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0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=    .356
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=   1.359
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   2.019
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   2.788
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   3.350
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   4.111
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 8)=   4.503
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 9)=   4.712
0  K   I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
  11   1      -7.89311 -13.31378   -1.68968
  11   2      -8.76654 -14.89098   -2.27575
  11   3      -9.86416 -16.37451   -2.94737
  11   4     -10.33296 -20.46327   -4.94207
  11   5     -11.00948 -20.59740   -5.01218
  11   6     -11.41681 -21.42536   -5.46421
  11   7     -11.92912 -28.41419   -9.48564
  11   8     -12.33547 -29.90431  -10.36474
  11   9     -12.55917      NUMXQ(K)=  9
                                                    BACK EXTRAPOLATION FOR  1 PERCENTILE.
     3.987E-04                .058                1.000
     2.296E-04                .175                3.000
     1.743E-04                .292                5.000
     1.062E-04                .583               10.000
     7.614E-05                .875               15.000
     5.954E-05               1.167               20.000
     4.799E-05               1.459               25.000
     3.872E-05               1.750               30.000
     3.187E-05               2.042               35.000
     2.418E-05               2.334               40.000
     1.886E-05               2.625               45.000
     1.501E-05               2.917               50.000
     1.215E-05               3.209               55.000
     9.902E-06               3.500               60.000
     8.110E-06               3.792               65.000
     6.724E-06               4.084               70.000
     5.017E-06               4.376               75.000
     3.695E-06               4.667               80.000
0    1.200E-04               0.5                  8.57
0ANNUAL AVERAGE =   6.46E-06
0K= 11     FIVEXQ(K)= 1.200E-04     FIVEPR(K)= 8.570
```

1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23: 4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE ENE SECTOR.

STABILITY CLASS	WINDSPEED FREQUENCY METER/SEC AT 10.0 METERS	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=1431.SQ.METERS	USED
A	.4	.39	1950.	0.	0.	556.3	364.0	556.3	3.701E-06	3.693E-06	3.693E-06
A	1.0	1.36	1950.	0.	0.	556.3	364.0	556.3	1.563E-06	1.559E-06	1.559E-06
A	2.0	1.51	1950.	0.	0.	556.3	364.0	556.3	7.728E-07	7.711E-07	7.711E-07
A	3.0	1.29	1950.	0.	0.	556.3	364.0	556.3	5.209E-07	5.198E-07	5.198E-07
A	4.0	.91	1950.	0.	0.	556.3	364.0	556.3	3.929E-07	3.920E-07	3.920E-07
A	5.0	.61	1950.	0.	0.	556.3	364.0	556.3	3.126E-07	3.119E-07	3.119E-07
A	6.0	.30	1950.	0.	0.	556.3	364.0	556.3	2.614E-07	2.609E-07	2.609E-07
A	8.0	.98	1950.	0.	0.	556.3	364.0	556.3	1.959E-07	1.955E-07	1.955E-07
A	10.0	.61	1950.	0.	0.	556.3	364.0	556.3	1.566E-07	1.563E-07	1.563E-07
A	13.0	.23	1950.	0.	0.	556.3	364.0	556.3	1.206E-07	1.204E-07	1.204E-07
B	.4	.07	1950.	0.	0.	320.6	240.6	320.6	9.719E-06	9.662E-06	9.662E-06
B	1.0	.23	1950.	0.	0.	320.6	240.6	320.6	4.104E-06	4.080E-06	4.080E-06
B	2.0	.68	1950.	0.	0.	320.6	240.6	320.6	2.029E-06	2.017E-06	2.017E-06
B	3.0	.38	1950.	0.	0.	320.6	240.6	320.6	1.368E-06	1.360E-06	1.360E-06
B	4.0	.45	1950.	0.	0.	320.6	240.6	320.6	1.032E-06	1.026E-06	1.026E-06
B	5.0	.30	1950.	0.	0.	320.6	240.6	320.6	8.208E-07	8.159E-07	8.159E-07
B	8.0	.15	1950.	0.	0.	320.6	240.6	320.6	5.144E-07	5.114E-07	5.114E-07
B	10.0	.30	1950.	0.	0.	320.6	240.6	320.6	4.113E-07	4.089E-07	4.089E-07
C	.4	.08	1950.	0.	0.	253.6	154.7	253.6	1.910E-05	1.888E-05	1.888E-05
C	1.0	.23	1950.	0.	0.	253.6	154.7	253.6	8.064E-06	7.972E-06	7.972E-06
C	2.0	1.06	1950.	0.	0.	253.6	154.7	253.6	3.988E-06	3.942E-06	3.942E-06
C	3.0	.45	1950.	0.	0.	253.6	154.7	253.6	2.688E-06	2.657E-06	2.657E-06
C	4.0	.53	1950.	0.	0.	253.6	154.7	253.6	2.027E-06	2.004E-06	2.004E-06
C	5.0	.83	1950.	0.	0.	253.6	154.7	253.6	1.613E-06	1.594E-06	1.594E-06
C	6.0	.38	1950.	0.	0.	253.6	154.7	253.6	1.349E-06	1.334E-06	1.334E-06
C	8.0	.68	1950.	0.	0.	253.6	154.7	253.6	1.011E-06	9.992E-07	9.992E-07
C	10.0	1.06	1950.	0.	0.	253.6	154.7	253.6	8.082E-07	7.989E-07	7.989E-07
C	13.0	.08	1950.	0.	0.	253.6	154.7	253.6	6.225E-07	6.153E-07	6.153E-07
D	.4	.46	1950.	0.	0.	114.1	75.2	114.1	8.742E-05	8.301E-05	8.301E-05
D	1.0	1.89	1950.	0.	0.	114.1	75.2	114.1	3.691E-05	3.505E-05	3.505E-05
D	2.0	2.95	1950.	0.	0.	114.1	75.2	114.1	1.825E-05	1.733E-05	1.733E-05
D	3.0	3.55	1950.	0.	0.	114.1	75.2	114.1	1.230E-05	1.168E-05	1.168E-05
D	4.0	1.89	1950.	0.	0.	114.1	75.2	114.1	9.279E-06	8.811E-06	8.811E-06
D	5.0	1.29	1950.	0.	0.	114.1	75.2	114.1	7.382E-06	7.009E-06	7.009E-06
D	6.0	1.97	1950.	0.	0.	114.1	75.2	114.1	6.174E-06	5.863E-06	5.863E-06
D	8.0	3.71	1950.	0.	0.	114.1	75.2	114.1	4.626E-06	4.393E-06	4.393E-06
D	10.0	3.18	1950.	0.	0.	114.1	75.2	114.1	3.699E-06	3.513E-06	3.513E-06
D	13.0	.83	1950.	0.	0.	114.1	75.2	114.1	2.849E-06	2.705E-06	2.705E-06

E	.4	1.02	1950.	0.	0.	195.7	22.3	195.7	1.722E-04	1.559E-04	1.559E-04
E	1.0	3.93	1950.	0.	0.	195.7	22.3	195.7	7.269E-05	6.581E-05	6.581E-05
E	2.0	7.34	1950.	0.	0.	195.7	22.3	195.7	3.595E-05	3.254E-05	3.254E-05
E	3.0	5.22	1950.	0.	0.	195.7	22.3	195.7	2.423E-05	2.194E-05	2.194E-05
E	4.0	3.40	1950.	0.	0.	195.7	22.3	195.7	1.827E-05	1.654E-05	1.654E-05
E	5.0	2.57	1950.	0.	0.	195.7	22.3	195.7	1.454E-05	1.316E-05	1.316E-05
E	6.0	2.50	1950.	0.	0.	195.7	22.3	195.7	1.216E-05	1.101E-05	1.101E-05
E	8.0	2.87	1950.	0.	0.	195.7	22.3	195.7	9.112E-06	8.249E-06	8.249E-06
E	10.0	.91	1950.	0.	0.	195.7	22.3	195.7	7.285E-06	6.596E-06	6.596E-06
E	13.0	.45	1950.	0.	0.	195.7	22.3	195.7	5.611E-06	5.080E-06	5.080E-06
F	.4	1.37	1950.	0.	0.	303.4	8.4	303.4	2.935E-04	2.491E-04	2.491E-04
F	1.0	4.99	1950.	0.	0.	303.4	8.4	303.4	1.239E-04	1.052E-04	1.052E-04
F	2.0	6.35	1950.	0.	0.	303.4	8.4	303.4	6.128E-05	5.201E-05	5.201E-05
F	3.0	4.39	1950.	0.	0.	303.4	8.4	303.4	4.131E-05	3.506E-05	3.506E-05
F	4.0	2.12	1950.	0.	0.	303.4	8.4	303.4	3.115E-05	2.644E-05	2.644E-05
F	5.0	1.21	1950.	0.	0.	303.4	8.4	303.4	2.478E-05	2.103E-05	2.103E-05
F	6.0	.38	1950.	0.	0.	303.4	8.4	303.4	2.073E-05	1.759E-05	1.759E-05
F	8.0	.38	1950.	0.	0.	303.4	8.4	303.4	1.553E-05	1.318E-05	1.318E-05
F	13.0	.08	1950.	0.	0.	303.4	8.4	303.4	9.565E-06	8.118E-06	8.118E-06
G	.4	1.47	1950.	0.	0.	488.9	3.2	488.9	4.828E-04	3.733E-04	3.733E-04
G	1.0	4.31	1950.	0.	0.	488.9	3.2	488.9	2.039E-04	1.576E-04	1.576E-04
G	2.0	2.87	1950.	0.	0.	488.9	3.2	488.9	1.008E-04	7.794E-05	7.794E-05
G	3.0	1.21	1950.	0.	0.	488.9	3.2	488.9	6.795E-05	5.254E-05	5.254E-05
G	4.0	.45	1950.	0.	0.	488.9	3.2	488.9	5.125E-05	3.962E-05	3.962E-05
G	5.0	.30	1950.	0.	0.	488.9	3.2	488.9	4.077E-05	3.152E-05	3.152E-05
G	6.0	.08	1950.	0.	0.	488.9	3.2	488.9	3.410E-05	2.637E-05	2.637E-05

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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:  CGS                                METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma=desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0SITE EXCLUSION BOUNDARY CALCULATIONS:
0 ENE SECTOR      BOUNDARY DISTANCE = 1950.0 METERS
0DESERT SIGMA VALUES USED.  MEANDER IS INCLUDED IN THESE VALUES- RG 1.145 MEANDER FACTORS ARE NOT USED.
 BUILDING WAKE CREDIT ALLOWED:   C=   .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0   3.733E-04  2.491E-04  1.576E-04  1.559E-04  1.052E-04  8.301E-05  7.794E-05  6.581E-05  5.254E-05  5.201E-05
        1.471      2.840      7.151      8.170     13.161     13.623     16.497     20.429     21.639     27.992
         .06147     .11869     .29884     .34143     .55002     .56931     .68942     .85376     .90433    1.16982
0   3.962E-05  3.506E-05  3.505E-05  3.254E-05  3.152E-05  2.644E-05  2.637E-05  2.194E-05  2.103E-05  1.888E-05
       28.446     32.832     34.723     42.059     42.361     44.479     44.554     49.773     50.983     51.061
        1.18878    1.37210    1.45111    1.75768    1.77033    1.85882    1.86198    2.08006    2.13063    2.13391
0   1.759E-05  1.733E-05  1.654E-05  1.318E-05  1.316E-05  1.168E-05  1.101E-05  9.662E-06  8.811E-06  8.249E-06
       51.439     54.389     57.792     58.170     60.741     64.296     66.792     66.866     68.757     71.631
        2.14971    2.27297    2.41520    2.43100    2.53846    2.68700    2.79130    2.79443    2.87344    2.99354
0   8.118E-06  7.972E-06  7.009E-06  6.596E-06  5.863E-06  5.080E-06  4.393E-06  4.080E-06  3.942E-06  3.693E-06
       71.707     71.933     73.219     74.127     76.093     76.547     80.252     80.479     81.538     81.925
        2.99670    3.00618    3.05991    3.09784    3.18002    3.19898    3.35385    3.36333    3.40758    3.42375
0   3.513E-06  2.705E-06  2.657E-06  2.017E-06  2.004E-06  1.594E-06  1.559E-06  1.360E-06  1.334E-06  1.026E-06
       85.101     85.933     86.387     87.068     87.597     88.429     89.790     90.168     90.547     91.000
        3.55649    3.59126    3.61022    3.63866    3.66079    3.69555    3.75244    3.76825    3.78405    3.80301
0   9.992E-07  8.159E-07  7.989E-07  7.711E-07  6.153E-07  5.198E-07  5.114E-07  4.089E-07  3.920E-07  3.119E-07
       91.681     91.984     93.042     94.555     94.631     95.916     96.067     96.370     97.277     97.882
        3.83146    3.84410    3.88835    3.95156    3.95472    4.00845    4.01477    4.02741    4.06534    4.09062
0   2.609E-07  1.955E-07  1.563E-07  1.204E-07
       98.185     99.168     99.773    100.000
        4.10327    4.14435    4.16964    4.17912
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0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=    .341
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=    .549
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   1.168
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   1.756
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   2.413
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   2.789
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 8)=   2.991
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 9)=   3.351
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(10)=   3.553
0  K   I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
  12   1     -7.89311 -13.25285   1.65823
  12   2     -8.76654 -15.32152  -2.42286
  12   3     -9.15996 -15.65424  -2.55369
  12   4     -9.86416 -16.49446  -2.92427
  12   5    -10.33296 -21.13936  -5.12875
  12   6    -11.00948 -23.92265  -6.53792
  12   7    -11.41681 -29.42709  -9.41558
  12   8    -11.70542 -35.14363 -12.45281
  12   9    -12.33547 -27.78733  -8.43641
  12  10    -12.55917      NUMXQ(K)= 10

                                                    BACK EXTRAPOLATION FOR  1 PERCENTILE.
     4.470E-04              .042             1.000
     2.638E-04              .125             3.000
     2.029E-04              .209             5.000
     1.322E-04              .418            10.000
     9.350E-05              .627            15.000
     7.174E-05              .836            20.000
     5.804E-05             1.045            25.000
     4.811E-05             1.254            30.000
     4.034E-05             1.463            35.000
     3.453E-05             1.672            40.000
     2.826E-05             1.881            45.000
     2.261E-05             2.090            50.000
     1.842E-05             2.299            55.000
     1.490E-05             2.507            60.000
     1.189E-05             2.716            65.000
     9.075E-06             2.925            70.000
     6.403E-06             3.134            75.000
     4.471E-06             3.343            80.000
     3.529E-06             3.552            85.000
0    1.140E-04             0.5              11.96
0ANNUAL AVERAGE =   5.66E-06
0K= 12     FIVEXQ(K)= 1.140E-04     FIVEPR(K)=11.964
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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23: 4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM PRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE E SECTOR.

STABILITY CLASS	WINDSPEED AT 10.0 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	USED CA=1431.SQ.METERS
A	.4	.28	1950.	0.	0.	556.3	364.0	556.3	3.701E-06	3.693E-06	3.693E-06
A	1.0	1.00	1950.	0.	0.	556.3	364.0	556.3	1.563E-06	1.559E-06	1.559E-06
A	2.0	2.00	1950.	0.	0.	556.3	364.0	556.3	7.728E-07	7.711E-07	7.711E-07
A	3.0	.60	1950.	0.	0.	556.3	364.0	556.3	5.209E-07	5.198E-07	5.198E-07
A	4.0	.73	1950.	0.	0.	556.3	364.0	556.3	3.929E-07	3.920E-07	3.920E-07
A	5.0	.53	1950.	0.	0.	556.3	364.0	556.3	3.126E-07	3.119E-07	3.119E-07
A	6.0	.33	1950.	0.	0.	556.3	364.0	556.3	2.614E-07	2.609E-07	2.609E-07
A	8.0	.60	1950.	0.	0.	556.3	364.0	556.3	1.959E-07	1.955E-07	1.955E-07
A	10.0	.47	1950.	0.	0.	556.3	364.0	556.3	1.566E-07	1.563E-07	1.563E-07
A	13.0	.20	1950.	0.	0.	556.3	364.0	556.3	1.206E-07	1.204E-07	1.204E-07
B	.4	.09	1950.	0.	0.	320.6	240.6	320.6	9.719E-06	9.662E-06	9.662E-06
B	1.0	.27	1950.	0.	0.	320.6	240.6	320.6	4.104E-06	4.080E-06	4.080E-06
B	2.0	.60	1950.	0.	0.	320.6	240.6	320.6	2.029E-06	2.017E-06	2.017E-06
B	3.0	.33	1950.	0.	0.	320.6	240.6	320.6	1.368E-06	1.360E-06	1.360E-06
B	4.0	.40	1950.	0.	0.	320.6	240.6	320.6	1.032E-06	1.026E-06	1.026E-06
B	5.0	.40	1950.	0.	0.	320.6	240.6	320.6	8.208E-07	8.159E-07	8.159E-07
B	6.0	.60	1950.	0.	0.	320.6	240.6	320.6	6.865E-07	6.825E-07	6.825E-07
B	8.0	.67	1950.	0.	0.	320.6	240.6	320.6	5.144E-07	5.114E-07	5.114E-07
B	10.0	.07	1950.	0.	0.	320.6	240.6	320.6	4.113E-07	4.089E-07	4.089E-07
B	13.0	.27	1950.	0.	0.	320.6	240.6	320.6	3.168E-07	3.149E-07	3.149E-07
C	.4	.07	1950.	0.	0.	253.6	154.7	253.6	1.910E-05	1.888E-05	1.888E-05
C	1.0	.20	1950.	0.	0.	253.6	154.7	253.6	8.064E-06	7.972E-06	7.972E-06
C	2.0	.47	1950.	0.	0.	253.6	154.7	253.6	3.988E-06	3.942E-06	3.942E-06
C	3.0	.60	1950.	0.	0.	253.6	154.7	253.6	2.688E-06	2.657E-06	2.657E-06
C	4.0	.53	1950.	0.	0.	253.6	154.7	253.6	2.027E-06	2.004E-06	2.004E-06
C	5.0	.47	1950.	0.	0.	253.6	154.7	253.6	1.613E-06	1.594E-06	1.594E-06
C	6.0	.47	1950.	0.	0.	253.6	154.7	253.6	1.349E-06	1.334E-06	1.334E-06
C	8.0	.67	1950.	0.	0.	253.6	154.7	253.6	1.011E-06	9.992E-07	9.992E-07
C	10.0	.27	1950.	0.	0.	253.6	154.7	253.6	8.082E-07	7.989E-07	7.989E-07
C	13.0	.07	1950.	0.	0.	253.6	154.7	253.6	6.225E-07	6.153E-07	6.153E-07
D	.4	.57	1950.	0.	0.	114.1	75.2	114.1	8.742E-05	8.301E-05	8.301E-05
D	1.0	2.33	1950.	0.	0.	114.1	75.2	114.1	3.691E-05	3.505E-05	3.505E-05
D	2.0	3.33	1950.	0.	0.	114.1	75.2	114.1	1.825E-05	1.733E-05	1.733E-05
D	3.0	1.93	1950.	0.	0.	114.1	75.2	114.1	1.230E-05	1.168E-05	1.168E-05
D	4.0	2.13	1950.	0.	0.	114.1	75.2	114.1	9.279E-06	8.811E-06	8.811E-06
D	5.0	2.67	1950.	0.	0.	114.1	75.2	114.1	7.382E-06	7.009E-06	7.009E-06
D	6.0	1.93	1950.	0.	0.	114.1	75.2	114.1	6.174E-06	5.863E-06	5.863E-06
D	8.0	2.27	1950.	0.	0.	114.1	75.2	114.1	4.626E-06	4.393E-06	4.393E-06
D	10.0	1.20	1950.	0.	0.	114.1	75.2	114.1	3.699E-06	3.513E-06	3.513E-06
D	13.0	.33	1950.	0.	0.	114.1	75.2	114.1	2.849E-06	2.705E-06	2.705E-06
D	18.0	.13	1950.	0.	0.	114.1	75.2	114.1	2.058E-06	1.954E-06	1.954E-06
E	.4	1.07	1950.	0.	0.	195.7	22.3	195.7	1.722E-04	1.559E-04	1.559E-04
E	1.0	4.13	1950.	0.	0.	195.7	22.3	195.7	7.269E-05	6.581E-05	6.581E-05
E	2.0	6.53	1950.	0.	0.	195.7	22.3	195.7	3.595E-05	3.254E-05	3.254E-05
E	3.0	5.40	1950.	0.	0.	195.7	22.3	195.7	2.423E-05	2.194E-05	2.194E-05
E	4.0	5.73	1950.	0.	0.	195.7	22.3	195.7	1.827E-05	1.654E-05	1.654E-05
E	5.0	2.87	1950.	0.	0.	195.7	22.3	195.7	1.454E-05	1.316E-05	1.316E-05
E	6.0	2.87	1950.	0.	0.	195.7	22.3	195.7	1.216E-05	1.101E-05	1.101E-05
E	8.0	2.73	1950.	0.	0.	195.7	22.3	195.7	9.112E-06	8.249E-06	8.249E 06
E	10.0	.80	1950.	0.	0.	195.7	22.3	195.7	7.285E-06	6.596E-06	6.596E-06
E	13.0	.40	1950.	0.	0.	195.7	22.3	195.7	5.611E-06	5.080E-06	5.080E-06
F	.4	1.37	1950.	0.	0.	303.4	8.4	303.4	2.935E-04	2.491E-04	2.491E-04
F	1.0	5.00	1950.	0.	0.	303.4	8.4	303.4	1.239E-04	1.052E-04	1.052E-04
F	2.0	6.80	1950.	0.	0.	303.4	8.4	303.4	6.128E-05	5.201E-05	5.201E-05
F	3.0	3.47	1950.	0.	0.	303.4	8.4	303.4	4.131E-05	3.506E-05	3.506E-05
F	4.0	3.00	1950.	0.	0.	303.4	8.4	303.4	3.115E-05	2.644E-05	2.644E-05
F	5.0	2.13	1950.	0.	0.	303.4	8.4	303.4	2.478E-05	2.103E-05	2.103E-05
F	6.0	1.07	1950.	0.	0.	303.4	8.4	303.4	2.073E-05	1.759E-05	1.759E-05
F	8.0	.13	1950.	0.	0.	303.4	8.4	303.4	1.553E-05	1.318E-05	1.318E-05
F	10.0	.07	1950.	0.	0.	303.4	8.4	303.4	1.242E-05	1.054E-05	1.054E-05
G	.4	1.41	1950.	0.	0.	488.9	3.2	488.9	4.828E-04	3.733E-04	3.733E-04
G	1.0	4.13	1950.	0.	0.	488.9	3.2	488.9	2.039E-04	1.576E-04	1.576E-04
G	2.0	3.60	1950.	0.	0.	488.9	3.2	488.9	1.008E-04	7.794E-05	7.794E-05
G	3.0	1.00	1950.	0.	0.	488.9	3.2	488.9	6.795E-05	5.254E-05	5.254E-05
G	4.0	.87	1950.	0.	0.	488.9	3.2	488.9	5.125E-05	3.962E-05	3.962E-05
G	5.0	.33	1950.	0.	0.	488.9	3.2	488.9	4.077E-05	3.152E-05	3.152E-05

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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE: 11/19/2003     TIME: 23: 4:56
/PLANT NAME:  CGS                                METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT: 10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:  10 - 75 METERS
 SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS: input file: P96-99-F.inp   output file: P96-99-F.out  sigma=desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0SITE EXCLUSION BOUNDARY CALCULATIONS:
0   E SECTOR     BOUNDARY DISTANCE = 1950.0 METERS
0DESERT SIGMA VALUES USED.  MEANDER IS INCLUDED IN THESE VALUES- RG 1.145 MEANDER FACTORS ARE NOT USED.
 BUILDING WAKE CREDIT ALLOWED:  C=   .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0  3.733E-04  2.491E-04  1.576E-04  1.559E-04  1.052E-04  8.301E-05  7.794E-05  6.581E-05  5.254E-05  5.201E-05
       1.410      2.782      6.915      7.986     12.987     13.556     17.156     21.290     22.290     29.090
        .06687     .13188     .32784     .37861     .61565     .64266     .81333    1.00929    1.05670    1.37907
0  3.962E-05  3.506E-05  3.505E-05  3.254E-05  3.152E-05  2.644E-05  2.194E-05  2.103E-05  1.888E-05  1.759E-05
      29.957     33.424     35.757     42.290     42.624     45.624     51.024     53.157     53.227     54.293
       1.42016    1.58451    1.69513    2.00486    2.02067    2.16289    2.41890    2.52003    2.52331    2.57388
0  1.733E-05  1.654E-05  1.318E-05  1.316E-05  1.168E-05  1.101E-05  1.054E-05  9.662E-06  8.811E-06  8.249E-06
      57.627     63.360     63.494     66.360     68.294     71.160     71.227     71.315     73.448     76.182
       2.73191    3.00372    3.01004    3.14594    3.23760    3.37350    3.37666    3.38083    3.48196    3.61155
0  7.972E-06  7.009E-06  6.596E-06  5.863E-06  5.080E-06  4.393E-06  4.080E-06  3.942E-06  3.693E-06  3.513E-06
      76.382     79.048     79.849     81.782     82.182     84.449     84.715     85.182     85.466     86.666
       3.62103    3.74745    3.78538    3.87703    3.89600    4.00346    4.01610    4.03822    4.05170    4.10859
0  2.705E-06  2.657E-06  2.017E-06  2.004E-06  1.954E-06  1.594E-06  1.559E-06  1.360E-06  1.334E-06  1.026E-06
      87.000     87.600     88.200     88.733     88.866     89.333     90.333     90.666     91.133     91.533
       4.12439    4.15284    4.18128    4.20657    4.21289    4.23501    4.28242    4.29822    4.32035    4.33931
0  9.992E-07  8.159E-07  7.989E-07  7.711E-07  6.825E-07  6.153E-07  5.198E-07  5.114E-07  4.089E-07  3.920E-07
      92.200     92.600     92.866     94.867     95.467     95.533     96.133     96.800     96.867     97.600
       4.37091    4.38988    4.40252    4.49734    4.52578    4.52894    4.55739    4.58899    4.59215    4.62692
0  3.149E-07  3.119E-07  2.609E-07  1.955E-07  1.563E-07  1.204E-07
      97.867     98.400     98.733     99.333     99.800    100.000
       4.63956    4.66485    4.68065    4.70909    4.73122    4.74070
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0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=    .378
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=   1.378
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   2.003
                                                    HANDCHECK GRAPH:  SLOPE LT  1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   3.001
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   3.370
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   3.608
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 8)=   3.744
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 9)=   3.874
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(10)=   4.105
0  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
  13  1      -7.89311 -13.10971  -1.62607
  13  2      -8.76654 -15.03985  -2.34871
  13  3      -9.86416 -16.73080  -3.11606
  13  4     -10.33296 -18.38447  -3.92147
  13  5      11.00948 -25.81873  -7.87447
  13  6     -11.41681 -28.51189  -9.34699
  13  7     -11.70542 -29.04175  -9.64168
  13  8     -11.86825 -32.20620 -11.41829
  13  9     -12.04686 -45.64285 -19.02883
  13 10     -12.55917     NUMXQ(K)= 10

                                                    BACK EXTRAPOLATION FOR  1 PERCENTILE.
    4.375E-04                .047                1.000
    2.595E-04                .142                3.000
    2.001E-04                .237                5.000
    1.303E-04                .474               10.000
    9.320E-05                .711               15.000
    7.277E-05                .948               20.000
    5.969E-05               1.185               25.000
    5.008E-05               1.422               30.000
    4.138E-05               1.659               35.000
    3.495E-05               1.896               40.000
    2.941E-05               2.133               45.000
    2.472E-05               2.370               50.000
    2.107E 05               2.607               55.000
    1.817E-05               2.844               60.000
    1.514E-05               3.081               65.000
    1.167E-05               3.318               70.000
    8.816E-06               3.556               75.000
    6.583E-06               3.793               80.000
    4.172E-06               4.030               85.000
0   1.248E-04               0.5                 10.55
0ANNUAL AVERAGE =   6.50E-06
0K= 13     FIVEXQ(K)= 1.248E-04     FIVEPR(K)=10.547
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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23: 4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE ESE SECTOR.

STABILITY CLASS	WINDSPEED AT 10.0 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=1431.SQ.METERS	USED
A	.4	.24	1950.	0.	0.	556.3	364.0	556.3	3.701E-06	3.693E-06	3.693E-06
A	1.0	.84	1950.	0.	0.	556.3	364.0	556.3	1.563E-06	1.559E-06	1.559E-06
A	2.0	1.19	1950.	0.	0.	556.3	364.0	556.3	7.728E-07	7.711E-07	7.711E-07
A	3.0	.65	1950.	0.	0.	556.3	364.0	556.3	5.209E-07	5.198E-07	5.198E-07
A	4.0	.19	1950.	0.	0.	556.3	364.0	556.3	3.929E-07	3.920E-07	3.920E-07
A	5.0	.23	1950.	0.	0.	556.3	364.0	556.3	3.126E-07	3.119E-07	3.119E-07
A	6.0	.23	1950.	0.	0.	556.3	364.0	556.3	2.614E-07	2.609E-07	2.609E-07
A	8.0	.42	1950.	0.	0.	556.3	364.0	556.3	1.959E-07	1.955E-07	1.955E-07
A	10.0	.23	1950.	0.	0.	556.3	364.0	556.3	1.566E-07	1.563E-07	1.563E-07
A	13.0	.27	1950.	0.	0.	556.3	364.0	556.3	1.206E-07	1.204E-07	1.204E-07
B	.4	.04	1950.	0.	0.	320.6	240.6	320.6	9.719E-06	9.662E-06	9.662E-06
B	1.0	.11	1950.	0.	0.	320.6	240.6	320.6	4.104E-06	4.080E-06	4.080E-06
B	2.0	.31	1950.	0.	0.	320.6	240.6	320.6	2.029E-06	2.017E-06	2.017E-06
B	3.0	.27	1950.	0.	0.	320.6	240.6	320.6	1.368E-06	1.360E-06	1.360E-06
B	4.0	.27	1950.	0.	0.	320.6	240.6	320.6	1.032E-06	1.026E-06	1.026E-06
B	5.0	.23	1950.	0.	0.	320.6	240.6	320.6	8.208E-07	8.159E-07	8.159E-07
B	6.0	.27	1950.	0.	0.	320.6	240.6	320.6	6.865E-07	6.825E-07	6.825E-07
B	8.0	.19	1950.	0.	0.	320.6	240.6	320.6	5.144E-07	5.114E-07	5.114E-07
B	10.0	.08	1950.	0.	0.	320.6	240.6	320.6	4.113E-07	4.089E-07	4.089E-07
B	13.0	.15	1950.	0.	0.	320.6	240.6	320.6	3.168E-07	3.149E-07	3.149E-07
C	.4	.04	1950.	0.	0.	253.6	154.7	253.6	1.910E-05	1.888E-05	1.888E-05
C	1.0	.11	1950.	0.	0.	253.6	154.7	253.6	8.064E-06	7.972E-06	7.972E-06
C	2.0	.34	1950.	0.	0.	253.6	154.7	253.6	3.988E-06	3.942E-06	3.942E-06
C	3.0	.46	1950.	0.	0.	253.6	154.7	253.6	2.688E-06	2.657E-06	2.657E-06
C	4.0	.11	1950.	0.	0.	253.6	154.7	253.6	2.027E-06	2.004E-06	2.004E-06
C	5.0	.27	1950.	0.	0.	253.6	154.7	253.6	1.613E-06	1.594E-06	1.594E 06
C	6.0	.27	1950.	0.	0.	253.6	154.7	253.6	1.349E-06	1.334E-06	1.334E-06
C	8.0	.19	1950.	0.	0.	253.6	154.7	253.6	1.011E-06	9.992E-07	9.992E-07
C	10.0	.34	1950.	0.	0.	253.6	154.7	253.6	8.082E-07	7.989E-07	7.989E-07
C	13.0	.31	1950.	0.	0.	253.6	154.7	253.6	6.225E-07	6.153E-07	6.153E-07
D	.4	.36	1950.	0.	0.	114.1	75.2	114.1	8.742E-05	8.301E-05	8.301E-05
D	1.0	1.49	1950.	0.	0.	114.1	75.2	114.1	3.691E-05	3.505E-05	3.505E-05
D	2.0	1.91	1950.	0.	0.	114.1	75.2	114.1	1.825E-05	1.733E-05	1.733E-05
D	3.0	2.45	1950.	0.	0.	114.1	75.2	114.1	1.230E-05	1.168E-05	1.168E-05
D	4.0	2.45	1950.	0.	0.	114.1	75.2	114.1	9.279E-06	8.811E-06	8.811E-06
D	5.0	1.80	1950.	0.	0.	114.1	75.2	114.1	7.382E-06	7.009E-06	7.009E-06
D	6.0	2.07	1950.	0.	0.	114.1	75.2	114.1	6.174E-06	5.863E-06	5.863E-06
D	8.0	3.94	1950.	0.	0.	114.1	75.2	114.1	4.626E-06	4.393E-06	4.393E-06
D	10.0	1.95	1950.	0.	0.	114.1	75.2	114.1	3.699E-06	3.513E-06	3.513E-06
D	13.0	.69	1950.	0.	0.	114.1	75.2	114.1	2.849E-06	2.705E-06	2.705E-06
D	18.0	.08	1950.	0.	0.	114.1	75.2	114.1	2.058E-06	1.954E-06	1.954E-06
E	.4	.89	1950.	0.	0.	195.7	22.3	195.7	1.722E-04	1.559E-04	1.559E-04
E	1.0	3.44	1950.	0.	0.	195.7	22.3	195.7	7.269E-05	6.581E-05	6.581E-05
E	2.0	5.40	1950.	0.	0.	195.7	22.3	195.7	3.595E-05	3.254E-05	3.254E-05
E	3.0	5.82	1950.	0.	0.	195.7	22.3	195.7	2.423E-05	2.194E-05	2.194E-05
E	4.0	5.51	1950.	0.	0.	195.7	22.3	195.7	1.827E-05	1.654E-05	1.654E-05
E	5.0	6.16	1950.	0.	0.	195.7	22.3	195.7	1.454E-05	1.316E-05	1.316E-05
E	6.0	5.36	1950.	0.	0.	195.7	22.3	195.7	1.216E-05	1.101E-05	1.101E-05
E	8.0	5.78	1950.	0.	0.	195.7	22.3	195.7	9.112E-06	8.249E-06	8.249E-06
E	10.0	2.45	1950.	0.	0.	195.7	22.3	195.7	7.285E-06	6.596E-06	6.596E-06
E	13.0	.77	1950.	0.	0.	195.7	22.3	195.7	5.611E-06	5.080E-06	5.080E-06
E	18.0	.08	1950.	0.	0.	195.7	22.3	195.7	4.053E-06	3.670E-06	3.670E-06
F	.4	.85	1950.	0.	0.	303.4	8.4	303.4	2.935E-04	2.491E-04	2.491E-04
F	1.0	3.10	1950.	0.	0.	303.4	8.4	303.4	1.239E-04	1.052E-04	1.052E-04
F	2.0	5.36	1950.	0.	0.	303.4	8.4	303.4	6.128E-05	5.201E-05	5.201E-05
F	3.0	3.87	1950.	0.	0.	303.4	8.4	303.4	4.131E-05	3.506E-05	3.506E-05
F	4.0	3.94	1950.	0.	0.	303.4	8.4	303.4	3.115E-05	2.644E-05	2.644E-05
F	5.0	2.07	1950.	0.	0.	303.4	8.4	303.4	2.478E-05	2.103E-05	2.103E-05
F	6.0	1.07	1950.	0.	0.	303.4	8.4	303.4	2.073E-05	1.759E-05	1.759E-05
F	8.0	.54	1950.	0.	0.	303.4	8.4	303.4	1.553E-05	1.318E-05	1.318E-05
G	.4	.86	1950.	0.	0.	488.9	3.2	488.9	4.828E-04	3.733E-04	3.733E-04
G	1.0	2.53	1950.	0.	0.	488.9	3.2	488.9	2.039E-04	1.576E-04	1.576E-04
G	2.0	3.71	1950.	0.	0.	488.9	3.2	488.9	1.008E-04	7.794E-05	7.794E-05
G	3.0	1.68	1950.	0.	0.	488.9	3.2	488.9	6.795E-05	5.254E-05	5.254E-05
G	4.0	.54	1950.	0.	0.	488.9	3.2	488.9	5.125E-05	3.962E-05	3.962E-05
G	5.0	.19	1950.	0.	0.	488.9	3.2	488.9	4.077E-05	3.152E-05	3.152E-05

```
1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:   CGS                               METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma=desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0SITE EXCLUSION BOUNDARY CALCULATIONS:
0 ESE SECTOR     BOUNDARY DISTANCE = 1950.0 METERS
0DESERT SIGMA VALUES USED.  MEANDER IS INCLUDED IN THESE VALUES- RG 1.145 MEANDER FACTORS ARE NOT USED.
 BUILDING WAKE CREDIT ALLOWED:  C=   .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0   3.733E-04  2.491E-04  1.576E-04  1.559E-04  1.052E-04  8.301E-05  7.794E-05  6.581E-05  5.254E-05  5.201E-05
        .862       1.712      4.238      5.131      8.231      8.595     12.308     15.752     17.436     22.794
     .07118     .14140     .35000     .42370     .67970     .70980    1.01637    1.30082    1.43989    1.88237
0   3.962E-05  3.506E-05  3.505E-05  3.254E-05  3.152E-05  2.644E-05  2.194E-05  2.103E-05  1.888E-05  1.759E-05
       23.330     27.196     28.688     34.085     34.276     38.218     44.035     46.102     46.142     47.213
      1.92661    2.24583    2.36909    2.81473    2.83053    3.15607    3.63648    3.80715    3.81042    3.89892
0   1.733E-05  1.654E-05  1.318E-05  1.316E-05  1.168E-05  1.101E-05  9.662E-06  8.811E-06  8.249E-06  7.972E-06
       49.127     54.638     55.174     61.336     63.785     69.143     69.181     71.631     77.410     77.524
      4.05695    4.51207    4.55631    5.06516    5.26744    5.70992    5.71304    5.91532    6.39256    6.40204
0   7.009E-06  6.596E-06  5.863E-06  5.080E-06  4.393E-06  4.080E-06  3.942E-06  3.693E-06  3.670E-06  3.513E-06
       79.323     81.773     83.839     84.605     88.547     88.662     89.006     89.245     89.322     91.274
      6.55059    6.75286    6.92354    6.98675    7.31228    7.32176    7.35021    7.36997    7.37630    7.53748
0   2.705E-06  2.657E-06  2.017E-06  2.004E-06  1.954E-06  1.594E-06  1.559E-06  1.360E-06  1.334E-06  1.026E-06
       91.963     92.422     92.728     92.843     92.920     93.188     94.030     94.297     94.565     94.833
      7.59437    7.63230    7.65758    7.66707    7.67339    7.69551    7.76504    7.78717    7.80929    7.83141
0   9.992E-07  8.159E-07  7.989E-07  7.711E-07  6.825E-07  6.153E-07  5.198E-07  5.114E-07  4.089E-07  3.920E-07
       95.025     95.254     95.599     96.785     97.053     97.359     98.010     98.201     98.278     98.469
      7.84722    7.86618    7.89463    7.99260    8.01473    8.04001    8.09374    8.10954    8.11586    8.13167
0   3.149E-07  3.119E-07  2.609E-07  1.955E-07  1.563E-07  1.204E-07
       98.622     98.852     99.081     99.502     99.732    100.000
      8.14431    8.16327    8.18224    8.21700    8.23597    8.25809
```

```
0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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)=    .423
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=   1.880
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   2.812
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   4.509
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   5.706
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   6.389
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 8)=   6.749
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 9)=   6.920
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(10)=   7.308
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(11)=   7.534
```

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0  K   I    XQSAVE(K,I)   XQINT(K,I) XQSLOP(K,I)
  14   1      -7.89311 -12.89450  -1.56779
  14   2      -8.76654 -13.98449  -1.98177
  14   3      -9.86416 -15.59954  -2.75857
  14   4     -10.33296 -16.34961  -3.15145
  14   5     -11.00948 -17.03407  -3.55538
  14   6     -11.41681 -19.41735  -5.06384
  14   7     -11.70542 -23.79038  -7.93528
  14   8     -11.92912 -25.52002  -9.09243
  14   9     -12.04686 -26.99855 -10.09022
  14  10     -12.33547 -32.60150 -13.94582
  14  11     -12.55917      NUMXQ(K)= 11
     3.489E-04                .083              1.000
     2.058E-04                .248              3.000
     1.580E-04                .413              5.000
     9.779E-05                .826             10.000
     7.230E-05               1.239             15.000
     5.777E-05               1.652             20.000
     4.682E 05               2.065             25.000
     3.788E-05               2.477             30.000
     3.138E-05               2.890             35.000
     2.604E-05               3.303             40.000
     2.201E-05               3.716             45.000
     1.887E-05               4.129             50.000
     1.636E-05               4.542             55.000
     1.410E-05               4.955             60.000
     1.227E-05               5.368             65.000
     1.067E-05               5.781             70.000
     8.950E-06               6.194             75.000
     7.215E-06               6.606             80.000
     5.454E-06               7.019             85.000
     3.897E-06               7.432             90.000
0    1.393E-04               0.5                6.05
0ANNUAL AVERAGE =   8.41E-06
0K= 14      FIVEXQ(K)= 1.393E-04      FIVEPR(K)= 6.055
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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23:4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE SE SECTOR.

STABILITY CLASS	WINDSPEED AT 10.0 METERS METER/SEC	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=1431.SQ.METERS	USED
A	.4	.21	1950.	0.	0.	556.3	364.0	556.3	3.701E-06	3.693E-06	3.693E-06
A	1.0	.73	1950.	0.	0.	556.3	364.0	556.3	1.563E-06	1.559E-06	1.559E-06
A	2.0	1.42	1950.	0.	0.	556.3	364.0	556.3	7.728E-07	7.711E-07	7.711E-07
A	3.0	.78	1950.	0.	0.	556.3	364.0	556.3	5.209E-07	5.198E-07	5.198E-07
A	4.0	.55	1950.	0.	0.	556.3	364.0	556.3	3.929E-07	3.920E-07	3.920E-07
A	5.0	.12	1950.	0.	0.	556.3	364.0	556.3	3.126E-07	3.119E-07	3.119E-07
A	6.0	.15	1950.	0.	0.	556.3	364.0	556.3	2.614E-07	2.609E-07	2.609E-07
A	8.0	.17	1950.	0.	0.	556.3	364.0	556.3	1.959E-07	1.955E-07	1.955E-07
A	10.0	.12	1950.	0.	0.	556.3	364.0	556.3	1.566E-07	1.563E-07	1.563E-07
A	13.0	.09	1950.	0.	0.	556.3	364.0	556.3	1.206E-07	1.204E-07	1.204E-07
B	.4	.08	1950.	0.	0.	320.6	240.6	320.6	9.719E-06	9.662E-06	9.662E-06
B	1.0	.23	1950.	0.	0.	320.6	240.6	320.6	4.104E-06	4.080E-06	4.080E-06
B	2.0	.35	1950.	0.	0.	320.6	240.6	320.6	2.029E-06	2.017E-06	2.017E-06
B	3.0	.26	1950.	0.	0.	320.6	240.6	320.6	1.368E-06	1.360E-06	1.360E-06
B	4.0	.35	1950.	0.	0.	320.6	240.6	320.6	1.032E-06	1.026E-06	1.026E-06
B	5.0	.15	1950.	0.	0.	320.6	240.6	320.6	8.208E-07	8.159E-07	8.159E-07
B	6.0	.12	1950.	0.	0.	320.6	240.6	320.6	6.865E-07	6.825E-07	6.825E-07
B	8.0	.06	1950.	0.	0.	320.6	240.6	320.6	5.144E-07	5.114E-07	5.114E-07
B	10.0	.03	1950.	0.	0.	320.6	240.6	320.6	4.113E-07	4.089E-07	4.089E-07
C	.4	.03	1950.	0.	0.	253.6	154.7	253.6	1.910E-05	1.888E-05	1.888E-05
C	1.0	.09	1950.	0.	0.	253.6	154.7	253.6	8.064E-06	7.972E-06	7.972E-06
C	2.0	.46	1950.	0.	0.	253.6	154.7	253.6	3.988E-06	3.942E-06	3.942E-06
C	3.0	.49	1950.	0.	0.	253.6	154.7	253.6	2.688E-06	2.657E-06	2.657E-06
C	4.0	.20	1950.	0.	0.	253.6	154.7	253.6	2.027E-06	2.004E-06	2.004E-06
C	5.0	.20	1950.	0.	0.	253.6	154.7	253.6	1.613E-06	1.594E-06	1.594E-06
C	6.0	.12	1950.	0.	0.	253.6	154.7	253.6	1.349E-06	1.334E-06	1.334E-06
C	8.0	.09	1950.	0.	0.	253.6	154.7	253.6	1.011E-06	9.992E-07	9.992E-07
C	10.0	.20	1950.	0.	0.	253.6	154.7	253.6	8.082E-07	7.989E-07	7.989E-07
D	.4	.26	1950.	0.	0.	114.1	75.2	114.1	8.742E-05	8.301E-05	8.301E-05
D	1.0	1.05	1950.	0.	0.	114.1	75.2	114.1	3.691E-05	3.505E-05	3.505E-05
D	2.0	4.33	1950.	0.	0.	114.1	75.2	114.1	1.825E-05	1.733E-05	1.733E-05
D	3.0	4.30	1950.	0.	0.	114.1	75.2	114.1	1.230E-05	1.168E-05	1.168E-05
D	4.0	3.81	1950.	0.	0.	114.1	75.2	114.1	9.279E-06	8.811E-06	8.811E-06
D	5.0	2.85	1950.	0.	0.	114.1	75.2	114.1	7.382E-06	7.009E-06	7.009E-06
D	6.0	2.12	1950.	0.	0.	114.1	75.2	114.1	6.174E-06	5.863E-06	5.863E-06
D	8.0	1.48	1950.	0.	0.	114.1	75.2	114.1	4.626E-06	4.393E-06	4.393E-06
D	10.0	.81	1950.	0.	0.	114.1	75.2	114.1	3.699E-06	3.513E-06	3.513E-06
D	13.0	.46	1950.	0.	0.	114.1	75.2	114.1	2.849E-06	2.705E-06	2.705E-06
D	18.0	.06	1950.	0.	0.	114.1	75.2	114.1	2.058E-06	1.954E-06	1.954E-06

E	.4	.60	1950.	0.	0.	195.7	22.3	195.7	1.722E-04	1.559E-04	1.559E-04
E	1.0	2.32	1950.	0.	0.	195.7	22.3	195.7	7.269E-05	6.581E-05	6.581E-05
E	2.0	5.99	1950.	0.	0.	195.7	22.3	195.7	3.595E-05	3.254E-05	3.254E-05
E	3.0	7.00	1950.	0.	0.	195.7	22.3	195.7	2.423E-05	2.194E-05	2.194E-05
E	4.0	5.61	1950.	0.	0.	195.7	22.3	195.7	1.827E-05	1.654E-05	1.654E-05
E	5.0	4.48	1950.	0.	0.	195.7	22.3	195.7	1.454E-05	1.316E-05	1.316E-05
E	6.0	3.57	1950.	0.	0.	195.7	22.3	195.7	1.216E-05	1.101E-05	1.101E-05
E	8.0	3.25	1950.	0.	0.	195.7	22.3	195.7	9.112E-06	8.249E-06	8.249E-06
E	10.0	.90	1950.	0.	0.	195.7	22.3	195.7	7.285E-06	6.596E-06	6.596E-06
E	13.0	.29	1950.	0.	0.	195.7	22.3	195.7	5.611E-06	5.080E-06	5.080E-06
F	.4	.77	1950.	0.	0.	303.4	8.4	303.4	2.935E-04	2.491E-04	2.491E-04
F	1.0	2.79	1950.	0.	0.	303.4	8.4	303.4	1.239E-04	1.052E-04	1.052E-04
F	2.0	6.74	1950.	0.	0.	303.4	8.4	303.4	6.128E-05	5.201E-05	5.201E-05
F	3.0	4.71	1950.	0.	0.	303.4	8.4	303.4	4.131E-05	3.506E-05	3.506E-05
F	4.0	4.07	1950.	0.	0.	303.4	8.4	303.4	3.115E-05	2.644E-05	2.644E-05
F	5.0	1.48	1950.	0.	0.	303.4	8.4	303.4	2.478E-05	2.103E-05	2.103E-05
F	6.0	.58	1950.	0.	0.	303.4	8.4	303.4	2.073E-05	1.759E-05	1.759E-05
F	8.0	.06	1950.	0.	0.	303.4	8.4	303.4	1.553E-05	1.318E-05	1.318E-05
G	.4	.86	1950.	0.	0.	488.9	3.2	488.9	4.828E-04	3.733E-04	3.733E-04
G	1.0	2.53	1950.	0.	0.	488.9	3.2	488.9	2.039E-04	1.576E-04	1.576E-04
G	2.0	6.13	1950.	0.	0.	488.9	3.2	488.9	1.008E-04	7.794E-05	7.794E-05
G	3.0	3.63	1950.	0.	0.	488.9	3.2	488.9	6.795E-05	5.254E-05	5.254E-05
G	4.0	2.03	1950.	0.	0.	488.9	3.2	488.9	5.125E-05	3.962E-05	3.962E-05
G	5.0	.17	1950.	0.	0.	488.9	3.2	488.9	4.077E-05	3.152E-05	3.152E-05
G	6.0	.06	1950.	0.	0.	488.9	3.2	488.9	3.410E-05	2.637E-05	2.637E-05

```
1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:  CGS                                METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma=desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0SITE EXCLUSION BOUNDARY CALCULATIONS:
0  SE SECTOR      BOUNDARY DISTANCE = 1950.0 METERS
0DESERT SIGMA VALUES USED.  MEANDER IS INCLUDED IN THESE VALUES- RG 1.145 MEANDER FACTORS ARE NOT USED.
 BUILDING WAKE CREDIT ALLOWED:   C=   .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0   3.733E-04   2.491E-04   1.576E-04   1.559E-04   1.052E-04   8.301E-05   7.794E-05   6.581E-05   5.254E-05   5.201E-05
        .863       1.628       4.156       4.758       7.548       7.803      13.935      16.259      19.892      26.633
     .09383      .17705      .45202      .51753      .82095      .84873     1.51561     1.76845     2.16352     2.89677
0   3.962E-05   3.506E-05   3.505E-05   3.254E-05   3.152E-05   2.644E-05   2.637E-05   2.194E-05   2.103E-05   1.888E-05
       28.667      33.375      34.421      40.407      40.581      44.650      44.708      51.711      53.193      53.223
      3.11801     3.63002     3.74380     4.39487     4.41384     4.85631     4.86263     5.62433     5.78552     5.78879
0   1.759E-05   1.733E-05   1.654E-05   1.318E-05   1.316E-05   1.168E-05   1.101E-05   9.662E-06   8.811E-06   8.249E-06
       53.804      58.134      63.742      63.800      68.275      72.576      76.150      76.227      80.034      83.288
      5.85201     6.32293     6.93292     6.93924     7.42596     7.89373     8.28247     8.29081     8.70484     9.05882
0   7.972E-06   7.009E-06   6.596E-06   5.863E-06   5.080E-06   4.393E-06   4.080E-06   3.942E-06   3.693E-06   3.513E-06
       83.375      86.223      87.124      89.245      89.536      91.018      91.250      91.715      91.922      92.735
      9.06830     9.37804     9.47602     9.70674     9.73834     9.89953     9.92481     9.97538     9.99784    10.08634
0   2.705E-06   2.657E-06   2.017E-06   2.004E-06   1.954E-06   1.594E-06   1.559E-06   1.360E-06   1.334E-06   1.026E-06
       93.200      93.694      94.043      94.246      94.305      94.508      95.234      95.496      95.612      95.961
     10.13691    10.19064    10.22856    10.25069    10.25701    10.27913    10.35814    10.38659    10.39923    10.43716
0   9.992E-07   8.159E-07   7.989E-07   7.711E-07   6.825E-07   5.198E-07   5.114E-07   4.089E-07   3.920E-07   3.119E-07
       96.048      96.193      96.397      97.821      97.937      98.721      98.780      98.809      99.361      99.477
     10.44664    10.46244    10.48457    10.63943    10.65207    10.73741    10.74373    10.74689    10.80694    10.81959
0   2.609E-07   1.955E-07   1.563E-07   1.204E-07
       99.622      99.797      99.913     100.000
     10.83539    10.85435    10.86699    10.87648
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0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=    .517
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=   2.894
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   4.391
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   6.929
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   8.279
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   9.055
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 8)=   9.375
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 9)=   9.704
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(10)=  10.083
0  K   I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
  15  1      -7.89311 -12.87549  -1.60237
  15  2      -8.76654 -12.98201  -1.64391
  15  3      -9.86416 -14.55278  -2.47211
  15  4     -10.33296 -15.44553  -2.99511
  15  5     -11.00948 -17.39104  -4.30868
  15  6     -11.41681 -19.54949  -5.86537
  15  7     -11.70542 -22.97431  -8.42626
  15  8     -11.86825 -24.00465  -9.20799
  15  9     -12.04686 -42.55036 -23.48894
  15 10     -12.55917     NUMXQ(K)= 10
     3.480E-04                .109              1.000
     2.002E-04                .326              3.000
     1.515E-04                .544              5.000
     1.001E-04               1.088             10.000
     7.722E-05               1.631             15.000
     6.362E-05               2.175             20.000
     5.442E-05               2.719             25.000
     4.565E-05               3.263             30.000
     3.840E-05               3.807             35.000
     3.293E-05               4.351             40.000
     2.790E-05               4.894             45.000
     2.391E-05               5.438             50.000
     2.074E-05               5.982             55.000
     1.817E-05               6.526             60.000
     1.583E-05               7.070             65.000
     1.338E-05               7.614             70.000
     1.141E-05               8.157             75.000
     9.399E-06               8.701             80.000
     7.498E-06               9.245             85.000
     5.242E-06               9.789             90.000
0    1.589E-04               0.5                4.60
0ANNUAL AVERAGE =   1.24E-05
0K= 15     FIVEXQ(K)= 1.589E-04     FIVEPR(K)= 4.597
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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23: 4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE SSE SECTOR.

STABILITY CLASS	WINDSPEED AT 10.0 METERS METER/SEC	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=1431.SQ.METERS	USED
A	.4	.25	1950.	0.	0.	556.3	364.0	556.3	3.701E-06	3.693E-06	3.693E-06
A	1.0	.89	1950.	0.	0.	556.3	364.0	556.3	1.563E-06	1.559E-06	1.559E-06
A	2.0	2.82	1950.	0.	0.	556.3	364.0	556.3	7.728E-07	7.711E-07	7.711E-07
A	3.0	1.79	1950.	0.	0.	556.3	364.0	556.3	5.209E-07	5.198E-07	5.198E-07
A	4.0	.89	1950.	0.	0.	556.3	364.0	556.3	3.929E-07	3.920E-07	3.920E-07
A	5.0	1.03	1950.	0.	0.	556.3	364.0	556.3	3.126E-07	3.119E-07	3.119E-07
A	6.0	.56	1950.	0.	0.	556.3	364.0	556.3	2.614E-07	2.609E-07	2.609E-07
A	8.0	.36	1950.	0.	0.	556.3	364.0	556.3	1.959E-07	1.955E-07	1.955E-07
A	13.0	.03	1950.	0.	0.	556.3	364.0	556.3	1.206E-07	1.204E-07	1.204E-07
A	18.0	.03	1950.	0.	0.	556.3	364.0	556.3	8.715E-08	8.695E-08	8.695E-08
B	.4	.13	1950.	0.	0.	320.6	240.6	320.6	9.719E-06	9.662E-06	9.662E-06
B	1.0	.40	1950.	0.	0.	320.6	240.6	320.6	4.104E-06	4.080E-06	4.080E-06
B	2.0	.66	1950.	0.	0.	320.6	240.6	320.6	2.029E-06	2.017E-06	2.017E-06
B	3.0	.73	1950.	0.	0.	320.6	240.6	320.6	1.368E-06	1.360E-06	1.360E-06
B	4.0	.33	1950.	0.	0.	320.6	240.6	320.6	1.032E-06	1.026E-06	1.026E-06
B	5.0	.27	1950.	0.	0.	320.6	240.6	320.6	8.208E-07	8.159E-07	8.159E-07
B	6.0	.10	1950.	0.	0.	320.6	240.6	320.6	6.865E-07	6.825E-07	6.825E-07
B	8.0	.13	1950.	0.	0.	320.6	240.6	320.6	5.144E-07	5.114E-07	5.114E-07
C	.4	.07	1950.	0.	0.	253.6	154.7	253.6	1.910E-05	1.888E-05	1.888E-05
C	1.0	.20	1950.	0.	0.	253.6	154.7	253.6	8.064E-06	7.972E-06	7.972E-06
C	2.0	.56	1950.	0.	0.	253.6	154.7	253.6	3.988E-06	3.942E-06	3.942E-06
C	3.0	.83	1950.	0.	0.	253.6	154.7	253.6	2.688E-06	2.657E-06	2.657E-06
C	4.0	.53	1950.	0.	0.	253.6	154.7	253.6	2.027E-06	2.004E-06	2.004E-06
C	5.0	.36	1950.	0.	0.	253.6	154.7	253.6	1.613E-06	1.594E-06	1.594E-06
C	6.0	.23	1950.	0.	0.	253.6	154.7	253.6	1.349E-06	1.334E-06	1.334E-06
C	8.0	.30	1950.	0.	0.	253.6	154.7	253.6	1.011E-06	9.992E-07	9.992E 07
C	10.0	.03	1950.	0.	0.	253.6	154.7	253.6	8.082E-07	7.989E-07	7.989E-07
C	13.0	.03	1950.	0.	0.	253.6	154.7	253.6	6.225E-07	6.153E-07	6.153E-07
D	.4	.32	1950.	0.	0.	114.1	75.2	114.1	8.742E-05	8.301E-05	8.301E-05
D	1.0	1.33	1950.	0.	0.	114.1	75.2	114.1	3.691E-05	3.505E-05	3.505E-05
D	2.0	4.24	1950.	0.	0.	114.1	75.2	114.1	1.825E-05	1.733E-05	1.733E-05
D	3.0	4.77	1950.	0.	0.	114.1	75.2	114.1	1.230E-05	1.168E-05	1.168E-05
D	4.0	4.27	1950.	0.	0.	114.1	75.2	114.1	9.279E-06	8.811E-06	8.811E 06
D	5.0	2.78	1950.	0.	0.	114.1	75.2	114.1	7.382E-06	7.009E-06	7.009E-06
D	6.0	1.56	1950.	0.	0.	114.1	75.2	114.1	6.174E-06	5.863E-06	5.863E-06
D	8.0	1.62	1950.	0.	0.	114.1	75.2	114.1	4.626E-06	4.393E-06	4.393E-06
D	10.0	.50	1950.	0.	0.	114.1	75.2	114.1	3.699E-06	3.513E-06	3.513E-06
D	13.0	.10	1950.	0.	0.	114.1	75.2	114.1	2.849E-06	2.705E-06	2.705E-06
D	18.0	.10	1950.	0.	0.	114.1	75.2	114.1	2.058E-06	1.954E-06	1.954E-06

E	.4	.47	1950.	0.	0.	195.7	22.3	195.7	1.722E-04	1.559E-04	1.559E-04
E	1.0	1.82	1950.	0.	0.	195.7	22.3	195.7	7.269E-05	6.581E-05	6.581E-05
E	2.0	7.09	1950.	0.	0.	195.7	22.3	195.7	3.595E-05	3.254E-05	3.254E-05
E	3.0	5.67	1950.	0.	0.	195.7	22.3	195.7	2.423E-05	2.194E-05	2.194E-05
E	4.0	4.34	1950.	0.	0.	195.7	22.3	195.7	1.827E-05	1.654E-05	1.654E-05
E	5.0	2.45	1950.	0.	0.	195.7	22.3	195.7	1.454E-05	1.316E-05	1.316E-05
E	6.0	1.13	1950.	0.	0.	195.7	22.3	195.7	1.216E-05	1.101E-05	1.101E-05
E	8.0	1.89	1950.	0.	0.	195.7	22.3	195.7	9.112E-06	8.249E-06	8.249E-06
E	10.0	.70	1950.	0.	0.	195.7	22.3	195.7	7.285E-06	6.596E-06	6.596E-06
E	13.0	.13	1950.	0.	0.	195.7	22.3	195.7	5.611E-06	5.080E-06	5.080E-06
F	.4	.75	1950.	0.	0.	303.4	8.4	303.4	2.935E-04	2.491E-04	2.491E-04
F	1.0	2.75	1950.	0.	0.	303.4	8.4	303.4	1.239E-04	1.052E-04	1.052E-04
F	2.0	7.02	1950.	0.	0.	303.4	8.4	303.4	6.128E-05	5.201E-05	5.201E-05
F	3.0	5.53	1950.	0.	0.	303.4	8.4	303.4	4.131E-05	3.506E-05	3.506E-05
F	4.0	1.86	1950.	0.	0.	303.4	8.4	303.4	3.115E-05	2.644E-05	2.644E-05
F	5.0	.76	1950.	0.	0.	303.4	8.4	303.4	2.478E-05	2.103E-05	2.103E-05
F	6.0	.13	1950.	0.	0.	303.4	8.4	303.4	2.073E-05	1.759E-05	1.759E-05
F	8.0	.13	1950.	0.	0.	303.4	8.4	303.4	1.553E-05	1.318E-05	1.318E-05
G	.4	1.40	1950.	0.	0.	488.9	3.2	488.9	4.828E-04	3.733E-04	3.733E-04
G	1.0	4.11	1950.	0.	0.	488.9	3.2	488.9	2.039E-04	1.576E-04	1.576E-04
G	2.0	8.35	1950.	0.	0.	488.9	3.2	488.9	1.008E-04	7.794E-05	7.794E-05
G	3.0	4.24	1950.	0.	0.	488.9	3.2	488.9	6.795E-05	5.254E-05	5.254E-05
G	4.0	1.06	1950.	0.	0.	488.9	3.2	488.9	5.125E-05	3.962E-05	3.962E-05
G	5.0	.03	1950.	0.	0.	488.9	3.2	488.9	4.077E-05	3.152E-05	3.152E-05

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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:   CGS                               METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10   75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma=desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0SITE EXCLUSION BOUNDARY CALCULATIONS:
0 SSE SECTOR      BOUNDARY DISTANCE = 1950.0 METERS
0DESERT SIGMA VALUES USED.  MEANDER IS INCLUDED IN THESE VALUES- RG 1.145 MEANDER FACTORS ARE NOT USED.
 BUILDING WAKE CREDIT ALLOWED:   C=   .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0  3.733E-04  2.491E-04  1.576E-04  1.559E-04  1.052E-04  8.301E-05  7.794E-05  6.581E-05  5.254E-05  5.201E-05
       1.402      2.157      6.265      6.738      9.488      9.812     18.162     19.985     24.226     31.251
        .13373     .20569     .59760     .64264     .90496     .93583    1.73229    1.90612    2.31067    2.98071
0  3.962E-05  3.506E-05  3.505E-05  3.254E-05  3.152E-05  2.644E-05  2.194E-05  2.103E-05  1.888E-05  1.759E-05
      32.312     37.845     39.171     46.262     46.295     48.151     53.817     54.579     54.648     54.781
       3.08185    3.60966    3.73608    4.41244    4.41560    4.59259    5.13305    5.20574    5.21230    5.22494
0  1.733E-05  1.654E-05  1.318E-05  1.316E-05  1.168E-05  1.101E-05  9.662E-06  8.811E-06  8.249E-06  7.972E-06
      59.022     63.363     63.496     65.948     70.719     71.846     71.977     76.252     78.141     78.339
       5.62949    6.04352    6.05617    6.29005    6.74517    6.85263    6.86512    7.27284    7.45299    7.47195
0  7.009E-06  6.596E-06  5.863E-06  5.080E-06  4.393E-06  4.080E-06  3.942E-06  3.693E-06  3.513E-06  2.705E-06
      81.123     81.819     83.376     83.509     85.132     85.530     86.093     86.348     86.845     86.944
       7.73744    7.80381    7.95236    7.96500    8.11987    8.15779    8.21152    8.23578    8.28319    8.29267
0  2.657E-06  2.017E-06  2.004E-06  1.954E 06  1.594E-06  1.559E-06  1.360E-06  1.334E-06  1.026E-06  9.992E-07
      87.773     88.435     88.965     89.065     89.429     90.324     91.053     91.285     91.616     91.915
       8.37168    8.43489    8.48546    8.49494    8.52971    8.61504    8.68458    8.70670    8.73831    8.76675
0  8.159E-07  7.989E-07  7.711E-07  6.825E-07  6.153E-07  5.198E-07  5.114E-07  3.920E-07  3.119E-07  2.609E-07
      92.180     92.213     95.030     95.129     95.162     96.951     97.084     97.979     99.006     99.569
       8.79203    8.79519    9.06384    9.07332    9.07648    9.24715    9.25980    9.34513    9.44311    9.49684
0  1.955E-07  1.204E-07  8.695E-08
      99.934     99.967    100.000
       9.53160    9.53476    9.53792
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0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=    .642
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=   2.978
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   4.409
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   6.040
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   6.741
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   7.449
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 8)=   7.734
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 9)=   7.949
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(10)=   8.208
0  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
  16  1      -7.89311 -12.98725  -1.69626
  16  2      -8.76654 -13.28689  -1.81669
  16  3      -9.86416 -14.79932  -2.61943
  16  4     -10.33296 -17.84130  -4.40350
  16  5     -11.00948 -20.62949  -6.20065
  16  6     -11.35742 -21.32489  -6.66569
  16  7     -11.70542 -23.50493  -8.17633
  16  8     -11.86825 -29.18372 -12.16643
  16  9     -12.04686 -44.34816 -22.93253
  16 10     -12.44381     NUMXQ(K)= 10

                                                  BACK EXTRAPOLATION FOR  1 PERCENTILE.
    4.434E-04               .095              1.000
    2.487E-04               .286              3.000
    1.860E-04               .477              5.000
    1.200E-04               .954             10.000
    9.053E-05              1.431             15.000
    7.339E-05              1.908             20.000
    6.197E-05              2.384             25.000
    5.373E-05              2.861             30.000
    4.557E-05              3.338             35.000
    3.887E-05              3.815             40.000
    3.367E-05              4.292             45.000
    2.765E-05              4.769             50.000
    2.255E-05              5.246             55.000
    1.866E-05              5.723             60.000
    1.527E-05              6.200             65.000
    1.207E-05              6.677             70.000
    9.527E-06              7.153             75.000
    7.449E-06              7.630             80.000
    4.619E-06              8.107             85.000
0   1.810E-04              0.5                5.24
0ANNUAL AVERAGE =   1.36E-05
0K= 16     FIVEXQ(K)= 1.810E-04     FIVEPR(K)= 5.242
```

1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23: 4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996 1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE ALL SECTOR.

STABILITY CLASS	WINDSPEED AT 10.0 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	USED
										CA=1431.SQ.METERS	
A	.4	.35	1950.	0.	0.	556.3	364.0	556.3	3.701E-06	3.693E-06	3.693E-06
A	1.0	1.22	1950.	0.	0.	556.3	364.0	556.3	1.563E-06	1.559E-06	1.559E-06
A	2.0	2.50	1950.	0.	0.	556.3	364.0	556.3	7.728E-07	7.711E-07	7.711E-07
A	3.0	1.81	1950.	0.	0.	556.3	364.0	556.3	5.209E-07	5.198E-07	5.198E-07
A	4.0	1.41	1950.	0.	0.	556.3	364.0	556.3	3.929E-07	3.920E-07	3.920E-07
A	5.0	1.02	1950.	0.	0.	556.3	364.0	556.3	3.126E-07	3.119E-07	3.119E-07
A	6.0	.58	1950.	0.	0.	556.3	364.0	556.3	2.614E-07	2.609E-07	2.609E-07
A	8.0	.70	1950.	0.	0.	556.3	364.0	556.3	1.959E-07	1.955E-07	1.955E-07
A	10.0	.21	1950.	0.	0.	556.3	364.0	556.3	1.566E-07	1.563E-07	1.563E-07
A	13.0	.09	1950.	0.	0.	556.3	364.0	556.3	1.206E-07	1.204E-07	1.204E-07
A	18.0	.01	1950.	0.	0.	556.3	364.0	556.3	8.715E-08	8.695E-08	8.695E-08
B	.4	.09	1950.	0.	0.	320.6	240.6	320.6	9.719E-06	9.662E-06	9.662E-06
B	1.0	.28	1950.	0.	0.	320.6	240.6	320.6	4.104E-06	4.080E-06	4.080E-06
B	2.0	.63	1950.	0.	0.	320.6	240.6	320.6	2.029E-06	2.017E-06	2.017E-06
B	3.0	.67	1950.	0.	0.	320.6	240.6	320.6	1.368E-06	1.360E-06	1.360E-06
B	4.0	.57	1950.	0.	0.	320.6	240.6	320.6	1.032E-06	1.026E-06	1.026E-06
B	5.0	.42	1950.	0.	0.	320.6	240.6	320.6	8.208E-07	8.159E-07	8.159E-07
B	6.0	.23	1950.	0.	0.	320.6	240.6	320.6	6.865E-07	6.825E 07	6.825E-07
B	8.0	.31	1950.	0.	0.	320.6	240.6	320.6	5.144E-07	5.114E-07	5.114E-07
B	10.0	.09	1950.	0.	0.	320.6	240.6	320.6	4.113E-07	4.089E-07	4.089E-07
B	13.0	.07	1950.	0.	0.	320.6	240.6	320.6	3.168E-07	3.149E-07	3.149E-07
C	.4	.09	1950.	0.	0.	253.6	154.7	253.6	1.910E-05	1.888E-05	1.888E-05
C	1.0	.26	1950.	0.	0.	253.6	154.7	253.6	8.064E-06	7.972E-06	7.972E-06
C	2.0	.61	1950.	0.	0.	253.6	154.7	253.6	3.988E-06	3.942E-06	3.942E-06
C	3.0	.76	1950.	0.	0.	253.6	154.7	253.6	2.688E-06	2.657E-06	2.657E-06
C	4.0	.55	1950.	0.	0.	253.6	154.7	253.6	2.027E-06	2.004E-06	2.004E-06
C	5.0	.48	1950.	0.	0.	253.6	154.7	253.6	1.613E-06	1.594E-06	1.594E-06
C	6.0	.32	1950.	0.	0.	253.6	154.7	253.6	1.349E-06	1.334E-06	1.334E-06
C	8.0	.34	1950.	0.	0.	253.6	154.7	253.6	1.011E-06	9.992E-07	9.992E-07
C	10.0	.21	1950.	0.	0.	253.6	154.7	253.6	8.082E-07	7.989E-07	7.989E-07
C	13.0	.07	1950.	0.	0.	253.6	154.7	253.6	6.225E-07	6.153E-07	6.153E-07
D	.4	.36	1950.	0.	0.	114.1	75.2	114.1	8.742E-05	8.301E-05	8.301E-05
D	1.0	1.49	1950.	0.	0.	114.1	75.2	114.1	3.691E-05	3.505E-05	3.505E-05
D	2.0	3.58	1950.	0.	0.	114.1	75.2	114.1	1.825E-05	1.733E-05	1.733E-05
D	3.0	3.74	1950.	0.	0.	114.1	75.2	114.1	1.230E-05	1.168E-05	1.168E-05
D	4.0	3.31	1950.	0.	0.	114.1	75.2	114.1	9.279E-06	8.811E-06	8.811E-06
D	5.0	2.55	1950.	0.	0.	114.1	75.2	114.1	7.382E-06	7.009E-06	7.009E-06
D	6.0	1.73	1950.	0.	0.	114.1	75.2	114.1	6.174E-06	5.863E-06	5.863E-06
D	8.0	2.04	1950.	0.	0.	114.1	75.2	114.1	4.626E-06	4.393E-06	4.393E-06
D	10.0	1.03	1950.	0.	0.	114.1	75.2	114.1	3.699E-06	3.513E-06	3.513E-06
D	13.0	.45	1950.	0.	0.	114.1	75.2	114.1	2.849E-06	2.705E-06	2.705E-06
D	18.0	.08	1950.	0.	0.	114.1	75.2	114.1	2.058E-06	1.954E-06	1.954E-06
E	.4	.61	1950.	0.	0.	195.7	22.3	195.7	1.722E-04	1.559E-04	1.559E-04
E	1.0	2.34	1950.	0.	0.	195.7	22.3	195.7	7.269E-05	6.581E-05	6.581E-05
E	2.0	5.33	1950.	0.	0.	195.7	22.3	195.7	3.595E-05	3.254E-05	3.254E-05
E	3.0	5.02	1950.	0.	0.	195.7	22.3	195.7	2.423E-05	2.194E-05	2.194E-05
E	4.0	4.32	1950.	0.	0.	195.7	22.3	195.7	1.827E-05	1.654E-05	1.654E-05
E	5.0	3.44	1950.	0.	0.	195.7	22.3	195.7	1.454E-05	1.316E-05	1.316E-05
E	6.0	2.59	1950.	0.	0.	195.7	22.3	195.7	1.216E-05	1.101E-05	1.101E-05
E	8.0	2.81	1950.	0.	0.	195.7	22.3	195.7	9.112E-06	8.249E-06	8.249E-06
E	10.0	1.15	1950.	0.	0.	195.7	22.3	195.7	7.285E-06	6.596E-06	6.596E-06
E	13.0	.39	1950.	0.	0.	195.7	22.3	195.7	5.611E-06	5.080E-06	5.080E-06
E	18.0	.05	1950.	0.	0.	195.7	22.3	195.7	4.053E-06	3.670E-06	3.670E-06
F	.4	.76	1950.	0.	0.	303.4	8.4	303.4	2.935E-04	2.491E-04	2.491E-04
F	1.0	2.77	1950.	0.	0.	303.4	8.4	303.4	1.239E-04	1.052E-04	1.052E-04
F	2.0	5.95	1950.	0.	0.	303.4	8.4	303.4	6.128E-05	5.201E-05	5.201E-05
F	3.0	4.56	1950.	0.	0.	303.4	8.4	303.4	4.131E-05	3.506E-05	3.506E-05
F	4.0	3.20	1950.	0.	0.	303.4	8.4	303.4	3.115E-05	2.644E-05	2.644E-05
F	5.0	1.58	1950.	0.	0.	303.4	8.4	303.4	2.478E-05	2.103E-05	2.103E-05
F	6.0	.63	1950.	0.	0.	303.4	8.4	303.4	2.073E-05	1.759E-05	1.759E-05
F	8.0	.39	1950.	0.	0.	303.4	8.4	303.4	1.553E-05	1.318E-05	1.318E-05
F	10.0	.07	1950.	0.	0.	303.4	8.4	303.4	1.242E-05	1.054E-05	1.054E-05
F	13.0	.03	1950.	0.	0.	303.4	8.4	303.4	9.565E-06	8.118E-06	8.118E-06
G	.4	1.05	1950.	0.	0.	488.9	3.2	488.9	4.828E-04	3.733E-04	3.733E-04
G	1.0	3.07	1950.	0.	0.	488.9	3.2	488.9	2.039E-04	1.576E-04	1.576E-04
G	2.0	5.65	1950.	0.	0.	488.9	3.2	488.9	1.008E-04	7.794E-05	7.794E-05
G	3.0	3.12	1950.	0.	0.	488.9	3.2	488.9	6.795E-05	5.254E-05	5.254E-05
G	4.0	1.37	1950.	0.	0.	488.9	3.2	488.9	5.125E-05	3.962E-05	3.962E-05
G	5.0	.34	1950.	0.	0.	488.9	3.2	488.9	4.077E-05	3.152E-05	3.152E-05
G	6.0	.09	1950.	0.	0.	488.9	3.2	488.9	3.410E-05	2.637E-05	2.637E-05
G	8.0	.02	1950.	0.	0.	488.9	3.2	488.9	2.555E-05	1.976E-05	1.976E-05
G	10.0	.01	1950.	0.	0.	488.9	3.2	488.9	2.043E-05	1.580E-05	1.580E-05
G	13.0	.00	1950.	0.	0.	488.9	3.2	488.9	1.573E-05	1.217E-05	1.217E-05
G	18.0	.00	1950.	0.	0.	488.9	3.2	488.9	1.137E-05	8.789E-06	8.789E-06

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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE: 11/19/2003     TIME: 23: 4:56
/PLANT NAME:  CGS                                METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma=desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0SITE EXCLUSION BOUNDARY CALCULATIONS:
 DIRECTION-INDEPENDENT (S.R.P 2.3.4) MODEL.
 MINIMUM BOUNDARY DISTANCE = 1950.0 METERS.
0DESERT SIGMA VALUES USED.  MEANDER IS INCLUDED IN THESE VALUES- RG 1.145 MEANDER FACTORS ARE NOT USED.
 BUILDING WAKE CREDIT ALLOWED:  C=   .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0  3.733E-04  2.491E-04  1.576E-04  1.559E-04  1.052E-04  8.301E-05  7.794E-05  6.581E-05  5.254E-05  5.201E-05
       1.046      1.805      4.870      5.477      8.243      8.606     14.254     16.596     19.719     25.673
     1.04614    1.80468    4.87042    5.47724    8.24273    8.60619   14.25411   16.59608   19.71871   25.67320
0  3.962E-05  3.506E-05  3.505E-05  3.254E-05  3.152E-05  2.644E-05  2.637E-05  2.194E-05  2.103E-05  1.976E-05
      27.039     31.596     33.085     38.417     38.755     41.950     42.042     47.064     48.647     48.666
     27.03856   31.59608   33.08470   38.41656   38.75474   41.95006   42.04172   47.06384   48.64728   48.66624
0  1.888E-05  1.759E-05  1.733E-05  1.654E-05  1.580E-05  1.318E-05  1.316E-05  1.217E-05  1.168E-05  1.101E-05
      48.755     49.384     52.965     57.285     57.295     57.680     61.116     61.119     64.861     67.453
     48.75474   49.38369   52.96460   57.28508   57.29457   57.68016   61.11568   61.11884   64.86094   67.45259
0  1.054E-05  9.662E-06  8.811E-06  8.789E-06  8.249E-06  8.118E-06  7.972E-06  7.009E-06  6.596E-06  5.863E-06
      67.522     67.614     70.926     70.929     73.742     73.767     74.023     76.571     77.718     79.447
     67.52213   67.61378   70.92605   70.92921   73.74210   73.76739   74.02339   76.57080   77.71809   79.44691
0  5.080E-06  4.393E-06  4.080E-06  3.942E-06  3.693E-06  3.670E-06  3.513E-06  2.705E-06  2.657E-06  2.017E-06
      79.839     81.874     82.152     82.765     83.113     83.167     84.194     84.643     85.401     86.030
     79.83881   81.87422   82.15235   82.76550   83.11317   83.16689   84.19408   84.64288   85.40141   86.03036
0  2.004E-06  1.954E-06  1.594E-06  1.559E-06  1.360E-06  1.334E-06  1.026E-06  9.992E-07  8.159E-07  7.989E-07
      86.583     86.662     87.143     88.366     89.036     89.352     89.921     90.265     90.689     90.898
     86.58346   86.66248   87.14288   88.36602   89.03606   89.35211   89.92101   90.26551   90.68903   90.89762
0  7.711E-07  6.825E-07  6.153E-07  5.198E-07  5.114E-07  4.089E-07  3.920E-07  3.149E-07  3.119E-07  2.609E-07
      93.394     93.628     93.698     95.509     95.815     95.907     97.317     97.386     98.404     98.982
     93.39446   93.62834   93.69788   95.50887   95.81544   95.90710   97.31671   97.38625   98.40395   98.98233
     1.955E-07  1.563E-07  1.204E-07  8.695E-08
      99.687     99.899     99.994    100.000
     99.68713   99.89889   99.99371   100.00000
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0          X/Q PERCENTILES
  (BASED ON THE UPPER ENVELOPE OF THE
  ORDERED X/Q-FREQUENCY VALUES, AND AS
  PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

                                                    BACK EXTRAPOLATION FOR  1 PERCENTILE.
     3.809E-04              1.000              1.000
     2.242E-04              3.000              3.000
     1.693E-04              5.000              5.000
     1.099E-04             10.000             10.000
     8.205E-05             15.000             15.000
     6.507E-05             20.000             20.000
     5.332E-05             25.000             25.000
     4.394E-05             30.000             30.000
     3.664E-05             35.000             35.000
     3.037E-05             40.000             40.000
     2.452E-05             45.000             45.000
     2.026E 05             50.000             50.000
     1.764E-05             55.000             55.000
     1.489E-05             60.000             60.000
     1.219E-05             65.000             65.000
     9.828E-06             70.000             70.000
     7.702E-06             75.000             75.000
     5.950E-06             80.000             80.000
     4.615E-06             85.000             85.000
     3.352E-06             90.000             90.000
0    1.693E 04              5.0                5.00
OK= 17      FIVEXQ(K)= 1.693E-04      FIVEPR(K)= 5.000
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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:  CGS                                METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma=desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0SITE EXCLUSION BOUNDARY CALCULATIONS:
0FIVE PERCENT OVERALL SITE LIMIT
0DESERT SIGMA VALUES USED.  MEANDER IS INCLUDED IN THESE VALUES- RG 1.145 MEANDER FACTORS ARE NOT USED.
 BUILDING WAKE CREDIT ALLOWED:   C=   .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0  3.733E-04  2.491E-04  1.576E-04  1.559E-04  1.052E-04  8.301E-05  7.794E-05  6.581E-05  5.254E-05  5.201E-05
       1.046      1.805      4.870      5.477      8.243      8.606     14.254     16.596     19.719     25.673
     1.04614    1.80468    4.87042    5.47724    8.24273    8.60620   14.25411   16.59609   19.71872   25.67321
0  3.962E-05  3.506E-05  3.505E-05  3.254E-05  3.152E-05  2.644E-05  2.637E-05  2.194E-05  2.103E-05  1.976E-05
      27.039     31.596     33.085     38.417     38.755     41.950     42.042     47.064     48.647     48.666
     27.03857   31.59609   33.08472   38.41658   38.75476   41.95008   42.04174   47.06386   48.64730   48.66627
0  1.888E-05  1.759E-05  1.733E-05  1.654E-05  1.580E-05  1.318E-05  1.316E-05  1.217E-05  1.168E-05  1.101E-05
      48.755     49.384     52.965     57.285     57.295     57.680     61.116     61.119     64.861     67.453
     48.75476   49.38371   52.96462   57.28510   57.29459   57.68017   61.11570   61.11886   64.86096   67.45261
0  1.054E-05  9.662E-06  8.811E-06  8.789E-06  8.249E-06  8.118E-06  7.972E-06  7.009E-06  6.596E-06  5.863E-06
      67.522     67.614     70.926     70.929     73.742     73.767     74.023     76.571     77.718     79.447
     67.52215   67.61383   70.92610   70.92926   73.74215   73.76744   74.02347   76.57088   77.71815   79.44698
0  5.080E-06  4.393E-06  4.080E-06  3.942E-06  3.693E-06  3.670E-06  3.513E-06  2.705E-06  2.657E-06  2.017E-06
      79.839     81.874     82.152     82.766     83.113     83.167     84.194     84.643     85.401     86.030
     79.83890   81.87431   82.15244   82.76559   83.11323   83.16696   84.19415   84.64294   85.40147   86.03042
0  2.004E-06  1.954E-06  1.594E-06  1.559E-06  1.360E-06  1.334E-06  1.026E-06  9.992E-07  8.159E-07  7.989E-07
      86.584     86.663     87.143     88.366     89.036     89.352     89.921     90.266     90.689     90.898
     86.58353   86.66256   87.14297   88.36612   89.03616   89.35222   89.92114   90.26564   90.68917   90.89777
0  7.711E-07  6.825E-07  6.153E-07  5.198E-07  5.114E-07  4.089E-07  3.920E-07  3.149E-07  3.119E-07  2.609E-07
      93.395     93.628     93.698     95.509     95.816     95.907     97.317     97.386     98.404     98.982
     93.39461   93.62849   93.69803   95.50903   95.81561   95.90726   97.31687   97.38641   98.40411   98.98248
     1.955E-07  1.563E-07  1.204E-07  8.695E-08
      99.687     99.899     99.994    100.000
     99.68729   99.89906   99.99388  100.00020
```

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0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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
0  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
  18  1      -7.89311 -10.64124  -1.18976
  18  2      -9.86416 -10.71703  -1.30581
  18  3     -10.33296 -10.82610  -1.67665
  18  4     -10.76940 -10.80680  -1.10587
  18  5     -11.00948 -10.73168   1.51571
  18  6     -11.41681 -10.70420  -1.57651
  18  7     -11.70542 -10.59021  -1.75600
  18  8     -11.92912 -10.93760  -1.30040
  18  9     -15.93279     NUMXQ(K)=  9
     3.809E-04              1.000              1.000                BACK EXTRAPOLATION FOR  1 PERCENTILE.
     2.242E-04              3.000              3.000
     1.693E-04              5.000              5.000
     1.099E-04             10.000             10.000
     8.205E-05             15.000             15.000
     6.507E-05             20.000             20.000
     5.332E-05             25.000             25.000
     4.394E-05             30.000             30.000
     3.664E-05             35.000             35.000
     3.037E-05             40.000             40.000
     2.452E-05             45.000             45.000
     2.026E-05             50.000             50.000
     1.764E-05             55.000             55.000
     1.489E-05             60.000             60.000
     1.219E-05             65.000             65.000
     9.828E-06             70.000             70.000
     7.702E-06             75.000             75.000
     5.952E-06             80.000             80.000
     4.619E-06             85.000             85.000
     3.357E-06             90.000             90.000
0    1.693E-04              5.0                5.00
0K= 18      FIVEXQ(K)= 1.693E-04      FIVEPR(K)= 5.000
0  K          HIGHPR              PR       GRNDVT(K)
   1        -2.61965          .44011        7.11613
   2        -1.70114         4.44581        5.59889
   3        -2.80567          .25107        3.79337
   4        -3.03767          .11922        1.66485
   5        -3.13349          .08638        1.20432
   6        -3.13647          .08550        1.52234
   7        -3.05142          .11389        4.75939
   8        -2.83132          .23178       10.15150
   9        -2.78472          .26788       12.08469
  10        -2.87121          .20446        8.67808
  11        -2.77952          .27220        5.83414
  12        -2.79549          .25911        4.17912
  13        -2.76275          .28659        4.74070
  14        -2.72818          .31843        8.25809
  15        -2.65745          .39368       10.87648
  16        -2.57624          .49942        9.53793
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0 K	HOURS(K)	TOTHRS
1	38.55353	38.55353
2	389.45290	428.00640
3	21.99344	449.99980
4	10.44326	460.44310
5	7.56680	468.00990
6	7.49005	475.50000
7	9.97647	485.47640
8	20.30433	505.78080
9	23.46587	529.24660
10	17.91033	547.15700
11	23.84494	571.00190
12	22.69833	593.70020
13	25.10538	618.80550
14	27.89463	646.70020
15	34.48661	681.18680
16	43.74879	724.93560

0 K	FIVEXQ	SVANN	SLTIME	TIMINT	I	TIME	XQT
1	1.683E-04	1.170E-05	-.3179	-8.4694			
					1	8.0	-9.13048
					2	16.0	-9.35085
					3	72.0	-9.82903
					4	624.0	-10.51557
2	1.606E-04	1.048E-05	-.3255	-8.5111			
					1	8.0	-9.18803
					2	16.0	-9.41366
					3	72.0	-9.90326
					4	624.0	-10.60621
3	1.133E-04	6.203E-06	-.3465	-8.8449			
					1	8.0	-9.56545
					2	16.0	9.80563
					3	72.0	-10.32680
					4	624.0	-11.07507
4	5.617E-05	2.616E-06	-.3657	-9.5336			
					1	8.0	-10.29412
					2	16.0	-10.54763
					3	72.0	-11.09772
					4	624.0	-11.88752
5	2.878E-05	1.666E-06	-.3398	-10.2203			
					1	8.0	-10.92696
					2	16.0	-11.16251
					3	72.0	-11.67363
					4	624.0	-12.40747
6	3.141E-05	1.715E-06	-.3467	-10.1282			
					1	8.0	-10.84922
					2	16.0	-11.08957
					3	72.0	-11.61110
					4	624.0	-12.35988
7	7.224E-05	3.675E-06	-.3552	-9.2893			
					1	8.0	-10.02796
					2	16.0	-10.27418
					3	72.0	-10.80844
					4	624.0	-11.57550
8	1.187E-04	8.638E-06	-.3125	-8.8223			
					1	8.0	-9.47214
					2	16.0	-9.68876
					3	72.0	-10.15880
					4	624.0	-10.83367
9	1.301E-04	9.874E-06	-.3075	-8.7340			
					1	8.0	-9.37345
					2	16.0	-9.58660
					3	72.0	-10.04910
					4	624.0	-10.71314
10	1.085E-04	6.727E-06	-.3317	-8.8985			
					1	8.0	-9.58819
					2	16.0	-9.81808
					3	72.0	-10.31693
					4	624.0	-11.03316
11	1.200E-04	6.459E-06	-.3485	-8.7866			
					1	8.0	-9.51120
					2	16.0	-9.75273
					3	72.0	-10.27685
					4	624.0	-11.02935
12	1.140E-04	5.665E-06	-.3580	-8.8315			
					1	8.0	-9.57592
					2	16.0	-9.82404
					3	72.0	-10.36246
					4	624.0	-11.13548
13	1.248E-04	6.498E-06	-.3524	-8.7447			
					1	8.0	-9.47757
					2	16.0	-9.72185
					3	72.0	-10.25192
					4	624.0	-11.01296
14	1.393E-04	8.409E-06	-.3348	-8.6469			
					1	8.0	-9.34309

				2	16.0	-9.57514
				3	72.0	-10.07868
				4	624.0	-10.80164
15	1.589E-04	1.240E-05	-.3041	-8.5366		
				1	8.0	-9.16902
				2	16.0	-9.37983
				3	72.0	-9.83727
				4	624.0	-10.49403
16	1.810E-04	1.359E-05	-.3088	-8.4033		
				1	8.0	-9.04532
				2	16.0	-9.25935
				3	72.0	-9.72376
				4	624.0	-10.39054
17	1.693E-04	1.359E-05	-.3008	-8.4753		
				1	8.0	-9.10087
				2	16.0	-9.30939
				3	72.0	-9.76186
				4	624.0	-10.41151
18	1.693E-04	1.359E-05	-.3008	-8.4753		
				1	8.0	-9.10087
				2	16.0	-9.30939
				3	72.0	-9.76186
				4	624.0	-10.41151

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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:   CGS                               METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma=desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0                                  RELATIVE CONCENTRATION (X/Q) VALUES (SEC/CUBIC METER)
                                                  VERSUS                                  HOURS PER YEAR MAX
                                                AVERAGING TIME                                  0-2 HR X/Q IS
 DOWNWIND DISTANCE                                                                                EXCEEDED  DOWNWIND
 SECTOR   (METERS)        0-2 HOURS     0-8 HOURS     8-24 HOURS     1-4 DAYS     4-30 DAYS ANNUAL AVERAGE IN SECTOR   SECTOR
     S      1950.          1.68E-04      1.08E-04      8.69E-05      5.39E-05      2.71E-05      1.17E-05      38.6        S
   SSW      1950.          1.61E-04      1.02E-04      8.16E-05      5.00E-05      2.48E-05      1.05E-05     389.5      SSW
    SW      1950.          1.13E-04      7.01E-05      5.51E-05      3.27E-05      1.55E-05      6.20E-06      22.0       SW
   WSW      1950.          5.62E-05      3.38E-05      2.63E-05      1.51E-05      6.88E-06      2.62E-06      10.4      WSW
     W      1950.          2.88E-05      1.80E-05      1.42E-05      8.52E-06      4.09E-06      1.67E-06       7.6        W
   WNW      1950.          3.14E-05      1.94E-05      1.53E-05      9.06E-06      4.29E-06      1.72E-06       7.5      WNW
    NW      1950.          7.22E-05      4.41E-05      3.45E-05      2.02E-05      9.39E-06      3.67E-06      10.0       NW
   NNW      1950.          1.19E-04      7.70E-05      6.20E-05      3.87E-05      1.97E-05      8.64E-06      20.3      NNW
     N      1950.          1.30E-04      8.49E-05      6.86E-05      4.32E-05      2.23E-05      9.87E-06      23.5        N
   NNE      1950.          1.09E-04      6.85E-05      5.45E-05      3.31E-05      1.62E-05      6.73E-06      17.9      NNE
    NE      1950.          1.20E-04      7.40E-05      5.81E-05      3.44E-05      1.62E-05      6.46E-06      23.8       NE
   ENE      1950.          1.14E-04      6.94E-05      5.41E-05      3.16E-05      1.46E-05      5.66E-06      22.7      ENE
     E      1950.          1.25E-04      7.65E-05      6.00E-05      3.53E-05      1.65E-05      6.50E-06      25.1        E
   ESE      1950.          1.39E-04      8.76E-05      6.94E-05      4.20E-05      2.04E-05      8.41E-06      27.9      ESE
    SE      1950.          1.59E-04      1.04E-04      8.44E-05      5.34E-05      2.77E-05      1.24E-05      34.5       SE
   SSE      1950.          1.81E-04      1.18E-04      9.52E-05      5.98E-05      3.07E-05      1.36E-05      43.7      SSE
 MAX X/Q                   1.81E-04                                                TOTAL HOURS AROUND SITE:   724.9

 SRP 2.3.4  1950.          1.69E-04      1.12E-04      9.06E-05      5.76E-05      3.01E-05      1.36E-05
 SITE LIMIT                1.69E-04      1.12E-04      9.06E-05      5.76E-05      3.01E-05      1.36E-05
0THE FIVE-PERCENT-FOR-THE-ENTIRE-SITE X/Q IS LIMITING.
0**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.
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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23: 4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE S SECTOR.

STABILITY CLASS	WINDSPEED FREQUENCY METER/SEC AT 10.0 METERS	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=1431.SQ.METERS	USED
A	.4	.40	4827.	0.	0.	1000.0	1000.0	1000.0	7.495E-07	7.492E-07	7.492E-07
A	1.0	1.42	4827.	0.	0.	1000.0	1000.0	1000.0	3.165E-07	3.163E-07	3.163E-07
A	2.0	3.24	4827.	0.	0.	1000.0	1000.0	1000.0	1.565E-07	1.564E-07	1.564E-07
A	3.0	2.66	4827.	0.	0.	1000.0	1000.0	1000.0	1.055E-07	1.054E-07	1.054E-07
A	4.0	2.35	4827.	0.	0.	1000.0	1000.0	1000.0	7.956E-08	7.952E-08	7.952E-08
A	5.0	1.60	4827.	0.	0.	1000.0	1000.0	1000.0	6.329E-08	6.326E-08	6.326E-08
A	6.0	.71	4827.	0.	0.	1000.0	1000.0	1000.0	5.294E-08	5.292E-08	5.292E-08
A	8.0	1.11	4827.	0.	0.	1000.0	1000.0	1000.0	3.967E-08	3.965E-08	3.965E-08
A	10.0	.04	4827.	0.	0.	1000.0	1000.0	1000.0	3.172E-08	3.170E-08	3.170E-08
B	.4	.10	4827.	0.	0.	725.4	859.0	725.4	1.203E-06	1.202E-06	1.202E-06
B	1.0	.31	4827.	0.	0.	725.4	859.0	725.4	5.079E-07	5.075E-07	5.075E-07
B	2.0	.89	4827.	0.	0.	725.4	859.0	725.4	2.512E-07	2.510E-07	2.510E-07
B	3.0	1.20	4827.	0.	0.	725.4	859.0	725.4	1.693E-07	1.692E-07	1.692E-07
B	4.0	.67	4827.	0.	0.	725.4	859.0	725.4	1.277E-07	1.276E-07	1.276E-07
B	5.0	.49	4827.	0.	0.	725.4	859.0	725.4	1.016E-07	1.015E-07	1.015E-07
B	6.0	.27	4827.	0.	0.	725.4	859.0	725.4	8.496E-08	8.490E-08	8.490E-08
B	8.0	.18	4827.	0.	0.	725.4	859.0	725.4	6.366E-08	6.362E-08	6.362E-08
B	10.0	.04	4827.	0.	0.	725.4	859.0	725.4	5.090E-08	5.086E-08	5.086E-08
C	.4	.09	4827.	0.	0.	568.7	500.4	568.7	2.634E-06	2.629E-06	2.629E-06
C	1.0	.27	4827.	0.	0.	568.7	500.4	568.7	1.112E-06	1.110E-06	1.110E-06
C	2.0	1.07	4827.	0.	0.	568.7	500.4	568.7	5.499E-07	5.490E-07	5.490E-07
C	3.0	1.11	4827.	0.	0.	568.7	500.4	568.7	3.706E-07	3.700E-07	3.700E-07
C	4.0	.76	4827.	0.	0.	568.7	500.4	568.7	2.795E-07	2.791E-07	2.791E-07
C	5.0	.71	4827.	0.	0.	568.7	500.4	568.7	2.224E-07	2.220E-07	2.220E-07
C	6.0	.31	4827.	0.	0.	568.7	500.4	568.7	1.860E-07	1.857E-07	1.857E-07
C	8.0	.31	4827.	0.	0.	568.7	500.4	568.7	1.394E-07	1.392E-07	1.392E-07
D	.4	.49	4827.	0.	0.	221.3	158.9	221.3	2.131E-05	2.104E-05	2.104E-05
D	1.0	2.00	4827.	0.	0.	221.3	158.9	221.3	9.000E-06	8.885E-06	8.885E-06
D	2.0	4.66	4827.	0.	0.	221.3	158.9	221.3	4.450E-06	4.393E-06	4.393E-06
D	3.0	5.91	4827.	0.	0.	221.3	158.9	221.3	3.000E-06	2.962E-06	2.962E-06
D	4.0	3.06	4827.	0.	0.	221.3	158.9	221.3	2.262E-06	2.234E-06	2.234E-06
D	5.0	2.71	4827.	0.	0.	221.3	158.9	221.3	1.800E-06	1.777E-06	1.777E-06
D	6.0	1.82	4827.	0.	0.	221.3	158.9	221.3	1.506E-06	1.486E-06	1.486E-06
D	8.0	.44	4827.	0.	0.	221.3	158.9	221.3	1.128E-06	1.114E-06	1.114E-06
D	10.0	.04	4827.	0.	0.	221.3	158.9	221.3	9.020E-07	8.904E-07	8.904E-07
D	13.0	.04	4827.	0.	0.	221.3	158.9	221.3	6.947E-07	6.858E-07	6.858E-07

E	.4	.52	4827.	0.	0.	428.5	35.6	428.5	4.920E-05	4.777E-05	4.777E-05
E	1.0	2.00	4827.	0.	0.	428.5	35.6	428.5	2.077E-05	2.017E-05	2.017E-05
E	2.0	5.20	4827.	0.	0.	428.5	35.6	428.5	1.027E-05	9.974E-06	9.974E-06
E	3.0	4.31	4827.	0.	0.	428.5	35.6	428.5	6.924E-06	6.723E-06	6.723E-06
E	4.0	2.27	4827.	0.	0.	428.5	35.6	428.5	5.222E-06	5.070E-06	5.070E-06
E	5.0	1.11	4827.	0.	0.	428.5	35.6	428.5	4.154E-06	4.034E-06	4.034E-06
E	6.0	.49	4827.	0.	0.	428.5	35.6	428.5	3.475E-06	3.374E-06	3.374E-06
E	8.0	.36	4827.	0.	0.	428.5	35.6	428.5	2.604E-06	2.528E-06	2.528E-06
E	10.0	.13	4827.	0.	0.	428.5	35.6	428.5	2.082E-06	2.021E-06	2.021E-06
E	13.0	.04	4827.	0.	0.	428.5	35.6	428.5	1.603E-06	1.557E-06	1.557E-06
F	.4	1.05	4827.	0.	0.	696.0	11.2	696.0	9.625E-05	9.094E-05	9.094E-05
F	1.0	3.82	4827.	0.	0.	696.0	11.2	696.0	4.064E-05	3.839E-05	3.839E-05
F	2.0	7.46	4827.	0.	0.	696.0	11.2	696.0	2.010E-05	1.899E-05	1.899E-05
F	3.0	4.31	4827.	0.	0.	696.0	11.2	696.0	1.355E-05	1.280E-05	1.280E-05
F	4.0	.58	4827.	0.	0.	696.0	11.2	696.0	1.022E-05	9.652E-06	9.652E-06
F	5.0	.09	4827.	0.	0.	696.0	11.2	696.0	8.128E-06	7.679E-06	7.679E-06
F	6.0	.13	4827.	0.	0.	696.0	11.2	696.0	6.799E-06	6.423E-06	6.423E-06
G	.4	1.59	4827.	0.	0.	1000.0	3.5	1000.0	2.136E-04	1.891E-04	1.891E-04
G	1.0	4.66	4827.	0.	0.	1000.0	3.5	1000.0	9.021E-05	7.984E-05	7.984E-05
G	2.0	12.08	4827.	0.	0.	1000.0	3.5	1000.0	4.461E-05	3.948E-05	3.948E-05
G	3.0	3.95	4827.	0.	0.	1000.0	3.5	1000.0	3.007E-05	2.661E-05	2.661E-05
G	4.0	.36	4827.	0.	0.	1000.0	3.5	1000.0	2.268E-05	2.007E-05	2.007E-05

```
1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE: 11/19/2003     TIME: 23: 4:56
/PLANT NAME:   CGS                               METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT: 10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS: input file: P96-99-F.inp   output file: P96-99-F.out  sigma-desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0LOW POPULATION ZONE CALCULATIONS:
0   S SECTOR     BOUNDARY DISTANCE = 4827.0 METERS
0DESERT SIGMA VALUES USED.  MEANDER IS INCLUDED IN THESE VALUES- RG 1.145 MEANDER FACTORS ARE NOT USED.
 BUILDING WAKE CREDIT ALLOWED:   C=   .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0  1.891E-04  9.094E-05  7.984E-05  4.777E-05  3.948E-05  3.839E-05  2.661E-05  2.104E-05  2.017E-05  2.007E-05
       1.591      2.639      7.302      7.820     19.901     23.721     27.673     28.161     30.160     30.515
    .11324     .18780     .51965     .55651    1.41618    1.68798    1.96927    2.00400    2.14623    2.17151
0  1.899E-05  1.280E-05  9.974E-06  9.652E-06  8.885E-06  7.679E-06  6.723E-06  6.423E-06  5.070E-06  4.393E-06
      37.977     42.285     47.481     48.059     50.057     50.146     54.454     54.588     56.853     61.516
     2.70248    3.00906    3.37884    3.41993    3.56215    3.56848    3.87505    3.88453    4.04572    4.37758
0  4.034E-06  3.374E-06  2.962E-06  2.629E-06  2.528E-06  2.234E-06  2.021E-06  1.777E-06  1.557E-06  1.486E-06
      62.627     63.115     69.022     69.114     69.470     72.534     72.668     75.377     75.421     77.242
     4.45659    4.49136    4.91171    4.91827    4.94355    5.16163    5.17111    5.36391    5.36707    5.49665
0  1.202E-06  1.114E-06  1.110E-06  8.904E-07  7.492E-07  6.858E-07  5.490E-07  5.075E-07  3.700E-07  3.163E-07
      77.345     77.789     78.055     78.100     78.504     78.548     79.614     79.925     81.035     82.456
     5.50394    5.53554    5.55451    5.55767    5.58642    5.58958    5.66543    5.68755    5.76657    5.86771
0  2.791E-07  2.510E-07  2.220E-07  1.857E-07  1.692E-07  1.564E-07  1.392E-07  1.276E-07  1.054E-07  1.015E-07
      83.211     84.100     84.810     85.121     86.320     89.563     89.874     90.540     93.205     93.693
     5.92143    5.98465    6.03521    6.05734    6.14267    6.37339    6.39552    6.44293    6.63256    6.66731
0  8.490E-08  7.952E-08  6.362E-08  6.326E-08  5.292E-08  5.086E-08  3.965E-08  3.170E-08
      93.960     96.314     96.491     98.090     98.801     98.845     99.956    100.000
     6.68629    6.85380    6.86644    6.98022    7.03079    7.03395    7.11297    7.11613
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0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=   1.686
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=   2.700
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   3.559
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   3.872
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   4.908
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   5.158
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 8)=   5.360
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 9)=   5.493
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(10)=   6.976
0  K   I    XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
   1   1      -8.57322 -13.80769  -1.71430
   1   2     -10.16758 -17.77680  -3.58355
   1   3      10.87178  22.81338  -6.19742
   1   4     -11.63119 -24.67657  -7.23005
   1   5     -11.90999 -24.84286  -7.32422
   1   6     -12.72980 -32.08663 -11.70420
   1   7     -13.01191 -32.79868 -12.14112
   1   8     -13.24063 -37.10030 -14.81144
   1   9     -13.41924 -55.03370 -26.02798
   1  10     -16.57596      NUMXQ(K)= 10
                                                    BACK EXTRAPOLATION FOR  1 PERCENTILE.
     2.391E-04                .071               1.000
     1.352E-04                .213               3.000
     1.017E-04                .356               5.000
     6.742E-05                .712              10.000
     5.217E-05               1.067              15.000
     4.313E-05               1.423              20.000
     3.558E-05               1.779              25.000
     2.719E-05               2.135              30.000
     2.153E-05               2.491              35.000
     1.651E-05               2.846              40.000
     1.196E-05               3.202              45.000
     8.913E-06               3.558              50.000
     6.500E-06               3.914              55.000
     4.829E-06               4.270              60.000
     3.658E-06               4.625              65.000
     2.735E-06               4.981              70.000
     1.831E-06               5.337              75.000
     9.446E-07               5.693              80.000
     4.281E-07               6.049              85.000
     2.011E-07               6.405              90.000
0    8.345E-05               0.5                 7.03
0ANNUAL AVERAGE =   2.20E-06
0K=  1     FIVEXQ(K)= 8.345E-05     FIVEPR(K)= 7.026
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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23: 4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma-desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE SSW SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 10.0 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=1431.SQ.METERS	USED
A	.4	.63	4827.	0.	0.	1000.0	1000.0	1000.0	7.495E-07	7.492E-07	7.492E-07
A	1.0	2.20	4827.	0.	0.	1000.0	1000.0	1000.0	3.165E-07	3.163E-07	3.163E-07
A	2.0	3.39	4827.	0.	0.	1000.0	1000.0	1000.0	1.565E-07	1.564E-07	1.564E-07
A	3.0	2.60	4827.	0.	0.	1000.0	1000.0	1000.0	1.055E-07	1.054E-07	1.054E-07
A	4.0	2.09	4827.	0.	0.	1000.0	1000.0	1000.0	7.956E-08	7.952E-08	7.952E-08
A	5.0	1.58	4827.	0.	0.	1000.0	1000.0	1000.0	6.329E-08	6.326E-08	6.326E-08
A	6.0	.51	4827.	0.	0.	1000.0	1000.0	1000.0	5.294E-08	5.292E-08	5.292E-08
A	8.0	1.02	4827.	0.	0.	1000.0	1000.0	1000.0	3.967E-08	3.965E-08	3.965E-08
A	10.0	.06	4827.	0.	0.	1000.0	1000.0	1000.0	3.172E-08	3.170E-08	3.170E-08
A	13.0	.11	4827.	0.	0.	1000.0	1000.0	1000.0	2.443E-08	2.442E-08	2.442E-08
B	.4	.15	4827.	0.	0.	725.4	859.0	725.4	1.203E-06	1.202E-06	1.202E-06
B	1.0	.45	4827.	0.	0.	725.4	859.0	725.4	5.079E-07	5.075E-07	5.075E-07
B	2.0	.73	4827.	0.	0.	725.4	859.0	725.4	2.512E-07	2.510E-07	2.510E-07
B	3.0	1.02	4827.	0.	0.	725.4	859.0	725.4	1.693E-07	1.692E-07	1.692E-07
B	4.0	1.02	4827.	0.	0.	725.4	859.0	725.4	1.277E-07	1.276E-07	1.276E-07
B	5.0	.56	4827.	0.	0.	725.4	859.0	725.4	1.016E-07	1.015E-07	1.015E-07
B	6.0	.11	4827.	0.	0.	725.4	859.0	725.4	8.496E-08	8.490E-08	8.490E-08
B	8.0	.11	4827.	0.	0.	725.4	859.0	725.4	6.366E-08	6.362E-08	6.362E-08
B	13.0	.11	4827.	0.	0.	725.4	859.0	725.4	3.920E-08	3.917E-08	3.917E-08
C	.4	.20	4827.	0.	0.	568.7	500.4	568.7	2.634E-06	2.629E-06	2.629E-06
C	1.0	.56	4827.	0.	0.	568.7	500.4	568.7	1.112E-06	1.110E-06	1.110E-06
C	2.0	1.07	4827.	0.	0.	568.7	500.4	568.7	5.499E-07	5.490E-07	5.490E-07
C	3.0	1.02	4827.	0.	0.	568.7	500.4	568.7	3.706E-07	3.700E-07	3.700E-07
C	4.0	.85	4827.	0.	0.	568.7	500.4	568.7	2.795E-07	2.791E-07	2.791E-07
C	5.0	.62	4827.	0.	0.	568.7	500.4	568.7	2.224E-07	2.220E-07	2.220E-07
C	6.0	.17	4827.	0.	0.	568.7	500.4	568.7	1.860E-07	1.857E-07	1.857E-07
C	8.0	.11	4827.	0.	0.	568.7	500.4	568.7	1.394E-07	1.392E-07	1.392E-07
C	10.0	.11	4827.	0.	0.	568.7	500.4	568.7	1.114E-07	1.113E-07	1.113E-07
D	.4	.44	4827.	0.	0.	221.3	158.9	221.3	2.131E-05	2.104E-05	2.104E-05
D	1.0	1.81	4827.	0.	0.	221.3	158.9	221.3	9.000E-06	8.885E-06	8.885E-06
D	2.0	3.84	4827.	0.	0.	221.3	158.9	221.3	4.450E-06	4.393E-06	4.393E-06
D	3.0	4.12	4827.	0.	0.	221.3	158.9	221.3	3.000E-06	2.962E-06	2.962E-06
D	4.0	3.33	4827.	0.	0.	221.3	158.9	221.3	2.262E-06	2.234E-06	2.234E-06
D	5.0	1.81	4827.	0.	0.	221.3	158.9	221.3	1.800E-06	1.777E-06	1.777E-06
D	6.0	.85	4827.	0.	0.	221.3	158.9	221.3	1.506E-06	1.486E-06	1.486E-06
D	8.0	.68	4827.	0.	0.	221.3	158.9	221.3	1.128E-06	1.114E-06	1.114E-06
D	10.0	.45	4827.	0.	0.	221.3	158.9	221.3	9.020E-07	8.904E-07	8.904E-07
D	13.0	.06	4827.	0.	0.	221.3	158.9	221.3	6.947E-07	6.858E-07	6.858E-07

E	.4	.51	4827.	0.	0.	428.5	35.6	428.5	4.920E-05	4.777E-05	4.777E-05
E	1.0	1.98	4827.	0.	0.	428.5	35.6	428.5	2.077E-05	2.017E-05	2.017E-05
E	2.0	5.19	4827.	0.	0.	428.5	35.6	428.5	1.027E-05	9.974E-06	9.974E-06
E	3.0	4.46	4827.	0.	0.	428.5	35.6	428.5	6.924E-06	6.723E-06	6.723E-06
E	4.0	1.86	4827.	0.	0.	428.5	35.6	428.5	5.222E-06	5.070E-06	5.070E-06
E	5.0	.56	4827.	0.	0.	428.5	35.6	428.5	4.154E-06	4.034E-06	4.034E-06
E	6.0	.23	4827.	0.	0.	428.5	35.6	428.5	3.475E-06	3.374E-06	3.374E-06
E	8.0	.73	4827.	0.	0.	428.5	35.6	428.5	2.604E-06	2.528E-06	2.528E-06
E	10.0	.73	4827.	0.	0.	428.5	35.6	428.5	2.082E-06	2.021E-06	2.021E-06
F	.4	.98	4827.	0.	0.	696.0	11.2	696.0	9.625E-05	9.094E-05	9.094E-05
F	1.0	3.56	4827.	0.	0.	696.0	11.2	696.0	4.064E-05	3.839E-05	3.839E-05
F	2.0	7.96	4827.	0.	0.	696.0	11.2	696.0	2.010E-05	1.899E-05	1.899E-05
F	3.0	3.67	4827.	0.	0.	696.0	11.2	696.0	1.355E-05	1.280E-05	1.280E-05
F	4.0	.45	4827.	0.	0.	696.0	11.2	696.0	1.022E-05	9.652E-06	9.652E-06
F	5.0	.06	4827.	0.	0.	696.0	11.2	696.0	8.128E-06	7.679E-06	7.679E-06
G	.4	1.98	4827.	0.	0.	1000.0	3.5	1000.0	2.136E-04	1.891E-04	1.891E-04
G	1.0	5.81	4827.	0.	0.	1000.0	3.5	1000.0	9.021E-05	7.984E-05	7.984E-05
G	2.0	14.06	4827.	0.	0.	1000.0	3.5	1000.0	4.461E-05	3.948E-05	3.948E-05
G	3.0	4.23	4827.	0.	0.	1000.0	3.5	1000.0	3.007E-05	2.661E-05	2.661E-05
G	4.0	.45	4827.	0.	0.	1000.0	3.5	1000.0	2.268E-05	2.007E-05	2.007E-05

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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:   CGS                               METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma=desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0LOW POPULATION ZONE CALCULATIONS:
0 SSW SECTOR      BOUNDARY DISTANCE = 4827.0 METERS
0DESERT SIGMA VALUES USED.  MEANDER IS INCLUDED IN THESE VALUES- RG 1.145 MEANDER FACTORS ARE NOT USED.
 BUILDING WAKE CREDIT ALLOWED:   C=   .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0   1.891E-04   9.094E-05   7.984E-05   4.777E-05   3.948E-05   3.839E-05   2.661E-05   2.104E-05   2.017E-05   2.007E-05
        1.984       2.960       8.774       9.286      23.342      26.898      31.132      31.573      33.549      34.000
       .11109      .16570      .49124      .51990     1.30688     1.50599     1.74303     1.76773     1.87835     1.90363
0   1.899E-05   1.280E-05   9.974E-06   9.652E-06   8.885E-06   7.679E-06   6.723E-06   5.070E-06   4.393E-06   4.034E-06
       41.960      45.629      50.822      51.274      53.080      53.137      57.596      59.459      63.298      63.862
      2.34927     2.55471     2.84548     2.87076     2.97190     2.97506     3.22475     3.32904     3.54396     3.57557
0   3.374E-06   2.962E-06   2.629E-06   2.528E-06   2.234E-06   2.021E-06   1.777E-06   1.486E-06   1.202E-06   1.114E-06
       64.088      68.209      68.404      69.138      72.468      73.202      75.008      75.855      76.004      76.681
      3.58821     3.81893     3.82986     3.87094     4.05742     4.09850     4.19964     4.24705     4.25538     4.29331
0   1.110E-06   8.904E-07   7.492E-07   6.858E-07   5.490E-07   5.075E-07   3.700E-07   3.163E-07   2.791E-07   2.510E-07
       77.246      77.698      78.323      78.380      79.452      79.904      80.920      83.122      83.968      84.702
      4.32491     4.35020     4.38523     4.38839     4.44845     4.47373     4.53062     4.65388     4.70129     4.74238
0   2.220E-07   1.857E-07   1.692E-07   1.564E-07   1.392E-07   1.276E-07   1.113E-07   1.054E-07   1.015E-07   8.490E-08
       85.323      85.492      86.509      89.896      90.008      91.025      91.137      93.734      94.299      94.412
      4.77714     4.78663     4.84352     5.03315     5.03947     5.09636     5.10268     5.24807     5.27967     5.28599
0   7.952E-08   6.362E-08   6.326E-08   5.292E-08   3.965E-08   3.917E-08   3.170E-08   2.442E-08
       96.500      96.613      98.194      98.702      99.718      99.831      99.887     100.000
      5.40293     5.40926     5.49775     5.52620     5.58309     5.58941     5.59257     5.59889
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0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=   1.504
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=   2.347
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   2.969
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   3.222
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   3.541
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   4.054
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 8)=   4.196
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 9)=   4.244
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(10)=   4.321
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(11)=   5.399
0  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
   2  1      -8.57322 -14.05213  -1.79098
   2  2     -10.16758 -18.55566  -3.86734
   2  3     -10.87178  25.73632  -7.48140
   2  4     -11.63119 -26.15022  -7.70093
   2  5     -11.90999 -30.41824 -10.00903
   2  6     -12.33539 -31.98439 -10.87590
   2  7     -13.01191 -37.80581 -14.21301
   2  8     -13.24063 -71.86451 -33.91882
   2  9     -13.41924 -72.24459 -34.13940
   2 10     -13.71102 -55.86605 -24.58670
   2 11     -16.34724     NUMXQ(K)= 11
                                                  BACK EXTRAPOLATION FOR  1 PERCENTILE.
     2.704E-04              .056              1.000
     1.509E-04              .168              3.000
     1.128E-04              .280              5.000
     7.421E-05              .560             10.000
     5.720E-05              .840             15.000
     4.718E-05             1.120             20.000
     4.043E-05             1.400             25.000
     3.244E-05             1.680             30.000
     2.545E-05             1.960             35.000
     2.053E-05             2.240             40.000
     1.519E-05             2.519             45.000
     1.081E-05             2.799             50.000
     7.873E-06             3.079             55.000
     5.596E-06             3.359             60.000
     3.853E-06             3.639             65.000
     2.660E-06             3.919             70.000
     1.778E-06             4.199             75.000
     7.388E-07             4.479             80.000
     3.627E-07             4.759             85.000
     1.840E-07             5.039             90.000
0    7.963E-05             0.5                8.93
0ANNUAL AVERAGE =   1.99E-06
0K=  2     FIVEXQ(K)= 7.963E-05     FIVEPR(K)= 8.930
```

1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23: 4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE SW SECTOR.

STABILITY CLASS	WINDSPEED AT 10.0 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=1431.SQ.METERS	USED
A	.4	.71	4827.	0.	0.	1000.0	1000.0	1000.0	7.495E-07	7.492E-07	7.492E-07
A	1.0	2.50	4827.	0.	0.	1000.0	1000.0	1000.0	3.165E-07	3.163E-07	3.163E-07
A	2.0	4.25	4827.	0.	0.	1000.0	1000.0	1000.0	1.565E-07	1.564E-07	1.564E-07
A	3.0	3.42	4827.	0.	0.	1000.0	1000.0	1000.0	1.055E-07	1.054E-07	1.054E-07
A	4.0	1.58	4827.	0.	0.	1000.0	1000.0	1000.0	7.956E-08	7.952E-08	7.952E-08
A	5.0	.92	4827.	0.	0.	1000.0	1000.0	1000.0	6.329E-08	6.326E-08	6.326E-08
A	6.0	.42	4827.	0.	0.	1000.0	1000.0	1000.0	5.294E-08	5.292E-08	5.292E-08
A	8.0	.83	4827.	0.	0.	1000.0	1000.0	1000.0	3.967E-08	3.965E-08	3.965E-08
A	10.0	.17	4827.	0.	0.	1000.0	1000.0	1000.0	3.172E-08	3.170E-08	3.170E-08
B	.4	.03	4827.	0.	0.	725.4	859.0	725.4	1.203E-06	1.202E-06	1.202E-06
B	1.0	.08	4827.	0.	0.	725.4	859.0	725.4	5.079E-07	5.075E-07	5.075E-07
B	2.0	.92	4827.	0.	0.	725.4	859.0	725.4	2.512E-07	2.510E-07	2.510E-07
B	3.0	1.25	4827.	0.	0.	725.4	859.0	725.4	1.693E-07	1.692E-07	1.692E-07
B	4.0	.83	4827.	0.	0.	725.4	859.0	725.4	1.277E-07	1.276E-07	1.276E-07
B	5.0	.67	4827.	0.	0.	725.4	859.0	725.4	1.016E-07	1.015E-07	1.015E-07
B	6.0	.08	4827.	0.	0.	725.4	859.0	725.4	8.496E-08	8.490E-08	8.490E-08
B	8.0	.17	4827.	0.	0.	725.4	859.0	725.4	6.366E-08	6.362E-08	6.362E-08
C	.4	.23	4827.	0.	0.	568.7	500.4	568.7	2.634E-06	2.629E-06	2.629E-06
C	1.0	.67	4827.	0.	0.	568.7	500.4	568.7	1.112E-06	1.110E-06	1.110E-06
C	2.0	.92	4827.	0.	0.	568.7	500.4	568.7	5.499E-07	5.490E-07	5.490E-07
C	3.0	.92	4827.	0.	0.	568.7	500.4	568.7	3.706E-07	3.700E-07	3.700E-07
C	4.0	.25	4827.	0.	0.	568.7	500.4	568.7	2.795E-07	2.791E-07	2.791E-07
C	5.0	.42	4827.	0.	0.	568.7	500.4	568.7	2.224E-07	2.220E-07	2.220E-07
C	6.0	.25	4827.	0.	0.	568.7	500.4	568.7	1.860E-07	1.857E-07	1.857E-07
C	8.0	.17	4827.	0.	0.	568.7	500.4	568.7	1.394E-07	1.392E-07	1.392E-07
D	.4	.53	4827.	0.	0.	221.3	158.9	221.3	2.131E-05	2.104E-05	2.104E-05
D	1.0	2.17	4827.	0.	0.	221.3	158.9	221.3	9.000E-06	8.885E-06	8.885E-06
D	2.0	4.42	4827.	0.	0.	221.3	158.9	221.3	4.450E-06	4.393E-06	4.393E-06
D	3.0	4.50	4827.	0.	0.	221.3	158.9	221.3	3.000E-06	2.962E-06	2.962E-06
D	4.0	3.33	4827.	0.	0.	221.3	158.9	221.3	2.262E-06	2.234E-06	2.234E-06
D	5.0	2.83	4827.	0.	0.	221.3	158.9	221.3	1.800E-06	1.777E-06	1.777E-06
D	6.0	1.33	4827.	0.	0.	221.3	158.9	221.3	1.506E-06	1.486E-06	1.486E-06
D	8.0	.33	4827.	0.	0.	221.3	158.9	221.3	1.128E-06	1.114E-06	1.114E-06
D	10.0	.50	4827.	0.	0.	221.3	158.9	221.3	9.020E-07	8.904E-07	8.904E-07
D	13.0	.33	4827.	0.	0.	221.3	158.9	221.3	6.947E-07	6.858E-07	6.858E-07
D	18.0	.17	4827.	0.	0.	221.3	158.9	221.3	5.018E-07	4.954E-07	4.954E-07

E	.4	.50	4827.	0.	0.	428.5	35.6	428.5	4.920E-05	4.777E-05	4.777E-05
E	1.0	1.92	4827.	0.	0.	428.5	35.6	428.5	2.077E-05	2.017E-05	2.017E-05
E	2.0	5.25	4827.	0.	0.	428.5	35.6	428.5	1.027E-05	9.974E-06	9.974E-06
E	3.0	4.50	4827.	0.	0.	428.5	35.6	428.5	6.924E-06	6.723E-06	6.723E-06
E	4.0	3.83	4827.	0.	0.	428.5	35.6	428.5	5.222E-06	5.070E-06	5.070E-06
E	5.0	1.25	4827.	0.	0.	428.5	35.6	428.5	4.154E-06	4.034E-06	4.034E-06
E	6.0	.25	4827.	0.	0.	428.5	35.6	428.5	3.475E-06	3.374E-06	3.374E-06
E	8.0	.50	4827.	0.	0.	428.5	35.6	428.5	2.604E-06	2.528E-06	2.528E-06
E	10.0	.58	4827.	0.	0.	428.5	35.6	428.5	2.082E-06	2.021E-06	2.021E-06
E	13.0	.08	4827.	0.	0.	428.5	35.6	428.5	1.603E-06	1.557E-06	1.557E-06
F	.4	.98	4827.	0.	0.	696.0	11.2	696.0	9.625E-05	9.094E-05	9.094E-05
F	1.0	3.58	4827.	0.	0.	696.0	11.2	696.0	4.064E-05	3.839E-05	3.839E-05
F	2.0	5.83	4827.	0.	0.	696.0	11.2	696.0	2.010E-05	1.899E-05	1.899E-05
F	3.0	3.33	4827.	0.	0.	696.0	11.2	696.0	1.355E-05	1.280E-05	1.280E-05
F	4.0	1.83	4827.	0.	0.	696.0	11.2	696.0	1.022E-05	9.652E-06	9.652E-06
F	5.0	.25	4827.	0.	0.	696.0	11.2	696.0	8.128E-06	7.679E-06	7.679E-06
G	.4	1.79	4827.	0.	0.	1000.0	3.5	1000.0	2.136E-04	1.891E-04	1.891E-04
G	1.0	5.25	4827.	0.	0.	1000.0	3.5	1000.0	9.021E-05	7.984E-05	7.984E-05
G	2.0	8.83	4827.	0.	0.	1000.0	3.5	1000.0	4.461E-05	3.948E-05	3.948E-05
G	3.0	4.75	4827.	0.	0.	1000.0	3.5	1000.0	3.007E-05	2.661E-05	2.661E-05
G	4.0	1.58	4827.	0.	0.	1000.0	3.5	1000.0	2.268E-05	2.007E-05	2.007E-05
G	5.0	.25	4827.	0.	0.	1000.0	3.5	1000.0	1.804E-05	1.597E-05	1.597E-05

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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:  CGS                                METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma=desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0LOW POPULATION ZONE CALCULATIONS:
0  SW SECTOR      BOUNDARY DISTANCE = 4827.0 METERS
0DESERT SIGMA VALUES USED.  MEANDER IS INCLUDED IN THESE VALUES- RG 1.145 MEANDER FACTORS ARE NOT USED.
 BUILDING WAKE CREDIT ALLOWED:   C=   .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0   1.891E-04   9.094E-05   7.984E-05   4.777E-05   3.948E-05   3.839E-05   2.661E-05   2.104E-05   2.017E-05   2.007E-05
        1.791       2.774       8.023       8.519      17.351      20.934      25.683      26.212      28.128      29.711
      .06795      .10522      .30434      .32317      .65819      .79410      .97425      .99431     1.06700     1.12705
0   1.899E-05   1.597E-05   1.280E-05   9.974E-06   9.652E-06   8.885E-06   7.679E-06   6.723E-06   5.070E-06   4.393E-06
       35.543      35.793      39.126      44.375      46.208      48.374      48.624      53.124      56.956      61.372
      1.34829     1.35777     1.48420     1.68331     1.75284     1.83502     1.84450     2.01517     2.16056     2.32807
0   4.034E-06   3.374E-06   2.962E-06   2.629E-06   2.528E-06   2.234E-06   2.021E-06   1.777E-06   1.557E-06   1.486E-06
       62.622      62.872      67.371      67.601      68.101      71.434      72.017      74.850      74.933      76.266
      2.37547     2.38496     2.55563     2.56437     2.58333     2.70975     2.73188     2.83933     2.84250     2.89306
0   1.202E-06   1.114E-06   1.110E-06   8.904E-07   7.492E-07   6.858E-07   5.490E-07   5.075E-07   4.954E-07   3.700E-07
       76.254      76.627      77.294      77.794      78.504      78.837      79.754      79.837      80.004      80.920
      2.89411     2.90675     2.93203     2.95100     2.97795     2.99059     3.02535     3.02852     3.03484     3.06960
0   3.163E-07   2.791E-07   2.510E-07   2.220E-07   1.857E-07   1.692E-07   1.564E-07   1.392E-07   1.276E-07   1.054E-07
       83.420      83.670      84.586      85.003      85.253      86.503      90.752      90.918      91.752      95.168
      3.16442     3.17390     3.20867     3.22447     3.23395     3.28136     3.44255     3.44887     3.48047     3.61006
0   1.015E-07   8.490E-08   7.952E-08   6.362E-08   6.326E-08   5.292E-08   3.965E-08   3.170E-08
       95.834      95.917      97.500      97.667      98.584      99.000      99.833     100.000
      3.63534     3.63850     3.69855     3.70487     3.73964     3.75544     3.78705     3.79337
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0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

                                                 HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=    .304
                                                 HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=    .793
                                                 HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   1.347
                                                 HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   1.833
                                                 HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   2.326
                                                 HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   2.553
                                                 HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 8)=   2.707
                                                 HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 9)=   2.837
                                                 HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(10)=   2.890
                                                 HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(11)=   3.632
0  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
   3  1      -8.57322 -14.57718  -1.87419
   3  2      -9.43545 -15.49635  -2.20923
   3  3     -10.16758 -18.67768  -3.52816
   3  4     -10.87178 -24.53923  -6.17751
   3  5     -11.63119 -26.52127  -7.12607
   3  6     -12.33539 -32.09314  -9.92501
   3  7     -12.72980 -34.51620 -11.16699
   3  8     -13.01191 -34.67773 -11.25087
   3  9     -13.24063 -54.72895 -21.77439
   3 10     -13.41924 -63.29005 -26.28696
   3 11     -16.10317     NUMXQ(K)= 11
                                                 BACK EXTRAPOLATION FOR  1 PERCENTILE.
     2.572E-04                .038              1.000
     1.423E-04                .114              3.000
     1.061E-04                .190              5.000
     6.793E-05                .379             10.000
     4.996E-05                .569             15.000
     3.983E-05                .759             20.000
     3.048E-05                .948             25.000
     2.392E-05               1.138             30.000
     1.939E-05               1.328             35.000
     1.425E-05               1.517             40.000
     1.065E-05               1.707             45.000
     8.069E-06               1.897             50.000
     6.096E-06               2.086             55.000
     4.703E-06               2.276             60.000
     3.448E-06               2.466             65.000
     2.464E-06               2.655             70.000
     1.743E-06               2.845             75.000
     8.550E-07               3.035             80.000
     4.213E-07               3.224             85.000
     2.147E-07               3.414             90.000
0    5.518E-05               0.5               13.18
0ANNUAL AVERAGE =   1.17E-06
0K=  3     FIVEXQ(K)= 5.518E-05     FIVEPR(K)=13.181
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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23: 4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE WSW SECTOR.

STABILITY CLASS	WINDSPEED AT 10.0 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=1431.SQ.METERS	USED
A	.4	1.24	4827.	0.	0.	1000.0	1000.0	1000.0	7.495E-07	7.492E-07	7.492E-07
A	1.0	4.37	4827.	0.	0.	1000.0	1000.0	1000.0	3.165E-07	3.163E-07	3.163E-07
A	2.0	6.83	4827.	0.	0.	1000.0	1000.0	1000.0	1.565E-07	1.564E-07	1.564E-07
A	3.0	2.09	4827.	0.	0.	1000.0	1000.0	1000.0	1.055E-07	1.054E-07	1.054E-07
A	4.0	1.33	4827.	0.	0.	1000.0	1000.0	1000.0	7.956E-08	7.952E-08	7.952E-08
A	5.0	.38	4827.	0.	0.	1000.0	1000.0	1000.0	6.329E-08	6.326E-08	6.326E-08
A	6.0	.19	4827.	0.	0.	1000.0	1000.0	1000.0	5.294E-08	5.292E-08	5.292E-08
B	.4	.31	4827.	0.	0.	725.4	859.0	725.4	1.203E-06	1.202E-06	1.202E-06
B	1.0	.95	4827.	0.	0.	725.4	859.0	725.4	5.079E-07	5.075E-07	5.075E-07
B	2.0	.76	4827.	0.	0.	725.4	859.0	725.4	2.512E-07	2.510E-07	2.510E-07
B	3.0	.76	4827.	0.	0.	725.4	859.0	725.4	1.693E-07	1.692E-07	1.692E-07
B	4.0	.38	4827.	0.	0.	725.4	859.0	725.4	1.277E-07	1.276E-07	1.276E-07
B	5.0	.19	4827.	0.	0.	725.4	859.0	725.4	1.016E-07	1.015E-07	1.015E-07
B	6.0	.19	4827.	0.	0.	725.4	859.0	725.4	8.496E-08	8.490E-08	8.490E-08
B	8.0	.57	4827.	0.	0.	725.4	859.0	725.4	6.366E-08	6.362E-08	6.362E-08
C	.4	.33	4827.	0.	0.	568.7	500.4	568.7	2.634E-06	2.629E-06	2.629E-06
C	1.0	.95	4827.	0.	0.	568.7	500.4	568.7	1.112E-06	1.110E-06	1.110E-06
C	2.0	.76	4827.	0.	0.	568.7	500.4	568.7	5.499E-07	5.490E-07	5.490E-07
C	3.0	1.71	4827.	0.	0.	568.7	500.4	568.7	3.706E-07	3.700E-07	3.700E-07
C	4.0	.19	4827.	0.	0.	568.7	500.4	568.7	2.795E-07	2.791E-07	2.791E-07
D	.4	1.07	4827.	0.	0.	221.3	158.9	221.3	2.131E-05	2.104E-05	2.104E-05
D	1.0	4.37	4827.	0.	0.	221.3	158.9	221.3	9.000E-06	8.885E-06	8.885E-06
D	2.0	6.26	4827.	0.	0.	221.3	158.9	221.3	4.450E-06	4.393E-06	4.393E-06
D	3.0	4.75	4827.	0.	0.	221.3	158.9	221.3	3.000E-06	2.962E-06	2.962E-06
D	4.0	3.61	4827.	0.	0.	221.3	158.9	221.3	2.262E-06	2.234E-06	2.234E-06
D	5.0	1.14	4827.	0.	0.	221.3	158.9	221.3	1.800E-06	1.777E-06	1.777E-06
D	8.0	.38	4827.	0.	0.	221.3	158.9	221.3	1.128E-06	1.114E-06	1.114E-06

E	.4	1.28	4827.	0.	0.	428.5	35.6	428.5	4.920E-05	4.777E-05	4.777E-05
E	1.0	4.94	4827.	0.	0.	428.5	35.6	428.5	2.077E-05	2.017E-05	2.017E-05
E	2.0	5.70	4827.	0.	0.	428.5	35.6	428.5	1.027E-05	9.974E-06	9.974E-06
E	3.0	5.13	4827.	0.	0.	428.5	35.6	428.5	6.924E-06	6.723E-06	6.723E-06
E	4.0	1.52	4827.	0.	0.	428.5	35.6	428.5	5.222E-06	5.070E-06	5.070E-06
E	5.0	1.71	4827.	0.	0.	428.5	35.6	428.5	4.154E-06	4.034E-06	4.034E-06
E	6.0	.95	4827.	0.	0.	428.5	35.6	428.5	3.475E-06	3.374E-06	3.374E-06
E	8.0	.19	4827.	0.	0.	428.5	35.6	428.5	2.604E-06	2.528E-06	2.528E-06
F	.4	.94	4827.	0.	0.	696.0	11.2	696.0	9.625E-05	9.094E-05	9.094E-05
F	1.0	3.42	4827.	0.	0.	696.0	11.2	696.0	4.064E-05	3.839E-05	3.839E-05
F	2.0	5.70	4827.	0.	0.	696.0	11.2	696.0	2.010E-05	1.899E-05	1.899E-05
F	3.0	3.04	4827.	0.	0.	696.0	11.2	696.0	1.355E-05	1.280E-05	1.280E-05
F	4.0	1.90	4827.	0.	0.	696.0	11.2	696.0	1.022E-05	9.652E-06	9.652E-06
F	5.0	.57	4827.	0.	0.	696.0	11.2	696.0	8.128E-06	7.679E-06	7.679E-06
G	.4	1.81	4827.	0.	0.	1000.0	3.5	1000.0	2.136E-04	1.891E-04	1.891E-04
G	1.0	5.32	4827.	0.	0.	1000.0	3.5	1000.0	9.021E-05	7.984E-05	7.984E-05
G	2.0	5.51	4827.	0.	0.	1000.0	3.5	1000.0	4.461E-05	3.948E-05	3.948E-05
G	3.0	2.66	4827.	0.	0.	1000.0	3.5	1000.0	3.007E-05	2.661E-05	2.661E-05
G	4.0	1.14	4827.	0.	0.	1000.0	3.5	1000.0	2.268E-05	2.007E-05	2.007E-05
G	5.0	.38	4827.	0.	0.	1000.0	3.5	1000.0	1.804E-05	1.597E-05	1.597E-05
G	6.0	.19	4827.	0.	0.	1000.0	3.5	1000.0	1.509E-05	1.336E-05	1.336E-05

```
1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:  CGS                                METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma=desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0LOW POPULATION ZONE CALCULATIONS:
0 WSW SECTOR     BOUNDARY DISTANCE = 4827.0 METERS
0DESERT SIGMA VALUES USED.  MEANDER IS INCLUDED IN THESE VALUES- RG 1.145 MEANDER FACTORS ARE NOT USED.
 BUILDING WAKE CREDIT ALLOWED:  C=   .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0   1.891E-04  9.094E-05  7.984E-05  4.777E-05  3.948E-05  3.839E-05  2.661E-05  2.104E-05  2.017E-05  2.007E-05
        1.814      2.751      8.067      9.346     14.851     18.268     20.926     21.992     26.928     28.067
      .03020     .04580     .13430     .15559     .24725     .30414     .34838     .36613     .44831     .46727
0   1.899E-05  1.597E-05  1.336E-05  1.280E-05  9.974E-06  9.652E-06  8.885E-06  7.679E-06  6.723E-06  5.070E-06
       33.762     34.142     34.332     37.369     43.064     44.963     49.329     49.899     55.024     56.543
      .56209     .56841     .57157     .62214     .71695     .74856     .82125     .83073     .91607     .94135
0   4.393E-06  4.034E-06  3.374E-06  2.962E-06  2.629E-06  2.528E-06  2.234E-06  1.777E-06  1.202E-06  1.114E-06
       62.808     64.516     65.465     70.211     70.540     70.729     74.336     75.475     75.788     76.168
      1.04565    1.07410    1.08990    1.16891    1.17438    1.17754    1.23759    1.25655    1.26176    1.26808
0   1.110E-06  7.492E-07  5.490E-07  5.075E-07  3.700E-07  3.163E-07  2.791E-07  2.510E-07  1.692E-07  1.564E-07
       77.117     78.358     79.118     80.067     81.775     86.142     86.331     87.091     87.850     94.684
      1.28388    1.30454    1.31719    1.33299    1.36143    1.43413    1.43729    1.44993    1.46257    1.57635
0   1.276E-07  1.054E-07  1.015E-07  8.490E-08  7.952E-08  6.362E-08  6.326E-08  5.292E-08
       95.064     97.152     97.342     97.532     98.861     99.430     99.810    100.000
      1.58267    1.61744    1.62060    1.62376    1.64589    1.65537    1.66169    1.66485
```

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0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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)=    .134
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=    .304
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=    .561
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=    .820
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=    .915
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   1.073
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 8)=   1.168
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 9)=   1.236
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(10)=   1.575
```

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0  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
   4  1      -8.57322 -15.48082  -2.01386
   4  2      -9.43545 -17.94689  -2.83537
   4  3     -10.16758 -19.44942  -3.38301
   4  4     -10.87178 -25.05645  -5.59441
   4  5     -11.63119 -28.24546  -6.92330
   4  6     -11.90999 -32.11650  -8.56392
   4  7     -12.42081 -34.48468  -9.59363
   4  8     -12.72980 -41.88872 -12.85873
   4  9     -13.01191 -75.93091 -28.01758
   4 10     -15.67072     NUMXQ(K)= 10
```

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BACK EXTRAPOLATION FOR  1 PERCENTILE.
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     2.601E-04               .017              1.000
     1.429E-04               .050              3.000
     1.064E-04               .083              5.000
     6.621E-05               .166             10.000
     4.605E-05               .250             15.000
     3.470E-05               .333             20.000
     2.695E-05               .416             25.000
     2.182E-05               .499             30.000
     1.769E-05               .583             35.000
     1.358E-05               .666             40.000
     1.071E-05               .749             45.000
     8.585E-06               .832             50.000
     6.731E-06               .916             55.000
     5.098E-06               .999             60.000
     3.926E-06              1.082             65.000
     2.995E-06              1.165             70.000
     2.029E-06              1.249             75.000
     1.006E-06              1.332             80.000
     5.176E-07              1.415             85.000
     2.752E-07              1.498             90.000
0    2.179E-05              0.5               30.03
0ANNUAL AVERAGE =   4.85E-07
0K=  4     FIVEXQ(K)= 2.179E-05     FIVEPR(K)=30.033
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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23: 4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE W SECTOR.

STABILITY CLASS	WINDSPEED AT 10.0 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=1431.SQ.METERS	USED
A	.4	2.01	4827.	0.	0.	1000.0	1000.0	1000.0	7.495E-07	7.492E-07	7.492E-07
A	1.0	7.09	4827.	0.	0.	1000.0	1000.0	1000.0	3.165E-07	3.163E-07	3.163E-07
A	2.0	7.87	4827.	0.	0.	1000.0	1000.0	1000.0	1.565E-07	1.564E-07	1.564E-07
A	3.0	2.62	4827.	0.	0.	1000.0	1000.0	1000.0	1.055E-07	1.054E-07	1.054E-07
A	4.0	1.31	4827.	0.	0.	1000.0	1000.0	1000.0	7.956E-08	7.952E-08	7.952E-08
A	5.0	1.05	4827.	0.	0.	1000.0	1000.0	1000.0	6.329E-08	6.326E-08	6.326E-08
B	.4	.61	4827.	0.	0.	725.4	859.0	725.4	1.203E-06	1.202E-06	1.202E-06
B	1.0	1.84	4827.	0.	0.	725.4	859.0	725.4	5.079E-07	5.075E-07	5.075E-07
B	2.0	1.57	4827.	0.	0.	725.4	859.0	725.4	2.512E-07	2.510E-07	2.510E-07
B	3.0	.79	4827.	0.	0.	725.4	859.0	725.4	1.693E-07	1.692E-07	1.692E-07
B	4.0	.52	4827.	0.	0.	725.4	859.0	725.4	1.277E-07	1.276E-07	1.276E-07
C	.4	.27	4827.	0.	0.	568.7	500.4	568.7	2.634E-06	2.629E-06	2.629E-06
C	1.0	.79	4827.	0.	0.	568.7	500.4	568.7	1.112E-06	1.110E-06	1.110E-06
C	2.0	1.57	4827.	0.	0.	568.7	500.4	568.7	5.499E-07	5.490E-07	5.490E-07
C	3.0	1.84	4827.	0.	0.	568.7	500.4	568.7	3.706E-07	3.700E-07	3.700E-07
C	4.0	.52	4827.	0.	0.	568.7	500.4	568.7	2.795E-07	2.791E-07	2.791E-07
D	.4	1.03	4827.	0.	0.	221.3	158.9	221.3	2.131E-05	2.104E-05	2.104E-05
D	1.0	4.20	4827.	0.	0.	221.3	158.9	221.3	9.000E-06	8.885E-06	8.885E-06
D	2.0	9.71	4827.	0.	0.	221.3	158.9	221.3	4.450E-06	4.393E-06	4.393E-06
D	3.0	6.04	4827.	0.	0.	221.3	158.9	221.3	3.000E-06	2.962E-06	2.962E-06
D	4.0	4.72	4827.	0.	0.	221.3	158.9	221.3	2.262E-06	2.234E-06	2.234E-06
D	5.0	1.31	4827.	0.	0.	221.3	158.9	221.3	1.800E-06	1.777E-06	1.777E-06

E	.4	1.50	4827.	0.	0.	428.5	35.6	428.5	4.920E-05	4.777E-05	4.777E-05
E	1.0	5.77	4827.	0.	0.	428.5	35.6	428.5	2.077E-05	2.017E-05	2.017E-05
E	2.0	5.77	4827.	0.	0.	428.5	35.6	428.5	1.027E-05	9.974E-06	9.974E-06
E	3.0	4.99	4827.	0.	0.	428.5	35.6	428.5	6.924E-06	6.723E-06	6.723E-06
E	4.0	1.31	4827.	0.	0.	428.5	35.6	428.5	5.222E-06	5.070E-06	5.070E-06
E	8.0	.26	4827.	0.	0.	428.5	35.6	428.5	2.604E-06	2.528E-06	2.528E-06
F	.4	1.30	4827.	0.	0.	696.0	11.2	696.0	9.625E-05	9.094E-05	9.094E-05
F	1.0	4.72	4827.	0.	0.	696.0	11.2	696.0	4.064E-05	3.839E-05	3.839E-05
F	2.0	3.67	4827.	0.	0.	696.0	11.2	696.0	2.010E-05	1.899E-05	1.899E-05
F	3.0	2.10	4827.	0.	0.	696.0	11.2	696.0	1.355E-05	1.280E-05	1.280E-05
F	4.0	.52	4827.	0.	0.	696.0	11.2	696.0	1.022E-05	9.652E-06	9.652E-06
G	.4	1.70	4827.	0.	0.	1000.0	3.5	1000.0	2.136E-04	1.891E-04	1.891E-04
G	1.0	4.99	4827.	0.	0.	1000.0	3.5	1000.0	9.021E-05	7.984E-05	7.984E-05
G	2.0	1.57	4827.	0.	0.	1000.0	3.5	1000.0	4.461E-05	3.948E-05	3.948E-05
G	3.0	.26	4827.	0.	0.	1000.0	3.5	1000.0	3.007E-05	2.661E-05	2.661E-05
G	4.0	.26	4827.	0.	0.	1000.0	3.5	1000.0	2.268E-05	2.007E-05	2.007E-05

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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:   CGS                               METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma=desert + F-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0LOW POPULATION ZONE CALCULATIONS:
0   W SECTOR     BOUNDARY DISTANCE = 4827.0 METERS
0DESERT SIGMA VALUES USED.  MEANDER IS INCLUDED IN THESE VALUES- RG 1.145 MEANDER FACTORS ARE NOT USED.
 BUILDING WAKE CREDIT ALLOWED:   C=   .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0   1.891E-04   9.094E-05   7.984E-05   4.777E-05   3.948E-05   3.839E-05   2.661E-05   2.104E-05   2.017E-05   2.007E-05
        1.702       2.997       7.983       9.479      11.054      15.778      16.040      17.066      22.839      23.102
        .02049      .03610      .09615      .11416      .13313      .19002      .19318      .20552      .27506      .27822
0   1.899E-05   1.280E-05   9.974E-06   9.652E-06   8.885E-06   6.723E-06   5.070E-06   4.393E-06   2.962E-06   2.629E-06
       26.776      28.875      34.649      35.174      39.373      44.359      45.671      55.381      61.417      61.689
        .32246      .34775      .41728      .42360      .47417      .53422      .55002      .66696      .73966      .74294
0   2.528E-06   2.234E-06   1.777E-06   1.202E-06   1.110E-06   7.492E-07   5.490E-07   5.075E-07   3.700E-07   3.163E-07
       61.952      66.676      67.988      68.593      69.381      71.395      72.969      74.806      76.643      83.729
        .74610      .80299      .81879      .82608      .83556      .85982      .87878      .90090      .92303     1.00836
0   2.791E-07   2.510E-07   1.692E-07   1.564E-07   1.276E-07   1.054E-07   7.952E-08   6.326E-08
       84.254      85.829      86.616      94.489      95.014      97.638      98.950     100.000
      1.01468     1.03365     1.04313     1.13795     1.14427     1.17587     1.19168     1.20432
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0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=    .096
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=    .190
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=    .322
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=    .474
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=    .666
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=    .802
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 8)=   1.137
0  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
   5  1      -8.57322 -15.63189  -1.99745
   5  2      -9.43545 -20.37820  -3.52745
   5  3     -10.16758 -22.14254  -4.13697
   5  4     -10.87178 -26.80175  -5.84715
   5  5     -11.63119 -26.91788  -5.89191
   5  6     -12.33539 -37.32047  10.09497
   5  7     -13.01191 -62.22779 -20.43861
   5  8     -15.67072     NUMXQ(K)=  8
                                                    BACK EXTRAPOLATION FOR  1 PERCENTILE.
     2.492E-04                .012              1.000
     1.394E-04                .036              3.000
     1.048E-04                .060              5.000
     6.298E-05                .120             10.000
     4.060E-05                .181             15.000
     2.812E-05                .241             20.000
     2.085E-05                .301             25.000
     1.522E-05                .361             30.000
     1.124E-05                .422             35.000
     8.604E-06                .482             40.000
     6.765E-06                .542             45.000
     5.441E-06                .602             50.000
     4.458E-06                .662             55.000
     3.287E-06                .723             60.000
     2.453E-06                .783             65.000
     1.552E-06                .843             70.000
     9.225E-07                .903             75.000
     5.648E-07                .963             80.000
     3.550E-07               1.024             85.000
     2.283E-07               1.084             90.000
0    7.977E-06                0.5              41.52
0ANNUAL AVERAGE =   3.02E 07
0K=  5     FIVEXQ(K)= 7.977E-06     FIVEPR(K)=41.517
```

1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23:4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE WNW SECTOR.

STABILITY CLASS	WINDSPEED AT 10.0 METERS METER/SEC	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=1431.SQ.METERS	USED
A	.4	1.48	4827.	0.	0.	1000.0	1000.0	1000.0	7.495E-07	7.492E-07	7.492E-07
A	1.0	5.19	4827.	0.	0.	1000.0	1000.0	1000.0	3.165E-07	3.163E-07	3.163E-07
A	2.0	8.10	4827.	0.	0.	1000.0	1000.0	1000.0	1.565E-07	1.564E-07	1.564E-07
A	3.0	6.23	4827.	0.	0.	1000.0	1000.0	1000.0	1.055E-07	1.054E-07	1.054E-07
A	4.0	1.87	4827.	0.	0.	1000.0	1000.0	1000.0	7.956E-08	7.952E-08	7.952E-08
A	5.0	.83	4827.	0.	0.	1000.0	1000.0	1000.0	6.329E-08	6.326E-08	6.326E-08
A	6.0	.21	4827.	0.	0.	1000.0	1000.0	1000.0	5.294E-08	5.292E-08	5.292E-08
B	.4	.34	4827.	0.	0.	725.4	859.0	725.4	1.203E-06	1.202E-06	1.202E-06
B	1.0	1.04	4827.	0.	0.	725.4	859.0	725.4	5.079E-07	5.075E-07	5.075E-07
B	2.0	2.28	4827.	0.	0.	725.4	859.0	725.4	2.512E-07	2.510E-07	2.510E-07
B	3.0	1.04	4827.	0.	0.	725.4	859.0	725.4	1.693E-07	1.692E-07	1.692E-07
B	4.0	1.45	4827.	0.	0.	725.4	859.0	725.4	1.277E-07	1.276E-07	1.276E-07
B	5.0	.42	4827.	0.	0.	725.4	859.0	725.4	1.016E-07	1.015E-07	1.015E-07
C	.4	.29	4827.	0.	0.	568.7	500.4	568.7	2.634E-06	2.629E-06	2.629E-06
C	1.0	.83	4827.	0.	0.	568.7	500.4	568.7	1.112E-06	1.110E-06	1.110E-06
C	2.0	.62	4827.	0.	0.	568.7	500.4	568.7	5.499E-07	5.490E-07	5.490E-07
C	3.0	.21	4827.	0.	0.	568.7	500.4	568.7	3.706E-07	3.700E-07	3.700E-07
C	4.0	.83	4827.	0.	0.	568.7	500.4	568.7	2.795E-07	2.791E-07	2.791E-07
C	5.0	.42	4827.	0.	0.	568.7	500.4	568.7	2.224E-07	2.220E-07	2.220E-07
D	.4	.66	4827.	0.	0.	221.3	158.9	221.3	2.131E-05	2.104E-05	2.104E-05
D	1.0	2.70	4827.	0.	0.	221.3	158.9	221.3	9.000E-06	8.885E-06	8.885E-06
D	2.0	6.64	4827.	0.	0.	221.3	158.9	221.3	4.450E-06	4.393E-06	4.393E-06
D	3.0	6.02	4827.	0.	0.	221.3	158.9	221.3	3.000E-06	2.962E-06	2.962E-06
D	4.0	5.40	4827.	0.	0.	221.3	158.9	221.3	2.262E-06	2.234E-06	2.234E-06
D	5.0	1.45	4827.	0.	0.	221.3	158.9	221.3	1.800E-06	1.777E-06	1.777E-06
D	6.0	1.04	4827.	0.	0.	221.3	158.9	221.3	1.506E-06	1.486E-06	1.486E-06
D	8.0	.21	4827.	0.	0.	221.3	158.9	221.3	1.128E-06	1.114E-06	1.114E-06

E	.4	.86	4827.	0.	0.	428.5	35.6	428.5	4.920E-05	4.777E-05	4.777E-05
E	1.0	3.32	4827.	0.	0.	428.5	35.6	428.5	2.077E-05	2.017E-05	2.017E-05
E	2.0	6.44	4827.	0.	0.	428.5	35.6	428.5	1.027E-05	9.974E-06	9.974E-06
E	3.0	4.15	4827.	0.	0.	428.5	35.6	428.5	6.924E-06	6.723E-06	6.723E-06
E	4.0	5.19	4827.	0.	0.	428.5	35.6	428.5	5.222E-06	5.070E-06	5.070E-06
E	5.0	2.49	4827.	0.	0.	428.5	35.6	428.5	4.154E-06	4.034E-06	4.034E-06
E	6.0	.42	4827.	0.	0.	428.5	35.6	428.5	3.475E-06	3.374E-06	3.374E-06
F	.4	.91	4827.	0.	0.	696.0	11.2	696.0	9.625E-05	9.094E-05	9.094E-05
F	1.0	3.32	4827.	0.	0.	696.0	11.2	696.0	4.064E-05	3.839E-05	3.839E-05
F	2.0	4.98	4827.	0.	0.	696.0	11.2	696.0	2.010E-05	1.899E-05	1.899E-05
F	3.0	2.08	4827.	0.	0.	696.0	11.2	696.0	1.355E-05	1.280E-05	1.280E-05
F	4.0	.83	4827.	0.	0.	696.0	11.2	696.0	1.022E-05	9.652E-06	9.652E-06
F	5.0	.42	4827.	0.	0.	696.0	11.2	696.0	8.128E-06	7.679E-06	7.679E-06
G	.4	1.42	4827.	0.	0.	1000.0	3.5	1000.0	2.136E-04	1.891E-04	1.891E-04
G	1.0	4.15	4827.	0.	0.	1000.0	3.5	1000.0	9.021E-05	7.984E-05	7.984E-05
G	2.0	1.25	4827.	0.	0.	1000.0	3.5	1000.0	4.461E-05	3.948E-05	3.948E-05

```
1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:   CGS                               METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma=desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0LCW POPULATION ZONE CALCULATIONS:
0 WNW SECTOR     BOUNDARY DISTANCE = 4827.0 METERS
0DESERT SIGMA VALUES USED.  MEANDER IS INCLUDED IN THESE VALUES- RG 1.145 MEANDER FACTORS ARE NOT USED.
 BUILDING WAKE CREDIT ALLOWED:   C=   .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0   1.891E-04   9.094E-05   7.984E-05   4.777E-05   3.948E-05   3.839E-05   2.104E-05   2.017E-05   1.899E-05   1.280E-05
        1.417       2.328       6.480       7.341       8.587      11.908      12.567      15.889      20.872      22.948
        .02157      .03544      .09865      .11175      .13072      .18129      .19132      .24189      .31774      .34935
0   9.974E-06   9.652E-06   8.885E-06   7.679E-06   6.723E-06   5.070E-06   4.393E-06   4.034E-06   3.374E-06   2.962E-06
       29.384      30.214      32.913      33.328      37.481      42.671      49.315      51.806      52.221      58.242
        .44732      .45997      .50105      .50737      .57059      .64960      .75074      .78866      .79498      .88664
0   2.629E-06   2.234E-06   1.777E-06   1.486E-06   1.202E-06   1.114E-06   1.110E-06   7.492E-07   5.490E-07   5.075E-07
       58.529      63.927      65.380      66.418      66.760      66.968      67.798      69.274      69.896      70.934
        .89101      .97319      .99531     1.01111     1.01632     1.01948     1.03212     1.05458     1.06406     1.07987
0   3.700E-07   3.163E-07   2.791E-07   2.510E-07   2.220E-07   1.692E-07   1.564E-07   1.276E-07   1.054E-07   1.015E-07
       71.142      76.332      77.163      79.446      79.862      80.900      88.997      90.450      96.678      97.093
       1.08303     1.16204     1.17468     1.20945     1.21577     1.23157     1.35483     1.37696     1.47177     1.47810
0   7.952E-08   6.326E-08   5.292E-08
       98.962      99.792     100.000
       1.50654     1.51918     1.52234
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0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=    .099
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=    .317
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=    .788
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=    .886
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=    .972
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   1.470
0  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
   6  1      -8.57322 -15.70315  -2.02540
   6  2      -9.43545 -21.60352  -3.93210
   6  3     -10.87178 -24.30515  -4.92197
   6  4     -12.42081 -29.78536  -7.19163
   6  5     -12.72980 -32.05612  -8.14912
   6  6     -13.01191 -57.91115 -19.21262
   6  7     -16.06513     NUMXQ(K)=  7
                                                  BACK EXTRAPOLATION FOR  1 PERCENTILE.
     2.275E-04                .015              1.000
     1.251E-04                .046              3.000
     9.315E-05                .076              5.000
     4.769E-05                .152             10.000
     2.894E-05                .228             15.000
     2.006E-05                .304             20.000
     1.413E-05                .381             25.000
     1.042E-05                .457             30.000
     8.020E-06                .533             35.000
     6.369E-06                .609             40.000
     5.182E-06                .685             45.000
     4.298E-06                .761             50.000
     3.447E-06                .837             55.000
     2.707E-06                .913             60.000
     1.982E-06                .990             65.000
     1.159E-06               1.066             70.000
     7.006E-07               1.142             75.000
     4.356E-07               1.218             80.000
     2.777E-07               1.294             85.000
     1.810E-07               1.370             90.000
0    8.940E-06               0.5               32.84
0ANNUAL AVERAGE =   3.11E-07
0K=  6     FIVEXQ(K)= 8.940E-06     FIVEPR(K)=32.844
```

1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23:4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE NW SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 10.0 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=1431.SQ.METERS	USED
A	.4	.53	4827.	0.	0.	1000.0	1000.0	1000.0	7.495E-07	7.492E-07	7.492E-07
A	1.0	1.86	4827.	0.	0.	1000.0	1000.0	1000.0	3.165E-07	3.163E-07	3.163E-07
A	2.0	5.18	4827.	0.	0.	1000.0	1000.0	1000.0	1.565E-07	1.564E-07	1.564E-07
A	3.0	3.32	4827.	0.	0.	1000.0	1000.0	1000.0	1.055E-07	1.054E-07	1.054E-07
A	4.0	2.92	4827.	0.	0.	1000.0	1000.0	1000.0	7.956E-08	7.952E-08	7.952E-08
A	5.0	1.46	4827.	0.	0.	1000.0	1000.0	1000.0	6.329E-08	6.326E-08	6.326E-08
A	6.0	.40	4827.	0.	0.	1000.0	1000.0	1000.0	5.294E-08	5.292E-08	5.292E-08
A	8.0	.07	4827.	0.	0.	1000.0	1000.0	1000.0	3.967E-08	3.965E-08	3.965E-08
B	.4	.13	4827.	0.	0.	725.4	859.0	725.4	1.203E-06	1.202E-06	1.202E-06
B	1.0	.40	4827.	0.	0.	725.4	859.0	725.4	5.079E-07	5.075E-07	5.075E-07
B	2.0	.80	4827.	0.	0.	725.4	859.0	725.4	2.512E-07	2.510E-07	2.510E-07
B	3.0	1.33	4827.	0.	0.	725.4	859.0	725.4	1.693E-07	1.692E-07	1.692E-07
B	4.0	.80	4827.	0.	0.	725.4	859.0	725.4	1.277E-07	1.276E-07	1.276E-07
B	5.0	.20	4827.	0.	0.	725.4	859.0	725.4	1.016E-07	1.015E-07	1.015E-07
B	6.0	.13	4827.	0.	0.	725.4	859.0	725.4	8.496E-08	8.490E-08	8.490E-08
B	8.0	.20	4827.	0.	0.	725.4	859.0	725.4	6.366E-08	6.362E-08	6.362E-08
C	.4	.11	4827.	0.	0.	568.7	500.4	568.7	2.634E-06	2.629E-06	2.629E-06
C	1.0	.33	4827.	0.	0.	568.7	500.4	568.7	1.112E-06	1.110E-06	1.110E-06
C	2.0	.53	4827.	0.	0.	568.7	500.4	568.7	5.499E-07	5.490E-07	5.490E-07
C	3.0	1.33	4827.	0.	0.	568.7	500.4	568.7	3.706E-07	3.700E-07	3.700E-07
C	4.0	.73	4827.	0.	0.	568.7	500.4	568.7	2.795E-07	2.791E-07	2.791E-07
C	5.0	.46	4827.	0.	0.	568.7	500.4	568.7	2.224E-07	2.220E-07	2.220E-07
C	6.0	.07	4827.	0.	0.	568.7	500.4	568.7	1.860E-07	1.857E-07	1.857E-07
C	8.0	.33	4827.	0.	0.	568.7	500.4	568.7	1.394E-07	1.392E-07	1.392E-07
D	.4	.44	4827.	0.	0.	221.3	158.9	221.3	2.131E-05	2.104E-05	2.104E-05
D	1.0	1.79	4827.	0.	0.	221.3	158.9	221.3	9.000E-06	8.885E-06	8.885E-06
D	2.0	4.32	4827.	0.	0.	221.3	158.9	221.3	4.450E-06	4.393E-06	4.393E-06
D	3.0	4.05	4827.	0.	0.	221.3	158.9	221.3	3.000E-06	2.962E-06	2.962E-06
D	4.0	4.58	4827.	0.	0.	221.3	158.9	221.3	2.262E-06	2.234E-06	2.234E-06
D	5.0	2.79	4827.	0.	0.	221.3	158.9	221.3	1.800E-06	1.777E-06	1.777E-06
D	6.0	1.06	4827.	0.	0.	221.3	158.9	221.3	1.506E-06	1.486E-06	1.486E-06
D	8.0	.27	4827.	0.	0.	221.3	158.9	221.3	1.128E-06	1.114E-06	1.114E-06
D	10.0	.07	4827.	0.	0.	221.3	158.9	221.3	9.020E-07	8.904E-07	8.904E-07

E	.4	.52	4827.	0.	0.	428.5	35.6	428.5	4.920E-05	4.777E-05	4.777E-05
E	1.0	1.99	4827.	0.	0.	428.5	35.6	428.5	2.077E-05	2.017E-05	2.017E-05
E	2.0	5.18	4827.	0.	0.	428.5	35.6	428.5	1.027E-05	9.974E-06	9.974E-06
E	3.0	6.04	4827.	0.	0.	428.5	35.6	428.5	6.924E-06	6.723E-06	6.723E-06
E	4.0	7.30	4827.	0.	0.	428.5	35.6	428.5	5.222E-06	5.070E-06	5.070E-06
E	5.0	5.18	4827.	0.	0.	428.5	35.6	428.5	4.154E-06	4.034E-06	4.034E-06
E	6.0	2.13	4827.	0.	0.	428.5	35.6	428.5	3.475E-06	3.374E-06	3.374E-06
E	8.0	1.46	4827.	0.	0.	428.5	35.6	428.5	2.604E-06	2.528E-06	2.528E-06
E	10.0	.07	4827.	0.	0.	428.5	35.6	428.5	2.082E-06	2.021E-06	2.021E-06
F	.4	.42	4827.	0.	0.	696.0	11.2	696.0	9.625E-05	9.094E-05	9.094E-05
F	1.0	1.53	4827.	0.	0.	696.0	11.2	696.0	4.064E-05	3.839E-05	3.839E-05
F	2.0	4.38	4827.	0.	0.	696.0	11.2	696.0	2.010E-05	1.899E-05	1.899E-05
F	3.0	3.65	4827.	0.	0.	696.0	11.2	696.0	1.355E-05	1.280E-05	1.280E-05
F	4.0	5.64	4827.	0.	0.	696.0	11.2	696.0	1.022E-05	9.652E-06	9.652E-06
F	5.0	2.32	4827.	0.	0.	696.0	11.2	696.0	8.128E-06	7.679E-06	7.679E-06
F	6.0	.60	4827.	0.	0.	696.0	11.2	696.0	6.799E-06	6.423E-06	6.423E-06
F	8.0	.27	4827.	0.	0.	696.0	11.2	696.0	5.094E-06	4.813E-06	4.813E-06
G	.4	.57	4827.	0.	0.	1000.0	3.5	1000.0	2.136E-04	1.891E-04	1.891E-04
G	1.0	1.66	4827.	0.	0.	1000.0	3.5	1000.0	9.021E-05	7.984E-05	7.984E-05
G	2.0	2.92	4827.	0.	0.	1000.0	3.5	1000.0	4.461E-05	3.948E-05	3.948E-05
G	3.0	2.39	4827.	0.	0.	1000.0	3.5	1000.0	3.007E-05	2.661E-05	2.661E-05
G	4.0	.60	4827.	0.	0.	1000.0	3.5	1000.0	2.268E-05	2.007E-05	2.007E-05
G	5.0	.20	4827.	0.	0.	1000.0	3.5	1000.0	1.804E-05	1.597E-05	1.597E-05

```
1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:  CGS                                METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma=desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0LOW POPULATION ZONE CALCULATIONS:
0  NW SECTOR      BOUNDARY DISTANCE = 4827.0 METERS
0DESERT SIGMA VALUES USED.  MEANDER IS INCLUDED IN THESE VALUES- RG 1.145 MEANDER FACTORS ARE NOT USED.
 BUILDING WAKE CREDIT ALLOWED:   C=   .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0   1.891E-04   9.094E-05   7.984E-05   4.777E-05   3.948E-05   3.839E-05   2.661E-05   2.104E-05   2.017E-05   2.007E-05
        .567        .985       2.646       3.162       6.084       7.611      10.002      10.439      12.432      13.029
      .02696      .04690      .12591      .15048      .28955      .36224      .47602      .49686      .59167      .62012
0   1.899E-05   1.597E-05   1.280E-05   9.974E-06   9.652E-06   8.885E-06   7.679E-06   6.723E-06   6.423E-06   5.070E-06
      17.412      17.611      21.264      26.444      32.088      33.881      36.205      42.248      42.846      50.151
      .82871      .83820     1.01203     1.25855     1.52720     1.61253     1.72315     2.01076     2.03921     2.38687
0   4.813E-06   4.393E 06   4.034E-06   3.374E-06   2.962E-06   2.629E-06   2.528E-06   2.234E-06   2.021E-06   1.777E-06
      50.416      54.733      59.913      62.038      66.088      66.203      67.664      72.246      72.313      75.102
      2.39951     2.60495     2.85147     2.95261     3.14540     3.15086     3.22040     3.43848     3.44164     3.57438
0   1.486E-06   1.202E-06   1.114E-06   1.110E-06   8.904E-07   7.492E-07   5.490E-07   5.075E-07   3.700E-07   3.163E-07
      76.164      76.296      76.561      76.893      76.960      77.488      78.019      78.418      79.746      81.605
      3.62495     3.63120     3.64384     3.65964     3.66280     3.68796     3.71324     3.73220     3.79542     3.88391
0   2.791E-07   2.510E-07   2.220E-07   1.857E-07   1.692E-07   1.564E-07   1.392E-07   1.276E-07   1.054E-07   1.015E-07
      82.336      83.133      83.598      83.664      84.992      90.172      90.504      91.301      94.621      94.820
      3.91868     3.95660     3.97873     3.98189     4.04510     4.29162     4.30743     4.34535     4.50338     4.51286
0   8.490E-08   7.952E-08   6.362E-08   6.326E-08   5.292E-08   3.965E-08
      94.953      97.875      98.074      99.535      99.934     100.000
      4.51918     4.65825     4.66773     4.73726     4.75622     4.75938
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0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=    .126
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=    .362
HANDCHECK GRAPH:  SLOPE LT  1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=    .828
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   1.525
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   2.009
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   2.849
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 8)=   3.435
HANDCHESCK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 9)=   3.571
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(10)=   4.655

0  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
   7  1      -8.57322 -15.36700  -1.96315
   7  2      -9.43545 -16.02541  -2.18107
   7  3     -10.16758 -16.70478  -2.43402
   7  4     -10.87178 -17.82875  -2.90303
   7  5     -11.54831 -18.56984  -3.24559
   7  6     -11.90999 -18.97035  -3.44077
   7  7     -12.42081 -25.94936  -7.10717
   7  8     -13.01191 -36.71158 -13.01937
   7  9     -13.24063 -58.60069 -25.16130
   7 10     -16.34724     NUMXQ(K)= 10
     1.392E-04                .048              1.000
     7.345E-05                .143              3.000
     5.182E-05                .238              5.000
     3.065E-05                .476             10.000
     2.166E-05                .714             15.000
     1.636E-05                .952             20.000
     1.281E-05               1.190             25.000
     1.043E-05               1.428             30.000
     8.624E-06               1.666             35.000
     7.233E-06               1.904             40.000
     6.143E-06               2.142             45.000
     5.274E-06               2.380             50.000
     4.584E-06               2.618             55.000
     4.016E-06               2.856             60.000
     3.126E-06               3.094             65.000
     2.471E-06               3.332             70.000
     1.791E-06               3.570             75.000
     8.587E-07               3.808             80.000
     4.240E-07               4.045             85.000
     2.164E-07               4.283             90.000
0    2.941E-05               0.5               10.51
0ANNUAL AVERAGE =   6.61E-07
0K=  7     FIVEXQ(K)= 2.941E-05     FIVEPR(K)=10.506
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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23: 4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE NNW SECTOR.

STABILITY CLASS	WINDSPEED AT 10.0 METER/SEC	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=1431.SQ.METERS	USED
A	.4	.14	4827.	0.	0.	1000.0	1000.0	1000.0	7.495E-07	7.492E-07	7.492E-07
A	1.0	.50	4827.	0.	0.	1000.0	1000.0	1000.0	3.165E-07	3.163E-07	3.163E-07
A	2.0	1.77	4827.	0.	0.	1000.0	1000.0	1000.0	1.565E-07	1.564E-07	1.564E-07
A	3.0	2.43	4827.	0.	0.	1000.0	1000.0	1000.0	1.055E-07	1.054E-07	1.054E-07
A	4.0	2.58	4827.	0.	0.	1000.0	1000.0	1000.0	7.956E-08	7.952E-08	7.952E-08
A	5.0	1.12	4827.	0.	0.	1000.0	1000.0	1000.0	6.329E-08	6.326E-08	6.326E-08
A	6.0	.47	4827.	0.	0.	1000.0	1000.0	1000.0	5.294E-08	5.292E-08	5.292E-08
A	8.0	.22	4827.	0.	0.	1000.0	1000.0	1000.0	3.967E-08	3.965E-08	3.965E-08
A	10.0	.06	4827.	0.	0.	1000.0	1000.0	1000.0	3.172E-08	3.170E-08	3.170E-08
A	13.0	.03	4827.	0.	0.	1000.0	1000.0	1000.0	2.443E-08	2.442E-08	2.442E-08
B	.4	.06	4827.	0.	0.	725.4	859.0	725.4	1.203E-06	1.202E-06	1.202E-06
B	1.0	.19	4827.	0.	0.	725.4	859.0	725.4	5.079E-07	5.075E-07	5.075E-07
B	2.0	.25	4827.	0.	0.	725.4	859.0	725.4	2.512E-07	2.510E-07	2.510E-07
B	3.0	.75	4827.	0.	0.	725.4	859.0	725.4	1.693E-07	1.692E-07	1.692E-07
B	4.0	.84	4827.	0.	0.	725.4	859.0	725.4	1.277E-07	1.276E-07	1.276E-07
B	5.0	.50	4827.	0.	0.	725.4	859.0	725.4	1.016E-07	1.015E-07	1.015E-07
B	6.0	.19	4827.	0.	0.	725.4	859.0	725.4	8.496E-08	8.490E-08	8.490E-08
B	8.0	.12	4827.	0.	0.	725.4	859.0	725.4	6.366E-08	6.362E-08	6.362E-08
B	10.0	.03	4827.	0.	0.	725.4	859.0	725.4	5.090E-08	5.086E-08	5.086E-08
C	.4	.02	4827.	0.	0.	568.7	500.4	568.7	2.634E-06	2.629E-06	2.629E-06
C	1.0	.06	4827.	0.	0.	568.7	500.4	568.7	1.112E-06	1.110E-06	1.110E-06
C	2.0	.47	4827.	0.	0.	568.7	500.4	568.7	5.499E-07	5.490E-07	5.490E-07
C	3.0	.97	4827.	0.	0.	568.7	500.4	568.7	3.706E-07	3.700E-07	3.700E-07
C	4.0	.75	4827.	0.	0.	568.7	500.4	568.7	2.795E-07	2.791E-07	2.791E-07
C	5.0	.56	4827.	0.	0.	568.7	500.4	568.7	2.224E-07	2.220E-07	2.220E-07
C	6.0	.34	4827.	0.	0.	568.7	500.4	568.7	1.860E-07	1.857E-07	1.857E-07
C	8.0	.16	4827.	0.	0.	568.7	500.4	568.7	1.394E-07	1.392E-07	1.392E-07
D	.4	.17	4827.	0.	0.	221.3	158.9	221.3	2.131E-05	2.104E-05	2.104E-05
D	1.0	.72	4827.	0.	0.	221.3	158.9	221.3	9.000E-06	8.885E-06	8.885E-06
D	2.0	3.18	4827.	0.	0.	221.3	158.9	221.3	4.450E-06	4.393E-06	4.393E-06
D	3.0	3.95	4827.	0.	0.	221.3	158.9	221.3	3.000E-06	2.962E-06	2.962E-06
D	4.0	3.89	4827.	0.	0.	221.3	158.9	221.3	2.262E-06	2.234E-06	2.234E-06
D	5.0	2.99	4827.	0.	0.	221.3	158.9	221.3	1.800E-06	1.777E-06	1.777E-06
D	6.0	1.34	4827.	0.	0.	221.3	158.9	221.3	1.506E-06	1.486E-06	1.486E-06
D	8.0	1.18	4827.	0.	0.	221.3	158.9	221.3	1.128E-06	1.114E-06	1.114E-06
D	10.0	.09	4827.	0.	0.	221.3	158.9	221.3	9.020E-07	8.904E-07	8.904E-07

E	.4	.28	4827.	0.	0.	428.5	35.6	428.5	4.920E-05	4.777E-05	4.777E-05
E	1.0	1.09	4827.	0.	0.	428.5	35.6	428.5	2.077E-05	2.017E-05	2.017E-05
E	2.0	4.05	4827.	0.	0.	428.5	35.6	428.5	1.027E-05	9.974E-06	9.974E-06
E	3.0	5.36	4827.	0.	0.	428.5	35.6	428.5	6.924E-06	6.723E-06	6.723E 06
E	4.0	6.60	4827.	0.	0.	428.5	35.6	428.5	5.222E-06	5.070E-06	5.070E-06
E	5.0	5.17	4827.	0.	0.	428.5	35.6	428.5	4.154E-06	4.034E-06	4.034E-06
E	6.0	2.83	4827.	0.	0.	428.5	35.6	428.5	3.475E-06	3.374E-06	3.374E-06
E	8.0	2.21	4827.	0.	0.	428.5	35.6	428.5	2.604E-06	2.528E-06	2.528E-06
E	10.0	.09	4827.	0.	0.	428.5	35.6	428.5	2.082E-06	2.021E-06	2.021E-06
F	.4	.34	4827.	0.	0.	696.0	11.2	696.0	9.625E-05	9.094E-05	9.094E-05
F	1.0	1.25	4827.	0.	0.	696.0	11.2	696.0	4.064E-05	3.839E-05	3.839E-05
F	2.0	5.04	4827.	0.	0.	696.0	11.2	696.0	2.010E-05	1.899E-05	1.899E-05
F	3.0	5.95	4827.	0.	0.	696.0	11.2	696.0	1.355E-05	1.280E-05	1.280E-05
F	4.0	5.73	4827.	0.	0.	696.0	11.2	696.0	1.022E-05	9.652E-06	9.652E-06
F	5.0	4.08	4827.	0.	0.	696.0	11.2	696.0	8.128E-06	7.679E-06	7.679E-06
F	6.0	.90	4827.	0.	0.	696.0	11.2	696.0	6.799E-06	6.423E-06	6.423E-06
F	8.0	.65	4827.	0.	0.	696.0	11.2	696.0	5.094E-06	4.813E-06	4.813E-06
F	10.0	.06	4827.	0.	0.	696.0	11.2	696.0	4.073E-06	3.848E-06	3.848E-06
G	.4	.53	4827.	0.	0.	1000.0	3.5	1000.0	2.136E-04	1.891E-04	1.891E-04
G	1.0	1.56	4827.	0.	0.	1000.0	3.5	1000.0	9.021E-05	7.984E-05	7.984E-05
G	2.0	3.52	4827.	0.	0.	1000.0	3.5	1000.0	4.461E-05	3.948E-05	3.948E-05
G	3.0	4.86	4827.	0.	0.	1000.0	3.5	1000.0	3.007E-05	2.661E-05	2.661E-05
G	4.0	3.02	4827.	0.	0.	1000.0	3.5	1000.0	2.268E-05	2.007E-05	2.007E-05
G	5.0	1.34	4827.	0.	0.	1000.0	3.5	1000.0	1.804E-05	1.597E-05	1.597E-05
G	6.0	.31	4827.	0.	0.	1000.0	3.5	1000.0	1.509E-05	1.336E-05	1.336E-05
G	8.0	.06	4827.	0.	0.	1000.0	3.5	1000.0	1.131E-05	1.001E-05	1.001E-05
G	10.0	.03	4827.	0.	0.	1000.0	3.5	1000.0	9.041E-06	8.002E-06	8.002E-06

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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:  CGS                                METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma=desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0LOW POPULATION ZONE CALCULATIONS:
0 NNW SECTOR      BOUNDARY DISTANCE = 4827.0 METERS
0DESERT SIGMA VALUES USED.  MEANDER IS INCLUDED IN THESE VALUES- RG 1.145 MEANDER FACTORS ARE NOT USED.
 BUILDING WAKE CREDIT ALLOWED:   C=   .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0   1.891E-04   9.094E-05   7.984E-05   4.777E-05   3.948E-05   3.839E-05   2.661E-05   2.104E-05   2.017E-05   2.007E-05
        .531        .873       2.429       2.712       6.230       7.475      12.332      12.507      13.597      16.617
      .05392      .08860      .24663      .27529      .63243      .75886     1.25190     1.26965     1.38027     1.68685
0   1.899E-05   1.597E-05   1.336E-05   1.280E-05   1.001E-05   9.974E-06   9.652E-06   8.885E-06   8.002E-06   7.679E-06
       21.660      22.999      23.310      29.257      29.319      33.367      39.095      39.811      39.843      43.921
      2.19886     2.33476     2.36636     2.97003     2.97635     3.38722     3.96877     4.04146     4.04462     4.45865
0   6.723E-06   6.423E-06   5.070E-06   4.813E-06   4.393E-06   4.034E-06   3.848E-06   3.374E-06   2.962E-06   2.629E-06
       49.276      50.179      56.779      57.433      60.609      65.777      65.839      68.673      72.627      72.648
      5.00227     5.09392     5.76396     5.83033     6.15271     6.67736     6.68369     6.97130     7.37269     7.37487
0   2.528E-06   2.234E-06   2.021E-06   1.777E-06   1.486E-06   1.202E-06   1.114E-06   1.110E-06   8.904E-07   7.492E-07
       74.859      78.750      78.844      81.833      83.171      83.233      84.416      84.478      84.572      84.713
      7.59927     7.99434     8.00382     8.30723     8.44314     8.44939     8.56949     8.57581     8.58529     8.59967
0   5.490E-07   5.075E-07   3.700E-07   3.163E-07   2.791E-07   2.510E-07   2.220E-07   1.857E-07   1.692E-07   1.564E-07
       85.180      85.367      86.332      86.830      87.578      87.827      88.387      88.730      89.477      91.251
      8.64708     8.66604     8.76402     8.81458     8.89044     8.91572     8.97261     9.00738     9.08323     9.26338
0   1.392E-07   1.276E-07   1.054E-07   1.015E-07   8.490E-08   7.952E-08   6.362E-08   6.326E-08   5.292E-08   5.086E-08
       91.407      92.248      94.676      95.174      95.361      97.945      98.070      99.191      99.658      99.689
      9.27919     9.36452     9.61105     9.66161     9.68058     9.94290     9.95555    10.06933    10.11673    10.11989
0   3.965E-08   3.170E-08   2.442E-08
       99.907      99.969     100.000
     10.14202    10.14834    10.15150
```

```
0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=    .246
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=   2.197
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   3.965
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   4.999
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   6.673
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   7.369
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 8)=   7.991
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 9)=   8.304
0  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
   8  1      -8.57322 -14.73252  -1.88390
   8  2      -9.43545 -14.50262  -1.80213
   8  3     -10.87178 -16.11356  -2.60171
   8  4     -11.54831 -17.33238  -3.29631
   8  5     -11.90999 -17.72791  -3.53675
   8  6     -12.42081 -21.38906  -5.97661
   8  7     -12.72980 -22.20133  -6.53724
   8  8     -13.01191 -28.49446 -11.01409
   8  9     -13.24063     NUMXQ(K)=  9
     1.339E-04              .102              1.000
     7.057E-05              .305              3.000
     5.174E-05              .508              5.000
     3.298E-05             1.015             10.000
     2.487E-05             1.523             15.000
     2.016E-05             2.030             20.000
     1.621E-05             2.538             25.000
     1.318E-05             3.045             30.000
     1.102E-05             3.553             35.000
     9.320E-06             4.061             40.000
     7.763E-06             4.568             45.000
     6.557E-06             5.076             50.000
     5.556E-06             5.583             55.000
     4.762E 06             6.091             60.000
     4.122E-06             6.598             65.000
     3.325E-06             7.106             70.000
     2.649E-06             7.614             75.000
     2.034E-06             8.121             80.000
0    5.223E-05             0.5                4.93
0ANNUAL AVERAGE =   1.59E-06
0K=  8     FIVEXQ(K)= 5.223E-05     FIVEPR(K)= 4.925
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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23: 4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99 F.inp output file: P96-99-F.out sigma-desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE N SECTOR.

STABILITY CLASS	WINDSPEED AT 10.0 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=1431.SQ.METERS	USED
A	.4	.20	4827.	0.	0.	1000.0	1000.0	1000.0	7.495E-07	7.492E-07	7.492E-07
A	1.0	.71	4827.	0.	0.	1000.0	1000.0	1000.0	3.165E-07	3.163E-07	3.163E-07
A	2.0	1.86	4827.	0.	0.	1000.0	1000.0	1000.0	1.565E-07	1.564E-07	1.564E-07
A	3.0	1.73	4827.	0.	0.	1000.0	1000.0	1000.0	1.055E-07	1.054E-07	1.054E-07
A	4.0	1.49	4827.	0.	0.	1000.0	1000.0	1000.0	7.956E-08	7.952E-08	7.952E-08
A	5.0	1.62	4827.	0.	0.	1000.0	1000.0	1000.0	6.329E-08	6.326E-08	6.326E-08
A	6.0	1.49	4827.	0.	0.	1000.0	1000.0	1000.0	5.294E-08	5.292E-08	5.292E-08
A	8.0	1.62	4827.	0.	0.	1000.0	1000.0	1000.0	3.967E-08	3.965E-08	3.965E-08
A	10.0	.52	4827.	0.	0.	1000.0	1000.0	1000.0	3.172E-08	3.170E-08	3.170E-08
A	13.0	.18	4827.	0.	0.	1000.0	1000.0	1000.0	2.443E-08	2.442E-08	2.442E-08
B	.4	.04	4827.	0.	0.	725.4	859.0	725.4	1.203E-06	1.202E-06	1.202E-06
B	1.0	.13	4827.	0.	0.	725.4	859.0	725.4	5.079E-07	5.075E-07	5.075E-07
B	2.0	.58	4827.	0.	0.	725.4	859.0	725.4	2.512E-07	2.510E-07	2.510E-07
B	3.0	.78	4827.	0.	0.	725.4	859.0	725.4	1.693E-07	1.692E-07	1.692E-07
B	4.0	.63	4827.	0.	0.	725.4	859.0	725.4	1.277E-07	1.276E-07	1.276E-07
B	5.0	.76	4827.	0.	0.	725.4	859.0	725.4	1.016E-07	1.015E-07	1.015E-07
B	6.0	.39	4827.	0.	0.	725.4	859.0	725.4	8.496E-08	8.490E-08	8.490E-08
B	8.0	.55	4827.	0.	0.	725.4	859.0	725.4	6.366E-08	6.362E-08	6.362E-08
B	10.0	.08	4827.	0.	0.	725.4	859.0	725.4	5.090E-08	5.086E-08	5.086E-08
C	.4	.05	4827.	0.	0.	568.7	500.4	568.7	2.634E-06	2.629E-06	2.629E-06
C	1.0	.16	4827.	0.	0.	568.7	500.4	568.7	1.112E-06	1.110E-06	1.110E-06
C	2.0	.37	4827.	0.	0.	568.7	500.4	568.7	5.499E-07	5.490E-07	5.490E-07
C	3.0	.68	4827.	0.	0.	568.7	500.4	568.7	3.706E-07	3.700E-07	3.700E-07
C	4.0	.76	4827.	0.	0.	568.7	500.4	568.7	2.795E-07	2.791E-07	2.791E-07
C	5.0	.52	4827.	0.	0.	568.7	500.4	568.7	2.224E-07	2.220E-07	2.220E-07
C	6.0	.52	4827.	0.	0.	568.7	500.4	568.7	1.860E-07	1.857E-07	1.857E-07
C	8.0	.39	4827.	0.	0.	568.7	500.4	568.7	1.394E-07	1.392E-07	1.392E-07
C	10.0	.16	4827.	0.	0.	568.7	500.4	568.7	1.114E-07	1.113E-07	1.113E-07
C	13.0	.05	4827.	0.	0.	568.7	500.4	568.7	8.583E-08	8.569E-08	8.569E-08
D	.4	.20	4827.	0.	0.	221.3	158.9	221.3	2.131E-05	2.104E-05	2.104E-05
D	1.0	.84	4827.	0.	0.	221.3	158.9	221.3	9.000E-06	8.885E-06	8.885E-06
D	2.0	2.67	4827.	0.	0.	221.3	158.9	221.3	4.450E-06	4.393E-06	4.393E-06
D	3.0	2.80	4827.	0.	0.	221.3	158.9	221.3	3.000E-06	2.962E-06	2.962E-06
D	4.0	3.30	4827.	0.	0.	221.3	158.9	221.3	2.262E-06	2.234E-06	2.234E-06
D	5.0	2.69	4827.	0.	0.	221.3	158.9	221.3	1.800E-06	1.777E-06	1.777E-06
D	6.0	1.88	4827.	0.	0.	221.3	158.9	221.3	1.506E-06	1.486E-06	1.486E-06
D	8.0	2.77	4827.	0.	0.	221.3	158.9	221.3	1.128E-06	1.114E-06	1.114E-06
D	10.0	1.02	4827.	0.	0.	221.3	158.9	221.3	9.020E-07	8.904E-07	8.904E-07
D	13.0	.34	4827.	0.	0.	221.3	158.9	221.3	6.947E-07	6.858E-07	6.858E-07
D	18.0	.05	4827.	0.	0.	221.3	158.9	221.3	5.018E-07	4.954E-07	4.954E-07

E	.4	.42	4827.	0.	0.	428.5	35.6	428.5	4.920E-05	4.777E-05	4.777E-05
E	1.0	1.62	4827.	0.	0.	428.5	35.6	428.5	2.077E-05	2.017E-05	2.017E-05
E	2.0	4.05	4827.	0.	0.	428.5	35.6	428.5	1.027E-05	9.974E-06	9.974E-06
E	3.0	4.00	4827.	0.	0.	428.5	35.6	428.5	6.924E-06	6.723E-06	6.723E-06
E	4.0	4.00	4827.	0.	0.	428.5	35.6	428.5	5.222E-06	5.070E-06	5.070E-06
E	5.0	4.58	4827.	0.	0.	428.5	35.6	428.5	4.154E-06	4.034E-06	4.034E-06
E	6.0	3.56	4827.	0.	0.	428.5	35.6	428.5	3.475E-06	3.374E-06	3.374E-06
E	8.0	3.50	4827.	0.	0.	428.5	35.6	428.5	2.604E-06	2.528E-06	2.528E-06
E	10.0	.63	4827.	0.	0.	428.5	35.6	428.5	2.082E-06	2.021E-06	2.021E-06
E	13.0	.21	4827.	0.	0.	428.5	35.6	428.5	1.603E-06	1.557E-06	1.557E-06
E	18.0	.05	4827.	0.	0.	428.5	35.6	428.5	1.158E-06	1.125E-06	1.125E-06
F	.4	.46	4827.	0.	0.	696.0	11.2	696.0	9.625E-05	9.094E-05	9.094E-05
F	1.0	1.67	4827.	0.	0.	696.0	11.2	696.0	4.064E-05	3.839E-05	3.839E-05
F	2.0	5.20	4827.	0.	0.	696.0	11.2	696.0	2.010E-05	1.899E-05	1.899E-05
F	3.0	6.07	4827.	0.	0.	696.0	11.2	696.0	1.355E-05	1.280E-05	1.280E-05
F	4.0	4.79	4827.	0.	0.	696.0	11.2	696.0	1.022E-05	9.652E-06	9.652E-06
F	5.0	2.46	4827.	0.	0.	696.0	11.2	696.0	8.128E-06	7.679E-06	7.679E-06
F	6.0	1.07	4827.	0.	0.	696.0	11.2	696.0	6.799E-06	6.423E-06	6.423E-06
F	8.0	.86	4827.	0.	0.	696.0	11.2	696.0	5.094E-06	4.813E-06	4.813E-06
F	10.0	.08	4827.	0.	0.	696.0	11.2	696.0	4.073E-06	3.848E-06	3.848E-06
F	13.0	.05	4827.	0.	0.	696.0	11.2	696.0	3.137E-06	2.964E-06	2.964E-06
G	.4	.49	4827.	0.	0.	1000.0	3.5	1000.0	2.136E-04	1.891E-04	1.891E-04
G	1.0	1.44	4827.	0.	0.	1000.0	3.5	1000.0	9.021E-05	7.984E-05	7.984E-05
G	2.0	3.37	4827.	0.	0.	1000.0	3.5	1000.0	4.461E-05	3.948E-05	3.948E-05
G	3.0	4.11	4827.	0.	0.	1000.0	3.5	1000.0	3.007E-05	2.661E-05	2.661E-05
G	4.0	2.59	4827.	0.	0.	1000.0	3.5	1000.0	2.268E-05	2.007E-05	2.007E-05
G	5.0	.71	4827.	0.	0.	1000.0	3.5	1000.0	1.804E-05	1.597E-05	1.597E-05
G	6.0	.24	4827.	0.	0.	1000.0	3.5	1000.0	1.509E-05	1.336E-05	1.336E-05
G	8.0	.08	4827.	0.	0.	1000.0	3.5	1000.0	1.131E 05	1.001E-05	1.001E-05
G	10.0	.05	4827.	0.	0.	1000.0	3.5	1000.0	9.041E-06	8.002E-06	8.002E-06

```
1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:  CGS                                METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma-desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0LOW POPULATION ZONE CALCULATIONS:
0   N SECTOR      BOUNDARY DISTANCE = 4827.0 METERS
0DESERT SIGMA VALUES USED.  MEANDER IS INCLUDED IN THESE VALUES- RG 1.145 MEANDER FACTORS ARE NOT USED.
 BUILDING WAKE CREDIT ALLOWED:   C=   .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0   1.891E-04   9.094E-05   7.984E-05   4.777E-05   3.948E-05   3.839E-05   2.661E-05   2.104E-05   2.017E-05   2.007E-05
          .491        .950       2.388       2.809       6.182       7.856      11.962      12.167      13.788      16.377
       .05932      .11480      .28863      .33940      .74711      .94939     1.44560     1.47029     1.66625     1.97914
0   1.899E-05   1.597E-05   1.336E-05   1.280E-05   1.001E-05   9.974E-06   9.652E-06   8.885E-06   8.002E-06   7.679E-06
         21.582      22.288      22.523      28.591      28.669      32.723      37.509      38.346      38.398      40.857
       2.60809     2.69343     2.72187     3.45512     3.46460     3.95449     4.53287     4.63401     4.64033     4.93742
0   6.723E-06   6.423E-06   5.070E-06   4.813E-06   4.393E-06   4.034E-06   3.848E-06   3.374E-06   2.964E-06   2.962E-06
         44.858      45.931      49.932      50.795      53.463      58.040      58.118      61.675      61.727      64.526
       5.42099     5.55057     6.03414     6.13843     6.46081     7.01391     7.02339     7.45323     7.45955     7.79773
0   2.629E-06   2.528E-06   2.234E-06   2.021E-06   1.777E-06   1.557E-06   1.486E-06   1.202E-06   1.125E-06   1.114E-06
         64.580      68.084      71.380      72.007      74.701      74.910      76.794      76.837      76.889      79.661
       7.80428     8.22780     8.62603     8.70188     9.02742     9.05270     9.28026     9.28547     9.29179     9.62681
0   1.110E-06   8.904E-07   7.492E-07   6.858E-07   5.490E-07   5.075E-07   4.954E-07   3.700E-07   3.163E-07   2.791E-07
         79.818      80.838      81.039      81.379      81.745      81.876      81.928      82.608      83.314      84.073
       9.64577     9.76904     9.79329     9.83438     9.87863     9.89443     9.90075     9.98292    10.06826    10.15991
0   2.510E-07   2.220E-07   1.857E-07   1.692E-07   1.564E-07   1.392E-07   1.276E-07   1.113E-07   1.054E-07   1.015E-07
         84.648      85.171      85.694      86.479      88.336      88.728      89.356      89.513      91.239      91.997
       10.22945    10.29266    10.35587    10.45069    10.67509    10.72249    10.79835    10.81731    11.02591    11.11756
0   8.569E-08   8.490E-08   7.952E-08   6.362E-08   6.326E-08   5.292E-08   5.086E-08   3.965E-08   3.170E-08   2.442E-08
         92.049      92.442      93.932      94.482      96.103      97.594      97.672      99.294      99.817     100.000
       11.12388    11.17129    11.35144    11.41782    11.61377    11.79392    11.80340    11.99936    12.06257    12.08470
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0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

 HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=    .948
 HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=   2.605
 HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   4.529
 HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   7.010
 HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   8.622
 HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   9.024
 HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 8)=   9.277
 HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 9)=   9.643

0  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
   9  1     -8.57322 -14.34161  -1.77906
   9  2    -10.16758 -14.25735  -1.74314
   9  3    -10.87178 -16.12952  -2.70707
   9  4    -11.54831 -18.34420  -4.01574
   9  5    -12.42081 -20.29952  -5.34134
   9  6    -13.01191 -25.44657  -9.11380
   9  7    -13.24063 -28.78827 -11.60894
   9  8    -13.41924 -31.21796 -13.44420
   9  9    -13.71102     NUMXQ(K)=  9
     1.305E-04              .121            1.000
     7.021E-05              .363            3.000
     5.139E-05              .604            5.000
     3.274E-05             1.208           10.000
     2.476E-05             1.813           15.000
     2.010E-05             2.417           20.000
     1.596E-05             3.021           25.000
     1.279E-05             3.625           30.000
     1.055E-05             4.230           35.000
     8.530E-06             4.834           40.000
     6.774E-06             5.438           45.000
     5.485E-06             6.042           50.000
     4.512E-06             6.647           55.000
     3.676E-06             7.251           60.000
     2.929E-06             7.855           65.000
     2.365E-06             8.459           70.000
     1.732E-06             9.064           75.000
0    5.781E-05             0.5              4.14
0ANNUAL AVERAGE =   1.80E-06
0K=  9     FIVEXQ(K)= 5.781E-05     FIVEPR(K)= 4.137
```

1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23: 4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE NNE SECTOR.

STABILITY CLASS	WINDSPEED AT 10.0 METERS METER/SEC	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=1431.SQ.METERS	USED
A	.4	.20	4827.	0.	0.	1000.0	1000.0	1000.0	7.495E-07	7.492E-07	7.492E-07
A	1.0	.69	4827.	0.	0.	1000.0	1000.0	1000.0	3.165E-07	3.163E-07	3.163E-07
A	2.0	1.78	4827.	0.	0.	1000.0	1000.0	1000.0	1.565E-07	1.564E-07	1.564E-07
A	3.0	1.24	4827.	0.	0.	1000.0	1000.0	1000.0	1.055E-07	1.054E-07	1.054E-07
A	4.0	1.24	4827.	0.	0.	1000.0	1000.0	1000.0	7.956E-08	7.952E-08	7.952E-08
A	5.0	1.35	4827.	0.	0.	1000.0	1000.0	1000.0	6.329E-08	6.326E-08	6.326E-08
A	6.0	.91	4827.	0.	0.	1000.0	1000.0	1000.0	5.294E-08	5.292E-08	5.292E-08
A	8.0	1.06	4827.	0.	0.	1000.0	1000.0	1000.0	3.967E-08	3.965E-08	3.965E-08
A	10.0	.18	4827.	0.	0.	1000.0	1000.0	1000.0	3.172E-08	3.170E-08	3.170E-08
A	13.0	.07	4827.	0.	0.	1000.0	1000.0	1000.0	2.443E-08	2.442E-08	2.442E-08
A	18.0	.04	4827.	0.	0.	1000.0	1000.0	1000.0	1.765E-08	1.764E-08	1.764E-08
B	.4	.06	4827.	0.	0.	725.4	859.0	725.4	1.203E-06	1.202E-06	1.202E-06
B	1.0	.18	4827.	0.	0.	725.4	859.0	725.4	5.079E-07	5.075E-07	5.075E-07
B	2.0	.66	4827.	0.	0.	725.4	859.0	725.4	2.512E-07	2.510E-07	2.510E-07
B	3.0	.29	4827.	0.	0.	725.4	859.0	725.4	1.693E-07	1.692E-07	1.692E-07
B	4.0	.55	4827.	0.	0.	725.4	859.0	725.4	1.277E-07	1.276E-07	1.276E-07
B	5.0	.55	4827.	0.	0.	725.4	859.0	725.4	1.016E-07	1.015E-07	1.015E-07
B	6.0	.47	4827.	0.	0.	725.4	859.0	725.4	8.496E-08	8.490E-08	8.490E-08
B	8.0	.69	4827.	0.	0.	725.4	859.0	725.4	6.366E-08	6.362E-08	6.362E-08
B	10.0	.29	4827.	0.	0.	725.4	859.0	725.4	5.090E-08	5.086E-08	5.086E-08
B	13.0	.15	4827.	0.	0.	725.4	859.0	725.4	3.920E-08	3.917E-08	3.917E-08
C	.4	.09	4827.	0.	0.	568.7	500.4	568.7	2.634E-06	2.629E-06	2.629E-06
C	1.0	.25	4827.	0.	0.	568.7	500.4	568.7	1.112E-06	1.110E-06	1.110E-06
C	2.0	.66	4827.	0.	0.	568.7	500.4	568.7	5.499E-07	5.490E-07	5.490E-07
C	3.0	.51	4827.	0.	0.	568.7	500.4	568.7	3.706E-07	3.700E-07	3.700E-07
C	4.0	.51	4827.	0.	0.	568.7	500.4	568.7	2.795E-07	2.791E-07	2.791E-07
C	5.0	.55	4827.	0.	0.	568.7	500.4	568.7	2.224E-07	2.220E-07	2.220E 07
C	6.0	.66	4827.	0.	0.	568.7	500.4	568.7	1.860E-07	1.857E-07	1.857E-07
C	8.0	.73	4827.	0.	0.	568.7	500.4	568.7	1.394E-07	1.392E-07	1.392E-07
C	10.0	.36	4827.	0.	0.	568.7	500.4	568.7	1.114E-07	1.113E-07	1.113E-07
C	13.0	.22	4827.	0.	0.	568.7	500.4	568.7	8.583E-08	8.569E-08	8.569E-08
D	.4	.17	4827.	0.	0.	221.3	158.9	221.3	2.131E-05	2.104E-05	2.104E-05
D	1.0	.69	4827.	0.	0.	221.3	158.9	221.3	9.000E-06	8.885E-06	8.885E-06
D	2.0	2.80	4827.	0.	0.	221.3	158.9	221.3	4.450E-06	4.393E-06	4.393E-06
D	3.0	2.44	4827.	0.	0.	221.3	158.9	221.3	3.000E-06	2.962E-06	2.962E-06
D	4.0	2.37	4827.	0.	0.	221.3	158.9	221.3	2.262E-06	2.234E-06	2.234E-06
D	5.0	3.24	4827.	0.	0.	221.3	158.9	221.3	1.800E-06	1.777E-06	1.777E-06
D	6.0	2.77	4827.	0.	0.	221.3	158.9	221.3	1.506E-06	1.486E-06	1.486E-06
D	8.0	4.26	4827.	0.	0.	221.3	158.9	221.3	1.128E-06	1.114E-06	1.114E-06
D	10.0	2.48	4827.	0.	0.	221.3	158.9	221.3	9.020E-07	8.904E-07	8.904E-07
D	13.0	1.38	4827.	0.	0.	221.3	158.9	221.3	6.947E-07	6.858E-07	6.858E-07
D	18.0	.25	4827.	0.	0.	221.3	158.9	221.3	5.018E-07	4.954E-07	4.954E-07
E	.4	.50	4827.	0.	0.	428.5	35.6	428.5	4.920E-05	4.777E-05	4.777E-05
E	1.0	1.93	4827.	0.	0.	428.5	35.6	428.5	2.077E-05	2.017E-05	2.017E-05
E	2.0	4.52	4827.	0.	0.	428.5	35.6	428.5	1.027E-05	9.974E-06	9.974E-06
E	3.0	3.31	4827.	0.	0.	428.5	35.6	428.5	6.924E-06	6.723E-06	6.723E-06
E	4.0	2.26	4827.	0.	0.	428.5	35.6	428.5	5.222E-06	5.070E-06	5.070E-06
E	5.0	2.88	4827.	0.	0.	428.5	35.6	428.5	4.154E-06	4.034E-06	4.034E-06
E	6.0	3.64	4827.	0.	0.	428.5	35.6	428.5	3.475E-06	3.374E-06	3.374E-06
E	8.0	5.97	4827.	0.	0.	428.5	35.6	428.5	2.604E-06	2.528E-06	2.528E-06
E	10.0	4.01	4827.	0.	0.	428.5	35.6	428.5	2.082E-06	2.021E-06	2.021E-06
E	13.0	1.53	4827.	0.	0.	428.5	35.6	428.5	1.603E-06	1.557E-06	1.557E-06
E	18.0	.29	4827.	0.	0.	428.5	35.6	428.5	1.158E-06	1.125E-06	1.125E-06
F	.4	.47	4827.	0.	0.	696.0	11.2	696.0	9.625E-05	9.094E-05	9.094E-05
F	1.0	1.71	4827.	0.	0.	696.0	11.2	696.0	4.064E-05	3.839E-05	3.839E-05
F	2.0	5.24	4827.	0.	0.	696.0	11.2	696.0	2.010E-05	1.899E-05	1.899E-05
F	3.0	4.48	4827.	0.	0.	696.0	11.2	696.0	1.355E-05	1.280E-05	1.280E-05
F	4.0	3.31	4827.	0.	0.	696.0	11.2	696.0	1.022E-05	9.652E-06	9.652E-06
F	5.0	1.38	4827.	0.	0.	696.0	11.2	696.0	8.128E-06	7.679E-06	7.679E-06
F	6.0	1.24	4827.	0.	0.	696.0	11.2	696.0	6.799E-06	6.423E-06	6.423E-06
F	8.0	.98	4827.	0.	0.	696.0	11.2	696.0	5.094E-06	4.813E-06	4.813E-06
F	10.0	.55	4827.	0.	0.	696.0	11.2	696.0	4.073E-06	3.848E-06	3.848E-06
F	13.0	.11	4827.	0.	0.	696.0	11.2	696.0	3.137E-06	2.964E-06	2.964E-06
G	.4	.55	4827.	0.	0.	1000.0	3.5	1000.0	2.136E-04	1.891E-04	1.891E-04
G	1.0	1.60	4827.	0.	0.	1000.0	3.5	1000.0	9.021E-05	7.984E-05	7.984E-05
G	2.0	3.86	4827.	0.	0.	1000.0	3.5	1000.0	4.461E-05	3.948E-05	3.948E-05
G	3.0	1.78	4827.	0.	0.	1000.0	3.5	1000.0	3.007E-05	2.661E-05	2.661E-05
G	4.0	1.27	4827.	0.	0.	1000.0	3.5	1000.0	2.268E-05	2.007E-05	2.007E-05
G	5.0	.29	4827.	0.	0.	1000.0	3.5	1000.0	1.804E-05	1.597E-05	1.597E-05
G	6.0	.22	4827.	0.	0.	1000.0	3.5	1000.0	1.509E-05	1.336E-05	1.336E-05
G	8.0	.04	4827.	0.	0.	1000.0	3.5	1000.0	1.131E-05	1.001E-05	1.001E-05
G	13.0	.04	4827.	0.	0.	1000.0	3.5	1000.0	6.963E-06	6.163E-06	6.163E-06

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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:   CGS                               METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma=desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0LOW POPULATION ZONE CALCULATIONS:
0 NNE SECTOR     BOUNDARY DISTANCE = 4827.0 METERS
0DESERT SIGMA VALUES USED.  MEANDER IS INCLUDED IN THESE VALUES- RG 1.145 MEANDER FACTORS ARE NOT USED.
 BUILDING WAKE CREDIT ALLOWED:   C=   .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0  1.891E-04  9.094E-05  7.984E-05  4.777E-05  3.948E-05  3.839E-05  2.661E-05  2.104E-05  2.017E-05  2.007E-05
       .547       1.016      2.619      3.119      6.979      8.691     10.476     10.645     12.575     13.850
      .04745     .08820     .22726     .27067     .60568     .75423     .90910     .92376    1.09127    1.20189
0  1.899E-05  1.597E-05  1.336E-05  1.280E-05  1.001E-05  9.974E-06  9.652E-06  8.885E-06  7.679E-06  6.723E-06
     19.094     19.386     19.604     24.084     24.120     28.636     31.950     32.642     34.026     37.341
     1.65701    1.68229    1.70126    2.09001    2.09317    2.48507    2.77269    2.83274    2.95284    3.24045
0  6.423E-06  6.163E-06  5.070E-06  4.813E-06  4.393E-06  4.034E-06  3.848E-06  3.374E-06  2.964E-06  2.962E-06
     38.579     38.615     40.873     41.857     44.661     47.538     48.084     51.726     51.836     54.276
     3.34791    3.35107    3.54702    3.63236    3.87572    4.12540    4.17281    4.48887    4.49835    4.71011
0  2.629E-06  2.528E-06  2.234E-06  2.021E-06  1.777E-06  1.557E-06  1.486E-06  1.202E-06  1.125E-06  1.114E-06
     54.364     60.337     62.704     66.710     69.952     71.481     74.249     74.309     74.601     78.862
     4.71775    5.23609    5.44152    5.78918    6.07047    6.20322    6.44342    6.44863    6.47391    6.84370
0  1.110E-06  8.904E-07  7.492E-07  6.858E-07  5.490E-07  5.075E-07  4.954E-07  3.700E-07  3.163E-07  2.791E-07
     79.117     81.593     81.790     83.174     83.830     84.012     84.267     84.776     85.468     85.978
     6.86582    7.08074    7.09781    7.21791    7.27480    7.29060    7.31272    7.35697    7.41702    7.46127
0  2.510E-07  2.220E-07  1.857E-07  1.692E-07  1.564E-07  1.392E-07  1.276E-07  1.113E-07  1.054E-07  1.015E-07
     86.634     87.180     87.836     88.127     89.912     90.640     91.186     91.551     92.789     93.335
     7.51816    7.56557    7.62246    7.64774    7.80261    7.86582    7.91323    7.94484    8.05229    8.09970
0  8.569E-08  8.490E-08  7.952E-08  6.362E-08  6.326E-08  5.292E-08  5.086E-08  3.965E-08  3.917E-08  3.170E-08
     93.554     94.027     95.265     95.957     97.305     98.215     98.507     99.563     99.709     99.891
     8.11867    8.15975    8.26721    8.32726    8.44420    8.52322    8.54850    8.64016    8.65280    8.66860
    2.442E-08  1.764E-08
       99.964    100.000
       8.67492    8.67809
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0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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)=    .753
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=   1.655
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   2.770
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   4.122
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   5.232
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   5.785
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 8)=   6.067
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 9)=   6.440
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(10)=   6.862
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0  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
  10  1      -8.57322 -14.59846  -1.82283
  10  2     -10.16758 -15.87443  -2.34775
  10  3     -10.87178 -17.57376  -3.14525
  10  4     -11.54831 -20.88477  -4.87358
  10  5     -12.42081 -19.54039  -4.09948
  10  6     -12.88803 -20.19483  -4.50278
  10  7     -13.11173 -21.61479  -5.40546
  10  8     -13.24063 -22.36723  -5.89115
  10  9     -13.41924 -26.95746  -8.91325
  10 10     -13.71102     NUMXQ(K)= 10
     1.379E-04                .087             1.000
     7.449E-05                .260             3.000
     5.469E-05                .434             5.000
     3.404E-05                .868            10.000
     2.375E-05               1.302            15.000
     1.790E-05               1.736            20.000
     1.341E-05               2.170            25.000
     1.052E-05               2.603            30.000
     7.944E-06               3.037            35.000
     5.938E-06               3.471            40.000
     4.567E-06               3.905            45.000
     3.660E-06               4.339            50.000
     3.039E-06               4.773            55.000
     2.557E-06               5.207            60.000
     2.143E-06               5.641            65.000
     1.773E-06               6.075            70.000
     1.420E-06               6.509            75.000
0    5.005E-05               0.5               5.76
CANNUAL AVERAGE =   1.23E-06
0K= 10     FIVEXQ(K)= 5.005E-05     FIVEPR(K)= 5.762
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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23:4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE NE SECTOR.

STABILITY CLASS	WINDSPEED AT 10.0 METER/SEC	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=1431.SQ.METERS	USED
A	.4	.22	4827.	0.	0.	1000.0	1000.0	1000.0	7.495E-07	7.492E-07	7.492E-07
A	1.0	.76	4827.	0.	0.	1000.0	1000.0	1000.0	3.165E-07	3.163E-07	3.163E-07
A	2.0	1.68	4827.	0.	0.	1000.0	1000.0	1000.0	1.565E-07	1.564E-07	1.564E-07
A	3.0	1.25	4827.	0.	0.	1000.0	1000.0	1000.0	1.055E-07	1.054E-07	1.054E-07
A	4.0	1.33	4827.	0.	0.	1000.0	1000.0	1000.0	7.956E-08	7.952E-08	7.952E-08
A	5.0	1.25	4827.	0.	0.	1000.0	1000.0	1000.0	6.329E-08	6.326E-08	6.326E-08
A	6.0	.60	4827.	0.	0.	1000.0	1000.0	1000.0	5.294E-08	5.292E-08	5.292E-08
A	8.0	1.14	4827.	0.	0.	1000.0	1000.0	1000.0	3.967E-08	3.965E-08	3.965E-08
A	10.0	.60	4827.	0.	0.	1000.0	1000.0	1000.0	3.172E-08	3.170E-08	3.170E-08
A	13.0	.05	4827.	0.	0.	1000.0	1000.0	1000.0	2.443E-08	2.442E-08	2.442E-08
B	.4	.05	4827.	0.	0.	725.4	859.0	725.4	1.203E-06	1.202E-06	1.202E-06
B	1.0	.16	4827.	0.	0.	725.4	859.0	725.4	5.079E-07	5.075E-07	5.075E-07
B	2.0	.87	4827.	0.	0.	725.4	859.0	725.4	2.512E-07	2.510E-07	2.510E-07
B	3.0	.54	4827.	0.	0.	725.4	859.0	725.4	1.693E-07	1.692E-07	1.692E-07
B	4.0	.38	4827.	0.	0.	725.4	859.0	725.4	1.277E-07	1.276E-07	1.276E-07
B	5.0	.54	4827.	0.	0.	725.4	859.0	725.4	1.016E-07	1.015E-07	1.015E-07
B	6.0	.27	4827.	0.	0.	725.4	859.0	725.4	8.496E-08	8.490E-08	8.490E-08
B	8.0	.87	4827.	0.	0.	725.4	859.0	725.4	6.366E-08	6.362E-08	6.362E-08
B	10.0	.43	4827.	0.	0.	725.4	859.0	725.4	5.090E-08	5.086E-08	5.086E-08
B	13.0	.43	4827.	0.	0.	725.4	859.0	725.4	3.920E-08	3.917E-08	3.917E-08
C	.4	.13	4827.	0.	0.	568.7	500.4	568.7	2.634E-06	2.629E-06	2.629E-06
C	1.0	.38	4827.	0.	0.	568.7	500.4	568.7	1.112E-06	1.110E-06	1.110E-06
C	2.0	.49	4827.	0.	0.	568.7	500.4	568.7	5.499E-07	5.490E-07	5.490E-07
C	3.0	.49	4827.	0.	0.	568.7	500.4	568.7	3.706E-07	3.700E-07	3.700E-07
C	4.0	.76	4827.	0.	0.	568.7	500.4	568.7	2.795E-07	2.791E-07	2.791E-07
C	5.0	.81	4827.	0.	0.	568.7	500.4	568.7	2.224E-07	2.220E-07	2.220E-07
C	6.0	.38	4827.	0.	0.	568.7	500.4	568.7	1.860E-07	1.857E-07	1.857E-07
C	8.0	.92	4827.	0.	0.	568.7	500.4	568.7	1.394E-07	1.392E-07	1.392E-07
C	10.0	.70	4827.	0.	0.	568.7	500.4	568.7	1.114E-07	1.113E-07	1.113E-07
C	13.0	.16	4827.	0.	0.	568.7	500.4	568.7	8.583E-08	8.569E-08	8.569E-08
D	.4	.53	4827.	0.	0.	221.3	158.9	221.3	2.131E-05	2.104E-05	2.104E-05
D	1.0	2.17	4827.	0.	0.	221.3	158.9	221.3	9.000E-06	8.885E-06	8.885E-06
D	2.0	2.33	4827.	0.	0.	221.3	158.9	221.3	4.450E-06	4.393E-06	4.393E-06
D	3.0	2.87	4827.	0.	0.	221.3	158.9	221.3	3.000E-06	2.962E-06	2.962E-06
D	4.0	2.76	4827.	0.	0.	221.3	158.9	221.3	2.262E-06	2.234E-06	2.234E-06
D	5.0	2.44	4827.	0.	0.	221.3	158.9	221.3	1.800E-06	1.777E-06	1.777E-06
D	6.0	1.84	4827.	0.	0.	221.3	158.9	221.3	1.506E-06	1.486E-06	1.486E-06
D	8.0	3.47	4827.	0.	0.	221.3	158.9	221.3	1.128E-06	1.114E-06	1.114E-06
D	10.0	2.44	4827.	0.	0.	221.3	158.9	221.3	9.020E-07	8.904E-07	8.904E-07
D	13.0	1.73	4827.	0.	0.	221.3	158.9	221.3	6.947E-07	6.858E-07	6.858E-07
D	18.0	.27	4827.	0.	0.	221.3	158.9	221.3	5.018E-07	4.954E-07	4.954E-07
E	.4	.77	4827.	0.	0.	428.5	35.6	428.5	4.920E-05	4.777E-05	4.777E-05
E	1.0	2.98	4827.	0.	0.	428.5	35.6	428.5	2.077E-05	2.017E-05	2.017E-05
E	2.0	4.82	4827.	0.	0.	428.5	35.6	428.5	1.027E-05	9.974E-06	9.974E-06
E	3.0	3.90	4827.	0.	0.	428.5	35.6	428.5	6.924E-06	6.723E-06	6.723E-06
E	4.0	3.41	4827.	0.	0.	428.5	35.6	428.5	5.222E-06	5.070E-06	5.070E-06
E	5.0	2.82	4827.	0.	0.	428.5	35.6	428.5	4.154E-06	4.034E-06	4.034E-06
E	6.0	3.41	4827.	0.	0.	428.5	35.6	428.5	3.475E-06	3.374E-06	3.374E-06
E	8.0	3.85	4827.	0.	0.	428.5	35.6	428.5	2.604E-06	2.528E-06	2.528E-06
E	10.0	3.36	4827.	0.	0.	428.5	35.6	428.5	2.082E-06	2.021E-06	2.021E-06
E	13.0	1.41	4827.	0.	0.	428.5	35.6	428.5	1.603E-06	1.557E-06	1.557E-06
E	18.0	.27	4827.	0.	0.	428.5	35.6	428.5	1.158E-06	1.125E-06	1.125E-06
F	.4	.83	4827.	0.	0.	696.0	11.2	696.0	9.625E-05	9.094E-05	9.094E-05
F	1.0	3.03	4827.	0.	0.	696.0	11.2	696.0	4.064E-05	3.839E-05	3.839E-05
F	2.0	5.20	4827.	0.	0.	696.0	11.2	696.0	2.010E-05	1.899E-05	1.899E-05
F	3.0	3.52	4827.	0.	0.	696.0	11.2	696.0	1.355E-05	1.280E 05	1.280E-05
F	4.0	2.00	4827.	0.	0.	696.0	11.2	696.0	1.022E-05	9.652E-06	9.652E-06
F	5.0	.87	4827.	0.	0.	696.0	11.2	696.0	8.128E-06	7.679E-06	7.679E-06
F	6.0	.54	4827.	0.	0.	696.0	11.2	696.0	6.799E-06	6.423E-06	6.423E-06
F	8.0	.54	4827.	0.	0.	696.0	11.2	696.0	5.094E-06	4.813E-06	4.813E-06
F	10.0	.05	4827.	0.	0.	696.0	11.2	696.0	4.073E-06	3.848E-06	3.848E-06
F	13.0	.11	4827.	0.	0.	696.0	11.2	696.0	3.137E-06	2.964E-06	2.964E-06
G	.4	1.15	4827.	0.	0.	1000.0	3.5	1000.0	2.136E-04	1.891E-04	1.891E-04
G	1.0	3.36	4827.	0.	0.	1000.0	3.5	1000.0	9.021E-05	7.984E-05	7.984E-05
G	2.0	4.06	4827.	0.	0.	1000.0	3.5	1000.0	4.461E-05	3.948E-05	3.948E-05
G	3.0	1.41	4827.	0.	0.	1000.0	3.5	1000.0	3.007E-05	2.661E-05	2.661E-05
G	4.0	.81	4827.	0.	0.	1000.0	3.5	1000.0	2.268E-05	2.007E-05	2.007E-05
G	18.0	.05	4827.	0.	0.	1000.0	3.5	1000.0	5.030E-06	4.452E-06	4.452E-06

```
1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:  CGS                                METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma-desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0LOW POPULATION ZONE CALCULATIONS:
0  NE SECTOR     BOUNDARY DISTANCE = 4827.0 METERS
0DESERT SIGMA VALUES USED.  MEANDER IS INCLUDED IN THESE VALUES- RG 1.145 MEANDER FACTORS ARE NOT USED.
 BUILDING WAKE CREDIT ALLOWED:  C=   .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0   1.891E-04  9.094E-05  7.984E-05  4.777E-05  3.948E-05  3.839E-05  2.661E-05  2.104E-05  2.017E-05  2.007E-05
        1.146      1.978      5.337      6.109     10.172     13.206     14.614     15.143     18.123     18.935
      .06687     .11541     .31137     .35641     .59345     .77044     .85262     .88348    1.05731    1.10472
0   1.899E-05  1.280E-05  9.974E-06  9.652E-06  8.885E-06  7.679E-06  6.723E-06  6.423E-06  5.070E-06  4.813E-06
       24.136     27.657     32.479     34.483     36.650     37.517     41.417     41.959     45.372     45.914
      1.40814    1.61357    1.89486    2.01180    2.13822    2.18879    2.41635    2.44796    2.64707    2.67868
0   4.452E-06  4.393E-06  4.034E-06  3.848E-06  3.374E-06  2.964E-06  2.962E 06  2.629E-06  2.528E-06  2.234E-06
       45.968     48.297     51.115     51.169     54.582     54.690     57.561     57.692     61.539     64.301
      2.68184    2.81774    2.98209    2.98525    3.18437    3.19069    3.35820    3.36585    3.59025    3.75143
0   2.021E-06  1.777E-06  1.557E-06  1.486E-06  1.202E-06  1.125E-06  1.114E-06  1.110E-06  8.904E-07  7.492E-07
       67.660     70.098     71.506     73.348     73.402     73.673     77.140     77.519     79.957     80.172
      3.94739    4.08961    4.17179    4.27925    4.28237    4.29817    4.50045    4.52257    4.66480    4.67738
0   6.858E-07  5.490E-07  5.075E-07  4.954E-07  3.700E-07  3.163E-07  2.791E-07  2.510E-07  2.220E-07  1.857E-07
       81.906     82.394     82.556     82.827     83.315     84.073     84.831     85.698     86.511     86.890
      4.77851    4.80696    4.81644    4.83224    4.86069    4.90494    4.94918    4.99975    5.04716    5.06929
0   1.692E-07  1.564E-07  1.392E-07  1.276E-07  1.113E-07  1.054E-07  1.015E-07  8.569E-08  8.490E-08  7.952E-08
       87.432     89.111     90.032     90.411     91.116     92.362     92.903     93.066     93.337     94.637
      5.10089    5.19887    5.25260    5.27472    5.31581    5.38850    5.42011    5.42959    5.44539    5.52124
0   6.362E-08  6.326E-08  5.292E-08  5.086E-08  3.965E-08  3.917E-08  3.170E-08  2.442E-08
       95.504     96.750     97.345     97.779     98.916     99.350     99.946    100.000
      5.57181    5.64451    5.67927    5.70456    5.77093    5.79621    5.83098    5.83414
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0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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)=    .311
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=    .770
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   1.407
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   2.136
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   2.414
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   2.979
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 8)=   3.944
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 9)=   4.086
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(10)=   4.276
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(11)=   4.519
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(12)=   4.661
```

```
0  K   I    XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
   11  1      -8.57322 -14.43160  -1.82612
   11  2      -9.43545 -15.83738  -2.33994
   11  3     -10.16758 -17.66461  -3.09404
   11  4     -10.87178 -20.73628  -4.49315
   11  5     -11.63119 -22.59565  -5.41070
   11  6     -11.90999 -22.98853  -5.60964
   11  7     -12.42081 -22.69910  -5.45600
   11  8     -13.11173 -26.88185  -7.83632
   11  9     -13.24063 -27.88965  -8.41527
   11 10     -13.41924 -32.60690 -11.15858
   11 11     -13.71102 -39.00584 -14.93734
   11 12     -13.93155      NUMXQ(K)= 12
```

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BACK EXTRAPOLATION FOR  1 PERCENTILE.
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    2.031E-04              .058             1.000
    1.118E-04              .175             3.000
    8.302E-05              .292             5.000
    4.845E-05              .583            10.000
    3.324E-05              .875            15.000
    2.379E-05             1.167            20.000
    1.784E-05             1.459            25.000
    1.286E-05             1.750            30.000
    9.683E-06             2.042            35.000
    7.282E-06             2.334            40.000
    5.508E-06             2.625            45.000
    4.259E-06             2.917            50.000
    3.379E-06             3.209            55.000
    2.729E-06             3.500            60.000
    2.236E-06             3.792            65.000
    1.786E-06             4.084            70.000
    1.322E-06             4.376            75.000
0   5.495E-05             0.5               8.57
0ANNUAL AVERAGE =   1.19E-06
0K= 11     FIVEXQ(K)= 5.495E-05     FIVEPR(K)= 8.570
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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23: 4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE ENE SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 10.0 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=1431.SQ.METERS	USED
A	.4	.39	4827.	0.	0.	1000.0	1000.0	1000.0	7.495E-07	7.492E-07	7.492E-07
A	1.0	1.36	4827.	0.	0.	1000.0	1000.0	1000.0	3.165E-07	3.163E-07	3.163E-07
A	2.0	1.51	4827.	0.	0.	1000.0	1000.0	1000.0	1.565E-07	1.564E-07	1.564E-07
A	3.0	1.29	4827.	0.	0.	1000.0	1000.0	1000.0	1.055E-07	1.054E-07	1.054E-07
A	4.0	.91	4827.	0.	0.	1000.0	1000.0	1000.0	7.956E-08	7.952E-08	7.952E-08
A	5.0	.61	4827.	0.	0.	1000.0	1000.0	1000.0	6.329E-08	6.326E-08	6.326E-08
A	6.0	.30	4827.	0.	0.	1000.0	1000.0	1000.0	5.294E-08	5.292E-08	5.292E-08
A	8.0	.98	4827.	0.	0.	1000.0	1000.0	1000.0	3.967E-08	3.965E-08	3.965E-08
A	10.0	.61	4827.	0.	0.	1000.0	1000.0	1000.0	3.172E-08	3.170E-08	3.170E 08
A	13.0	.23	4827.	0.	0.	1000.0	1000.0	1000.0	2.443E-08	2.442E-08	2.442E-08
B	.4	.07	4827.	0.	0.	725.4	859.0	725.4	1.203E-06	1.202E-06	1.202E-06
B	1.0	.23	4827.	0.	0.	725.4	859.0	725.4	5.079E-07	5.075E-07	5.075E-07
B	2.0	.68	4827.	0.	0.	725.4	859.0	725.4	2.512E-07	2.510E-07	2.510E-07
B	3.0	.38	4827.	0.	0.	725.4	859.0	725.4	1.693E-07	1.692E-07	1.692E-07
B	4.0	.45	4827.	0.	0.	725.4	859.0	725.4	1.277E-07	1.276E-07	1.276E-07
B	5.0	.30	4827.	0.	0.	725.4	859.0	725.4	1.016E-07	1.015E-07	1.015E-07
B	8.0	.15	4827.	0.	0.	725.4	859.0	725.4	6.366E-08	6.362E-08	6.362E-08
B	10.0	.30	4827.	0.	0.	725.4	859.0	725.4	5.090E-08	5.086E-08	5.086E-08
C	.4	.08	4827.	0.	0.	568.7	500.4	568.7	2.634E-06	2.629E-06	2.629E-06
C	1.0	.23	4827.	0.	0.	568.7	500.4	568.7	1.112E-06	1.110E-06	1.110E-06
C	2.0	1.06	4827.	0.	0.	568.7	500.4	568.7	5.499E-07	5.490E-07	5.490E-07
C	3.0	.45	4827.	0.	0.	568.7	500.4	568.7	3.706E-07	3.700E-07	3.700E-07
C	4.0	.53	4827.	0.	0.	568.7	500.4	568.7	2.795E-07	2.791E-07	2.791E-07
C	5.0	.83	4827.	0.	0.	568.7	500.4	568.7	2.224E-07	2.220E-07	2.220E-07
C	6.0	.38	4827.	0.	0.	568.7	500.4	568.7	1.860E-07	1.857E-07	1.857E-07
C	8.0	.68	4827.	0.	0.	568.7	500.4	568.7	1.394E-07	1.392E-07	1.392E-07
C	10.0	1.06	4827.	0.	0.	568.7	500.4	568.7	1.114E-07	1.113E-07	1.113E-07
C	13.0	.08	4827.	0.	0.	568.7	500.4	568.7	8.583E-08	8.569E-08	8.569E-08
D	.4	.46	4827.	0.	0.	221.3	158.9	221.3	2.131E-05	2.104E-05	2.104E-05
D	1.0	1.89	4827.	0.	0.	221.3	158.9	221.3	9.000E-06	8.885E-06	8.885E-06
D	2.0	2.95	4827.	0.	0.	221.3	158.9	221.3	4.450E-06	4.393E-06	4.393E-06
D	3.0	3.55	4827.	0.	0.	221.3	158.9	221.3	3.000E-06	2.962E-06	2.962E-06
D	4.0	1.89	4827.	0.	0.	221.3	158.9	221.3	2.262E-06	2.234E-06	2.234E-06
D	5.0	1.29	4827.	0.	0.	221.3	158.9	221.3	1.800E-06	1.777E-06	1.777E-06
D	6.0	1.97	4827.	0.	0.	221.3	158.9	221.3	1.506E-06	1.486E-06	1.486E-06
D	8.0	3.71	4827.	0.	0.	221.3	158.9	221.3	1.128E-06	1.114E-06	1.114E-06
D	10.0	3.18	4827.	0.	0.	221.3	158.9	221.3	9.020E-07	8.904E-07	8.904E-07
D	13.0	.83	4827.	0.	0.	221.3	158.9	221.3	6.947E-07	6.858E-07	6.858E-07

E	.4	1.02	4827.	0.	0.	428.5	35.6	428.5	4.920E-05	4.777E-05	4.777E-05
E	1.0	3.93	4827.	0.	0.	428.5	35.6	428.5	2.077E-05	2.017E-05	2.017E-05
E	2.0	7.34	4827.	0.	0.	428.5	35.6	428.5	1.027E-05	9.974E-06	9.974E-06
E	3.0	5.22	4827.	0.	0.	428.5	35.6	428.5	6.924E-06	6.723E-06	6.723E-06
E	4.0	3.40	4827.	0.	0.	428.5	35.6	428.5	5.222E-06	5.070E-06	5.070E-06
E	5.0	2.57	4827.	0.	0.	428.5	35.6	428.5	4.154E-06	4.034E-06	4.034E-06
E	6.0	2.50	4827.	0.	0.	428.5	35.6	428.5	3.475E-06	3.374E-06	3.374E-06
E	8.0	2.87	4827.	0.	0.	428.5	35.6	428.5	2.604E-06	2.528E-06	2.528E-06
E	10.0	.91	4827.	0.	0.	428.5	35.6	428.5	2.082E-06	2.021E-06	2.021E-06
E	13.0	.45	4827.	0.	0.	428.5	35.6	428.5	1.603E-06	1.557E-06	1.557E-06
F	.4	1.37	4827.	0.	0.	696.0	11.2	696.0	9.625E-05	9.094E-05	9.094E-05
F	1.0	4.99	4827.	0.	0.	696.0	11.2	696.0	4.064E-05	3.839E-05	3.839E-05
F	2.0	6.35	4827.	0.	0.	696.0	11.2	696.0	2.010E-05	1.899E-05	1.899E-05
F	3.0	4.39	4827.	0.	0.	696.0	11.2	696.0	1.355E-05	1.280E-05	1.280E-05
F	4.0	2.12	4827.	0.	0.	696.0	11.2	696.0	1.022E-05	9.652E-06	9.652E-06
F	5.0	1.21	4827.	0.	0.	696.0	11.2	696.0	8.128E-06	7.679E-06	7.679E-06
F	6.0	.38	4827.	0.	0.	696.0	11.2	696.0	6.799E-06	6.423E-06	6.423E-06
F	8.0	.38	4827.	0.	0.	696.0	11.2	696.0	5.094E-06	4.813E-06	4.813E-06
F	13.0	.08	4827.	0.	0.	696.0	11.2	696.0	3.137E-06	2.964E-06	2.964E-06
G	.4	1.47	4827.	0.	0.	1000.0	3.5	1000.0	2.136E-04	1.891E-04	1.891E-04
G	1.0	4.31	4827.	0.	0.	1000.0	3.5	1000.0	9.021E-05	7.984E-05	7.984E-05
G	2.0	2.87	4827.	0.	0.	1000.0	3.5	1000.0	4.461E-05	3.948E-05	3.948E-05
G	3.0	1.21	4827.	0.	0.	1000.0	3.5	1000.0	3.007E-05	2.661E-05	2.661E-05
G	4.0	.45	4827.	0.	0.	1000.0	3.5	1000.0	2.268E-05	2.007E-05	2.007E-05
G	5.0	.30	4827.	0.	0.	1000.0	3.5	1000.0	1.804E-05	1.597E-05	1.597E-05
G	6.0	.08	4827.	0.	0.	1000.0	3.5	1000.0	1.509E-05	1.336E-05	1.336E-05

1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23: 4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma-desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0LOW POPULATION ZONE CALCULATIONS:
0 ENE SECTOR BOUNDARY DISTANCE = 4827.0 METERS
0DESERT SIGMA VALUES USED. MEANDER IS INCLUDED IN THESE VALUES- RG 1.145 MEANDER FACTORS ARE NOT USED.
BUILDING WAKE CREDIT ALLOWED: C= .5 A= 2861. D= 70.0
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.

0	1.891E-04	9.094E-05	7.984E-05	4.777E-05	3.948E-05	3.839E-05	2.661E-05	2.104E-05	2.017E-05	2.007E-05
	1.471	2.840	7.151	8.170	11.044	16.035	17.245	17.707	21.639	22.093
	.06147	.11869	.29884	.34143	.46153	.67012	.72069	.73998	.90433	.92330
0	1.899E-05	1.597E-05	1.336E-05	1.280E-05	9.974E-06	9.652E-06	8.885E-06	7.679E-06	6.723E-06	6.423E-06
	28.446	28.748	28.824	33.210	40.546	42.664	44.554	45.764	50.983	51.361
	1.18878	1.20143	1.20459	1.38790	1.69447	1.78297	1.86198	1.91255	2.13063	2.14643
0	5.070E-06	4.813E-06	4.393E-06	4.034E-06	3.374E-06	2.964E-06	2.962E-06	2.629E-06	2.528E-06	2.234E-06
	54.764	55.142	58.092	60.663	63.159	63.234	66.789	66.867	69.741	71.632
	2.28866	2.30446	2.42772	2.53518	2.63948	2.64264	2.79119	2.79446	2.91456	2.99358
0	2.021E-06	1.777E-06	1.557E-06	1.486E-06	1.202E-06	1.114E-06	1.110E-06	8.904E-07	7.492E-07	6.858E-07
	72.539	73.825	74.279	76.245	76.320	80.026	80.252	83.429	83.816	84.648
	3.03151	3.08523	3.10420	3.18637	3.18950	3.34436	3.35385	3.48659	3.50276	3.53753
0	5.490E-07	5.075E-07	3.700E-07	3.163E-07	2.791E-07	2.510E-07	2.220E-07	1.857E-07	1.692E-07	1.564E-07
	85.706	85.933	86.387	87.748	88.278	88.958	89.790	90.168	90.547	92.059
	3.58177	3.59126	3.61022	3.66711	3.68923	3.71768	3.75244	3.76825	3.78405	3.84726
0	1.392E-07	1.276E-07	1.113E-07	1.054E-07	1.015E-07	8.569E-08	7.952E-08	6.362E-08	6.326E-08	5.292E-08
	92.740	93.194	94.252	95.538	95.841	95.916	96.824	96.975	97.580	97.882
	3.87571	3.89467	3.93892	3.99265	4.00529	4.00845	4.04638	4.05270	4.07798	4.09062
0	5.086E-08	3.965E-08	3.170E-08	2.442E-08						
	98.185	99.168	99.773	100.000						
	4.10327	4.14435	4.16964	4.17912						

```
0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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
```

```
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=    .299
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=    .669
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   1.187
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   1.781
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   1.860
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   2.128
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 8)=   2.533
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 9)=   2.788
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(10)=   2.912
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(11)=   2.991
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(12)=   3.483
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(13)=   4.002
```

```
0  K   I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
   12  1     -8.57322 -14.34584  -1.78597
   12  2     -9.43545 -16.72586  -2.65162
   12  3    -10.16758 -18.37782  -3.31953
   12  4    -10.87178 -20.43606  -4.22978
   12  5    -11.54831 -21.40772  -4.69220
   12  6    -11.63119 -22.07070  -5.01040
   12  7    -11.90999 -26.00114  -6.94856
   12  8    -12.42081 -26.94587  -7.43194
   12  9    -12.72980 -28.73422  -8.36686
   12 10    -12.88803 -32.83082 -10.52989
   12 11    -13.01191 -38.42793 -13.50366
   12 12    -13.93155 -75.88050 -34.14944
   12 13    -16.10317     NUMXQ(K)= 13
```

```
BACK EXTRAPOLATION FOR  1 PERCENTILE.
```

```
     2.296E-04              .042             1.000
     1.301E-04              .125             3.000
     9.809E-05              .209             5.000
     5.936E-05              .418            10.000
     4.089E-05              .627            15.000
     2.944E-05              .836            20.000
     2.235E-05             1.045            25.000
     1.741E-05             1.254            30.000
     1.350E-05             1.463            35.000
     1.078E-05             1.672            40.000
     8.705E-06             1.881            45.000
     7.002E-06             2.090            50.000
     5.389E-06             2.299            55.000
     4.168E-06             2.507            60.000
     3.233E-06             2.716            65.000
     2.485E-06             2.925            70.000
     1.697E-06             3.134            75.000
     1.150E-06             3.343            80.000
     6.670E-07             3.552            85.000
     2.735E-07             3.761            90.000
0    5.044E-05             0.5              11.96
0ANNUAL AVERAGE =   1.04E-06
0K= 12     FIVEXQ(K)= 5.044E-05     FIVEPR(K)=11.964
```

1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23: 4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-P.inp output file: P96-99-P.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE E SECTOR.

STABILITY CLASS	WINDSPEED AT 10.0 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=1431.SQ.METERS	USED
A	.4	.28	4827.	0.	0.	1000.0	1000.0	1000.0	7.495E-07	7.492E-07	7.492E-07
A	1.0	1.00	4827.	0.	0.	1000.0	1000.0	1000.0	3.165E-07	3.163E-07	3.163E-07
A	2.0	2.00	4827.	0.	0.	1000.0	1000.0	1000.0	1.565E-07	1.564E-07	1.564E-07
A	3.0	.60	4827.	0.	0.	1000.0	1000.0	1000.0	1.055E-07	1.054E-07	1.054E-07
A	4.0	.73	4827.	0.	0.	1000.0	1000.0	1000.0	7.956E-08	7.952E-08	7.952E-08
A	5.0	.53	4827.	0.	0.	1000.0	1000.0	1000.0	6.329E-08	6.326E-08	6.326E-08
A	6.0	.33	4827.	0.	0.	1000.0	1000.0	1000.0	5.294E-08	5.292E-08	5.292E-08
A	8.0	.60	4827.	0.	0.	1000.0	1000.0	1000.0	3.967E-08	3.965E-08	3.965E-08
A	10.0	.47	4827.	0.	0.	1000.0	1000.0	1000.0	3.172E-08	3.170E-08	3.170E-08
A	13.0	.20	4827.	0.	0.	1000.0	1000.0	1000.0	2.443E-08	2.442E-08	2.442E-08
B	.4	.09	4827.	0.	0.	725.4	859.0	725.4	1.203E-06	1.202E-06	1.202E-06
B	1.0	.27	4827.	0.	0.	725.4	859.0	725.4	5.079E-07	5.075E-07	5.075E-07
B	2.0	.60	4827.	0.	0.	725.4	859.0	725.4	2.512E-07	2.510E-07	2.510E-07
B	3.0	.33	4827.	0.	0.	725.4	859.0	725.4	1.693E-07	1.692E-07	1.692E-07
B	4.0	.40	4827.	0.	0.	725.4	859.0	725.4	1.277E-07	1.276E-07	1.276E-07
B	5.0	.40	4827.	0.	0.	725.4	859.0	725.4	1.016E-07	1.015E-07	1.015E-07
B	6.0	.60	4827.	0.	0.	725.4	859.0	725.4	8.496E-08	8.490E-08	8.490E-08
B	8.0	.67	4827.	0.	0.	725.4	859.0	725.4	6.366E-08	6.362E-08	6.362E-08
B	10.0	.07	4827.	0.	0.	725.4	859.0	725.4	5.090E-08	5.086E-08	5.086E-08
B	13.0	.27	4827.	0.	0.	725.4	859.0	725.4	3.920E-08	3.917E-08	3.917E-08
C	.4	.07	4827.	0.	0.	568.7	500.4	568.7	2.634E-06	2.629E-06	2.629E-06
C	1.0	.20	4827.	0.	0.	568.7	500.4	568.7	1.112E-06	1.110E-06	1.110E-06
C	2.0	.47	4827.	0.	0.	568.7	500.4	568.7	5.499E-07	5.490E-07	5.490E-07
C	3.0	.60	4827.	0.	0.	568.7	500.4	568.7	3.706E-07	3.700E-07	3.700E-07
C	4.0	.53	4827.	0.	0.	568.7	500.4	568.7	2.795E-07	2.791E-07	2.791E-07
C	5.0	.47	4827.	0.	0.	568.7	500.4	568.7	2.224E-07	2.220E-07	2.220E-07
C	6.0	.47	4827.	0.	0.	568.7	500.4	568.7	1.860E-07	1.857E-07	1.857E-07
C	8.0	.67	4827.	0.	0.	568.7	500.4	568.7	1.394E-07	1.392E-07	1.392E-07
C	10.0	.27	4827.	0.	0.	568.7	500.4	568.7	1.114E-07	1.113E-07	1.113E-07
C	13.0	.07	4827.	0.	0.	568.7	500.4	568.7	8.583E-08	8.569E-08	8.569E-08
D	.4	.57	4827.	0.	0.	221.3	158.9	221.3	2.131E-05	2.104E-05	2.104E-05
D	1.0	2.33	4827.	0.	0.	221.3	158.9	221.3	9.000E-06	8.885E-06	8.885E-06
D	2.0	3.33	4827.	0.	0.	221.3	158.9	221.3	4.450E-06	4.393E-06	4.393E-06
D	3.0	1.93	4827.	0.	0.	221.3	158.9	221.3	3.000E-06	2.962E-06	2.962E-06
D	4.0	2.13	4827.	0.	0.	221.3	158.9	221.3	2.262E-06	2.234E-06	2.234E-06
D	5.0	2.67	4827.	0.	0.	221.3	158.9	221.3	1.800E-06	1.777E-06	1.777E-06
D	6.0	1.93	4827.	0.	0.	221.3	158.9	221.3	1.506E-06	1.486E-06	1.486E-06
D	8.0	2.27	4827.	0.	0.	221.3	158.9	221.3	1.128E-06	1.114E-06	1.114E-06
D	10.0	1.20	4827.	0.	0.	221.3	158.9	221.3	9.020E-07	8.904E-07	8.904E-07
D	13.0	.33	4827.	0.	0.	221.3	158.9	221.3	6.947E-07	6.858E-07	6.858E-07
D	18.0	.13	4827.	0.	0.	221.3	158.9	221.3	5.018E-07	4.954E-07	4.954E-07
E	.4	1.07	4827.	0.	0.	428.5	35.6	428.5	4.920E-05	4.777E-05	4.777E-05
E	1.0	4.13	4827.	0.	0.	428.5	35.6	428.5	2.077E-05	2.017E-05	2.017E-05
E	2.0	6.53	4827.	0.	0.	428.5	35.6	428.5	1.027E-05	9.974E-06	9.974E-06
E	3.0	5.40	4827.	0.	0.	428.5	35.6	428.5	6.924E-06	6.723E-06	6.723E-06
E	4.0	5.73	4827.	0.	0.	428.5	35.6	428.5	5.222E-06	5.070E-06	5.070E-06
E	5.0	2.87	4827.	0.	0.	428.5	35.6	428.5	4.154E-06	4.034E-06	4.034E-06
E	6.0	2.87	4827.	0.	0.	428.5	35.6	428.5	3.475E-06	3.374E-06	3.374E-06
E	8.0	2.73	4827.	0.	0.	428.5	35.6	428.5	2.604E-06	2.528E-06	2.528E-06
E	10.0	.80	4827.	0.	0.	428.5	35.6	428.5	2.082E-06	2.021E-06	2.021E-06
E	13.0	.40	4827.	0.	0.	428.5	35.6	428.5	1.603E-06	1.557E-06	1.557E-06
F	.4	1.37	4827.	0.	0.	696.0	11.2	696.0	9.625E-05	9.094E-05	9.094E-05
F	1.0	5.00	4827.	0.	0.	696.0	11.2	696.0	4.064E-05	3.839E-05	3.839E-05
F	2.0	6.80	4827.	0.	0.	696.0	11.2	696.0	2.010E-05	1.899E-05	1.899E-05
F	3.0	3.47	4827.	0.	0.	696.0	11.2	696.0	1.355E-05	1.280E-05	1.280E-05
F	4.0	3.00	4827.	0.	0.	696.0	11.2	696.0	1.022E-05	9.652E-06	9.652E-06
F	5.0	2.13	4827.	0.	0.	696.0	11.2	696.0	8.128E-06	7.679E-06	7.679E-06
F	6.0	1.07	4827.	0.	0.	696.0	11.2	696.0	6.799E-06	6.423E-06	6.423E-06
F	8.0	.13	4827.	0.	0.	696.0	11.2	696.0	5.094E-06	4.813E-06	4.813E-06
F	10.0	.07	4827.	0.	0.	696.0	11.2	696.0	4.073E-06	3.848E-06	3.848E-06
G	.4	1.41	4827.	0.	0.	1000.0	3.5	1000.0	2.136E-04	1.891E-04	1.891E-04
G	1.0	4.13	4827.	0.	0.	1000.0	3.5	1000.0	9.021E-05	7.984E-05	7.984E 05
G	2.0	3.60	4827.	0.	0.	1000.0	3.5	1000.0	4.461E-05	3.948E-05	3.948E-05
G	3.0	1.00	4827.	0.	0.	1000.0	3.5	1000.0	3.007E-05	2.661E-05	2.661E-05
G	4.0	.87	4827.	0.	0.	1000.0	3.5	1000.0	2.268E-05	2.007E-05	2.007E-05
G	5.0	.33	4827.	0.	0.	1000.0	3.5	1000.0	1.804E-05	1.597E-05	1.597E-05

```
1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:  CGS                                METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma=desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0LOW POPULATION ZONE CALCULATIONS:
0   E SECTOR      BOUNDARY DISTANCE = 4827.0 METERS
0DESERT SIGMA VALUES USED.  MEANDER IS INCLUDED IN THESE VALUES- RG 1.145 MEANDER FACTORS ARE NOT USED.
 BUILDING WAKE CREDIT ALLOWED:   C=   .5    A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0  1.891E-04  9.094E-05  7.984E-05  4.777E-05  3.948E-05  3.839E-05  2.661E-05  2.104E-05  2.017E-05  2.007E-05
       1.410      2.782      6.915      7.986     11.587     16.587     17.587     18.156     22.290     23.157
        .06687     .13188     .32784     .37861     .54928     .78632     .83373     .86074    1.05670    1.09778
0  1.899E-05  1.597E-05  1.280E-05  9.974E-06  9.652E-06  8.885E-06  7.679E-06  6.723E-06  6.423E-06  5.070E-06
      29.957     30.290     33.757     40.290     43.290     45.624     47.757     53.157     54.224     59.958
       1.42016    1.43596    1.60031    1.91005    2.05227    2.16289    2.26403    2.52003    2.57060    2.84241
0  4.813E-06  4.393E-06  4.034E-06  3.848E-06  3.374E-06  2.962E-06  2.629E-06  2.528E-06  2.234E-06  2.021E-06
      60.091     63.424     66.291     66.358     69.225     71.158     71.227     73.960     76.094     76.894
       2.84873    3.00676    3.14266    3.14582    3.28173    3.37338    3.37666    3.50624    3.60738    3.64531
0  1.777E-06  1.557E-06  1.486E-06  1.202E-06  1.114E-06  1.110E-06  8.904E-07  7.492E-07  6.858E-07  5.490E-07
      79.561     79.961     81.894     81.982     84.249     84.449     85.649     85.933     86.266     86.733
       3.77173    3.79069    3.88235    3.88652    3.99398    4.00346    4.06035    4.07382    4.08962    4.11175
0  5.075E-07  4.954E-07  3.700E-07  3.163E-07  2.791E-07  2.510E-07  2.220E-07  1.857E-07  1.692E-07  1.564E-07
      87.000     87.133     87.733     88.733     89.266     89.866     90.333     90.800     91.133     93.133
       4.12439    4.13071    4.15916    4.20657    4.23185    4.26030    4.28242    4.30454    4.32035    4.41516
0  1.392E-07  1.276E-07  1.113E-07  1.054E-07  1.015E-07  8.569E-08  8.490E-08  7.952E-08  6.362E-08  6.326E-08
      93.800     94.200     94.467     95.067     95.467     95.533     96.133     96.867     97.533     98.067
       4.44677    4.46573    4.47837    4.50682    4.52578    4.52894    4.55739    4.59215    4.62376    4.64904
0  5.292E-08  5.086E-08  3.965E-08  3.917E-08  3.170E-08  2.442E-08
      98.400     98.467     99.067     99.333     99.800    100.000
       4.66485    4.66801    4.69645    4.70909    4.73122    4.74070
```

```
0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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
```

```
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=    .327
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=    .785
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   1.419
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   2.517
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   3.140
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   3.279
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 8)=   3.606
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 9)=   3.768
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(10)=   3.879
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(11)=   4.000
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(12)=   4.057
```

```
0  K   I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
   13   1     -8.57322 -14.22795  -1.76264
   13   2     -9.43545 -15.99860  -2.41387
   13   3    -10.16758 -17.77814  -3.15054
   13   4    -10.87178 -20.55067  -4.41532
   13   5    -11.90999 -22.28706  -5.30260
   13   6    -12.42081 -29.62188  -9.24469
   13   7    -12.59942 -30.37227  -9.65221
   13   8    -13.01191 -33.19906 -11.22389
   13   9    -13.24063 -37.10111 -13.41826
   13  10    -13.41924 -49.62372 -20.51362
   13  11    -13.71102 -72.55437 -33.61180
   13  12    -13.93155      NUMXQ(K)= 12
```

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BACK EXTRAPOLATION FOR  1 PERCENTILE.
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```
    2.246E-04                .047              1.000
    1.275E-04                .142              3.000
    9.617E-05                .237              5.000
    5.914E-05                .474             10.000
    4.192E-05                .711             15.000
    3.090E-05                .948             20.000
    2.369E-05               1.185             25.000
    1.894E-05               1.422             30.000
    1.445E-05               1.659             35.000
    1.138E-05               1.896             40.000
    9.175E-06               2.133             45.000
    7.544E-06               2.370             50.000
    6.221E-06               2.607             55.000
    5.092E-06               2.844             60.000
    4.225E-06               3.081             65.000
    3.215E-06               3.318             70.000
    2.380E-06               3.556             75.000
    1.718E-06               3.793             80.000
    1.003E-06               4.030             85.000
0   5.658E-05               0.5               10.55
0ANNUAL AVERAGE =   1.19E-06
0K= 13     FIVEXQ(K)= 5.658E-05     FIVEPR(K)=10.547
```

1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23: 4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE ESE SECTOR.

STABILITY CLASS	WINDSPEED AT 10.0 METER/SEC	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=1431.SQ.METERS	USED
A	.4	.24	4827.	0.	0.	1000.0	1000.0	1000.0	7.495E-07	7.492E-07	7.492E-07
A	1.0	.84	4827.	0.	0.	1000.0	1000.0	1000.0	3.165E-07	3.163E-07	3.163E-07
A	2.0	1.19	4827.	0.	0.	1000.0	1000.0	1000.0	1.565E-07	1.564E-07	1.564E-07
A	3.0	.65	4827.	0.	0.	1000.0	1000.0	1000.0	1.055E-07	1.054E-07	1.054E-07
A	4.0	.19	4827.	0.	0.	1000.0	1000.0	1000.0	7.956E-08	7.952E-08	7.952E-08
A	5.0	.23	4827.	0.	0.	1000.0	1000.0	1000.0	6.329E-08	6.326E-08	6.326E-08
A	6.0	.23	4827.	0.	0.	1000.0	1000.0	1000.0	5.294E-08	5.292E-08	5.292E-08
A	8.0	.42	4827.	0.	0.	1000.0	1000.0	1000.0	3.967E-08	3.965E-08	3.965E-08
A	10.0	.23	4827.	0.	0.	1000.0	1000.0	1000.0	3.172E-08	3.170E-08	3.170E-08
A	13.0	.27	4827.	0.	0.	1000.0	1000.0	1000.0	2.443E-08	2.442E-08	2.442E-08
B	.4	.04	4827.	0.	0.	725.4	859.0	725.4	1.203E-06	1.202E-06	1.202E-06
B	1.0	.11	4827.	0.	0.	725.4	859.0	725.4	5.079E-07	5.075E-07	5.075E-07
B	2.0	.31	4827.	0.	0.	725.4	859.0	725.4	2.512E-07	2.510E-07	2.510E-07
B	3.0	.27	4827.	0.	0.	725.4	859.0	725.4	1.693E-07	1.692E-07	1.692E-07
B	4.0	.27	4827.	0.	0.	725.4	859.0	725.4	1.277E-07	1.276E-07	1.276E-07
B	5.0	.23	4827.	0.	0.	725.4	859.0	725.4	1.016E-07	1.015E-07	1.015E-07
B	6.0	.27	4827.	0.	0.	725.4	859.0	725.4	8.496E-08	8.490E-08	8.490E-08
B	8.0	.19	4827.	0.	0.	725.4	859.0	725.4	6.366E 08	6.362E 08	6.362E-08
B	10.0	.08	4827.	0.	0.	725.4	859.0	725.4	5.090E-08	5.086E-08	5.086E-08
B	13.0	.15	4827.	0.	0.	725.4	859.0	725.4	3.920E-08	3.917E-08	3.917E-08
C	.4	.04	4827.	0.	0.	568.7	500.4	568.7	2.634E-06	2.629E-06	2.629E-06
C	1.0	.11	4827.	0.	0.	568.7	500.4	568.7	1.112E-06	1.110E-06	1.110E-06
C	2.0	.34	4827.	0.	0.	568.7	500.4	568.7	5.499E-07	5.490E-07	5.490E-07
C	3.0	.46	4827.	0.	0.	568.7	500.4	568.7	3.706E-07	3.700E-07	3.700E-07
C	4.0	.11	4827.	0.	0.	568.7	500.4	568.7	2.795E-07	2.791E-07	2.791E-07
C	5.0	.27	4827.	0.	0.	568.7	500.4	568.7	2.224E-07	2.220E-07	2.220E-07
C	6.0	.27	4827.	0.	0.	568.7	500.4	568.7	1.860E-07	1.857E-07	1.857E-07
C	8.0	.19	4827.	0.	0.	568.7	500.4	568.7	1.394E-07	1.392E-07	1.392E-07
C	10.0	.34	4827.	0.	0.	568.7	500.4	568.7	1.114E-07	1.113E-07	1.113E-07
C	13.0	.31	4827.	0.	0.	568.7	500.4	568.7	8.583E-08	8.569E-08	8.569E-08
D	.4	.36	4827.	0.	0.	221.3	158.9	221.3	2.131E-05	2.104E-05	2.104E-05
D	1.0	1.49	4827.	0.	0.	221.3	158.9	221.3	9.000E-06	8.885E-06	8.885E-06
D	2.0	1.91	4827.	0.	0.	221.3	158.9	221.3	4.450E-06	4.393E-06	4.393E-06
D	3.0	2.45	4827.	0.	0.	221.3	158.9	221.3	3.000E-06	2.962E-06	2.962E-06
D	4.0	2.45	4827.	0.	0.	221.3	158.9	221.3	2.262E-06	2.234E-06	2.234E-06
D	5.0	1.80	4827.	0.	0.	221.3	158.9	221.3	1.800E-06	1.777E-06	1.777E-06
D	6.0	2.07	4827.	0.	0.	221.3	158.9	221.3	1.506E-06	1.486E-06	1.486E-06
D	8.0	3.94	4827.	0.	0.	221.3	158.9	221.3	1.128E-06	1.114E-06	1.114E-06
D	10.0	1.95	4827.	0.	0.	221.3	158.9	221.3	9.020E-07	8.904E-07	8.904E-07
D	13.0	.69	4827.	0.	0.	221.3	158.9	221.3	6.947E-07	6.858E-07	6.858E-07
D	18.0	.08	4827.	0.	0.	221.3	158.9	221.3	5.018E-07	4.954E-07	4.954E-07
E	.4	.89	4827.	0.	0.	428.5	35.6	428.5	4.920E-05	4.777E-05	4.777E-05
E	1.0	3.44	4827.	0.	0.	428.5	35.6	428.5	2.077E-05	2.017E-05	2.017E-05
E	2.0	5.40	4827.	0.	0.	428.5	35.6	428.5	1.027E-05	9.974E-06	9.974E-06
E	3.0	5.82	4827.	0.	0.	428.5	35.6	428.5	6.924E-06	6.723E-06	6.723E-06
E	4.0	5.51	4827.	0.	0.	428.5	35.6	428.5	5.222E-06	5.070E-06	5.070E-06
E	5.0	6.16	4827.	0.	0.	428.5	35.6	428.5	4.154E-06	4.034E-06	4.034E-06
E	6.0	5.36	4827.	0.	0.	428.5	35.6	428.5	3.475E-06	3.374E-06	3.374E-06
E	8.0	5.78	4827.	0.	0.	428.5	35.6	428.5	2.604E-06	2.528E-06	2.528E-06
E	10.0	2.45	4827.	0.	0.	428.5	35.6	428.5	2.082E-06	2.021E-06	2.021E-06
E	13.0	.77	4827.	0.	0.	428.5	35.6	428.5	1.603E-06	1.557E-06	1.557E-06
E	18.0	.08	4827.	0.	0.	428.5	35.6	428.5	1.158E-06	1.125E-06	1.125E-06
F	.4	.85	4827.	0.	0.	696.0	11.2	696.0	9.625E-05	9.094E-05	9.094E-05
F	1.0	3.10	4827.	0.	0.	696.0	11.2	696.0	4.064E-05	3.839E-05	3.839E-05
F	2.0	5.36	4827.	0.	0.	696.0	11.2	696.0	2.010E-05	1.899E-05	1.899E-05
F	3.0	3.87	4827.	0.	0.	696.0	11.2	696.0	1.355E-05	1.280E-05	1.280E-05
F	4.0	3.94	4827.	0.	0.	696.0	11.2	696.0	1.022E-05	9.652E-06	9.652E-06
F	5.0	2.07	4827.	0.	0.	696.0	11.2	696.0	8.128E-06	7.679E-06	7.679E-06
F	6.0	1.07	4827.	0.	0.	696.0	11.2	696.0	6.799E-06	6.423E-06	6.423E-06
F	8.0	.54	4827.	0.	0.	696.0	11.2	696.0	5.094E-06	4.813E 06	4.813E 06
G	.4	.86	4827.	0.	0.	1000.0	3.5	1000.0	2.136E-04	1.891E-04	1.891E-04
G	1.0	2.53	4827.	0.	0.	1000.0	3.5	1000.0	9.021E-05	7.984E-05	7.984E-05
G	2.0	3.71	4827.	0.	0.	1000.0	3.5	1000.0	4.461E-05	3.948E-05	3.948E-05
G	3.0	1.68	4827.	0.	0.	1000.0	3.5	1000.0	3.007E-05	2.661E-05	2.661E-05
G	4.0	.54	4827.	0.	0.	1000.0	3.5	1000.0	2.268E-05	2.007E-05	2.007E-05
G	5.0	.19	4827.	0.	0.	1000.0	3.5	1000.0	1.804E-05	1.597E-05	1.597E-05

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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:   CGS                               METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma=desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0LOW POPULATION ZONE CALCULATIONS.
0 ESE SECTOR      BOUNDARY DISTANCE = 4827.0 METERS
0DESERT SIGMA VALUES USED.  MEANDER IS INCLUDED IN THESE VALUES- RG 1.145 MEANDER FACTORS ARE NOT USED.
 BUILDING WAKE CREDIT ALLOWED:   C=   .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0   1.891E-04   9.094E-05   7.984E-05   4.777E-05   3.948E-05   3.839E-05   2.661E-05   2.104E-05   2.017E-05   2.007E-05
        .862       1.712       4.238       5.131       8.843      11.943      13.627      13.992      17.436      17.972
      .07118      .14140      .35000      .42370      .73027      .98628     1.12534     1.15544     1.43989     1.48414
0   1.899E-05   1.597E-05   1.280E-05   9.974E-06   9.652E-06   8.885E-06   7.679E-06   6.723E-06   6.423E-06   5.070E-06
       23.330      23.521      27.387      32.783      36.725      38.218      40.285      46.102      47.174      52.685
      1.92661     1.94242     2.26163     2.70727     3.03281     3.15607     3.32674     3.80715     3.89564     4.35076
0   4.813E-06   4.393E-06   4.034E-06   3.374E-06   2.962E-06   2.629E-06   2.528E-06   2.234E-06   2.021E-06   1.777E-06
       53.221      55.134      61.296      66.654      69.104      69.143      74.922      77.372      79.821      81.620
      4.39501     4.55304     5.06189     5.50436     5.70664     5.70992     6.18716     6.38944     6.59171     6.74026
0   1.557E-06   1.486E-06   1.202E-06   1.125E-06   1.114E-06   1.110E-06   8.904E-07   7.492E-07   6.858E-07   5.490E-07
       82.386      84.452      84.490      84.567      88.509      88.623      90.575      90.815      91.504      91.848
      6.80347     6.97414     6.97726     6.98359     7.30912     7.31860     7.47979     7.49956     7.55645     7.58489
0   5.075E-07   4.954E-07   3.700E-07   3.163E-07   2.791E-07   2.510E-07   2.220E-07   1.857E-07   1.692E-07   1.564E-07
       91.963      92.039      92.499      93.341      93.455      93.762      94.030      94.297      94.565      95.752
      7.59437     7.60069     7.63862     7.70815     7.71764     7.74292     7.76504     7.78717     7.80929     7.90727
0   1.392E-07   1.276E-07   1.113E-07   1.054E-07   1.015E-07   8.569E-08   8.490E-08   7.952E-08   6.362E-08   6.326E-08
       95.943      96.211      96.555      97.206      97.436      97.742      98.010      98.201      98.393      98.622
      7.92307     7.94519     7.97364     8.02737     8.04633     8.07162     8.09374     8.10954     8.12535     8.14431
0   5.292E-08   5.086E-08   3.965E-08   3.917E-08   3.170E-08   2.442E-08
       98.852      98.928      99.349      99.502      99.732     100.000
      8.16327     8.16959     8.20436     8.21700     8.23597     8.25809
```

```
0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=    .350
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=    .985
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   1.925
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   3.030
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   3.804
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   5.058
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 8)=   5.501
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 9)=   6.183
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(10)=   6.588
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(11)=   6.970
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(12)=   7.315
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(13)=   7.476

0  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
  14  1      -8.57322 -14.15417  -1.74947
  14  2      -9.43545 -14.84173  -2.00438
  14  3     -10.16758 -16.42638  -2.68391
  14  4     -10.87178 -18.11974  -3.50213
  14  5     -11.54831 -18.16952  -3.52865
  14  6     -11.90999 -18.63843  -3.79299
  14  7     -12.42081 -19.54508  -4.34609
  14  8     -12.59942 -20.47383  -4.92723
  14  9     -12.88803 -23.53201  -6.91362
  14 10     -13.11173 -28.98304 -10.53026
  14 11     -13.41924 -30.48745 -11.54812
  14 12     -13.71102 -41.54215 -19.15767
  14 13     -13.93155      NUMXQ(K)= 13
     1.753E-04                .083             1.000
     9.731E-05                .248             3.000
     7.144E-05                .413             5.000
     4.381E-05                .826            10.000
     3.043E-05               1.239            15.000
     2.246E-05               1.652            20.000
     1.718E-05               2.065            25.000
     1.313E-05               2.477            30.000
     1.040E-05               2.890            35.000
     8.441E-06               3.303            40.000
     6.992E-06               3.716            45.000
     5.829E-06               4.129            50.000
     4.916E-06               4.542            55.000
     4.196E-06               4.955            60.000
     3.561E-06               5.368            65.000
     2.992E-06               5.781            70.000
     2.519E-06               6.194            75.000
     1.997E-06               6.606            80.000
     1.430E-06               7.019            85.000
     9.499E-07               7.432            90.000
0    6.265E-05               0.5               6.05
0ANNUAL AVERAGE =   1.54E-06
0K= 14     FIVEXQ(K)= 6.265E-05     FIVEPR(K)= 6.055
```

1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23: 4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE SE SECTOR.

STABILITY CLASS	WINDSPEED AT 10.0 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=1431.SQ.METERS	USED
A	.4	.21	4827.	0.	0.	1000.0	1000.0	1000.0	7.495E-07	7.492E-07	7.492E-07
A	1.0	.73	4827.	0.	0.	1000.0	1000.0	1000.0	3.165E-07	3.163E-07	3.163E-07
A	2.0	1.42	4827.	0.	0.	1000.0	1000.0	1000.0	1.565E-07	1.564E-07	1.564E-07
A	3.0	.78	4827.	0.	0.	1000.0	1000.0	1000.0	1.055E-07	1.054E-07	1.054E-07
A	4.0	.55	4827.	0.	0.	1000.0	1000.0	1000.0	7.956E-08	7.952E-08	7.952E-08
A	5.0	.12	4827.	0.	0.	1000.0	1000.0	1000.0	6.329E-08	6.326E-08	6.326E-08
A	6.0	.15	4827.	0.	0.	1000.0	1000.0	1000.0	5.294E-08	5.292E-08	5.292E-08
A	8.0	.17	4827.	0.	0.	1000.0	1000.0	1000.0	3.967E-08	3.965E-08	3.965E-08
A	10.0	.12	4827.	0.	0.	1000.0	1000.0	1000.0	3.172E-08	3.170E-08	3.170E-08
A	13.0	.09	4827.	0.	0.	1000.0	1000.0	1000.0	2.443E-08	2.442E-08	2.442E-08
B	.4	.08	4827.	0.	0.	725.4	859.0	725.4	1.203E-06	1.202E-06	1.202E-06
B	1.0	.23	4827.	0.	0.	725.4	859.0	725.4	5.079E-07	5.075E-07	5.075E-07
B	2.0	.35	4827.	0.	0.	725.4	859.0	725.4	2.512E-07	2.510E-07	2.510E-07
B	3.0	.26	4827.	0.	0.	725.4	859.0	725.4	1.693E-07	1.692E-07	1.692E-07
B	4.0	.35	4827.	0.	0.	725.4	859.0	725.4	1.277E-07	1.276E-07	1.276E-07
B	5.0	.15	4827.	0.	0.	725.4	859.0	725.4	1.016E-07	1.015E-07	1.015E-07
B	6.0	.12	4827.	0.	0.	725.4	859.0	725.4	8.496E-08	8.490E-08	8.490E-08
B	8.0	.06	4827.	0.	0.	725.4	859.0	725.4	6.366E-08	6.362E-08	6.362E-08
B	10.0	.03	4827.	0.	0.	725.4	859.0	725.4	5.090E-08	5.086E-08	5.086E-08
C	.4	.03	4827.	0.	0.	568.7	500.4	568.7	2.634E-06	2.629E-06	2.629E-06
C	1.0	.09	4827.	0.	0.	568.7	500.4	568.7	1.112E-06	1.110E-06	1.110E-06
C	2.0	.46	4827.	0.	0.	568.7	500.4	568.7	5.499E-07	5.490E-07	5.490E-07
C	3.0	.49	4827.	0.	0.	568.7	500.4	568.7	3.706E-07	3.700E-07	3.700E-07
C	4.0	.20	4827.	0.	0.	568.7	500.4	568.7	2.795E-07	2.791E-07	2.791E-07
C	5.0	.20	4827.	0.	0.	568.7	500.4	568.7	2.224E-07	2.220E-07	2.220E-07
C	6.0	.12	4827.	0.	0.	568.7	500.4	568.7	1.860E-07	1.857E-07	1.857E-07
C	8.0	.09	4827.	0.	0.	568.7	500.4	568.7	1.394E-07	1.392E-07	1.392E-07
C	10.0	.20	4827.	0.	0.	568.7	500.4	568.7	1.114E-07	1.113E-07	1.113E-07
D	.4	.26	4827.	0.	0.	221.3	158.9	221.3	2.131E-05	2.104E-05	2.104E-05
D	1.0	1.05	4827.	0.	0.	221.3	158.9	221.3	9.000E-06	8.885E-06	8.885E-06
D	2.0	4.33	4827.	0.	0.	221.3	158.9	221.3	4.450E-06	4.393E-06	4.393E-06
D	3.0	4.30	4827.	0.	0.	221.3	158.9	221.3	3.000E-06	2.962E-06	2.962E-06
D	4.0	3.81	4827.	0.	0.	221.3	158.9	221.3	2.262E-06	2.234E-06	2.234E-06
D	5.0	2.85	4827.	0.	0.	221.3	158.9	221.3	1.800E-06	1.777E-06	1.777E-06
D	6.0	2.12	4827.	0.	0.	221.3	158.9	221.3	1.506E-06	1.486E-06	1.486E-06
D	8.0	1.48	4827.	0.	0.	221.3	158.9	221.3	1.128E-06	1.114E-06	1.114E-06
D	10.0	.81	4827.	0.	0.	221.3	158.9	221.3	9.020E-07	8.904E-07	8.904E-07
D	13.0	.46	4827.	0.	0.	221.3	158.9	221.3	6.947E-07	6.858E-07	6.858E-07
D	18.0	.06	4827.	0.	0.	221.3	158.9	221.3	5.018E-07	4.954E-07	4.954E-07

E	.4	.60	4827.	0.	0.	428.5	35.6	428.5	4.920E-05	4.777E-05	4.777E-05
E	1.0	2.32	4827.	0.	0.	428.5	35.6	428.5	2.077E-05	2.017E-05	2.017E-05
E	2.0	5.99	4827.	0.	0.	428.5	35.6	428.5	1.027E-05	9.974E-06	9.974E-06
E	3.0	7.00	4827.	0.	0.	428.5	35.6	428.5	6.924E-06	6.723E-06	6.723E-06
E	4.0	5.61	4827.	0.	0.	428.5	35.6	428.5	5.222E-06	5.070E-06	5.070E-06
E	5.0	4.48	4827.	0.	0.	428.5	35.6	428.5	4.154E-06	4.034E-06	4.034E-06
E	6.0	3.57	4827.	0.	0.	428.5	35.6	428.5	3.475E-06	3.374E-06	3.374E-06
E	8.0	3.25	4827.	0.	0.	428.5	35.6	428.5	2.604E-06	2.528E-06	2.528E-06
E	10.0	.90	4827.	0.	0.	428.5	35.6	428.5	2.082E-06	2.021E-06	2.021E-06
E	13.0	.29	4827.	0.	0.	428.5	35.6	428.5	1.603E-06	1.557E-06	1.557E-06
F	.4	.77	4827.	0.	0.	696.0	11.2	696.0	9.625E-05	9.094E-05	9.094E-05
F	1.0	2.79	4827.	0.	0.	696.0	11.2	696.0	4.064E-05	3.839E-05	3.839E-05
F	2.0	6.74	4827.	0.	0.	696.0	11.2	696.0	2.010E-05	1.899E-05	1.899E-05
F	3.0	4.71	4827.	0.	0.	696.0	11.2	696.0	1.355E-05	1.280E-05	1.280E-05
F	4.0	4.07	4827.	0.	0.	696.0	11.2	696.0	1.022E-05	9.652E-06	9.652E-06
F	5.0	1.48	4827.	0.	0.	696.0	11.2	696.0	8.128E-06	7.679E-06	7.679E-06
F	6.0	.58	4827.	0.	0.	696.0	11.2	696.0	6.799E-06	6.423E-06	6.423E-06
F	8.0	.06	4827.	0.	0.	696.0	11.2	696.0	5.094E-06	4.813E-06	4.813E-06
G	.4	.86	4827.	0.	0.	1000.0	3.5	1000.0	2.136E-04	1.891E-04	1.891E-04
G	1.0	2.53	4827.	0.	0.	1000.0	3.5	1000.0	9.021E-05	7.984E-05	7.984E-05
G	2.0	6.13	4827.	0.	0.	1000.0	3.5	1000.0	4.461E-05	3.948E-05	3.948E-05
G	3.0	3.63	4827.	0.	0.	1000.0	3.5	1000.0	3.007E-05	2.661E-05	2.661E-05
G	4.0	2.03	4827.	0.	0.	1000.0	3.5	1000.0	2.268E-05	2.007E-05	2.007E-05
G	5.0	.17	4827.	0.	0.	1000.0	3.5	1000.0	1.804E-05	1.597E-05	1.597E-05
G	6.0	.06	4827.	0.	0.	1000.0	3.5	1000.0	1.509E-05	1.336E-05	1.336E-05

```
1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:  CGS                                METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma-desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0LOW POPULATION ZONE CALCULATIONS:
0  SE SECTOR      BOUNDARY DISTANCE = 4827.0 METERS
0DESERT SIGMA VALUES USED.  MEANDER IS INCLUDED IN THESE VALUES- RG 1.145 MEANDER FACTORS ARE NOT USED.
 BUILDING WAKE CREDIT ALLOWED:   C=   .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0   1.891E-04   9.094E-05   7.984E-05   4.777E-05   3.948E-05   3.839E-05   2.661E-05   2.104E-05   2.017E-05   2.007E-05
        .863       1.628       4.156       4.758      10.890      13.679      17.312      17.567      19.892      21.926
      .09383      .17705      .45202      .51753     1.18441     1.48783     1.88289     1.91068     2.16352     2.38476
0   1.899E-05   1.597E-05   1.336E-05   1.280E-05   9.974E-06   9.652E-06   8.885E-06   7.679E-06   6.723E-06   6.423E-06
       28.667      28.842      28.900      33.607      39.594      43.662      44.708      46.190      53.193      53.774
      3.11801     3.13697     3.14329     3.65530     4.30638     4.74885     4.86263     5.02382     5.78552     5.84873
0   5.070E-06   4.813E-06   4.393E-06   4.034E-06   3.374E-06   2.962E-06   2.629E-06   2.528E-06   2.234E-06   2.021E-06
       59.382      59.441      63.770      68.245      71.820      76.120      76.150      79.405      83.212      84.112
      6.45872     6.46504     6.93596     7.42269     7.81143     8.27920     8.28247     8.63646     9.05049     9.14847
0   1.777E-06   1.557E-06   1.486E-06   1.202E-06   1.114E-06   1.110E-06   8.904E-07   7.492E-07   6.858E-07   5.490E-07
       86.960      87.251      89.372      89.449      90.931      91.018      91.831      92.038      92.503      92.968
      9.45820     9.48981     9.72053     9.72886     9.89005     9.89953     9.98803    10.01048    10.06105    10.11162
0   5.075E-07   4.954E-07   3.700E-07   3.163E-07   2.791E-07   2.510E-07   2.220E-07   1.857E-07   1.692E-07   1.564E-07
       93.200      93.258      93.752      94.479      94.682      95.031      95.234      95.351      95.612      97.036
     10.13691    10.14323    10.19696    10.27597    10.29809    10.33602    10.35814    10.37079    10.39923    10.55410
0   1.392E-07   1.276E-07   1.113E-07   1.054E-07   1.015E-07   8.490E-08   7.952E-08   6.362E-08   6.326E-08   5.292E-08
       97.123      97.472      97.675      98.460      98.605      98.721      99.274      99.332      99.448      99.593
     10.56358    10.60151    10.62363    10.70897    10.72477    10.73741    10.79746    10.80378    10.81642    10.83223
0   5.086E-08   3.965E-08   3.170E-08   2.442E-08
       99.622      99.797      99.913     100.000
     10.83539    10.85435    10.86699    10.87648
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0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=   1.486
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=   3.115
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   4.745
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   5.782
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   7.419
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   8.276
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 8)=   9.047
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 9)=   9.455
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(10)=   9.717
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(11)=   9.896

0  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
  15  1      -8.57322 -13.87180  -1.70406
  15  2     -10.16758 -15.11160  -2.27441
  15  3     -10.87178 -17.37024  -3.48603
  15  4     -11.54831 -17.79426  -3.73992
  15  5     -11.90999 -18.18507  -3.98831
  15  6     -12.42081 -20.05307  -5.28079
  15  7     -12.72980 -20.72868  -5.76798
  15  8     -13.01191 -25.44484  -9.29311
  15  9     -13.24063 -28.44781 -11.57978
  15 10     -13.41924 -50.00460 -28.18966
  15 11     -13.71102     NUMXQ(K)= 11
     1.755E-04                .109              1.000
     9.748E-05                .326              3.000
     7.253E-05                .544              5.000
     4.721E-05               1.088             10.000
     3.532E-05               1.631             15.000
     2.702E-05               2.175             20.000
     2.177E-05               2.719             25.000
     1.769E-05               3.263             30.000
     1.386E-05               3.807             35.000
     1.116E-05               4.351             40.000
     9.142E-06               4.894             45.000
     7.542E-06               5.438             50.000
     6.288E-06               5.982             55.000
     5.271E-06               6.526             60.000
     4.468E-06               7.070             65.000
     3.757E-06               7.614             70.000
     3.090E-06               8.157             75.000
     2.532E-06               8.701             80.000
     2.001E-06               9.245             85.000
     1.329E-06               9.789             90.000
0    7.623E-05               0.5                4.60
0ANNUAL AVERAGE =   2.29E-06
0K= 15     FIVEXQ(K)= 7.623E-05     FIVEPR(K)= 4.597
```

1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23:4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE SSE SECTOR.

STABILITY CLASS	WINDSPEED AT 10.0 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=1431.SQ.METERS	USED
A	.4	.25	4827.	0.	0.	1000.0	1000.0	1000.0	7.495E-07	7.492E-07	7.492E-07
A	1.0	.89	4827.	0.	0.	1000.0	1000.0	1000.0	3.165E-07	3.163E-07	3.163E-07
A	2.0	2.82	4827.	0.	0.	1000.0	1000.0	1000.0	1.565E-07	1.564E-07	1.564E-07
A	3.0	1.79	4827.	0.	0.	1000.0	1000.0	1000.0	1.055E-07	1.054E-07	1.054E-07
A	4.0	.89	4827.	0.	0.	1000.0	1000.0	1000.0	7.956E-08	7.952E-08	7.952E-08
A	5.0	1.03	4827.	0.	0.	1000.0	1000.0	1000.0	6.329E-08	6.326E-08	6.326E-08
A	6.0	.56	4827.	0.	0.	1000.0	1000.0	1000.0	5.294E-08	5.292E-08	5.292E-08
A	8.0	.36	4827.	0.	0.	1000.0	1000.0	1000.0	3.967E-08	3.965E-08	3.965E-08
A	13.0	.03	4827.	0.	0.	1000.0	1000.0	1000.0	2.443E-08	2.442E-08	2.442E-08
A	18.0	.03	4827.	0.	0.	1000.0	1000.0	1000.0	1.765E-08	1.764E-08	1.764E-08
B	.4	.13	4827.	0.	0.	725.4	859.0	725.4	1.203E-06	1.202E-06	1.202E-06
B	1.0	.40	4827.	0.	0.	725.4	859.0	725.4	5.079E-07	5.075E-07	5.075E-07
B	2.0	.66	4827.	0.	0.	725.4	859.0	725.4	2.512E-07	2.510E-07	2.510E-07
B	3.0	.73	4827.	0.	0.	725.4	859.0	725.4	1.693E-07	1.692E-07	1.692E-07
B	4.0	.33	4827.	0.	0.	725.4	859.0	725.4	1.277E-07	1.276E-07	1.276E-07
B	5.0	.27	4827.	0.	0.	725.4	859.0	725.4	1.016E-07	1.015E-07	1.015E-07
B	6.0	.10	4827.	0.	0.	725.4	859.0	725.4	8.496E-08	8.490E-08	8.490E-08
B	8.0	.13	4827.	0.	0.	725.4	859.0	725.4	6.366E-08	6.362E-08	6.362E-08
C	.4	.07	4827.	0.	0.	568.7	500.4	568.7	2.634E-06	2.629E-06	2.629E-06
C	1.0	.20	4827.	0.	0.	568.7	500.4	568.7	1.112E-06	1.110E-06	1.110E-06
C	2.0	.56	4827.	0.	0.	568.7	500.4	568.7	5.499E-07	5.490E-07	5.490E-07
C	3.0	.83	4827.	0.	0.	568.7	500.4	568.7	3.706E-07	3.700E-07	3.700E-07
C	4.0	.53	4827.	0.	0.	568.7	500.4	568.7	2.795E-07	2.791E-07	2.791E-07
C	5.0	.36	4827.	0.	0.	568.7	500.4	568.7	2.224E-07	2.220E-07	2.220E-07
C	6.0	.23	4827.	0.	0.	568.7	500.4	568.7	1.860E-07	1.857E-07	1.857E-07
C	8.0	.30	4827.	0.	0.	568.7	500.4	568.7	1.394E-07	1.392E-07	1.392E-07
C	10.0	.03	4827.	0.	0.	568.7	500.4	568.7	1.114E-07	1.113E-07	1.113E-07
C	13.0	.03	4827.	0.	0.	568.7	500.4	568.7	8.583E-08	8.569E-08	8.569E-08
D	.4	.32	4827.	0.	0.	221.3	158.9	221.3	2.131E-05	2.104E-05	2.104E-05
D	1.0	1.33	4827.	0.	0.	221.3	158.9	221.3	9.000E-06	8.885E-06	8.885E-06
D	2.0	4.24	4827.	0.	0.	221.3	158.9	221.3	4.450E-06	4.393E-06	4.393E-06
D	3.0	4.77	4827.	0.	0.	221.3	158.9	221.3	3.000E-06	2.962E-06	2.962E-06
D	4.0	4.27	4827.	0.	0.	221.3	158.9	221.3	2.262E-06	2.234E-06	2.234E-06
D	5.0	2.78	4827.	0.	0.	221.3	158.9	221.3	1.800E-06	1.777E-06	1.777E-06
D	6.0	1.56	4827.	0.	0.	221.3	158.9	221.3	1.506E-06	1.486E-06	1.486E-06
D	8.0	1.62	4827.	0.	0.	221.3	158.9	221.3	1.128E-06	1.114E-06	1.114E-06
D	10.0	.50	4827.	0.	0.	221.3	158.9	221.3	9.020E-07	8.904E-07	8.904E-07
D	13.0	.10	4827.	0.	0.	221.3	158.9	221.3	6.947E-07	6.858E-07	6.858E-07
D	18.0	.10	4827.	0.	0.	221.3	158.9	221.3	5.018E-07	4.954E-07	4.954E-07

E	.4	.47	4827.	0.	0.	428.5	35.6	428.5	4.920E-05	4.777E-05	4.777E-05
E	1.0	1.82	4827.	0.	0.	428.5	35.6	428.5	2.077E-05	2.017E-05	2.017E-05
E	2.0	7.09	4827.	0.	0.	428.5	35.6	428.5	1.027E-05	9.974E-06	9.974E-06
E	3.0	5.67	4827.	0.	0.	428.5	35.6	428.5	6.924E-06	6.723E-06	6.723E-06
E	4.0	4.34	4827.	0.	0.	428.5	35.6	428.5	5.222E-06	5.070E-06	5.070E-06
E	5.0	2.45	4827.	0.	0.	428.5	35.6	428.5	4.154E-06	4.034E-06	4.034E-06
E	6.0	1.13	4827.	0.	0.	428.5	35.6	428.5	3.475E-06	3.374E-06	3.374E-06
E	8.0	1.89	4827.	0.	0.	428.5	35.6	428.5	2.604E-06	2.528E-06	2.528E-06
E	10.0	.70	4827.	0.	0.	428.5	35.6	428.5	2.082E-06	2.021E-06	2.021E-06
E	13.0	.13	4827.	0.	0.	428.5	35.6	428.5	1.603E-06	1.557E-06	1.557E-06
F	.4	.75	4827.	0.	0.	696.0	11.2	696.0	9.625E-05	9.094E-05	9.094E-05
F	1.0	2.75	4827.	0.	0.	696.0	11.2	696.0	4.064E-05	3.839E-05	3.839E-05
F	2.0	7.02	4827.	0.	0.	696.0	11.2	696.0	2.010E-05	1.899E-05	1.899E-05
F	3.0	5.53	4827.	0.	0.	696.0	11.2	696.0	1.355E-05	1.280E-05	1.280E-05
F	4.0	1.86	4827.	0.	0.	696.0	11.2	696.0	1.022E-05	9.652E-06	9.652E-06
F	5.0	.76	4827.	0.	0.	696.0	11.2	696.0	8.128E-06	7.679E-06	7.679E-06
F	6.0	.13	4827.	0.	0.	696.0	11.2	696.0	6.799E-06	6.423E-06	6.423E-06
F	8.0	.13	4827.	0.	0.	696.0	11.2	696.0	5.094E-06	4.813E-06	4.813E-06
G	.4	1.40	4827.	0.	0.	1000.0	3.5	1000.0	2.136E-04	1.891E-04	1.891E-04
G	1.0	4.11	4827.	0.	0.	1000.0	3.5	1000.0	9.021E-05	7.984E-05	7.984E-05
G	2.0	8.35	4827.	0.	0.	1000.0	3.5	1000.0	4.461E-05	3.948E-05	3.948E-05
G	3.0	4.24	4827.	0.	0.	1000.0	3.5	1000.0	3.007E-05	2.661E-05	2.661E-05
G	4.0	1.06	4827.	0.	0.	1000.0	3.5	1000.0	2.268E-05	2.007E-05	2.007E-05
G	5.0	.03	4827.	0.	0.	1000.0	3.5	1000.0	1.804E-05	1.597E-05	1.597E-05

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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:  CGS                                METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96 99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma=desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0LOW POPULATION ZONE CALCULATIONS:
0 SSE SECTOR      BOUNDARY DISTANCE = 4827.0 METERS
0DESERT SIGMA VALUES USED.  MEANDER IS INCLUDED IN THESE VALUES- RG 1.145 MEANDER FACTORS ARE NOT USED.
 BUILDING WAKE CREDIT ALLOWED:  C=   .5    A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0   1.891E-04   9.094E-05   7.984E-05   4.777E-05   3.948E-05   3.839E-05   2.661E-05   2.104E-05   2.017E-05   2.007E-05
        1.402       2.157       6.265       6.738      15.088      17.839      22.080      22.404      24.226      25.287
        .13373      .20569      .59760      .64264     1.43910     1.70142     2.10597     2.13684     2.31067     2.41181
0   1.899E-05   1.597E-05   1.280E-05   9.974E-06   9.652E-06   8.885E-06   7.679E-06   6.723E-06   6.423E-06   5.070E-06
       32.312      32.345      37.878      44.970      46.825      48.151      48.913      54.579      54.712      59.053
       3.08185     3.08501     3.61282     4.28918     4.46617     4.59259     4.66529     5.20574     5.21838     5.63242
0   4.813E-06   4.393E-06   4.034E-06   3.374E-06   2.962E-06   2.629E-06   2.528E-06   2.234E-06   2.021E-06   1.777E-06
       59.185      63.427      65.879      67.006      71.777      71.846      73.735      78.010      78.705      81.489
       5.64506     6.04961     6.28349     6.39095     6.84607     6.85262     7.03278     7.44049     7.50686     7.77235
0   1.557E-06   1.486E-06   1.202E-06   1.114E-06   1.110E-06   8.904E-07   7.492E-07   6.858E-07   5.490E-07   5.075E-07
       81.621      83.179      83.310      84.934      85.132      85.629      85.884      85.983      86.546      86.944
       7.78499     7.93353     7.94603     8.10090     8.11986     8.16727     8.19153     8.20101     8.25474     8.29267
0   4.954E-07   3.700E-07   3.163E-07   2.791E-07   2.510E-07   2.220E-07   1.857E-07   1.692E-07   1.564E-07   1.392E-07
       87.044      87.872      88.767      89.297      89.960      90.324      90.556      91.285      94.102      94.400
       8.30215     8.38116     8.46650     8.51707     8.58028     8.61504     8.63717     8.70670     8.97535     9.00379
0   1.276E-07   1.113E-07   1.054E-07   1.015E-07   8.569E-08   8.490E-08   7.952E-08   6.362E-08   6.326E-08   5.292E-08
       94.731      94.764      96.554      96.819      96.852      96.951      97.846      97.979      99.006      99.569
       9.03540     9.03856     9.20923     9.23451     9.23767     9.24715     9.33249     9.34513     9.44311     9.49684
0   3.965E-08   2.442E-08   1.764E-08
       99.934      99.967     100.000
       9.53160     9.53476     9.53792
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0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

                                                                HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=    .597
                                                                HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=   1.700
                                                                HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   3.079
                                                                HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   4.463
                                                                HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   5.202
                                                                HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   6.280
                                                                HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 8)=   7.437
                                                                HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 9)=   7.769
                                                                HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(10)=   7.930
                                                                HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(11)=   8.116
0  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
  16  1      -8.57322 -13.86655  -1.76259
  16  2      -9.43545 -14.10932  -1.85916
  16  3     -10.16758 -16.11916  -2.80711
  16  4     -10.87178 -18.31249  -3.98045
  16  5     -11.54831 -19.87894  -4.90224
  16  6     -11.90999 -20.75716  -5.44249
  16  7     -12.42081 -22.74505  -6.74031
  16  8     -13.01191 -27.24272  -9.85499
  16  9     -13.24063 -36.30701 -16.23465
  16 10     -13.41924 -46.30325 -23.32514
  16 11      13.71102     NUMXQ(K)= 11
                                                                BACK EXTRAPOLATION FOR  1 PERCENTILE.
     2.261E-04                .095              1.000
     1.240E-04                .286              3.000
     9.170E-05                .477              5.000
     5.826E-05                .954             10.000
     4.365E-05               1.431             15.000
     3.370E-05               1.908             20.000
     2.595E-05               2.384             25.000
     2.081E-05               2.861             30.000
     1.647E-05               3.338             35.000
     1.294E-05               3.815             40.000
     1.040E-05               4.292             45.000
     8.279E-06               4.769             50.000
     6.587E-06               5.246             55.000
     5.212E-06               5.723             60.000
     4.186E-06               6.200             65.000
     3.271E-06               6.677             70.000
     2.568E-06               7.153             75.000
     1.958E-06               7.630             80.000
     1.132E-06               8.107             85.000
0    8.910E-05               0.5                5.24
0ANNUAL AVERAGE =    2.55E-06
0K= 16     FIVEXQ(K)= 8.910E-05     FIVEPR(K)= 5.242
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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23: 4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE ALL SECTOR.

STABILITY CLASS	WINDSPEED FREQUENCY AT 10.0 METERS METER/SEC	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=1431.SQ.METERS	USED
A	.4	.35	4827.	0.	0.	1000.0	1000.0	1000.0	7.495E-07	7.492E-07	7.492E-07
A	1.0	1.22	4827.	0.	0.	1000.0	1000.0	1000.0	3.165E-07	3.163E-07	3.163E-07
A	2.0	2.50	4827.	0.	0.	1000.0	1000.0	1000.0	1.565E-07	1.564E-07	1.564E-07
A	3.0	1.81	4827.	0.	0.	1000.0	1000.0	1000.0	1.055E-07	1.054E-07	1.054E-07
A	4.0	1.41	4827.	0.	0.	1000.0	1000.0	1000.0	7.956E-08	7.952E-08	7.952E-08
A	5.0	1.02	4827.	0.	0.	1000.0	1000.0	1000.0	6.329E-08	6.326E-08	6.326E-08
A	6.0	.58	4827.	0.	0.	1000.0	1000.0	1000.0	5.294E-08	5.292E-08	5.292E-08
A	8.0	.70	4827.	0.	0.	1000.0	1000.0	1000.0	3.967E-08	3.965E-08	3.965E-08
A	10.0	.21	4827.	0.	0.	1000.0	1000.0	1000.0	3.172E-08	3.170E-08	3.170E-08
A	13.0	.09	4827.	0.	0.	1000.0	1000.0	1000.0	2.443E-08	2.442E-08	2.442E-08
A	18.0	.01	4827.	0.	0.	1000.0	1000.0	1000.0	1.765E-08	1.764E-08	1.764E-08
B	.4	.09	4827.	0.	0.	725.4	859.0	725.4	1.203E-06	1.202E-06	1.202E-06
B	1.0	.28	4827.	0.	0.	725.4	859.0	725.4	5.079E-07	5.075E-07	5.075E-07
B	2.0	.63	4827.	0.	0.	725.4	859.0	725.4	2.512E-07	2.510E-07	2.510E-07
B	3.0	.67	4827.	0.	0.	725.4	859.0	725.4	1.693E-07	1.692E-07	1.692E-07
B	4.0	.57	4827.	0.	0.	725.4	859.0	725.4	1.277E-07	1.276E-07	1.276E-07
B	5.0	.42	4827.	0.	0.	725.4	859.0	725.4	1.016E-07	1.015E-07	1.015E-07
B	6.0	.23	4827.	0.	0.	725.4	859.0	725.4	8.496E-08	8.490E-08	8.490E-08
B	8.0	.31	4827.	0.	0.	725.4	859.0	725.4	6.366E-08	6.362E-08	6.362E-08
B	10.0	.09	4827.	0.	0.	725.4	859.0	725.4	5.090E-08	5.086E-08	5.086E-08
B	13.0	.07	4827.	0.	0.	725.4	859.0	725.4	3.920E-08	3.917E-08	3.917E-08
C	.4	.09	4827.	0.	0.	568.7	500.4	568.7	2.634E-06	2.629E-06	2.629E-06
C	1.0	.26	4827.	0.	0.	568.7	500.4	568.7	1.112E-06	1.110E-06	1.110E-06
C	2.0	.61	4827.	0.	0.	568.7	500.4	568.7	5.499E-07	5.490E-07	5.490E-07
C	3.0	.76	4827.	0.	0.	568.7	500.4	568.7	3.706E-07	3.700E-07	3.700E-07
C	4.0	.55	4827.	0.	0.	568.7	500.4	568.7	2.795E-07	2.791E-07	2.791E-07
C	5.0	.48	4827.	0.	0.	568.7	500.4	568.7	2.224E-07	2.220E-07	2.220E-07
C	6.0	.32	4827.	0.	0.	568.7	500.4	568.7	1.860E-07	1.857E-07	1.857E-07
C	8.0	.34	4827.	0.	0.	568.7	500.4	568.7	1.394E-07	1.392E-07	1.392E-07
C	10.0	.21	4827.	0.	0.	568.7	500.4	568.7	1.114E-07	1.113E-07	1.113E-07
C	13.0	.07	4827.	0.	0.	568.7	500.4	568.7	8.583E-08	8.569E-08	8.569E-08
D	.4	.36	4827.	0.	0.	221.3	158.9	221.3	2.131E-05	2.104E-05	2.104E-05
D	1.0	1.49	4827.	0.	0.	221.3	158.9	221.3	9.006E-06	8.885E-06	8.885E-06
D	2.0	3.58	4827.	0.	0.	221.3	158.9	221.3	4.450E-06	4.393E-06	4.393E-06
D	3.0	3.74	4827.	0.	0.	221.3	158.9	221.3	3.000E-06	2.962E-06	2.962E-06
D	4.0	3.31	4827.	0.	0.	221.3	158.9	221.3	2.262E-06	2.234E-06	2.234E-06
D	5.0	2.55	4827.	0.	0.	221.3	158.9	221.3	1.800E-06	1.777E-06	1.777E-06
D	6.0	1.73	4827.	0.	0.	221.3	158.9	221.3	1.506E-06	1.486E-06	1.486E-06
D	8.0	2.04	4827.	0.	0.	221.3	158.9	221.3	1.128E-06	1.114E-06	1.114E-06
D	10.0	1.03	4827.	0.	0.	221.3	158.9	221.3	9.020E-07	8.904E-07	8.904E-07
D	13.0	.45	4827.	0.	0.	221.3	158.9	221.3	6.947E-07	6.858E-07	6.858E-07
D	18.0	.08	4827.	0.	0.	221.3	158.9	221.3	5.018E 07	4.954E-07	4.954E-07
E	.4	.61	4827.	0.	0.	428.5	35.6	428.5	4.920E-05	4.777E-05	4.777E-05
E	1.0	2.34	4827.	0.	0.	428.5	35.6	428.5	2.077E-05	2.017E-05	2.017E-05
E	2.0	5.33	4827.	0.	0.	428.5	35.6	428.5	1.027E-05	9.974E-06	9.974E-06
E	3.0	5.02	4827.	0.	0.	428.5	35.6	428.5	6.924E-06	6.723E-06	6.723E-06
E	4.0	4.32	4827.	0.	0.	428.5	35.6	428.5	5.222E-06	5.070E-06	5.070E-06
E	5.0	3.44	4827.	0.	0.	428.5	35.6	428.5	4.154E-06	4.034E-06	4.034E-06
E	6.0	2.59	4827.	0.	0.	428.5	35.6	428.5	3.475E-06	3.374E-06	3.374E-06
E	8.0	2.81	4827.	0.	0.	428.5	35.6	428.5	2.604E-06	2.528E-06	2.528E-06
E	10.0	1.15	4827.	0.	0.	428.5	35.6	428.5	2.082E-06	2.021E-06	2.021E-06
E	13.0	.39	4827.	0.	0.	428.5	35.6	428.5	1.603E-06	1.557E-06	1.557E-06
E	18.0	.05	4827.	0.	0.	428.5	35.6	428.5	1.158E-06	1.125E-06	1.125E-06
F	.4	.76	4827.	0.	0.	696.0	11.2	696.0	9.625E-05	9.094E-05	9.094E-05
F	1.0	2.77	4827.	0.	0.	696.0	11.2	696.0	4.064E-05	3.839E-05	3.839E-05
F	2.0	5.95	4827.	0.	0.	696.0	11.2	696.0	2.010E-05	1.899E-05	1.899E-05
F	3.0	4.56	4827.	0.	0.	696.0	11.2	696.0	1.355E-05	1.280E-05	1.280E-05
F	4.0	3.20	4827.	0.	0.	696.0	11.2	696.0	1.022E-05	9.652E-06	9.652E-06
F	5.0	1.58	4827.	0.	0.	696.0	11.2	696.0	8.128E-06	7.679E-06	7.679E-06
F	6.0	.63	4827.	0.	0.	696.0	11.2	696.0	6.799E-06	6.423E-06	6.423E-06
F	8.0	.39	4827.	0.	0.	696.0	11.2	696.0	5.094E-06	4.813E-06	4.813E-06
F	10.0	.07	4827.	0.	0.	696.0	11.2	696.0	4.073E-06	3.848E-06	3.848E-06
F	13.0	.03	4827.	0.	0.	696.0	11.2	696.0	3.137E-06	2.964E-06	2.964E-06
G	.4	1.05	4827.	0.	0.	1000.0	3.5	1000.0	2.136E-04	1.891E-04	1.891E-04
G	1.0	3.07	4827.	0.	0.	1000.0	3.5	1000.0	9.021E-05	7.984E-05	7.984E-05
G	2.0	5.65	4827.	0.	0.	1000.0	3.5	1000.0	4.461E-05	3.948E-05	3.948E-05
G	3.0	3.12	4827.	0.	0.	1000.0	3.5	1000.0	3.007E-05	2.661E-05	2.661E-05
G	4.0	1.37	4827.	0.	0.	1000.0	3.5	1000.0	2.268E-05	2.007E-05	2.007E-05
G	5.0	.34	4827.	0.	0.	1000.0	3.5	1000.0	1.804E-05	1.597E-05	1.597E-05
G	6.0	.09	4827.	0.	0.	1000.0	3.5	1000.0	1.509E-05	1.336E-05	1.336E-05
G	8.0	.02	4827.	0.	0.	1000.0	3.5	1000.0	1.131E-05	1.001E-05	1.001E-05
G	10.0	.01	4827.	0.	0.	1000.0	3.5	1000.0	9.041E-06	8.002E-06	8.002E-06
G	13.0	.00	4827.	0.	0.	1000.0	3.5	1000.0	6.963E-06	6.163E-06	6.163E-06
G	18.0	.00	4827.	0.	0.	1000.0	3.5	1000.0	5.030E-06	4.452E-06	4.452E-06

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1USNRC COMPUTER CODE PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
 /PLANT NAME:  CGS                               METEOROLOGICAL INSTRUMENTATION
  DATA PERIOD: JFD 1996-1999                     WIND SENSORS HEIGHT:  10.0 METERS
  TYPE OF RELEASE: GROUND LEVEL RELEASE          DELTA-T HEIGHTS:    10 - 75 METERS
  SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
  COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma=desert + P-G
  PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0LOW POPULATION ZONE CALCULATIONS:
  DIRECTION-INDEPENDENT (S.R.P 2.3.4) MODEL.
  MINIMUM BOUNDARY DISTANCE = 4827.0 METERS.
0DESERT SIGMA VALUES USED.  MEANDER IS INCLUDED IN THESE VALUES. RG 1.145 MEANDER FACTORS ARE NOT USED.
  BUILDING WAKE CREDIT ALLOWED:  C=   .5    A=  2661.    D=   70.0
  CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0   1.891E-04  9.094E-05  7.984E-05  4.777E-05  3.948E-05  3.839E-05  2.661E-05  2.104E-05  2.017E-05  2.007E-05
        1.046      1.805      4.870      5.477     11.125     13.891     17.013     17.377     19.719     21.084
      1.04614    1.80468    4.87042    5.47724   11.12516   13.89064   17.01327   17.37674   19.71871   21.08407
0   1.899E-05  1.597E-05  1.336E-05  1.280E-05  1.001E-05  9.974E-06  9.652E-06  8.885E-06  8.002E-06  7.679E-06
       27.039     27.377     27.468     32.026     32.045     37.377     40.572     42.062     42.070     43.654
      27.03856   27.37674   27.46839   32.02592   32.04488   37.37674   40.57206   42.06068   42.07016   43.65360
0   6.723E-06  6.423E-06  6.163E-06  5.070E-06  4.813E-06  4.452E-06  4.393E-06  4.034E-06  3.848E-06  3.374E-06
       48.676     49.305     49.308     53.628     54.014     54.017     57.598     61.033     61.103     63.695
      48.67572   49.30468   49.30784   53.62832   54.01391   54.01707   57.59798   61.03351   61.10304   63.69469
0   2.964E-06  2.962E-06  2.629E-06  2.528E-06  2.234E-06  2.021E-06  1.777E-06  1.557E-06  1.486E-06  1.202E-06
       63.720     67.462     67.551     70.363     73.676     74.823     77.370     77.762     79.491     79.583
      63.71998   67.46207   67.55057   70.36346   73.67573   74.82301   77.37042   77.76233   79.49115   79.58281
0   1.125E-06  1.114E-06  1.110E-06  8.904E-07  7.492E-07  6.858E-07  5.490E-07  5.075E-07  4.954E-07  3.700E-07
       79.637     81.672     81.928     82.955     83.303     83.752     84.365     84.643     84.722     85.480
      79.63654   81.67194   81.92795   82.95513   83.30280   83.75159   84.36475   84.64288   84.72189   85.48042
0   3.163E-07  2.791E-07  2.510E-07  2.220E-07  1.857E-07  1.692E-07  1.564E-07  1.392E-07  1.276E-07  1.113E-07
       86.704     87.257     87.886     88.366     88.682     89.352     91.849     92.193     92.762     92.971
      86.70356   87.25666   87.88561   88.36602   88.68208   89.35211   91.84895   92.19345   92.76235   92.97095
0   1.054E-07  1.015E-07  8.569E-08  8.490E-08  7.952E-08  6.362E-08  6.326E-08  5.292E-08  5.086E-08  3.965E-08
       94.782     95.205     95.275     95.509     96.918     97.225     98.243     98.821     98.913     99.618
      94.78194   95.20546   95.27499   95.50887   96.91848   97.22505   98.24275   98.82114   98.91280   99.61760
      3.917E-08  3.170E-08  2.442E-08  1.764E-08
         99.687     99.899     99.994    100.000
       99.68713   99.89889   99.99371  100.00000
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0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=  13.890
                                                  BACK EXTRAPOLATION FOR  1 PERCENTILE.
     1.933E-04              1.000              1.000
     1.082E-04              3.000              3.000
     7.960E-05              5.000              5.000
     4.959E-05             10.000             10.000
     3.571E-05             15.000             15.000
     2.673E-05             20.000             20.000
     2.085E-05             25.000             25.000
     1.621E-05             30.000             30.000
     1.259E-05             35.000             35.000
     9.914E-06             40.000             40.000
     7.911E-06             45.000             45.000
     6.369E-06             50.000             50.000
     5.190E-06             55.000             55.000
     4.214E-06             60.000             60.000
     3.383E-06             65.000             65.000
     2.681E-06             70.000             70.000
     2.062E-06             75.000             75.000
     1.450E-06             80.000             80.000
     1.111E-06             85.000             85.000
     7.952E-07             90.000             90.000
0    7.960E-05              5.0                5.00
OK= 17      FIVEXQ(K)= 7.960E-05      FIVEPR(K)= 5.000
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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23: 4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0LOW POPULATION ZONE CALCULATIONS:
0FIVE PERCENT OVERALL SITE LIMIT
0DESERT SIGMA VALUES USED. MEANDER IS INCLUDED IN THESE VALUES- RG 1.145 MEANDER FACTORS ARE NOT USED.
BUILDING WAKE CREDIT ALLOWED: C= .5 A= 2861. D= 70.0
CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.

0	1.891E-04	9.094E-05	7.984E-05	4.777E-05	3.948E-05	3.839E-05	2.661E-05	2.104E-05	2.017E-05	2.007E-05
	1.046	1.805	4.870	5.477	11.125	13.891	17.013	17.377	19.719	21.084
	1.04614	1.80468	4.87042	5.47724	11.12516	13.89065	17.01328	17.37674	19.71871	21.08406
0	1.899E-05	1.597E-05	1.336E-05	1.280E-05	1.001E-05	9.974E-06	9.652E-06	8.885E-06	8.002E-06	7.679E-06
	27.039	27.377	27.468	32.026	32.045	37.377	40.572	42.061	42.070	43.654
	27.03856	27.37673	27.46839	32.02591	32.04487	37.37673	40.57205	42.06067	42.07016	43.65360
0	6.723E-06	6.423E-06	6.163E-06	5.070E-06	4.813E-06	4.452E-06	4.393E-06	4.034E-06	3.848E-06	3.374E-06
	48.676	49.305	49.308	53.628	54.014	54.017	57.598	61.033	61.103	63.695
	48.67572	49.30468	49.30784	53.62832	54.01390	54.01707	57.59798	61.03350	61.10304	63.69470
0	2.964E-06	2.962E-06	2.629E-06	2.528E-06	2.234E-06	2.021E-06	1.777E-06	1.557E-06	1.486E-06	1.202E-06
	63.720	67.462	67.551	70.363	73.676	74.823	77.370	77.762	79.491	79.583
	63.71999	67.46210	67.55061	70.36349	73.67577	74.82304	77.37045	77.76237	79.49120	79.58288
0	1.125E-06	1.114E-06	1.110E-06	8.904E-07	7.492E-07	6.858E-07	5.490E-07	5.075E-07	4.954E-07	3.700E-07
	79.637	81.672	81.928	82.955	83.303	83.752	84.365	84.643	84.722	85.480
	79.63661	81.67202	81.92805	82.95523	83.30287	83.75166	84.36481	84.64294	84.72198	85.48051
0	3.163E-07	2.791E-07	2.510E-07	2.220E-07	1.857E-07	1.692E-07	1.564E-07	1.392E-07	1.276E-07	1.113E-07
	86.704	87.257	87.886	88.366	88.682	89.352	91.849	92.194	92.762	92.971
	86.70366	87.25677	87.88571	88.36613	88.68219	89.35223	91.84906	92.19356	92.76248	92.97108
0	1.054E-07	1.015E-07	8.569E-08	8.490E-08	7.952E-08	6.362E-08	6.326E-08	5.292E-08	5.086E-08	3.965E-08
	94.782	95.206	95.275	95.509	96.919	97.225	98.243	98.821	98.913	99.618
	94.78208	95.20561	95.27515	95.50903	96.91864	97.22523	98.24293	98.82130	98.91296	99.61777
	3.917E-08	3.170E-08	2.442E-08	1.764E-08						
	99.687	99.899	99.994	100.000						
	99.68730	99.89906	99.99389	100.00020						

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0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=  13.890
0  K  I    XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
  18  1       -8.57322 -11.58064  -1.30202
  18  2      -10.16758 -11.77999  -1.48571
  18  3      -10.87178 -11.98011  -1.81307
  18  4      -11.54831 -11.96838  -1.76382
  18  5      -11.90999 -11.96404  -1.63269
  18  6      -12.42081 -11.95272  -1.67316
  18  7      -13.01191 -11.78294  -1.94135
  18  8      -13.24063 -11.39187  -2.46218
  18  9      -13.41924 -12.29836  -1.36127
  18 10      -17.52805      NUMXQ(K)= 10
                                                    BACK EXTRAPOLATION FOR  1 PERCENTILE.
      1.933E-04               1.000               1.000
      1.082E-04               3.000               3.000
      7.960E-05               5.000               5.000
      4.959E-05              10.000              10.000
      3.571E-05              15.000              15.000
      2.673E-05              20.000              20.000
      2.085E-05              25.000              25.000
      1.621E-05              30.000              30.000
      1.259E-05              35.000              35.000
      9.914E-06              40.000              40.000
      7.911E-06              45.000              45.000
      6.369E-06              50.000              50.000
      5.190E-06              55.000              55.000
      4.214E-06              60.000              60.000
      3.383E-06              65.000              65.000
      2.681E-06              70.000              70.000
      2.062E-06              75.000              75.000
      1.450E-06              80.000              80.000
      1.112E-06              85.000              85.000
      7.964E-07              90.000              90.000
0     7.960E-05               5.0                 5.00
0K= 18      FIVEXQ(K)= 7.960E-05      FIVEPR(K)= 5.000
```

0 K	HIGHPR	PR	GRNDVT(K)
1	-2.61446	.44684	7.11613
2	-1.73187	4.16481	5.59889
3	-2.80200	.25394	3.79337
4	-3.05637	.11203	1.66485
5	-3.15711	.07968	1.20432
6	-3.14873	.08200	1.52234
7	-3.07734	.10443	4.75939
8	-2.87001	.20523	10.15150
9	-2.81942	.24056	12.08469
10	-2.89262	.19103	8.67808
11	-2.79603	.25868	5.83414
12	-2.81087	.24705	4.17912
13	-2.78119	.27080	4.74070
14	-2.75996	.28905	8.25809
15	-2.66780	.38176	10.87648
16	-2.57624	.49942	9.53793

0 K	HOURS(K)	TOTHRS
1	39.14354	39.14354
2	364.83730	403.98080
3	22.24511	426.22600
4	9.81356	436.03950
5	6.97992	443.01940
6	7.18303	450.20250
7	9.14836	459.35080
8	17.97821	477.32900
9	21.07291	498.40190
10	16.73396	515.13590
11	22.66021	537.79610
12	21.64152	559.43770
13	23.72224	583.15990
14	25.32102	608.48100
15	33.44181	641.92280
16	43.74879	685.67160

0 K	FIVEXQ	SVANH	SLTIME	TIMINT	I	TIME	XQT
1	8.345E-05	2.201E-06	-.4336	-9.0907			
					1	8.0	-9.99229
					2	16.0	-10.29282
					3	72.0	-10.94495
					4	624.0	-11.88124
2	7.963E-05	1.988E-06	-.4401	-9.1331			
					1	8.0	-10.04825
					2	16.0	-10.35331
					3	72.0	-11.01525
					4	624.0	-11.96563
3	5.518E-05	1.168E-06	-.4598	-9.4862			
					1	8.0	-10.44221
					2	16.0	-10.76088
					3	72.0	-11.45239
					4	624.0	-12.44522
4	2.179E-05	4.847E-07	-.4539	-10.4194			
					1	8.0	-11.36320
					2	16.0	-11.67780
					3	72.0	-12.36047
					4	624.0	-13.34061
5	7.977E-06	3.015E-07	-.3906	-11.4682			
					1	8.0	-12.28046
					2	16.0	-12.55123
					3	72.0	-13.13877
					4	624.0	-13.98234
6	8.940E-06	3.111E-07	-.4005	-11.3474			
					1	8.0	-12.18022
					2	16.0	-12.45783
					3	72.0	-13.06023
					4	624.0	-13.92512
7	2.941E-05	6.609E-07	-.4527	-10.1204			
					1	8.0	-11.06168
					2	16.0	-11.37543
					3	72.0	-12.05625
					4	624.0	-13.03375
8	5.223E-05	1.589E-06	-.4165	-9.5712			
					1	8.0	-10.43729
					2	16.0	-10.72598
					3	72.0	-11.35243
					4	624.0	-12.25185
9	5.781E-05	1.803E-06	-.4135	-9.4717			
					1	8.0	-10.33163
					2	16.0	-10.61827
					3	72.0	-11.24026
					4	624.0	-12.13329
10	5.005E-05	1.226E-06	-.4424	-9.5958			
					1	8.0	-10.51566
					2	16.0	-10.82228
					3	72.0	-11.48763
					4	624.0	-12.44290
11	5.495E-05	1.191E-06	-.4569	-9.4924			
					1	8.0	-10.44258
					2	16.0	-10.75930
					3	72.0	-11.44655
					4	624.0	-12.43328
12	5.044E-05	1.040E-06	-.4629	-9.5738			
					1	8.0	-10.53635
					2	16.0	-10.85719
					3	72.0	-11.55338
					4	624.0	-12.55294
13	5.658E-05	1.192E-06	-.4603	-9.4608			
					1	8.0	-10.41804
					2	16.0	-10.73711
					3	72.0	-11.42946
					4	624.0	-12.42351
14	6.265E-05	1.537E-06	-.4422	-9.3715			
					1	8.0	-10.29095
					2	16.0	-10.59743
					3	72.0	-11.26249
					4	624.0	-12.21735
15	7.623E-05	2.290E-06	-.4180	-9.1920			
					1	8.0	-10.06123
					2	16.0	-10.35098
					3	72.0	-10.97970
					4	624.0	-11.88240
16	8.910E-05	2.549E-06	-.4238	-9.0319			
					1	8.0	-9.91329
					2	16.0	-10.20708
					3	72.0	-10.84458
					4	624.0	-11.75987
17	7.960E-05	2.549E-06	-.4104	-9.1541			
					1	8.0	-10.00747
					2	16.0	-10.29193
					3	72.0	-10.90919
					4	624.0	-11.79542
18	7.960E-05	2.549E-06	-.4104	-9.1541			
					1	8.0	-10.00747
					2	16.0	-10.29193
					3	72.0	-10.90919
					4	624.0	-11.79542

1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23: 4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0 RELATIVE CONCENTRATION (X/Q) VALUES (SEC/CUBIC METER)

		VERSUS AVERAGING TIME						HOURS PER YEAR MAX 0-2 HR X/Q IS EXCEEDED	
DOWNWIND SECTOR	DISTANCE (METERS)	0-2 HOURS	0-8 HOURS	8-24 HOURS	1-4 DAYS	4-30 DAYS	ANNUAL AVERAGE	IN SECTOR	DOWNWIND SECTOR
S	4827.	8.35E-05	4.58E-05	3.39E-05	1.76E-05	6.92E-06	2.20E-06	39.1	S
SSW	4827.	7.96E-05	4.33E-05	3.19E-05	1.64E-05	6.36E-06	1.99E-06	364.8	SSW
SW	4827.	5.52E-05	2.92E-05	2.12E-05	1.06E-05	3.94E-06	1.17E-06	22.2	SW
WSW	4827.	2.18E-05	1.16E-05	8.48E-06	4.28E-06	1.61E-06	4.85E-07	9.8	WSW
W	4827.	7.98E-06	4.64E-06	3.54E-06	1.97E-06	8.46E-07	3.02E-07	7.0	W
WNW	4827.	8.94E-06	5.13E-06	3.89E-06	2.13E-06	8.96E-07	3.11E-07	7.2	WNW
NW	4827.	2.94E 05	1.57E-05	1.15E-05	5.81E-06	2.19E-06	6.61E-07	9.1	NW
NNW	4827.	5.22E-05	2.93E-05	2.20E-05	1.17E-05	4.78E-06	1.59E-06	18.0	NNW
N	4827.	5.78E-05	3.26E-05	2.45E-05	1.31E-05	5.38E-06	1.80E-06	21.1	N
NNE	4827.	5.01E-05	2.71E-05	1.99E-05	1.03E-05	3.95E-06	1.23E-06	16.7	NNE
NE	4827.	5.49E-05	2.92E-05	2.12E-05	1.07E-05	3.98E-06	1.19E-06	22.7	NE
ENE	4827.	5.04E-05	2.66E-05	1.93E-05	9.60E-06	3.53E-06	1.04E-06	21.6	ENE
E	4827.	5.66E-05	2.99E-05	2.17E-05	1.09E-05	4.02E-06	1.19E-06	23.7	E
ESE	4827.	6.26E-05	3.39E-05	2.50E-05	1.28E-05	4.94E-06	1.54E-06	25.3	ESE
SE	4827.	7.62E-05	4.27E-05	3.20E-05	1.70E-05	6.91E-06	2.29E-06	33.4	SE
SSE	4827.	8.91E-05	4.95E-05	3.69E-05	1.95E-05	7.81E-06	2.55E-06	43.7	SSE
MAX X/Q		8.91E-05				TOTAL HOURS AROUND SITE:		685.7	
SRP 2.3.4	4827.	7.96E-05	4.51E-05	3.39E-05	1.83E-05	7.54E-06	2.55E-06		
SITE LIMIT		7.96E-05	4.51E-05	3.39E-05	1.83E-05	7.54E-06	2.55E-06		

0THE FIVE-PERCENT-FOR-THE-ENTIRE-SITE X/Q IS LIMITING.
0**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.

1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23:4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE S SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 10.0 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=1431.SQ.METERS	USED
A	.4	.40	1950.	0.	0.	342.4	1000.0	342.4	2.189E-06	2.186E-06	2.186E-06
A	1.0	1.42	1950.	0.	0.	342.4	1000.0	342.4	9.244E-07	9.231E-07	9.231E-07
A	2.0	3.24	1950.	0.	0.	342.4	1000.0	342.4	4.571E-07	4.565E-07	4.565E-07
A	3.0	2.66	1950.	0.	0.	342.4	1000.0	342.4	3.081E-07	3.077E-07	3.077E-07
A	4.0	2.35	1950.	0.	0.	342.4	1000.0	342.4	2.324E-07	2.321E-07	2.321E-07
A	5.0	1.60	1950.	0.	0.	342.4	1000.0	342.4	1.849E-07	1.846E-07	1.846E-07
A	6.0	.71	1950.	0.	0.	342.4	1000.0	342.4	1.546E-07	1.544E-07	1.544E-07
A	8.0	1.11	1950.	0.	0.	342.4	1000.0	342.4	1.159E-07	1.157E-07	1.157E-07
A	10.0	.04	1950.	0.	0.	342.4	1000.0	342.4	9.264E-08	9.252E-08	9.252E-08
B	.4	.10	1950.	0.	0.	257.5	227.3	257.5	1.281E-05	1.271E-05	1.271E-05
B	1.0	.31	1950.	0.	0.	257.5	227.3	257.5	5.407E-06	5.365E-06	5.365E-06
B	2.0	.89	1950.	0.	0.	257.5	227.3	257.5	2.674E-06	2.653E-06	2.653E-06
B	3.0	1.20	1950.	0.	0.	257.5	227.3	257.5	1.802E-06	1.788E-06	1.788E-06
B	4.0	.67	1950.	0.	0.	257.5	227.3	257.5	1.359E-06	1.349E-06	1.349E-06
B	5.0	.49	1950.	0.	0.	257.5	227.3	257.5	1.081E-06	1.073E-06	1.073E-06
B	6.0	.27	1950.	0.	0.	257.5	227.3	257.5	9.045E-07	8.975E-07	8.975E-07
B	8.0	.18	1950.	0.	0.	257.5	227.3	257.5	6.777E-07	6.725E-07	6.725E-07
B	10.0	.04	1950.	0.	0.	257.5	227.3	257.5	5.419E-07	5.377E-07	5.377E-07
C	.4	.09	1950.	0.	0.	195.5	112.3	195.5	3.414E-05	3.345E-05	3.345E-05
C	1.0	.27	1950.	0.	0.	195.5	112.3	195.5	1.442E-05	1.412E-05	1.412E-05
C	2.0	1.07	1950.	0.	0.	195.5	112.3	195.5	7.129E-06	6.984E-06	6.984E-06
C	3.0	1.11	1950.	0.	0.	195.5	112.3	195.5	4.805E-06	4.708E-06	4.708E-06
C	4.0	.76	1950.	0.	0.	195.5	112.3	195.5	3.624E-06	3.551E-06	3.551E-06
C	5.0	.71	1950.	0.	0.	195.5	112.3	195.5	2.883E-06	2.825E-06	2.825E-06
C	6.0	.31	1950.	0.	0.	195.5	112.3	195.5	2.412E-06	2.363E-06	2.363E-06
C	8.0	.31	1950.	0.	0.	195.5	112.3	195.5	1.807E-06	1.770E-06	1.770E-06
D	.4	.49	1950.	0.	0.	137.7	49.8	199.2	7.552E-05	1.025E-04	7.552E-05
D	1.0	2.00	1950.	0.	0.	137.7	49.8	199.2	3.189E-05	4.328E-05	3.189E-05
D	2.0	4.66	1950.	0.	0.	137.7	49.8	197.9	1.587E-05	2.140E-05	1.587E-05
D	3.0	5.91	1950.	0.	0.	137.7	49.8	171.1	1.238E-05	1.443E-05	1.238E-05
D	4.0	3.06	1950.	0.	0.	137.7	49.8	155.6	1.026E-05	1.088E-05	1.026E-05
D	5.0	2.71	1950.	0.	0.	137.7	49.8	144.9	8.768E-06	8.655E-06	8.655E-06
D	6.0	1.82	1950.	0.	0.	137.7	49.8	137.7	7.720E-06	7.239E-06	7.239E-06
D	8.0	.44	1950.	0.	0.	137.7	49.8	137.7	5.785E 06	5.424E 06	5.424E 06
D	10.0	.04	1950.	0.	0.	137.7	49.8	137.7	4.625E-06	4.337E-06	4.337E-06
D	13.0	.04	1950.	0.	0.	137.7	49.8	137.7	3.562E-06	3.340E-06	3.340E-06

E	.4	.52	1950.	0.	0.	97.9	33.8	185.5	1.194E-04	1.989E-04	1.194E-04
E	1.0	2.00	1950.	0.	0.	97.9	33.8	185.5	5.043E-05	8.399E-05	5.043E-05
E	2.0	5.20	1950.	0.	0.	97.9	33.8	183.3	2.523E-05	4.153E-05	2.523E-05
E	3.0	4.31	1950.	0.	0.	97.9	33.8	141.2	2.208E-05	2.800E-05	2.208E-05
E	4.0	2.27	1950.	0.	0.	97.9	33.8	119.8	1.963E-05	2.111E-05	1.963E-05
E	5.0	1.11	1950.	0.	0.	97.9	33.8	106.3	1.759E-05	1.680E-05	1.680E-05
E	6.0	.49	1950.	0.	0.	97.9	33.8	97.9	1.598E-05	1.405E-05	1.405E-05
E	8.0	.36	1950.	0.	0.	97.9	33.8	97.9	1.197E-05	1.053E-05	1.053E-05
E	10.0	.13	1950.	0.	0.	97.9	33.8	97.9	9.574E-06	8.417E-06	8.417E-06
E	13.0	.04	1950.	0.	0.	97.9	33.8	97.9	7.374E-06	6.483E-06	6.483E-06
F	.4	1.05	1950.	0.	0.	67.6	22.0	158.2	2.155E-04	3.862E-04	2.155E-04
F	1.0	3.82	1950.	0.	0.	67.6	22.0	158.2	9.099E-05	1.631E-04	9.099E-05
F	2.0	7.46	1950.	0.	0.	67.6	22.0	155.7	4.573E-05	8.064E-05	4.573E-05
F	3.0	4.31	1950.	0.	0.	67.6	22.0	109.3	4.391E-05	5.436E-05	4.391E-05
F	4.0	.58	1950.	0.	0.	67.6	22.0	87.7	4.125E-05	4.100E-05	4.100E-05
F	5.0	.09	1950.	0.	0.	67.6	22.0	75.1	3.834E-05	3.261E-05	3.261E-05
F	6.0	.13	1950.	0.	0.	67.6	22.0	67.6	3.564E-05	2.728E-05	2.728E-05
G	.4	1.59	1950.	0.	0.	46.6	14.3	150.9	3.478E-04	6.684E-04	3.478E-04
G	1.0	4.66	1950.	0.	0.	46.6	14.3	150.9	1.468E-04	2.822E-04	1.468E-04
G	2.0	12.08	1950.	0.	0.	46.6	14.3	147.5	7.429E-05	1.396E-04	7.429E-05
G	3.0	3.95	1950.	0.	0.	46.6	14.3	89.8	8.229E-05	9.408E-05	8.229E-05
G	4.0	.36	1950.	0.	0.	46.6	14.3	66.2	8.420E-05	7.095E-05	7.095E-05

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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:  CGS                                METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma=desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0SITE EXCLUSION BOUNDARY CALCULATIONS:
0   S SECTOR      BOUNDARY DISTANCE = 1950.0 METERS
0LATERAL PLUME MEANDER/BUILDING WAKE CREDIT ALLOWED
 AS A FUNCTION OF DOWNWIND DISTANCE.
 MEANDER CREDIT IS FOR WINDSPEEDS LESS THAN 6 MPS.
 BUILDING WAKE CREDIT ALLOWED:  C=   .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0  3.478E-04  2.155E-04  1.468E-04  1.194E-04  9.099E-05  8.229E-05  7.552E-05  7.429E-05  7.095E-05  5.043E-05
       1.591      2.639      7.302      7.820     11.640     15.593     16.081     28.161     28.517     30.515
      .11324     .18780     .51965     .55651     .82831    1.10960    1.14433    2.00400    2.02928    2.17151
0  4.573E-05  4.391E-05  4.100E-05  3.345E-05  3.261E-05  3.189E-05  2.728E-05  2.523E-05  2.208E-05  1.963E-05
      37.977     42.285     42.862     42.955     43.043     45.042     45.175     50.372     54.680     56.945
     2.70248    3.00906    3.05014    3.05670    3.06302    3.20525    3.21473    3.58451    3.89109    4.05228
0  1.680E-05  1.587E-05  1.412E-05  1.405E-05  1.271E-05  1.238E-05  1.053E-05  1.026E-05  8.655E-06  8.417E-06
      58.055     62.719     62.985     63.474     63.576     69.483     69.839     72.903     75.612     75.746
     4.13129    4.46315    4.48211    4.51688    4.52417    4.94452    4.96981    5.18788    5.38068    5.39016
0  7.239E-06  6.984E-06  6.483E-06  5.424E-06  5.365E-06  4.708E-06  4.337E-06  3.551E-06  3.340E-06  2.825E-06
      77.567     78.633     78.677     79.121     79.432     80.542     80.587     81.342     81.386     82.097
     5.51974    5.59560    5.59876    5.63036    5.65249    5.73150    5.73466    5.78839    5.79155    5.84212
0  2.653E-06  2.363E-06  2.186E-06  1.788E-06  1.770E-06  1.349E-06  1.073E-06  9.231E-07  8.975E-07  6.725E-07
      82.985     83.296     83.700     84.899     85.210     85.876     86.365     87.786     88.053     88.230
     5.90533    5.92745    5.95620    6.04154    6.06366    6.11107    6.14583    6.24697    6.26593    6.27858
0  5.377E-07  4.565E-07  3.077E-07  2.321E-07  1.846E-07  1.544E-07  1.157E-07  9.252E-08
      88.275     91.517     94.182     96.536     98.135     98.845     99.956    100.000
     6.28174    6.51246    6.70209    6.86960    6.98338    7.03395    7.11296    7.11613
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0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=   2.002
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=   3.006
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   3.888
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   4.941
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   5.184
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   5.377
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 8)=   5.592
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 9)=   6.980
0  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
   1  1     -7.96393 -12.67711  -1.54358
   1  2     -9.50758 -15.73073  -3.03071
   1  3    -10.03335 -21.17132  -5.92482
   1  4    -10.72076 -19.73659  -5.11142
   1  5    -11.29960 -24.52737  -8.01384
   1  6     11.48682 -26.99376   9.52951
   1  7    -11.65737 -29.48782 -11.07924
   1  8    -11.87188 -63.13766 -32.24272
   1  9    -15.50492     NUMXQ(K)=  9
                                                    BACK EXTRAPOLATION FOR  1 PERCENTILE.
    4.295E-04               .071             1.000
    2.572E-04               .213             3.000
    1.990E-04               .356             5.000
    1.374E-04               .712            10.000
    1.091E-04              1.067            15.000
    9.191E-05              1.423            20.000
    8.009E-05              1.779            25.000
    6.860E-05              2.135            30.000
    5.632E-05              2.491            35.000
    4.728E-05              2.846            40.000
    3.729E-05              3.202            45.000
    2.815E-05              3.558            50.000
    2.178E-05              3.914            55.000
    1.770E-05              4.270            60.000
    1.458E-05              4.625            65.000
    1.203E-05              4.981            70.000
    8.991E-06              5.337            75.000
    5.297E-06              5.693            80.000
    1.988E-06              6.049            85.000
    7.794E-07              6.405            90.000
0   1.665E-04              0.5               7.03
0ANNUAL AVERAGE =   3.82E-06
0X=  1     FIVEXQ(K)= 1.665E-04     FIVEPR(K)= 7.026
```

1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23: 4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, INPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE SSW SECTOR.

STABILITY CLASS	WINDSPEED AT 10.0 METERS METER/SEC	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=1431.SQ.METERS	USED
A	.4	.63	1950.	0.	0.	342.4	1000.0	342.4	2.189E-06	2.186E-06	2.186E-06
A	1.0	2.20	1950.	0.	0.	342.4	1000.0	342.4	9.244E-07	9.231E-07	9.231E-07
A	2.0	3.39	1950.	0.	0.	342.4	1000.0	342.4	4.571E-07	4.565E-07	4.565E-07
A	3.0	2.60	1950.	0.	0.	342.4	1000.0	342.4	3.081E-07	3.077E-07	3.077E-07
A	4.0	2.09	1950.	0.	0.	342.4	1000.0	342.4	2.324E-07	2.321E-07	2.321E-07
A	5.0	1.58	1950.	0.	0.	342.4	1000.0	342.4	1.849E-07	1.846E-07	1.846E-07
A	6.0	.51	1950.	0.	0.	342.4	1000.0	342.4	1.546E-07	1.544E-07	1.544E-07
A	8.0	1.02	1950.	0.	0.	342.4	1000.0	342.4	1.159E-07	1.157E-07	1.157E-07
A	10.0	.06	1950.	0.	0.	342.4	1000.0	342.4	9.264E 08	9.252E-08	9.252E-08
A	13.0	.11	1950.	0.	0.	342.4	1000.0	342.4	7.135E-08	7.125E-08	7.125E-08
B	.4	.15	1950.	0.	0.	257.5	227.3	257.5	1.281E-05	1.271E-05	1.271E-05
B	1.0	.45	1950.	0.	0.	257.5	227.3	257.5	5.407E-06	5.365E-06	5.365E-06
B	2.0	.73	1950.	0.	0.	257.5	227.3	257.5	2.674E-06	2.653E-06	2.653E-06
B	3.0	1.02	1950.	0.	0.	257.5	227.3	257.5	1.802E-06	1.788E-06	1.788E-06
B	4.0	1.02	1950.	0.	0.	257.5	227.3	257.5	1.359E-06	1.349E-06	1.349E-06
B	5.0	.56	1950.	0.	0.	257.5	227.3	257.5	1.081E-06	1.073E-06	1.073E-06
B	6.0	.11	1950.	0.	0.	257.5	227.3	257.5	9.045E-07	8.975E-07	8.975E-07
B	8.0	.11	1950.	0.	0.	257.5	227.3	257.5	6.777E-07	6.725E-07	6.725E-07
B	13.0	.11	1950.	0.	0.	257.5	227.3	257.5	4.173E-07	4.141E-07	4.141E-07
C	.4	.20	1950.	0.	0.	195.5	112.3	195.5	3.414E-05	3.345E-05	3.345E-05
C	1.0	.56	1950.	0.	0.	195.5	112.3	195.5	1.442E-05	1.412E-05	1.412E-05
C	2.0	1.07	1950.	0.	0.	195.5	112.3	195.5	7.129E-06	6.984E-06	6.984E-06
C	3.0	1.02	1950.	0.	0.	195.5	112.3	195.5	4.805E-06	4.708E-06	4.708E-06
C	4.0	.85	1950.	0.	0.	195.5	112.3	195.5	3.624E-06	3.551E-06	3.551E-06
C	5.0	.62	1950.	0.	0.	195.5	112.3	195.5	2.883E-06	2.825E-06	2.825E-06
C	6.0	.17	1950.	0.	0.	195.5	112.3	195.5	2.412E-06	2.363E-06	2.363E-06
C	8.0	.11	1950.	0.	0.	195.5	112.3	195.5	1.807E-06	1.770E-06	1.770E-06
C	10.0	.11	1950.	0.	0.	195.5	112.3	195.5	1.445E-06	1.415E-06	1.415E-06
D	.4	.44	1950.	0.	0.	137.7	49.8	199.2	7.552E-05	1.025E-04	7.552E-05
D	1.0	1.81	1950.	0.	0.	137.7	49.8	199.2	3.189E-05	4.328E-05	3.189E-05
D	2.0	3.84	1950.	0.	0.	137.7	49.8	197.9	1.587E-05	2.140E-05	1.587E-05
D	3.0	4.12	1950.	0.	0.	137.7	49.8	171.1	1.238E-05	1.443E-05	1.238E-05
D	4.0	3.33	1950.	0.	0.	137.7	49.8	155.6	1.026E-05	1.088E-05	1.026E-05
D	5.0	1.81	1950.	0.	0.	137.7	49.8	144.9	8.768E-06	8.655E-06	8.655E-06
D	6.0	.85	1950.	0.	0.	137.7	49.8	137.7	7.720E-06	7.239E-06	7.239E-06
D	8.0	.68	1950.	0.	0.	137.7	49.8	137.7	5.785E-06	5.424E-06	5.424E-06
D	10.0	.45	1950.	0.	0.	137.7	49.8	137.7	4.625E-06	4.337E-06	4.337E-06
D	13.0	.06	1950.	0.	0.	137.7	49.8	137.7	3.562E-06	3.340E-06	3.340E-06

E	.4	.51	1950.	0.	0.	97.9	33.8	185.5	1.194E-04	1.989E-04	1.194E-04
E	1.0	1.98	1950.	0.	0.	97.9	33.8	185.5	5.043E-05	8.399E-05	5.043E-05
E	2.0	5.19	1950.	0.	0.	97.9	33.8	183.3	2.523E-05	4.153E-05	2.523E-05
E	3.0	4.46	1950.	0.	0.	97.9	33.8	141.2	2.208E-05	2.800E-05	2.208E-05
E	4.0	1.86	1950.	0.	0.	97.9	33.8	119.8	1.963E-05	2.111E-05	1.963E-05
E	5.0	.56	1950.	0.	0.	97.9	33.8	106.3	1.759E-05	1.680E-05	1.680E-05
E	6.0	.23	1950.	0.	0.	97.9	33.8	97.9	1.598E-05	1.405E-05	1.405E-05
E	8.0	.73	1950.	0.	0.	97.9	33.8	97.9	1.197E-05	1.053E-05	1.053E-05
E	10.0	.73	1950.	0.	0.	97.9	33.8	97.9	9.574E-06	8.417E-06	8.417E-06
F	.4	.98	1950.	0.	0.	67.6	22.0	158.2	2.155E-04	3.862E-04	2.155E-04
F	1.0	3.56	1950.	0.	0.	67.6	22.0	158.2	9.099E-05	1.631E-04	9.099E-05
F	2.0	7.96	1950.	0.	0.	67.6	22.0	155.7	4.573E-05	8.064E-05	4.573E-05
F	3.0	3.67	1950.	0.	0.	67.6	22.0	109.3	4.391E-05	5.436E-05	4.391E-05
F	4.0	.45	1950.	0.	0.	67.6	22.0	87.7	4.125E-05	4.100E-05	4.100E-05
F	5.0	.06	1950.	0.	0.	67.6	22.0	75.1	3.834E-05	3.261E-05	3.261E-05
G	.4	1.98	1950.	0.	0.	46.6	14.3	150.9	3.478E-04	6.684E-04	3.478E-04
G	1.0	5.81	1950.	0.	0.	46.6	14.3	150.9	1.468E-04	2.822E-04	1.468E-04
G	2.0	14.06	1950.	0.	0.	46.6	14.3	147.5	7.429E-05	1.396E-04	7.429E-05
G	3.0	4.23	1950.	0.	0.	46.6	14.3	89.8	8.229E-05	9.408E-05	8.229E-05
G	4.0	.45	1950.	0.	0.	46.6	14.3	66.2	8.420E-05	7.095E-05	7.095E-05

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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:  CGS                                METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma-desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0SITE EXCLUSION BOUNDARY CALCULATIONS:
0 SSW SECTOR     BOUNDARY DISTANCE = 1950.0 METERS
0LATERAL PLUME MEANDER/BUILDING WAKE CREDIT ALLOWED
 AS A FUNCTION OF DOWNWIND DISTANCE.
 MEANDER CREDIT IS FOR WINDSPEEDS LESS THAN 6 MPS.
 BUILDING WAKE CREDIT ALLOWED:   C=   .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0   3.478E-04  2.155E-04  1.468E-04  1.194E-04  9.099E-05  8.229E-05  7.552E-05  7.429E-05  7.095E-05  5.043E-05
        1.984      2.960      8.774      9.286     12.842     17.076     17.517     31.573     32.024     34.000
      .11109     .16570     .49124     .51990     .71901     .95606     .98075    1.76773    1.79301    1.90363
0   4.573E-05  4.391E-05  4.100E-05  3.345E-05  3.261E-05  3.189E-05  2.523E-05  2.208E-05  1.963E-05  1.680E-05
       41.960     45.629     46.080     46.276     46.332     48.138     53.332     57.791     59.654     60.219
      2.34927    2.55471    2.57999    2.59092    2.59408    2.69522    2.98599    3.23567    3.33997    3.37158
0   1.587E-05  1.412E-05  1.405E-05  1.271E-05  1.238E-05  1.053E-05  1.026E-05  8.655E-06  8.417E-06  7.239E-06
       64.057     64.622     64.848     64.996     69.117     69.851     73.182     74.988     75.722     76.569
      3.58649    3.61810    3.63074    3.63907    3.86979    3.91088    4.09735    4.19849    4.23958    4.28699
0   6.984E-06  5.424E-06  5.365E-06  4.708E-06  4.337E-06  3.551E-06  3.340E-06  2.825E-06  2.653E-06  2.363E-06
       77.641     78.319     78.770     79.786     80.238     81.085     81.141     81.762     82.496     82.665
      4.34704    4.38496    4.41025    4.46714    4.49242    4.53983    4.54299    4.57776    4.61885    4.62833
0   2.186E-06  1.788E-06  1.770E-06  1.415E-06  1.349E-06  1.073E-06  9.231E-07  8.975E-07  6.725E-07  4.565E-07
       83.291     84.307     84.420     84.533     85.549     86.113     88.315     88.428     88.541     91.928
      4.66336    4.72025    4.72658    4.73290    4.78979    4.82139    4.94465    4.95097    4.95730    5.14693
0   4.141E-07  3.077E-07  2.321E-07  1.846E-07  1.544E-07  1.157E-07  9.252E-08  7.125E-08
       92.041     94.637     96.726     98.307     98.815     99.831     99.887    100.000
      5.15325    5.29864    5.41558    5.50407    5.53252    5.58941    5.59257    5.59889
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0          X/Q PERCENTILES
  (BASED ON THE UPPER ENVELOPE OF THE
  ORDERED X/Q-FREQUENCY VALUES, AND AS
  PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=   1.766
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=   2.552
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   3.233
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   4.094
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   4.236
                                                  HANDCHECK GRAPH:  SLOPE LT  1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   4.344
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 8)=   4.464
0  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
   2  1      -7.96393 -12.91155  -1.61730
   2  2      -9.50758 -16.71203  -3.42300
   2  3     -10.03335 -22.99545  -6.64342
   2  4     -10.72076 -23.85565  -7.10899
   2  5     -11.48682 -33.10474 -12.42491
   2  6     -11.68521 -39.00649 -15.84836
   2  7     -11.87188 -64.26140 -30.59885
   2  8     -12.26630      NUMXQ(K)=  8

                                                  BACK EXTRAPOLATION FOR  1 PERCENTILE.
     4.803E-04                .056                1.000
     2.836E-04                .168                3.000
     2.181E-04                .280                5.000
     1.494E-04                .560               10.000
     1.181E-04                .840               15.000
     9.928E-05               1.120               20.000
     8.636E-05               1.400               25.000
     7.681E-05               1.680               30.000
     6.431E-05               1.960               35.000
     5.318E-05               2.240               40.000
     4.481E-05               2.519               45.000
     3.376E-05               2.799               50.000
     2.556E-05               3.079               55.000
     1.959E-05               3.359               60.000
     1.514E-05               3.639               65.000
     1.189E-05               3.919               70.000
     8.901E-06               4.199               75.000
0    1.593E-04               0.5                  8.91
0ANNUAL AVERAGE =   3.23E-06
0K=  2     FIVEXQ(K)= 1.593E-04     FIVEPR(K)= 8.930
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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23:4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE SW SECTOR.

STABILITY CLASS	WINDSPEED AT 10.0 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=1431.SQ.METERS	USED
A	.4	.71	1950.	0.	0.	342.4	1000.0	342.4	2.189E-06	2.186E-06	2.186E-06
A	1.0	2.50	1950.	0.	0.	342.4	1000.0	342.4	9.244E 07	9.231E-07	9.231E-07
A	2.0	4.25	1950.	0.	0.	342.4	1000.0	342.4	4.571E-07	4.565E-07	4.565E-07
A	3.0	3.42	1950.	0.	0.	342.4	1000.0	342.4	3.081E-07	3.077E-07	3.077E-07
A	4.0	1.58	1950.	0.	0.	342.4	1000.0	342.4	2.324E-07	2.321E-07	2.321E-07
A	5.0	.92	1950.	0.	0.	342.4	1000.0	342.4	1.849E-07	1.846E-07	1.846E-07
A	6.0	.42	1950.	0.	0.	342.4	1000.0	342.4	1.546E-07	1.544E-07	1.544E-07
A	8.0	.83	1950.	0.	0.	342.4	1000.0	342.4	1.159E-07	1.157E-07	1.157E-07
A	10.0	.17	1950.	0.	0.	342.4	1000.0	342.4	9.264E-08	9.252E-08	9.252E-08
B	.4	.03	1950.	0.	0.	257.5	227.3	257.5	1.281E-05	1.271E-05	1.271E-05
B	1.0	.08	1950.	0.	0.	257.5	227.3	257.5	5.407E-06	5.365E-06	5.365E-06
B	2.0	.92	1950.	0.	0.	257.5	227.3	257.5	2.674E-06	2.653E-06	2.653E-06
B	3.0	1.25	1950.	0.	0.	257.5	227.3	257.5	1.802E-06	1.788E-06	1.788E-06
B	4.0	.83	1950.	0.	0.	257.5	227.3	257.5	1.359E-06	1.349E-06	1.349E-06
B	5.0	.67	1950.	0.	0.	257.5	227.3	257.5	1.081E-06	1.073E-06	1.073E-06
B	6.0	.08	1950.	0.	0.	257.5	227.3	257.5	9.045E-07	8.975E-07	8.975E-07
B	8.0	.17	1950.	0.	0.	257.5	227.3	257.5	6.777E-07	6.725E-07	6.725E-07
C	.4	.23	1950.	0.	0.	195.5	112.3	195.5	3.414E-05	3.345E 05	3.345E-05
C	1.0	.67	1950.	0.	0.	195.5	112.3	195.5	1.442E-05	1.412E-05	1.412E-05
C	2.0	.92	1950.	0.	0.	195.5	112.3	195.5	7.129E-06	6.984E-06	6.984E-06
C	3.0	.92	1950.	0.	0.	195.5	112.3	195.5	4.805E-06	4.708E-06	4.708E-06
C	4.0	.25	1950.	0.	0.	195.5	112.3	195.5	3.624E-06	3.551E-06	3.551E-06
C	5.0	.42	1950.	0.	0.	195.5	112.3	195.5	2.883E-06	2.825E-06	2.825E-06
C	6.0	.25	1950.	0.	0.	195.5	112.3	195.5	2.412E-06	2.363E-06	2.363E-06
C	8.0	.17	1950.	0.	0.	195.5	112.3	195.5	1.807E-06	1.770E-06	1.770E-06
D	.4	.53	1950.	0.	0.	137.7	49.8	199.2	7.552E-05	1.025E-04	7.552E-05
D	1.0	2.17	1950.	0.	0.	137.7	49.8	199.2	3.189E-05	4.328E-05	3.189E-05
D	2.0	4.42	1950.	0.	0.	137.7	49.8	197.9	1.587E-05	2.140E-05	1.587E-05
D	3.0	4.50	1950.	0.	0.	137.7	49.8	171.1	1.238E-05	1.443E-05	1.238E-05
D	4.0	3.33	1950.	0.	0.	137.7	49.8	155.6	1.026E-05	1.088E-05	1.026E-05
D	5.0	2.83	1950.	0.	0.	137.7	49.8	144.9	8.768E-06	8.655E-06	8.655E-06
D	6.0	1.33	1950.	0.	0.	137.7	49.8	137.7	7.720E-06	7.239E-06	7.239E-06
D	8.0	.33	1950.	0.	0.	137.7	49.8	137.7	5.785E-06	5.424E-06	5.424E-06
D	10.0	.50	1950.	0.	0.	137.7	49.8	137.7	4.625E 06	4.337E 06	4.337E-06
D	13.0	.33	1950.	0.	0.	137.7	49.8	137.7	3.562E-06	3.340E-06	3.340E-06
D	18.0	.17	1950.	0.	0.	137.7	49.8	137.7	2.573E-06	2.413E-06	2.413E-06

E	.4	.50	1950.	0.	0.	97.9	33.8	185.5	1.194E-04	1.989E-04	1.194E-04
E	1.0	1.92	1950.	0.	0.	97.9	33.8	185.5	5.043E-05	8.399E-05	5.043E-05
E	2.0	5.25	1950.	0.	0.	97.9	33.8	183.3	2.523E-05	4.153E-05	2.523E-05
E	3.0	4.50	1950.	0.	0.	97.9	33.8	141.2	2.208E-05	2.800E-05	2.208E-05
E	4.0	3.83	1950.	0.	0.	97.9	33.8	119.8	1.963E-05	2.111E-05	1.963E-05
E	5.0	1.25	1950.	0.	0.	97.9	33.8	106.3	1.759E-05	1.680E-05	1.680E-05
E	6.0	.25	1950.	0.	0.	97.9	33.8	97.9	1.598E-05	1.405E-05	1.405E-05
E	8.0	.50	1950.	0.	0.	97.9	33.8	97.9	1.197E-05	1.053E-05	1.053E-05
E	10.0	.58	1950.	0.	0.	97.9	33.8	97.9	9.574E-06	8.417E-06	8.417E-06
E	13.0	.08	1950.	0.	0.	97.9	33.8	97.9	7.374E-06	6.483E-06	6.483E-06
F	.4	.98	1950.	0.	0.	67.6	22.0	158.2	2.155E-04	3.862E-04	2.155E-04
F	1.0	3.58	1950.	0.	0.	67.6	22.0	158.2	9.099E-05	1.631E-04	9.099E-05
F	2.0	5.83	1950.	0.	0.	67.6	22.0	155.7	4.573E-05	8.064E-05	4.573E-05
F	3.0	3.33	1950.	0.	0.	67.6	22.0	109.3	4.391E-05	5.436E-05	4.391E-05
F	4.0	1.83	1950.	0.	0.	67.6	22.0	87.7	4.125E-05	4.100E-05	4.100E-05
F	5.0	.25	1950.	0.	0.	67.6	22.0	75.1	3.834E-05	3.261E-05	3.261E-05
G	.4	1.79	1950.	0.	0.	46.6	14.3	150.9	3.478E-04	6.684E-04	3.478E-04
G	1.0	5.25	1950.	0.	0.	46.6	14.3	150.9	1.468E-04	2.822E-04	1.468E-04
G	2.0	8.83	1950.	0.	0.	46.6	14.3	147.5	7.429E-05	1.396E-04	7.429E-05
G	3.0	4.75	1950.	0.	0.	46.6	14.3	89.8	8.229E-05	9.408E-05	8.229E-05
G	4.0	1.58	1950.	0.	0.	46.6	14.3	66.2	8.420E-05	7.095E-05	7.095E-05
G	5.0	.25	1950.	0.	0.	46.6	14.3	53.6	8.270E-05	5.645E-05	5.645E-05

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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE: 11/19/2003     TIME: 23: 4:56
/PLANT NAME:  CGS                                METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT: 10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma=desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0SITE EXCLUSION BOUNDARY CALCULATIONS:
0  SW SECTOR      BOUNDARY DISTANCE = 1950.0 METERS
0LATERAL PLUME MEANDER/BUILDING WAKE CREDIT ALLOWED
 AS A FUNCTION OF DOWNWIND DISTANCE.
 MEANDER CREDIT IS FOR WINDSPEEDS LESS THAN 6 MPS.
 BUILDING WAKE CREDIT ALLOWED:   C=   .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0   3.478E-04  2.155E-04  1.468E-04  1.194E-04  9.099E-05  8.229E-05  7.552E-05  7.429E-05  7.095E-05  5.645E-05
        1.791      2.774      8.023      8.519     12.102     16.851     17.380     26.212     27.795     28.045
      .06795     .10522     .30434     .32317     .45908     .63923     .65929     .99431    1.05436    1.06384
0   5.043E-05  4.573E-05  4.391E-05  4.100E-05  3.345E-05  3.261E-05  3.189E-05  2.523E-05  2.208E-05  1.963E-05
       29.961     35.793     39.126     40.959     41.189     41.439     43.606     48.855     53.354     57.187
      1.13654    1.35777    1.48420    1.55373    1.56247    1.57195    1.65413    1.85324    2.02391    2.16930
0   1.680E-05  1.587E-05  1.412E-05  1.405E-05  1.271E-05  1.238E-05  1.053E-05  1.026E-05  8.655E-06  8.417E-06
       58.436     62.852     63.519     63.769     63.796     68.295     68.795     72.128     74.961     75.544
      2.21670    2.38421    2.40950    2.41898    2.42002    2.59069    2.60966    2.73608    2.84354    2.86566
0   7.239E-06  6.984E-06  6.483E-06  5.424E-06  5.365E-06  4.708E-06  4.337E-06  3.551E-06  3.340E-06  2.825E-06
       76.877     77.794     77.877     78.210     78.293     79.210     79.710     79.960     80.293     80.710
      2.91623    2.95100    2.95416    2.96680    2.96996    3.00473    3.02369    3.03317    3.04581    3.06162
0   2.653E-06  2.413E-06  2.363E-06  2.186E-06  1.788E-06  1.770E-06  1.349E 06  1.073E-06  9.231E-07  8.975E-07
       81.626     81.793     82.043     82.753     84.003     84.170     85.003     85.669     88.169     88.252
      3.09638    3.10270    3.11218    3.13913    3.18654    3.19286    3.22447    3.24975    3.34457    3.34773
0   6.725E-07  4.565E-07  3.077E-07  2.321E-07  1.846E-07  1.544E-07  1.157E-07  9.252E-08
       88.419     92.668     96.084     97.667     98.584     99.000     99.833    100.000
      3.35405    3.51524    3.64482    3.70487    3.73964    3.75544    3.78705    3.79337
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0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=    .993
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=   1.053
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   1.483
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   1.552
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   2.382
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   2.588
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 8)=   2.733
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 9)=   2.863
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(10)=   2.948
0  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
   3  1      -7.96393 -13.61820  -1.76503
   3  2      -9.50758 -14.35369  -2.08084
   3  3      -9.55350 -17.93104  -3.63158
   3  4     -10.03335 -18.25548  -3.78077
   3  5     -10.10203 -21.73169  -5.39269
   3  6     -11.05090 -24.92677  -7.00588
   3  7     -11.29960 -26.73028  -7.93308
   3  8     -11.48682 -30.38708  -9.83617
   3  9     -11.68521 -39.26055 -14.50313
   3 10     -11.87188      NUMXQ(K)= 10
                                                    BACK EXTRAPOLATION FOR  1 PERCENTILE.
     4.647E-04                .038               1.000
     2.661E-04                .114               3.000
     2.018E-04                .190               5.000
     1.357E-04                .379              10.000
     1.062E-04                .569              15.000
     8.858E-05                .759              20.000
     7.664E-05                .948              25.000
     6.386E-05               1.138              30.000
     5.147E-05               1.328              35.000
     4.248E-05               1.517              40.000
     3.345E-05               1.707              45.000
     2.655E-05               1.897              50.000
     2.148E-05               2.086              55.000
     1.765E-05               2.276              60.000
     1.436E-05               2.466              65.000
     1.138E-05               2.655              70.000
     8.683E-06               2.845              75.000
0    1.149E-04               0.5                13.18
0ANNUAL AVERAGE =   2.01E-06
0K=  3     FIVEXQ(K)= 1.149E-04     FIVEPR(K)=13.181
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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23:4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE WSW SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 10.0 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=1431.SQ.METERS	USED
A	.4	1.24	1950.	0.	0.	342.4	1000.0	342.4	2.189E-06	2.186E-06	2.186E-06
A	1.0	4.37	1950.	0.	0.	342.4	1000.0	342.4	9.244E-07	9.231E-07	9.231E-07
A	2.0	6.83	1950.	0.	0.	342.4	1000.0	342.4	4.571E-07	4.565E-07	4.565E-07
A	3.0	2.09	1950.	0.	0.	342.4	1000.0	342.4	3.081E-07	3.077E-07	3.077E-07
A	4.0	1.33	1950.	0.	0.	342.4	1000.0	342.4	2.324E-07	2.321E-07	2.321E-07
A	5.0	.38	1950.	0.	0.	342.4	1000.0	342.4	1.849E-07	1.846E-07	1.846E-07
A	6.0	.19	1950.	0.	0.	342.4	1000.0	342.4	1.546E-07	1.544E-07	1.544E-07
B	.4	.31	1950.	0.	0.	257.5	227.3	257.5	1.281E-05	1.271E-05	1.271E-05
B	1.0	.95	1950.	0.	0.	257.5	227.3	257.5	5.407E-06	5.365E-06	5.365E-06
B	2.0	.76	1950.	0.	0.	257.5	227.3	257.5	2.674E-06	2.653E-06	2.653E-06
B	3.0	.76	1950.	0.	0.	257.5	227.3	257.5	1.802E-06	1.788E-06	1.788E-06
B	4.0	.38	1950.	0.	0.	257.5	227.3	257.5	1.359E-06	1.349E-06	1.349E-06
B	5.0	.19	1950.	0.	0.	257.5	227.3	257.5	1.081E-06	1.073E-06	1.073E-06
B	6.0	.19	1950.	0.	0.	257.5	227.3	257.5	9.045E-07	8.975E-07	8.975E-07
B	8.0	.57	1950.	0.	0.	257.5	227.3	257.5	6.777E-07	6.725E-07	6.725E-07
C	.4	.33	1950.	0.	0.	195.5	112.3	195.5	3.414E-05	3.345E-05	3.345E-05
C	1.0	.95	1950.	0.	0.	195.5	112.3	195.5	1.442E-05	1.412E-05	1.412E-05
C	2.0	.76	1950.	0.	0.	195.5	112.3	195.5	7.129E-06	6.984E-06	6.984E-06
C	3.0	1.71	1950.	0.	0.	195.5	112.3	195.5	4.805E-06	4.708E-06	4.708E-06
C	4.0	.19	1950.	0.	0.	195.5	112.3	195.5	3.624E-06	3.551E-06	3.551E-06
D	.4	1.07	1950.	0.	0.	137.7	49.8	199.2	7.552E-05	1.025E-04	7.552E-05
D	1.0	4.37	1950.	0.	0.	137.7	49.8	199.2	3.189E-05	4.328E-05	3.189E-05
D	2.0	6.26	1950.	0.	0.	137.7	49.8	197.9	1.587E-05	2.140E-05	1.587E-05
D	3.0	4.75	1950.	0.	0.	137.7	49.8	171.1	1.238E-05	1.443E-05	1.238E-05
D	4.0	3.61	1950.	0.	0.	137.7	49.8	155.6	1.026E-05	1.088E-05	1.026E-05
D	5.0	1.14	1950.	0.	0.	137.7	49.8	144.9	8.768E-06	8.655E-06	8.655E-06
D	8.0	.38	1950.	0.	0.	137.7	49.8	137.7	5.785E-06	5.424E-06	5.424E-06

E	.4	1.28	1950.	0.	0.	97.9	33.8	185.5	1.194E-04	1.989E-04	1.194E-04
E	1.0	4.94	1950.	0.	0.	97.9	33.8	185.5	5.043E-05	8.399E-05	5.043E-05
E	2.0	5.70	1950.	0.	0.	97.9	33.8	183.3	2.523E-05	4.153E-05	2.523E-05
E	3.0	5.13	1950.	0.	0.	97.9	33.8	141.2	2.208E-05	2.800E-05	2.208E-05
E	4.0	1.52	1950.	0.	0.	97.9	33.8	119.8	1.963E-05	2.111E-05	1.963E-05
E	5.0	1.71	1950.	0.	0.	97.9	33.8	106.3	1.759E-05	1.680E-05	1.680E-05
E	6.0	.95	1950.	0.	0.	97.9	33.8	97.9	1.598E-05	1.405E-05	1.405E-05
E	8.0	.19	1950.	0.	0.	97.9	33.8	97.9	1.197E-05	1.053E-05	1.053E-05
F	.4	.94	1950.	0.	0.	67.6	22.0	158.2	2.155E-04	3.862E-04	2.155E-04
F	1.0	3.42	1950.	0.	0.	67.6	22.0	158.2	9.099E-05	1.631E-04	9.099E-05
F	2.0	5.70	1950.	0.	0.	67.6	22.0	155.7	4.573E-05	8.064E-05	4.573E-05
F	3.0	3.04	1950.	0.	0.	67.6	22.0	109.3	4.391E-05	5.436E-05	4.391E-05
F	4.0	1.90	1950.	0.	0.	67.6	22.0	87.7	4.125E-05	4.100E-05	4.100E-05
F	5.0	.57	1950.	0.	0.	67.6	22.0	75.1	3.834E-05	3.261E-05	3.261E-05
G	.4	1.81	1950.	0.	0.	46.6	14.3	150.9	3.478E-04	6.684E-04	3.478E-04
G	1.0	5.32	1950.	0.	0.	46.6	14.3	150.9	1.468E-04	2.822E-04	1.468E-04
G	2.0	5.51	1950.	0.	0.	46.6	14.3	147.5	7.429E-05	1.396E-04	7.429E-05
G	3.0	2.66	1950.	0.	0.	46.6	14.3	89.8	8.229E-05	9.408E-05	8.229E-05
G	4.0	1.14	1950.	0.	0.	46.6	14.3	66.2	8.420E 05	7.095E-05	7.095E-05
G	5.0	.38	1950.	0.	0.	46.6	14.3	53.6	8.270E-05	5.645E-05	5.645E-05
G	6.0	.19	1950.	0.	0.	46.6	14.3	46.6	7.950E-05	4.721E-05	4.721E-05

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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:  CGS                                METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma-desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0SITE EXCLUSION BOUNDARY CALCULATIONS:
0 WSW SECTOR     BOUNDARY DISTANCE = 1950.0 METERS
0LATERAL PLUME MEANDER/BUILDING WAKE CREDIT ALLOWED
 AS A FUNCTION OF DOWNWIND DISTANCE.
 MEANDER CREDIT IS FOR WINDSPEEDS LESS THAN 6 MPS.
 BUILDING WAKE CREDIT ALLOWED:   C=   .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0   3.478E-04  2.155E-04  1.468E-04  1.194E-04  9.099E-05  8.229E-05  7.552E-05  7.429E-05  7.095E-05  5.645E-05
       1.814      2.751      8.067      9.346     12.763     15.420     16.487     21.992     23.131     23.511
       .03020     .04580     .13430     .15559     .21248     .25673     .27448     .36613     .38510     .39142
0   5.043E-05  4.721E-05  4.573E-05  4.391E-05  4.100E-05  3.345E-05  3.261E-05  3.189E-05  2.523E-05  2.208E-05
      28.447     28.636     34.332     37.369     39.267     39.596     40.165     44.531     50.227     55.352
       .47359     .47675     .57157     .62214     .65374     .65921     .66869     .74138     .83620     .92153
0   1.963E-05  1.680E-05  1.587E-05  1.412E-05  1.405E-05  1.271E 05  1.238E-05  1.053E-05  1.026E-05  8.655E-06
      56.871     58.580     64.844     65.794     66.743     67.056     71.802     71.991     75.598     76.737
       .94682     .97526    1.07956    1.09536    1.11117    1.11637    1.19539    1.19855    1.25860    1.27756
0   6.984E-06  5.424E-06  5.365E-06  4.708E-06  3.551E-06  2.653E-06  2.186E-06  1.788E-06  1.349E-06  1.073E-06
      77.497     77.876     78.826     80.534     80.724     81.483     82.725     83.484     83.864     84.053
      1.29020    1.29653    1.31233    1.34077    1.34393    1.35658    1.37724    1.38988    1.39620    1.39936
0   9.231E-07  8.975E-07  6.725E-07  4.565E-07  3.077E-07  2.321E-07  1.846E-07  1.544E-07
      88.420     88.610     89.179     96.013     98.102     99.430     99.810    100.000
      1.47205    1.47522    1.48470    1.59848    1.63324    1.65537    1.66169    1.66485
```

```
0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

                                                                HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=    .134
                                                                HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=    .366
                                                                HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=    .385
                                                                HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=    .621
                                                                HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=    .653
                                                                HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=    .920
                                                                HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 8)=   1.078
                                                                HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 9)=   1.194
                                                                HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(10)=   1.257
0  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
   4  1      -7.96393 -14.87153  -2.01386
   4  2      -8.82616 -15.22473  -2.13152
   4  3      -9.50758 -16.78037  -2.71151
   4  4      -9.55350 -17.28087  -2.89930
   4  5     -10.03335 -19.78457  -3.90088
   4  6     -10.10203 -22.40215  -4.95544
   4  7     -10.72076 -23.83062  -5.56142
   4  8     -11.05090 -25.75231  -6.39769
   4  9     -11.29960 -32.60155  -9.42961
   4 10     -11.48682     NUMXQ(K)= 10
                                                                BACK EXTRAPOLATION FOR  1 PERCENTILE.
     4.784E-04              .017              1.000
     2.629E-04              .050              3.000
     1.957E-04              .083              5.000
     1.276E-04              .166             10.000
     9.708E-05              .250             15.000
     7.946E-05              .333             20.000
     6.576E-05              .416             25.000
     5.487E-05              .499             30.000
     4.695E-05              .583             35.000
     3.968E-05              .666             40.000
     3.217E-05              .749             45.000
     2.659E-05              .832             50.000
     2.234E-05              .916             55.000
     1.868E-05              .999             60.000
     1.578E-05             1.082             65.000
     1.317E-05             1.165             70.000
     1.057E-05             1.249             75.000
0    5.481E-05             0.5               30.03
0ANNUAL AVERAGE =   9.65E-07
0K=  4     FIVEXQ(K)= 5.481E-05     FIVEPR(K)=30.033
```

1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23: 4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, INPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE W SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 10.0 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=1431.SQ.METERS	USED
A	.4	2.01	1950.	0.	0.	342.4	1000.0	342.4	2.189E-06	2.186E-06	2.186E-06
A	1.0	7.09	1950.	0.	0.	342.4	1000.0	342.4	9.244E-07	9.231E-07	9.231E-07
A	2.0	7.87	1950.	0.	0.	342.4	1000.0	342.4	4.571E-07	4.565E-07	4.565E-07
A	3.0	2.62	1950.	0.	0.	342.4	1000.0	342.4	3.081E-07	3.077E-07	3.077E-07
A	4.0	1.31	1950.	0.	0.	342.4	1000.0	342.4	2.324E-07	2.321E-07	2.321E-07
A	5.0	1.05	1950.	0.	0.	342.4	1000.0	342.4	1.849E-07	1.846E-07	1.846E-07
B	.4	.61	1950.	0.	0.	257.5	227.3	257.5	1.281E-05	1.271E-05	1.271E-05
B	1.0	1.84	1950.	0.	0.	257.5	227.3	257.5	5.407E-06	5.365E-06	5.365E-06
B	2.0	1.57	1950.	0.	0.	257.5	227.3	257.5	2.674E-06	2.653E-06	2.653E-06
B	3.0	.79	1950.	0.	0.	257.5	227.3	257.5	1.802E-06	1.788E-06	1.788E-06
B	4.0	.52	1950.	0.	0.	257.5	227.3	257.5	1.359E-06	1.349E-06	1.349E-06
C	.4	.27	1950.	0.	0.	195.5	112.3	195.5	3.414E-05	3.345E-05	3.345E-05
C	1.0	.79	1950.	0.	0.	195.5	112.3	195.5	1.442E-05	1.412E-05	1.412E-05
C	2.0	1.57	1950.	0.	0.	195.5	112.3	195.5	7.129E-06	6.984E-06	6.984E-06
C	3.0	1.84	1950.	0.	0.	195.5	112.3	195.5	4.805E-06	4.708E-06	4.708E-06
C	4.0	.52	1950.	0.	0.	195.5	112.3	195.5	3.624E-06	3.551E-06	3.551E-06
D	.4	1.03	1950.	0.	0.	137.7	49.8	199.2	7.552E-05	1.025E-04	7.552E-05
D	1.0	4.20	1950.	0.	0.	137.7	49.8	199.2	3.189E-05	4.328E-05	3.189E-05
D	2.0	9.71	1950.	0.	0.	137.7	49.8	197.9	1.587E-05	2.140E-05	1.587E-05
D	3.0	6.04	1950.	0.	0.	137.7	49.8	171.1	1.238E-05	1.443E-05	1.238E-05
D	4.0	4.72	1950.	0.	0.	137.7	49.8	155.6	1.026E-05	1.088E-05	1.026E-05
D	5.0	1.31	1950.	0.	0.	137.7	49.8	144.9	8.768E-06	8.655E-06	8.655E-06

E	.4	1.50	1950.	0.	0.	97.9	33.8	185.5	1.194E-04	1.989E-04	1.194E-04
E	1.0	5.77	1950.	0.	0.	97.9	33.8	185.5	5.043E-05	8.399E-05	5.043E-05
E	2.0	5.77	1950.	0.	0.	97.9	33.8	183.3	2.523E-05	4.153E-05	2.523E-05
E	3.0	4.99	1950.	0.	0.	97.9	33.8	141.2	2.208E-05	2.800E-05	2.208E-05
E	4.0	1.31	1950.	0.	0.	97.9	33.8	119.8	1.963E-05	2.111E-05	1.963E-05
E	8.0	.26	1950.	0.	0.	97.9	33.8	97.9	1.197E-05	1.053E-05	1.053E-05
F	.4	1.30	1950.	0.	0.	67.6	22.0	158.2	2.155E-04	3.862E-04	2.155E-04
F	1.0	4.72	1950.	0.	0.	67.6	22.0	158.2	9.099E-05	1.631E-04	9.099E-05
F	2.0	3.67	1950.	0.	0.	67.6	22.0	155.7	4.573E-05	8.064E-05	4.573E-05
F	3.0	2.10	1950.	0.	0.	67.6	22.0	109.3	4.391E-05	5.436E-05	4.391E-05
F	4.0	.52	1950.	0.	0.	67.6	22.0	87.7	4.125E-05	4.100E-05	4.100E-05
G	.4	1.70	1950.	0.	0.	46.6	14.3	150.9	3.478E-04	6.684E-04	3.478E-04
G	1.0	4.99	1950.	0.	0.	46.6	14.3	150.9	1.468E-04	2.822E-04	1.468E-04
G	2.0	1.57	1950.	0.	0.	46.6	14.3	147.5	7.429E-05	1.396E-04	7.429E-05
G	3.0	.26	1950.	0.	0.	46.6	14.3	89.8	8.229E-05	9.408E-05	8.229E-05
G	4.0	.26	1950.	0.	0.	46.6	14.3	66.2	8.420E-05	7.095E-05	7.095E-05

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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:   CGS                               METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma=desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0SITE EXCLUSION BOUNDARY CALCULATIONS:
0   W SECTOR     BOUNDARY DISTANCE = 1950.0 METERS
0LATERAL PLUME MEANDER/BUILDING WAKE CREDIT ALLOWED
 AS A FUNCTION OF DOWNWIND DISTANCE.
 MEANDER CREDIT IS FOR WINDSPEEDS LESS THAN 6 MPS.
 BUILDING WAKE CREDIT ALLOWED:   C=   .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0   3.478E-04   2.155E-04   1.468E-04   1.194E-04   9.099E-05   8.229E-05   7.552E-05   7.429E-05   7.095E-05   5.043E-05
        1.702       2.997       7.983       9.479      14.203      14.466      15.491      17.066      17.328      23.102
      .02049      .03610      .09615      .11416      .17105      .17421      .18656      .20552      .20868      .27822
0   4.573E-05   4.391E-05   4.100E-05   3.345E-05   3.189E-05   2.523E-05   2.208E-05   1.963E-05   1.587E-05   1.412E-05
       26.776      28.875      29.400      29.672      33.871      39.645      44.631      45.943      55.653      56.441
      .32246      .34775      .35407      .35735      .40792      .47745      .53750      .55330      .67024      .67972
0   1.271E-05   1.238E-05   1.053E-05   1.026E-05   8.655E-06   6.984E-06   5.365E-06   4.708E-06   3.551E-06   2.653E-06
       57.046      63.082      63.344      68.068      69.381      70.955      72.792      74.629      75.154      76.729
      .68701      .75971      .76287      .81976      .83556      .85452      .87665      .89877      .90509      .92406
0   2.186E-06   1.788E-06   1.349E-06   9.231E-07   4.565E-07   3.077E-07   2.321E-07   1.846E-07
       78.743      79.530      80.055      87.141      95.014      97.638      98.950     100.000
      .94831      .95779      .96411     1.04945     1.14427     1.17587     1.19168     1.20432
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0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=    .096
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=    .171
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=    .347
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=    .669
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=    .759
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=    .819
0  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
   5  1     -7.96393 -15.02260  -1.99745
   5  2     -8.82616 -17.32492  -2.73962
   5  3     -9.30480 -18.65569  -3.19420
   5  4    -10.03335 -22.18037  -4.49994
   5  5     11.05090 -24.68784  -5.51377
   5  6    -11.29960 -27.70098  -6.75469
   5  7    -11.48682      NUMXQ(K)=  7

                                                    BACK EXTRAPOLATION FOR  1 PERCENTILE.
     4.582E-04                .012              1.000
     2.563E-04                .036              3.000
     1.926E-04                .060              5.000
     1.221E-04                .120             10.000
     8.617E-05                .181             15.000
     6.442E-05                .241             20.000
     5.112E-05                .301             25.000
     4.146E-05                .361             30.000
     3.283E-05                .422             35.000
     2.673E-05                .482             40.000
     2.225E-05                .542             45.000
     1.884E-05                .602             50.000
     1.618E-05                .662             55.000
     1.368E-05                .723             60.000
     1.150E-05                .783             65.000
     2.523E-05               0.5               41.52
0ANNUAL AVERAGE =   6.80E-07
0K=  5     FIVEXQ(K)= 2.523E-05     FIVEPR(K)=41.517
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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23: 4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE WNW SECTOR.

STABILITY CLASS	WINDSPEED AT 10.0 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=1431.SQ.METERS	USED
A	.4	1.48	1950.	0.	0.	342.4	1000.0	342.4	2.189E-06	2.186E-06	2.186E-06
A	1.0	5.19	1950.	0.	0.	342.4	1000.0	342.4	9.244E-07	9.231E-07	9.231E-07
A	2.0	8.10	1950.	0.	0.	342.4	1000.0	342.4	4.571E-07	4.565E-07	4.565E-07
A	3.0	6.23	1950.	0.	0.	342.4	1000.0	342.4	3.081E-07	3.077E-07	3.077E-07
A	4.0	1.87	1950.	0.	0.	342.4	1000.0	342.4	2.324E-07	2.321E-07	2.321E-07
A	5.0	.83	1950.	0.	0.	342.4	1000.0	342.4	1.849E-07	1.846E-07	1.846E-07
A	6.0	.21	1950.	0.	0.	342.4	1000.0	342.4	1.546E-07	1.544E-07	1.544E-07
B	.4	.34	1950.	0.	0.	257.5	227.3	257.5	1.281E-05	1.271E-05	1.271E-05
B	1.0	1.04	1950.	0.	0.	257.5	227.3	257.5	5.407E-06	5.365E-06	5.365E-06
B	2.0	2.28	1950.	0.	0.	257.5	227.3	257.5	2.674E-06	2.653E-06	2.653E-06
B	3.0	1.04	1950.	0.	0.	257.5	227.3	257.5	1.802E-06	1.788E-06	1.788E-06
B	4.0	1.45	1950.	0.	0.	257.5	227.3	257.5	1.359E-06	1.349E-06	1.349E-06
B	5.0	.42	1950.	0.	0.	257.5	227.3	257.5	1.081E-06	1.073E-06	1.073E-06
C	.4	.29	1950.	0.	0.	195.5	112.3	195.5	3.414E-05	3.345E-05	3.345E-05
C	1.0	.83	1950.	0.	0.	195.5	112.3	195.5	1.442E-05	1.412E-05	1.412E-05
C	2.0	.62	1950.	0.	0.	195.5	112.3	195.5	7.129E-06	6.984E-06	6.984E-06
C	3.0	.21	1950.	0.	0.	195.5	112.3	195.5	4.805E-06	4.708E-06	4.708E-06
C	4.0	.83	1950.	0.	0.	195.5	112.3	195.5	3.624E-06	3.551E-06	3.551E-06
C	5.0	.42	1950.	0.	0.	195.5	112.3	195.5	2.883E-06	2.825E-06	2.825E-06
D	.4	.66	1950.	0.	0.	137.7	49.8	199.2	7.552E-05	1.025E-04	7.552E-05
D	1.0	2.70	1950.	0.	0.	137.7	49.8	199.2	3.189E-05	4.328E-05	3.189E-05
D	2.0	6.64	1950.	0.	0.	137.7	49.8	197.9	1.587E-05	2.140E-05	1.587E-05
D	3.0	6.02	1950.	0.	0.	137.7	49.8	171.1	1.238E-05	1.443E-05	1.238E-05
D	4.0	5.40	1950.	0.	0.	137.7	49.8	155.6	1.026E-05	1.088E-05	1.026E-05
D	5.0	1.45	1950.	0.	0.	137.7	49.8	144.9	8.768E-06	8.655E-06	8.655E-06
D	6.0	1.04	1950.	0.	0.	137.7	49.8	137.7	7.720E-06	7.239E-06	7.239E-06
D	8.0	.21	1950.	0.	0.	137.7	49.8	137.7	5.785E-06	5.424E-06	5.424E-06

E	.4	.86	1950.	0.	0.	97.9	33.8	185.5	1.194E-04	1.989E-04	1.194E-04
E	1.0	3.32	1950.	0.	0.	97.9	33.8	185.5	5.043E-05	8.399E-05	5.043E-05
E	2.0	6.44	1950.	0.	0.	97.9	33.8	183.3	2.523E-05	4.153E-05	2.523E-05
E	3.0	4.15	1950.	0.	0.	97.9	33.8	141.2	2.208E-05	2.800E-05	2.208E-05
E	4.0	5.19	1950.	0.	0.	97.9	33.8	119.8	1.963E-05	2.111E-05	1.963E-05
E	5.0	2.49	1950.	0.	0.	97.9	33.8	106.3	1.759E-05	1.680E-05	1.680E-05
E	6.0	.42	1950.	0.	0.	97.9	33.8	97.9	1.598E-05	1.405E-05	1.405E-05
F	.4	.91	1950.	0.	0.	67.6	22.0	158.2	2.155E-04	3.862E-04	2.155E-04
F	1.0	3.32	1950.	0.	0.	67.6	22.0	158.2	9.099E-05	1.631E-04	9.099E-05
F	2.0	4.98	1950.	0.	0.	67.6	22.0	155.7	4.573E-05	8.064E-05	4.573E-05
F	3.0	2.08	1950.	0.	0.	67.6	22.0	109.3	4.391E-05	5.436E-05	4.391E-05
F	4.0	.83	1950.	0.	0.	67.6	22.0	87.7	4.125E-05	4.100E-05	4.100E-05
F	5.0	.42	1950.	0.	0.	67.6	22.0	75.1	3.834E-05	3.261E-05	3.261E-05
G	.4	1.42	1950.	0.	0.	46.6	14.3	150.9	3.478E-04	6.684E-04	3.478E-04
G	1.0	4.15	1950.	0.	0.	46.6	14.3	150.9	1.468E-04	2.822E-04	1.468E-04
G	2.0	1.25	1950.	0.	0.	46.6	14.3	147.5	7.429E-05	1.396E-04	7.429E-05

```
1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:   CGS                               METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma=desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0SITE EXCLUSION BOUNDARY CALCULATIONS:
0 WNW SECTOR      BOUNDARY DISTANCE = 1950.0 METERS
0LATERAL PLUME MEANDER/BUILDING WAKE CREDIT ALLOWED
 AS A FUNCTION OF DOWNWIND DISTANCE.
 MEANDER CREDIT IS FOR WINDSPEEDS LESS THAN 6 MPS.
 BUILDING WAKE CREDIT ALLOWED:   C=   .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0   3.478E-04   2.155E-04   1.468E-04   1.194E-04   9.099E-05   7.552E-05   7.429E-05   5.043E-05   4.573E-05   4.391E-05
        1.417       2.328       6.480       7.341      10.663      11.322      12.567      15.889      20.872      22.948
        .02157      .03544      .09865      .11175      .16232      .17236      .19132      .24189      .31774      .34935
0   4.100E-05   3.345E-05   3.261E-05   3.189E-05   2.523E-05   2.208E 05   1.963E-05   1.680E-05   1.587E-05   1.412E-05
       23.778      24.065      24.481      27.180      33.616      37.768      42.958      45.449      52.093      52.923
        .36199      .36636      .37268      .41377      .51174      .57496      .65397      .69190      .79303      .80568
0   1.405E-05   1.271E-05   1.238E-05   1.026E-05   8.655E-06   7.239E-06   6.984E-06   5.424E-06   5.365E-06   4.708E-06
       53.339      53.681      59.701      65.099      66.553      67.591      68.213      68.421      69.459      69.667
        .81200      .81720      .90886      .99104     1.01316     1.02896     1.03844     1.04160     1.05741     1.06057
0   3.551E-06   2.825E-06   2.653E-06   2.186E-06   1.788E-06   1.349E-06   1.073E-06   9.231E-07   4.565E-07   3.077E-07
       70.497      70.912      73.196      74.671      75.709      77.163      77.578      82.768      90.865      97.093
       1.07321     1.07953     1.11430     1.13676     1.15256     1.17468     1.18100     1.26002     1.38328     1.47810
0   2.321E-07   1.846E-07   1.544E-07
       98.962      99.792     100.000
       1.50654     1.51918     1.52234
```

```
0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

                                                 HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=    .099
                                                 HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=    .349
                                                 HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=    .792
                                                 HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=    .908
                                                 HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=    .990
0  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
   6  1      -7.96393 -15.09386  -2.02540
   6  2      -8.82616 -18.24312  -3.04308
   6  3     -10.03335 -19.65499  -3.56641
   6  4     -11.05090 -23.02378  -4.96278
   6  5     -11.29960 -25.00951  -5.80333
   6  6     -11.48682      NUMXQ(K)=  6
                                                 BACK EXTRAPOLATION FOR  1 PERCENTILE.
     4.185E-04                .015              1.000
     2.300E-04                .046              3.000
     1.713E-04                .076              5.000
     9.855E-05                .152             10.000
     6.695E-05                .228             15.000
     5.042E-05                .304             20.000
     3.965E-05                .381             25.000
     3.180E-05                .457             30.000
     2.631E-05                .533             35.000
     2.226E-05                .609             40.000
     1.917E-05                .685             45.000
     1.674E-05                .761             50.000
     1.438E-05                .837             55.000
     1.225E-05                .913             60.000
     1.030E-05                .990             65.000
     2.846E-05              0.5                32.84
  ANNUAL AVERAGE =   6.87E-07
  K=  6      FIVEXQ(K)= 2.846E-05      FIVEPR(K)=32.844
```

1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23: 4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE NW SECTOR.

STABILITY CLASS	WINDSPEED AT 10.0 METERS METER/SEC	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=1431.SQ.METERS	USED
A	.4	.53	1950.	0.	0.	342.4	1000.0	342.4	2.189E-06	2.186E-06	2.186E-06
A	1.0	1.86	1950.	0.	0.	342.4	1000.0	342.4	9.244E-07	9.231E-07	9.231E-07
A	2.0	5.18	1950.	0.	0.	342.4	1000.0	342.4	4.571E-07	4.565E-07	4.565E-07
A	3.0	3.32	1950.	0.	0.	342.4	1000.0	342.4	3.081E-07	3.077E-07	3.077E-07
A	4.0	2.92	1950.	0.	0.	342.4	1000.0	342.4	2.324E-07	2.321E-07	2.321E-07
A	5.0	1.46	1950.	0.	0.	342.4	1000.0	342.4	1.849E-07	1.846E-07	1.846E-07
A	6.0	.40	1950.	0.	0.	342.4	1000.0	342.4	1.546E-07	1.544E-07	1.544E-07
A	8.0	.07	1950.	0.	0.	342.4	1000.0	342.4	1.159E-07	1.157E-07	1.157E-07
B	.4	.13	1950.	0.	0.	257.5	227.3	257.5	1.281E-05	1.271E-05	1.271E-05
B	1.0	.40	1950.	0.	0.	257.5	227.3	257.5	5.407E-06	5.365E-06	5.365E-06
B	2.0	.80	1950.	0.	0.	257.5	227.3	257.5	2.674E-06	2.653E-06	2.653E-06
B	3.0	1.33	1950.	0.	0.	257.5	227.3	257.5	1.802E-06	1.788E-06	1.788E-06
B	4.0	.80	1950.	0.	0.	257.5	227.3	257.5	1.359E-06	1.349E-06	1.349E-06
B	5.0	.20	1950.	0.	0.	257.5	227.3	257.5	1.081E-06	1.073E-06	1.073E-06
B	6.0	.13	1950.	0.	0.	257.5	227.3	257.5	9.045E-07	8.975E-07	8.975E-07
B	8.0	.20	1950.	0.	0.	257.5	227.3	257.5	6.777E-07	6.725E-07	6.725E-07
C	.4	.11	1950.	0.	0.	195.5	112.3	195.5	3.414E-05	3.345E-05	3.345E-05
C	1.0	.33	1950.	0.	0.	195.5	112.3	195.5	1.442E-05	1.412E-05	1.412E-05
C	2.0	.53	1950.	0.	0.	195.5	112.3	195.5	7.129E-06	6.984E-06	6.984E-06
C	3.0	1.33	1950.	0.	0.	195.5	112.3	195.5	4.805E-06	4.708E-06	4.708E-06
C	4.0	.73	1950.	0.	0.	195.5	112.3	195.5	3.624E-06	3.551E-06	3.551E-06
C	5.0	.46	1950.	0.	0.	195.5	112.3	195.5	2.883E-06	2.825E-06	2.825E-06
C	6.0	.07	1950.	0.	0.	195.5	112.3	195.5	2.412E-06	2.363E-06	2.363E-06
C	8.0	.33	1950.	0.	0.	195.5	112.3	195.5	1.807E-06	1.770E-06	1.770E-06
D	.4	.44	1950.	0.	0.	137.7	49.8	199.2	7.552E-05	1.025E-04	7.552E-05
D	1.0	1.79	1950.	0.	0.	137.7	49.8	199.2	3.189E-05	4.328E-05	3.189E-05
D	2.0	4.32	1950.	0.	0.	137.7	49.8	197.9	1.587E-05	2.140E-05	1.587E-05
D	3.0	4.05	1950.	0.	0.	137.7	49.8	171.1	1.238E-05	1.443E-05	1.238E-05
D	4.0	4.58	1950.	0.	0.	137.7	49.8	155.6	1.026E-05	1.088E-05	1.026E-05
D	5.0	2.79	1950.	0.	0.	137.7	49.8	144.9	8.768E-06	8.655E-06	8.655E-06
D	6.0	1.06	1950.	0.	0.	137.7	49.8	137.7	7.720E-06	7.239E-06	7.239E-06
D	8.0	.27	1950.	0.	0.	137.7	49.8	137.7	5.765E-06	5.424E-06	5.424E-06
D	10.0	.07	1950.	0.	0.	137.7	49.8	137.7	4.625E-06	4.337E-06	4.337E-06

E	.4	.52	1950.	0.	0.	97.9	33.8	185.5	1.194E-04	1.989E-04	1.194E-04
E	1.0	1.99	1950.	0.	0.	97.9	33.8	185.5	5.043E-05	8.399E-05	5.043E-05
E	2.0	5.18	1950.	0.	0.	97.9	33.8	183.3	2.523E-05	4.153E-05	2.523E-05
E	3.0	6.04	1950.	0.	0.	97.9	33.8	141.2	2.208E-05	2.800E-05	2.208E-05
E	4.0	7.30	1950.	0.	0.	97.9	33.8	119.8	1.963E-05	2.111E-05	1.963E-05
E	5.0	5.18	1950.	0.	0.	97.9	33.8	106.3	1.759E-05	1.680E-05	1.680E-05
E	6.0	2.13	1950.	0.	0.	97.9	33.8	97.9	1.598E-05	1.405E-05	1.405E-05
E	8.0	1.46	1950.	0.	0.	97.9	33.8	97.9	1.197E-05	1.053E-05	1.053E-05
E	10.0	.07	1950.	0.	0.	97.9	33.8	97.9	9.574E-06	8.417E-06	8.417E-06
F	.4	.42	1950.	0.	0.	67.6	22.0	158.2	2.155E-04	3.862E-04	2.155E-04
F	1.0	1.53	1950.	0.	0.	67.6	22.0	158.2	9.099E-05	1.631E-04	9.099E-05
F	2.0	4.38	1950.	0.	0.	67.6	22.0	155.7	4.573E-05	8.064E-05	4.573E-05
F	3.0	3.65	1950.	0.	0.	67.6	22.0	109.3	4.391E-05	5.436E-05	4.391E-05
F	4.0	5.64	1950.	0.	0.	67.6	22.0	87.7	4.125E-05	4.100E-05	4.100E-05
F	5.0	2.32	1950.	0.	0.	67.6	22.0	75.1	3.834E-05	3.261E-05	3.261E-05
F	6.0	.60	1950.	0.	0.	67.6	22.0	67.6	3.564E-05	2.728E-05	2.728E-05
F	8.0	.27	1950.	0.	0.	67.6	22.0	67.6	2.671E-05	2.044E-05	2.044E-05
G	.4	.57	1950.	0.	0.	46.6	14.3	150.9	3.478E-04	6.684E-04	3.478E-04
G	1.0	1.66	1950.	0.	0.	46.6	14.3	150.9	1.468E-04	2.822E-04	1.468E-04
G	2.0	2.92	1950.	0.	0.	46.6	14.3	147.5	7.429E-05	1.396E-04	7.429E-05
G	3.0	2.39	1950.	0.	0.	46.6	14.3	89.8	8.229E-05	9.408E-05	8.229E-05
G	4.0	.60	1950.	0.	0.	46.6	14.3	66.2	8.420E-05	7.095E-05	7.095E-05
G	5.0	.20	1950.	0.	0.	46.6	14.3	53.6	8.270E-05	5.645E-05	5.645E-05

```
1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:   CGS                               METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10   75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma=desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0SITE EXCLUSION BOUNDARY CALCULATIONS:
0  NW SECTOR      BOUNDARY DISTANCE = 1950.0 METERS
0LATERAL PLUME MEANDER/BUILDING WAKE CREDIT ALLOWED
 AS A FUNCTION OF DOWNWIND DISTANCE.
 MEANDER CREDIT IS FOR WINDSPEEDS LESS THAN 6 MPS.
 BUILDING WAKE CREDIT ALLOWED:   C=   .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0  3.478E-04  2.155E-04  1.468E-04  1.194E-04  9.099E-05  8.229E-05  7.552E-05  7.429E-05  7.095E-05  5.645E-05
        .567       .985      2.646      3.162      4.689      7.080      7.518     10.439     11.037     11.236
       .02696     .04690     .12591     .15048     .22318     .33696     .35779     .49686     .52530     .53478
0  5.043E-05  4.573E-05  4.391E-05  4.100E-05  3.345E-05  3.261E-05  3.189E-05  2.728E-05  2.523E-05  2.208E-05
      13.229     17.611     21.264     26.908     27.023     29.347     31.140     31.738     36.918     42.961
       .62960     .83820    1.01203    1.28067    1.28614    1.39676    1.48209    1.51054    1.75706    2.04467
0  2.044E-05  1.963E-05  1.680E-05  1.587E-05  1.412E-05  1.405E-05  1.271E-05  1.238E-05  1.053E-05  1.026E-05
      43.226     50.531     55.711     60.027     60.359     62.484     62.616     66.667     68.127     72.710
      2.05731    2.40497    2.65150    2.85693    2.87274    2.97387    2.98012    3.17292    3.24245    3.46053
0  8.655E-06  8.417E-06  7.239E-06  6.984E-06  5.424E-06  5.365E-06  4.708E-06  4.337E-06  3.551E-06  2.825E-06
      75.499     75.565     76.628     77.159     77.424     77.823     79.151     79.217     79.948     80.413
      3.59327    3.59643    3.64700    3.67228    3.68493    3.70389    3.76710    3.77026    3.80503    3.82715
0  2.653E-06  2.363E-06  2.186E-06  1.788E-06  1.770E-06  1.349E-06  1.073E-06  9.231E-07  8.975E-07  6.725E-07
      81.210     81.276     81.805     83.133     83.465     84.262     84.461     86.320     86.453     86.652
      3.86508    3.86824    3.89339    3.95660    3.97241    4.01033    4.01981    4.10831    4.11463    4.12411
0  4.565E-07  3.077E-07  2.321E-07  1.846E-07  1.544E-07  1.157E-07
      91.832     95.152     98.074     99.535     99.934    100.000
      4.37064    4.52866    4.66773    4.73726    4.75622    4.75938
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0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=    .496
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=   1.279
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   2.403
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   2.854
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   3.457
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   3.590
0  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
   7  1     -7.96393 -14.01906  -1.74971
   7  2     -9.50758 -13.93807  -1.71830
   7  3    -10.10203 -16.53574  -2.88189
   7  4    -10.83848 -16.49431  -2.86093
   7  5    -11.05090 -20.78323  -5.11509
   7  6    -11.48682 -29.63779  -9.98706
   7  7    -11.65737     NUMXQ(K)=  7
     2.647E-04                .048              1.000
     1.508E-04                .143              3.000
     1.140E-04                .238              5.000
     7.624E-05                .476             10.000
     5.964E-05                .714             15.000
     4.976E-05                .952             20.000
     4.304E-05               1.190             25.000
     3.627E-05               1.428             30.000
     3.040E-05               1.666             35.000
     2.600E-05               1.904             40.000
     2.260E-05               2.142             45.000
     1.989E-05               2.380             50.000
     1.769E-05               2.618             55.000
     1.588E-05               2.856             60.000
     1.327E-05               3.094             65.000
     1.120E-05               3.332             70.000
     8.920E-06               3.570             75.000
0    7.401E-05               0.5               10.51
0ANNUAL AVERAGE =   1.57E-06
0K=  7     FIVEXQ(K)= 7.401E-05     FIVEPR(K)=10.506
```

1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23:4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE NNW SECTOR.

STABILITY CLASS	WINDSPEED AT 10.0 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=1431.SQ.METERS	USED
A	.4	.14	1950.	0.	0.	342.4	1000.0	342.4	2.189E-06	2.186E-06	2.186E-06
A	1.0	.50	1950.	0.	0.	342.4	1000.0	342.4	9.244E-07	9.231E-07	9.231E-07
A	2.0	1.77	1950.	0.	0.	342.4	1000.0	342.4	4.571E-07	4.565E-07	4.565E-07
A	3.0	2.43	1950.	0.	0.	342.4	1000.0	342.4	3.081E-07	3.077E-07	3.077E-07
A	4.0	2.58	1950.	0.	0.	342.4	1000.0	342.4	2.324E-07	2.321E-07	2.321E-07
A	5.0	1.12	1950.	0.	0.	342.4	1000.0	342.4	1.849E-07	1.846E-07	1.846E-07
A	6.0	.47	1950.	0.	0.	342.4	1000.0	342.4	1.546E-07	1.544E-07	1.544E-07
A	8.0	.22	1950.	0.	0.	342.4	1000.0	342.4	1.159E-07	1.157E-07	1.157E-07
A	10.0	.06	1950.	0.	0.	342.4	1000.0	342.4	9.264E-08	9.252E-08	9.252E-08
A	13.0	.03	1950.	0.	0.	342.4	1000.0	342.4	7.135E-08	7.125E-08	7.125E-08
B	.4	.06	1950.	0.	0.	257.5	227.3	257.5	1.281E-05	1.271E-05	1.271E-05
B	1.0	.19	1950.	0.	0.	257.5	227.3	257.5	5.407E-06	5.365E-06	5.365E-06
B	2.0	.25	1950.	0.	0.	257.5	227.3	257.5	2.674E-06	2.653E-06	2.653E-06
B	3.0	.75	1950.	0.	0.	257.5	227.3	257.5	1.802E-06	1.788E-06	1.788E-06
B	4.0	.84	1950.	0.	0.	257.5	227.3	257.5	1.359E-06	1.349E-06	1.349E-06
B	5.0	.50	1950.	0.	0.	257.5	227.3	257.5	1.081E-06	1.073E-06	1.073E-06
B	6.0	.19	1950.	0.	0.	257.5	227.3	257.5	9.045E-07	8.975E-07	8.975E-07
B	8.0	.12	1950.	0.	0.	257.5	227.3	257.5	6.777E-07	6.725E-07	6.725E-07
B	10.0	.03	1950.	0.	0.	257.5	227.3	257.5	5.419E-07	5.377E-07	5.377E-07
C	.4	.02	1950.	0.	0.	195.5	112.3	195.5	3.414E-05	3.345E-05	3.345E-05
C	1.0	.06	1950.	0.	0.	195.5	112.3	195.5	1.442E-05	1.412E-05	1.412E-05
C	2.0	.47	1950.	0.	0.	195.5	112.3	195.5	7.129E-06	6.984E-06	6.984E-06
C	3.0	.97	1950.	0.	0.	195.5	112.3	195.5	4.805E-06	4.708E-06	4.708E-06
C	4.0	.75	1950.	0.	0.	195.5	112.3	195.5	3.624E-06	3.551E-06	3.551E-06
C	5.0	.56	1950.	0.	0.	195.5	112.3	195.5	2.883E-06	2.825E-06	2.825E-06
C	6.0	.34	1950.	0.	0.	195.5	112.3	195.5	2.412E-06	2.363E-06	2.363E-06
C	8.0	.16	1950.	0.	0.	195.5	112.3	195.5	1.807E-06	1.770E-06	1.770E-06
D	.4	.17	1950.	0.	0.	137.7	49.8	199.2	7.552E-05	1.025E-04	7.552E-05
D	1.0	.72	1950.	0.	0.	137.7	49.8	199.2	3.189E-05	4.328E-05	3.189E-05
D	2.0	3.18	1950.	0.	0.	137.7	49.8	197.9	1.587E-05	2.140E-05	1.587E-05
D	3.0	3.95	1950.	0.	0.	137.7	49.8	171.1	1.238E-05	1.443E-05	1.238E-05
D	4.0	3.89	1950.	0.	0.	137.7	49.8	155.6	1.026E-05	1.088E-05	1.026E-05
D	5.0	2.99	1950.	0.	0.	137.7	49.8	144.9	8.768E-06	8.655E-06	8.655E-06
D	6.0	1.34	1950.	0.	0.	137.7	49.8	137.7	7.720E-06	7.239E-06	7.239E-06
D	8.0	1.18	1950.	0.	0.	137.7	49.8	137.7	5.785E-06	5.424E-06	5.424E-06
D	10.0	.09	1950.	0.	0.	137.7	49.8	137.7	4.625E-06	4.337E-06	4.337E-06

E	.4	.28	1950.	0.	0.	97.9	33.8	185.5	1.194E-04	1.989E-04	1.194E-04
E	1.0	1.09	1950.	0.	0.	97.9	33.8	185.5	5.043E-05	8.399E-05	5.043E-05
E	2.0	4.05	1950.	0.	0.	97.9	33.8	183.3	2.523E-05	4.153E-05	2.523E-05
E	3.0	5.36	1950.	0.	0.	97.9	33.8	141.2	2.208E-05	2.800E-05	2.208E-05
E	4.0	6.60	1950.	0.	0.	97.9	33.8	119.8	1.963E-05	2.111E-05	1.963E-05
E	5.0	5.17	1950.	0.	0.	97.9	33.8	106.3	1.759E-05	1.680E-05	1.680E-05
E	6.0	2.83	1950.	0.	0.	97.9	33.8	97.9	1.598E-05	1.405E-05	1.405E-05
E	8.0	2.21	1950.	0.	0.	97.9	33.8	97.9	1.197E-05	1.053E-05	1.053E-05
E	10.0	.09	1950.	0.	0.	97.9	33.8	97.9	9.574E-06	8.417E-06	8.417E-06
F	.4	.34	1950.	0.	0.	67.6	22.0	158.2	2.155E-04	3.862E-04	2.155E-04
F	1.0	1.25	1950.	0.	0.	67.6	22.0	158.2	9.099E-05	1.631E-04	9.099E-05
F	2.0	5.04	1950.	0.	0.	67.6	22.0	155.7	4.573E-05	8.064E-05	4.573E-05
F	3.0	5.95	1950.	0.	0.	67.6	22.0	109.3	4.391E-05	5.436E-05	4.391E-05
F	4.0	5.73	1950.	0.	0.	67.6	22.0	87.7	4.125E-05	4.100E-05	4.100E-05
F	5.0	4.08	1950.	0.	0.	67.6	22.0	75.1	3.834E-05	3.261E-05	3.261E-05
F	6.0	.90	1950.	0.	0.	67.6	22.0	67.6	3.564E-05	2.728E-05	2.728E-05
F	8.0	.65	1950.	0.	0.	67.6	22.0	67.6	2.671E-05	2.044E-05	2.044E-05
F	10.0	.06	1950.	0.	0.	67.6	22.0	67.6	2.135E-05	1.634E-05	1.634E-05
G	.4	.53	1950.	0.	0.	46.6	14.3	150.9	3.478E-04	6.684E-04	3.478E-04
G	1.0	1.56	1950.	0.	0.	46.6	14.3	150.9	1.468E-04	2.822E-04	1.468E-04
G	2.0	3.52	1950.	0.	0.	46.6	14.3	147.5	7.429E-05	1.396E-04	7.429E-05
G	3.0	4.86	1950.	0.	0.	46.6	14.3	89.8	8.229E-05	9.408E-05	8.229E-05
G	4.0	3.02	1950.	0.	0.	46.6	14.3	66.2	8.420E-05	7.095E-05	7.095E-05
G	5.0	1.34	1950.	0.	0.	46.6	14.3	53.6	8.270E-05	5.645E-05	5.645E-05
G	6.0	.31	1950.	0.	0.	46.6	14.3	46.6	7.950E-05	4.721E-05	4.721E-05
G	8.0	.06	1950.	0.	0.	46.6	14.3	46.6	5.957E-05	3.538E-05	3.538E-05
G	10.0	.03	1950.	0.	0.	46.6	14.3	46.6	4.763E-05	2.829E-05	2.829E-05

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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:  CGS                                METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SCURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma=desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0SITE EXCLUSION BOUNDARY CALCULATIONS:
0 NNW SECTOR     BOUNDARY DISTANCE = 1950.0 METERS
0LATERAL PLUME MEANDER/BUILDING WAKE CREDIT ALLOWED
 AS A FUNCTION OF DOWNWIND DISTANCE.
 MEANDER CREDIT IS FOR WINDSPEEDS LESS THAN 6 MPS.
 BUILDING WAKE CREDIT ALLOWED:  C=   .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0   3.478E-04   2.155E-04   1.468E-04   1.194E-04   9.099E-05   8.229E-05   7.552E-05   7.429E-05   7.095E-05   5.645E-05
          .531        .873       2.429       2.712       3.957       8.814       8.989      12.507      15.527      16.866
        .05392      .08860      .24663      .27529      .40171      .89476      .91251     1.26965     1.57623     1.71213
0   5.043E-05   4.721E-05   4.573E-05   4.391E-05   4.100E-05   3.538E-05   3.345E-05   3.261E-05   3.189E-05   2.829E-05
         17.955      18.267      23.310      29.257      34.986      35.048      35.069      39.148      39.864      39.895
       1.82275     1.85435     2.36636     2.97003     3.55157     3.55789     3.56008     3.97411     4.04681     4.04997
0   2.728E-05   2.523E-05   2.208E-05   2.044E-05   1.963E-05   1.680E-05   1.634E-05   1.587E-05   1.412E-05   1.405E-05
         40.798      44.846      50.201      50.854      57.455      62.623      62.685      65.861      65.923      68.756
       4.14162     4.55249     5.09611     5.16248     5.83252     6.35717     6.36349     6.68587     6.69219     6.97980
0   1.271E-05   1.238E-05   1.053E-05   1.026E-05   8.655E-06   8.417E-06   7.239E-06   6.984E-06   5.424E-06   5.365E-06
         68.818      72.772      74.982      78.874      81.863      81.956      83.295      83.762      84.945      85.132
       6.98605     7.38744     7.61184     8.00691     8.31032     8.31981     8.45571     8.50312     8.62322     8.64218
0   4.708E-06   4.337E-06   3.551E-06   2.825E-06   2.653E-06   2.363E-06   2.186E-06   1.788E-06   1.770E 06   1.349E-06
         86.097      86.191      86.938      87.498      87.747      88.090      88.231      88.979      89.134      89.975
       8.74016     8.74964     8.82550     8.88239     8.90767     8.94244     8.95681     9.03266     9.04847     9.13380
0   1.073E-06   9.231E-07   8.975E-07   6.725E-07   5.377E-07   4.565E-07   3.077E-07   2.321E-07   1.846E-07   1.544E-07
         90.473      90.971      91.158      91.283      91.314      93.088      95.517      98.101      99.222      99.689
       9.18437     9.23494     9.25390     9.26654     9.26970     9.44986     9.69638     9.95871    10.07249    10.11989
0   1.157E-07   9.252E-08   7.125E-08
         99.907      99.969     100.000
      10.14202    10.14834    10.15150
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0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=   1.574
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=   3.548
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   5.092
                                                  HANDCHECK GRAPH:  SLOPE LT  1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   5.829
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   6.682
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   8.003
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 8)=   8.307
0  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
   8  1      -7.96393 -12.60986  -1.42101
   8  2      -9.55350 -12.97170  -1.58925
   8  3     -10.10203 -16.68478  -3.64558
   8  4     -10.72076 -13.61057  -1.76643
   8  5     -10.83848 -15.64077  -3.06011
   8  6     -11.05090 -17.93018  -4.58649
   8  7     -11.48682 -23.39418  -8.47585
   8  8     -11.65737     NUMXQ(K)=  8
     2.680E-04                .102              1.000
     1.646E-04                .305              3.000
     1.289E-04                .508              5.000
     9.038E-05               1.015             10.000
     7.235E-05               1.523             15.000
     6.025E-05               2.030             20.000
     5.189E-05               2.538             25.000
     4.574E-05               3.045             30.000
     4.097E-05               3.553             35.000
     3.275E-05               4.061             40.000
     2.676E-05               4.568             45.000
     2.224E-05               5.076             50.000
     2.040E-05               5.583             55.000
     1.836E-05               6.091             60.000
     1.621E-05               6.598             65.000
     1.373E-05               7.106             70.000
     1.162E-05               7.614             75.000
     9.620E-06               8.121             80.000
0    1.299E-04               0.5                4.93
0ANNUAL AVERAGE =   3.24E-06
0K=  8     FIVEXQ(K)= 1.299E-04     FIVEPR(K)= 4.925
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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23: 4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE N SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 10.0 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=1431.SQ.METERS	USED
A	.4	.20	1950.	0.	0.	342.4	1000.0	342.4	2.189E-06	2.186E-06	2.186E-06
A	1.0	.71	1950.	0.	0.	342.4	1000.0	342.4	9.244E-07	9.231E-07	9.231E-07
A	2.0	1.86	1950.	0.	0.	342.4	1000.0	342.4	4.571E-07	4.565E-07	4.565E-07
A	3.0	1.73	1950.	0.	0.	342.4	1000.0	342.4	3.081E-07	3.077E-07	3.077E-07
A	4.0	1.49	1950.	0.	0.	342.4	1000.0	342.4	2.324E-07	2.321E-07	2.321E-07
A	5.0	1.62	1950.	0.	0.	342.4	1000.0	342.4	1.849E-07	1.846E-07	1.846E-07
A	6.0	1.49	1950.	0.	0.	342.4	1000.0	342.4	1.546E-07	1.544E-07	1.544E-07
A	8.0	1.62	1950.	0.	0.	342.4	1000.0	342.4	1.159E-07	1.157E-07	1.157E-07
A	10.0	.52	1950.	0.	0.	342.4	1000.0	342.4	9.264E-08	9.252E-08	9.252E-08
A	13.0	.18	1950.	0.	0.	342.4	1000.0	342.4	7.135E-08	7.125E-08	7.125E-08
B	.4	.04	1950.	0.	0.	257.5	227.3	257.5	1.281E-05	1.271E-05	1.271E-05
B	1.0	.13	1950.	0.	0.	257.5	227.3	257.5	5.407E-06	5.365E-06	5.365E-06
B	2.0	.58	1950.	0.	0.	257.5	227.3	257.5	2.674E-06	2.653E-06	2.653E-06
B	3.0	.78	1950.	0.	0.	257.5	227.3	257.5	1.802E-06	1.788E-06	1.788E-06
B	4.0	.63	1950.	0.	0.	257.5	227.3	257.5	1.359E-06	1.349E-06	1.349E-06
B	5.0	.76	1950.	0.	0.	257.5	227.3	257.5	1.081E-06	1.073E-06	1.073E-06
B	6.0	.39	1950.	0.	0.	257.5	227.3	257.5	9.045E-07	8.975E-07	8.975E-07
B	8.0	.55	1950.	0.	0.	257.5	227.3	257.5	6.777E-07	6.725E-07	6.725E-07
B	10.0	.08	1950.	0.	0.	257.5	227.3	257.5	5.419E-07	5.377E-07	5.377E-07
C	.4	.05	1950.	0.	0.	195.5	112.3	195.5	3.414E-05	3.345E-05	3.345E-05
C	1.0	.16	1950.	0.	0.	195.5	112.3	195.5	1.442E-05	1.412E-05	1.412E-05
C	2.0	.37	1950.	0.	0.	195.5	112.3	195.5	7.129E-06	6.984E-06	6.984E-06
C	3.0	.68	1950.	0.	0.	195.5	112.3	195.5	4.805E-06	4.708E-06	4.708E-06
C	4.0	.76	1950.	0.	0.	195.5	112.3	195.5	3.624E-06	3.551E-06	3.551E-06
C	5.0	.52	1950.	0.	0.	195.5	112.3	195.5	2.883E-06	2.825E-06	2.825E-06
C	6.0	.52	1950.	0.	0.	195.5	112.3	195.5	2.412E-06	2.363E-06	2.363E-06
C	8.0	.39	1950.	0.	0.	195.5	112.3	195.5	1.807E-06	1.770E-06	1.770E-06
C	10.0	.16	1950.	0.	0.	195.5	112.3	195.5	1.445E-06	1.415E-06	1.415E-06
C	13.0	.05	1950.	0.	0.	195.5	112.3	195.5	1.113E-06	1.090E-06	1.090E-06
D	.4	.20	1950.	0.	0.	137.7	49.8	199.2	7.552E-05	1.025E-04	7.552E-05
D	1.0	.84	1950.	0.	0.	137.7	49.8	199.2	3.189E-05	4.328E-05	3.189E-05
D	2.0	2.67	1950.	0.	0.	137.7	49.8	197.9	1.587E-05	2.140E-05	1.587E-05
D	3.0	2.80	1950.	0.	0.	137.7	49.8	171.1	1.238E-05	1.443E-05	1.238E-05
D	4.0	3.30	1950.	0.	0.	137.7	49.8	155.6	1.026E-05	1.088E-05	1.026E-05
D	5.0	2.69	1950.	0.	0.	137.7	49.8	144.9	8.768E-06	8.655E-06	8.655E-06
D	6.0	1.88	1950.	0.	0.	137.7	49.8	137.7	7.720E-06	7.239E-06	7.239E-06
D	8.0	2.77	1950.	0.	0.	137.7	49.8	137.7	5.785E-06	5.424E-06	5.424E-06
D	10.0	1.02	1950.	0.	0.	137.7	49.8	137.7	4.625E-06	4.337E-06	4.337E-06
D	13.0	.34	1950.	0.	0.	137.7	49.8	137.7	3.562E-06	3.340E-06	3.340E-06
D	18.0	.05	1950.	0.	0.	137.7	49.8	137.7	2.573E-06	2.413E-06	2.413E-06

E	.4	.42	1950.	0.	0.	97.9	33.8	185.5	1.194E-04	1.989E-04	1.194E-04
E	1.0	1.62	1950.	0.	0.	97.9	33.8	185.5	5.043E-05	8.399E-05	5.043E-05
E	2.0	4.05	1950.	0.	0.	97.9	33.8	183.3	2.523E-05	4.153E-05	2.523E-05
E	3.0	4.00	1950.	0.	0.	97.9	33.8	141.2	2.208E-05	2.800E-05	2.208E-05
E	4.0	4.00	1950.	0.	0.	97.9	33.8	119.8	1.963E-05	2.111E-05	1.963E-05
E	5.0	4.58	1950.	0.	0.	97.9	33.8	106.3	1.759E-05	1.680E-05	1.680E-05
E	6.0	3.56	1950.	0.	0.	97.9	33.8	97.9	1.598E-05	1.405E-05	1.405E-05
E	8.0	3.50	1950.	0.	0.	97.9	33.8	97.9	1.197E-05	1.053E-05	1.053E-05
E	10.0	.63	1950.	0.	0.	97.9	33.8	97.9	9.574E-06	8.417E-06	8.417E-06
E	13.0	.21	1950.	0.	0.	97.9	33.8	97.9	7.374E-06	6.483E-06	6.483E-06
E	18.0	.05	1950.	0.	0.	97.9	33.8	97.9	5.327E-06	4.683E-06	4.683E 06
F	.4	.46	1950.	0.	0.	67.6	22.0	158.2	2.155E-04	3.862E-04	2.155E-04
F	1.0	1.67	1950.	0.	0.	67.6	22.0	158.2	9.099E-05	1.631E-04	9.099E-05
F	2.0	5.20	1950.	0.	0.	67.6	22.0	155.7	4.573E-05	8.064E-05	4.573E-05
F	3.0	6.07	1950.	0.	0.	67.6	22.0	109.3	4.391E-05	5.436E-05	4.391E-05
F	4.0	4.79	1950.	0.	0.	67.6	22.0	87.7	4.125E-05	4.100E-05	4.100E-05
F	5.0	2.46	1950.	0.	0.	67.6	22.0	75.1	3.834E-05	3.261E-05	3.261E-05
F	6.0	1.07	1950.	0.	0.	67.6	22.0	67.6	3.564E-05	2.728E-05	2.728E-05
F	8.0	.86	1950.	0.	0.	67.6	22.0	67.6	2.671E-05	2.044E 05	2.044E-05
F	10.0	.08	1950.	0.	0.	67.6	22.0	67.6	2.135E-05	1.634E-05	1.634E-05
F	13.0	.05	1950.	0.	0.	67.6	22.0	67.6	1.645E-05	1.259E-05	1.259E-05
G	.4	.49	1950.	0.	0.	46.6	14.3	150.9	3.478E-04	6.684E-04	3.478E-04
G	1.0	1.44	1950.	0.	0.	46.6	14.3	150.9	1.468E-04	2.822E-04	1.468E-04
G	2.0	3.37	1950.	0.	0.	46.6	14.3	147.5	7.429E-05	1.396E-04	7.429E-05
G	3.0	4.11	1950.	0.	0.	46.6	14.3	89.8	8.229E-05	9.408E-05	8.229E-05
G	4.0	2.59	1950.	0.	0.	46.6	14.3	66.2	8.420E-05	7.095E-05	7.095E-05
G	5.0	.71	1950.	0.	0.	46.6	14.3	53.6	8.270E-05	5.645E 05	5.645E-05
G	6.0	.24	1950.	0.	0.	46.6	14.3	46.6	7.950E-05	4.721E-05	4.721E-05
G	8.0	.08	1950.	0.	0.	46.6	14.3	46.6	5.957E-05	3.538E-05	3.538E-05
G	10.0	.05	1950.	0.	0.	46.6	14.3	46.6	4.763E-05	2.829E-05	2.829E-05

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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:  CGS                                METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma=desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0SITE EXCLUSION BOUNDARY CALCULATIONS:
0   N SECTOR     BOUNDARY DISTANCE = 1950.0 METERS
0LATERAL PLUME MEANDER/BUILDING WAKE CREDIT ALLOWED
 AS A FUNCTION OF DOWNWIND DISTANCE.
 MEANDER CREDIT IS FOR WINDSPEEDS LESS THAN 6 MPS.
 BUILDING WAKE CREDIT ALLOWED:  C=   .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0  3.478E-04  2.155E-04  1.468E-04  1.194E-04  9.099E-05  8.229E-05  7.552E-05  7.429E-05  7.095E-05  5.645E-05
       .491       .950      2.388      2.809      4.482      8.588      8.793     12.167     14.756     15.462
      .05932     .11480     .28863     .33940     .54168    1.03789    1.06258    1.47029    1.78319    1.86852
0  5.043E-05  4.721E-05  4.573E-05  4.391E-05  4.100E-05  3.538E-05  3.345E-05  3.261E-05  3.189E-05  2.829E-05
      17.083     17.319     22.523     28.591     33.377     33.455     33.510     35.968     36.805     36.857
      2.06448    2.09292    2.72187    3.45512    4.03350    4.04298    4.04954    4.34663    4.44777    4.45409
0  2.728E-05  2.523E-05  2.208E-05  2.044E-05  1.963E-05  1.680E-05  1.634E-05  1.587E-05  1.412E-05  1.405E-05
      37.930     41.983     45.985     46.848     50.849     55.426     55.505     58.172     58.329     61.886
      4.58367    5.07356    5.55713    5.66142    6.14499    6.69809    6.70757    7.02994    7.04891    7.47874
0  1.271E-05  1.259E-05  1.238E-05  1.053E-05  1.026E-05  8.655E-06  8.417E-06  7.239E-06  6.984E-06  6.483E-06
      61.929     61.981     64.780     68.284     71.580     74.274     74.901     76.784     77.150     77.360
      7.48395    7.49027    7.82845    8.25197    8.65020    8.97574    9.05159    9.27915    9.32340    9.34868
0  5.424E-06  5.365E-06  4.708E-06  4.683E-06  4.337E-06  3.551E-06  3.340E-06  2.825E-06  2.653E-06  2.413E-06
      80.132     80.263     80.943     80.995     82.015     82.773     83.113     83.637     84.212     84.264
      9.68370    9.69950    9.78168    9.78800    9.91126   10.00292   10.04400   10.10721   10.17675   10.18307
0  2.363E-06  2.186E-06  1.788E-06  1.770E-06  1.415E-06  1.349E-06  1.090E-06  1.073E-06  9.231E-07  8.975E-07
      84.787     84.988     85.773     86.165     86.322     86.949     87.002     87.760     88.466     88.859
     10.24628   10.27054   10.36535   10.41276   10.43172   10.50758   10.51390   10.60555   10.69089   10.73830
0  6.725E-07  5.377E-07  4.565E-07  3.077E-07  2.321E-07  1.846E-07  1.544E-07  1.157E-07  9.252E-08  7.125E-08
      89.408     89.486     91.343     93.069     94.560     96.182     97.672     99.294     99.817    100.000
     10.80467   10.81415   11.03855   11.24715   11.42730   11.62325   11.80340   11.99936   12.06257   12.08470
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0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

                                                HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=   1.781
                                                HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=   4.030
                                                HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   5.553
                                                HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   6.141
                                                HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   7.026
                                                HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   7.475
                                                HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 8)=   8.647
                                                HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 9)=   9.048
                                                HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(10)=   9.276
0  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
   9  1      -7.96393 -12.48020  -1.39288
   9  2      -9.55350 -12.80949  -1.54960
   9  3     -10.10203 -17.13169  -4.02338
   9  4     -10.72076 -14.44365  -2.33642
   9  5     -10.83848 -15.57631  -3.07046
   9  6     -11.05090 -16.57543  -3.74837
   9  7     -11.17289  16.93943  -4.00091
   9  8     -11.48682 -22.28249  -7.92144
   9  9     -11.68521 -26.26519 -10.89850
   9 10     -11.83598     NUMXQ(K)= 10
     2.601E-04              .121              1.000
     1.601E-04              .363              3.000
     1.254E-04              .604              5.000
     8.789E-05             1.208             10.000
     7.022E-05             1.813             15.000
     5.833E-05             2.417             20.000
     5.022E-05             3.021             25.000
     4.424E-05             3.625             30.000
     3.750E-05             4.230             35.000
     2.904E-05             4.834             40.000
     2.305E-05             5.438             45.000
     2.002E-05             6.042             50.000
     1.736E-05             6.647             55.000
     1.494E-05             7.251             60.000
     1.265E-05             7.855             65.000
     1.078E-05             8.459             70.000
     8.351E-06             9.064             75.000
0    1.375E-04             0.5                4.14
0ANNUAL AVERAGE =   3.81E-06
0K=  9     FIVEXQ(K)= 1.375E-04     FIVEPR(K)= 4.137
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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23:4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE NNE SECTOR.

STABILITY CLASS	WINDSPEED AT 10.0 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=1431.SQ.METERS	USED
A	.4	.20	1950.	0.	0.	342.4	1000.0	342.4	2.189E-06	2.186E-06	2.186E-06
A	1.0	.69	1950.	0.	0.	342.4	1000.0	342.4	9.244E-07	9.231E-07	9.231E-07
A	2.0	1.78	1950.	0.	0.	342.4	1000.0	342.4	4.571E-07	4.565E-07	4.565E-07
A	3.0	1.24	1950.	0.	0.	342.4	1000.0	342.4	3.081E-07	3.077E-07	3.077E-07
A	4.0	1.24	1950.	0.	0.	342.4	1000.0	342.4	2.324E-07	2.321E-07	2.321E-07
A	5.0	1.35	1950.	0.	0.	342.4	1000.0	342.4	1.849E-07	1.846E-07	1.846E-07
A	6.0	.91	1950.	0.	0.	342.4	1000.0	342.4	1.546E-07	1.544E-07	1.544E-07
A	8.0	1.06	1950.	0.	0.	342.4	1000.0	342.4	1.159E-07	1.157E-07	1.157E-07
A	10.0	.18	1950.	0.	0.	342.4	1000.0	342.4	9.264E-08	9.252E-08	9.252E-08
A	13.0	.07	1950.	0.	0.	342.4	1000.0	342.4	7.135E-08	7.125E-08	7.125E-08
A	18.0	.04	1950.	0.	0.	342.4	1000.0	342.4	5.154E-08	5.148E-08	5.148E-08
B	.4	.06	1950.	0.	0.	257.5	227.3	257.5	1.281E-05	1.271E-05	1.271E-05
B	1.0	.18	1950.	0.	0.	257.5	227.3	257.5	5.407E-06	5.365E-06	5.365E-06
B	2.0	.66	1950.	0.	0.	257.5	227.3	257.5	2.674E-06	2.653E-06	2.653E-06
B	3.0	.29	1950.	0.	0.	257.5	227.3	257.5	1.802E-06	1.788E-06	1.788E-06
B	4.0	.55	1950.	0.	0.	257.5	227.3	257.5	1.359E-06	1.349E-06	1.349E-06
B	5.0	.55	1950.	0.	0.	257.5	227.3	257.5	1.081E-06	1.073E-06	1.073E-06
B	6.0	.47	1950.	0.	0.	257.5	227.3	257.5	9.045E-07	8.975E-07	8.975E-07
B	8.0	.69	1950.	0.	0.	257.5	227.3	257.5	6.777E-07	6.725E-07	6.725E-07
B	10.0	.29	1950.	0.	0.	257.5	227.3	257.5	5.419E-07	5.377E-07	5.377E-07
B	13.0	.15	1950.	0.	0.	257.5	227.3	257.5	4.173E-07	4.141E-07	4.141E-07
C	.4	.09	1950.	0.	0.	195.5	112.3	195.5	3.414E-05	3.345E-05	3.345E-05
C	1.0	.25	1950.	0.	0.	195.5	112.3	195.5	1.442E-05	1.412E-05	1.412E-05
C	2.0	.66	1950.	0.	0.	195.5	112.3	195.5	7.129E-06	6.984E-06	6.984E-06
C	3.0	.51	1950.	0.	0.	195.5	112.3	195.5	4.805E-06	4.708E-06	4.708E-06
C	4.0	.51	1950.	0.	0.	195.5	112.3	195.5	3.624E-06	3.551E-06	3.551E-06
C	5.0	.55	1950.	0.	0.	195.5	112.3	195.5	2.883E-06	2.825E-06	2.825E-06
C	6.0	.66	1950.	0.	0.	195.5	112.3	195.5	2.412E-06	2.363E-06	2.363E-06
C	8.0	.73	1950.	0.	0.	195.5	112.3	195.5	1.807E-06	1.770E-06	1.770E-06
C	10.0	.36	1950.	0.	0.	195.5	112.3	195.5	1.445E-06	1.415E-06	1.415E-06
C	13.0	.22	1950.	0.	0.	195.5	112.3	195.5	1.113E-06	1.090E-06	1.090E-06
D	.4	.17	1950.	0.	0.	137.7	49.8	199.2	7.552E-05	1.025E-04	7.552E-05
D	1.0	.69	1950.	0.	0.	137.7	49.8	199.2	3.189E-05	4.328E-05	3.189E-05
D	2.0	2.80	1950.	0.	0.	137.7	49.8	197.9	1.587E-05	2.140E-05	1.587E-05
D	3.0	2.44	1950.	0.	0.	137.7	49.8	171.1	1.238E-05	1.443E-05	1.238E-05
D	4.0	2.37	1950.	0.	0.	137.7	49.8	155.6	1.026E-05	1.088E-05	1.026E-05
D	5.0	3.24	1950.	0.	0.	137.7	49.8	144.9	8.768E-06	8.655E-06	8.655E-06
D	6.0	2.77	1950.	0.	0.	137.7	49.8	137.7	7.720E-06	7.239E-06	7.239E-06
D	8.0	4.26	1950.	0.	0.	137.7	49.8	137.7	5.785E-06	5.424E-06	5.424E-06
D	10.0	2.48	1950.	0.	0.	137.7	49.8	137.7	4.625E-06	4.337E-06	4.337E-06
D	13.0	1.38	1950.	0.	0.	137.7	49.8	137.7	3.562E-06	3.340E-06	3.340E-06
D	18.0	.25	1950.	0.	0.	137.7	49.8	137.7	2.573E-06	2.413E-06	2.413E-06
E	.4	.50	1950.	0.	0.	97.9	33.8	185.5	1.194E-04	1.989E-04	1.194E-04
E	1.0	1.93	1950.	0.	0.	97.9	33.8	185.5	5.043E-05	8.399E-05	5.043E-05
E	2.0	4.52	1950.	0.	0.	97.9	33.8	183.3	2.523E-05	4.153E-05	2.523E-05
E	3.0	3.31	1950.	0.	0.	97.9	33.8	141.2	2.208E-05	2.800E-05	2.208E-05
E	4.0	2.26	1950.	0.	0.	97.9	33.8	119.8	1.963E-05	2.111E-05	1.963E-05
E	5.0	2.88	1950.	0.	0.	97.9	33.8	106.3	1.759E-05	1.680E-05	1.680E-05
E	6.0	3.64	1950.	0.	0.	97.9	33.8	97.9	1.598E-05	1.405E-05	1.405E-05
E	8.0	5.97	1950.	0.	0.	97.9	33.8	97.9	1.197E-05	1.053E-05	1.053E-05
E	10.0	4.01	1950.	0.	0.	97.9	33.8	97.9	9.574E-06	8.417E-06	8.417E-06
E	13.0	1.53	1950.	0.	0.	97.9	33.8	97.9	7.374E-06	6.483E-06	6.483E-06
E	18.0	.29	1950.	0.	0.	97.9	33.8	97.9	5.327E-06	4.683E-06	4.683E-06
F	.4	.47	1950.	0.	0.	67.6	22.0	158.2	2.155E-04	3.862E-04	2.155E-04
F	1.0	1.71	1950.	0.	0.	67.6	22.0	158.2	9.099E-05	1.631E-04	9.099E-05
F	2.0	5.24	1950.	0.	0.	67.6	22.0	155.7	4.573E-05	8.064E-05	4.573E-05
F	3.0	4.48	1950.	0.	0.	67.6	22.0	109.3	4.391E-05	5.436E-05	4.391E-05
F	4.0	3.31	1950.	0.	0.	67.6	22.0	87.7	4.125E-05	4.100E-05	4.100E-05
F	5.0	1.38	1950.	0.	0.	67.6	22.0	75.1	3.834E-05	3.261E-05	3.261E-05
F	6.0	1.24	1950.	0.	0.	67.6	22.0	67.6	3.564E-05	2.728E-05	2.728E-05
F	8.0	.98	1950.	0.	0.	67.6	22.0	67.6	2.671E-05	2.044E-05	2.044E-05
F	10.0	.55	1950.	0.	0.	67.6	22.0	67.6	2.135E-05	1.634E-05	1.634E-05
F	13.0	.11	1950.	0.	0.	67.6	22.0	67.6	1.645E-05	1.259E-05	1.259E-05
G	.4	.55	1950.	0.	0.	46.6	14.3	150.9	3.478E-04	6.684E-04	3.478E-04
G	1.0	1.60	1950.	0.	0.	46.6	14.3	150.9	1.468E-04	2.822E-04	1.468E-04
G	2.0	3.86	1950.	0.	0.	46.6	14.3	147.5	7.429E-05	1.396E-04	7.429E-05
G	3.0	1.78	1950.	0.	0.	46.6	14.3	89.8	8.229E-05	9.408E-05	8.229E-05
G	4.0	1.27	1950.	0.	0.	46.6	14.3	66.2	8.420E-05	7.095E-05	7.095E-05
G	5.0	.29	1950.	0.	0.	46.6	14.3	53.6	8.270E-05	5.645E-05	5.645E-05
G	6.0	.22	1950.	0.	0.	46.6	14.3	46.6	7.950E-05	4.721E-05	4.721E-05
G	8.0	.04	1950.	0.	0.	46.6	14.3	46.6	5.957E-05	3.538E-05	3.538E-05
G	13.0	.04	1950.	0.	0.	46.6	14.3	46.6	3.668E-05	2.178E-05	2.178E-05

```
1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
 /PLANT NAME:  CGS                               METEOROLOGICAL INSTRUMENTATION
  DATA PERIOD: JFD 1996-1999                     WIND SENSORS HEIGHT:  10.0 METERS
  TYPE OF RELEASE: GROUND LEVEL RELEASE          DELTA-T HEIGHTS:    10 - 75 METERS
  SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
  COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma-desert + P-G
  PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
 0SITE EXCLUSION BOUNDARY CALCULATIONS:
 0 NNE SECTOR     BOUNDARY DISTANCE = 1950.0 METERS
 0LATERAL PLUME MEANDER/BUILDING WAKE CREDIT ALLOWED
  AS A FUNCTION OF DOWNWIND DISTANCE.
  MEANDER CREDIT IS FOR WINDSPEEDS LESS THAN 6 MPS.
  BUILDING WAKE CREDIT ALLOWED:  C=   .5     A=  2861.     D=   70.0
  CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
 0BELOW 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.
 0   3.478E-04   2.155E-04   1.468E-04   1.194E-04   9.099E-05   8.229E-05   7.552E-05   7.429E-05   7.095E-05   5.645E-05
         .547        1.016       2.619       3.119       4.831       6.615       6.784      10.645      11.919      12.211
       .04745      .08820      .22726      .27067      .41921      .57408      .58874      .92376     1.03438     1.05966
 0   5.043E-05   4.721E-05   4.573E-05   4.391E-05   4.100E-05   3.538E-05   3.345E-05   3.261E-05   3.189E-05   2.728E-05
        14.141      14.360      19.604      24.084      27.398      27.434      27.522      28.906      29.598      30.837
       1.22717     1.24614     1.70126     2.09001     2.37762     2.38078     2.38842     2.50853     2.56858     2.67604
 0   2.523E-05   2.208E-05   2.178E-05   2.044E-05   1.963E-05   1.680E-05   1.634E-05   1.587E-05   1.412E-05   1.405E-05
        35.353      38.667      38.703      39.687      41.945      44.822      45.368      48.173      48.428      52.070
       3.06794     3.35555     3.35872     3.44405     3.64000     3.88969     3.93710     4.18046     4.20258     4.51864
 0   1.271E-05   1.259E-05   1.238E-05   1.053E-05   1.026E-05   8.655E-06   8.417E-06   7.239E-06   6.984E-06   6.483E-06
        52.130      52.239      54.679      60.652      63.019      66.261      70.267      73.035      73.690      75.220
       4.52385     4.53333     4.74509     5.26342     5.46885     5.75014     6.09780     6.33801     6.39490     6.52764
 0   5.424E-06   5.365E-06   4.708E-06   4.683E-06   4.337E-06   3.551E-06   3.340E-06   2.825E-06   2.653E-06   2.413E-06
        79.481      79.663      80.173      80.464      82.941      83.451      84.835      85.381      86.037      86.292
       6.89742     6.91323     6.95748     6.98276     7.19768     7.24193     7.36203     7.40944     7.46633     7.48845
 0   2.363E-06   2.186E-06   1.788E-06   1.770E-06   1.415E-06   1.349E-06   1.090E-06   1.073E-06   9.231E-07   8.975E-07
        86.947      87.144      87.435      88.164      88.528      89.074      89.293      89.839      90.531      91.004
       7.54534     7.56241     7.58769     7.65090     7.68251     7.72992     7.74888     7.79629     7.85634     7.89743
 0   6.725E-07   5.377E-07   4.565E-07   4.141E-07   3.077E-07   2.321E-07   1.846E-07   1.544E-07   1.157E-07   9.252E-08
        91.696      91.988      93.772      93.918      95.156      96.394      97.742      98.652      99.709      99.891
       7.95748     7.98276     8.13763     8.15027     8.25773     8.36519     8.48213     8.56114     8.65280     8.66860
     7.125E-08   5.148E-08
        99.964     100.000
       8.67492     8.67809
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0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=   1.033
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=   2.375
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   3.352
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   3.637
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   4.177
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   4.515
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 8)=   5.465
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 9)=   6.094
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(10)=   6.894

0  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
  10  1      -7.96393 -13.26395  -1.60343
  10  2      -9.55350 -13.37341  -1.65073
  10  3     -10.10203 -18.25259  -4.11275
  10  4     -10.72076 -16.57011  -3.19403
  10  5     -10.83848 -16.79641  -3.32014
  10  6     -11.05090 -16.80416  -3.32462
  10  7     -11.17289 -16.92332  -3.39497
  10  8     -11.48682 -17.32593  -3.64639
  10  9     -11.68521 -22.44506  -6.95560
  10 10     -12.12459     NUMXQ(K)= 10
     2.635E-04                .087              1.000
     1.532E-04                .260              3.000
     1.168E-04                .434              5.000
     7.880E-05                .868             10.000
     6.137E-05               1.302             15.000
     5.084E-05               1.736             20.000
     4.369E-05               2.170             25.000
     3.495E-05               2.603             30.000
     2.651E-05               3.037             35.000
     2.103E-05               3.471             40.000
     1.763E-05               3.905             45.000
     1.498E-05               4.339             50.000
     1.286E-05               4.773             55.000
     1.114E-05               5.207             60.000
     9.706E-06               5.641             65.000
     8.477E-06               6.075             70.000
     6.682E-06               6.509             75.000
0    1.080E-04               0.5                5.76
0ANNUAL AVERAGE =   2.67E-06
0K= 10     FIVEXQ(K)= 1.080E-04     FIVEPR(K)= 5.762
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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23: 4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE NE SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 10.0 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=1431.SQ.METERS	USED
A	.4	.22	1950.	0.	0.	342.4	1000.0	342.4	2.189E-06	2.186E-06	2.186E-06
A	1.0	.76	1950.	0.	0.	342.4	1000.0	342.4	9.244E-07	9.231E-07	9.231E-07
A	2.0	1.68	1950.	0.	0.	342.4	1000.0	342.4	4.571E-07	4.565E-07	4.565E-07
A	3.0	1.25	1950.	0.	0.	342.4	1000.0	342.4	3.081E-07	3.077E-07	3.077E-07
A	4.0	1.30	1950.	0.	0.	342.4	1000.0	342.4	2.324E-07	2.321E-07	2.321E-07
A	5.0	1.25	1950.	0.	0.	342.4	1000.0	342.4	1.849E-07	1.846E-07	1.846E-07
A	6.0	.60	1950.	0.	0.	342.4	1000.0	342.4	1.546E-07	1.544E-07	1.544E-07
A	8.0	1.14	1950.	0.	0.	342.4	1000.0	342.4	1.159E-07	1.157E-07	1.157E-07
A	10.0	.60	1950.	0.	0.	342.4	1000.0	342.4	9.264E-08	9.252E-08	9.252E-08
A	13.0	.05	1950.	0.	0.	342.4	1000.0	342.4	7.135E-08	7.125E-08	7.125E-08
B	.4	.05	1950.	0.	0.	257.5	227.3	257.5	1.281E-05	1.271E-05	1.271E-05
B	1.0	.16	1950.	0.	0.	257.5	227.3	257.5	5.407E-06	5.365E-06	5.365E-06
B	2.0	.87	1950.	0.	0.	257.5	227.3	257.5	2.674E-06	2.653E-06	2.653E-06
B	3.0	.54	1950.	0.	0.	257.5	227.3	257.5	1.802E-06	1.788E-06	1.788E-06
B	4.0	.38	1950.	0.	0.	257.5	227.3	257.5	1.359E-06	1.349E-06	1.349E-06
B	5.0	.54	1950.	0.	0.	257.5	227.3	257.5	1.081E-06	1.073E-06	1.073E-06
B	6.0	.27	1950.	0.	0.	257.5	227.3	257.5	9.045E-07	8.975E-07	8.975E-07
B	8.0	.87	1950.	0.	0.	257.5	227.3	257.5	6.777E-07	6.725E-07	6.725E-07
B	10.0	.43	1950.	0.	0.	257.5	227.3	257.5	5.419E-07	5.377E-07	5.377E-07
B	13.0	.43	1950.	0.	0.	257.5	227.3	257.5	4.173E-07	4.141E-07	4.141E-07
C	.4	.13	1950.	0.	0.	195.5	112.3	195.5	3.414E-05	3.345E-05	3.345E-05
C	1.0	.38	1950.	0.	0.	195.5	112.3	195.5	1.442E-05	1.412E-05	1.412E-05
C	2.0	.49	1950.	0.	0.	195.5	112.3	195.5	7.129E-06	6.984E-06	6.984E-06
C	3.0	.49	1950.	0.	0.	195.5	112.3	195.5	4.805E-06	4.708E-06	4.708E-06
C	4.0	.76	1950.	0.	0.	195.5	112.3	195.5	3.624E-06	3.551E 06	3.551E 06
C	5.0	.81	1950.	0.	0.	195.5	112.3	195.5	2.883E-06	2.825E-06	2.825E-06
C	6.0	.38	1950.	0.	0.	195.5	112.3	195.5	2.412E-06	2.363E-06	2.363E-06
C	8.0	.92	1950.	0.	0.	195.5	112.3	195.5	1.807E-06	1.770E-06	1.770E-06
C	10.0	.70	1950.	0.	0.	195.5	112.3	195.5	1.445E-06	1.415E-06	1.415E-06
C	13.0	.16	1950.	0.	0.	195.5	112.3	195.5	1.113E-06	1.090E-06	1.090E-06
D	.4	.53	1950.	0.	0.	137.7	49.8	199.2	7.552E-05	1.025E-04	7.552E-05
D	1.0	2.17	1950.	0.	0.	137.7	49.8	199.2	3.189E-05	4.328E-05	3.189E-05
D	2.0	2.33	1950.	0.	0.	137.7	49.8	197.9	1.587E-05	2.140E-05	1.587E-05
D	3.0	2.87	1950.	0.	0.	137.7	49.8	171.1	1.238E-05	1.443E-05	1.238E-05
D	4.0	2.76	1950.	0.	0.	137.7	49.8	155.6	1.026E-05	1.088E-05	1.026E-05
D	5.0	2.44	1950.	0.	0.	137.7	49.8	144.9	8.768E-06	8.655E-06	8.655E-06
D	6.0	1.84	1950.	0.	0.	137.7	49.8	137.7	7.720E-06	7.239E-06	7.239E-06
D	8.0	3.47	1950.	0.	0.	137.7	49.8	137.7	5.785E-06	5.424E-06	5.424E-06
D	10.0	2.44	1950.	0.	0.	137.7	49.8	137.7	4.625E-06	4.337E-06	4.337E-06
D	13.0	1.73	1950.	0.	0.	137.7	49.8	137.7	3.562E-06	3.340E-06	3.340E-06
D	18.0	.27	1950.	0.	0.	137.7	49.8	137.7	2.573E-06	2.413E-06	2.413E-06
E	.4	.77	1950.	0.	0.	97.9	33.8	185.5	1.194E-04	1.989E-04	1.194E-04
E	1.0	2.98	1950.	0.	0.	97.9	33.8	185.5	5.043E-05	8.399E-05	5.043E-05
E	2.0	4.82	1950.	0.	0.	97.9	33.8	183.3	2.523E-05	4.153E-05	2.523E-05
E	3.0	3.90	1950.	0.	0.	97.9	33.8	141.2	2.208E-05	2.800E-05	2.208E-05
E	4.0	3.41	1950.	0.	0.	97.9	33.8	119.8	1.963E-05	2.111E-05	1.963E-05
E	5.0	2.82	1950.	0.	0.	97.9	33.8	106.3	1.759E-05	1.680E-05	1.680E-05
E	6.0	3.41	1950.	0.	0.	97.9	33.8	97.9	1.598E-05	1.405E-05	1.405E-05
E	8.0	3.85	1950.	0.	0.	97.9	33.8	97.9	1.197E-05	1.053E-05	1.053E-05
E	10.0	3.36	1950.	0.	0.	97.9	33.8	97.9	9.574E-06	8.417E-06	8.417E-06
E	13.0	1.41	1950.	0.	0.	97.9	33.8	97.9	7.374E-06	6.483E-06	6.483E-06
E	18.0	.27	1950.	0.	0.	97.9	33.8	97.9	5.327E-06	4.683E-06	4.683E-06
F	.4	.83	1950.	0.	0.	67.6	22.0	158.2	2.155E-04	3.862E-04	2.155E-04
F	1.0	3.03	1950.	0.	0.	67.6	22.0	158.2	9.099E-05	1.631E-04	9.099E-05
F	2.0	5.20	1950.	0.	0.	67.6	22.0	155.7	4.573E-05	8.064E-05	4.573E-05
F	3.0	3.52	1950.	0.	0.	67.6	22.0	109.3	4.391E-05	5.436E-05	4.391E-05
F	4.0	2.00	1950.	0.	0.	67.6	22.0	87.7	4.125E-05	4.100E-05	4.100E-05
F	5.0	.87	1950.	0.	0.	67.6	22.0	75.1	3.834E-05	3.261E-05	3.261E-05
F	6.0	.54	1950.	0.	0.	67.6	22.0	67.6	3.564E-05	2.728E-05	2.728E-05
F	8.0	.54	1950.	0.	0.	67.6	22.0	67.6	2.671E-05	2.044E-05	2.044E-05
F	10.0	.05	1950.	0.	0.	67.6	22.0	67.6	2.135E-05	1.634E-05	1.634E-05
F	13.0	.11	1950.	0.	0.	67.6	22.0	67.6	1.645E-05	1.259E-05	1.259E-05
G	.4	1.15	1950.	0.	0.	46.6	14.3	150.9	3.478E-04	6.684E-04	3.478E-04
G	1.0	3.36	1950.	0.	0.	46.6	14.3	150.9	1.468E-04	2.822E-04	1.468E-04
G	2.0	4.06	1950.	0.	0.	46.6	14.3	147.5	7.429E-05	1.396E-04	7.429E-05
G	3.0	1.41	1950.	0.	0.	46.6	14.3	89.8	8.229E-05	9.408E-05	8.229E-05
G	4.0	.81	1950.	0.	0.	46.6	14.3	66.2	8.420E-05	7.095E-05	7.095E-05
G	18.0	.05	1950.	0.	0.	46.6	14.3	46.6	2.650E-05	1.574E-05	1.574E-05

```
1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:   CGS                               METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma=desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0SITE EXCLUSION BOUNDARY CALCULATIONS:
0  NE SECTOR      BOUNDARY DISTANCE = 1950.0 METERS
0LATERAL PLUME MEANDER/BUILDING WAKE CREDIT ALLOWED
 AS A FUNCTION OF DOWNWIND DISTANCE.
 MEANDER CREDIT IS FOR WINDSPEEDS LESS THAN 6 MPS.
 BUILDING WAKE CREDIT ALLOWED:   C=    .5     A=  2861.     D=    70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0   3.478E-04   2.155E-04   1.468E-04   1.194E-04   9.099E-05   8.229E-05   7.552E-05   7.429E-05   7.095E-05   5.043E-05
        1.146       1.978       5.337       6.109       9.143      10.551      11.080      15.143      15.956      18.935
      .06687      .11541      .31137      .35641      .53340      .61557      .64644      .88348      .93089     1.10472
0   4.573E-05   4.391E-05   4.100E-05   3.345E-05   3.261E-05   3.189E-05   2.728E-05   2.523E-05   2.208E-05   2.044E-05
       24.136      27.657      29.662      29.793      30.660      32.827      33.368      38.190      42.090      42.632
      1.40814     1.61357     1.73051     1.73816     1.78873     1.91515     1.94676     2.22805     2.45561     2.48721
0   1.963E-05   1.680E-05   1.634E-05   1.587E-05   1.574E-05   1.412E-05   1.405E-05   1.271E-05   1.259E-05   1.238E-05
       46.045      48.862      48.916      51.246      51.300      51.679      55.092      55.145      55.254      58.125
      2.68633     2.85068     2.85384     2.98974     2.99290     3.01502     3.21414     3.21726     3.22359     3.39110
0   1.053E-05   1.026E-05   8.655E-06   8.417E-06   7.239E-06   6.984E-06   6.483E-06   5.424E-06   5.365E-06   4.708E-06
       61.971      64.734      67.172      70.531      72.373      72.860      74.269      77.736      77.898      78.386
      3.61549     3.77668     3.91891     4.11486     4.22232     4.25077     4.33294     4.53522     4.54470     4.57314
0   4.683E-06   4.337E-06   3.551E-06   3.340E-06   2.825E-06   2.653E-06   2.413E-06   2.363E-06   2.186E-06   1.788E-06
       78.657      81.095      81.853      83.587      84.399      85.266      85.537      85.916      86.132      86.673
      4.58895     4.73117     4.77542     4.87656     4.92396     4.97453     4.99034     5.01246     5.02504     5.05664
0   1.770E-06   1.415E-06   1.349E-06   1.090E-06   1.073E-06   9.231E-07   8.975E-07   6.725E-07   5.377E-07   4.565E-07
       87.594      88.299      88.678      88.840      89.382      90.140      90.411      91.278      91.711      93.391
      5.11037     5.15146     5.17358     5.18307     5.21467     5.25892     5.27472     5.32529     5.35057     5.44855
0   4.141E-07   3.077E-07   2.321E-07   1.846E-07   1.544E-07   1.157E-07   9.252E-08   7.125E-08
       93.824      95.070      96.370      97.616      98.212      99.350      99.946     100.000
      5.47384     5.54653     5.62238     5.69508     5.72984     5.79621     5.83098     5.83414
```

```
0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=    .311
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=    .882
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   1.612
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   1.729
                                                    HANDCHECK GRAPH:  SLOPE LT  1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   2.684
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   3.211
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 8)=   3.773
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 9)=   4.111
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(10)=   4.532
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(11)=   4.728
0  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
  11  1      -7.96393 -13.82232  -1.82612
  11  2      -8.82616 -13.96152  -1.87700
  11  3      -9.50758 -14.89846  -2.27185
  11  4     -10.03335 -15.25933  -2.44036
  11  5     -10.10203 -18.56647  -4.00526
  11  6     -10.83848 -19.02328  -4.24202
  11  7     -11.17289 -19.12908  -4.29918
  11  8     -11.48682 -20.36734  -4.99577
  11  9     -11.68521 -28.34707  -9.58738
  11 10     -12.12459 -30.86035 -11.07271
  11 11     -12.34829     NUMXQ(K)= 11
                                                    BACK EXTRAPOLATION FOR  1 PERCENTILE.
     3.735E-04               .058              1.000
     2.056E-04               .175              3.000
     1.527E-04               .292              5.000
     9.836E-05               .583             10.000
     7.478E-05               .875             15.000
     5.858E-05              1.167             20.000
     4.810E-05              1.459             25.000
     4.025E-05              1.750             30.000
     3.126E-05              2.042             35.000
     2.498E-05              2.334             40.000
     2.042E-05              2.625             45.000
     1.686E-05              2.917             50.000
     1.409E-05              3.209             55.000
     1.191E-05              3.500             60.000
     1.017E-05              3.792             65.000
     8.567E-06              4.084             70.000
     6.384E-06              4.376             75.000
     4.661E-06              4.667             80.000
0    1.088E-04              0.5                8.57
0ANNUAL AVERAGE =   2.44E-06
0K= 11     FIVEXQ(K)= 1.088E-04     FIVEPR(K)= 8.570
```

1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23: 4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE ENE SECTOR.

STABILITY CLASS	WINDSPEED AT 10.0 METERS METER/SEC	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=1431.SQ.METERS	USED
A	.4	.39	1950.	0.	0.	342.4	1000.0	342.4	2.189E-06	2.186E-06	2.186E-06
A	1.0	1.36	1950.	0.	0.	342.4	1000.0	342.4	9.244E-07	9.231E-07	9.231E-07
A	2.0	1.51	1950.	0.	0.	342.4	1000.0	342.4	4.571E-07	4.565E-07	4.565E-07
A	3.0	1.29	1950.	0.	0.	342.4	1000.0	342.4	3.081E-07	3.077E-07	3.077E-07
A	4.0	.91	1950.	0.	0.	342.4	1000.0	342.4	2.324E-07	2.321E-07	2.321E-07
A	5.0	.61	1950.	0.	0.	342.4	1000.0	342.4	1.849E-07	1.846E-07	1.846E-07
A	6.0	.30	1950.	0.	0.	342.4	1000.0	342.4	1.546E-07	1.544E-07	1.544E-07
A	8.0	.98	1950.	0.	0.	342.4	1000.0	342.4	1.159E-07	1.157E-07	1.157E-07
A	10.0	.61	1950.	0.	0.	342.4	1000.0	342.4	9.264E-08	9.252E-08	9.252E-08
A	13.0	.23	1950.	0.	0.	342.4	1000.0	342.4	7.135E-08	7.125E-08	7.125E-08
B	.4	.07	1950.	0.	0.	257.5	227.3	257.5	1.281E-05	1.271E-05	1.271E-05
B	1.0	.23	1950.	0.	0.	257.5	227.3	257.5	5.407E-06	5.365E-06	5.365E-06
B	2.0	.68	1950.	0.	0.	257.5	227.3	257.5	2.674E-06	2.653E-06	2.653E-06
B	3.0	.38	1950.	0.	0.	257.5	227.3	257.5	1.802E-06	1.788E-06	1.788E-06
B	4.0	.45	1950.	0.	0.	257.5	227.3	257.5	1.359E-06	1.349E-06	1.349E-06
B	5.0	.30	1950.	0.	0.	257.5	227.3	257.5	1.081E-06	1.073E-06	1.073E-06
B	8.0	.15	1950.	0.	0.	257.5	227.3	257.5	6.777E-07	6.725E-07	6.725E-07
B	10.0	.30	1950.	0.	0.	257.5	227.3	257.5	5.419E-07	5.377E-07	5.377E-07
C	.4	.08	1950.	0.	0.	195.5	112.3	195.5	3.414E-05	3.345E-05	3.345E-05
C	1.0	.23	1950.	0.	0.	195.5	112.3	195.5	1.442E-05	1.412E-05	1.412E-05
C	2.0	1.06	1950.	0.	0.	195.5	112.3	195.5	7.129E-06	6.984E-06	6.984E-06
C	3.0	.45	1950.	0.	0.	195.5	112.3	195.5	4.805E-06	4.708E-06	4.708E-06
C	4.0	.53	1950.	0.	0.	195.5	112.3	195.5	3.624E-06	3.551E-06	3.551E-06
C	5.0	.83	1950.	0.	0.	195.5	112.3	195.5	2.883E-06	2.825E-06	2.825E-06
C	6.0	.38	1950.	0.	0.	195.5	112.3	195.5	2.412E-06	2.363E-06	2.363E-06
C	8.0	.68	1950.	0.	0.	195.5	112.3	195.5	1.807E-06	1.770E-06	1.770E-06
C	10.0	1.06	1950.	0.	0.	195.5	112.3	195.5	1.445E-06	1.415E-06	1.415E-06
C	13.0	.08	1950.	0.	0.	195.5	112.3	195.5	1.113E-06	1.090E-06	1.090E-06
D	.4	.46	1950.	0.	0.	137.7	49.8	199.2	7.552E-05	1.025E-04	7.552E-05
D	1.0	1.89	1950.	0.	0.	137.7	49.8	199.2	3.189E-05	4.328E-05	3.189E-05
D	2.0	2.95	1950.	0.	0.	137.7	49.8	197.9	1.587E-05	2.140E-05	1.587E-05
D	3.0	3.55	1950.	0.	0.	137.7	49.8	171.1	1.238E-05	1.443E-05	1.238E-05
D	4.0	1.89	1950.	0.	0.	137.7	49.8	155.6	1.026E-05	1.088E-05	1.026E-05
D	5.0	1.29	1950.	0.	0.	137.7	49.8	144.9	8.768E-06	8.655E-06	8.655E-06
D	6.0	1.97	1950.	0.	0.	137.7	49.8	137.7	7.720E-06	7.239E-06	7.239E-06
D	8.0	3.71	1950.	0.	0.	137.7	49.8	137.7	5.785E-06	5.424E-06	5.424E-06
D	10.0	3.18	1950.	0.	0.	137.7	49.8	137.7	4.625E-06	4.337E-06	4.337E-06
D	13.0	.83	1950.	0.	0.	137.7	49.8	137.7	3.562E-06	3.340E-06	3.340E-06

E	.4	1.02	1950.	0.	0.	97.9	33.8	185.5	1.194E-04	1.989E-04	1.194E-04
E	1.0	3.93	1950.	0.	0.	97.9	33.8	185.5	5.043E-05	8.399E-05	5.043E-05
E	2.0	7.34	1950.	0.	0.	97.9	33.8	183.3	2.523E-05	4.153E-05	2.523E-05
E	3.0	5.22	1950.	0.	0.	97.9	33.8	141.2	2.208E-05	2.800E-05	2.208E-05
E	4.0	3.40	1950.	0.	0.	97.9	33.8	119.8	1.963E-05	2.111E-05	1.963E-05
E	5.0	2.57	1950.	0.	0.	97.9	33.8	106.3	1.759E-05	1.680E-05	1.680E-05
E	6.0	2.50	1950.	0.	0.	97.9	33.8	97.9	1.598E-05	1.405E-05	1.405E-05
E	8.0	2.87	1950.	0.	0.	97.9	33.8	97.9	1.197E-05	1.053E-05	1.053E-05
E	10.0	.91	1950.	0.	0.	97.9	33.8	97.9	9.574E-06	8.417E-06	8.417E-06
E	13.0	.45	1950.	0.	0.	97.9	33.8	97.9	7.374E-06	6.483E-06	6.483E-06
F	.4	1.37	1950.	0.	0.	67.6	22.0	158.2	2.155E-04	3.862E-04	2.155E-04
F	1.0	4.99	1950.	0.	0.	67.6	22.0	158.2	9.099E-05	1.631E-04	9.099E-05
F	2.0	6.35	1950.	0.	0.	67.6	22.0	155.7	4.573E-05	8.064E-05	4.573E-05
F	3.0	4.39	1950.	0.	0.	67.6	22.0	109.3	4.391E-05	5.436E-05	4.391E-05
F	4.0	2.12	1950.	0.	0.	67.6	22.0	87.7	4.125E-05	4.100E-05	4.100E-05
F	5.0	1.21	1950.	0.	0.	67.6	22.0	75.1	3.834E-05	3.261E-05	3.261E-05
F	6.0	.38	1950.	0.	0.	67.6	22.0	67.6	3.564E-05	2.728E-05	2.728E-05
F	8.0	.38	1950.	0.	0.	67.6	22.0	67.6	2.671E-05	2.044E-05	2.044E-05
F	13.0	.08	1950.	0.	0.	67.6	22.0	67.6	1.645E-05	1.259E-05	1.259E-05
G	.4	1.47	1950.	0.	0.	46.6	14.3	150.9	3.478E-04	6.684E-04	3.478E-04
G	1.0	4.31	1950.	0.	0.	46.6	14.3	150.9	1.468E-04	2.822E-04	1.468E-04
G	2.0	2.87	1950.	0.	0.	46.6	14.3	147.5	7.429E-05	1.396E-04	7.429E-05
G	3.0	1.21	1950.	0.	0.	46.6	14.3	89.8	8.229E-05	9.408E-05	8.229E-05
G	4.0	.45	1950.	0.	0.	46.6	14.3	66.2	8.420E-05	7.095E-05	7.095E-05
G	5.0	.30	1950.	0.	0.	46.6	14.3	53.6	8.270E-05	5.645E-05	5.645E-05
G	6.0	.08	1950.	0.	0.	46.6	14.3	46.6	7.950E-05	4.721E-05	4.721E-05

```
1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:   CGS                               METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma=desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0SITE EXCLUSION BOUNDARY CALCULATIONS:
0 ENE SECTOR      BOUNDARY DISTANCE = 1950.0 METERS
0LATERAL PLUME MEANDER/BUILDING WAKE CREDIT ALLOWED
 AS A FUNCTION OF DOWNWIND DISTANCE.
 MEANDER CREDIT IS FOR WINDSPEEDS LESS THAN 6 MPS.
 BUILDING WAKE CREDIT ALLOWED:   C=   .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0   3.478E-04   2.155E-04   1.468E-04   1.194E-04   9.099E-05   8.229E-05   7.552E-05   7.429E-05   7.095E-05   5.645E-05
        1.471       2.840       7.151       8.170      13.161      14.371      14.833      17.707      18.160      18.463
       .06147      .11869      .29884      .34143      .55002      .60059      .61988      .73998      .75895      .77159
0   5.043E-05   4.721E-05   4.573E-05   4.391E-05   4.100E-05   3.345E-05   3.261E-05   3.189E-05   2.728E-05   2.523E-05
       22.396      22.471      28.824      33.210      35.328      35.406      36.616      38.507      38.885      46.221
       .93594      .93910     1.20459     1.38790     1.47639     1.47967     1.53024     1.60925     1.62506     1.93163
0   2.208E-05   2.044E-05   1.963E-05   1.680E-05   1.587E-05   1.412E-05   1.405E-05   1.271E-05   1.259E-05   1.238E-05
       51.439      51.817      55.221      57.792      60.741      60.968      63.464      63.539      63.614      67.169
       2.14971     2.16551     2.30774     2.41520     2.53846     2.54794     2.65224     2.65536     2.65852     2.80707
0   1.053E-05   1.026E-05   8.655E-06   8.417E-06   7.239E-06   6.984E-06   6.483E-06   5.424E-06   5.365E-06   4.708E-06
       70.043      71.933      73.219      74.127      76.093      77.152      77.606      81.311      81.538      81.992
       2.92717     3.00618     3.05991     3.09784     3.18002     3.22426     3.24323     3.39809     3.40758     3.42654
0   4.337E-06   3.551E-06   3.340E-06   2.825E-06   2.653E-06   2.363E-06   2.186E-06   1.788E-06   1.770E-06   1.415E-06
       85.168      85.698      86.530      87.361      88.042      88.420      88.807      89.185      89.866      90.925
       3.55928     3.58141     3.61617     3.65094     3.67938     3.69519     3.71136     3.72716     3.75560     3.79985
0   1.349E-06   1.090E-06   1.073E-06   9.231E-07   6.725E-07   5.377E-07   4.565E-07   3.077E-07   2.321E-07   1.846E-07
       91.379      91.454      91.757      93.118      93.269      93.572      95.084      96.370      97.277      97.882
       3.81882     3.82198     3.83462     3.89151     3.89783     3.91047     3.97368     4.02741     4.06534     4.09062
0   1.544E-07   1.157E-07   9.252E-08   7.125E-08
       98.185      99.168      99.773     100.000
       4.10327     4.14435     4.16964     4.17912
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```
0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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)=    .299
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=    .739
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   1.386
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   1.475
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   2.305
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   2.536
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 8)=   2.804
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 9)=   3.003
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(10)=   3.556
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(11)=   3.676
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0  K   I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
   12  1      -7.96393 -13.73655  -1.78597
   12  2      -8.82616 -14.83578  -2.18577
   12  3      -9.50758 -14.92596  -2.22277
   12  4     -10.03335 -16.24856  -2.82364
   12  5     -10.10203 -18.89100  -4.03755
   12  6     -10.83848 -21.28527  -5.23804
   12  7      11.05090 -22.22259  -5.71777
   12  8     -11.29960 -23.19934  -6.22906
   12  9     -11.48682 -32.91046 -11.39371
   12 10     -12.34829 -70.98909 -32.49347
   12 11     -12.83980      NUMXQ(K)= 11
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BACK EXTRAPOLATION FOR  1 PERCENTILE.
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     4.223E-04                .042              1.000
     2.392E-04                .125              3.000
     1.804E 04                .209              5.000
     1.150E-04                .418             10.000
     8.458E-05                .627             15.000
     6.731E-05                .836             20.000
     5.597E-05               1.045             25.000
     4.795E-05               1.254             30.000
     4.142E-05               1.463             35.000
     3.357E-05               1.672             40.000
     2.768E-05               1.881             45.000
     2.322E-05               2.090             50.000
     1.976E-05               2.299             55.000
     1.632E-05               2.507             60.000
     1.343E-05               2.716             65.000
     1.106E-05               2.925             70.000
     8.315E-06               3.134             75.000
     5.987E-06               3.343             80.000
     4.382E-06               3.552             85.000
0    1.006E-04               0.5               11.96
0ANNUAL AVERAGE =   2.14E-06
0K= 12     FIVEXQ(K)= 1.006E-04     FIVEPR(K)=11.964
```

1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23:4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE E SECTOR.

STABILITY CLASS	WINDSPEED AT 10.0 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=1431.SQ.METERS	USED
A	.4	.28	1950.	0.	0.	342.4	1000.0	342.4	2.189E-06	2.186E-06	2.186E-06
A	1.0	1.00	1950.	0.	0.	342.4	1000.0	342.4	9.244E-07	9.231E-07	9.231E-07
A	2.0	2.00	1950.	0.	0.	342.4	1000.0	342.4	4.571E-07	4.565E-07	4.565E 07
A	3.0	.60	1950.	0.	0.	342.4	1000.0	342.4	3.081E-07	3.077E-07	3.077E-07
A	4.0	.73	1950.	0.	0.	342.4	1000.0	342.4	2.324E-07	2.321E-07	2.321E-07
A	5.0	.53	1950.	0.	0.	342.4	1000.0	342.4	1.849E-07	1.846E-07	1.846E-07
A	6.0	.33	1950.	0.	0.	342.4	1000.0	342.4	1.546E-07	1.544E-07	1.544E-07
A	8.0	.60	1950.	0.	0.	342.4	1000.0	342.4	1.159E-07	1.157E-07	1.157E-07
A	10.0	.47	1950.	0.	0.	342.4	1000.0	342.4	9.264E-08	9.252E-08	9.252E-08
A	13.0	.20	1950.	0.	0.	342.4	1000.0	342.4	7.135E-08	7.125E-08	7.125E-08
B	.4	.09	1950.	0.	0.	257.5	227.3	257.5	1.281E-05	1.271E-05	1.271E-05
B	1.0	.27	1950.	0.	0.	257.5	227.3	257.5	5.407E-06	5.365E-06	5.365E-06
B	2.0	.60	1950.	0.	0.	257.5	227.3	257.5	2.674E-06	2.653E-06	2.653E-06
B	3.0	.33	1950.	0.	0.	257.5	227.3	257.5	1.802E-06	1.788E-06	1.788E-06
B	4.0	.40	1950.	0.	0.	257.5	227.3	257.5	1.359E-06	1.349E-06	1.349E-06
B	5.0	.40	1950.	0.	0.	257.5	227.3	257.5	1.081E-06	1.073E-06	1.073E-06
B	6.0	.60	1950.	0.	0.	257.5	227.3	257.5	9.045E-07	8.975E-07	8.975E-07
B	8.0	.67	1950.	0.	0.	257.5	227.3	257.5	6.777E-07	6.725E-07	6.725E-07
B	10.0	.07	1950.	0.	0.	257.5	227.3	257.5	5.419E-07	5.377E-07	5.377E-07
B	13.0	.27	1950.	0.	0.	257.5	227.3	257.5	4.173E-07	4.141E-07	4.141E-07
C	.4	.07	1950.	0.	0.	195.5	112.3	195.5	3.414E-05	3.345E-05	3.345E-05
C	1.0	.20	1950.	0.	0.	195.5	112.3	195.5	1.442E-05	1.412E-05	1.412E-05
C	2.0	.47	1950.	0.	0.	195.5	112.3	195.5	7.129E-06	6.984E-06	6.984E-06
C	3.0	.60	1950.	0.	0.	195.5	112.3	195.5	4.805E-06	4.708E-06	4.708E-06
C	4.0	.53	1950.	0.	0.	195.5	112.3	195.5	3.624E-06	3.551E-06	3.551E-06
C	5.0	.47	1950.	0.	0.	195.5	112.3	195.5	2.883E-06	2.825E-06	2.825E-06
C	6.0	.47	1950.	0.	0.	195.5	112.3	195.5	2.412E-06	2.363E-06	2.363E-06
C	8.0	.67	1950.	0.	0.	195.5	112.3	195.5	1.807E-06	1.770E-06	1.770E-06
C	10.0	.27	1950.	0.	0.	195.5	112.3	195.5	1.445E-06	1.415E-06	1.415E-06
C	13.0	.07	1950.	0.	0.	195.5	112.3	195.5	1.113E-06	1.090E-06	1.090E-06
D	.4	.57	1950.	0.	0.	137.7	49.8	199.2	7.552E-05	1.025E-04	7.552E-05
D	1.0	2.33	1950.	0.	0.	137.7	49.8	199.2	3.189E-05	4.328E-05	3.189E-05
D	2.0	3.33	1950.	0.	0.	137.7	49.8	197.9	1.587E-05	2.140E-05	1.587E-05
D	3.0	1.93	1950.	0.	0.	137.7	49.8	171.1	1.238E-05	1.443E-05	1.238E-05
D	4.0	2.13	1950.	0.	0.	137.7	49.8	155.6	1.026E-05	1.088E-05	1.026E-05
D	5.0	2.67	1950.	0.	0.	137.7	49.8	144.9	8.768E-06	8.655E-06	8.655E-06
D	6.0	1.93	1950.	0.	0.	137.7	49.8	137.7	7.720E-06	7.239E-06	7.239E-06
D	8.0	2.27	1950.	0.	0.	137.7	49.8	137.7	5.785E-06	5.424E-06	5.424E-06
D	10.0	1.20	1950.	0.	0.	137.7	49.8	137.7	4.625E-06	4.337E-06	4.337E-06
D	13.0	.33	1950.	0.	0.	137.7	49.8	137.7	3.562E-06	3.340E-06	3.340E-06
D	18.0	.13	1950.	0.	0.	137.7	49.8	137.7	2.573E-06	2.413E-06	2.413E-06
E	.4	1.07	1950.	0.	0.	97.9	33.8	185.5	1.194E-04	1.989E-04	1.194E-04
E	1.0	4.13	1950.	0.	0.	97.9	33.8	185.5	5.043E-05	8.399E-05	5.043E-05
E	2.0	6.53	1950.	0.	0.	97.9	33.8	183.3	2.523E-05	4.153E-05	2.523E-05
E	3.0	5.40	1950.	0.	0.	97.9	33.8	141.2	2.208E-05	2.800E-05	2.208E-05
E	4.0	5.73	1950.	0.	0.	97.9	33.8	119.8	1.963E-05	2.111E-05	1.963E-05
E	5.0	2.87	1950.	0.	0.	97.9	33.8	106.3	1.759E-05	1.680E-05	1.680E-05
E	6.0	2.87	1950.	0.	0.	97.9	33.8	97.9	1.598E-05	1.405E-05	1.405E-05
E	8.0	2.73	1950.	0.	0.	97.9	33.8	97.9	1.197E-05	1.053E-05	1.053E-05
E	10.0	.80	1950.	0.	0.	97.9	33.8	97.9	9.574E-06	8.417E-06	8.417E-06
E	13.0	.40	1950.	0.	0.	97.9	33.8	97.9	7.374E-06	6.483E-06	6.483E-06
F	.4	1.37	1950.	0.	0.	67.6	22.0	158.2	2.155E-04	3.862E-04	2.155E-04
F	1.0	5.00	1950.	0.	0.	67.6	22.0	158.2	9.099E-05	1.631E-04	9.099E-05
F	2.0	6.80	1950.	0.	0.	67.6	22.0	155.7	4.573E-05	8.064E-05	4.573E-05
F	3.0	3.47	1950.	0.	0.	67.6	22.0	109.3	4.391E-05	5.436E-05	4.391E-05
F	4.0	3.00	1950.	0.	0.	67.6	22.0	87.7	4.125E-05	4.100E-05	4.100E-05
F	5.0	2.13	1950.	0.	0.	67.6	22.0	75.1	3.834E-05	3.261E-05	3.261E-05
F	6.0	1.07	1950.	0.	0.	67.6	22.0	67.6	3.564E-05	2.728E-05	2.728E-05
F	8.0	.13	1950.	0.	0.	67.6	22.0	67.6	2.671E-05	2.044E-05	2.044E-05
F	10.0	.07	1950.	0.	0.	67.6	22.0	67.6	2.135E-05	1.634E-05	1.634E-05
G	.4	1.41	1950.	0.	0.	46.6	14.3	150.9	3.478E-04	6.684E-04	3.478E-04
G	1.0	4.13	1950.	0.	0.	46.6	14.3	150.9	1.468E-04	2.822E-04	1.468E-04
G	2.0	3.60	1950.	0.	0.	46.6	14.3	147.5	7.429E-05	1.396E-04	7.429E-05
G	3.0	1.00	1950.	0.	0.	46.6	14.3	89.8	8.229E-05	9.408E-05	8.229E-05
G	4.0	.87	1950.	0.	0.	46.6	14.3	66.2	8.420E-05	7.095E-05	7.095E-05
G	5.0	.33	1950.	0.	0.	46.6	14.3	53.6	8.270E-05	5.645E-05	5.645E-05

```
1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:  CGS                                METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma-desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0SITE EXCLUSION BOUNDARY CALCULATIONS:
0   E SECTOR     BOUNDARY DISTANCE = 1950.0 METERS
0LATERAL PLUME MEANDER/BUILDING WAKE CREDIT ALLOWED
 AS A FUNCTION OF DOWNWIND DISTANCE.
 MEANDER CREDIT IS FOR WINDSPEEDS LESS THAN 6 MPS.
 BUILDING WAKE CREDIT ALLOWED:   C=   .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0  3.478E-04  2.155E-04  1.468E-04  1.194E-04  9.099E-05  8.229E-05  7.552E-05  7.429E-05  7.095E-05  5.645E-05
       1.410      2.782      6.915      7.986     12.987     13.987     14.556     18.156     19.023     19.356
        .06687     .13188     .32784     .37861     .61565     .66306     .69007     .86074     .90183     .91763
0  5.043E-05  4.573E-05  4.391E-05  4.100E-05  3.345E-05  3.261E-05  3.189E-05  2.728E-05  2.523E-05  2.208E-05
      23.490     30.290     33.757     36.757     36.826     38.959     41.293     42.360     48.893     54.293
       1.11359    1.43596    1.60031    1.74254    1.74581    1.84695    1.95757    2.00814    2.31787    2.57388
0  2.044E-05  1.963E-05  1.680E-05  1.634E-05  1.587E-05  1.412E-05  1.405E-05  1.271E-05  1.238E-05  1.053E-05
      54.427     60.160     63.027     63.093     66.427     66.627     69.494     69.582     71.515     74.248
       2.58020    2.85201    2.98791    2.99107    3.14910    3.15858    3.29449    3.29865    3.39031    3.51989
0  1.026E-05  8.655E-06  8.417E-06  7.239E-06  6.984E-06  6.483E-06  5.424E-06  5.365E-06  4.708E-06  4.337E-06
      76.382     79.048     79.849     81.782     82.249     82.649     84.915     85.182     85.782     86.982
       3.62103    3.74745    3.78538    3.87703    3.89916    3.91812    4.02558    4.03822    4.06667    4.12356
0  3.551E-06  3.340E-06  2.825E-06  2.653E-06  2.413E-06  2.363E-06  2.186E-06  1.788E-06  1.770E-06  1.415E-06
      87.515     87.849     88.315     88.915     89.049     89.515     89.800     90.133     90.800     91.066
       4.14884    4.16465    4.18677    4.21521    4.22154    4.24366    4.25713    4.27294    4.30454    4.31719
0  1.349E-06  1.090E-06  1.073E-06  9.231E-07  8.975E-07  6.725E-07  5.377E-07  4.565E-07  4.141E-07  3.077E-07
      91.466     91.533     91.933     92.933     93.533     94.200     94.267     96.267     96.533     97.133
       4.33615    4.33931    4.35827    4.40568    4.43413    4.46573    4.46889    4.56371    4.57635    4.60480
0  2.321E-07  1.846E-07  1.544E-07  1.157E-07  9.252E-08  7.125E-08
      97.867     98.400     98.733     99.333     99.800    100.000
       4.63956    4.66485    4.68065    4.70909    4.73122    4.74070
```

```
0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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
```

```
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=    .327
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=    .860
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   1.741
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   2.849
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   3.146
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   3.291
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 8)=   3.618
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 9)=   3.782
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(10)=   3.896
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(11)=   4.035
```

```
0  K   I    XQSAVE(K,I)   XQINT(K,I) XQSLOP(K,I)
   13  1      -7.96393 -13.61866  -1.76264
   13  2      -8.82616 -14.33346  -2.02554
   13  3      -9.50758 -14.71473  -2.18556
   13  4     -10.10203 -17.60688  -3.55591
   13  5     -10.83848 -20.09266  -4.86186
   13  6     -11.05090 -22.31064  -6.05449
   13  7     -11.17289 -24.69171  -7.34884
   13  8     -11.48682 -29.03314  -9.76495
   13  9     -11.68521 -35.98671 -13.67904
   13 10     -11.87188 -40.48720 -16.23192
   13 11     -12.13560      NUMXQ(K)= 11
```

BACK EXTRAPOLATION FOR 1 PERCENTILE.

```
     4.131E-04                .047              1.000
     2.345E-04                .142              3.000
     1.769E-04                .237              5.000
     1.141E-04                .474             10.000
     8.552E-05                .711             15.000
     6.869E-05                .948             20.000
     5.713E-05               1.185             25.000
     4.894E-05               1.422             30.000
     4.280E-05               1.659             35.000
     3.627E-05               1.896             40.000
     3.050E-05               2.133             45.000
     2.606E-05               2.370             50.000
     2.254E-05               2.607             55.000
     1.971E-05               2.844             60.000
     1.663E-05               3.081             65.000
     1.372E-05               3.318             70.000
     1.091E-05               3.556             75.000
     8.318E-06               3.793             80.000
     5.452E-06               4.030             85.000
0    1.100E-04               0.5               10.55
0ANNUAL AVERAGE =   2.47E-06
0K= 13     FIVEXQ(K)= 1.100E-04     FIVEPR(K)=10.547
```

1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23: 4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE ESE SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 10.0 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=1431.SQ.METERS	USED
A	.4	.24	1950.	0.	0.	342.4	1000.0	342.4	2.189E-06	2.186E-06	2.186E-06
A	1.0	.84	1950.	0.	0.	342.4	1000.0	342.4	9.244E-07	9.231E-07	9.231E-07
A	2.0	1.19	1950.	0.	0.	342.4	1000.0	342.4	4.571E-07	4.565E-07	4.565E-07
A	3.0	.65	1950.	0.	0.	342.4	1000.0	342.4	3.081E-07	3.077E-07	3.077E-07
A	4.0	.19	1950.	0.	0.	342.4	1000.0	342.4	2.324E-07	2.321E-07	2.321E-07
A	5.0	.23	1950.	0.	0.	342.4	1000.0	342.4	1.849E-07	1.846E-07	1.846E-07
A	6.0	.23	1950.	0.	0.	342.4	1000.0	342.4	1.546E-07	1.544E-07	1.544E-07
A	8.0	.42	1950.	0.	0.	342.4	1000.0	342.4	1.159E-07	1.157E-07	1.157E-07
A	10.0	.23	1950.	0.	0.	342.4	1000.0	342.4	9.264E-08	9.252E-08	9.252E-08
A	13.0	.27	1950.	0.	0.	342.4	1000.0	342.4	7.135E-08	7.125E-08	7.125E-08
B	.4	.04	1950.	0.	0.	257.5	227.3	257.5	1.281E-05	1.271E-05	1.271E-05
B	1.0	.11	1950.	0.	0.	257.5	227.3	257.5	5.407E-06	5.365E-06	5.365E-06
B	2.0	.31	1950.	0.	0.	257.5	227.3	257.5	2.674E-06	2.653E-06	2.653E-06
B	3.0	.27	1950.	0.	0.	257.5	227.3	257.5	1.802E-06	1.788E-06	1.788E-06
B	4.0	.27	1950.	0.	0.	257.5	227.3	257.5	1.359E-06	1.349E-06	1.349E-06
B	5.0	.23	1950.	0.	0.	257.5	227.3	257.5	1.081E-06	1.073E-06	1.073E-06
B	6.0	.27	1950.	0.	0.	257.5	227.3	257.5	9.045E-07	8.975E-07	8.975E-07
B	8.0	.19	1950.	0.	0.	257.5	227.3	257.5	6.777E-07	6.725E-07	6.725E-07
B	10.0	.08	1950.	0.	0.	257.5	227.3	257.5	5.419E-07	5.377E-07	5.377E-07
B	13.0	.15	1950.	0.	0.	257.5	227.3	257.5	4.173E-07	4.141E-07	4.141E-07
C	.4	.04	1950.	0.	0.	195.5	112.3	195.5	3.414E-05	3.345E-05	3.345E-05
C	1.0	.11	1950.	0.	0.	195.5	112.3	195.5	1.442E-05	1.412E-05	1.412E-05
C	2.0	.34	1950.	0.	0.	195.5	112.3	195.5	7.129E-06	6.984E-06	6.984E-06
C	3.0	.46	1950.	0.	0.	195.5	112.3	195.5	4.805E-06	4.708E-06	4.708E-06
C	4.0	.11	1950.	0.	0.	195.5	112.3	195.5	3.624E-06	3.551E-06	3.551E-06
C	5.0	.27	1950.	0.	0.	195.5	112.3	195.5	2.883E-06	2.825E-06	2.825E-06
C	6.0	.27	1950.	0.	0.	195.5	112.3	195.5	2.412E-06	2.363E-06	2.363E-06
C	8.0	.19	1950.	0.	0.	195.5	112.3	195.5	1.807E-06	1.770E-06	1.770E-06
C	10.0	.34	1950.	0.	0.	195.5	112.3	195.5	1.445E-06	1.415E-06	1.415E-06
C	13.0	.31	1950.	0.	0.	195.5	112.3	195.5	1.113E-06	1.090E-06	1.090E-06
D	.4	.36	1950.	0.	0.	137.7	49.8	199.2	7.552E-05	1.025E-04	7.552E-05
D	1.0	1.49	1950.	0.	0.	137.7	49.8	199.2	3.189E-05	4.328E-05	3.189E-05
D	2.0	1.91	1950.	0.	0.	137.7	49.8	197.9	1.587E-05	2.140E-05	1.587E-05
D	3.0	2.45	1950.	0.	0.	137.7	49.8	171.1	1.238E-05	1.443E 05	1.238E-05
D	4.0	2.45	1950.	0.	0.	137.7	49.8	155.6	1.026E-05	1.088E-05	1.026E-05
D	5.0	1.80	1950.	0.	0.	137.7	49.8	144.9	8.768E-06	8.655E-06	8.655E-06
D	6.0	2.07	1950.	0.	0.	137.7	49.8	137.7	7.720E-06	7.239E-06	7.239E-06
D	8.0	3.94	1950.	0.	0.	137.7	49.8	137.7	5.785E-06	5.424E-06	5.424E-06
D	10.0	1.95	1950.	0.	0.	137.7	49.8	137.7	4.625E-06	4.337E-06	4.337E-06
D	13.0	.69	1950.	0.	0.	137.7	49.8	137.7	3.562E-06	3.340E-06	3.340E-06
D	18.0	.08	1950.	0.	0.	137.7	49.8	137.7	2.573E-06	2.413E-06	2.413E-06
E	.4	.89	1950.	0.	0.	97.9	33.8	185.5	1.194E-04	1.989E-04	1.194E-04
E	1.0	3.44	1950.	0.	0.	97.9	33.8	185.5	5.043E-05	8.399E-05	5.043E-05
E	2.0	5.40	1950.	0.	0.	97.9	33.8	183.3	2.523E-05	4.153E-05	2.523E-05
E	3.0	5.82	1950.	0.	0.	97.9	33.8	141.2	2.208E-05	2.800E-05	2.208E-05
E	4.0	5.51	1950.	0.	0.	97.9	33.8	119.8	1.963E-05	2.111E-05	1.963E-05
E	5.0	6.16	1950.	0.	0.	97.9	33.8	106.3	1.759E-05	1.680E-05	1.680E-05
E	6.0	5.36	1950.	0.	0.	97.9	33.8	97.9	1.598E-05	1.405E-05	1.405E-05
E	8.0	5.78	1950.	0.	0.	97.9	33.8	97.9	1.197E-05	1.053E-05	1.053E-05
E	10.0	2.45	1950.	0.	0.	97.9	33.8	97.9	9.574E-06	8.417E-06	8.417E-06
E	13.0	.77	1950.	0.	0.	97.9	33.8	97.9	7.374E-06	6.483E-06	6.483E-06
E	18.0	.08	1950.	0.	0.	97.9	33.8	97.9	5.327E-06	4.683E-06	4.683E-06
F	.4	.85	1950.	0.	0.	67.6	22.0	158.2	2.155E-04	3.862E-04	2.155E-04
F	1.0	3.10	1950.	0.	0.	67.6	22.0	158.2	9.099E-05	1.631E-04	9.099E-05
F	2.0	5.36	1950.	0.	0.	67.6	22.0	155.7	4.573E-05	8.064E-05	4.573E-05
F	3.0	3.87	1950.	0.	0.	67.6	22.0	109.3	4.391E-05	5.436E-05	4.391E-05
F	4.0	3.94	1950.	0.	0.	67.6	22.0	87.7	4.125E-05	4.100E-05	4.100E-05
F	5.0	2.07	1950.	0.	0.	67.6	22.0	75.1	3.834E-05	3.261E-05	3.261E-05
F	6.0	1.07	1950.	0.	0.	67.6	22.0	67.6	3.564E-05	2.728E-05	2.728E-05
F	8.0	.54	1950.	0.	0.	67.6	22.0	67.6	2.671E-05	2.044E-05	2.044E-05
G	.4	.86	1950.	0.	0.	46.6	14.3	150.9	3.478E-04	6.684E-04	3.478E-04
G	1.0	2.53	1950.	0.	0.	46.6	14.3	150.9	1.468E-04	2.822E-04	1.468E-04
G	2.0	3.71	1950.	0.	0.	46.6	14.3	147.5	7.429E-05	1.396E-04	7.429E-05
G	3.0	1.68	1950.	0.	0.	46.6	14.3	89.8	8.229E-05	9.408E-05	8.229E-05
G	4.0	.54	1950.	0.	0.	46.6	14.3	66.2	8.420E-05	7.095E-05	7.095E-05
G	5.0	.19	1950.	0.	0.	46.6	14.3	53.6	8.270E-05	5.645E-05	5.645E-05

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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:   CGS                               METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma=desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0SITE EXCLUSION BOUNDARY CALCULATIONS:
0 ESE SECTOR      BOUNDARY DISTANCE = 1950.0 METERS
0LATERAL PLUME MEANDER/BUILDING WAKE CREDIT ALLOWED
 AS A FUNCTION OF DOWNWIND DISTANCE.
 MEANDER CREDIT IS FOR WINDSPEEDS LESS THAN 6 MPS.
 BUILDING WAKE CREDIT ALLOWED:   C=    .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0   3.478E-04   2.155E-04   1.468E-04   1.194E-04   9.099E-05   8.229E-05   7.552E-05   7.429E-05   7.095E-05   5.645E-05
        .862       1.712       4.238       5.131       8.231       9.915      10.279      13.992      14.527      14.719
     .07118      .14140      .35000      .42370      .67970      .81877      .84887     1.15544     1.19969     1.21549
0   5.043E-05   4.573E-05   4.391E-05   4.100E-05   3.345E-05   3.261E-05   3.189E-05   2.728E-05   2.523E-05   2.208E-05
       18.163      23.521      27.387      31.329      31.369      33.435      34.928      36.000      41.396      47.213
     1.49994     1.94242     2.26163     2.58717     2.59045     2.76112     2.88438     2.97288     3.41851     3.89892
0   2.044E-05   1.963E-05   1.680E-05   1.587E-05   1.412E 05   1.405E-05   1.271E-05   1.238E-05   1.053E-05   1.026E-05
       47.749      53.260      59.422      61.336      61.451      66.809      66.847      69.296      75.075      77.524
     3.94317     4.39829     4.90714     5.06516     5.07465     5.51712     5.52025     5.72252     6.19977     6.40204
0   8.655E-06   8.417E-06   7.239E-06   6.984E-06   6.483E-06   5.424E-06   5.365E-06   4.708E-06   4.683E-06   4.337E-06
       79.323      81.773      83.839      84.184      84.949      88.891      89.006      89.465      89.542      91.494
     6.55059     6.75287     6.92354     6.95198     7.01519     7.34073     7.35021     7.38814     7.39446     7.55565
0   3.551E-06   3.340E-06   2.825E-06   2.653E-06   2.413E-06   2.363E-06   2.186E-06   1.788E-06   1.770E-06   1.415E-06
       91.609      92.298      92.565      92.872      92.948      93.216      93.455      93.733      93.915      94.259
     7.56513     7.62202     7.64414     7.66943     7.67575     7.69787     7.71764     7.73976     7.75556     7.78401
0   1.349E-06   1.090E-06   1.073E-06   9.231E-07   8.975E-07   6.725E-07   5.377E-07   4.565E-07   4.141E-07   3.077E-07
       94.527      94.833      95.063      95.905      96.173      96.364      96.441      97.627      97.780      98.431
     7.80613     7.83142     7.85038     7.91991     7.94204     7.95784     7.96416     8.06214     8.07478     8.12851
0   2.321E-07   1.846E-07   1.544E-07   1.157E-07   9.252E-08   7.125E-08
       98.622      98.852      99.081      99.502      99.732     100.000
     8.14431     8.16327     8.18224     8.21700     8.23597     8.25809
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0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=   1.154
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=   2.585
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   4.903
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   5.513
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   6.398
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   6.749
                                                    HANDCHECK GRAPH:  SLOPE LT  1.0 FOR LOW PERCENTAGES.  XSAVE( 8)=   7.337
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 9)=   7.552
0  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
  14  1      -7.96393 -13.32810  -1.68151
  14  2      -9.50758 -13.64578  -1.82133
  14  3     -10.10203 -16.05955  -3.06190
  14  4     -10.99428 -16.15178  -3.11765
  14  5     -11.17289 -17.87401  -4.19607
  14  6     -11.48682 -22.49471  -7.23166
  14  7     -11.68521 -26.74901 -10.07782
  14  8     -12.12459 -33.38115 -14.64808
  14  9     -12.34829      NUMXQ(K)=  9
     3.234E-04                .083              1.000
     1.836E-04                .248              3.000
     1.383E-04                .413              5.000
     9.177E-05                .826             10.000
     7.076E-05               1.239             15.000
     5.757E-05               1.652             20.000
     4.877E-05               2.065             25.000
     4.241E-05               2.477             30.000
     3.538E-05               2.890             35.000
     2.952E-05               3.303             40.000
     2.507E-05               3.716             45.000
     2.159E-05               4.129             50.000
     1.882E-05               4.542             55.000
     1.655E-05               4.955             60.000
     1.466E-05               5.368             65.000
     1.275E-05               5.781             70.000
     1.102E-05               6.194             75.000
     9.135E-06               6.606             80.000
     6.873E-06               7.019             85.000
     4.928E-06               7.432             90.000
0    1.239E-04               0.5                6.05
0ANNUAL AVERAGE =   3.37E-06
0K= 14      FIVEXQ(K)= 1.239E-04      FIVEPR(K)= 6.055
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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23:4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE SE SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 10.0 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=1431.SQ.METERS	USED
A	.4	.21	1950.	0.	0.	342.4	1000.0	342.4	2.189E-06	2.186E-06	2.186E-06
A	1.0	.73	1950.	0.	0.	342.4	1000.0	342.4	9.244E-07	9.231E-07	9.231E-07
A	2.0	1.42	1950.	0.	0.	342.4	1000.0	342.4	4.571E-07	4.565E-07	4.565E-07
A	3.0	.78	1950.	0.	0.	342.4	1000.0	342.4	3.081E-07	3.077E-07	3.077E-07
A	4.0	.55	1950.	0.	0.	342.4	1000.0	342.4	2.324E-07	2.321E-07	2.321E-07
A	5.0	.12	1950.	0.	0.	342.4	1000.0	342.4	1.849E-07	1.846E-07	1.846E-07
A	6.0	.15	1950.	0.	0.	342.4	1000.0	342.4	1.546E-07	1.544E-07	1.544E-07
A	8.0	.17	1950.	0.	0.	342.4	1000.0	342.4	1.159E-07	1.157E-07	1.157E-07
A	10.0	.12	1950.	0.	0.	342.4	1000.0	342.4	9.264E-08	9.252E-08	9.252E-08
A	13.0	.09	1950.	0.	0.	342.4	1000.0	342.4	7.135E-08	7.125E-08	7.125E-08
B	.4	.08	1950.	0.	0.	257.5	227.3	257.5	1.281E-05	1.271E-05	1.271E-05
B	1.0	.23	1950.	0.	0.	257.5	227.3	257.5	5.407E-06	5.365E-06	5.365E-06
B	2.0	.35	1950.	0.	0.	257.5	227.3	257.5	2.674E-06	2.653E-06	2.653E-06
B	3.0	.26	1950.	0.	0.	257.5	227.3	257.5	1.802E-06	1.788E-06	1.788E-06
B	4.0	.35	1950.	0.	0.	257.5	227.3	257.5	1.359E-06	1.349E-06	1.349E-06
B	5.0	.15	1950.	0.	0.	257.5	227.3	257.5	1.081E-06	1.073E-06	1.073E-06
B	6.0	.12	1950.	0.	0.	257.5	227.3	257.5	9.045E-07	8.975E-07	8.975E-07
B	8.0	.06	1950.	0.	0.	257.5	227.3	257.5	6.777E-07	6.725E-07	6.725E-07
B	10.0	.03	1950.	0.	0.	257.5	227.3	257.5	5.419E-07	5.377E-07	5.377E-07
C	.4	.03	1950.	0.	0.	195.5	112.3	195.5	3.414E-05	3.345E-05	3.345E-05
C	1.0	.09	1950.	0.	0.	195.5	112.3	195.5	1.442E-05	1.412E-05	1.412E-05
C	2.0	.46	1950.	0.	0.	195.5	112.3	195.5	7.129E-06	6.984E-06	6.984E-06
C	3.0	.49	1950.	0.	0.	195.5	112.3	195.5	4.805E-06	4.708E-06	4.708E-06
C	4.0	.20	1950.	0.	0.	195.5	112.3	195.5	3.624E-06	3.551E-06	3.551E-06
C	5.0	.20	1950.	0.	0.	195.5	112.3	195.5	2.883E-06	2.825E-06	2.825E-06
C	6.0	.12	1950.	0.	0.	195.5	112.3	195.5	2.412E-06	2.363E-06	2.363E-06
C	8.0	.09	1950.	0.	0.	195.5	112.3	195.5	1.807E-06	1.770E-06	1.770E-06
C	10.0	.20	1950.	0.	0.	195.5	112.3	195.5	1.445E-06	1.415E-06	1.415E-06
D	.4	.26	1950.	0.	0.	137.7	49.8	199.2	7.552E-05	1.025E-04	7.552E-05
D	1.0	1.05	1950.	0.	0.	137.7	49.8	199.2	3.189E-05	4.328E-05	3.189E-05
D	2.0	4.33	1950.	0.	0.	137.7	49.8	197.9	1.587E-05	2.140E-05	1.587E-05
D	3.0	4.30	1950.	0.	0.	137.7	49.8	171.1	1.238E-05	1.443E-05	1.238E-05
D	4.0	3.81	1950.	0.	0.	137.7	49.8	155.6	1.026E-05	1.088E-05	1.026E-05
D	5.0	2.85	1950.	0.	0.	137.7	49.8	144.9	8.768E-06	8.655E-06	8.655E-06
D	6.0	2.12	1950.	0.	0.	137.7	49.8	137.7	7.720E-06	7.239E-06	7.239E-06
D	8.0	1.48	1950.	0.	0.	137.7	49.8	137.7	5.785E-06	5.424E-06	5.424E-06
D	10.0	.81	1950.	0.	0.	137.7	49.8	137.7	4.625E-06	4.337E-06	4.337E-06
D	13.0	.46	1950.	0.	0.	137.7	49.8	137.7	3.562E-06	3.340E-06	3.340E-06
D	18.0	.06	1950.	0.	0.	137.7	49.8	137.7	2.573E-06	2.413E-06	2.413E-06

E	.4	.60	1950.	0.	0.	97.9	33.8	185.5	1.194E-04	1.989E-04	1.194E-04
E	1.0	2.32	1950.	0.	0.	97.9	33.8	185.5	5.043E-05	8.399E-05	5.043E-05
E	2.0	5.99	1950.	0.	0.	97.9	33.8	183.3	2.523E-05	4.153E-05	2.523E-05
E	3.0	7.00	1950.	0.	0.	97.9	33.8	141.2	2.208E-05	2.800E-05	2.208E-05
E	4.0	5.61	1950.	0.	0.	97.9	33.8	119.8	1.963E-05	2.111E-05	1.963E-05
E	5.0	4.48	1950.	0.	0.	97.9	33.8	106.3	1.759E-05	1.680E-05	1.680E-05
E	6.0	3.57	1950.	0.	0.	97.9	33.8	97.9	1.598E-05	1.405E-05	1.405E-05
E	8.0	3.25	1950.	0.	0.	97.9	33.8	97.9	1.197E-05	1.053E-05	1.053E-05
E	10.0	.90	1950.	0.	0.	97.9	33.8	97.9	9.574E-06	8.417E-06	8.417E-06
E	13.0	.29	1950.	0.	0.	97.9	33.8	97.9	7.374E-06	6.483E-06	6.483E-06
F	.4	.77	1950.	0.	0.	67.6	22.0	158.2	2.155E-04	3.862E-04	2.155E-04
F	1.0	2.79	1950.	0.	0.	67.6	22.0	158.2	9.099E-05	1.631E-04	9.099E-05
F	2.0	6.74	1950.	0.	0.	67.6	22.0	155.7	4.573E-05	8.064E-05	4.573E-05
F	3.0	4.71	1950.	0.	0.	67.6	22.0	109.3	4.391E-05	5.436E-05	4.391E-05
F	4.0	4.07	1950.	0.	0.	67.6	22.0	87.7	4.125E-05	4.100E-05	4.100E-05
F	5.0	1.48	1950.	0.	0.	67.6	22.0	75.1	3.834E-05	3.261E-05	3.261E-05
F	6.0	.58	1950.	0.	0.	67.6	22.0	67.6	3.564E-05	2.728E-05	2.728E-05
F	8.0	.06	1950.	0.	0.	67.6	22.0	67.6	2.671E-05	2.044E-05	2.044E-05
G	.4	.86	1950.	0.	0.	46.6	14.3	150.9	3.478E-04	6.684E-04	3.478E-04
G	1.0	2.53	1950.	0.	0.	46.6	14.3	150.9	1.468E-04	2.822E-04	1.468E-04
G	2.0	6.13	1950.	0.	0.	46.6	14.3	147.5	7.429E-05	1.396E-04	7.429E-05
G	3.0	3.63	1950.	0.	0.	46.6	14.3	89.8	8.229E-05	9.408E-05	8.229E-05
G	4.0	2.03	1950.	0.	0.	46.6	14.3	66.2	8.420E-05	7.095E-05	7.095E-05
G	5.0	.17	1950.	0.	0.	46.6	14.3	53.6	8.270E-05	5.645E-05	5.645E-05
G	6.0	.06	1950.	0.	0.	46.6	14.3	46.6	7.950E-05	4.721E-05	4.721E-05

```
1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:  CGS                                METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma-desert + F-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0SITE EXCLUSION BOUNDARY CALCULATIONS:
0  SE SECTOR     BOUNDARY DISTANCE = 1950.0 METERS
0LATERAL PLUME MEANDER/BUILDING WAKE CREDIT ALLOWED
 AS A FUNCTION OF DOWNWIND DISTANCE.
 MEANDER CREDIT IS FOR WINDSPEEDS LESS THAN 6 MPS.
 BUILDING WAKE CREDIT ALLOWED:  C=   .5    A=  2861.    D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0   3.478E-04   2.155E-04   1.468E-04   1.194E-04   9.099E-05   8.229E-05   7.552E-05   7.429E-05   7.095E-05   5.645E-05
        .863       1.628       4.156       4.758       7.548      11.180      11.436      17.567      19.601      19.776
      .09383      .17705      .45202      .51753      .82095     1.21602     1.24380     1.91068     2.13191     2.15088
0   5.043E-05   4.721E-05   4.573E-05   4.391E-05   4.100E-05   3.345E-05   3.261E-05   3.189E-05   2.728E-05   2.523E-05
       22.100      22.158      28.900      33.607      37.676      37.706      39.188      40.234      40.815      46.801
      2.40372     2.41004     3.14329     3.65530     4.09778     4.10106     4.26225     4.37603     4.43924     5.09031
0   2.208E-05   2.044E-05   1.963E-05   1.680E-05   1.587E-05   1.412E-05   1.405E-05   1.271E-05   1.238E-05   1.053E-05
       53.804      53.862      59.471      63.946      68.275      68.363      71.937      72.013      76.314      79.569
      5.85201     5.85833     6.46831     6.95504     7.42596     7.43544     7.82419     7.83252     8.30029     8.65427
0   1.026E-05   8.655E-06   8.417E-06   7.239E-06   6.984E-06   6.483E-06   5.424E-06   5.365E-06   4.708E-06   4.337E-06
       83.375      86.223      87.124      89.245      89.710      90.001      91.483      91.715      92.209      93.023
      9.06830     9.37804     9.47602     9.70674     9.75730     9.78891     9.95010     9.97538    10.02911    10.11761
0   3.551E-06   3.340E-06   2.825E-06   2.653E-06   2.413E-06   2.363E-06   2.186E-06   1.788E-06   1.770E-06   1.415E-06
       93.226      93.691      93.895      94.243      94.301      94.418      94.624      94.886      94.973      95.176
     10.13973    10.19030    10.21242    10.25035    10.25667    10.26931    10.29177    10.32022    10.32970    10.35182
0   1.349E-06   1.073E-06   9.231E-07   8.975E-07   6.725E-07   5.377E-07   4.565E-07   3.077E-07   2.321E-07   1.846E-07
       95.525      95.670      96.397      96.513      96.571      96.600      98.024      98.809      99.361      99.477
     10.38975    10.40555    10.48457    10.49721    10.50353    10.50669    10.66156    10.74689    10.80694    10.81959
0   1.544E-07   1.157E-07   9.252E-08   7.125E-08
       99.622      99.797      99.913     100.000
     10.83539    10.85435    10.86699    10.87648
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0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=   2.130
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=   4.094
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   6.464
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   7.422
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   9.065
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   9.473
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 8)=   9.704
0  K   I    XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
  15  1       -7.96393 -12.53315  -1.46949
  15  2       -9.55350 -13.41764  -1.90570
  15  3      -10.10203 -15.84968  -3.30356
  15  4      -10.83848 -15.32267  -2.95614
  15  5      -11.05090 -16.86840  -4.02581
  15  6      -11.48682 -22.27758  -8.07225
  15  7      -11.68521 -26.27136 -11.11584
  15  8      -11.83598      NUMXQ(K)=  8
     3.261E-04                .109              1.000
     1.964E-04                .326              3.000
     1.522E-04                .544              5.000
     1.051E-04               1.088             10.000
     8.332E-05               1.631             15.000
     6.982E-05               2.175             20.000
     5.825E-05               2.719             25.000
     4.999E-05               3.263             30.000
     4.375E-05               3.807             35.000
     3.736E-05               4.351             40.000
     3.103E-05               4.894             45.000
     2.618E-05               5.438             50.000
     2.238E-05               5.982             55.000
     1.937E-05               6.526             60.000
     1.713E-05               7.070             65.000
     1.505E-05               7.614             70.000
     1.297E-05               8.157             75.000
     1.125E-05               8.701             80.000
     9.411E-06               9.245             85.000
0    1.589E-04               0.5                4.60
0ANNUAL AVERAGE =   4.63E-06
0K= 15     FIVEXQ(K)= 1.589E-04     FIVEPR(K)= 4.597
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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23: 4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma-desert + P G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE SSE SECTOR.

STABILITY CLASS	WINDSPEED AT 10.0 METERS METER/SEC	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=1431.SQ.METERS	USED
A	.4	.25	1950.	0.	0.	342.4	1000.0	342.4	2.189E-06	2.186E-06	2.186E-06
A	1.0	.89	1950.	0.	0.	342.4	1000.0	342.4	9.244E-07	9.231E-07	9.231E-07
A	2.0	2.82	1950.	0.	0.	342.4	1000.0	342.4	4.571E-07	4.565E-07	4.565E-07
A	3.0	1.79	1950.	0.	0.	342.4	1000.0	342.4	3.081E-07	3.077E-07	3.077E-07
A	4.0	.89	1950.	0.	0.	342.4	1000.0	342.4	2.324E-07	2.321E-07	2.321E-07
A	5.0	1.03	1950.	0.	0.	342.4	1000.0	342.4	1.849E-07	1.846E-07	1.846E-07
A	6.0	.56	1950.	0.	0.	342.4	1000.0	342.4	1.546E-07	1.544E-07	1.544E-07
A	8.0	.36	1950.	0.	0.	342.4	1000.0	342.4	1.159E-07	1.157E-07	1.157E-07
A	13.0	.03	1950.	0.	0.	342.4	1000.0	342.4	7.135E-08	7.125E-08	7.125E-08
A	18.0	.03	1950.	0.	0.	342.4	1000.0	342.4	5.154E-08	5.148E-08	5.148E-08
B	.4	.13	1950.	0.	0.	257.5	227.3	257.5	1.281E-05	1.271E-05	1.271E-05
B	1.0	.40	1950.	0.	0.	257.5	227.3	257.5	5.407E-06	5.365E-06	5.365E-06
B	2.0	.66	1950.	0.	0.	257.5	227.3	257.5	2.674E-06	2.653E-06	2.653E-06
B	3.0	.73	1950.	0.	0.	257.5	227.3	257.5	1.802E-06	1.788E-06	1.788E-06
B	4.0	.33	1950.	0.	0.	257.5	227.3	257.5	1.359E-06	1.349E-06	1.349E-06
B	5.0	.27	1950.	0.	0.	257.5	227.3	257.5	1.081E-06	1.073E-06	1.073E-06
B	6.0	.10	1950.	0.	0.	257.5	227.3	257.5	9.045E-07	8.975E-07	8.975E-07
B	8.0	.13	1950.	0.	0.	257.5	227.3	257.5	6.777E-07	6.725E-07	6.725E-07
C	.4	.07	1950.	0.	0.	195.5	112.3	195.5	3.414E-05	3.345E-05	3.345E-05
C	1.0	.20	1950.	0.	0.	195.5	112.3	195.5	1.442E-05	1.412E-05	1.412E-05
C	2.0	.56	1950.	0.	0.	195.5	112.3	195.5	7.129E-06	6.984E-06	6.984E-06
C	3.0	.83	1950.	0.	0.	195.5	112.3	195.5	4.805E-06	4.708E-06	4.708E-06
C	4.0	.53	1950.	0.	0.	195.5	112.3	195.5	3.624E-06	3.551E-06	3.551E-06
C	5.0	.36	1950.	0.	0.	195.5	112.3	195.5	2.883E-06	2.825E-06	2.825E-06
C	6.0	.23	1950.	0.	0.	195.5	112.3	195.5	2.412E-06	2.363E-06	2.363E-06
C	8.0	.30	1950.	0.	0.	195.5	112.3	195.5	1.807E-06	1.770E-06	1.770E-06
C	10.0	.03	1950.	0.	0.	195.5	112.3	195.5	1.445E-06	1.415E-06	1.415E-06
C	13.0	.03	1950.	0.	0.	195.5	112.3	195.5	1.113E-06	1.090E-06	1.090E-06
D	.4	.32	1950.	0.	0.	137.7	49.8	199.2	7.552E-05	1.025E-04	7.552E-05
D	1.0	1.33	1950.	0.	0.	137.7	49.8	199.2	3.189E-05	4.328E-05	3.189E-05
D	2.0	4.24	1950.	0.	0.	137.7	49.8	197.9	1.587E-05	2.140E-05	1.587E-05
D	3.0	4.77	1950.	0.	0.	137.7	49.8	171.1	1.238E-05	1.443E-05	1.238E-05
D	4.0	4.27	1950.	0.	0.	137.7	49.8	155.6	1.026E-05	1.088E-05	1.026E-05
D	5.0	2.78	1950.	0.	0.	137.7	49.8	144.9	8.768E-06	8.655E-06	8.655E-06
D	6.0	1.56	1950.	0.	0.	137.7	49.8	137.7	7.720E-06	7.239E-06	7.239E-06
D	8.0	1.62	1950.	0.	0.	137.7	49.8	137.7	5.785E-06	5.424E-06	5.424E-06
D	10.0	.50	1950.	0.	0.	137.7	49.8	137.7	4.625E-06	4.337E-06	4.337E-06
D	13.0	.10	1950.	0.	0.	137.7	49.8	137.7	3.562E-06	3.340E-06	3.340E-06
D	18.0	.10	1950.	0.	0.	137.7	49.8	137.7	2.573E-06	2.413E-06	2.413E-06

E	.4	.47	1950.	0.	0.	97.9	33.8	185.5	1.194E-04	1.989E-04	1.194E-04
E	1.0	1.82	1950.	0.	0.	97.9	33.8	185.5	5.043E-05	8.399E-05	5.043E-05
E	2.0	7.09	1950.	0.	0.	97.9	33.8	183.3	2.523E-05	4.153E-05	2.523E-05
E	3.0	5.67	1950.	0.	0.	97.9	33.8	141.2	2.208E-05	2.800E-05	2.208E-05
E	4.0	4.34	1950.	0.	0.	97.9	33.8	119.8	1.963E-05	2.111E-05	1.963E-05
E	5.0	2.45	1950.	0.	0.	97.9	33.8	106.3	1.759E-05	1.680E-05	1.680E-05
E	6.0	1.13	1950.	0.	0.	97.9	33.8	97.9	1.598E-05	1.405E-05	1.405E-05
E	8.0	1.89	1950.	0.	0.	97.9	33.8	97.9	1.197E-05	1.053E-05	1.053E-05
E	10.0	.70	1950.	0.	0.	97.9	33.8	97.9	9.574E-06	8.417E-06	8.417E-06
E	13.0	.23	1950.	0.	0.	97.9	33.8	97.9	7.374E-06	6.483E-06	6.483E-06
F	.4	.75	1950.	0.	0.	67.6	22.0	158.2	2.155E-04	3.862E-04	2.155E-04
F	1.0	2.75	1950.	0.	0.	67.6	22.0	158.2	9.099E-05	1.631E-04	9.099E-05
F	2.0	7.02	1950.	0.	0.	67.6	22.0	155.7	4.573E-05	8.064E-05	4.573E-05
F	3.0	5.53	1950.	0.	0.	67.6	22.0	109.3	4.391E-05	5.436E-05	4.391E-05
F	4.0	1.86	1950.	0.	0.	67.6	22.0	87.7	4.125E-05	4.100E-05	4.100E-05
F	5.0	.76	1950.	0.	0.	67.6	22.0	75.1	3.834E-05	3.261E-05	3.261E-05
F	6.0	.13	1950.	0.	0.	67.6	22.0	67.6	3.564E-05	2.728E-05	2.728E-05
F	8.0	.13	1950.	0.	0.	67.6	22.0	67.6	2.671E-05	2.044E-05	2.044E-05
G	.4	1.40	1950.	0.	0.	46.6	14.3	150.9	3.478E-04	6.684E-04	3.478E-04
G	1.0	4.11	1950.	0.	0.	46.6	14.3	150.9	1.468E-04	2.822E-04	1.468E-04
G	2.0	8.35	1950.	0.	0.	46.6	14.3	147.5	7.429E-05	1.396E-04	7.429E-05
G	3.0	4.24	1950.	0.	0.	46.6	14.3	89.8	8.229E-05	9.408E-05	8.229E 05
G	4.0	1.06	1950.	0.	0.	46.6	14.3	66.2	8.420E-05	7.095E-05	7.095E-05
G	5.0	.03	1950.	0.	0.	46.6	14.3	53.6	8.270E-05	5.645E-05	5.645E-05

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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:   CGS                               METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma=desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0SITE EXCLUSION BOUNDARY CALCULATIONS:
0 SSE SECTOR     BOUNDARY DISTANCE = 1950.0 METERS
0LATERAL PLUME MEANDER/BUILDING WAKE CREDIT ALLOWED
 AS A FUNCTION OF DOWNWIND DISTANCE.
 MEANDER CREDIT IS FOR WINDSPEEDS LESS THAN 6 MPS.
 BUILDING WAKE CREDIT ALLOWED:   C=   .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0  3.478E-04  2.155E-04  1.468E-04  1.194E-04  9.099E-05  8.229E-05  7.552E-05  7.429E-05  7.095E-05  5.645E-05
       1.402      2.157      6.265      6.738      9.488     13.730     14.053     22.404     23.464     23.497
        .13373     .20569     .59760     .64264     .90496    1.30951    1.34038    2.13684    2.23798    2.24114
0  5.043E-05  4.573E-05  4.391E-05  4.100E-05  3.345E-05  3.261E-05  3.189E-05  2.728E-05  2.523E-05  2.208E-05
      25.320     32.345     37.878     39.734     39.803     40.565     41.890     42.023     49.114     54.781
       2.41497    3.08501    3.61282    3.78981    3.79637    3.86906    3.99548    4.00812    4.68448    5.22494
0  2.044E-05  1.963E-05  1.680E-05  1.587E-05  1.412E-05  1.405E-05  1.271E-05  1.238E-05  1.053E-05  1.026E-05
      54.913     59.254     61.706     65.948     66.147     67.273     67.404     72.176     74.065     78.339
       5.23758    5.65161    5.88549    6.29005    6.30901    6.41647    6.42897    6.88409    7.06424    7.47195
0  8.655E-06  8.417E-06  7.239E-06  6.984E-06  6.483E-06  5.424E-06  5.365E-06  4.708E-06  4.337E-06  3.551E-06
      81.123     81.819     83.376     83.939     84.072     85.696     86.093     86.922     87.419     87.949
       7.73744    7.80381    7.95235    8.00608    8.01873    8.17359    8.21152    8.29053    8.33794    8.38851
0  3.340E-06  2.825E-06  2.653E-06  2.413E-06  2.363E-06  2.186E-06  1.788E-06  1.770E-06  1.415E-06  1.349E-06
      88.048     88.413     89.076     89.175     89.407     89.661     90.390     90.689     90.722     91.053
       8.39799    8.43276    8.49597    8.50545    8.52758    8.55183    8.62136    8.64981    8.65297    8.68458
0  1.090E-06  1.073E-06  9.231E-07  8.975E-07  6.725E-07  4.565E-07  3.077E-07  2.321E-07  1.846E-07  1.544E-07
      91.086     91.351     92.246     92.345     92.478     95.295     97.084     97.979     99.006     99.569
       8.68774    8.71302    8.79835    8.80784    8.82048    9.08913    9.25980    9.34513    9.44311    9.49684
0  1.157E-07  7.125E-08  5.148E-08
      99.934     99.967    100.000
       9.53160    9.53476    9.53792
```

```
0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=   2.135
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=   3.610
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   3.787
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   5.648
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   6.286
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   7.468
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 8)=   7.800
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 9)=   8.002

0  K   I    XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
  16   1      -7.96393 -12.71156  -1.58088
  16   2      -9.50758 -14.16464  -2.29784
  16   3     -10.03335 -15.67476  -3.13777
  16   4     -10.10203 -16.95105  -3.85640
  16   5     -10.83848 -17.08991  -3.94401
  16   6     -11.05090 -18.51706  -4.87606
  16   7     -11.48682 -23.85025  -8.57508
  16   8     -11.68521 -30.96316 -13.58894
  16   9     -11.87188      NUMXQ(K)=  9

                                                  BACK EXTRAPOLATION FOR  1 PERCENTILE.

     4.082E-04                .095              1.000
     2.382E-04                .286              3.000
     1.817E-04                .477              5.000
     1.228E-04                .954             10.000
     9.605E-05               1.431             15.000
     8.001E-05               1.908             20.000
     6.681E-05               2.384             25.000
     5.578E-05               2.861             30.000
     4.767E-05               3.338             35.000
     4.051E-05               3.815             40.000
     3.280E-05               4.292             45.000
     2.703E-05               4.769             50.000
     2.262E-05               5.246             55.000
     1.915E-05               5.723             60.000
     1.634E-05               6.200             65.000
     1.368E-05               6.677             70.000
     1.148E-05               7.153             75.000
     9.330E-06               7.630             80.000
0    1.771E-04               0.5                5.24
0ANNUAL AVERAGE =   4.59E-06
0K= 16      FIVEXQ(K)= 1.771E-04      FIVEPR(K)= 5.242
```

1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23:4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE ALL SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 10.0 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=1431.SQ.METERS	USED
A	.4	.35	1950.	0.	0.	342.4	1000.0	342.4	2.189E-06	2.186E-06	2.186E-06
A	1.0	1.22	1950.	0.	0.	342.4	1000.0	342.4	9.244E-07	9.231E-07	9.231E-07
A	2.0	2.50	1950.	0.	0.	342.4	1000.0	342.4	4.571E-07	4.565E-07	4.565E-07
A	3.0	1.81	1950.	0.	0.	342.4	1000.0	342.4	3.081E-07	3.077E-07	3.077E-07
A	4.0	1.41	1950.	0.	0.	342.4	1000.0	342.4	2.324E-07	2.321E-07	2.321E-07
A	5.0	1.02	1950.	0.	0.	342.4	1000.0	342.4	1.849E-07	1.846E-07	1.846E-07
A	6.0	.58	1950.	0.	0.	342.4	1000.0	342.4	1.546E-07	1.544E-07	1.544E-07
A	8.0	.70	1950.	0.	0.	342.4	1000.0	342.4	1.159E-07	1.157E-07	1.157E-07
A	10.0	.21	1950.	0.	0.	342.4	1000.0	342.4	9.264E-08	9.252E-08	9.252E-08
A	13.0	.09	1950.	0.	0.	342.4	1000.0	342.4	7.135E-08	7.125E-08	7.125E-08
A	18.0	.01	1950.	0.	0.	342.4	1000.0	342.4	5.154E-08	5.148E-08	5.148E-08
B	.4	.09	1950.	0.	0.	257.5	227.3	257.5	1.281E-05	1.271E-05	1.271E-05
B	1.0	.28	1950.	0.	0.	257.5	227.3	257.5	5.407E-06	5.365E-06	5.365E-06
B	2.0	.63	1950.	0.	0.	257.5	227.3	257.5	2.674E-06	2.653E-06	2.653E-06
B	3.0	.67	1950.	0.	0.	257.5	227.3	257.5	1.802E-06	1.788E-06	1.788E-06
B	4.0	.57	1950.	0.	0.	257.5	227.3	257.5	1.359E-06	1.349E-06	1.349E-06
B	5.0	.42	1950.	0.	0.	257.5	227.3	257.5	1.081E-06	1.073E-06	1.073E-06
B	6.0	.23	1950.	0.	0.	257.5	227.3	257.5	9.045E-07	8.975E-07	8.975E-07
B	8.0	.31	1950.	0.	0.	257.5	227.3	257.5	6.777E-07	6.725E-07	6.725E-07
B	10.0	.09	1950.	0.	0.	257.5	227.3	257.5	5.419E-07	5.377E-07	5.377E-07
B	13.0	.07	1950.	0.	0.	257.5	227.3	257.5	4.173E-07	4.141E-07	4.141E-07
C	.4	.09	1950.	0.	0.	195.5	112.3	195.5	3.414E-05	3.345E-05	3.345E-05
C	1.0	.26	1950.	0.	0.	195.5	112.3	195.5	1.442E-05	1.412E-05	1.412E-05
C	2.0	.61	1950.	0.	0.	195.5	112.3	195.5	7.129E-06	6.984E-06	6.984E-06
C	3.0	.76	1950.	0.	0.	195.5	112.3	195.5	4.805E-06	4.708E-06	4.708E-06
C	4.0	.55	1950.	0.	0.	195.5	112.3	195.5	3.624E-06	3.551E-06	3.551E-06
C	5.0	.48	1950.	0.	0.	195.5	112.3	195.5	2.883E-06	2.825E-06	2.825E-06
C	6.0	.32	1950.	0.	0.	195.5	112.3	195.5	2.412E-06	2.363E-06	2.363E-06
C	8.0	.34	1950.	0.	0.	195.5	112.3	195.5	1.807E-06	1.770E-06	1.770E-06
C	10.0	.21	1950.	0.	0.	195.5	112.3	195.5	1.445E-06	1.415E-06	1.415E-06
C	13.0	.07	1950.	0.	0.	195.5	112.3	195.5	1.113E-06	1.090E-06	1.090E-06
D	.4	.36	1950.	0.	0.	137.7	49.8	137.7	1.093E-04	1.025E-04	1.025E-04
D	1.0	1.49	1950.	0.	0.	137.7	49.8	137.7	4.615E-05	4.328E-05	4.328E-05
D	2.0	3.58	1950.	0.	0.	137.7	49.8	137.7	2.282E-05	2.140E-05	2.140E-05
D	3.0	3.74	1950.	0.	0.	137.7	49.8	137.7	1.538E-05	1.443E-05	1.443E-05
D	4.0	3.31	1950.	0.	0.	137.7	49.8	137.7	1.160E-05	1.088E-05	1.088E-05
D	5.0	2.55	1950.	0.	0.	137.7	49.8	137.7	9.230E-06	8.655E-06	8.655E-06
D	6.0	1.73	1950.	0.	0.	137.7	49.8	137.7	7.720E-06	7.239E-06	7.239E-06
D	8.0	2.04	1950.	0.	0.	137.7	49.8	137.7	5.785E-06	5.424E-06	5.424E-06
D	10.0	1.03	1950.	0.	0.	137.7	49.8	137.7	4.625E 06	4.337E-06	4.337E-06
D	13.0	.45	1950.	0.	0.	137.7	49.8	137.7	3.562E-06	3.340E-06	3.340E-06
D	18.0	.08	1950.	0.	0.	137.7	49.8	137.7	2.573E-06	2.413E-06	2.413E-06
E	.4	.61	1950.	0.	0.	97.9	33.8	97.9	2.263E-04	1.989E-04	1.989E-04
E	1.0	2.34	1950.	0.	0.	97.9	33.8	97.9	9.553E-05	8.399E-05	8.399E-05
E	2.0	5.33	1950.	0.	0.	97.9	33.8	97.9	4.724E-05	4.153E-05	4.153E-05
E	3.0	5.02	1950.	0.	0.	97.9	33.8	97.9	3.184E-05	2.800E-05	2.800E-05
E	4.0	4.32	1950.	0.	0.	97.9	33.8	97.9	2.402E-05	2.111E-05	2.111E-05
E	5.0	3.44	1950.	0.	0.	97.9	33.8	97.9	1.911E-05	1.680E-05	1.680E-05
E	6.0	2.59	1950.	0.	0.	97.9	33.8	97.9	1.598E-05	1.405E-05	1.405E-05
E	8.0	2.81	1950.	0.	0.	97.9	33.8	97.9	1.197E-05	1.053E-05	1.053E-05
E	10.0	1.15	1950.	0.	0.	97.9	33.8	97.9	9.574E-06	8.417E-06	8.417E-06
E	13.0	.39	1950.	0.	0.	97.9	33.8	97.9	7.374E-06	6.483E-06	6.483E-06
E	18.0	.05	1950.	0.	0.	97.9	33.8	97.9	5.327E-06	4.683E-06	4.683E-06
F	.4	.76	1950.	0.	0.	67.6	22.0	67.6	5.046E-04	3.862E-04	3.862E-04
F	1.0	2.77	1950.	0.	0.	67.6	22.0	67.6	2.131E-04	1.631E-04	1.631E-04
F	2.0	5.95	1950.	0.	0.	67.6	22.0	67.6	1.054E-04	8.064E-05	8.064E-05
F	3.0	4.56	1950.	0.	0.	67.6	22.0	67.6	7.102E-05	5.436E-05	5.436E-05
F	4.0	3.20	1950.	0.	0.	67.6	22.0	67.6	5.356E-05	4.100E-05	4.100E-05
F	5.0	1.58	1950.	0.	0.	67.6	22.0	67.6	4.261E-05	3.261E-05	3.261E-05
F	6.0	.63	1950.	0.	0.	67.6	22.0	67.6	3.564E-05	2.728E-05	2.728E-05
F	8.0	.39	1950.	0.	0.	67.6	22.0	67.6	2.671E-05	2.044E-05	2.044E-05
F	10.0	.07	1950.	0.	0.	67.6	22.0	67.6	2.135E-05	1.634E-05	1.634E-05
F	13.0	.03	1950.	0.	0.	67.6	22.0	67.6	1.645E-05	1.259E-05	1.259E-05
G	.4	1.05	1950.	0.	0.	46.6	14.3	46.6	1.126E-03	6.684E-04	6.684E-04
G	1.0	3.07	1950.	0.	0.	46.6	14.3	46.6	4.752E-04	2.822E-04	2.822E-04
G	2.0	5.65	1950.	0.	0.	46.6	14.3	46.6	2.350E-04	1.396E-04	1.396E-04
G	3.0	3.12	1950.	0.	0.	46.6	14.3	46.6	1.584E-04	9.408E-05	9.408E-05
G	4.0	1.37	1950.	0.	0.	46.6	14.3	46.6	1.195E-04	7.095E-05	7.095E-05
G	5.0	.34	1950.	0.	0.	46.6	14.3	46.6	9.504E-05	5.645E-05	5.645E-05
G	6.0	.09	1950.	0.	0.	46.6	14.3	46.6	7.950E-05	4.721E-05	4.721E-05
G	8.0	.02	1950.	0.	0.	46.6	14.3	46.6	5.957E-05	3.538E-05	3.538E-05
G	10.0	.01	1950.	0.	0.	46.6	14.3	46.6	4.763E-05	2.829E-05	2.829E-05
G	13.0	.00	1950.	0.	0.	46.6	14.3	46.6	3.668E-05	2.178E-05	2.178E-05
G	18.0	.00	1950.	0.	0.	46.6	14.3	46.6	2.650E-05	1.574E-05	1.574E-05

```
1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE: 11/19/2003     TIME: 23: 4:56
 /PLANT NAME:  CGS                               METEOROLOGICAL INSTRUMENTATION
  DATA PERIOD: JFD 1996-1999                     WIND SENSORS HEIGHT:  10.0 METERS
  TYPE OF RELEASE: GROUND LEVEL RELEASE          DELTA-T HEIGHTS:    10 - 75 METERS
  SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
  COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma=desert + P-G
  PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0SITE EXCLUSION BOUNDARY CALCULATIONS:
  DIRECTION-INDEPENDENT (S.R.P 2.3.4) MODEL.
  MINIMUM BOUNDARY DISTANCE = 1950.0 METERS.
  BUILDING WAKE CREDIT ALLOWED:  C=   .5     A=  2861.     D=   70.0
  CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0   6.684E-04  3.862E-04  2.822E-04  1.989E-04  1.631E-04  1.396E-04  1.025E-04  9.408E-05  8.399E-05  8.064E-05
        1.046      1.805      4.870      5.477      8.243     13.891     14.254     17.377     19.719     25.673
      1.04614    1.80468    4.87042    5.47724    8.24273   13.89064   14.25411   17.37674   19.71871   25.67320
0   7.095E-05  5.645E-05  5.436E-05  4.721E-05  4.328E-05  4.153E-05  4.100E-05  3.538E-05  3.345E-05  3.261E-05
       27.039     27.377     31.934     32.026     33.515     38.846     42.042     42.061     42.149     43.733
      27.03856   27.37674   31.93426   32.02592   33.51454   38.84639   42.04172   42.06068   42.14918   43.73262
0   2.829E-05  2.800E-05  2.728E-05  2.178E-05  2.140E-05  2.111E-05  2.044E-05  1.680E-05  1.634E-05  1.574E-05
       43.742     48.764     49.393     49.396     52.977     57.298     57.683     61.119     61.188     61.192
      43.74210   48.76422   49.39317   49.39634   52.97725   57.29773   57.68332   61.11884   61.18837   61.19154
0   1.443E-05  1.412E-05  1.405E-05  1.271E-05  1.259E-05  1.088E-05  1.053E-05  8.655E-06  8.417E-06  7.239E-06
       64.934     65.190     67.781     67.873     67.898     71.210     74.023     76.571     77.718     79.447
      64.93363   65.18964   67.78129   67.87295   67.89823   71.21049   74.02339   76.57080   77.71809   79.44691
0   6.984E-06  6.483E-06  5.424E-06  5.365E-06  4.708E-06  4.683E-06  4.337E-06  3.551E-06  3.340E-06  2.825E-06
       80.060     80.452     82.487     82.765     83.524     83.578     84.605     85.158     85.607     86.087
      80.06007   80.45197   82.48737   82.76550   83.52403   83.57776   84.60494   85.15804   85.60684   86.08725
0   2.653E-06  2.413E-06  2.363E-06  2.186E-06  1.788E-06  1.770E-06  1.415E-06  1.349E-06  1.090E-06  1.073E-06
       86.716     86.795     87.111     87.459     88.129     88.473     88.682     89.251     89.320     89.744
      86.71620   86.79522   87.11127   87.45894   88.12897   88.47347   88.68207   89.25097   89.32050   89.74402
0   9.231E 07  8.975E-07  6.725E-07  5.377E-07  4.565E-07  4.141E-07  3.077E-07  2.321E-07  1.846E-07  1.544E-07
       90.967     91.201     91.508     91.599     94.096     94.166     95.977     97.386     98.404     98.982
      90.96716   91.20103   91.50761   91.59927   94.09611   94.16564   95.97664   97.38625   98.40395   98.98233
0   1.157E-07  9.252E-08  7.125E-08  5.148E-08
       99.687     99.899     99.994    100.000
      99.68713   99.89889   99.99371   100.00000
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0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

                                                    BACK EXTRAPOLATION FOR  1 PERCENTILE.
     6.831E-04              1.000              1.000
     3.868E-04              3.000              3.000
     2.861E-04              5.000              5.000
     1.799E-04             10.000             10.000
     1.315E-04             15.000             15.000
     1.026E-04             20.000             20.000
     8.284E-05             25.000             25.000
     6.649E-05             30.000             30.000
     5.401E-05             35.000             35.000
     4.434E-05             40.000             40.000
     3.601E-05             45.000             45.000
     2.900E-05             50.000             50.000
     2.335E-05             55.000             55.000
     1.907E-05             60.000             60.000
     1.571E-05             65.000             65.000
     1.272E-05             70.000             70.000
     9.941E-06             75.000             75.000
     7.446E-06             80.000             80.000
     5.500E-06             85.000             85.000
     3.757E-06             90.000             90.000
0    2.861E-04               5.0                5.00
OK= 17     FIVEXQ(K)= 2.861E-04     FIVEPR(K)= 5.000
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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:   CGS                               METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma=desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0SITE EXCLUSION BOUNDARY CALCULATIONS:
0FIVE PERCENT OVERALL SITE LIMIT
 BUILDING WAKE CREDIT ALLOWED:   C=   .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0   3.478E-04   2.155E-04   1.468E-04   1.194E-04   9.099E-05   8.229E-05   7.552E-05   7.429E-05   7.095E-05   5.645E-05
        1.046       1.805       4.870       5.477       8.243      11.365      11.729      17.377      18.742      19.080
      1.04614     1.80468     4.87042     5.47724     8.24273    11.36536    11.72882    17.37674    18.74210    19.08027
0   5.043E-05   4.721E-05   4.573E-05   4.391E-05   4.100E-05   3.538E-05   3.345E-05   3.261E-05   3.189E-05   2.829E-05
       21.422      21.514      27.468      32.026      35.221      35.240      35.329      36.912      38.401      38.410
      21.42224    21.51390    27.46839    32.02591    35.22122    35.24019    35.32868    36.91212    38.40075    38.41023
0   2.728E-05   2.523E-05   2.208E-05   2.178E-05   2.044E-05   1.963E-05   1.680E-05   1.634E-05   1.587E-05   1.574E-05
       39.039      44.371      49.393      49.396      49.782      54.102      57.538      57.607      61.188      61.192
      39.03918    44.37104    49.39317    49.39633    49.78191    54.10239    57.53792    57.60746    61.18837    61.19153
0   1.412E-05   1.405E-05   1.271E-05   1.259E-05   1.238E-05   1.053E-05   1.026E-05   8.655E-06   8.417E-06   7.239E-06
       61.448      64.039      64.131      64.156      67.898      70.711      74.023      76.571      77.718      79.447
      61.44754    64.03921    64.13089    64.15618    67.89830    70.71119    74.02346    76.57087    77.71815    79.44698
0   6.984E-06   6.483E-06   5.424E-06   5.365E-06   4.708E-06   4.683E-06   4.337E-06   3.551E-06   3.340E-06   2.825E-06
       80.060      80.452      82.487      82.766      83.524      83.578      84.605      85.158      85.607      86.087
      80.06013    80.45204    82.48745    82.76558    83.52412    83.57785    84.60503    85.15814    85.60693    86.08735
0   2.653E-06   2.413E-06   2.363E-06   2.186E-06   1.788E-06   1.770E-06   1.415E-06   1.349E-06   1.090E-06   1.073E-06
       86.716      86.795      87.111      87.459      88.129      88.474      88.682      89.251      89.321      89.744
      86.71629    86.79533    87.11139    87.45903    88.12907    88.47356    88.68217    89.25109    89.32063    89.74416
0   9.231E-07   8.975E-07   6.725E-07   5.377E-07   4.565E-07   4.141E-07   3.077E-07   2.321E-07   1.846E-07   1.544E-07
       90.967      91.201      91.508      91.599      94.096      94.166      95.977      97.386      98.404      98.982
      90.96730    91.20119    91.50777    91.59943    94.09626    94.16579    95.97679    97.38640    98.40410    98.98248
0   1.157E-07   9.252E-08   7.125E-08   5.148E-08
       99.687      99.899      99.994     100.000
      99.68729    99.89905    99.99387   100.00020
```

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0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=  16.745
0  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
  18  1      -7.96393 -10.54503   -1.11745
  18  2      -9.55350 -10.51085   -1.07893
  18  3     -10.10203 -10.74656   -1.70101
  18  4     -10.72076 -10.73590    -.99812
  18  5     -10.83848 -10.71788   -1.17341
  18  6     -11.05090 -10.70719   -1.21108
  18  7     -11.48662 -10.41120   -1.67087
  18  8     -11.68521 -10.50336   -1.55001
  18  9     -16.45701      NUMXQ(K)=  9
                                                    BACK EXTRAPOLATION FOR  1 PERCENTILE.
     3.544E-04              1.000              1.000
     2.154E-04              3.000              3.000
     1.655E-04              5.000              5.000
     1.102E-04             10.000             10.000
     8.382E-05             15.000             15.000
     6.753E-05             20.000             20.000
     5.638E-05             25.000             25.000
     4.794E-05             30.000             30.000
     4.126E-05             35.000             35.000
     3.309E-05             40.000             40.000
     2.663E-05             45.000             45.000
     2.175E-05             50.000             50.000
     1.912E-05             55.000             55.000
     1.646E-05             60.000             60.000
     1.404E-05             65.000             65.000
     1.187E-05             70.000             70.000
     9.755E-06             75.000             75.000
     7.448E-06             80.000             80.000
     5.505E-06             85.000             85.000
     3.764E-06             90.000             90.000
0    1.655E-04               5.0                5.00
0K= 18      FIVEXQ(K)= 1.655E-04      FIVEPR(K)= 5.000
```

0 K	HIGHPR	PR	GRNDVT(K)
1	-2.61617	.44461	7.11613
2	-1.70583	4.40194	5.59889
3	-2.82112	.23929	3.79337
4	-3.09489	.09845	1.66485
5	-3.19595	.06969	1.20432
6	-3.18703	.07188	1.52234
7	-3.07492	.10529	4.75939
8	-2.79449	.25991	10.15150
9	-2.75784	.29092	12.08469
10	-2.88451	.19602	8.67808
11	-2.83851	.22663	5.83414
12	-2.85430	.21566	4.17912
13	-2.82520	.23626	4.74070
14	-2.78871	.26460	8.25809
15	-2.65010	.40234	10.87648
16	-2.57624	.49942	9.53793

0 K	HOURS(K)	TOTHRS
1	38.94827	38.94827
2	385.61000	424.55820
3	20.96170	445.51990
4	8.62413	454.14410
5	6.10482	460.24890
6	6.29645	466.54530
7	9.22302	475.76840
8	22.76829	498.53670
9	25.48497	524.02160
10	17.17099	541.19260
11	19.85268	561.04520
12	18.89195	579.93720
13	20.69645	600.63370
14	23.17869	623.81240
15	35.24527	659.05760
16	43.74879	702.80640

0 K	FIVEXQ	SVANN	SLTIME	TIMINT	I	TIME	XQT
1	1.665E-04	3.815E-06	-.4503	-8.3883			
					1	8.0	-9.32477
					2	16.0	-9.63691
					3	72.0	-10.31424
					4	624.0	-11.28672
2	1.593E-04	3.234E-06	-.4647	-8.4229			
					1	8.0	-9.38926
					2	16.0	-9.71140
					3	72.0	-10.41041
					4	624.0	-11.41402
3	1.149E-04	2.012E-06	-.4825	-8.7366			
					1	8.0	-9.73992
					2	16.0	-10.07434
					3	72.0	-10.80002
					4	624.0	-11.84191
4	5.481E-05	9.654E-07	-.4817	-9.4777			
					1	8.0	-10.47938
					2	16.0	-10.81327
					3	72.0	-11.53779
					4	624.0	-12.57802
5	2.523E-05	6.801E-07	-.4309	-10.2888			
					1	8.0	-11.18489
					2	16.0	-11.48361
					3	72.0	-12.13179
					4	624.0	-13.06241
6	2.846E-05	6.873E-07	-.4440	-10.1593			
					1	8.0	-11.08265
					2	16.0	-11.39044
					3	72.0	-12.05833
					4	624.0	-13.01724
7	7.401E-05	1.572E-06	-.4593	-9.1929			
					1	8.0	-10.14810
					2	16.0	-10.46649
					3	72.0	-11.15737
					4	624.0	-12.14931
8	1.299E-04	3.236E-06	-.4403	-8.6438			
					1	8.0	-9.55940
					2	16.0	-9.86460
					3	72.0	-10.52687
					4	624.0	-11.47773
9	1.375E 04	3.809E-06	-.4277	-8.5954			
					1	8.0	-9.48471
					2	16.0	-9.78117
					3	72.0	-10.42445
					4	624.0	-11.34805

10	1.080E-04	2.665E-06	-.4415	-8.8271		
					1	8.0 -9.74520
					2	16.0 -10.05123
					3	72.0 -10.71529
					4	624.0 -11.66871
11	1.088E-04	2.437E-06	-.4530	-8.8119		
					1	8.0 -9.75396
					2	16.0 -10.06798
					3	72.0 -10.74938
					4	624.0 -11.72770
12	1.006E-04	2.136E-06	-.4594	-8.8863		
					1	8.0 -9.84150
					2	16.0 -10.15990
					3	72.0 -10.85080
					4	624.0 -11.84276
13	1.100E-04	2.473E-06	-.4526	-8.8015		
					1	8.0 -9.74258
					2	16.0 -10.05627
					3	72.0 -10.73696
					4	624.0 -11.71426
14	1.239E-04	3.370E-06	-.4299	-8.6982		
					1	8.0 -9.59207
					2	16.0 -9.89004
					3	72.0 -10.53662
					4	624.0 -11.46495
15	1.589E-04	4.635E-06	-.4215	-8.4552		
					1	8.0 -9.33176
					2	16.0 -9.62394
					3	72.0 -10.25796
					4	624.0 -11.16825
16	1.771E-04	4.594E-06	-.4355	-8.3370		
					1	8.0 -9.24261
					2	16.0 -9.54449
					3	72.0 -10.19955
					4	624.0 -11.14005
17	2.861E-04	4.635E-06	-.4917	-7.8182		
					1	8.0 -8.84064
					2	16.0 -9.18146
					3	72.0 -9.92102
					4	624.0 -10.98285
18	1.655E-04	4.635E-06	-.4264	-8.4110		
					1	8.0 -9.29770
					2	16.0 -9.59326
					3	72.0 -10.23459
					4	624.0 -11.15539

1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23:4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0 RELATIVE CONCENTRATION (X/Q) VALUES (SEC/CUBIC METER)

DOWNWIND SECTOR	DISTANCE (METERS)	VERSUS AVERAGING TIME 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	1950.	1.67E-04	8.92E-05	6.53E-05	3.32E-05	1.25E-05	3.82E-06	38.9	S
SSW	1950.	1.59E-04	8.36E-05	6.06E-05	3.01E-05	1.10E-05	3.23E-06	385.6	SSW
SW	1950.	1.15E-04	5.89E-05	4.21E-05	2.04E-05	7.20E-06	2.01E-06	21.0	SW
WSW	1950.	5.48E-05	2.81E-05	2.01E-05	9.75E-06	3.45E-06	9.65E-07	8.6	WSW
W	1950.	2.52E-05	1.39E-05	1.03E-05	5.39E-06	2.12E-06	6.80E-07	6.1	W
WNW	1950.	2.85E-05	1.54E-05	1.13E-05	5.80E-06	2.22E-06	6.87E-07	6.3	WNW
NW	1950.	7.40E-05	3.92E-05	2.85E-05	1.43E-05	5.29E-06	1.57E-06	9.2	NW
NNW	1950.	1.30E-04	7.05E-05	5.20E-05	2.68E-05	1.04E-05	3.24E-06	22.8	NNW
N	1950.	1.38E-04	7.60E-05	5.65E-05	2.97E-05	1.18E-05	3.81E 06	25.5	N
NNE	1950.	1.08E-04	5.86E-05	4.31E-05	2.22E-05	8.56E-06	2.67E-06	17.2	NNE
NE	1950.	1.09E-04	5.81E-05	4.24E-05	2.15E-05	8.07E-06	2.44E-06	19.9	NE
ENE	1950.	1.01E-04	5.32E-05	3.87E-05	1.94E-05	7.19E-06	2.14E-06	18.9	ENE
E	1950.	1.10E-04	5.87E-05	4.29E-05	2.17E-05	8.18E-06	2.47E-06	20.7	E
ESE	1950.	1.24E-04	6.83E-05	5.07E-05	2.65E-05	1.05E-05	3.37E-06	23.2	ESE
SE	1950.	1.59E-04	8.86E-05	6.61E-05	3.51E-05	1.41E-05	4.63E-06	35.2	SE
SSE	1950.	1.77E-04	9.68E-05	7.16E-05	3.72E-05	1.45E-05	4.59E-06	43.7	SSE
MAX X/Q		1.77E-04				TOTAL HOURS AROUND SITE:		702.8	
SRP 2.3.4	1950.	2.86E-04	1.45E-04	1.03E-04	4.91E-05	1.70E-05	4.63E-06		
SITE LIMIT		1.65E-04	9.16E-05	6.82E-05	3.59E-05	1.43E-05	4.63E-06		

0THE FIVE-PERCENT-FOR-THE-ENTIRE-SITE X/Q IS LIMITING.
0**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.

1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23:4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma-desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE S SECTOR.

STABILITY CLASS	WINDSPEED FREQUENCY METER/SEC AT 10.0 METERS	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=1431.SQ.METERS	USED
A	.4	.40	4827.	0.	0.	776.2	1000.0	776.2	9.656E-07	9.651E-07	9.651E-07
A	1.0	1.42	4827.	0.	0.	776.2	1000.0	776.2	4.077E-07	4.075E-07	4.075E-07
A	2.0	3.24	4827.	0.	0.	776.2	1000.0	776.2	2.016E-07	2.015E-07	2.015E-07
A	3.0	2.66	4827.	0.	0.	776.2	1000.0	776.2	1.359E-07	1.358E-07	1.358E-07
A	4.0	2.35	4827.	0.	0.	776.2	1000.0	776.2	1.025E-07	1.024E-07	1.024E-07
A	5.0	1.60	4827.	0.	0.	776.2	1000.0	776.2	8.154E-08	8.149E-08	8.149E-08
A	6.0	.71	4827.	0.	0.	776.2	1000.0	776.2	6.820E-08	6.816E-08	6.816E-08
A	8.0	1.11	4827.	0.	0.	776.2	1000.0	776.2	5.111E-08	5.108E-08	5.108E-08
A	10.0	.04	4827.	0.	0.	776.2	1000.0	776.2	4.086E-08	4.084E-08	4.084E-08
B	.4	.10	4827.	0.	0.	583.7	611.6	583.7	2.099E-06	2.097E-06	2.097E-06
B	1.0	.31	4827.	0.	0.	583.7	611.6	583.7	8.864E-07	8.853E-07	8.853E-07
B	2.0	.89	4827.	0.	0.	583.7	611.6	583.7	4.383E-07	4.378E-07	4.378E-07
B	3.0	1.20	4827.	0.	0.	583.7	611.6	583.7	2.955E-07	2.951E-07	2.951E-07
B	4.0	.67	4827.	0.	0.	583.7	611.6	583.7	2.228E-07	2.226E-07	2.226E-07
B	5.0	.49	4827.	0.	0.	583.7	611.6	583.7	1.773E-07	1.771E-07	1.771E-07
B	6.0	.27	4827.	0.	0.	583.7	611.6	583.7	1.483E-07	1.481E-07	1.481E-07
B	8.0	.18	4827.	0.	0.	583.7	611.6	583.7	1.111E-07	1.110E-07	1.110E-07
B	10.0	.04	4827.	0.	0.	583.7	611.6	583.7	8.884E-08	8.873E-08	8.873E-08
C	.4	.09	4827.	0.	0.	443.3	256.4	443.3	6.595E-06	6.569E-06	6.569E-06
C	1.0	.27	4827.	0.	0.	443.3	256.4	443.3	2.784E-06	2.773E-06	2.773E-06
C	2.0	1.07	4827.	0.	0.	443.3	256.4	443.3	1.377E-06	1.371E-06	1.371E-06
C	3.0	1.11	4827.	0.	0.	443.3	256.4	443.3	9.282E-07	9.245E-07	9.245E-07
C	4.0	.76	4827.	0.	0.	443.3	256.4	443.3	7.000E-07	6.972E-07	6.972E-07
C	5.0	.71	4827.	0.	0.	443.3	256.4	443.3	5.569E-07	5.547E-07	5.547E-07
C	6.0	.31	4827.	0.	0.	443.3	256.4	443.3	4.658E-07	4.639E-07	4.639E-07
C	8.0	.31	4827.	0.	0.	443.3	256.4	443.3	3.490E-07	3.476E-07	3.476E-07
D	.4	.49	4827.	0.	0.	312.1	87.3	373.7	2.298E-05	2.706E-05	2.298E-05
D	1.0	2.00	4827.	0.	0.	312.1	87.3	373.7	9.704E-06	1.143E-05	9.704E-06
D	2.0	4.66	4827.	0.	0.	312.1	87.3	372.4	4.816E-06	5.651E-06	4.816E-06
D	3.0	5.91	4827.	0.	0.	312.1	87.3	345.6	3.498E-06	3.809E-06	3.498E-06
D	4.0	3.06	4827.	0.	0.	312.1	87.3	330.1	2.762E-06	2.873E-06	2.762E-06
D	5.0	2.71	4827.	0.	0.	312.1	87.3	319.4	2.271E-06	2.285E-06	2.271E-06
D	6.0	1.82	4827.	0.	0.	312.1	87.3	312.1	1.944E-06	1.912E-06	1.912E-06
D	8.0	.44	4827.	0.	0.	312.1	87.3	312.1	1.456E-06	1.432E-06	1.432E-06
D	10.0	.04	4827.	0.	0.	312.1	87.3	312.1	1.164E-06	1.145E-06	1.145E-06
D	13.0	.04	4827.	0.	0.	312.1	87.3	312.1	8.968E-07	8.820E-07	8.820E-07

E	.4	.52	4827.	0.	0.	222.0	55.4	309.5	4.368E-05	5.874E-05	4.368E-05
E	1.0	2.00	4827.	0.	0.	222.0	55.4	309.5	1.844E-05	2.480E-05	1.844E-05
E	2.0	5.20	4827.	0.	0.	222.0	55.4	307.3	9.185E-06	1.226E-05	9.185E-06
E	3.0	4.31	4827.	0.	0.	222.0	55.4	265.2	7.174E-06	8.267E-06	7.174E-06
E	4.0	2.27	4827.	0.	0.	222.0	55.4	243.8	5.885E-06	6.235E-06	5.885E-06
E	5.0	1.11	4827.	0.	0.	222.0	55.4	230.4	4.955E-06	4.960E-06	4.955E-06
E	6.0	.49	4827.	0.	0.	222.0	55.4	222.0	4.302E-06	4.149E-06	4.149E-06
E	8.0	.36	4827.	0.	0.	222.0	55.4	222.0	3.224E-06	3.109E-06	3.109E-06
E	10.0	.13	4827.	0.	0.	222.0	55.4	222.0	2.577E-06	2.486E-06	2.486E-06
E	13.0	.04	4827.	0.	0.	222.0	55.4	222.0	1.985E-06	1.914E-06	1.914E-06
F	.4	1.05	4827.	0.	0.	153.2	34.5	243.9	8.912E-05	1.306E-04	8.912E-05
F	1.0	3.82	4827.	0.	0.	153.2	34.5	243.9	3.763E-05	5.514E-05	3.763E-05
F	2.0	7.46	4827.	0.	0.	153.2	34.5	241.3	1.880E-05	2.727E-05	1.880E-05
F	3.0	4.31	4827.	0.	0.	153.2	34.5	194.9	1.569E-05	1.838E-05	1.569E-05
F	4.0	.58	4827.	0.	0.	153.2	34.5	173.4	1.331E-05	1.386E-05	1.331E-05
F	5.0	.09	4827.	0.	0.	153.2	34.5	160.7	1.142E-05	1.103E-05	1.103E-05
F	6.0	.13	4827.	0.	0.	153.2	34.5	153.2	1.002E-05	9.225E-06	9.225E-06
G	.4	1.59	4827.	0.	0.	105.7	21.5	210.1	1.663E-04	2.751E-04	1.663E-04
G	1.0	4.66	4827.	0.	0.	105.7	21.5	210.1	7.022E-05	1.162E-04	7.022E-05
G	2.0	12.08	4827.	0.	0.	105.7	21.5	206.7	3.530E-05	5.745E-05	3.530E-05
G	3.0	3.95	4827.	0.	0.	105.7	21.5	148.9	3.302E-05	3.872E-05	3.302E-05
G	4.0	.36	4827.	0.	0.	105.7	21.5	125.3	2.960E-05	2.921E-05	2.921E-05

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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:   CGS                               METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma-desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0LOW POPULATION ZONE CALCULATIONS:
0   S SECTOR      BOUNDARY DISTANCE = 4827.0 METERS
0LATERAL PLUME MEANDER/BUILDING WAKE CREDIT ALLOWED
 AS A FUNCTION OF DOWNWIND DISTANCE.
 MEANDER CREDIT IS FOR WINDSPEEDS LESS THAN 6 MPS.
 BUILDING WAKE CREDIT ALLOWED:   C=   .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0   1.663E-04   8.912E-05   7.022E-05   4.368E-05   3.763E-05   3.530E-05   3.302E-05   2.921E-05   2.298E-05   1.880E-05
        1.591       2.639       7.302       7.820      11.640      23.721      27.673      28.029      28.517      35.978
      .11324      .18780      .51965      .55651      .82831     1.68798     1.96927     1.99456     2.02928     2.56026
0   1.844E-05   1.569E-05   1.331E-05   1.103E-05   9.704E-06   9.225E-06   9.185E-06   7.174E-06   6.569E-06   5.885E-06
       37.977      42.285      42.862      42.951      44.950      45.083      50.280      54.588      54.680      56.945
     2.70248     3.00906     3.05014     3.05647     3.19869     3.20817     3.57796     3.88453     3.89109     4.05228
0   4.955E-06   4.816E-06   4.149E-06   3.498E-06   3.109E-06   2.773E-06   2.762E-06   2.486E-06   2.271E-06   2.097E-06
       58.055      62.719      63.207      69.114      69.470      69.736      72.801      72.934      75.643      75.746
     4.13129     4.46315     4.49791     4.91827     4.94355     4.96252     5.18059     5.19008     5.38287     5.39016
0   1.914E-06   1.912E-06   1.432E-06   1.371E-06   1.145E-06   9.651E-07   9.245E-07   8.853E-07   8.820E-07   6.972E-07
       75.790      77.611      78.055      79.121      79.166      79.570      80.680      80.991      81.035      81.790
     5.39332     5.52290     5.55451     5.63036     5.63352     5.66227     5.74128     5.76341     5.76657     5.82030
0   5.547E-07   4.639E-07   4.378E-07   4.075E-07   3.476E-07   2.951E-07   2.226E-07   2.015E-07   1.771E-07   1.481E-07
       82.501      82.812      83.700      85.121      85.432      86.631      87.298      90.540      91.028      91.295
     5.87087     5.89299     5.95620     6.05734     6.07946     6.16480     6.21221     6.44293     6.47769     6.49666
0   1.358E-07   1.110E-07   1.024E-07   8.873E-08   8.149E-08   6.816E-08   5.108E-08   4.084E-08
       93.960      94.137      96.491      96.536      98.135      98.845      99.956     100.000
     6.68629     6.69893     6.86644     6.86960     6.98338     7.03395     7.11297     7.11613
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0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=   1.967
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=   3.006
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   3.881
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   4.460
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   4.915
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   5.177
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 8)=   5.379
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 9)=   5.519
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(10)=   6.980
0  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
   1  1      -8.70159 -13.67355  -1.62833
   1  2     -10.31825 -18.80425  -4.11827
   1  3     -11.06239 -23.82999  -6.79170
   1  4     -11.84509 -22.67129  -6.13508
   1  5     -12.24366 -23.93048  -6.87592
   1  6     -12.56327 -28.03181  -9.35678
   1  7     -12.79953 -29.76929 -10.42406
   1  8     -12.99534 -34.85218 -13.58279
   1  9     -13.16756 -55.44002 -26.47858
   1 10     -16.32274      NUMXQ(K)= 10

                                                  BACK EXTRAPOLATION FOR  1 PERCENTILE.
     2.078E-04               .071              1.000
     1.210E-04               .213              3.000
     9.230E-05               .356              5.000
     6.244E-05               .712             10.000
     4.895E-05              1.067             15.000
     4.086E-05              1.423             20.000
     3.534E-05              1.779             25.000
     2.877E-05              2.135             30.000
     2.201E-05              2.491             35.000
     1.735E-05              2.846             40.000
     1.301E-05              3.202             45.000
     9.426E-06              3.558             50.000
     7.022E-06              3.914             55.000
     5.475E-06              4.270             60.000
     4.284E-06              4.625             65.000
     3.302E-06              4.981             70.000
     2.373E-06              5.337             75.000
     1.283E-06              5.693             80.000
     5.737E-07              6.049             85.000
     2.659E-07              6.405             90.000
0    7.647E-05              0.5                7.03
0ANNUAL AVERAGE =   6.01E-07
0K=  1     FIVEXQ(K)= 7.647E-05     FIVEPR(K)= 7.026
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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23:4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE SSW SECTOR.

STABILITY CLASS	WINDSPEED AT 10.0 METERS METER/SEC	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=1431.SQ.METERS	USED
A	.4	.63	4827.	0.	0.	776.2	1000.0	776.2	9.656E-07	9.651E-07	9.651E-07
A	1.0	2.20	4827.	0.	0.	776.2	1000.0	776.2	4.077E-07	4.075E-07	4.075E-07
A	2.0	3.39	4827.	0.	0.	776.2	1000.0	776.2	2.016E-07	2.015E-07	2.015E-07
A	3.0	2.60	4827.	0.	0.	776.2	1000.0	776.2	1.359E-07	1.358E-07	1.358E-07
A	4.0	2.09	4827.	0.	0.	776.2	1000.0	776.2	1.025E-07	1.024E-07	1.024E-07
A	5.0	1.58	4827.	0.	0.	776.2	1000.0	776.2	8.154E-08	8.149E-08	8.149E-08
A	6.0	.51	4827.	0.	0.	776.2	1000.0	776.2	6.820E-08	6.816E-08	6.816E-08
A	8.0	1.02	4827.	0.	0.	776.2	1000.0	776.2	5.111E-08	5.108E-08	5.108E-08
A	10.0	.06	4827.	0.	0.	776.2	1000.0	776.2	4.086E-08	4.084E-08	4.084E-08
A	13.0	.11	4827.	0.	0.	776.2	1000.0	776.2	3.147E-08	3.145E-08	3.145E-08
B	.4	.15	4827.	0.	0.	583.7	611.6	583.7	2.099E-06	2.097E-06	2.097E-06
B	1.0	.45	4827.	0.	0.	583.7	611.6	583.7	8.864E-07	8.853E-07	8.853E-07
B	2.0	.73	4827.	0.	0.	583.7	611.6	583.7	4.383E-07	4.378E-07	4.378E-07
B	3.0	1.02	4827.	0.	0.	583.7	611.6	583.7	2.955E-07	2.951E-07	2.951E-07
B	4.0	1.02	4827.	0.	0.	583.7	611.6	583.7	2.228E-07	2.226E-07	2.226E-07
B	5.0	.56	4827.	0.	0.	583.7	611.6	583.7	1.773E-07	1.771E-07	1.771E-07
B	6.0	.11	4827.	0.	0.	583.7	611.6	583.7	1.483E-07	1.481E-07	1.481E-07
B	8.0	.11	4827.	0.	0.	583.7	611.6	583.7	1.111E-07	1.110E-07	1.110E-07
B	13.0	.11	4827.	0.	0.	583.7	611.6	583.7	6.842E-08	6.833E-08	6.833E-08
C	.4	.20	4827.	0.	0.	443.3	256.4	443.3	6.595E-06	6.569E-06	6.569E-06
C	1.0	.56	4827.	0.	0.	443.3	256.4	443.3	2.784E-06	2.773E-06	2.773E-06
C	2.0	1.07	4827.	0.	0.	443.3	256.4	443.3	1.377E-06	1.371E-06	1.371E-06
C	3.0	1.02	4827.	0.	0.	443.3	256.4	443.3	9.282E-07	9.245E-07	9.245E-07
C	4.0	.85	4827.	0.	0.	443.3	256.4	443.3	7.000E-07	6.972E-07	6.972E-07
C	5.0	.62	4827.	0.	0.	443.3	256.4	443.3	5.569E-07	5.547E-07	5.547E-07
C	6.0	.17	4827.	0.	0.	443.3	256.4	443.3	4.658E-07	4.639E-07	4.639E-07
C	8.0	.11	4827.	0.	0.	443.3	256.4	443.3	3.490E-07	3.476E-07	3.476E-07
C	10.0	.11	4827.	0.	0.	443.3	256.4	443.3	2.791E-07	2.780E-07	2.780E-07
D	.4	.44	4827.	0.	0.	312.1	87.3	373.7	2.298E-05	2.706E-05	2.298E-05
D	1.0	1.81	4827.	0.	0.	312.1	87.3	373.7	9.704E-06	1.143E-05	9.704E-06
D	2.0	3.84	4827.	0.	0.	312.1	87.3	372.4	4.816E-06	5.651E-06	4.816E-06
D	3.0	4.12	4827.	0.	0.	312.1	87.3	345.6	3.498E-06	3.809E-06	3.498E-06
D	4.0	3.33	4827.	0.	0.	312.1	87.3	330.1	2.762E-06	2.873E 06	2.762E-06
D	5.0	1.81	4827.	0.	0.	312.1	87.3	319.4	2.271E-06	2.265E-06	2.271E-06
D	6.0	.85	4827.	0.	0.	312.1	87.3	312.1	1.944E-06	1.912E-06	1.912E-06
D	8.0	.68	4827.	0.	0.	312.1	87.3	312.1	1.456E-06	1.432E-06	1.432E-06
D	10.0	.45	4827.	0.	0.	312.1	87.3	312.1	1.164E-06	1.145E-06	1.145E-06
D	13.0	.06	4827.	0.	0.	312.1	87.3	312.1	8.968E-07	8.820E-07	8.820E-07

E	.4	.51	4827.	0.	0.	222.0	55.4	309.5	4.368E-05	5.874E-05	4.368E-05
E	1.0	1.98	4827.	0.	0.	222.0	55.4	309.5	1.844E-05	2.480E-05	1.844E-05
E	2.0	5.19	4827.	0.	0.	222.0	55.4	307.3	9.185E-06	1.226E-05	9.185E-06
E	3.0	4.46	4827.	0.	0.	222.0	55.4	265.2	7.174E-06	8.267E-06	7.174E-06
E	4.0	1.86	4827.	0.	0.	222.0	55.4	243.8	5.885E-06	6.235E-06	5.885E-06
E	5.0	.56	4827.	0.	0.	222.0	55.4	230.4	4.955E-06	4.960E-06	4.955E-06
E	6.0	.23	4827.	0.	0.	222.0	55.4	222.0	4.302E-06	4.149E-06	4.149E-06
E	8.0	.73	4827.	0.	0.	222.0	55.4	222.0	3.224E-06	3.109E-06	3.109E-06
E	10.0	.73	4827.	0.	0.	222.0	55.4	222.0	2.577E-06	2.486E-06	2.486E-06
F	.4	.98	4827.	0.	0.	153.2	34.5	243.9	8.912E-05	1.306E-04	8.912E-05
F	1.0	3.56	4827.	0.	0.	153.2	34.5	243.9	3.763E-05	5.514E-05	3.763E-05
F	2.0	7.96	4827.	0.	0.	153.2	34.5	241.3	1.880E-05	2.727E-05	1.880E-05
F	3.0	3.67	4827.	0.	0.	153.2	34.5	194.9	1.569E-05	1.838E-05	1.569E-05
F	4.0	.45	4827.	0.	0.	153.2	34.5	173.4	1.331E-05	1.386E-05	1.331E-05
F	5.0	.06	4827.	0.	0.	153.2	34.5	160.7	1.142E-05	1.103E-05	1.103E-05
G	.4	1.98	4827.	0.	0.	105.7	21.5	210.1	1.663E-04	2.751E-04	1.663E-04
G	1.0	5.81	4827.	0.	0.	105.7	21.5	210.1	7.022E-05	1.162E-04	7.022E-05
G	2.0	14.06	4827.	0.	0.	105.7	21.5	206.7	3.530E-05	5.745E-05	3.530E-05
G	3.0	4.23	4827.	0.	0.	105.7	21.5	148.9	3.302E-05	3.872E-05	3.302E-05
G	4.0	.45	4827.	0.	0.	105.7	21.5	125.3	2.960E-05	2.921E-05	2.921E-05

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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:   CGS                               METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma=desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0LOW POPULATION ZONE CALCULATIONS:
0 SSW SECTOR      BOUNDARY DISTANCE = 4827.0 METERS
0LATERAL PLUME MEANDER/BUILDING WAKE CREDIT ALLOWED
 AS A FUNCTION OF DOWNWIND DISTANCE.
 MEANDER CREDIT IS FOR WINDSPEEDS LESS THAN 6 MPS.
 BUILDING WAKE CREDIT ALLOWED:   C=   .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0   1.663E-04   8.912E-05   7.022E-05   4.368E-05   3.763E-05   3.530E-05   3.302E-05   2.921E-05   2.298E-05   1.880E-05
        1.984       2.960       8.774       9.286      12.842      26.898      31.132      31.583      32.024      39.984
       .11109      .16570      .49124      .51990      .71901     1.50599     1.74304     1.76832     1.79301     2.23865
0   1.844E-05   1.569E-05   1.331E-05   1.103E-05   9.704E-06   9.185E-06   7.174E-06   6.569E-06   5.885E-06   4.955E-06
       41.960      45.629      46.080      46.137      47.943      53.137      57.596      57.791      59.654      60.219
       2.34927     2.55471     2.57999     2.58315     2.68429     2.97506     3.22475     3.23567     3.33997     3.37157
0   4.816E-06   4.149E-06   3.498E-06   3.109E-06   2.773E-06   2.762E-06   2.486E-06   2.271E-06   2.097E-06   1.912E-06
       64.057      64.283      68.404      69.138      69.702      73.033      73.767      75.573      75.722      76.569
       3.58649     3.59913     3.82986     3.87094     3.90255     4.08902     4.13011     4.23125     4.23958     4.28699
0   1.432E-06   1.371E-06   1.145E-06   9.651E-07   9.245E-07   8.853E-07   8.820E-07   6.972E-07   5.547E-07   4.639E-07
       77.246      78.319      78.770      79.396      80.412      80.864      80.920      81.767      82.388      82.557
       4.32491     4.38496     4.41025     4.44529     4.50218     4.52746     4.53062     4.57803     4.61279     4.62228
0   4.378E-07   4.075E-07   3.476E-07   2.951E-07   2.780E-07   2.226E-07   2.015E-07   1.771E-07   1.481E-07   1.358E-07
       83.291      85.492      85.605      86.621      86.734      87.750      91.137      91.702      91.815      94.412
       4.66336     4.78663     4.79295     4.84984     4.85616     4.91305     5.10268     5.13429     5.14061     5.28599
0   1.110E-07   1.024E-07   8.149E-08   6.833E-08   6.816E-08   5.108E-08   4.084E-08   3.145E-08
       94.524      96.613      98.194      98.307      98.815      99.831      99.887     100.000
       5.29232     5.40926     5.49775     5.50407     5.53252     5.58941     5.59257     5.59889
```

```
0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=   1.741
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=   2.552
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   3.222
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   3.583
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   4.086
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   4.228
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 8)=   4.284
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 9)=   5.405
0  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
   2  1      -8.70159 -13.91434  -1.70398
   2  2     -10.31825 -20.17688  -4.67142
   2  3     -11.06239 -26.04000  -7.67642
   2  4     -11.84509 -27.22375  -8.31658
   2  5     -12.24366 -28.82149  -9.20361
   2  6     -12.79953 -34.11397 -12.24380
   2  7     -12.99534 -61.30417 -28.00768
   2  8     -13.16756 -58.09748 -26.14191
   2  9     -16.09403     NUMXQ(K)=  9
                                                    BACK EXTRAPOLATION FOR  1 PERCENTILE.
     2.337E-04              .056             1.000
     1.342E-04              .168             3.000
     1.017E-04              .280             5.000
     6.830E-05              .560            10.000
     5.332E-05              .840            15.000
     4.439E-05             1.120            20.000
     3.833E-05             1.400            25.000
     3.388E-05             1.680            30.000
     2.641E-05             1.960            35.000
     2.038E-05             2.240            40.000
     1.613E-05             2.519            45.000
     1.158E-05             2.799            50.000
     8.397E-06             3.079            55.000
     6.160E-06             3.359            60.000
     4.529E-06             3.639            65.000
     3.311E-06             3.919            70.000
     2.372E-06             4.199            75.000
     1.112E-06             4.479            80.000
     5.221E-07             4.759            85.000
     2.537E-07             5.039            90.000
0    7.304E-05             0.5               8.93
0ANNUAL AVERAGE =   5.08E-07
0K=  2     FIVEXQ(K)= 7.304E-05     FIVEPR(K)= 8.930
```

1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23:4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE SW SECTOR.

STABILITY CLASS	WINDSPEED FREQUENCY AT 10.0 METERS METER/SEC	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=1431.SQ.METERS	USED
A	.4	.71	4827.	0.	0.	776.2	1000.0	776.2	9.656E-07	9.651E-07	9.651E-07
A	1.0	2.50	4827.	0.	0.	776.2	1000.0	776.2	4.077E-07	4.075E-07	4.075E-07
A	2.0	4.25	4827.	0.	0.	776.2	1000.0	776.2	2.016E-07	2.015E-07	2.015E-07
A	3.0	3.42	4827.	0.	0.	776.2	1000.0	776.2	1.359E-07	1.358E-07	1.358E-07
A	4.0	1.58	4827.	0.	0.	776.2	1000.0	776.2	1.025E-07	1.024E-07	1.024E-07
A	5.0	.92	4827.	0.	0.	776.2	1000.0	776.2	8.154E-08	8.149E-08	8.149E-08
A	6.0	.42	4827.	0.	0.	776.2	1000.0	776.2	6.820E-08	6.816E-08	6.816E-08
A	8.0	.83	4827.	0.	0.	776.2	1000.0	776.2	5.111E-08	5.108E-08	5.108E-08
A	10.0	.17	4827.	0.	0.	776.2	1000.0	776.2	4.086E-08	4.084E-08	4.084E-08
B	.4	.03	4827.	0.	0.	583.7	611.6	583.7	2.099E-06	2.097E-06	2.097E-06
B	1.0	.08	4827.	0.	0.	583.7	611.6	583.7	8.864E-07	8.853E-07	8.853E-07
B	2.0	.92	4827.	0.	0.	583.7	611.6	583.7	4.383E-07	4.378E-07	4.378E-07
B	3.0	1.25	4827.	0.	0.	583.7	611.6	583.7	2.955E-07	2.951E-07	2.951E-07
B	4.0	.83	4827.	0.	0.	583.7	611.6	583.7	2.228E-07	2.226E-07	2.226E-07
B	5.0	.67	4827.	0.	0.	583.7	611.6	583.7	1.773E-07	1.771E-07	1.771E-07
B	6.0	.08	4827.	0.	0.	583.7	611.6	583.7	1.483E-07	1.481E-07	1.481E-07
B	8.0	.17	4827.	0.	0.	583.7	611.6	583.7	1.111E-07	1.110E-07	1.110E-07
C	.4	.23	4827.	0.	0.	443.3	256.4	443.3	6.595E-06	6.569E-06	6.569E-06
C	1.0	.67	4827.	0.	0.	443.3	256.4	443.3	2.784E-06	2.773E-06	2.773E-06
C	2.0	.92	4827.	0.	0.	443.3	256.4	443.3	1.377E-06	1.371E-06	1.371E-06
C	3.0	.92	4827.	0.	0.	443.3	256.4	443.3	9.282E-07	9.245E-07	9.245E-07
C	4.0	.25	4827.	0.	0.	443.3	256.4	443.3	7.000E-07	6.972E-07	6.972E-07
C	5.0	.42	4827.	0.	0.	443.3	256.4	443.3	5.569E-07	5.547E-07	5.547E-07
C	6.0	.25	4827.	0.	0.	443.3	256.4	443.3	4.658E-07	4.639E-07	4.639E-07
C	8.0	.17	4827.	0.	0.	443.3	256.4	443.3	3.490E-07	3.476E-07	3.476E-07
D	.4	.53	4827.	0.	0.	312.1	87.3	373.7	2.298E-05	2.706E-05	2.298E-05
D	1.0	2.17	4827.	0.	0.	312.1	87.3	373.7	9.704E-06	1.143E-05	9.704E-06
D	2.0	4.42	4827.	0.	0.	312.1	87.3	372.4	4.816E-06	5.651E-06	4.816E-06
D	3.0	4.50	4827.	0.	0.	312.1	87.3	345.6	3.498E-06	3.809E-06	3.498E-06
D	4.0	3.33	4827.	0.	0.	312.1	87.3	330.1	2.762E-06	2.873E-06	2.762E-06
D	5.0	2.83	4827.	0.	0.	312.1	87.3	319.4	2.271E-06	2.285E-06	2.271E-06
D	6.0	1.33	4827.	0.	0.	312.1	87.3	312.1	1.944E-06	1.912E-06	1.912E-06
D	8.0	.33	4827.	0.	0.	312.1	87.3	312.1	1.456E-06	1.432E-06	1.432E-06
D	10.0	.50	4827.	0.	0.	312.1	87.3	312.1	1.164E-06	1.145E-06	1.145E-06
D	13.0	.33	4827.	0.	0.	312.1	87.3	312.1	8.968E-07	8.820E-07	8.820E-07
D	18.0	.17	4827.	0.	0.	312.1	87.3	312.1	6.479E-07	6.372E-07	6.372E-07

E	.4	.50	4827.	0.	0.	222.0	55.4	309.5	4.368E-05	5.874E-05	4.368E-05
E	1.0	1.92	4827.	0.	0.	222.0	55.4	309.5	1.844E-05	2.480E-05	1.844E-05
E	2.0	5.25	4827.	0.	0.	222.0	55.4	307.3	9.185E-06	1.226E-05	9.185E-06
E	3.0	4.50	4827.	0.	0.	222.0	55.4	265.2	7.174E-06	8.267E-06	7.174E-06
E	4.0	3.83	4827.	0.	0.	222.0	55.4	243.8	5.885E-06	6.235E-06	5.885E-06
E	5.0	1.25	4827.	0.	0.	222.0	55.4	230.4	4.955E-06	4.960E-06	4.955E-06
E	6.0	.25	4827.	0.	0.	222.0	55.4	222.0	4.302E-06	4.149E-06	4.149E-06
E	8.0	.50	4827.	0.	0.	222.0	55.4	222.0	3.224E-06	3.109E-06	3.109E-06
E	10.0	.58	4827.	0.	0.	222.0	55.4	222.0	2.577E-06	2.486E-06	2.486E-06
E	13.0	.08	4827.	0.	0.	222.0	55.4	222.0	1.985E-06	1.914E-06	1.914E-06
F	.4	.98	4827.	0.	0.	153.2	34.5	243.9	8.912E-05	1.306E-04	8.912E-05
F	1.0	3.58	4827.	0.	0.	153.2	34.5	243.9	3.763E-05	5.514E-05	3.763E-05
F	2.0	5.83	4827.	0.	0.	153.2	34.5	241.3	1.880E-05	2.727E-05	1.880E-05
F	3.0	3.33	4827.	0.	0.	153.2	34.5	194.9	1.569E-05	1.838E-05	1.569E-05
F	4.0	1.83	4827.	0.	0.	153.2	34.5	173.4	1.331E-05	1.386E-05	1.331E-05
F	5.0	.25	4827.	0.	0.	153.2	34.5	160.7	1.142E-05	1.103E-05	1.103E-05
G	.4	1.79	4827.	0.	0.	105.7	21.5	210.1	1.663E-04	2.751E-04	1.663E-04
G	1.0	5.25	4827.	0.	0.	105.7	21.5	210.1	7.022E-05	1.162E-04	7.022E-05
G	2.0	8.83	4827.	0.	0.	105.7	21.5	206.7	3.530E-05	5.745E-05	3.530E-05
G	3.0	4.75	4827.	0.	0.	105.7	21.5	148.9	3.302E-05	3.872E-05	3.302E-05
G	4.0	1.58	4827.	0.	0.	105.7	21.5	125.3	2.960E-05	2.921E-05	2.921E-05
G	5.0	.25	4827.	0.	0.	105.7	21.5	112.7	2.618E-05	2.323E-05	2.323E-05

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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:   CGS                               METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma=desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0LOW POPULATION ZONE CALCULATIONS:
0  SW SECTOR      BOUNDARY DISTANCE = 4827.0 METERS
0LATERAL PLUME MEANDER/BUILDING WAKE CREDIT ALLOWED
 AS A FUNCTION OF DOWNWIND DISTANCE.
 MEANDER CREDIT IS FOR WINDSPEEDS LESS THAN 6 MPS.
 BUILDING WAKE CREDIT ALLOWED:   C=   .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0   1.663E-04   8.912E-05   7.022E-05   4.368E-05   3.763E-05   3.530E-05   3.302E-05   2.921E-05   2.323E-05   2.298E-05
        1.791       2.774       8.023       8.519      12.102      20.934      25.683      27.266      27.516      28.045
       .06795      .10522      .30434      .32317      .45908      .79410      .97425     1.03430     1.04378     1.06384
0   1.880E-05   1.844E-05   1.569E-05   1.331E-05   1.103E-05   9.704E-06   9.185E-06   7.174E-06   6.569E-06   5.885E-06
       33.877      35.793      39.126      40.959      41.209      43.375      48.624      53.124      53.354      57.187
       1.28508     1.35777     1.48420     1.55373     1.56321     1.64539     1.84450     2.01517     2.02391     2.16930
0   4.955E-06   4.816E-06   4.149E-06   3.498E-06   3.109E-06   2.773E-06   2.762E-06   2.486E-06   2.271E-06   2.097E-06
       58.436      62.852      63.102      67.601      68.101      68.768      72.100      72.684      75.516      75.544
       2.21671     2.38421     2.39370     2.56437     2.58333     2.60861     2.73504     2.75716     2.86462     2.86566
0   1.914E-06   1.912E-06   1.432E-06   1.371E-06   1.145E-06   9.651E-07   9.245E-07   8.853E-07   8.820E-07   6.972E-07
       75.627      76.960      77.294      78.210      78.710      79.421      80.337      80.420      80.754      81.004
       2.86882     2.91939     2.93203     2.96680     2.98576     3.01271     3.04748     3.05064     3.06328     3.07276
0   6.372E-07   5.547E-07   4.639E-07   4.378E-07   4.075E-07   3.476E-07   2.951E-07   2.226E-07   2.015E-07   1.771E-07
       81.170      81.587      81.837      82.753      85.253      85.419      86.669      87.502      91.752      92.418
       3.07908     3.09489     3.10437     3.13913     3.23395     3.24027     3.28768     3.31929     3.48047     3.50576
0   1.481E-07   1.358E-07   1.110E-07   1.024E-07   8.149E-08   6.816E-08   5.108E-08   4.084E-08
       92.501      95.917      96.084      97.667      98.584      99.000      99.833     100.000
       3.50892     3.63850     3.64482     3.70487     3.73964     3.75544     3.78705     3.79337
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0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=    .973
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=   1.356
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   1.483
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   2.382
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   2.732
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   2.862
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 8)=   2.917
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 9)=   3.635
0  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
   3  1      8.70159 -14.67543  -1.86479
   3  2    -10.31825 -21.05147  -4.59361
   3  3    -10.90090 -21.09893  -4.61508
   3  4    -11.06239 -24.29605  -6.08521
   3  5    -12.24366 -30.92509  -9.43219
   3  6    -12.79953 -31.45024  -9.70547
   3  7    -12.99534 -52.45142 -20.75002
   3  8    -13.16756 -63.98021 -26.83961
   3  9    -15.81192     NUMXQ(K)=  9
                                                  BACK EXTRAPOLATION FOR  1 PERCENTILE.
     2.259E-04               .038              1.000
     1.254E-04               .114              3.000
     9.360E-05               .190              5.000
     6.154E-05               .379             10.000
     4.748E-05               .569             15.000
     3.921E-05               .759             20.000
     3.365E-05               .948             25.000
     2.522E-05              1.138             30.000
     1.920E-05              1.328             35.000
     1.488E-05              1.517             40.000
     1.117E-05              1.707             45.000
     8.606E-06              1.897             50.000
     6.774E-06              2.086             55.000
     5.427E-06              2.276             60.000
     4.208E-06              2.466             65.000
     3.117E-06              2.655             70.000
     2.338E-06              2.845             75.000
     1.209E-06              3.035             80.000
     5.871E-07              3.224             85.000
     2.949E-07              3.414             90.000
0    5.164E-05              0.5               13.18
0ANNUAL AVERAGE =   3.16E-07
0K=  3     FIVEXQ(K)= 5.164E-05     FIVEPR(K)=13.181
```

1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23: 4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE WSW SECTOR.

STABILITY CLASS	WINDSPEED AT 10.0 METERS METER/SEC	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=1431.SQ.METERS	USED
A	.4	1.24	4827.	0.	0.	776.2	1000.0	776.2	9.656E-07	9.651E-07	9.651E-07
A	1.0	4.37	4827.	0.	0.	776.2	1000.0	776.2	4.077E-07	4.075E-07	4.075E-07
A	2.0	6.83	4827.	0.	0.	776.2	1000.0	776.2	2.016E-07	2.015E-07	2.015E-07
A	3.0	2.09	4827.	0.	0.	776.2	1000.0	776.2	1.359E-07	1.358E-07	1.358E-07
A	4.0	1.33	4827.	0.	0.	776.2	1000.0	776.2	1.025E-07	1.024E-07	1.024E-07
A	5.0	.38	4827.	0.	0.	776.2	1000.0	776.2	8.154E-08	8.149E-08	8.149E-08
A	6.0	.19	4827.	0.	0.	776.2	1000.0	776.2	6.820E-08	6.816E-08	6.816E-08
B	.4	.31	4827.	0.	0.	583.7	611.6	583.7	2.099E-06	2.097E-06	2.097E-06
B	1.0	.95	4827.	0.	0.	583.7	611.6	583.7	8.864E-07	8.853E-07	8.853E-07
B	2.0	.76	4827.	0.	0.	583.7	611.6	583.7	4.383E-07	4.378E-07	4.378E-07
B	3.0	.76	4827.	0.	0.	583.7	611.6	583.7	2.955E-07	2.951E-07	2.951E-07
B	4.0	.38	4827.	0.	0.	583.7	611.6	583.7	2.228E-07	2.226E-07	2.226E-07
B	5.0	.19	4827.	0.	0.	583.7	611.6	583.7	1.773E-07	1.771E-07	1.771E-07
B	6.0	.19	4827.	0.	0.	583.7	611.6	583.7	1.483E-07	1.481E-07	1.481E-07
B	8.0	.57	4827.	0.	0.	583.7	611.6	583.7	1.111E-07	1.110E-07	1.110E-07
C	.4	.33	4827.	0.	0.	443.3	256.4	443.3	6.595E-06	6.569E-06	6.569E-06
C	1.0	.95	4827.	0.	0.	443.3	256.4	443.3	2.784E-06	2.773E-06	2.773E-06
C	2.0	.76	4827.	0.	0.	443.3	256.4	443.3	1.377E-06	1.371E-06	1.371E-06
C	3.0	1.71	4827.	0.	0.	443.3	256.4	443.3	9.282E-07	9.245E-07	9.245E-07
C	4.0	.19	4827.	0.	0.	443.3	256.4	443.3	7.000E-07	6.972E-07	6.972E-07
D	.4	1.07	4827.	0.	0.	312.1	87.3	373.7	2.298E-05	2.706E-05	2.298E-05
D	1.0	4.37	4827.	0.	0.	312.1	87.3	373.7	9.704E-06	1.143E-05	9.704E-06
D	2.0	6.26	4827.	0.	0.	312.1	87.3	372.4	4.816E-06	5.651E-06	4.816E-06
D	3.0	4.75	4827.	0.	0.	312.1	87.3	345.6	3.498E-06	3.809E-06	3.498E-06
D	4.0	3.61	4827.	0.	0.	312.1	87.3	330.1	2.762E-06	2.873E-06	2.762E-06
D	5.0	1.14	4827.	0.	0.	312.1	87.3	319.4	2.271E-06	2.285E-06	2.271E-06
D	8.0	.38	4827.	0.	0.	312.1	87.3	312.1	1.456E-06	1.432E-06	1.432E-06

E	.4	1.28	4827.	0.	0.	222.0	55.4	309.5	4.368E-05	5.874E-05	4.368E-05
E	1.0	4.94	4827.	0.	0.	222.0	55.4	309.5	1.844E-05	2.480E-05	1.844E-05
E	2.0	5.70	4827.	0.	0.	222.0	55.4	307.3	9.185E-06	1.226E-05	9.185E-06
E	3.0	5.13	4827.	0.	0.	222.0	55.4	265.2	7.174E-06	8.267E-06	7.174E-06
E	4.0	1.52	4827.	0.	0.	222.0	55.4	243.8	5.885E-06	6.235E-06	5.885E-06
E	5.0	1.71	4827.	0.	0.	222.0	55.4	230.4	4.955E-06	4.960E-06	4.955E-06
E	6.0	.95	4827.	0.	0.	222.0	55.4	222.0	4.302E-06	4.149E-06	4.149E-06
E	8.0	.19	4827.	0.	0.	222.0	55.4	222.0	3.224E-06	3.109E-06	3.109E-06
F	.4	.94	4827.	0.	0.	153.2	34.5	243.9	8.912E-05	1.306E-04	8.912E-05
F	1.0	3.42	4827.	0.	0.	153.2	34.5	243.9	3.763E-05	5.514E-05	3.763E-05
F	2.0	5.70	4827.	0.	0.	153.2	34.5	241.3	1.880E-05	2.727E-05	1.880E-05
F	3.0	3.04	4827.	0.	0.	153.2	34.5	194.9	1.569E-05	1.838E-05	1.569E-05
F	4.0	1.90	4827.	0.	0.	153.2	34.5	173.4	1.331E-05	1.386E-05	1.331E-05
F	5.0	.57	4827.	0.	0.	153.2	34.5	160.7	1.142E-05	1.103E-05	1.103E-05
G	.4	1.81	4827.	0.	0.	105.7	21.5	210.1	1.663E-04	2.751E-04	1.663E-04
G	1.0	5.32	4827.	0.	0.	105.7	21.5	210.1	7.022E-05	1.162E-04	7.022E-05
G	2.0	5.51	4827.	0.	0.	105.7	21.5	206.7	3.530E-05	5.745E-05	3.530E-05
G	3.0	2.66	4827.	0.	0.	105.7	21.5	148.9	3.302E-05	3.872E-05	3.302E-05
G	4.0	1.14	4827.	0.	0.	105.7	21.5	125.3	2.960E-05	2.921E-05	2.921E-05
G	5.0	.38	4827.	0.	0.	105.7	21.5	112.7	2.618E-05	2.323E-05	2.323E-05
G	6.0	.19	4827.	0.	0.	105.7	21.5	105.7	2.333E-05	1.943E-05	1.943E-05

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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:  CGS                                METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-P.inp   output file: P96-99-P.out  sigma=desert + P G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0LOW POPULATION ZONE CALCULATIONS:
0 WSW SECTOR     BOUNDARY DISTANCE = 4827.0 METERS
0LATERAL PLUME MEANDER/BUILDING WAKE CREDIT ALLOWED
 AS A FUNCTION OF DOWNWIND DISTANCE.
 MEANDER CREDIT IS FOR WINDSPEEDS LESS THAN 6 MPS.
 BUILDING WAKE CREDIT ALLOWED:  C=   .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0  1.663E-04  8.912E-05  7.022E-05  4.368E-05  3.763E-05  3.530E-05  3.302E-05  2.921E-05  2.323E-05  2.298E-05
       1.814      2.751      8.067      9.346     12.763     18.268     20.926     22.065     22.445     23.511
        .03020     .04580     .13430     .15559     .21248     .30414     .34838     .36735     .37367     .39142
0  1.943E-05  1.880E-05  1.844E-05  1.569E-05  1.331E-05  1.103E-05  9.704E-06  9.185E-06  7.174E-06  6.569E-06
      23.701     29.396     34.332     37.369     39.267     39.837     44.203     49.899     55.024     55.352
        .39458     .48939     .57157     .62214     .65374     .66322     .73592     .83073     .91607     .92153
0  5.885E-06  4.955E-06  4.816E-06  4.149E-06  3.498E-06  3.109E-06  2.773E-06  2.762E-06  2.271E-06  2.097E-06
      56.871     58.580     64.844     65.794     70.540     70.729     71.679     75.286     76.425     76.737
        .94682     .97526    1.07956    1.09536    1.17438    1.17754    1.19334    1.25339    1.27235    1.27756
0  1.432E-06  1.371E-06  9.651E-07  9.245E-07  8.853E-07  6.972E-07  4.378E-07  4.075E-07  2.951E-07  2.226E-07
      77.117     77.876     79.118     80.826     81.775     81.965     82.725     87.091     87.850     88.230
       1.28388    1.29653    1.31719    1.34563    1.36143    1.36460    1.37724    1.44993    1.46257    1.46889
0  2.015E-07  1.771E-07  1.481E-07  1.358E-07  1.110E-07  1.024E-07  8.149E-08  6.816E-08
      95.064     95.254     95.444     97.532     98.102     99.430     99.810    100.000
       1.58267    1.58583    1.58900    1.62376    1.63324    1.65537    1.66169    1.66485
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0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=    .134
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=    .348
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=    .571
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=    .830
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   1.078
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   1.252
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 8)=   1.581
0  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
   4  1      -8.70159 -15.60919  -2.01386
   4  2      -9.56381 -17.03544  -2.48898
   4  3     -10.31825 -19.61563  -3.44505
   4  4     -10.90090 -24.05205  -5.19882
   4  5     -11.59799 -27.44037  -6.61324
   4  6     -12.24366 -34.60416  -9.73074
   4  7     -12.79953 -76.84576 -28.58188
   4  8     -15.41750     NUMXQ(K)=  8
                                                  BACK EXTRAPOLATION FOR  1 PERCENTILE.
     2.288E-04              .017             1.000
     1.257E-04              .050             3.000
     9.360E-05              .083             5.000
     5.958E-05              .166            10.000
     4.332E-05              .250            15.000
     3.428E-05              .333            20.000
     2.688E-05              .416            25.000
     2.168E-05              .499            30.000
     1.780E-05              .583            35.000
     1.392E-05              .666            40.000
     1.117E-05              .749            45.000
     9.139E-06              .832            50.000
     7.244E-06              .916            55.000
     5.844E-06              .999            60.000
     4.773E-06             1.082            65.000
     3.627E-06             1.165            70.000
     2.802E-06             1.249            75.000
     1.408E-06             1.332            80.000
     7.150E-07             1.415            85.000
     3.753E-07             1.498            90.000
0    2.165E-05             0.5              30.03
0ANNUAL AVERAGE =   1.50E-07
0K=  4     FIVEXQ(K)= 2.165E-05     FIVEPR(K)=30.033
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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23: 4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE W SECTOR.

STABILITY CLASS	WINDSPEED AT 10.0 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=1431.SQ.METERS	USED
A	.4	2.01	4827.	0.	0.	776.2	1000.0	776.2	9.656E-07	9.651E-07	9.651E-07
A	1.0	7.09	4827.	0.	0.	776.2	1000.0	776.2	4.077E-07	4.075E-07	4.075E-07
A	2.0	7.87	4827.	0.	0.	776.2	1000.0	776.2	2.016E-07	2.015E-07	2.015E-07
A	3.0	2.62	4827.	0.	0.	776.2	1000.0	776.2	1.359E-07	1.358E-07	1.358E-07
A	4.0	1.31	4827.	0.	0.	776.2	1000.0	776.2	1.025E-07	1.024E-07	1.024E-07
A	5.0	1.05	4827.	0.	0.	776.2	1000.0	776.2	8.154E-08	8.149E-08	8.149E-08
B	.4	.61	4827.	0.	0.	583.7	611.6	583.7	2.099E-06	2.097E-06	2.097E-06
B	1.0	1.84	4827.	0.	0.	583.7	611.6	583.7	8.864E-07	8.853E-07	8.853E-07
B	2.0	1.57	4827.	0.	0.	583.7	611.6	583.7	4.383E-07	4.378E-07	4.378E-07
B	3.0	.79	4827.	0.	0.	583.7	611.6	583.7	2.955E-07	2.951E-07	2.951E-07
B	4.0	.52	4827.	0.	0.	583.7	611.6	583.7	2.228E-07	2.226E-07	2.226E-07
C	.4	.27	4827.	0.	0.	443.3	256.4	443.3	6.595E-06	6.569E-06	6.569E-06
C	1.0	.79	4827.	0.	0.	443.3	256.4	443.3	2.784E-06	2.773E-06	2.773E-06
C	2.0	1.57	4827.	0.	0.	443.3	256.4	443.3	1.377E-06	1.371E-06	1.371E-06
C	3.0	1.84	4827.	0.	0.	443.3	256.4	443.3	9.282E-07	9.245E-07	9.245E-07
C	4.0	.52	4827.	0.	0.	443.3	256.4	443.3	7.000E-07	6.972E-07	6.972E-07
D	.4	1.03	4827.	0.	0.	312.1	87.3	373.7	2.298E-05	2.706E-05	2.298E-05
D	1.0	4.20	4827.	0.	0.	312.1	87.3	373.7	9.704E-06	1.143E-05	9.704E-06
D	2.0	9.71	4827.	0.	0.	312.1	87.3	372.4	4.816E-06	5.651E-06	4.816E-06
D	3.0	6.04	4827.	0.	0.	312.1	87.3	345.6	3.498E-06	3.809E-06	3.498E-06
D	4.0	4.72	4827.	0.	0.	312.1	87.3	330.1	2.762E-06	2.873E-06	2.762E-06
D	5.0	1.31	4827.	0.	0.	312.1	87.3	319.4	2.271E-06	2.285E-06	2.271E-06

E	.4	1.50	4827.	0.	0.	222.0	55.4	309.5	4.368E-05	5.874E-05	4.368E-05
E	1.0	5.77	4827.	0.	0.	222.0	55.4	309.5	1.844E-05	2.480E-05	1.844E-05
E	2.0	5.77	4827.	0.	0.	222.0	55.4	307.3	9.185E-06	1.226E-05	9.185E-06
E	3.0	4.99	4827.	0.	0.	222.0	55.4	265.2	7.174E-06	8.267E-06	7.174E-06
E	4.0	1.31	4827.	0.	0.	222.0	55.4	243.8	5.885E-06	6.235E-06	5.885E-06
E	8.0	.26	4827.	0.	0.	222.0	55.4	222.0	3.224E-06	3.109E-06	3.109E-06
F	.4	1.30	4827.	0.	0.	153.2	34.5	243.9	8.912E-05	1.306E-04	8.912E-05
F	1.0	4.72	4827.	0.	0.	153.2	34.5	243.9	3.763E-05	5.514E-05	3.763E-05
F	2.0	3.67	4827.	0.	0.	153.2	34.5	241.3	1.880E-05	2.727E-05	1.880E-05
F	3.0	2.10	4827.	0.	0.	153.2	34.5	194.9	1.569E-05	1.838E-05	1.569E-05
F	4.0	.52	4827.	0.	0.	153.2	34.5	173.4	1.331E-05	1.386E-05	1.331E-05
G	.4	1.70	4827.	0.	0.	105.7	21.5	210.1	1.663E-04	2.751E-04	1.663E-04
G	1.0	4.99	4827.	0.	0.	105.7	21.5	210.1	7.022E-05	1.162E-04	7.022E-05
G	2.0	1.57	4827.	0.	0.	105.7	21.5	206.7	3.530E-05	5.745E-05	3.530E-05
G	3.0	.26	4827.	0.	0.	105.7	21.5	148.9	3.302E-05	3.872E-05	3.302E-05
G	4.0	.26	4827.	0.	0.	105.7	21.5	125.3	2.960E-05	2.921E-05	2.921E-05

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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
 /PLANT NAME:   CGS                              METEOROLOGICAL INSTRUMENTATION
  DATA PERIOD: JFD 1996-1999                     WIND SENSORS HEIGHT:  10.0 METERS
  TYPE OF RELEASE: GROUND LEVEL RELEASE          DELTA-T HEIGHTS:    10 - 75 METERS
  SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
  COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma-desert + P-G
  PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0LOW POPULATION ZONE CALCULATIONS:
0   W SECTOR     BOUNDARY DISTANCE = 4827.0 METERS
0LATERAL PLUME MEANDER/BUILDING WAKE CREDIT ALLOWED
  AS A FUNCTION OF DOWNWIND DISTANCE.
  MEANDER CREDIT IS FOR WINDSPEEDS LESS THAN 6 MPS.
  BUILDING WAKE CREDIT ALLOWED:   C=   .5     A=  2861.     D=   70.0
  CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0   1.663E-04   8.912E-05   7.022E-05   4.368E-05   3.763E-05   3.530E-05   3.302E-05   2.921E-05   2.298E-05   1.880E-05
        1.702       2.997       7.983       9.479      14.203      15.778      16.040      16.303      17.328      21.002
         .02049      .03610      .09615      .11416      .17105      .19002      .19318      .19634      .20868      .25293
0   1.844E-05   1.569E-05   1.331E-05   9.704E-06   9.185E-06   7.174E-06   6.569E-06   5.885E-06   4.816E-06   3.498E-06
       26.776      28.875      29.400      33.599      39.373      44.359      44.631      45.943      55.653      61.689
         .32246      .34775      .35407      .40464      .47417      .53422      .53750      .55330      .67024      .74294
0   3.109E-06   2.773E-06   2.762E-06   2.271E-06   2.097E-06   1.371E-06   9.651E-07   9.245E-07   8.853E-07   6.972E-07
       61.952      62.739      67.463      68.775      69.381      70.955      72.969      74.806      76.643      77.168
         .74610      .75558      .81247      .82827      .83556      .85452      .87878      .90090      .92303      .92935
0   4.378E-07   4.075E-07   2.951E-07   2.226E-07   2.015E-07   1.358E-07   1.024E-07   8.149E-08
       78.743      85.829      86.616      87.141      95.014      97.638      98.950     100.000
         .94831     1.03365     1.04313     1.04945     1.14427     1.17587     1.19168     1.20432
```

```
0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=    .096
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=    .190
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=    .322
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=    .669
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=    .812
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   1.143
0  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
   5  1      -8.70159 -15.76025  -1.99745
   5  2      -9.56381 -19.84515  -3.31424
   5  3     -10.25170 -21.29144  -3.81389
   5  4     -10.90090 -25.46692  -5.34651
   5  5     -12.24366 -32.00969  -7.99192
   5  6     -12.79953 -61.99572 -20.46689
   5  7     -15.41750      NUMXQ(K)=  7

                                                  BACK EXTRAPOLATION FOR  1 PERCENTILE.
     2.191E-04                .012               1.000
     1.226E-04                .036               3.000
     9.213E-05                .060               5.000
     5.619E-05                .120              10.000
     3.720E-05                .181              15.000
     2.649E-05                .241              20.000
     2.010E-05                .301              25.000
     1.507E-05                .361              30.000
     1.142E-05                .422              35.000
     8.945E-06                .482              40.000
     7.192E-06                .542              45.000
     5.902E-06                .602              50.000
     4.925E-06                .662              55.000
     3.881E-06                .723              60.000
     3.078E-06                .783              65.000
     2.094E-06                .843              70.000
     1.244E-06                .903              75.000
     7.611E-07                .963              80.000
     4.780E-07               1.024              85.000
     3.073E-07               1.084              90.000
0    8.352E-06                0.5               41.52
0ANNUAL AVERAGE =   1.06E-07
0K=  5     FIVEXQ(K)= 8.352E-06     FIVEPR(K)=41.517
```

1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23:4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE WNW SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 10.0 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=1431.SQ.METERS	USED
A	.4	1.48	4827.	0.	0.	776.2	1000.0	776.2	9.656E-07	9.651E-07	9.651E-07
A	1.0	5.19	4827.	0.	0.	776.2	1000.0	776.2	4.077E-07	4.075E-07	4.075E-07
A	2.0	8.10	4827.	0.	0.	776.2	1000.0	776.2	2.016E-07	2.015E-07	2.015E-07
A	3.0	6.23	4827.	0.	0.	776.2	1000.0	776.2	1.359E-07	1.358E-07	1.358E-07
A	4.0	1.87	4827.	0.	0.	776.2	1000.0	776.2	1.025E-07	1.024E-07	1.024E-07
A	5.0	.83	4827.	0.	0.	776.2	1000.0	776.2	8.154E-08	8.149E-08	8.149E-08
A	6.0	.21	4827.	0.	0.	776.2	1000.0	776.2	6.820E-08	6.816E-08	6.816E-08
B	.4	.34	4827.	0.	0.	583.7	611.6	583.7	2.099E-06	2.097E-06	2.097E-06
B	1.0	1.04	4827.	0.	0.	583.7	611.6	583.7	8.864E-07	8.853E-07	8.853E-07
B	2.0	2.28	4827.	0.	0.	583.7	611.6	583.7	4.383E-07	4.378E-07	4.378E-07
B	3.0	1.04	4827.	0.	0.	583.7	611.6	583.7	2.955E-07	2.951E-07	2.951E-07
B	4.0	1.45	4827.	0.	0.	583.7	611.6	583.7	2.228E-07	2.226E-07	2.226E-07
B	5.0	.42	4827.	0.	0.	583.7	611.6	583.7	1.773E-07	1.771E-07	1.771E-07
C	.4	.29	4827.	0.	0.	443.3	256.4	443.3	6.595E-06	6.569E-06	6.569E-06
C	1.0	.83	4827.	0.	0.	443.3	256.4	443.3	2.784E-06	2.773E-06	2.773E-06
C	2.0	.62	4827.	0.	0.	443.3	256.4	443.3	1.377E-06	1.371E-06	1.371E-06
C	3.0	.21	4827.	0.	0.	443.3	256.4	443.3	9.282E-07	9.245E-07	9.245E-07
C	4.0	.83	4827.	0.	0.	443.3	256.4	443.3	7.000E-07	6.972E-07	6.972E-07
C	5.0	.42	4827.	0.	0.	443.3	256.4	443.3	5.569E-07	5.547E-07	5.547E-07
D	.4	.66	4827.	0.	0.	312.1	87.3	373.7	2.298E-05	2.706E-05	2.298E-05
D	1.0	2.70	4827.	0.	0.	312.1	87.3	373.7	9.704E-06	1.143E-05	9.704E-06
D	2.0	6.64	4827.	0.	0.	312.1	87.3	372.4	4.816E-06	5.651E-06	4.816E-06
D	3.0	6.02	4827.	0.	0.	312.1	87.3	345.6	3.498E-06	3.809E-06	3.498E-06
D	4.0	5.40	4827.	0.	0.	312.1	87.3	330.1	2.762E-06	2.873E-06	2.762E-06
D	5.0	1.45	4827.	0.	0.	312.1	87.3	319.4	2.271E-06	2.285E-06	2.271E-06
D	6.0	1.04	4827.	0.	0.	312.1	87.3	312.1	1.944E-06	1.912E-06	1.912E-06
D	8.0	.21	4827.	0.	0.	312.1	87.3	312.1	1.456E-06	1.432E-06	1.432E-06

E	.4	.86	4827.	0.	0.	222.0	55.4	309.5	4.368E-05	5.874E-05	4.368E-05
E	1.0	3.32	4827.	0.	0.	222.0	55.4	309.5	1.844E-05	2.480E-05	1.844E-05
E	2.0	6.44	4827.	0.	0.	222.0	55.4	307.3	9.185E-06	1.226E-05	9.185E-06
E	3.0	4.15	4827.	0.	0.	222.0	55.4	265.2	7.174E-06	8.267E-06	7.174E-06
E	4.0	5.19	4827.	0.	0.	222.0	55.4	243.8	5.885E-06	6.235E-06	5.885E-06
E	5.0	2.49	4827.	0.	0.	222.0	55.4	230.4	4.955E-06	4.960E-06	4.955E-06
E	6.0	.42	4827.	0.	0.	222.0	55.4	222.0	4.302E-06	4.149E-06	4.149E-06
F	.4	.91	4827.	0.	0.	153.2	34.5	243.9	8.912E-05	1.306E-04	8.912E-05
F	1.0	3.32	4827.	0.	0.	153.2	34.5	243.9	3.763E-05	5.514E-05	3.763E-05
F	2.0	4.98	4827.	0.	0.	153.2	34.5	241.3	1.880E-05	2.727E-05	1.880E-05
F	3.0	2.08	4827.	0.	0.	153.2	34.5	194.9	1.569E-05	1.838E-05	1.569E-05
F	4.0	.83	4827.	0.	0.	153.2	34.5	173.4	1.331E-05	1.386E-05	1.331E-05
F	5.0	.42	4827.	0.	0.	153.2	34.5	160.7	1.142E-05	1.103E-05	1.103E-05
G	.4	1.42	4827.	0.	0.	105.7	21.5	210.1	1.663E-04	2.751E-04	1.663E-04
G	1.0	4.15	4827.	0.	0.	105.7	21.5	210.1	7.022E-05	1.162E-04	7.022E-05
G	2.0	1.25	4827.	0.	0.	105.7	21.5	206.7	3.530E-05	5.745E-05	3.530E-05

```
1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:  CGS                                METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma=desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0LOW POPULATION ZONE CALCULATIONS:
0 WNW SECTOR     BOUNDARY DISTANCE = 4827.0 METERS
0LATERAL PLUME MEANDER/BUILDING WAKE CREDIT ALLOWED
 AS A FUNCTION OF DOWNWIND DISTANCE.
 MEANDER CREDIT IS FOR WINDSPEEDS LESS THAN 6 MPS.
 BUILDING WAKE CREDIT ALLOWED:  C=   .5    A=  2861.    D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0   1.663E-04  8.912E-05  7.022E-05  4.368E-05  3.763E-05  3.530E-05  2.298E-05  1.880E-05  1.844E-05  1.569E-05
        1.417      2.328      6.480      7.341     10.663     11.908     12.567     17.550     20.872     22.948
        .02157     .03544     .09865     .11175     .16232     .18129     .19132     .26717     .31774     .34935
0   1.331E-05  1.103E-05  9.704E-06  9.185E-06  7.174E-06  6.569E-06  5.885E-06  4.955E-06  4.816E-06  4.149E-06
       23.778     24.194     26.893     33.328     37.481     37.768     42.958     45.449     52.093     52.508
        .36199     .36831     .40940     .50737     .57059     .57496     .65397     .69190     .79303     .79935
0   3.498E-06  2.773E-06  2.762E-06  2.271E-06  2.097E-06  1.912E-06  1.432E-06  1.371E-06  9.651E-07  9.245E-07
       58.529     59.359     64.757     66.211     66.553     67.591     67.798     68.421     69.896     70.104
        .89101     .90365     .98583    1.00795    1.01316    1.02896    1.03212    1.04160    1.06406    1.06722
0   8.853E-07  6.972E-07  5.547E-07  4.378E-07  4.075E-07  2.951E-07  2.226E-07  2.015E-07  1.771E-07  1.358E-07
       71.142     71.972     72.388     74.671     79.862     80.900     82.353     90.450     90.865     97.093
       1.08303    1.09567    1.10199    1.13676    1.21577    1.23157    1.25370    1.37696    1.38328    1.47810
0   1.024E-07  8.149E-08  6.816E-08
       98.962     99.792    100.000
      1.50654    1.51918    1.52234
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0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=    .099
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=    .317
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=    .507
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=    .792
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=    .985
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   1.476
0  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
   6  1     -8.70159 -15.83152  -2.02540
   6  2     -9.56381 -20.89109  -3.66039
   6  3    -10.90090 -22.93495  -4.40926
   6  4    -11.59799 -22.06310  -4.07018
   6  5    -12.24366 -28.92343  -6.91379
   6  6    -12.79953 -57.89676 -19.33731
   6  7    -15.81192     NUMXQ(K)=  7
                                                  BACK EXTRAPOLATION FOR  1 PERCENTILE.
     2.001E-04              .015             1.000
     1.100E-04              .046             3.000
     8.193E-05              .076             5.000
     4.347E-05              .152            10.000
     2.730E-05              .228            15.000
     1.941E-05              .304            20.000
     1.415E-05              .381            25.000
     1.078E-05              .457            30.000
     8.571E-06              .533            35.000
     7.083E-06              .609            40.000
     5.972E-06              .685            45.000
     5.117E-06              .761            50.000
     4.198E-06              .837            55.000
     3.362E-06              .913            60.000
     2.688E-06              .990            65.000
     1.567E-06             1.066            70.000
     9.441E-07             1.142            75.000
     5.852E-07             1.218            80.000
     3.720E-07             1.294            85.000
     2.418E-07             1.370            90.000
0    9.392E-06              0.5             32.84
0ANNUAL AVERAGE =   1.07E-07
0K=  6     FIVEXQ(K)= 9.392E-06     FIVEPR(K)=32.844
```

1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23: 4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert - P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE NW SECTOR.

STABILITY CLASS	WINDSPEED AT 10.0 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=1431.SQ.METERS	USED
A	.4	.53	4827.	0.	0.	776.2	1000.0	776.2	9.656E-07	9.651E-07	9.651E-07
A	1.0	1.86	4827.	0.	0.	776.2	1000.0	776.2	4.077E-07	4.075E-07	4.075E-07
A	2.0	5.18	4827.	0.	0.	776.2	1000.0	776.2	2.016E-07	2.015E-07	2.015E-07
A	3.0	3.33	4827.	0.	0.	776.2	1000.0	776.2	1.359E-07	1.358E-07	1.358E-07
A	4.0	2.92	4827.	0.	0.	776.2	1000.0	776.2	1.025E-07	1.024E-07	1.024E-07
A	5.0	1.46	4827.	0.	0.	776.2	1000.0	776.2	8.154E-08	8.149E-08	8.149E-08
A	6.0	.40	4827.	0.	0.	776.2	1000.0	776.2	6.820E-08	6.816E-08	6.816E-08
A	8.0	.07	4827.	0.	0.	776.2	1000.0	776.2	5.111E-08	5.108E-08	5.108E-08
B	.4	.13	4827.	0.	0.	583.7	611.6	583.7	2.099E-06	2.097E-06	2.097E-06
B	1.0	.40	4827.	0.	0.	583.7	611.6	583.7	8.864E-07	8.853E-07	8.853E-07
B	2.0	.80	4827.	0.	0.	583.7	611.6	583.7	4.383E-07	4.378E-07	4.378E-07
B	3.0	1.33	4827.	0.	0.	583.7	611.6	583.7	2.955E-07	2.951E-07	2.951E-07
B	4.0	.80	4827.	0.	0.	583.7	611.6	583.7	2.228E-07	2.226E-07	2.226E-07
B	5.0	.20	4827.	0.	0.	583.7	611.6	583.7	1.773E-07	1.771E-07	1.771E-07
B	6.0	.13	4827.	0.	0.	583.7	611.6	583.7	1.483E-07	1.481E-07	1.481E-07
B	8.0	.20	4827.	0.	0.	583.7	611.6	583.7	1.111E-07	1.110E-07	1.110E-07
C	.4	.11	4827.	0.	0.	443.3	256.4	443.3	6.595E-06	6.569E-06	6.569E-06
C	1.0	.33	4827.	0.	0.	443.3	256.4	443.3	2.784E-06	2.773E-06	2.773E-06
C	2.0	.53	4827.	0.	0.	443.3	256.4	443.3	1.377E-06	1.371E-06	1.371E-06
C	3.0	1.33	4827.	0.	0.	443.3	256.4	443.3	9.282E-07	9.245E-07	9.245E-07
C	4.0	.73	4827.	0.	0.	443.3	256.4	443.3	7.000E-07	6.972E-07	6.972E-07
C	5.0	.46	4827.	0.	0.	443.3	256.4	443.3	5.569E-07	5.547E-07	5.547E-07
C	6.0	.07	4827.	0.	0.	443.3	256.4	443.3	4.658E-07	4.639E-07	4.639E-07
C	8.0	.33	4827.	0.	0.	443.3	256.4	443.3	3.490E-07	3.476E-07	3.476E-07
D	.4	.44	4827.	0.	0.	312.1	87.3	373.7	2.298E-05	2.706E-05	2.298E-05
D	1.0	1.79	4827.	0.	0.	312.1	87.3	373.7	9.704E-06	1.143E-05	9.704E-06
D	2.0	4.32	4827.	0.	0.	312.1	87.3	372.4	4.816E-06	5.651E-06	4.816E-06
D	3.0	4.05	4827.	0.	0.	312.1	87.3	345.6	3.498E-06	3.809E-06	3.498E-06
D	4.0	4.58	4827.	0.	0.	312.1	87.3	330.1	2.762E-06	2.873E-06	2.762E-06
D	5.0	2.79	4827.	0.	0.	312.1	87.3	319.4	2.271E-06	2.285E-06	2.271E-06
D	6.0	1.06	4827.	0.	0.	312.1	87.3	312.1	1.944E-06	1.912E-06	1.912E-06
D	8.0	.27	4827.	0.	0.	312.1	87.3	312.1	1.456E-06	1.432E-06	1.432E-06
D	10.0	.07	4827.	0.	0.	312.1	87.3	312.1	1.164E-06	1.145E-06	1.145E-06

E	.4	.52	4827.	0.	0.	222.0	55.4	309.5	4.368E-05	5.874E-05	4.368E-05
E	1.0	1.99	4827.	0.	0.	222.0	55.4	309.5	1.844E-05	2.480E-05	1.844E-05
E	2.0	5.18	4827.	0.	0.	222.0	55.4	307.3	9.185E-06	1.226E-05	9.185E-06
E	3.0	6.04	4827.	0.	0.	222.0	55.4	265.2	7.174E-06	8.267E-06	7.174E-06
E	4.0	7.30	4827.	0.	0.	222.0	55.4	243.8	5.885E-06	6.235E-06	5.885E-06
E	5.0	5.18	4827.	0.	0.	222.0	55.4	230.4	4.955E-06	4.960E-06	4.955E-06
E	6.0	2.13	4827.	0.	0.	222.0	55.4	222.0	4.302E-06	4.149E-06	4.149E-06
E	8.0	1.46	4827.	0.	0.	222.0	55.4	222.0	3.224E-06	3.109E-06	3.109E-06
E	10.0	.07	4827.	0.	0.	222.0	55.4	222.0	2.577E-06	2.486E-06	2.486E-06
F	.4	.42	4827.	0.	0.	153.2	34.5	243.9	8.912E-05	1.306E-04	8.912E-05
F	1.0	1.53	4827.	0.	0.	153.2	34.5	243.9	3.763E-05	5.514E-05	3.763E-05
F	2.0	4.38	4827.	0.	0.	153.2	34.5	241.3	1.880E-05	2.727E-05	1.880E-05
F	3.0	3.65	4827.	0.	0.	153.2	34.5	194.9	1.569E-05	1.838E-05	1.569E-05
F	4.0	5.64	4827.	0.	0.	153.2	34.5	173.4	1.331E-05	1.386E-05	1.331E-05
F	5.0	2.32	4827.	0.	0.	153.2	34.5	160.7	1.142E-05	1.103E-05	1.103E-05
F	6.0	.60	4827.	0.	0.	153.2	34.5	153.2	1.002E-05	9.225E-06	9.225E-06
F	8.0	.27	4827.	0.	0.	153.2	34.5	153.2	7.508E-06	6.912E-06	6.912E-06
G	.4	.57	4827.	0.	0.	105.7	21.5	210.1	1.663E-04	2.751E-04	1.663E-04
G	1.0	1.66	4827.	0.	0.	105.7	21.5	210.1	7.022E-05	1.162E-04	7.022E-05
G	2.0	2.92	4827.	0.	0.	105.7	21.5	206.7	3.530E-05	5.745E-05	3.530E-05
G	3.0	2.39	4827.	0.	0.	105.7	21.5	148.9	3.302E-05	3.872E-05	3.302E-05
G	4.0	.60	4827.	0.	0.	105.7	21.5	125.3	2.960E-05	2.921E-05	2.921E-05
G	5.0	.20	4827.	0.	0.	105.7	21.5	112.7	2.618E-05	2.323E-05	2.323E-05

```
1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
 /PLANT NAME:    CGS                             METEOROLOGICAL INSTRUMENTATION
  DATA PERIOD: JFD 1996-1999                     WIND SENSORS HEIGHT:  10.0 METERS
  TYPE OF RELEASE: GROUND LEVEL RELEASE          DELTA-T HEIGHTS:    10 - 75 METERS
  SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
  COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma=desert + P-G
  PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
 0LOW POPULATION ZONE CALCULATIONS:
 0  NW SECTOR      BOUNDARY DISTANCE = 4827.0 METERS
 0LATERAL PLUME MEANDER/BUILDING WAKE CREDIT ALLOWED
  AS A FUNCTION OF DOWNWIND DISTANCE.
  MEANDER CREDIT IS FOR WINDSPEEDS LESS THAN 6 MPS.
  BUILDING WAKE CREDIT ALLOWED:   C=   .5     A=  2861.     D=   70.0
  CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
 0BELOW 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.
 0   1.663E-04   8.912E-05   7.022E-05   4.368E-05   3.763E-05   3.530E-05   3.302E-05   2.921E-05   2.323E-05   2.298E-05
         .567        .985       2.646       3.162       4.689       7.611      10.002      10.599      10.799      11.236
      .02696      .04690      .12591      .15048      .22318      .36224      .47602      .50447      .51395      .53478
 0   1.880E-05   1.844E-05   1.569E-05   1.331E-05   1.103E-05   9.704E-06   9.225E-06   9.185E-06   7.174E-06   6.912E-06
       15.619      17.611      21.264      26.908      29.233      31.026      31.623      36.803      42.846      43.112
       .74338      .83820     1.01203     1.28067     1.39129     1.47663     1.50507     1.75160     2.03921     2.05185
 0   6.569E-06   5.885E-06   4.955E-06   4.816E-06   4.149E-06   3.498E-06   3.109E-06   2.773E-06   2.762E-06   2.486E-06
       43.226      50.531      55.711      60.027      62.152      66.203      67.664      67.996      72.578      72.645
      2.05731     2.40497     2.65150     2.85693     2.95807     3.15086     3.22040     3.23620     3.45428     3.45744
 0   2.271E-06   2.097E-06   1.912E-06   1.432E-06   1.371E-06   1.145E-06   9.651E-07   9.245E-07   8.853E-07   6.972E-07
       75.434      75.565      76.628      76.893      77.424      77.491      78.019      79.347      79.746      80.476
      3.59018     3.59643     3.64700     3.65964     3.68493     3.68809     3.71324     3.77645     3.79542     3.83018
 0   5.547E-07   4.639E-07   4.378E-07   4.075E-07   3.476E-07   2.951E-07   2.226E-07   2.015E-07   1.771E-07   1.481E-07
       80.941      81.008      81.805      83.664      83.996      85.324      86.121      91.301      91.500      91.633
      3.85231     3.85547     3.89339     3.98189     3.99769     4.06090     4.09883     4.34535     4.35483     4.36115
 0   1.358E-07   1.110E-07   1.024E-07   8.149E-08   6.816E-08   5.108E-08
       94.953      95.152      98.074      99.535      99.934     100.000
      4.51918     4.52866     4.66773     4.73726     4.75622     4.75938
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0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=    .475
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=   1.279
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   1.750
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   2.854
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   3.451
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   3.587

0  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
   7  1     -8.70159  15.15106  -1.86366
   7  2    -10.31825 -16.85376  -2.52027
   7  3    -11.22735 -17.89834  -2.98817
   7  4    -11.59799 -18.21423  -3.13799
   7  5    -12.24366 -24.77412  -6.58572
   7  6    -12.79953 -33.14164 -11.18764
   7  7    -12.99534     NUMXQ(K)=  7
     1.244E-04                .048              1.000
     6.831E-05                .143              3.000
     5.070E-05                .238              5.000
     3.303E-05                .476             10.000
     2.306E-05                .714             15.000
     1.768E-05                .952             20.000
     1.429E-05               1.190             25.000
     1.172E-05               1.428             30.000
     9.758E-06               1.666             35.000
     8.257E-06               1.904             40.000
     7.086E-06               2.142             45.000
     6.165E-06               2.380             50.000
     5.425E-06               2.618             55.000
     4.819E-06               2.856             60.000
     3.823E-06               3.094             65.000
     3.075E-06               3.332             70.000
     2.339E-06               3.570             75.000
0    3.164E-05               0.5               10.51
0ANNUAL AVERAGE =   2.46E-07
0K=  7     FIVEXQ(K)= 3.164E-05     FIVEPR(K)=10.506
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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23: 4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE NNW SECTOR.

STABILITY CLASS	WINDSPEED AT 10.0 METERS METER/SEC	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=1431.SQ.METERS	USED
A	.4	.14	4827.	0.	0.	776.2	1000.0	776.2	9.656E-07	9.651E-07	9.651E-07
A	1.0	.50	4827.	0.	0.	776.2	1000.0	776.2	4.077E-07	4.075E-07	4.075E-07
A	2.0	1.77	4827.	0.	0.	776.2	1000.0	776.2	2.016E-07	2.015E-07	2.015E-07
A	3.0	2.43	4827.	0.	0.	776.2	1000.0	776.2	1.359E-07	1.358E-07	1.358E-07
A	4.0	2.58	4827.	0.	0.	776.2	1000.0	776.2	1.025E-07	1.024E-07	1.024E-07
A	5.0	1.12	4827.	0.	0.	776.2	1000.0	776.2	8.154E-08	8.149E-08	8.149E-08
A	6.0	.47	4827.	0.	0.	776.2	1000.0	776.2	6.820E-08	6.816E-08	6.816E-08
A	8.0	.22	4827.	0.	0.	776.2	1000.0	776.2	5.111E-08	5.108E-08	5.108E-08
A	10.0	.06	4827.	0.	0.	776.2	1000.0	776.2	4.086E-08	4.084E-08	4.084E-08
A	13.0	.03	4827.	0.	0.	776.2	1000.0	776.2	3.147E-08	3.145E-08	3.145E-08
B	.4	.06	4827.	0.	0.	583.7	611.6	583.7	2.099E-06	2.097E-06	2.097E-06
B	1.0	.19	4827.	0.	0.	583.7	611.6	583.7	8.864E-07	8.853E-07	8.853E-07
B	2.0	.25	4827.	0.	0.	583.7	611.6	583.7	4.383E-07	4.378E-07	4.378E-07
B	3.0	.75	4827.	0.	0.	583.7	611.6	583.7	2.955E-07	2.951E-07	2.951E-07
B	4.0	.84	4827.	0.	0.	583.7	611.6	583.7	2.228E-07	2.226E-07	2.226E-07
B	5.0	.50	4827.	0.	0.	583.7	611.6	583.7	1.773E-07	1.771E-07	1.771E-07
B	6.0	.19	4827.	0.	0.	583.7	611.6	583.7	1.483E-07	1.481E-07	1.481E-07
B	8.0	.12	4827.	0.	0.	583.7	611.6	583.7	1.111E-07	1.110E-07	1.110E-07
B	10.0	.03	4827.	0.	0.	583.7	611.6	583.7	8.884E-08	8.873E-08	8.873E-08
C	.4	.02	4827.	0.	0.	443.3	256.4	443.3	6.595E-06	6.569E-06	6.569E-06
C	1.0	.06	4827.	0.	0.	443.3	256.4	443.3	2.784E-06	2.773E-06	2.773E-06
C	2.0	.47	4827.	0.	0.	443.3	256.4	443.3	1.377E-06	1.371E-06	1.371E-06
C	3.0	.97	4827.	0.	0.	443.3	256.4	443.3	9.282E-07	9.245E-07	9.245E-07
C	4.0	.75	4827.	0.	0.	443.3	256.4	443.3	7.000E-07	6.972E-07	6.972E-07
C	5.0	.56	4827.	0.	0.	443.3	256.4	443.3	5.569E-07	5.547E-07	5.547E-07
C	6.0	.34	4827.	0.	0.	443.3	256.4	443.3	4.658E-07	4.639E-07	4.639E-07
C	8.0	.16	4827.	0.	0.	443.3	256.4	443.3	3.490E-07	3.476E-07	3.476E-07
D	.4	.17	4827.	0.	0.	312.1	87.3	373.7	2.298E-05	2.706E-05	2.298E-05
D	1.0	.72	4827.	0.	0.	312.1	87.3	373.7	9.704E-06	1.143E-05	9.704E-06
D	2.0	3.18	4827.	0.	0.	312.1	87.3	372.4	4.816E-06	5.651E-06	4.816E-06
D	3.0	3.95	4827.	0.	0.	312.1	87.3	345.6	3.498E-06	3.809E-06	3.498E-06
D	4.0	3.89	4827.	0.	0.	312.1	87.3	330.1	2.762E-06	2.873E-06	2.762E-06
D	5.0	2.99	4827.	0.	0.	312.1	87.3	319.4	2.271E-06	2.285E-06	2.271E-06
D	6.0	1.34	4827.	0.	0.	312.1	87.3	312.1	1.944E-06	1.912E-06	1.912E-06
D	8.0	1.18	4827.	0.	0.	312.1	87.3	312.1	1.456E-06	1.432E-06	1.432E-06
D	10.0	.09	4827.	0.	0.	312.1	87.3	312.1	1.164E-06	1.145E-06	1.145E-06

E	.4	.28	4827.	0.	0.	222.0	55.4	309.5	4.368E-05	5.874E-05	4.368E-05
E	1.0	1.09	4827.	0.	0.	222.0	55.4	309.5	1.844E-05	2.480E-05	1.844E-05
E	2.0	4.05	4827.	0.	0.	222.0	55.4	307.3	9.185E-06	1.226E-05	9.185E-06
E	3.0	5.36	4827.	0.	0.	222.0	55.4	265.2	7.174E-06	8.267E-06	7.174E-06
E	4.0	6.60	4827.	0.	0.	222.0	55.4	243.8	5.885E-06	6.235E-06	5.885E-06
E	5.0	5.17	4827.	0.	0.	222.0	55.4	230.4	4.955E-06	4.960E-06	4.955E-06
E	6.0	2.83	4827.	0.	0.	222.0	55.4	222.0	4.302E-06	4.149E-06	4.149E-06
E	8.0	2.21	4827.	0.	0.	222.0	55.4	222.0	3.224E-06	3.109E-06	3.109E-06
E	10.0	.09	4827.	0.	0.	222.0	55.4	222.0	2.577E-06	2.486E-06	2.486E-06
F	.4	.34	4827.	0.	0.	153.2	34.5	243.9	8.912E-05	1.306E-04	8.912E-05
F	1.0	1.25	4827.	0.	0.	153.2	34.5	243.9	3.763E-05	5.514E-05	3.763E-05
F	2.0	5.04	4827.	0.	0.	153.2	34.5	241.3	1.880E-05	2.727E-05	1.880E-05
F	3.0	5.95	4827.	0.	0.	153.2	34.5	194.9	1.569E-05	1.838E-05	1.569E-05
F	4.0	5.73	4827.	0.	0.	153.2	34.5	173.4	1.331E-05	1.386E-05	1.331E-05
F	5.0	4.08	4827.	0.	0.	153.2	34.5	160.7	1.142E-05	1.103E-05	1.103E-05
F	6.0	.90	4827.	0.	0.	153.2	34.5	153.2	1.002E-05	9.225E-06	9.225E-06
F	8.0	.65	4827.	0.	0.	153.2	34.5	153.2	7.508E-06	6.912E-06	6.912E-06
F	10.0	.06	4827.	0.	0.	153.2	34.5	153.2	6.003E-06	5.526E-06	5.526E-06
G	.4	.53	4827.	0.	0.	105.7	21.5	210.1	1.663E-04	2.751E-04	1.663E-04
G	1.0	1.56	4827.	0.	0.	105.7	21.5	210.1	7.022E-05	1.162E-04	7.022E-05
G	2.0	3.52	4827.	0.	0.	105.7	21.5	206.7	3.530E-05	5.745E-05	3.530E-05
G	3.0	4.86	4827.	0.	0.	105.7	21.5	148.9	3.302E-05	3.872E-05	3.302E-05
G	4.0	3.02	4827.	0.	0.	105.7	21.5	125.3	2.960E-05	2.921E-05	2.921E-05
G	5.0	1.34	4827.	0.	0.	105.7	21.5	112.7	2.618E-05	2.323E-05	2.323E-05
G	6.0	.31	4827.	0.	0.	105.7	21.5	105.7	2.333E-05	1.943E-05	1.943E-05
G	8.0	.06	4827.	0.	0.	105.7	21.5	105.7	1.748E-05	1.456E-05	1.456E-05
G	10.0	.03	4827.	0.	0.	105.7	21.5	105.7	1.398E-05	1.164E-05	1.164E-05

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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:  CGS                                METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma=desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0LOW POPULATION ZONE CALCULATIONS:
0 NNW SECTOR     BOUNDARY DISTANCE = 4827.0 METERS
0LATERAL PLUME MEANDER/BUILDING WAKE CREDIT ALLOWED
 AS A FUNCTION OF DOWNWIND DISTANCE.
 MEANDER CREDIT IS FOR WINDSPEEDS LESS THAN 6 MPS.
 BUILDING WAKE CREDIT ALLOWED:   C=   .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0   1.663E-04   8.912E-05   7.022E-05   4.368E-05   3.763E-05   3.530E-05   3.302E-05   2.921E-05   2.323E-05   2.298E-05
        .531        .873       2.429       2.712       3.957       7.475      12.332      15.352      16.691      16.866
      .05392      .08860      .24663      .27529      .40171      .75886     1.25190     1.55848     1.69438     1.71213
0   1.943E-05   1.880E-05   1.844E-05   1.569E-05   1.456E-05   1.331E-05   1.164E-05   1.103E-05   9.704E-06   9.225E-06
      17.177      22.221      23.310      29.257      29.319      35.048      35.079      39.158      39.874      40.777
     1.74374     2.25575     2.36636     2.97003     2.97635     3.55789     3.56106     3.97509     4.04778     4.13944
0   9.185E-06   7.174E-06   6.912E-06   6.569E-06   5.885E-06   5.526E-06   4.955E-06   4.816E-06   4.149E-06   3.498E-06
      44.824      50.179      50.833      50.854      57.455      57.517      62.685      65.861      68.694      72.648
     4.55031     5.09393     5.16030     5.16248     5.83252     5.83884     6.36349     6.68587     6.97348     7.37487
0   3.109E-06   2.773E-06   2.762E-06   2.486E-06   2.271E-06   2.097E-06   1.912E-06   1.432E-06   1.371E-06   1.145E-06
      74.859      74.921      78.813      78.906      81.895      81.956      83.295      84.478      84.945      85.039
     7.59927     7.60559     8.00066     8.01014     8.31356     8.31981     8.45571     8.57581     8.62322     8.63270
0   9.651E-07   9.245E-07   8.853E-07   6.972E-07   5.547E-07   4.639E-07   4.378E-07   4.075E-07   3.476E-07   2.951E-07
      85.180      86.145      86.332      87.079      87.640      87.982      88.231      88.730      88.885      89.632
     8.64708     8.74505     8.76402     8.83987     8.89676     8.93153     8.95681     9.00738     9.02318     9.09904
0   2.226E-07   2.015E-07   1.771E-07   1.481E-07   1.358E-07   1.110E-07   1.024E-07   8.873E-08   8.149E-08   6.816E-08
      90.473      92.248      92.746      92.933      95.361      95.486      98.070      98.101      99.222      99.689
     9.18437     9.36452     9.41509     9.43405     9.68058     9.69322     9.95555     9.95871    10.07249    10.11989
0   5.108E-08   4.084E-08   3.145E-08
      99.907      99.969     100.000
     10.14202    10.14834    10.15150
```

```
0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=   1.557
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=   3.555
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   4.547
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   6.682
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   7.997
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   8.310
0  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
   8  1      -8.70159 -13.80653  -1.56141
   8  2     -10.44116 -15.27612  -2.24324
   8  3     -11.22735 -17.07552  -3.24021
   8  4     -11.59799 -17.32508  -3.38784
   8  5     -12.24366 -21.05485  -5.87451
   8  6     -12.79953 -26.05875  -9.43530
   8  7     -12.99534     NUMXQ(K)=  7
     1.249E-04                .102              1.000
     7.313E-05                .305              3.000
     5.589E-05                .508              5.000
     3.783E-05               1.015             10.000
     2.963E-05               1.523             15.000
     2.295E-05               2.030             20.000
     1.859E-05               2.538             25.000
     1.556E-05               3.045             30.000
     1.332E-05               3.553             35.000
     1.093E-05               4.061             40.000
     9.127E-06               4.568             45.000
     7.686E-06               5.076             50.000
     6.559E-06               5.583             55.000
     5.658E-06               6.091             60.000
     4.927E-06               6.598             65.000
     3.998E-06               7.106             70.000
     3.228E-06               7.614             75.000
     2.560E-06               8.121             80.000
0    5.635E-05               0.5                4.93
0ANNUAL AVERAGE =   5.13E-07
0K=  8     FIVEXQ(K)= 5.635E-05     FIVEPR(K)= 4.925
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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23: 4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE N SECTOR.

STABILITY CLASS	WINDSPEED FREQUENCY METER/SEC AT 10.0 METERS	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=1431.SQ.METERS	USED
A	.4	.20	4827.	0.	0.	776.2	1000.0	776.2	9.656E-07	9.651E-07	9.651E-07
A	1.0	.71	4827.	0.	0.	776.2	1000.0	776.2	4.077E-07	4.075E-07	4.075E-07
A	2.0	1.86	4827.	0.	0.	776.2	1000.0	776.2	2.016E-07	2.015E-07	2.015E-07
A	3.0	1.73	4827.	0.	0.	776.2	1000.0	776.2	1.359E-07	1.358E-07	1.358E-07
A	4.0	1.49	4827.	0.	0.	776.2	1000.0	776.2	1.025E-07	1.024E-07	1.024E-07
A	5.0	1.62	4827.	0.	0.	776.2	1000.0	776.2	8.154E-08	8.149E-08	8.149E-08
A	6.0	1.49	4827.	0.	0.	776.2	1000.0	776.2	6.820E-08	6.816E-08	6.816E-08
A	8.0	1.62	4827.	0.	0.	776.2	1000.0	776.2	5.111E-08	5.108E-08	5.108E-08
A	10.0	.52	4827.	0.	0.	776.2	1000.0	776.2	4.086E-08	4.084E-08	4.084E-08
A	13.0	.18	4827.	0.	0.	776.2	1000.0	776.2	3.147E-08	3.145E-08	3.145E-08
B	.4	.04	4827.	0.	0.	583.7	611.6	583.7	2.099E-06	2.097E-06	2.097E-06
B	1.0	.13	4827.	0.	0.	583.7	611.6	583.7	8.864E-07	8.853E-07	8.853E-07
B	2.0	.58	4827.	0.	0.	583.7	611.6	583.7	4.383E-07	4.378E-07	4.378E-07
B	3.0	.78	4827.	0.	0.	583.7	611.6	583.7	2.955E-07	2.951E-07	2.951E-07
B	4.0	.63	4827.	0.	0.	583.7	611.6	583.7	2.228E-07	2.226E-07	2.226E-07
B	5.0	.76	4827.	0.	0.	583.7	611.6	583.7	1.773E-07	1.771E-07	1.771E-07
B	6.0	.39	4827.	0.	0.	583.7	611.6	583.7	1.483E-07	1.481E-07	1.481E-07
B	8.0	.55	4827.	0.	0.	583.7	611.6	583.7	1.111E-07	1.110E-07	1.110E-07
B	10.0	.08	4827.	0.	0.	583.7	611.6	583.7	8.884E-08	8.873E-08	8.873E-08
C	.4	.05	4827.	0.	0.	443.3	256.4	443.3	6.595E-06	6.569E-06	6.569E-06
C	1.0	.16	4827.	0.	0.	443.3	256.4	443.3	2.784E-06	2.773E-06	2.773E-06
C	2.0	.37	4827.	0.	0.	443.3	256.4	443.3	1.377E-06	1.371E-06	1.371E-06
C	3.0	.68	4827.	0.	0.	443.3	256.4	443.3	9.282E-07	9.245E-07	9.245E-07
C	4.0	.76	4827.	0.	0.	443.3	256.4	443.3	7.000E-07	6.972E-07	6.972E-07
C	5.0	.52	4827.	0.	0.	443.3	256.4	443.3	5.569E-07	5.547E-07	5.547E-07
C	6.0	.52	4827.	0.	0.	443.3	256.4	443.3	4.658E-07	4.639E-07	4.639E-07
C	8.0	.39	4827.	0.	0.	443.3	256.4	443.3	3.490E-07	3.476E-07	3.476E-07
C	10.0	.16	4827.	0.	0.	443.3	256.4	443.3	2.791E-07	2.780E-07	2.780E-07
C	13.0	.05	4827.	0.	0.	443.3	256.4	443.3	2.149E-07	2.141E-07	2.141E-07
D	.4	.20	4827.	0.	0.	312.1	87.3	373.7	2.298E-05	2.706E-05	2.298E-05
D	1.0	.84	4827.	0.	0.	312.1	87.3	373.7	9.704E-06	1.143E-05	9.704E-06
D	2.0	2.67	4827.	0.	0.	312.1	87.3	372.4	4.816E-06	5.651E-06	4.816E-06
D	3.0	2.80	4827.	0.	0.	312.1	87.3	345.6	3.498E-06	3.809E-06	3.498E-06
D	4.0	3.30	4827.	0.	0.	312.1	87.3	330.1	2.762E-06	2.873E-06	2.762E-06
D	5.0	2.69	4827.	0.	0.	312.1	87.3	319.4	2.271E-06	2.285E-06	2.271E-06
D	6.0	1.88	4827.	0.	0.	312.1	87.3	312.1	1.944E-06	1.912E-06	1.912E-06
D	8.0	2.77	4827.	0.	0.	312.1	87.3	312.1	1.456E-06	1.432E-06	1.432E-06
D	10.0	1.02	4827.	0.	0.	312.1	87.3	312.1	1.164E-06	1.145E-06	1.145E-06
D	13.0	.34	4827.	0.	0.	312.1	87.3	312.1	8.968E-07	8.820E-07	8.820E-07
D	18.0	.05	4827.	0.	0.	312.1	87.3	312.1	6.479E-07	6.372E-07	6.372E-07

E	.4	.42	4827.	0.	0.	222.0	55.4	309.5	4.368E-05	5.874E-05	4.368E-05
E	1.0	1.62	4827.	0.	0.	222.0	55.4	309.5	1.844E-05	2.480E-05	1.844E-05
E	2.0	4.05	4827.	0.	0.	222.0	55.4	307.3	9.185E-06	1.226E-05	9.185E-06
E	3.0	4.00	4827.	0.	0.	222.0	55.4	265.2	7.174E-06	8.267E-06	7.174E-06
E	4.0	4.00	4827.	0.	0.	222.0	55.4	243.8	5.885E-06	6.235E-06	5.885E-06
E	5.0	4.58	4827.	0.	0.	222.0	55.4	230.4	4.955E-06	4.960E-06	4.955E-06
E	6.0	3.56	4827.	0.	0.	222.0	55.4	222.0	4.302E-06	4.149E-06	4.149E-06
E	8.0	3.50	4827.	0.	0.	222.0	55.4	222.0	3.224E-06	3.109E-06	3.109E-06
E	10.0	.63	4827.	0.	0.	222.0	55.4	222.0	2.577E-06	2.486E-06	2.486E-06
E	13.0	.21	4827.	0.	0.	222.0	55.4	222.0	1.985E-06	1.914E-06	1.914E-06
E	18.0	.05	4827.	0.	0.	222.0	55.4	222.0	1.434E-06	1.383E-06	1.383E-06
F	.4	.46	4827.	0.	0.	153.2	34.5	243.9	8.912E-05	1.306E-04	8.912E-05
F	1.0	1.67	4827.	0.	0.	153.2	34.5	243.9	3.763E-05	5.514E-05	3.763E-05
F	2.0	5.20	4827.	0.	0.	153.2	34.5	241.3	1.880E-05	2.727E-05	1.880E-05
F	3.0	6.07	4827.	0.	0.	153.2	34.5	194.9	1.569E-05	1.838E-05	1.569E-05
F	4.0	4.79	4827.	0.	0.	153.2	34.5	173.4	1.331E-05	1.386E-05	1.331E-05
F	5.0	2.46	4827.	0.	0.	153.2	34.5	160.7	1.142E-05	1.103E-05	1.103E-05
F	6.0	1.07	4827.	0.	0.	153.2	34.5	153.2	1.002E-05	9.225E-06	9.225E-06
F	8.0	.86	4827.	0.	0.	153.2	34.5	153.2	7.508E-06	6.912E-06	6.912E-06
F	10.0	.08	4827.	0.	0.	153.2	34.5	153.2	6.003E 06	5.526E-06	5.526E-06
F	13.0	.05	4827.	0.	0.	153.2	34.5	153.2	4.623E-06	4.256E-06	4.256E-06
G	.4	.49	4827.	0.	0.	105.7	21.5	210.1	1.663E-04	2.751E-04	1.663E-04
G	1.0	1.44	4827.	0.	0.	105.7	21.5	210.1	7.022E-05	1.162E-04	7.022E-05
G	2.0	3.37	4827.	0.	0.	105.7	21.5	206.7	3.530E-05	5.745E-05	3.530E-05
G	3.0	4.11	4827.	0.	0.	105.7	21.5	148.9	3.302E-05	3.872E-05	3.302E-05
G	4.0	2.59	4827.	0.	0.	105.7	21.5	125.3	2.960E-05	2.921E-05	2.921E-05
G	5.0	.71	4827.	0.	0.	105.7	21.5	112.7	2.618E-05	2.323E-05	2.323E-05
G	6.0	.24	4827.	0.	0.	105.7	21.5	105.7	2.333E-05	1.943E-05	1.943E-05
G	8.0	.08	4827.	0.	0.	105.7	21.5	105.7	1.748E-05	1.456E-05	1.456E-05
G	10.0	.05	4827.	0.	0.	105.7	21.5	105.7	1.398E-05	1.164E-05	1.164E-05

```
1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:  CGS                                METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma-desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0LOW POPULATION ZONE CALCULATIONS:
0   N SECTOR     BOUNDARY DISTANCE = 4827.0 METERS
0LATERAL PLUME MEANDER/BUILDING WAKE CREDIT ALLOWED
 AS A FUNCTION OF DOWNWIND DISTANCE.
 MEANDER CREDIT IS FOR WINDSPEEDS LESS THAN 6 MPS.
 BUILDING WAKE CREDIT ALLOWED:  C=   .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0  1.663E-04  8.912E-05  7.022E-05  4.368E-05  3.763E-05  3.530E-05  3.302E-05  2.921E-05  2.323E-05  2.298E-05
        .491       .950      2.388      2.809      4.482      7.856     11.962     14.551     15.258     15.462
      .05932     .11480     .28863     .33940     .54168     .94939    1.44560    1.75849    1.84383    1.86852
0  1.943E-05  1.880E-05  1.844E-05  1.569E-05  1.456E-05  1.331E-05  1.164E-05  1.103E-05  9.704E-06  9.225E-06
       15.697     20.902     22.523     28.591     28.669     33.455     33.508     35.966     36.803     37.875
      1.89697    2.52592    2.72187    3.45512    3.46460    4.04298    4.04931    4.34640    4.44754    4.57712
0  9.185E-06  7.174E-06  6.912E-06  6.569E-06  5.885E-06  5.526E-06  4.955E-06  4.816E-06  4.256E-06  4.149E-06
       41.929     45.931     46.794     46.848     50.849     50.928     55.505     58.172     58.225     61.781
      5.06701    5.55057    5.65487    5.66142    6.14499    6.15447    6.70757    7.02994    7.03627    7.46610
0  3.498E-06  3.109E-06  2.773E-06  2.762E-06  2.486E-06  2.271E-06  2.097E-06  1.914E-06  1.912E-06  1.432E-06
       64.580     68.084     68.241     71.537     72.164     74.858     74.901     75.110     76.994     79.766
      7.80428    8.22780    8.24676    8.64499    8.72084    9.04638    9.05159    9.07687    9.30443    9.63945
0  1.383E-06  1.371E-06  1.145E-06  9.651E-07  9.245E-07  8.853E-07  8.820E-07  6.972E-07  6.372E-07  5.547E-07
       79.818     80.184     81.204     81.405     82.085     82.216     82.556     83.314     83.366     83.890
      9.64577    9.69002    9.81328    9.83754    9.91971    9.93551    9.97660   10.06826   10.07458   10.13779
0  4.639E-07  4.378E-07  4.075E-07  3.476E-07  2.951E-07  2.780E-07  2.226E-07  2.141E-07  2.015E-07  1.771E-07
       84.413     84.988     85.694     86.086     86.871     87.028     87.656     87.708     89.565     90.323
     10.20100   10.27053   10.35587   10.40328   10.49809   10.51706   10.59291   10.59923   10.82363   10.91529
0  1.481E-07  1.358E-07  1.110E-07  1.024E-07  8.873E-08  8.149E-08  6.816E-08  5.108E-08  4.084E-08  3.145E-08
       90.716     92.442     92.991     94.482     94.560     96.182     97.672     99.294     99.817    100.000
     10.96270   11.17129   11.23766   11.41782   11.42730   11.62325   11.80340   11.99936   12.06257   12.08469
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0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=   1.444
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=   1.757
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   3.452
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   4.040
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   5.063
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   7.026
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 8)=   7.462
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 9)=   8.641
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(10)=   9.043
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(11)=   9.301
0  K  I    XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
   9  1      -8.70159 -13.65953  -1.52910
   9  2     -10.31825 -13.74879  -1.56995
   9  3     -10.44116 -14.97499  -2.15196
   9  4     -11.06239 -15.22524  -2.28960
   9  5     -11.22735 -17.25525  -3.45219
   9  6     -11.59799 -18.01471  -3.91563
   9  7     -12.24366 -19.18521  -4.70980
   9  8     -12.39272 -19.81652  -5.14755
   9  9     -12.79953 -23.45289  -7.81513
   9 10     -12.99534 -27.69752 -10.98722
   9 11     -13.16756      NUMXQ(K)= 11
     1.209E-04                .121              1.000
     7.098E-05                .363              3.000
     5.428E-05                .604              5.000
     3.674E-05               1.208             10.000
     2.844E-05               1.813             15.000
     2.198E-05               2.417             20.000
     1.785E-05               3.021             25.000
     1.493E-05               3.625             30.000
     1.237E-05               4.230             35.000
     9.937E-06               4.834             40.000
     8.020E-06               5.438             45.000
     6.528E-06               6.042             50.000
     5.397E-06               6.647             55.000
     4.462E-06               7.251             60.000
     3.609E-06               7.855             65.000
     2.936E-06               8.459             70.000
     2.245E-06               9.064             75.000
0    6.006E-05               0.5                4.14
0ANNUAL AVERAGE =    6.05E-07
0K=  9     FIVEXQ(K)= 6.006E-05     FIVEPR(K)= 4.137
```

1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23: 4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE NNE SECTOR.

STABILITY CLASS	WINDSPEED FREQUENCY METER/SEC AT 10.0 METERS	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=1431.SQ.METERS	USED
A	.4	.20	4827.	0.	0.	776.2	1000.0	776.2	9.656E-07	9.651E-07	9.651E-07
A	1.0	.69	4827.	0.	0.	776.2	1000.0	776.2	4.077E-07	4.075E-07	4.075E-07
A	2.0	1.78	4827.	0.	0.	776.2	1000.0	776.2	2.016E-07	2.015E-07	2.015E-07
A	3.0	1.24	4827.	0.	0.	776.2	1000.0	776.2	1.359E-07	1.358E-07	1.358E-07
A	4.0	1.24	4827.	0.	0.	776.2	1000.0	776.2	1.025E-07	1.024E-07	1.024E-07
A	5.0	1.35	4827.	0.	0.	776.2	1000.0	776.2	8.154E-08	8.149E-08	8.149E-08
A	6.0	.91	4827.	0.	0.	776.2	1000.0	776.2	6.820E-08	6.816E-08	6.816E-08
A	8.0	1.06	4827.	0.	0.	776.2	1000.0	776.2	5.111E-08	5.108E-08	5.108E-08
A	10.0	.18	4827.	0.	0.	776.2	1000.0	776.2	4.086E-08	4.084E-08	4.084E-08
A	13.0	.07	4827.	0.	0.	776.2	1000.0	776.2	3.147E-08	3.145E-08	3.145E-08
A	18.0	.04	4827.	0.	0.	776.2	1000.0	776.2	2.273E-08	2.272E-08	2.272E-08
B	.4	.06	4827.	0.	0.	583.7	611.6	583.7	2.099E-06	2.097E-06	2.097E-06
B	1.0	.18	4827.	0.	0.	583.7	611.6	583.7	8.864E-07	8.853E-07	8.853E-07
B	2.0	.66	4827.	0.	0.	583.7	611.6	583.7	4.383E-07	4.378E-07	4.378E-07
B	3.0	.29	4827.	0.	0.	583.7	611.6	583.7	2.955E-07	2.951E-07	2.951E-07
B	4.0	.55	4827.	0.	0.	583.7	611.6	583.7	2.228E-07	2.226E-07	2.226E-07
B	5.0	.55	4827.	0.	0.	583.7	611.6	583.7	1.773E-07	1.771E-07	1.771E-07
B	6.0	.47	4827.	0.	0.	583.7	611.6	583.7	1.483E-07	1.481E-07	1.481E-07
B	8.0	.69	4827.	0.	0.	583.7	611.6	583.7	1.111E-07	1.110E-07	1.110E-07
B	10.0	.29	4827.	0.	0.	583.7	611.6	583.7	8.884E-08	8.873E-08	8.873E-08
B	13.0	.15	4827.	0.	0.	583.7	611.6	583.7	6.842E-08	6.833E-08	6.833E-08
C	.4	.09	4827.	0.	0.	443.3	256.4	443.3	6.595E-06	6.569E-06	6.569E-06
C	1.0	.25	4827.	0.	0.	443.3	256.4	443.3	2.784E-06	2.773E-06	2.773E-06
C	2.0	.66	4827.	0.	0.	443.3	256.4	443.3	1.377E-06	1.371E-06	1.371E-06
C	3.0	.51	4827.	0.	0.	443.3	256.4	443.3	9.282E-07	9.245E-07	9.245E-07
C	4.0	.51	4827.	0.	0.	443.3	256.4	443.3	7.000E-07	6.972E-07	6.972E-07
C	5.0	.55	4827.	0.	0.	443.3	256.4	443.3	5.569E-07	5.547E-07	5.547E-07
C	6.0	.66	4827.	0.	0.	443.3	256.4	443.3	4.658E-07	4.639E-07	4.639E-07
C	8.0	.73	4827.	0.	0.	443.3	256.4	443.3	3.490E-07	3.476E-07	3.476E-07
C	10.0	.36	4827.	0.	0.	443.3	256.4	443.3	2.791E-07	2.780E-07	2.780E-07
C	13.0	.22	4827.	0.	0.	443.3	256.4	443.3	2.149E-07	2.141E-07	2.141E-07
D	.4	.17	4827.	0.	0.	312.1	87.3	373.7	2.298E-05	2.706E-05	2.298E-05
D	1.0	.69	4827.	0.	0.	312.1	87.3	373.7	9.704E-06	1.143E-05	9.704E-06
D	2.0	2.80	4827.	0.	0.	312.1	87.3	372.4	4.816E-06	5.651E-06	4.816E-06
D	3.0	2.44	4827.	0.	0.	312.1	87.3	345.6	3.498E-06	3.809E-06	3.498E-06
D	4.0	2.37	4827.	0.	0.	312.1	87.3	330.1	2.762E-06	2.873E-06	2.762E-06
D	5.0	3.24	4827.	0.	0.	312.1	87.3	319.4	2.271E-06	2.285E-06	2.271E-06
D	6.0	2.77	4827.	0.	0.	312.1	87.3	312.1	1.944E-06	1.912E-06	1.912E-06
D	8.0	4.26	4827.	0.	0.	312.1	87.3	312.1	1.456E-06	1.432E-06	1.432E-06
D	10.0	2.48	4827.	0.	0.	312.1	87.3	312.1	1.164E-06	1.145E-06	1.145E-06
D	13.0	1.38	4827.	0.	0.	312.1	87.3	312.1	8.968E-07	8.820E-07	8.820E-07
D	18.0	.25	4827.	0.	0.	312.1	87.3	312.1	6.479E-07	6.372E-07	6.372E-07
E	.4	.50	4827.	0.	0.	222.0	55.4	309.5	4.368E-05	5.874E-05	4.368E-05
E	1.0	1.93	4827.	0.	0.	222.0	55.4	309.5	1.844E-05	2.480E-05	1.844E-05
E	2.0	4.52	4827.	0.	0.	222.0	55.4	307.3	9.185E-06	1.226E-05	9.185E-06
E	3.0	3.31	4827.	0.	0.	222.0	55.4	265.2	7.174E-06	8.267E-06	7.174E-06
E	4.0	2.26	4827.	0.	0.	222.0	55.4	241.8	5.885E-06	6.235E-06	5.885E-06
E	5.0	2.88	4827.	0.	0.	222.0	55.4	230.4	4.955E-06	4.960E-06	4.955E-06
E	6.0	3.64	4827.	0.	0.	222.0	55.4	222.0	4.302E-06	4.149E-06	4.149E-06
E	8.0	5.97	4827.	0.	0.	222.0	55.4	222.0	3.224E-06	3.109E-06	3.109E-06
E	10.0	4.01	4827.	0.	0.	222.0	55.4	222.0	2.577E-06	2.486E-06	2.486E-06
E	13.0	1.53	4827.	0.	0.	222.0	55.4	222.0	1.985E-06	1.914E-06	1.914E-06
E	18.0	.29	4827.	0.	0.	222.0	55.4	222.0	1.434E-06	1.383E-06	1.383E-06
F	.4	.47	4827.	0.	0.	153.2	34.5	243.9	8.912E-05	1.306E-04	8.912E-05
F	1.0	1.71	4827.	0.	0.	153.2	34.5	243.9	3.763E-05	5.514E-05	3.763E-05
F	2.0	5.24	4827.	0.	0.	153.2	34.5	241.3	1.880E-05	2.727E-05	1.880E-05
F	3.0	4.48	4827.	0.	0.	153.2	34.5	194.9	1.569E-05	1.838E-05	1.569E-05
F	4.0	3.31	4827.	0.	0.	153.2	34.5	173.4	1.331E-05	1.386E-05	1.331E-05
F	5.0	1.38	4827.	0.	0.	153.2	34.5	160.7	1.142E-05	1.103E-05	1.103E-05
F	6.0	1.24	4827.	0.	0.	153.2	34.5	153.2	1.002E 05	9.225E-06	9.225E-06
F	8.0	.98	4827.	0.	0.	153.2	34.5	153.2	7.508E-06	6.912E-06	6.912E-06
F	10.0	.55	4827.	0.	0.	153.2	34.5	153.2	6.003E-06	5.526E-06	5.526E-06
F	13.0	.11	4827.	0.	0.	153.2	34.5	153.2	4.623E-06	4.256E-06	4.256E-06
G	.4	.55	4827.	0.	0.	105.7	21.5	210.1	1.663E-04	2.751E-04	1.663E-04
G	1.0	1.60	4827.	0.	0.	105.7	21.5	210.1	7.022E-05	1.162E-04	7.022E-05
G	2.0	3.86	4827.	0.	0.	105.7	21.5	206.7	3.530E-05	5.745E-05	3.530E-05
G	3.0	1.78	4827.	0.	0.	105.7	21.5	148.9	3.302E-05	3.872E-05	3.302E-05
G	4.0	1.27	4827.	0.	0.	105.7	21.5	125.3	2.960E-05	2.921E-05	2.921E-05
G	5.0	.29	4827.	0.	0.	105.7	21.5	112.7	2.618E-05	2.323E-05	2.323E-05
G	6.0	.22	4827.	0.	0.	105.7	21.5	105.7	2.333E-05	1.943E-05	1.943E-05
G	8.0	.04	4827.	0.	0.	105.7	21.5	105.7	1.748E-05	1.456E-05	1.456E-05
G	13.0	.04	4827.	0.	0.	105.7	21.5	105.7	1.077E-05	8.967E-06	8.967E-06

```
1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:   CGS                               METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma=desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0LOW POPULATION ZONE CALCULATIONS:
0 NNE SECTOR     BOUNDARY DISTANCE = 4827.0 METERS
0LATERAL PLUME MEANDER/BUILDING WAKE CREDIT ALLOWED
 AS A FUNCTION OF DOWNWIND DISTANCE.
 MEANDER CREDIT IS FOR WINDSPEEDS LESS THAN 6 MPS.
 BUILDING WAKE CREDIT ALLOWED:  C=   .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0  1.663E-04  8.912E-05  7.022E-05  4.368E-05  3.763E-05  3.530E-05  3.302E-05  2.921E-05  2.323E-05  2.298E-05
        .547       1.016      2.619      3.119      4.831      8.691     10.476     11.750     12.042     12.211
      .04745     .08820     .22726     .27067     .41921     .75423     .90910    1.01972    1.04500    1.05966
0  1.943E-05  1.880E-05  1.844E-05  1.569E-05  1.456E-05  1.331E-05  1.103E-05  9.704E-06  9.225E-06  9.185E-06
       12.429     17.674     19.604     24.084     24.120     27.434     28.818     29.510     30.749     35.265
      1.07863    1.53375    1.70126    2.09001    2.09317    2.38078    2.50088    2.56093    2.66839    3.06030
0  8.967E-06  7.174E-06  6.912E-06  6.569E-06  5.885E-06  5.526E-06  4.955E-06  4.816E-06  4.256E-06  4.149E-06
       35.301     38.615     39.599     39.687     41.945     42.491     45.368     48.173     48.282     51.924
      3.06346    3.35107    3.43640    3.44405    3.64000    3.68741    3.93710    4.18046    4.18994    4.50600
0  3.498E-06  3.109E-06  2.773E-06  2.762E-06  2.486E-06  2.271E-06  2.097E-06  1.914E-06  1.912E-06  1.432E-06
       54.364     60.337     60.592     62.959     66.965     70.207     70.267     71.796     74.564     78.825
      4.71775    5.23609    5.25821    5.46365    5.81131    6.09260    6.09780    6.23055    6.47075    6.84054
0  1.383E-06  1.371E-06  1.145E-06  9.651E-07  9.245E-07  8.853E-07  8.820E-07  6.972E-07  6.372E-07  5.547E-07
       79.117     79.772     82.249     82.446     82.955     83.138     84.522     85.031     85.286     85.833
      6.86582    6.92271    7.13763    7.15470    7.19894    7.21475    7.33485    7.37910    7.40122    7.44863
0  4.639E-07  4.378E-07  4.075E-07  3.476E-07  2.951E-07  2.780E-07  2.226E-07  2.141E-07  2.015E-07  1.771E-07
       86.488     87.144     87.836     88.564     88.856     89.220     89.766     89.985     91.769     92.315
      7.50552    7.56241    7.62246    7.68567    7.71095    7.74256    7.78997    7.80893    7.96380    8.01121
0  1.481E-07  1.358E-07  1.110E-07  1.024E-07  8.873E-08  8.149E-08  6.833E-08  6.816E-08  5.108E-08  4.084E-08
       92.789     94.027     94.719     95.957     96.249     97.596     97.742     98.652     99.709     99.891
      8.05229    8.15975    8.21980    8.32726    8.35255    8.46949    8.48213    8.56114    8.65280    8.66860
0  3.145E-08  2.272E-08
       99.964    100.000
      8.67492    8.67809
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0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=    .908
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=   2.088
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   2.378
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   3.057
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   4.177
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   5.232
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 8)=   6.089
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 9)=   6.467
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(10)=   6.919
0  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
  10  1      -8.70159 -14.36771  -1.71419
  10  2     -10.31825 -15.70429  -2.27997
  10  3     -11.06239 -17.19932  -3.01429
  10  4     -11.22735 -17.97683  -3.40673
  10  5     -11.59799 -20.11668  -4.54956
  10  6     -12.24366 -19.27148  -4.06115
  10  7     -12.68134 -19.44238  -4.16646
  10  8     -12.99534 -21.69081  -5.61953
  10  9     -13.16756 -27.61725  -9.52693
  10 10     -13.49964     NUMXQ(K)= 10
     1.236E-04                .087              1.000
     6.925E-05                .260              3.000
     5.180E-05                .434              5.000
     3.401E-05                .868             10.000
     2.421E-05               1.302             15.000
     1.867E-05               1.736             20.000
     1.497E-05               2.170             25.000
     1.168E-05               2.603             30.000
     9.289E-06               3.037             35.000
     7.107E-06               3.471             40.000
     5.562E-06               3.905             45.000
     4.485E-06               4.339             50.000
     3.731E-06               4.773             55.000
     3.143E-06               5.207             60.000
     2.668E-06               5.641             65.000
     2.285E-06               6.075             70.000
     1.858E-06               6.509             75.000
0    4.765E-05               0.5                5.76
0ANNUAL AVERAGE =   4.21E-07
0K= 10     FIVEXQ(K)= 4.765E 05     FIVEPR(K)= 5.762
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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23: 4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE NE SECTOR.

STABILITY CLASS	WINDSPEED AT 10.0 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=1431.SQ.METERS	USED
A	.4	.22	4827.	0.	0.	776.2	1000.0	776.2	9.656E-07	9.651E-07	9.651E-07
A	1.0	.76	4827.	0.	0.	776.2	1000.0	776.2	4.077E-07	4.075E-07	4.075E-07
A	2.0	1.68	4827.	0.	0.	776.2	1000.0	776.2	2.016E-07	2.015E-07	2.015E-07
A	3.0	1.25	4827.	0.	0.	776.2	1000.0	776.2	1.359E-07	1.358E-07	1.358E-07
A	4.0	1.30	4827.	0.	0.	776.2	1000.0	776.2	1.025E-07	1.024E-07	1.024E-07
A	5.0	1.25	4827.	0.	0.	776.2	1000.0	776.2	8.154E-08	8.149E-08	8.149E-08
A	6.0	.60	4827.	0.	0.	776.2	1000.0	776.2	6.820E-08	6.816E-08	6.816E-08
A	8.0	1.14	4827.	0.	0.	776.2	1000.0	776.2	5.111E-08	5.108E-08	5.108E-08
A	10.0	.60	4827.	0.	0.	776.2	1000.0	776.2	4.086E-08	4.084E-08	4.084E-08
A	13.0	.05	4827.	0.	0.	776.2	1000.0	776.2	3.147E-08	3.145E-08	3.145E-08
B	.4	.05	4827.	0.	0.	583.7	611.6	583.7	2.099E-06	2.097E-06	2.097E-06
B	1.0	.16	4827.	0.	0.	583.7	611.6	583.7	8.864E-07	8.853E-07	8.853E-07
B	2.0	.87	4827.	0.	0.	583.7	611.6	583.7	4.383E-07	4.378E-07	4.378E-07
B	3.0	.54	4827.	0.	0.	583.7	611.6	583.7	2.955E-07	2.951E-07	2.951E-07
B	4.0	.38	4827.	0.	0.	583.7	611.6	583.7	2.228E-07	2.226E-07	2.226E-07
B	5.0	.54	4827.	0.	0.	583.7	611.6	583.7	1.773E-07	1.771E-07	1.771E-07
B	6.0	.27	4827.	0.	0.	583.7	611.6	583.7	1.483E-07	1.481E-07	1.481E-07
B	8.0	.87	4827.	0.	0.	583.7	611.6	583.7	1.111E-07	1.110E-07	1.110E-07
B	10.0	.43	4827.	0.	0.	583.7	611.6	583.7	8.884E-08	8.873E-08	8.873E-08
B	13.0	.43	4827.	0.	0.	583.7	611.6	583.7	6.842E-08	6.833E-08	6.833E-08
C	.4	.13	4827.	0.	0.	443.3	256.4	443.3	6.595E-06	6.569E-06	6.569E-06
C	1.0	.38	4827.	0.	0.	443.3	256.4	443.3	2.784E-06	2.773E-06	2.773E-06
C	2.0	.49	4827.	0.	0.	443.3	256.4	443.3	1.377E-06	1.371E-06	1.371E-06
C	3.0	.49	4827.	0.	0.	443.3	256.4	443.3	9.282E-07	9.245E-07	9.245E-07
C	4.0	.76	4827.	0.	0.	443.3	256.4	443.3	7.000E-07	6.972E-07	6.972E-07
C	5.0	.81	4827.	0.	0.	443.3	256.4	443.3	5.569E-07	5.547E-07	5.547E-07
C	6.0	.38	4827.	0.	0.	443.3	256.4	443.3	4.658E 07	4.639E-07	4.639E-07
C	8.0	.92	4827.	0.	0.	443.3	256.4	443.3	3.490E-07	3.476E-07	3.476E-07
C	10.0	.70	4827.	0.	0.	443.3	256.4	443.3	2.791E-07	2.780E-07	2.780E-07
C	13.0	.16	4827.	0.	0.	443.3	256.4	443.3	2.149E-07	2.141E-07	2.141E-07
D	.4	.53	4827.	0.	0.	312.1	87.3	373.7	2.298E-05	2.706E-05	2.298E-05
D	1.0	2.17	4827.	0.	0.	312.1	87.3	373.7	9.704E-06	1.143E-05	9.704E-06
D	2.0	2.33	4827.	0.	0.	312.1	87.3	372.4	4.816E-06	5.651E-06	4.816E-06
D	3.0	2.87	4827.	0.	0.	312.1	87.3	345.6	3.498E-06	3.809E-06	3.498E-06
D	4.0	2.76	4827.	0.	0.	312.1	87.3	330.1	2.762E-06	2.873E-06	2.762E-06
D	5.0	2.44	4827.	0.	0.	312.1	87.3	319.4	2.271E-06	2.285E-06	2.271E-06
D	6.0	1.84	4827.	0.	0.	312.1	87.3	312.1	1.944E-06	1.912E-06	1.912E-06
D	8.0	3.47	4827.	0.	0.	312.1	87.3	312.1	1.456E-06	1.432E-06	1.432E-06
D	10.0	2.44	4827.	0.	0.	312.1	87.3	312.1	1.164E-06	1.145E-06	1.145E-06
D	13.0	1.73	4827.	0.	0.	312.1	87.3	312.1	8.968E-07	8.820E-07	8.820E-07
D	18.0	.37	4827.	0.	0.	312.1	87.3	312.1	6.479E-07	6.372E-07	6.372E-07
E	.4	.77	4827.	0.	0.	222.0	55.4	309.5	4.368E-05	5.874E-05	4.368E-05
E	1.0	2.98	4827.	0.	0.	222.0	55.4	309.5	1.844E-05	2.480E-05	1.844E-05
E	2.0	4.82	4827.	0.	0.	222.0	55.4	307.3	9.185E-06	1.226E-05	9.185E-06
E	3.0	3.90	4827.	0.	0.	222.0	55.4	265.2	7.174E-06	8.267E-06	7.174E-06
E	4.0	3.41	4827.	0.	0.	222.0	55.4	243.8	5.885E-06	6.235E-06	5.885E-06
E	5.0	2.82	4827.	0.	0.	222.0	55.4	230.4	4.955E-06	4.960E-06	4.955E-06
E	6.0	3.41	4827.	0.	0.	222.0	55.4	222.0	4.302E-06	4.149E-06	4.149E-06
E	8.0	3.85	4827.	0.	0.	222.0	55.4	222.0	3.224E-06	3.109E-06	3.109E-06
E	10.0	3.36	4827.	0.	0.	222.0	55.4	222.0	2.577E-06	2.486E-06	2.486E-06
E	13.0	1.41	4827.	0.	0.	222.0	55.4	222.0	1.985E-06	1.914E-06	1.914E-06
E	18.0	.27	4827.	0.	0.	222.0	55.4	222.0	1.434E-06	1.383E-06	1.383E-06
F	.4	.83	4827.	0.	0.	153.2	34.5	243.9	8.912E-05	1.306E-04	8.912E-05
F	1.0	3.03	4827.	0.	0.	153.2	34.5	243.9	3.763E-05	5.514E-05	3.763E-05
F	2.0	5.20	4827.	0.	0.	153.2	34.5	241.3	1.880E-05	2.727E-05	1.880E-05
F	3.0	3.52	4827.	0.	0.	153.2	34.5	194.9	1.569E-05	1.838E-05	1.569E-05
F	4.0	2.00	4827.	0.	0.	153.2	34.5	173.4	1.331E-05	1.386E-05	1.331E-05
F	5.0	.87	4827.	0.	0.	153.2	34.5	160.7	1.142E-05	1.103E-05	1.103E-05
F	6.0	.54	4827.	0.	0.	153.2	34.5	153.2	1.002E-05	9.225E-06	9.225E-06
F	8.0	.54	4827.	0.	0.	153.2	34.5	153.2	7.508E-06	6.912E-06	6.912E-06
F	10.0	.05	4827.	0.	0.	153.2	34.5	153.2	6.003E-06	5.526E-06	5.526E-06
F	13.0	.11	4827.	0.	0.	153.2	34.5	153.2	4.623E-06	4.256E-06	4.256E-06
G	.4	1.15	4827.	0.	0.	105.7	21.5	210.1	1.663E-04	2.751E-04	1.663E-04
G	1.0	3.36	4827.	0.	0.	105.7	21.5	210.1	7.022E-05	1.162E-04	7.022E-05
G	2.0	4.06	4827.	0.	0.	105.7	21.5	206.7	3.530E-05	5.745E-05	3.530E-05
G	3.0	1.41	4827.	0.	0.	105.7	21.5	148.9	3.302E-05	3.872E-05	3.302E-05
G	4.0	.81	4827.	0.	0.	105.7	21.5	125.3	2.960E-05	2.921E-05	2.921E-05
G	18.0	.05	4827.	0.	0.	105.7	21.5	105.7	7.778E-06	6.478E-06	6.478E-06

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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:  CGS                                METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma=desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0LOW POPULATION ZONE CALCULATIONS:
0  NE SECTOR      BOUNDARY DISTANCE = 4827.0 METERS
0LATERAL PLUME MEANDER/BUILDING WAKE CREDIT ALLOWED
 AS A FUNCTION OF DOWNWIND DISTANCE.
 MEANDER CREDIT IS FOR WINDSPEEDS LESS THAN 6 MPS.
 BUILDING WAKE CREDIT ALLOWED:   C=   .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0   1.663E-04   8.912E-05   7.022E-05   4.368E-05   3.763E-05   3.530E-05   3.302E-05   2.921E-05   2.298E-05   1.880E-05
        1.146       1.978       5.337       6.109       9.143      13.206      14.614      15.427      15.956      21.157
        .06687      .11541      .31137      .35641      .53340      .77044      .85262      .90002      .93089     1.23431
0   1.844E-05   1.569E-05   1.331E-05   1.103E-05   9.704E-06   9.225E-06   9.185E-06   7.174E-06   6.912E-06   6.569E-06
       24.136      27.657      29.662      30.529      32.696      33.237      38.059      41.959      42.501      42.632
       1.40814     1.61357     1.73051     1.78108     1.90750     1.93911     2.22040     2.44796     2.47956     2.48721
0   6.478E-06   5.885E-06   5.526E-06   4.955E-06   4.816E-06   4.256E-06   4.149E-06   3.498E-06   3.109E-06   2.773E-06
       42.686      46.099      46.153      48.970      51.300      51.408      54.821      57.692      61.539      61.918
       2.49037     2.68949     2.69265     2.85700     2.99290     2.99922     3.19834     3.36585     3.59025     3.61237
0   2.762E-06   2.486E-06   2.271E-06   2.097E-06   1.914E-06   1.912E-06   1.432E-06   1.383E-06   1.372E-06   1.145E-06
       64.681      68.039      70.477      70.531      71.939      73.781      77.248      77.519      78.007      80.444
       3.77356     3.96951     4.11174     4.11486     4.19704     4.30450     4.50677     4.52257     4.55102     4.69324
0   9.651E-07   9.245E-07   8.853E-07   8.820E-07   6.972E-07   6.372E-07   5.547E-07   4.639E-07   4.378E-07   4.075E-07
       80.660      81.148      81.310      83.044      83.802      84.073      84.886      85.265      86.132      86.890
       4.70582     4.73427     4.74375     4.84489     4.88913     4.90494     4.95235     4.97447     5.02504     5.06929
0   3.476E-07   2.951E-07   2.780E-07   2.226E-07   2.141E-07   2.015E-07   1.771E-07   1.481E-07   1.358E-07   1.110E-07
       87.811      88.353      89.057      89.436      89.599      91.278      91.820      92.091      93.337      94.203
       5.12302     5.15462     5.19571     5.21783     5.22731     5.32529     5.35690     5.37270     5.44539     5.49596
0   1.024E-07   8.873E-08   8.149E-08   6.833E-08   6.816E-08   5.108E-08   4.084E-08   3.145E-08
       95.504      95.937      97.183      97.616      98.212      99.350      99.946     100.000
       5.57181     5.59710     5.66979     5.69508     5.72984     5.79621     5.83098     5.83414
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0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=    .311
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=    .852
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   1.612
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   2.218
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   2.990
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   3.195
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 8)=   3.966
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 9)=   4.108
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(10)=   4.301
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(11)=   4.690

0  K   I    XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
   11  1      -8.70159 -14.55997  -1.82612
   11  2      -9.56381 -15.46239  -2.15596
   11  3     -10.31825 -17.57912  -3.04310
   11  4     -11.06239 -19.82988  -4.09414
   11  5     -11.59799 -21.70890  -5.02867
   11  6     -12.24366 -21.77691  -5.06480
   11  7     -12.39272 -22.05901  -5.21705
   11  8     -12.90504 -22.58126  -5.51469
   11  9     -12.99534 -26.93493  -8.01932
   11 10     -13.16756 -34.59140 -12.47912
   11 11     -13.67987     NUMXQ(K)= 11
                                                    BACK EXTRAPOLATION FOR  1 PERCENTILE.
    1.786E-04              .058             1.000
    9.834E-05              .175             3.000
    7.302E-05              .292             5.000
    4.432E-05              .583            10.000
    3.207E-05              .875            15.000
    2.308E-05             1.167            20.000
    1.773E-05             1.459            25.000
    1.372E-05             1.750            30.000
    1.060E-05             2.042            35.000
    8.265E-06             2.334            40.000
    6.418E-06             2.625            45.000
    5.097E-06             2.917            50.000
    4.117E-06             3.209            55.000
    3.357E-06             3.500            60.000
    2.775E-06             3.792            65.000
    2.311E-06             4.084            70.000
    1.736E-06             4.376            75.000
    1.184E-06             4.667            80.000
0   4.977E-05             0.5               8.57
 CANNUAL AVERAGE =   3.84E-07
 0K= 11     FIVEXQ(K)= 4.977E-05     FIVEPR(K)= 8.570
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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23: 6:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE ENE SECTOR.

STABILITY CLASS	WINDSPEED FREQUENCY METER/SEC AT 10.0 METERS	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=1431.SQ.METERS	USED
A	.4	.39	4827.	0.	0.	776.2	1000.0	776.2	9.656E-07	9.651E-07	9.651E-07
A	1.0	1.36	4827.	0.	0.	776.2	1000.0	776.2	4.077E-07	4.075E-07	4.075E-07
A	2.0	1.51	4827.	0.	0.	776.2	1000.0	776.2	2.016E-07	2.015E-07	2.015E-07
A	3.0	1.29	4827.	0.	0.	776.2	1000.0	776.2	1.359E-07	1.358E-07	1.358E-07
A	4.0	.91	4827.	0.	0.	776.2	1000.0	776.2	1.025E-07	1.024E-07	1.024E-07
A	5.0	.61	4827.	0.	0.	776.2	1000.0	776.2	8.154E-08	8.149E-08	8.149E-08
A	6.0	.30	4827.	0.	0.	776.2	1000.0	776.2	6.820E-08	6.816E-08	6.816E-08
A	8.0	.98	4827.	0.	0.	776.2	1000.0	776.2	5.111E-08	5.108E-08	5.108E-08
A	10.0	.61	4827.	0.	0.	776.2	1000.0	776.2	4.086E-08	4.084E-08	4.084E-08
A	13.0	.23	4827.	0.	0.	776.2	1000.0	776.2	3.147E-08	3.145E-08	3.145E-08
B	.4	.07	4827.	0.	0.	583.7	611.6	583.7	2.099E-06	2.097E-06	2.097E-06
B	1.0	.23	4827.	0.	0.	583.7	611.6	583.7	8.864E-07	8.853E-07	8.853E-07
B	2.0	.68	4827.	0.	0.	583.7	611.6	583.7	4.383E-07	4.378E-07	4.378E-07
B	3.0	.38	4827.	0.	0.	583.7	611.6	583.7	2.955E-07	2.951E-07	2.951E-07
B	4.0	.45	4827.	0.	0.	583.7	611.6	583.7	2.228E-07	2.226E-07	2.226E-07
B	5.0	.30	4827.	0.	0.	583.7	611.6	583.7	1.773E-07	1.771E-07	1.771E-07
B	8.0	.15	4827.	0.	0.	583.7	611.6	583.7	1.111E-07	1.110E-07	1.110E-07
B	10.0	.30	4827.	0.	0.	583.7	611.6	583.7	8.884E-08	8.873E-08	8.873E-08
C	.4	.08	4827.	0.	0.	443.3	256.4	443.3	6.595E-06	6.569E-06	6.569E-06
C	1.0	.23	4827.	0.	0.	443.3	256.4	443.3	2.784E-06	2.773E-06	2.773E-06
C	2.0	1.06	4827.	0.	0.	443.3	256.4	443.3	1.377E-06	1.371E-06	1.371E-06
C	3.0	.45	4827.	0.	0.	443.3	256.4	443.3	9.282E-07	9.245E-07	9.245E-07
C	4.0	.53	4827.	0.	0.	443.3	256.4	443.3	7.000E-07	6.972E-07	6.972E-07
C	5.0	.83	4827.	0.	0.	443.3	256.4	443.3	5.569E-07	5.547E-07	5.547E-07
C	6.0	.38	4827.	0.	0.	443.3	256.4	443.3	4.658E-07	4.639E-07	4.639E-07
C	8.0	.68	4827.	0.	0.	443.3	256.4	443.3	3.490E-07	3.476E-07	3.476E-07
C	10.0	1.06	4827.	0.	0.	443.3	256.4	443.3	2.791E-07	2.780E-07	2.780E-07
C	13.0	.08	4827.	0.	0.	443.3	256.4	443.3	2.149E-07	2.141E-07	2.141E-07
D	.4	.46	4827.	0.	0.	312.1	87.3	373.7	2.298E-05	2.706E-05	2.298E-05
D	1.0	1.89	4827.	0.	0.	312.1	87.3	373.7	9.704E-06	1.143E-05	9.704E-06
D	2.0	2.95	4827.	0.	0.	312.1	87.3	372.4	4.816E-06	5.651E-06	4.816E-06
D	3.0	3.55	4827.	0.	0.	312.1	87.3	345.6	3.498E-06	3.809E-06	3.498E-06
D	4.0	1.89	4827.	0.	0.	312.1	87.3	330.1	2.762E-06	2.873E-06	2.762E-06
D	5.0	1.29	4827.	0.	0.	312.1	87.3	319.4	2.271E-06	2.285E-06	2.271E-06
D	6.0	1.97	4827.	0.	0.	312.1	87.3	312.1	1.944E-06	1.912E-06	1.912E-06
D	8.0	3.71	4827.	0.	0.	312.1	87.3	312.1	1.456E-06	1.432E-06	1.432E-06
D	10.0	3.18	4827.	0.	0.	312.1	87.3	312.1	1.164E-06	1.145E-06	1.145E-06
D	13.0	.83	4827.	0.	0.	312.1	87.3	312.1	8.968E-07	8.820E-07	8.820E-07

E	.4	1.02	4827.	0.	0.	222.0	55.4	309.5	4.368E-05	5.874E-05	4.368E-05
E	1.0	3.93	4827.	0.	0.	222.0	55.4	309.5	1.844E-05	2.480E-05	1.844E-05
E	2.0	7.34	4827.	0.	0.	222.0	55.4	307.3	9.185E-06	1.226E-05	9.185E-06
E	3.0	5.22	4827.	0.	0.	222.0	55.4	265.2	7.174E-06	8.267E-06	7.174E-06
E	4.0	3.40	4827.	0.	0.	222.0	55.4	243.8	5.885E-06	6.235E-06	5.885E-06
E	5.0	2.57	4827.	0.	0.	222.0	55.4	230.4	4.955E-06	4.960E-06	4.955E-06
E	6.0	2.50	4827.	0.	0.	222.0	55.4	222.0	4.302E-06	4.149E-06	4.149E-06
E	8.0	2.87	4827.	0.	0.	222.0	55.4	222.0	3.224E-06	3.109E-06	3.109E-06
E	10.0	.91	4827.	0.	0.	222.0	55.4	222.0	2.577E-06	2.486E-06	2.486E-06
E	13.0	.45	4827.	0.	0.	222.0	55.4	222.0	1.985E-06	1.914E-06	1.914E-06
F	.4	1.37	4827.	0.	0.	153.2	34.5	243.9	8.912E-05	1.306E-04	8.912E-05
F	1.0	4.99	4827.	0.	0.	153.2	34.5	243.9	3.763E-05	5.514E-05	3.763E-05
F	2.0	6.35	4827.	0.	0.	153.2	34.5	241.3	1.880E-05	2.727E-05	1.880E-05
F	3.0	4.39	4827.	0.	0.	153.2	34.5	194.9	1.569E-05	1.838E-05	1.569E-05
F	4.0	2.12	4827.	0.	0.	153.2	34.5	173.4	1.331E-05	1.386E-05	1.331E-05
F	5.0	1.21	4827.	0.	0.	153.2	34.5	160.7	1.142E-05	1.103E-05	1.103E-05
F	6.0	.38	4827.	0.	0.	153.2	34.5	153.2	1.002E-05	9.225E-06	9.225E-06
F	8.0	.38	4827.	0.	0.	153.2	34.5	153.2	7.508E-06	6.912E-06	6.912E-06
F	13.0	.08	4827.	0.	0.	153.2	34.5	153.2	4.623E-06	4.256E-06	4.256E-06
G	.4	1.47	4827.	0.	0.	105.7	21.5	210.1	1.663E-04	2.751E-04	1.663E-04
G	1.0	4.31	4827.	0.	0.	105.7	21.5	210.1	7.022E-05	1.162E-04	7.022E-05
G	2.0	2.87	4827.	0.	0.	105.7	21.5	206.7	3.530E-05	5.745E-05	3.530E-05
G	3.0	1.21	4827.	0.	0.	105.7	21.5	148.9	3.302E-05	3.872E-05	3.302E-05
G	4.0	.45	4827.	0.	0.	105.7	21.5	125.3	2.960E-05	2.921E-05	2.921E-05
G	5.0	.30	4827.	0.	0.	105.7	21.5	112.7	2.618E-05	2.323E-05	2.323E-05
G	6.0	.08	4827.	0.	0.	105.7	21.5	105.7	2.333E-05	1.943E-05	1.943E-05

```
1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:  CGS                                METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma-desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0LOW POPULATION ZONE CALCULATIONS:
0 ENE SECTOR     BOUNDARY DISTANCE = 4827.0 METERS
0LATERAL PLUME MEANDER/BUILDING WAKE CREDIT ALLOWED
 AS A FUNCTION OF DOWNWIND DISTANCE.
 MEANDER CREDIT IS FOR WINDSPEEDS LESS THAN 6 MPS.
 BUILDING WAKE CREDIT ALLOWED:  C=   .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0   1.663E-04   8.912E-05   7.022E-05   4.368E-05   3.763E-05   3.530E-05   3.302E-05   2.921E-05   2.323E-05   2.298E-05
        1.471       2.840       7.151       8.170      13.161      16.035      17.245      17.699      18.001      18.463
         .06147      .11869      .29884      .34143      .55002      .67012      .72069      .73966      .75230      .77159
0   1.943E-05   1.880E-05   1.844E-05   1.569E-05   1.331E-05   1.103E-05   9.704E-06   9.225E-06   9.185E-06   7.174E-06
       18.539      24.891      28.824      33.210      35.328      36.538      38.429      38.807      46.143      51.361
         .77475     1.04024     1.20459     1.38790     1.47639     1.52696     1.60598     1.62178     1.92835     2.14643
0   6.912E-06   6.569E-06   5.885E-06   4.955E-06   4.816E-06   4.256E-06   4.149E-06   3.498E-06   3.109E-06   2.773E-06
       51.739      51.817      55.221      57.792      60.741      60.817      63.313      66.867      69.741      69.968
        2.16223     2.16551     2.30774     2.41520     2.53846     2.54162     2.64592     2.79446     2.91456     2.92405
0   2.762E-06   2.486E-06   2.271E-06   2.097E-06   1.914E-06   1.912E-06   1.432E-06   1.371E-06   1.145E-06   9.651E-07
       71.859      72.766      74.052      74.127      74.580      76.547      80.252      81.311      84.488      84.875
        3.00306     3.04099     3.09472     3.09784     3.11680     3.19898     3.35385     3.39809     3.53084     3.54701
0   9.245E-07   8.853E-07   8.820E-07   6.972E-07   5.547E-07   4.639E-07   4.378E-07   4.075E-07   3.476E-07   2.951E-07
       85.328      85.555      86.387      86.916      87.748      88.127      88.807      90.168      90.849      91.227
        3.56597     3.57545     3.61022     3.63234     3.66711     3.68291     3.71136     3.76825     3.79669     3.81249
0   2.780E-07   2.226E-07   2.141E-07   2.015E-07   1.771E-07   1.358E-07   1.110E-07   1.024E-07   8.873E-08   8.149E-08
       92.286      92.740      92.815      94.328      94.631      95.916      96.067      96.975      97.277      97.882
        3.85674     3.87571     3.87887     3.94208     3.95472     4.00845     4.01477     4.05270     4.06534     4.09062
0   6.816E-08   5.108E-08   4.084E-08   3.145E-08
       98.185      99.168      99.773     100.000
        4.10327     4.14435     4.16964     4.17912
```

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0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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)=    .299
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=    .669
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=    .720
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   1.386
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   1.926
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   2.144
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 8)=   2.536
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 9)=   2.912
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(10)=   3.000
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(11)=   3.528
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(12)=   3.607
```

```
0  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
  12  1      -8.70159 -14.47420  -1.78597
  12  2      -9.56381 -16.41356  -2.49134
  12  3     -10.25170 -16.55641  -2.54909
  12  4     -10.31825 -17.71880  -3.02408
  12  5     -11.06239 -19.99923  -4.06011
  12  6     -11.59799 -23.12030  -5.56844
  12  7     -11.84509 -23.21418  -5.61481
  12  8     -12.24366 -26.51204  -7.30268
  12  9     -12.68134 -29.69201  -8.98172
  12 10     -12.79953 -35.66097 -12.15541
  12 11     -13.67987 -60.39758 -25.83460
  12 12     -13.94104     NUMXQ(K)= 12
```

BACK EXTRAPOLATION FOR 1 PERCENTILE.

```
    2.019E-04              .042             1.000
    1.144E-04              .125             3.000
    8.627E-05              .209             5.000
    5.315E-05              .418            10.000
    3.745E-05              .627            15.000
    2.806E-05              .836            20.000
    2.183E-05             1.045            25.000
    1.769E-05             1.254            30.000
    1.443E-05             1.463            35.000
    1.163E-05             1.672            40.000
    9.576E-06             1.881            45.000
    7.635E-06             2.090            50.000
    6.105E-06             2.299            55.000
    4.960E-06             2.507            60.000
    3.890E-06             2.716            65.000
    3.064E-06             2.925            70.000
    2.194E-06             3.134            75.000
    1.545E-06             3.343            80.000
    1.067E-06             3.552            85.000
0   4.561E-05             0.5              11.96
0ANNUAL AVERAGE =   3.40E-07
0K= 12     FIVEXQ(K)= 4.561E-05     FIVEPR(K)=11.964
```

1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23: 4:56
/PLANT NAME: CGS METEORCLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE E SECTOR.

STABILITY CLASS	WINDSPEED AT 10.0 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=1431.SQ.METERS	USED
A	.4	.28	4827.	0.	0.	776.2	1000.0	776.2	9.656E-07	9.651E-07	9.651E-07
A	1.0	1.00	4827.	0.	0.	776.2	1000.0	776.2	4.077E-07	4.075E-07	4.075E-07
A	2.0	2.00	4827.	0.	0.	776.2	1000.0	776.2	2.016E-07	2.015E-07	2.015E-07
A	3.0	.60	4827.	0.	0.	776.2	1000.0	776.2	1.359E-07	1.358E-07	1.358E-07
A	4.0	.73	4827.	0.	0.	776.2	1000.0	776.2	1.025E-07	1.024E-07	1.024E-07
A	5.0	.53	4827.	0.	0.	776.2	1000.0	776.2	8.154E-08	8.149E-08	8.149E-08
A	6.0	.33	4827.	0.	0.	776.2	1000.0	776.2	6.820E-08	6.816E-08	6.816E-08
A	8.0	.60	4827.	0.	0.	776.2	1000.0	776.2	5.111E-08	5.108E-08	5.108E-08
A	10.0	.47	4827.	0.	0.	776.2	1000.0	776.2	4.086E-08	4.084E-08	4.084E-08
A	13.0	.20	4827.	0.	0.	776.2	1000.0	776.2	3.147E-08	3.145E-08	3.145E-08
B	.4	.09	4827.	0.	0.	583.7	611.6	583.7	2.099E-06	2.097E-06	2.097E-06
B	1.0	.27	4827.	0.	0.	583.7	611.6	583.7	8.864E-07	8.853E-07	8.853E-07
B	2.0	.60	4827.	0.	0.	583.7	611.6	583.7	4.383E-07	4.378E-07	4.378E-07
B	3.0	.33	4827.	0.	0.	583.7	611.6	583.7	2.955E-07	2.951E-07	2.951E-07
B	4.0	.40	4827.	0.	0.	583.7	611.6	583.7	2.228E-07	2.226E-07	2.226E-07
B	5.0	.40	4827.	0.	0.	583.7	611.6	583.7	1.773E-07	1.771E-07	1.771E-07
B	6.0	.60	4827.	0.	0.	583.7	611.6	583.7	1.483E-07	1.481E-07	1.481E-07
B	8.0	.67	4827.	0.	0.	583.7	611.6	583.7	1.111E-07	1.110E-07	1.110E-07
B	10.0	.07	4827.	0.	0.	583.7	611.6	583.7	8.884E-08	8.873E-08	8.873E-08
B	13.0	.27	4827.	0.	0.	583.7	611.6	583.7	6.842E-08	6.833E-08	6.833E-08
C	.4	.07	4827.	0.	0.	443.3	256.4	443.3	6.595E-06	6.569E-06	6.569E-06
C	1.0	.20	4827.	0.	0.	443.3	256.4	443.3	2.784E-06	2.773E-06	2.773E-06
C	2.0	.47	4827.	0.	0.	443.3	256.4	443.3	1.377E-06	1.371E-06	1.371E-06
C	3.0	.60	4827.	0.	0.	443.3	256.4	443.3	9.282E-07	9.245E-07	9.245E-07
C	4.0	.53	4827.	0.	0.	443.3	256.4	443.3	7.000E-07	6.972E-07	6.972E-07
C	5.0	.47	4827.	0.	0.	443.3	256.4	443.3	5.569E-07	5.547E-07	5.547E-07
C	6.0	.47	4827.	0.	0.	443.3	256.4	443.3	4.658E-07	4.639E-07	4.639E-07
C	8.0	.67	4827.	0.	0.	443.3	256.4	443.3	3.490E-07	3.476E-07	3.476E-07
C	10.0	.27	4827.	0.	0.	443.3	256.4	443.3	2.791E-07	2.780E-07	2.780E-07
C	13.0	.07	4827.	0.	0.	443.3	256.4	443.3	2.149E-07	2.141E-07	2.141E-07
D	.4	.57	4827.	0.	0.	312.1	87.3	373.7	2.298E-05	2.706E-05	2.298E-05
D	1.0	2.33	4827.	0.	0.	312.1	87.3	373.7	9.704E-06	1.143E-05	9.704E-06
D	2.0	3.33	4827.	0.	0.	312.1	87.3	372.4	4.816E-06	5.651E-06	4.816E-06
D	3.0	1.93	4827.	0.	0.	312.1	87.3	345.6	3.498E-06	3.809E-06	3.498E-06
D	4.0	2.13	4827.	0.	0.	312.1	87.3	330.1	2.762E-06	2.873E-06	2.762E-06
D	5.0	2.67	4827.	0.	0.	312.1	87.3	319.4	2.271E-06	2.285E-06	2.271E-06
D	6.0	1.93	4827.	0.	0.	312.1	87.3	312.1	1.944E-06	1.912E-06	1.912E-06
D	8.0	2.27	4827.	0.	0.	312.1	87.3	312.1	1.456E-06	1.432E-06	1.432E-06
D	10.0	1.20	4827.	0.	0.	312.1	87.3	312.1	1.164E-06	1.145E-06	1.145E-06
D	13.0	.33	4827.	0.	0.	312.1	87.3	312.1	8.968E-07	8.820E-07	8.820E-07
D	18.0	.13	4827.	0.	0.	312.1	87.3	312.1	6.479E-07	6.372E-07	6.372E-07
E	.4	1.07	4827.	0.	0.	222.0	55.4	309.5	4.368E-05	5.874E-05	4.368E-05
E	1.0	4.13	4827.	0.	0.	222.0	55.4	309.5	1.844E-05	2.480E-05	1.844E-05
E	2.0	6.53	4827.	0.	0.	222.0	55.4	307.3	9.185E-06	1.226E-05	9.185E-06
E	3.0	5.40	4827.	0.	0.	222.0	55.4	265.2	7.174E-06	8.267E-06	7.174E-06
E	4.0	5.73	4827.	0.	0.	222.0	55.4	243.8	5.885E-06	6.235E-06	5.885E-06
E	5.0	2.87	4827.	0.	0.	222.0	55.4	230.4	4.955E-06	4.960E-06	4.955E-06
E	6.0	2.87	4827.	0.	0.	222.0	55.4	222.0	4.302E-06	4.149E-06	4.149E-06
E	8.0	2.73	4827.	0.	0.	222.0	55.4	222.0	3.224E-06	3.109E-06	3.109E-06
E	10.0	.80	4827.	0.	0.	222.0	55.4	222.0	2.577E-06	2.486E-06	2.486E-06
E	13.0	.40	4827.	0.	0.	222.0	55.4	222.0	1.985E-06	1.914E-06	1.914E-06
F	.4	1.37	4827.	0.	0.	153.2	34.5	243.9	8.912E-05	1.306E-04	8.912E-05
F	1.0	5.00	4827.	0.	0.	153.2	34.5	243.9	3.763E-05	5.514E-05	3.763E-05
F	2.0	6.80	4827.	0.	0.	153.2	34.5	241.3	1.880E-05	2.727E-05	1.880E-05
F	3.0	3.47	4827.	0.	0.	153.2	34.5	194.9	1.569E-05	1.838E-05	1.569E-05
F	4.0	3.00	4827.	0.	0.	153.2	34.5	173.4	1.331E-05	1.386E-05	1.331E-05
F	5.0	2.13	4827.	0.	0.	153.2	34.5	160.7	1.142E-05	1.103E-05	1.103E-05
F	6.0	1.07	4827.	0.	0.	153.2	34.5	153.2	1.002E-05	9.225E-06	9.225E-06
F	8.0	.13	4827.	0.	0.	153.2	34.5	153.2	7.508E-06	6.912E-06	6.912E-06
F	10.0	.07	4827.	0.	0.	153.2	34.5	153.2	6.003E-06	5.526E-06	5.526E-06
G	.4	1.41	4827.	0.	0.	105.7	21.5	210.1	1.663E-04	2.751E-04	1.663E-04
G	1.0	4.13	4827.	0.	0.	105.7	21.5	210.1	7.022E-05	1.162E-04	7.022E-05
G	2.0	3.60	4827.	0.	0.	105.7	21.5	206.7	3.530E-05	5.745E-05	3.530E-05
G	3.0	1.00	4827.	0.	0.	105.7	21.5	148.9	3.302E-05	3.872E-05	3.302E-05
G	4.0	.87	4827.	0.	0.	105.7	21.5	125.3	2.960E-05	2.921E-05	2.921E-05
G	5.0	.33	4827.	0.	0.	105.7	21.5	112.7	2.618E-05	2.323E-05	2.323E-05

```
1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:  CGS                                METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma=desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0LOW POPULATION ZONE CALCULATIONS:
0   E SECTOR     BOUNDARY DISTANCE = 4827.0 METERS
0LATERAL PLUME MEANDER/BUILDING WAKE CREDIT ALLOWED
 AS A FUNCTION OF DOWNWIND DISTANCE.
 MEANDER CREDIT IS FOR WINDSPEEDS LESS THAN 6 MPS.
 BUILDING WAKE CREDIT ALLOWED:   C=   .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0  1.663E-04  8.912E-05  7.022E-05  4.368E-05  3.763E-05  3.530E-05  3.302E-05  2.921E-05  2.323E-05  2.298E-05
       1.410      2.782      6.915      7.986     12.987     16.587     17.587     18.453     18.787     19.356
        .06687     .13188     .32784     .37861     .61565     .78632     .83373     .87482     .89062     .91763
0  1.880E-05  1.844E-05  1.569E-05  1.331E-05  1.103E-05  9.704E-06  9.225E-06  9.185E-06  7.174E-06  6.912E-06
      26.157     30.290     33.757     36.757     38.890     41.224     42.290     48.824     54.224     54.357
       1.24001    1.43596    1.60031    1.74254    1.84367    1.95429    2.00486    2.31460    2.57060    2.57692
0  6.569E-06  5.885E-06  5.526E-06  4.955E-06  4.816E-06  4.149E-06  3.498E-06  3.109E-06  2.773E-06  2.762E-06
      54.427     60.160     60.227     63.093     66.427     69.294     71.227     73.960     74.160     76.294
       2.58020    2.85201    2.85517    2.99107    3.14910    3.28501    3.37666    3.50624    3.51573    3.61686
0  2.486E-06  2.271E-06  2.097E-06  1.914E-06  1.912E-06  1.432E-06  1.371E-06  1.145E-06  9.651E-07  9.245E-07
      77.094     79.761     79.849     80.249     82.182     84.449     84.915     86.115     86.400     87.000
       3.65479    3.78121    3.78538    3.80434    3.89600    4.00346    4.02558    4.08247    4.09595    4.12439
0  8.853E-07  8.820E-07  6.972E-07  6.372E-07  5.547E-07  4.639E-07  4.378E-07  4.075E-07  3.476E-07  2.951E-07
      87.266     87.600     88.133     88.266     88.733     89.200     89.800     90.800     91.466     91.800
       4.13703    4.15284    4.17812    4.18444    4.20657    4.22869    4.25713    4.30454    4.33615    4.35195
0  2.780E-07  2.226E-07  2.141E-07  2.015E-07  1.771E-07  1.481E-07  1.358E-07  1.110E-07  1.024E-07  8.873E-08
      92.066     92.466     92.533     94.533     94.933     95.533     96.133     96.800     97.533     97.600
       4.36459    4.38356    4.38672    4.48153    4.50050    4.52894    4.55739    4.58899    4.62376    4.62692
0  8.149E-08  6.833E-08  6.816E-08  5.108E-08  4.084E-08  3.145E-08
      98.133     98.400     98.733     99.333     99.800    100.000
       4.65220    4.66485    4.68065    4.70909    4.73122    4.74070
```

```
0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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
```

```
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=    .327
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=    .785
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   1.434
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   2.312
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   3.146
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   3.282
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 8)=   3.614
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 9)=   3.778
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(10)=   3.893
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(11)=   4.022
```

```
0  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
  13  1      -8.70159 -14.35632  -1.76264
  13  2      -9.56381 -15.73026  -2.26797
  13  3     -10.25170 -17.13386  -2.84901
  13  4     -10.90090 -18.73757  -3.58205
  13  5     -11.59799 -21.24350  -4.83931
  13  6     -12.24366 -26.94424  -7.90467
  13  7     -12.39272 -29.61439  -9.35514
  13  8     -12.79953 -30.10732  -9.62940
  13  9     -12.99534 -35.20751 -12.49942
  13 10     -13.16756 -51.78399 -21.90036
  13 11     -13.49964     NUMXQ(K)= 11
```

```
BACK EXTRAPOLATION FOR  1 PERCENTILE.
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```
    1.975E-04              .047              1.000
    1.121E-04              .142              3.000
    8.459E-05              .237              5.000
    5.297E-05              .474             10.000
    3.833E-05              .711             15.000
    2.900E-05              .948             20.000
    2.281E-05             1.185             25.000
    1.864E-05             1.422             30.000
    1.501E-05             1.659             35.000
    1.236E-05             1.896             40.000
    1.038E-05             2.133             45.000
    8.747E-06             2.370             50.000
    7.182E-06             2.607             55.000
    5.983E-06             2.844             60.000
    5.045E-06             3.081             65.000
    3.976E-06             3.318             70.000
    2.971E-06             3.556             75.000
    2.232E-06             3.793             80.000
0   5.081E-05             0.5               10.55
0ANNUAL AVERAGE =   3.94E-07
0K= 13     FIVEXQ(K)= 5.081E-05     FIVEPR(K)=10.547
```

1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23: 4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE ESE SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 10.0 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=1431.SQ.METERS	USED
A	.4	.24	4827.	0.	0.	776.2	1000.0	776.2	9.656E-07	9.651E-07	9.651E-07
A	1.0	.84	4827.	0.	0.	776.2	1000.0	776.2	4.077E-07	4.075E-07	4.075E-07
A	2.0	1.19	4827.	0.	0.	776.2	1000.0	776.2	2.016E-07	2.015E-07	2.015E-07
A	3.0	.65	4827.	0.	0.	776.2	1000.0	776.2	1.359E-07	1.358E-07	1.358E-07
A	4.0	.19	4827.	0.	0.	776.2	1000.0	776.2	1.025E-07	1.024E-07	1.024E-07
A	5.0	.23	4827.	0.	0.	776.2	1000.0	776.2	8.154E-08	8.149E-08	8.149E-08
A	6.0	.23	4827.	0.	0.	776.2	1000.0	776.2	6.820E-08	6.816E-08	6.816E-08
A	8.0	.42	4827.	0.	0.	776.2	1000.0	776.2	5.111E-08	5.108E-08	5.108E-08
A	10.0	.23	4827.	0.	0.	776.2	1000.0	776.2	4.086E-08	4.084E-08	4.084E-08
A	13.0	.27	4827.	0.	0.	776.2	1000.0	776.2	3.147E-08	3.145E-08	3.145E-08
B	.4	.04	4827.	0.	0.	583.7	611.6	583.7	2.099E-06	2.097E-06	2.097E-06
B	1.0	.11	4827.	0.	0.	583.7	611.6	583.7	8.864E-07	8.853E-07	8.853E-07
B	2.0	.31	4827.	0.	0.	583.7	611.6	583.7	4.383E-07	4.378E-07	4.378E-07
B	3.0	.27	4827.	0.	0.	583.7	611.6	583.7	2.955E-07	2.951E-07	2.951E-07
B	4.0	.27	4827.	0.	0.	583.7	611.6	583.7	2.228E-07	2.226E-07	2.226E-07
B	5.0	.23	4827.	0.	0.	583.7	611.6	583.7	1.773E-07	1.771E-07	1.771E-07
B	6.0	.27	4827.	0.	0.	583.7	611.6	583.7	1.483E-07	1.481E-07	1.481E-07
B	8.0	.19	4827.	0.	0.	583.7	611.6	583.7	1.111E-07	1.110E-07	1.110E-07
B	10.0	.08	4827.	0.	0.	583.7	611.6	583.7	8.884E-08	8.873E-08	8.873E-08
B	13.0	.15	4827.	0.	0.	583.7	611.6	583.7	6.842E-08	6.833E-08	6.833E-08
C	.4	.04	4827.	0.	0.	443.3	256.4	443.3	6.595E-06	6.569E-06	6.569E-06
C	1.0	.11	4827.	0.	0.	443.3	256.4	443.3	2.784E-06	2.773E-06	2.773E-06
C	2.0	.34	4827.	0.	0.	443.3	256.4	443.3	1.377E-06	1.371E-06	1.371E-06
C	3.0	.46	4827.	0.	0.	443.3	256.4	443.3	9.282E-07	9.245E-07	9.245E-07
C	4.0	.11	4827.	0.	0.	443.3	256.4	443.3	7.000E-07	6.972E-07	6.972E-07
C	5.0	.27	4827.	0.	0.	443.3	256.4	443.3	5.569E-07	5.547E-07	5.547E-07
C	6.0	.27	4827.	0.	0.	443.3	256.4	443.3	4.658E-07	4.639E-07	4.639E-07
C	8.0	.19	4827.	0.	0.	443.3	256.4	443.3	3.490E-07	3.476E-07	3.476E-07
C	10.0	.34	4827.	0.	0.	443.3	256.4	443.3	2.791E-07	2.780E-07	2.780E-07
C	13.0	.31	4827.	0.	0.	443.3	256.4	443.3	2.149E-07	2.141E-07	2.141E-07
D	.4	.36	4827.	0.	0.	312.1	87.3	373.7	2.298E-05	2.706E-05	2.298E-05
D	1.0	1.49	4827.	0.	0.	312.1	87.3	373.7	9.704E-06	1.143E-05	9.704E-06
D	2.0	1.91	4827.	0.	0.	312.1	87.3	372.4	4.816E-06	5.651E-06	4.816E-06
D	3.0	2.45	4827.	0.	0.	312.1	87.3	345.6	3.498E-06	3.809E-06	3.498E-06
D	4.0	2.45	4827.	0.	0.	312.1	87.3	330.1	2.762E-06	2.873E-06	2.762E-06
D	5.0	1.80	4827.	0.	0.	312.1	87.3	319.4	2.271E-06	2.285E-06	2.271E-06
D	6.0	2.07	4827.	0.	0.	312.1	87.3	312.1	1.944E-06	1.912E-06	1.912E-06
D	8.0	3.94	4827.	0.	0.	312.1	87.3	312.1	1.456E-06	1.432E-06	1.432E-06
D	10.0	1.95	4827.	0.	0.	312.1	87.3	312.1	1.164E-06	1.145E-06	1.145E-06
D	13.0	.69	4827.	0.	0.	312.1	87.3	312.1	8.968E-07	8.820E-07	8.820E-07
D	18.0	.08	4827.	0.	0.	312.1	87.3	312.1	6.479E-07	6.372E-07	6.372E-07
E	.4	.89	4827.	0.	0.	222.0	55.4	309.5	4.368E-05	5.874E-05	4.368E-05
E	1.0	3.44	4827.	0.	0.	222.0	55.4	309.5	1.844E-05	2.480E-05	1.844E-05
E	2.0	5.40	4827.	0.	0.	222.0	55.4	307.3	9.185E-06	1.226E-05	9.185E-06
E	3.0	5.82	4827.	0.	0.	222.0	55.4	265.2	7.174E-06	8.267E-06	7.174E-06
E	4.0	5.51	4827.	0.	0.	222.0	55.4	243.8	5.885E-06	6.235E-06	5.885E-06
E	5.0	6.16	4827.	0.	0.	222.0	55.4	230.4	4.955E-06	4.960E-06	4.955E-06
E	6.0	5.36	4827.	0.	0.	222.0	55.4	222.0	4.302E-06	4.149E-06	4.149E-06
E	8.0	5.78	4827.	0.	0.	222.0	55.4	222.0	3.224E-06	3.109E-06	3.109E-06
E	10.0	2.45	4827.	0.	0.	222.0	55.4	222.0	2.577E-06	2.486E-06	2.486E-06
E	13.0	.77	4827.	0.	0.	222.0	55.4	222.0	1.985E-06	1.914E-06	1.914E-06
E	18.0	.08	4827.	0.	0.	222.0	55.4	222.0	1.434E-06	1.383E-06	1.383E-06
F	.4	.85	4827.	0.	0.	153.2	34.5	243.9	8.912E-05	1.306E-04	8.912E-05
F	1.0	3.10	4827.	0.	0.	153.2	34.5	243.9	3.763E-05	5.514E-05	3.763E-05
F	2.0	5.36	4827.	0.	0.	153.2	34.5	241.3	1.880E-05	2.727E-05	1.880E-05
F	3.0	3.87	4827.	0.	0.	153.2	34.5	194.9	1.569E-05	1.838E-05	1.569E-05
F	4.0	3.94	4827.	0.	0.	153.2	34.5	173.4	1.331E-05	1.386E-05	1.331E-05
F	5.0	2.07	4827.	0.	0.	153.2	34.5	160.7	1.142E-05	1.103E-05	1.103E-05
F	6.0	1.07	4827.	0.	0.	153.2	34.5	153.2	1.002E-05	9.225E-06	9.225E-06
F	8.0	.54	4827.	0.	0.	153.2	34.5	153.2	7.508E-06	6.912E-06	6.912E-06
G	.4	.86	4827.	0.	0.	105.7	21.5	210.1	1.663E-04	2.751E-04	1.663E-04
G	1.0	2.53	4827.	0.	0.	105.7	21.5	210.1	7.022E-05	1.162E-04	7.022E-05
G	2.0	3.71	4827.	0.	0.	105.7	21.5	206.7	3.530E-05	5.745E-05	3.530E-05
G	3.0	1.68	4827.	0.	0.	105.7	21.5	148.9	3.302E-05	3.872E-05	3.302E-05
G	4.0	.54	4827.	0.	0.	105.7	21.5	125.3	2.960E-05	2.921E-05	2.921E-05
G	5.0	.19	4827.	0.	0.	105.7	21.5	112.7	2.618E-05	2.323E-05	2.323E-05

```
1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:   CGS                               METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma=desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0LOW POPULATION ZONE CALCULATIONS:
0 ESE SECTOR      BOUNDARY DISTANCE = 4827.0 METERS
0LATERAL PLUME MEANDER/BUILDING WAKE CREDIT ALLOWED
 AS A FUNCTION OF DOWNWIND DISTANCE.
 MEANDER CREDIT IS FOR WINDSPEEDS LESS THAN 6 MPS.
 BUILDING WAKE CREDIT ALLOWED:   C=   .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0   1.663E-04   8.912E-05   7.022E-05   4.368E-05   3.763E-05   3.530E-05   3.302E-05   2.921E-05   2.323E-05   2.298E-05
          .862       1.712       4.238       5.131       8.231      11.943      13.627      14.163      14.354      14.719
       .07118      .14140      .35000      .42370      .67970      .98628     1.12534     1.16959     1.18539     1.21549
0   1.880E-05   1.844E-05   1.569E-05   1.331E-05   1.103E-05   9.704E-06   9.225E-06   9.185E-06   7.174E-06   6.912E-06
         20.077      23.521      27.387      31.329      33.396      34.888      35.960      41.356      47.174      47.709
        1.65797     1.94242     2.26163     2.58717     2.75784     2.88110     2.96960     3.41524     3.89564     3.93989
0   6.569E-06   5.885E-06   4.955E-06   4.816E-06   4.149E-06   3.498E-06   3.109E-06   2.773E-06   2.762E-06   2.486E-06
         47.749      53.260      59.422      61.336      66.694      69.143      74.922      75.037      77.487      79.936
        3.94317     4.39829     4.90714     5.06516     5.50764     5.70992     6.18716     6.19664     6.39892     6.60119
0   2.271E-06   2.097E-06   1.914E-06   1.912E-06   1.432E-06   1.383E-06   1.371E-06   1.145E-06   9.651E-07   9.245E-07
         81.735      81.773      82.538      84.605      88.547      88.623      88.968      90.920      91.159      91.618
        6.74974     6.75286     6.81608     6.98675     7.31228     7.31860     7.34705     7.50824     7.52800     7.56593
0   8.853E-07   8.820E-07   6.972E-07   6.372E-07   5.547E-07   4.639E-07   4.378E-07   4.075E-07   3.476E-07   2.951E-07
         91.733      92.422      92.537      92.613      92.881      93.149      93.455      94.297      94.489      94.757
        7.57541     7.63230     7.64178     7.64810     7.67023     7.69235     7.71764     7.78717     7.80297     7.82509
0   2.780E-07   2.226E-07   2.141E-07   2.015E-07   1.771E-07   1.481E-07   1.358E-07   1.110E-07   1.024E-07   8.873E-08
         95.101      95.369      95.675      96.862      97.091      97.359      98.010      98.201      98.393      98.469
        7.85354     7.87566     7.90095     7.99892     8.01789     8.04001     8.09374     8.10954     8.12535     8.13167
0   8.149E-08   6.833E-08   6.816E-08   5.108E-08   4.084E-08   3.145E-08
         98.699      98.852      99.081      99.502      99.732     100.000
        8.15063     8.16327     8.18224     8.21700     8.23597     8.25809
```

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0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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)=    .350
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=   1.124
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   2.259
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   2.585
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   3.412
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   5.061
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 8)=   5.504
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 9)=   6.183
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(10)=   6.597
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(11)=   6.746
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(12)=   6.983
HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(13)=   7.308
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0  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
  14  1      -8.70159 -14.28253  -1.74947
  14  2      -9.56381 -14.46610  -1.81753
  14  3     -10.31825 -16.40026  -2.66505
  14  4     -11.06239 -16.83578  -2.88249
  14  5     -11.22735 -17.12420  -3.03072
  14  6     -11.59799 -17.97996  -3.50004
  14  7     -12.24366 -18.19128  -3.62898
  14  8     -12.39272 -20.30543  -4.95210
  14  9     -12.68134 -23.08734  -6.75905
  14 10     -12.90504 -24.75322  -7.86486
  14 11     -12.99534 -27.36180  -9.60975
  14 12     -13.16756 -31.02700 -12.09115
  14 13     -13.45617     NUMXQ(K)= 13
     1.542E-04                .083              1.000
     8.559E-05                .248              3.000
     6.349E-05                .413              5.000
     4.075E-05                .826             10.000
     2.994E-05               1.239             15.000
     2.214E-05               1.652             20.000
     1.737E-05               2.065             25.000
     1.404E-05               2.477             30.000
     1.150E-05               2.890             35.000
     9.612E-06               3.303             40.000
     8.030E-06               3.716             45.000
     6.771E-06               4.129             50.000
     5.786E-06               4.542             55.000
     4.999E-06               4.955             60.000
     4.344E-06               5.368             65.000
     3.683E-06               5.781             70.000
     3.098E-06               6.194             75.000
     2.477E-06               6.606             80.000
     1.856E-06               7.019             85.000
0    5.636E-05                 0.5              6.05
CANNUAL AVERAGE =   5.36E-07
OK= 14     FIVEXQ(K)= 5.636E-05     FIVEPR(K)= 6.055
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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23: 4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE SE SECTOR.

STABILITY CLASS	WINDSPEED AT 10.0 METERS METER/SEC	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=1431.SQ.METERS	USED
A	.4	.21	4827.	0.	0.	776.2	1000.0	776.2	9.656E-07	9.651E-07	9.651E-07
A	1.0	.73	4827.	0.	0.	776.2	1000.0	776.2	4.077E-07	4.075E-07	4.075E-07
A	2.0	1.42	4827.	0.	0.	776.2	1000.0	776.2	2.016E-07	2.015E-07	2.015E-07
A	3.0	.78	4827.	0.	0.	776.2	1000.0	776.2	1.359E-07	1.358E-07	1.358E-07
A	4.0	.55	4827.	0.	0.	776.2	1000.0	776.2	1.025E-07	1.024E-07	1.024E-07
A	5.0	.12	4827.	0.	0.	776.2	1000.0	776.2	8.154E-08	8.149E-08	8.149E-08
A	6.0	.15	4827.	0.	0.	776.2	1000.0	776.2	6.820E-08	6.816E-08	6.816E-08
A	8.0	.17	4827.	0.	0.	776.2	1000.0	776.2	5.111E-08	5.108E-08	5.108E-08
A	10.0	.12	4827.	0.	0.	776.2	1000.0	776.2	4.086E-08	4.084E-08	4.084E-08
A	13.0	.09	4827.	0.	0.	776.2	1000.0	776.2	3.147E-08	3.145E-08	3.145E-08
B	.4	.08	4827.	0.	0.	583.7	611.6	583.7	2.099E-06	2.097E-06	2.097E-06
B	1.0	.23	4827.	0.	0.	583.7	611.6	583.7	8.864E-07	8.853E-07	8.853E-07
B	2.0	.35	4827.	0.	0.	583.7	611.6	583.7	4.383E-07	4.378E-07	4.378E-07
B	3.0	.26	4827.	0.	0.	583.7	611.6	583.7	2.955E-07	2.951E-07	2.951E-07
B	4.0	.35	4827.	0.	0.	583.7	611.6	583.7	2.228E-07	2.226E-07	2.226E-07
B	5.0	.15	4827.	0.	0.	583.7	611.6	583.7	1.773E-07	1.771E-07	1.771E-07
B	6.0	.12	4827.	0.	0.	583.7	611.6	583.7	1.483E-07	1.481E-07	1.481E-07
B	8.0	.06	4827.	0.	0.	583.7	611.6	583.7	1.111E-07	1.110E-07	1.110E-07
B	10.0	.03	4827.	0.	0.	583.7	611.6	583.7	8.884E-08	8.873E-08	8.873E-08
C	.4	.03	4827.	0.	0.	443.3	256.4	443.3	6.595E-06	6.569E-06	6.569E-06
C	1.0	.09	4827.	0.	0.	443.3	256.4	443.3	2.784E-06	2.773E-06	2.773E-06
C	2.0	.46	4827.	0.	0.	443.3	256.4	443.3	1.377E-06	1.371E-06	1.371E-06
C	3.0	.49	4827.	0.	0.	443.3	256.4	443.3	9.282E-07	9.245E-07	9.245E-07
C	4.0	.20	4827.	0.	0.	443.3	256.4	443.3	7.000E-07	6.972E-07	6.972E-07
C	5.0	.20	4827.	0.	0.	443.3	256.4	443.3	5.569E-07	5.547E-07	5.547E-07
C	6.0	.12	4827.	0.	0.	443.3	256.4	443.3	4.658E-07	4.639E-07	4.639E-07
C	8.0	.09	4827.	0.	0.	443.3	256.4	443.3	3.490E-07	3.476E-07	3.476E-07
C	10.0	.20	4827.	0.	0.	443.3	256.4	443.3	2.791E-07	2.780E-07	2.780E-07
D	.4	.26	4827.	0.	0.	312.1	87.3	373.7	2.298E-05	2.706E-05	2.298E-05
D	1.0	1.05	4827.	0.	0.	312.1	87.3	373.7	9.704E-06	1.143E-05	9.704E-06
D	2.0	4.33	4827.	0.	0.	312.1	87.3	372.4	4.816E-06	5.651E-06	4.816E-06
D	3.0	4.30	4827.	0.	0.	312.1	87.3	345.6	3.498E-06	3.809E-06	3.498E-06
D	4.0	3.81	4827.	0.	0.	312.1	87.3	330.1	2.762E-06	2.873E-06	2.762E-06
D	5.0	2.85	4827.	0.	0.	312.1	87.3	319.4	2.271E-06	2.285E-06	2.271E-06
D	6.0	2.12	4827.	0.	0.	312.1	87.3	312.1	1.944E-06	1.912E-06	1.912E-06
D	8.0	1.48	4827.	0.	0.	312.1	87.3	312.1	1.456E-06	1.432E-06	1.432E-06
D	10.0	.81	4827.	0.	0.	312.1	87.3	312.1	1.164E-06	1.145E-06	1.145E-06
D	13.0	.46	4827.	0.	0.	312.1	87.3	312.1	8.968E-07	8.820E-07	8.820E-07
D	18.0	.06	4827.	0.	0.	312.1	87.3	312.1	6.479E-07	6.372E-07	6.372E-07

E	.4	.60	4827.	0.	0.	222.0	55.4	309.5	4.368E-05	5.874E-05	4.368E-05
E	1.0	2.32	4827.	0.	0.	222.0	55.4	309.5	1.844E-05	2.480E-05	1.844E-05
E	2.0	5.99	4827.	0.	0.	222.0	55.4	307.3	9.185E-06	1.226E-05	9.185E-06
E	3.0	7.00	4827.	0.	0.	222.0	55.4	265.2	7.174E-06	8.267E-06	7.174E-06
E	4.0	5.61	4827.	0.	0.	222.0	55.4	243.8	5.885E-06	6.235E-06	5.885E-06
E	5.0	4.48	4827.	0.	0.	222.0	55.4	230.4	4.955E-06	4.960E-06	4.955E-06
E	6.0	3.57	4827.	0.	0.	222.0	55.4	222.0	4.302E-06	4.149E-06	4.149E-06
E	8.0	3.25	4827.	0.	0.	222.0	55.4	222.0	3.224E-06	3.109E-06	3.109E-06
E	10.0	.90	4827.	0.	0.	222.0	55.4	222.0	2.577E-06	2.486E-06	2.486E-06
E	13.0	.29	4827.	0.	0.	222.0	55.4	222.0	1.985E-06	1.914E-06	1.914E-06
F	.4	.77	4827.	0.	0.	153.2	34.5	243.9	8.912E-05	1.306E-04	8.912E-05
F	1.0	2.79	4827.	0.	0.	153.2	34.5	243.9	3.763E-05	5.514E-05	3.763E-05
F	2.0	6.74	4827.	0.	0.	153.2	34.5	241.3	1.880E-05	2.727E-05	1.880E-05
F	3.0	4.71	4827.	0.	0.	153.2	34.5	194.9	1.569E-05	1.838E-05	1.569E-05
F	4.0	4.07	4827.	0.	0.	153.2	34.5	173.4	1.331E-05	1.386E-05	1.331E-05
F	5.0	1.48	4827.	0.	0.	153.2	34.5	160.7	1.142E-05	1.103E-05	1.103E-05
F	6.0	.58	4827.	0.	0.	153.2	34.5	153.2	1.002E-05	9.225E-06	9.225E-06
F	8.0	.06	4827.	0.	0.	153.2	34.5	153.2	7.508E-06	6.912E-06	6.912E-06
G	.4	.86	4827.	0.	0.	105.7	21.5	210.1	1.663E-04	2.751E-04	1.663E-04
G	1.3	2.53	4827.	0.	0.	105.7	21.5	210.1	7.022E-05	1.162E-04	7.022E-05
G	2.0	6.13	4827.	0.	0.	105.7	21.5	206.7	3.530E-05	5.745E-05	3.530E-05
G	3.0	3.63	4827.	0.	0.	105.7	21.5	148.9	3.302E-05	3.872E-05	3.302E-05
G	4.0	2.03	4827.	0.	0.	105.7	21.5	125.3	2.960E-05	2.921E-05	2.921E-05
G	5.0	.17	4827.	0.	0.	105.7	21.5	112.7	2.618E-05	2.323E-05	2.323E-05
G	6.0	.06	4827.	0.	0.	105.7	21.5	105.7	2.333E-05	1.943E-05	1.943E-05

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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:  CGS                                METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma=desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0LOW POPULATION ZONE CALCULATIONS:
0  SE SECTOR     BOUNDARY DISTANCE = 4827.0 METERS
0LATERAL PLUME MEANDER/BUILDING WAKE CREDIT ALLOWED
 AS A FUNCTION OF DOWNWIND DISTANCE.
 MEANDER CREDIT IS FOR WINDSPEEDS LESS THAN 6 MPS.
 BUILDING WAKE CREDIT ALLOWED:   C=   .5    A=  2861.    D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0   1.663E-04   8.912E-05   7.022E-05   4.368E-05   3.763E-05   3.530E-05   3.302E-05   2.921E-05   2.323E-05   2.298E-05
        .863       1.628       4.156       4.758       7.548      13.679      17.312      19.346      19.520      19.776
      .09383      .17705      .45202      .51753      .82095     1.48783     1.88289     2.10413     2.12310     2.15088
0   1.943E-05   1.880E-05   1.844E-05   1.569E-05   1.331E-05   1.103E-05   9.704E-06   9.225E-06   9.185E-06   7.174E-06
       19.834      26.575      28.900      33.607      37.676      39.158      40.204      40.785      46.771      53.774
      2.15720     2.89045     3.14329     3.65530     4.09778     4.25897     4.37275     4.43596     5.08703     5.84873
0   6.912E-06   6.569E-06   5.885E-06   4.955E-06   4.816E-06   4.149E-06   3.498E-06   3.109E-06   2.773E-06   2.762E-06
       53.832      53.862      59.471      63.946      68.275      71.850      76.150      79.405      79.492      83.299
      5.85505     5.85833     6.46831     6.95504     7.42596     7.81471     8.28247     8.63646     8.64594     9.05997
0   2.486E-06   2.271E-06   2.097E-06   1.914E-06   1.912E-06   1.432E-06   1.371E-06   1.145E-06   9.651E-07   9.245E-07
       84.200      87.047      87.124      87.415      89.536      91.018      91.483      92.296      92.503      92.997
      9.15795     9.46768     9.47602     9.50762     9.73834     9.89953     9.95010    10.03860    10.06105    10.11478
0   8.853E-07   8.820E-07   6.972E-07   6.372E-07   5.547E-07   4.639E-07   4.378E-07   4.075E-07   3.476E-07   2.951E-07
       93.229      93.694      93.898      93.956      94.159      94.275      94.624      95.351      95.438      95.699
     10.14007    10.19064    10.21276    10.21908    10.24120    10.25385    10.29177    10.37079    10.38027    10.40871
0   2.780E-07   2.226E-07   2.015E-07   1.771E-07   1.481E-07   1.358E-07   1.110E-07   1.024E-07   8.873E-08   8.149E-08
       95.903      96.251      97.675      97.821      97.937      98.721      98.780      99.332      99.361      99.477
     10.43084    10.46876    10.62363    10.63943    10.65207    10.73741    10.74373    10.80378    10.80694    10.81959
0   6.816E-08   5.108E-08   4.084E-08   3.145E-08
       99.622      99.797      99.913     100.000
     10.83539    10.85435    10.86699    10.87648
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0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=   1.881
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=   3.652
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   4.094
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   5.845
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   7.422
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   9.057
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 8)=   9.464
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 9)=   9.735
                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE(10)=   9.947
0  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
   15  1      -8.70159 -13.58017  -1.56899
   15  2     -10.31825 -15.71947  -2.59799
   15  3      11.06239 -16.67007  -3.12829
   15  4     -11.22735 -17.47928  -3.59340
   15  5     -11.84509 -16.93096  -3.24369
   15  6     -12.24366 -19.69707  -5.15788
   15  7     -12.79953 -23.44738  -7.96231
   15  8     -12.99534 -27.21613 -10.83331
   15  9     -13.16756 -48.42676 -27.18954
   15 10     -13.49964      NUMXQ(K)= 10
     1.553E-04                .109                1.000
     9.036E-05                .326                3.000
     6.883E-05                .544                5.000
     4.635E-05               1.088               10.000
     3.617E-05               1.631               15.000
     2.828E-05               2.175               20.000
     2.209E-05               2.719               25.000
     1.793E-05               3.263               30.000
     1.480E-05               3.807               35.000
     1.203E-05               4.351               40.000
     9.828E-06               4.894               45.000
     8.170E-06               5.438               50.000
     6.915E-06               5.982               55.000
     5.991E-06               6.526               60.000
     5.237E-06               7.070               65.000
     4.498E-06               7.614               70.000
     3.716E-06               8.157               75.000
     3.099E-06               8.701               80.000
     2.525E-06               9.245               85.000
     1.765E-06               9.789               90.000
0    7.205E-05               0.5                  4.60
0ANNUAL AVERAGE =   7.35E-07
0K= 15     FIVEXQ(K)= 7.205E-05     FIVEPR(K)= 4.597
```

1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23: 4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE SSE SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 10.0 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=1431.SQ.METERS	USED
A	.4	.25	4827.	0.	0.	776.2	1000.0	776.2	9.656E-07	9.651E-07	9.651E-07
A	1.0	.89	4827.	0.	0.	776.2	1000.0	776.2	4.077E-07	4.075E-07	4.075E-07
A	2.0	2.82	4827.	0.	0.	776.2	1000.0	776.2	2.016E-07	2.015E-07	2.015E-07
A	3.0	1.79	4827.	0.	0.	776.2	1000.0	776.2	1.359E-07	1.358E-07	1.358E-07
A	4.0	.89	4827.	0.	0.	776.2	1000.0	776.2	1.025E-07	1.024E-07	1.024E-07
A	5.0	1.03	4827.	0.	0.	776.2	1000.0	776.2	8.154E-08	8.149E-08	8.149E-08
A	6.0	.56	4827.	0.	0.	776.2	1000.0	776.2	6.820E-08	6.816E-08	6.816E-08
A	8.0	.36	4827.	0.	0.	776.2	1000.0	776.2	5.111E-08	5.108E-08	5.108E-08
A	13.0	.03	4827.	0.	0.	776.2	1000.0	776.2	3.147E-08	3.145E-08	3.145E-08
A	18.0	.03	4827.	0.	0.	776.2	1000.0	776.2	2.273E-08	2.272E-08	2.272E-08
B	.4	.13	4827.	0.	0.	583.7	611.6	583.7	2.099E-06	2.097E-06	2.097E-06
B	1.0	.40	4827.	0.	0.	583.7	611.6	583.7	8.864E-07	8.853E-07	8.853E-07
B	2.0	.66	4827.	0.	0.	583.7	611.6	583.7	4.383E-07	4.378E-07	4.378E-07
B	3.0	.73	4827.	0.	0.	583.7	611.6	583.7	2.955E-07	2.951E-07	2.951E-07
B	4.0	.33	4827.	0.	0.	583.7	611.6	583.7	2.228E-07	2.226E-07	2.226E-07
B	5.0	.27	4827.	0.	0.	583.7	611.6	583.7	1.773E-07	1.771E-07	1.771E-07
B	6.0	.10	4827.	0.	0.	583.7	611.6	583.7	1.483E-07	1.481E-07	1.481E-07
B	8.0	.13	4827.	0.	0.	583.7	611.6	583.7	1.111E-07	1.110E-07	1.110E-07
C	.4	.07	4827.	0.	0.	443.3	256.4	443.3	6.595E-06	6.569E-06	6.569E-06
C	1.0	.20	4827.	0.	0.	443.3	256.4	443.3	2.784E-06	2.773E-06	2.773E-06
C	2.0	.56	4827.	0.	0.	443.3	256.4	443.3	1.377E-06	1.371E-06	1.371E-06
C	3.0	.83	4827.	0.	0.	443.3	256.4	443.3	9.282E-07	9.245E-07	9.245E-07
C	4.0	.53	4827.	0.	0.	443.3	256.4	443.3	7.000E-07	6.972E-07	6.972E-07
C	5.0	.36	4827.	0.	0.	443.3	256.4	443.3	5.569E-07	5.547E-07	5.547E-07
C	6.0	.23	4827.	0.	0.	443.3	256.4	443.3	4.658E-07	4.639E-07	4.639E-07
C	8.0	.30	4827.	0.	0.	443.3	256.4	443.3	3.490E-07	3.476E-07	3.476E-07
C	10.0	.03	4827.	0.	0.	443.3	256.4	443.3	2.791E-07	2.780E-07	2.780E-07
C	13.0	.03	4827.	0.	0.	443.3	256.4	443.3	2.149E-07	2.141E-07	2.141E-07
D	.4	.32	4827.	0.	0.	312.1	87.3	373.7	2.298E-05	2.706E-05	2.298E-05
D	1.0	1.33	4827.	0.	0.	312.1	87.3	373.7	9.704E-06	1.143E-05	9.704E-06
D	2.0	4.24	4827.	0.	0.	312.1	87.3	372.4	4.816E-06	5.651E-06	4.816E-06
D	3.0	4.77	4827.	0.	0.	312.1	87.3	345.6	3.498E-06	3.809E-06	3.498E-06
D	4.0	4.27	4827.	0.	0.	312.1	87.3	330.1	2.762E-06	2.873E-06	2.762E-06
D	5.0	2.78	4827.	0.	0.	312.1	87.3	319.4	2.271E-06	2.285E-06	2.271E-06
D	6.0	1.56	4827.	0.	0.	312.1	87.3	312.1	1.944E-06	1.912E-06	1.912E-06
D	8.0	1.62	4827.	0.	0.	312.1	87.3	312.1	1.456E-06	1.432E-06	1.432E-06
D	10.0	.50	4827.	0.	0.	312.1	87.3	312.1	1.164E-06	1.145E-06	1.145E-06
D	13.0	.10	4827.	0.	0.	312.1	87.3	312.1	8.968E-07	8.820E-07	8.820E-07
D	18.0	.10	4827.	0.	0.	312.1	87.3	312.1	6.479E-07	6.372E-07	6.372E-07

E	.4	.47	4827.	0.	0.	222.0	55.4	309.5	4.368E-05	5.874E-05	4.368E-05
E	1.0	1.82	4827.	0.	0.	222.0	55.4	309.5	1.844E-05	2.480E-05	1.844E-05
E	2.0	7.09	4827.	0.	0.	222.0	55.4	307.3	9.185E-06	1.226E-05	9.185E-06
E	3.0	5.67	4827.	0.	0.	222.0	55.4	265.2	7.174E-06	8.267E-06	7.174E-06
E	4.0	4.34	4827.	0.	0.	222.0	55.4	243.8	5.885E-06	6.235E-06	5.885E-06
E	5.0	2.45	4827.	0.	0.	222.0	55.4	230.4	4.955E-06	4.960E-06	4.955E-06
E	6.0	1.13	4827.	0.	0.	222.0	55.4	222.0	4.302E-06	4.149E-06	4.149E-06
E	8.0	1.89	4827.	0.	0.	222.0	55.4	222.0	3.224E-06	3.109E-06	3.109E-06
E	10.0	.70	4827.	0.	0.	222.0	55.4	222.0	2.577E-06	2.486E-06	2.486E-06
E	13.0	.13	4827.	0.	0.	222.0	55.4	222.0	1.985E-06	1.914E-06	1.914E-06
F	.4	.75	4827.	0.	0.	153.2	34.5	243.9	8.912E-05	1.306E-04	8.912E-05
F	1.0	2.75	4827.	0.	0.	153.2	34.5	243.9	3.763E-05	5.514E-05	3.763E-05
F	2.0	7.02	4827.	0.	0.	153.2	34.5	241.3	1.880E-05	2.727E-05	1.880E-05
F	3.0	5.53	4827.	0.	0.	153.2	34.5	194.9	1.569E-05	1.838E-05	1.569E-05
F	4.0	1.86	4827.	0.	0.	153.2	34.5	173.4	1.331E-05	1.386E-05	1.331E-05
F	5.0	.76	4827.	0.	0.	153.2	34.5	160.7	1.142E-05	1.103E-05	1.103E-05
F	6.0	.13	4827.	0.	0.	153.2	34.5	153.2	1.002E-05	9.225E-06	9.225E-06
F	8.0	.13	4827.	0.	0.	153.2	34.5	153.2	7.508E-06	6.912E-06	6.912E-06
G	.4	1.40	4827.	0.	0.	105.7	21.5	210.1	1.663E-04	2.751E-04	1.663E-04
G	1.0	4.11	4827.	0.	0.	105.7	21.5	210.1	7.022E-05	1.162E-04	7.022E-05
G	2.0	8.35	4827.	0.	0.	105.7	21.5	206.7	3.530E-05	5.745E-05	3.530E-05
G	3.0	4.24	4827.	0.	0.	105.7	21.5	148.9	3.302E-05	3.872E-05	3.302E-05
G	4.0	1.06	4827.	0.	0.	105.7	21.5	125.3	2.960E-05	2.921E-05	2.921E-05
G	5.0	.03	4827.	0.	0.	105.7	21.5	112.7	2.618E-05	2.323E-05	2.323E-05

```
1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:  CGS                                METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma=desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0LOW POPULATION ZONE CALCULATIONS:
0 SSE SECTOR     BOUNDARY DISTANCE = 4827.0 METERS
0LATERAL PLUME MEANDER/BUILDING WAKE CREDIT ALLOWED
 AS A FUNCTION OF DOWNWIND DISTANCE.
 MEANDER CREDIT IS FOR WINDSPEEDS LESS THAN 6 MPS.
 BUILDING WAKE CREDIT ALLOWED:   C=   .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0   1.663E-04   8.912E-05   7.022E-05   4.368E-05   3.763E-05   3.530E-05   3.302E-05   2.921E-05   2.323E-05   2.298E-05
        1.402       2.157       6.265       6.738       9.488      17.839      22.080      23.140      23.174      23.497
       .13373      .20569      .59760      .64264      .90496     1.70142     2.10597     2.20711     2.21027     2.24114
0   1.880E-05   1.844E-05   1.569E-05   1.331E-05   1.103E-05   9.704E-06   9.225E-06   9.185E-06   7.174E-06   6.912E-06
       30.522      32.345      37.878      39.734      40.496      41.822      41.954      49.046      54.712      54.844
      2.91118     3.08501     3.61282     3.78981     3.86250     3.98893     4.00157     4.67793     5.21838     5.23103
0   6.569E-06   5.885E-06   4.955E 06   4.816E-06   4.149E-06   3.498E-06   3.109E-06   2.773E-06   2.762E-06   2.486E-06
       54.913      59.254      61.706      65.948      67.074      71.846      73.735      73.934      78.208      78.904
      5.23758     5.65161     5.88550     6.29005     6.39751     6.85263     7.03278     7.05174     7.45945     7.52582
0   2.271E-06   2.097E-06   1.914E-06   1.912E-06   1.432E-06   1.371E-06   1.145E-06   9.651E-07   9.245E-07   8.853E-07
       81.688      81.819      81.951      83.509      85.132      85.696      86.193      86.447      87.276      87.673
      7.79131     7.80381     7.81645     7.96500     8.11987     8.17359     8.22100     8.24526     8.32427     8.36220
0   8.820E-07   6.972E-07   6.372E-07   5.547E-07   4.639E-07   4.378E-07   4.075E-07   3.476E-07   2.951E-07   2.780E-07
       87.773      88.303      88.402      88.767      88.999      89.661      90.556      90.854      91.583      91.616
      8.37168     8.42225     8.43173     8.46650     8.48862     8.55183     8.63717     8.66561     8.73514     8.73831
0   2.226E-07   2.141E-07   2.015E-07   1.771E-07   1.481E-07   1.358E-07   1.110E-07   1.024E-07   8.149E-08   6.816E-08
       91.948      91.981      94.798      95.063      95.162      96.951      97.084      97.979      99.006      99.569
      8.76991     8.77307     9.04172     9.06700     9.07648     9.24715     9.25980     9.34513     9.44311     9.49684
0   5.108E-08   3.145E-08   2.272E-08
       99.934      99.967     100.000
      9.53160     9.53476     9.53792
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0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=   2.104
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 3)=   3.610
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 4)=   4.674
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 5)=   6.286
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 6)=   7.456
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 7)=   7.788
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 8)=   7.961
                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 9)=   8.170
0  K  I   XQSAVE(K,I)  XQINT(K,I) XQSLOP(K,I)
  16  1      -8.70159 -13.70485  -1.66600
  16  2     -10.31825 -16.75862  -3.16826
  16  3     -11.06239 -19.04603  -4.44053
  16  4     -11.59799 -19.01051  -4.41935
  16  5     -12.24366 -21.85960  -6.28006
  16  6     -12.79953 -24.99485  -8.45329
  16  7     -12.99534 -33.66739 -14.56283
  16  8     -13.16756 -46.68195 -23.80821
  16  9     -13.49964     NUMXQ(K)=  9
                                                    BACK EXTRAPOLATION FOR  1 PERCENTILE.
     1.969E-04               .095             1.000
     1.116E-04               .286             3.000
     8.392E-05               .477             5.000
     5.551E-05               .954            10.000
     4.286E-05              1.431            15.000
     3.535E-05              1.908            20.000
     2.799E-05              2.384            25.000
     2.182E-05              2.861            30.000
     1.757E-05              3.338            35.000
     1.405E-05              3.815            40.000
     1.101E-05              4.292            45.000
     8.817E-06              4.769            50.000
     7.188E-06              5.246            55.000
     5.944E-06              5.723            60.000
     4.975E-06              6.200            65.000
     3.975E-06              6.677            70.000
     3.173E-06              7.153            75.000
     2.495E-06              7.630            80.000
     1.523E-06              8.107            85.000
0    8.167E-05              0.5               5.24
0ANNUAL AVERAGE =   7.24E-07
CK= 16     FIVEXQ(K)= 8.167E-05     FIVEPR(K)= 5.242
```

1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23: 4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0PARAMETER VALUES FOR THE CHI/Q CALCULATIONS FOR THE ALL SECTOR.

STABILITY CLASS	WINDSPEED METER/SEC AT 10.0 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=1431.SQ.METERS	USED
A	.4	.35	4827.	0.	0.	776.2	1000.0	776.2	9.656E-07	9.651E-07	9.651E-07
A	1.0	1.22	4827.	0.	0.	776.2	1000.0	776.2	4.077E-07	4.075E-07	4.075E-07
A	2.0	2.50	4827.	0.	0.	776.2	1000.0	776.2	2.016E-07	2.015E-07	2.015E-07
A	3.0	1.81	4827.	0.	0.	776.2	1000.0	776.2	1.359E-07	1.358E-07	1.358E-07
A	4.0	1.41	4827.	0.	0.	776.2	1000.0	776.2	1.025E-07	1.024E-07	1.024E-07
A	5.0	1.02	4827.	0.	0.	776.2	1000.0	776.2	8.154E-08	8.149E-08	8.149E-08
A	6.0	.58	4827.	0.	0.	776.2	1000.0	776.2	6.820E-08	6.816E-08	6.816E-08
A	8.0	.70	4827.	0.	0.	776.2	1000.0	776.2	5.111E-08	5.108E-08	5.108E-08
A	10.0	.21	4827.	0.	0.	776.2	1000.0	776.2	4.086E-08	4.084E-08	4.084E-08
A	13.0	.09	4827.	0.	0.	776.2	1000.0	776.2	3.147E-08	3.145E-08	3.145E-08
A	18.0	.01	4827.	0.	0.	776.2	1000.0	776.2	2.273E-08	2.272E-08	2.272E-08
B	.4	.09	4827.	0.	0.	583.7	611.6	583.7	2.099E-06	2.097E-06	2.097E-06
B	1.0	.28	4827.	0.	0.	583.7	611.6	583.7	8.864E-07	8.853E-07	8.853E-07
B	2.0	.63	4827.	0.	0.	583.7	611.6	583.7	4.383E-07	4.378E-07	4.378E-07
B	3.0	.67	4827.	0.	0.	583.7	611.6	583.7	2.955E-07	2.951E-07	2.951E-07
B	4.0	.57	4827.	0.	0.	583.7	611.6	583.7	2.228E-07	2.226E-07	2.226E-07
B	5.0	.42	4827.	0.	0.	583.7	611.6	583.7	1.773E-07	1.771E-07	1.771E-07
B	6.0	.23	4827.	0.	0.	583.7	611.6	583.7	1.483E-07	1.481E-07	1.481E-07
B	8.0	.31	4827.	0.	0.	583.7	611.6	583.7	1.111E-07	1.110E-07	1.110E-07
B	10.0	.09	4827.	0.	0.	583.7	611.6	583.7	8.884E-08	8.873E-08	8.873E-08
B	13.0	.07	4827.	0.	0.	583.7	611.6	583.7	6.842E-08	6.833E-08	6.833E-08
C	.4	.09	4827.	0.	0.	443.3	256.4	443.3	6.595E-06	6.569E-06	6.569E-06
C	1.0	.26	4827.	0.	0.	443.3	256.4	443.3	2.784E-06	2.773E-06	2.773E-06
C	2.0	.61	4827.	0.	0.	443.3	256.4	443.3	1.377E-06	1.371E-06	1.371E-06
C	3.0	.76	4827.	0.	0.	443.3	256.4	443.3	9.282E-07	9.245E-07	9.245E-07
C	4.0	.55	4827.	0.	0.	443.3	256.4	443.3	7.000E-07	6.972E-07	6.972E-07
C	5.0	.48	4827.	0.	0.	443.3	256.4	443.3	5.569E-07	5.547E-07	5.547E-07
C	6.0	.32	4827.	0.	0.	443.3	256.4	443.3	4.658E-07	4.639E-07	4.639E-07
C	8.0	.34	4827.	0.	0.	443.3	256.4	443.3	3.490E-07	3.476E-07	3.476E-07
C	10.0	.21	4827.	0.	0.	443.3	256.4	443.3	2.791E-07	2.780E-07	2.780E-07
C	13.0	.07	4827.	0.	0.	443.3	256.4	443.3	2.149E-07	2.141E-07	2.141E-07
D	.4	.36	4827.	0.	0.	312.1	87.3	312.1	2.752E 05	2.706E-05	2.706E-05
D	1.0	1.49	4827.	0.	0.	312.1	87.3	312.1	1.162E-05	1.143E-05	1.143E-05
D	2.0	3.58	4827.	0.	0.	312.1	87.3	312.1	5.745E-06	5.651E-06	5.651E-06
D	3.0	3.74	4827.	0.	0.	312.1	87.3	312.1	3.873E-06	3.809E-06	3.809E-06
D	4.0	3.31	4827.	0.	0.	312.1	87.3	312.1	2.921E-06	2.873E-06	2.873E-06
D	5.0	2.55	4827.	0.	0.	312.1	87.3	312.1	2.324E-06	2.285E-06	2.285E-06
D	6.0	1.73	4827.	0.	0.	312.1	87.3	312.1	1.944E-06	1.912E-06	1.912E-06
D	8.0	2.04	4827.	0.	0.	312.1	87.3	312.1	1.456E-06	1.432E-06	1.432E-06
D	10.0	1.03	4827.	0.	0.	312.1	87.3	312.1	1.164E-06	1.145E-06	1.145E-06
D	13.0	.45	4827.	0.	0.	312.1	87.3	312.1	8.968E-07	8.820E-07	8.820E-07
D	18.0	.08	4827.	0.	0.	312.1	87.3	312.1	6.479E-07	6.372E-07	6.372E-07
E	.4	.61	4827.	0.	0.	222.0	55.4	222.0	6.091E-05	5.874E-05	5.874E-05
E	1.0	2.34	4827.	0.	0.	222.0	55.4	222.0	2.572E-05	2.480E-05	2.480E-05
E	2.0	5.33	4827.	0.	0.	222.0	55.4	222.0	1.272E-05	1.226E-05	1.226E-05
E	3.0	5.02	4827.	0.	0.	222.0	55.4	222.0	8.572E-06	8.267E-06	8.267E-06
E	4.0	4.32	4827.	0.	0.	222.0	55.4	222.0	6.465E-06	6.235E-06	6.235E-06
E	5.0	3.44	4827.	0.	0.	222.0	55.4	222.0	5.143E-06	4.960E-06	4.960E-06
E	6.0	2.59	4827.	0.	0.	222.0	55.4	222.0	4.302E-06	4.149E-06	4.149E-06
E	8.0	2.81	4827.	0.	0.	222.0	55.4	222.0	3.224E-06	3.109E-06	3.109E-06
E	10.0	1.15	4827.	0.	0.	222.0	55.4	222.0	2.577E-06	2.486E-06	2.486E-06
E	13.0	.39	4827.	0.	0.	222.0	55.4	222.0	1.985E-06	1.914E-06	1.914E-06
E	18.0	.05	4827.	0.	0.	222.0	55.4	222.0	1.434E-06	1.383E-06	1.383E-06
F	.4	.76	4827.	0.	0.	153.2	34.5	153.2	1.419E-04	1.306E-04	1.306E-04
F	1.0	2.77	4827.	0.	0.	153.2	34.5	153.2	5.989E-05	5.514E-05	5.514E-05
F	2.0	5.95	4827.	0.	0.	153.2	34.5	153.2	2.962E-05	2.727E-05	2.727E-05
F	3.0	4.56	4827.	0.	0.	153.2	34.5	153.2	1.996E-05	1.838E-05	1.838E-05
F	4.0	3.20	4827.	0.	0.	153.2	34.5	153.2	1.506E-05	1.386E-05	1.386E-05
F	5.0	1.58	4827.	0.	0.	153.2	34.5	153.2	1.198E-05	1.103E-05	1.103E-05
F	6.0	.63	4827.	0.	0.	153.2	34.5	153.2	1.002E-05	9.225E-06	9.225E-06
F	8.0	.39	4827.	0.	0.	153.2	34.5	153.2	7.508E-06	6.912E-06	6.912E-06
F	10.0	.07	4827.	0.	0.	153.2	34.5	153.2	6.003E-06	5.526E-06	5.526E-06

F	13.0	.03	4827.	0.	0.	153.2	34.5	153.2	4.623E-06	4.256E-06	4.256E-06
G	.4	1.05	4827.	0.	0.	105.7	21.5	105.7	3.304E-04	2.751E-04	2.751E-04
G	1.0	3.07	4827.	0.	0.	105.7	21.5	105.7	1.395E-04	1.162E-04	1.162E-04
G	2.0	5.65	4827.	0.	0.	105.7	21.5	105.7	6.898E-05	5.745E-05	5.745E-05
G	3.0	3.12	4827.	0.	0.	105.7	21.5	105.7	4.650E-05	3.872E-05	3.872E-05
G	4.0	1.37	4827.	0.	0.	105.7	21.5	105.7	3.507E-05	2.921E-05	2.921E-05
G	5.0	.34	4827.	0.	0.	105.7	21.5	105.7	2.790E-05	2.323E-05	2.323E-05
G	6.0	.09	4827.	0.	0.	105.7	21.5	105.7	2.333E-05	1.943E-05	1.943E-05
G	8.0	.02	4827.	0.	0.	105.7	21.5	105.7	1.748E-05	1.456E-05	1.456E-05
G	10.0	.01	4827.	0.	0.	105.7	21.5	105.7	1.398E-05	1.164E-05	1.164E-05
G	13.0	.00	4827.	0.	0.	105.7	21.5	105.7	1.077E-05	8.967E-06	8.967E-06
G	18.0	.00	4827.	0.	0.	105.7	21.5	105.7	7.778E-06	6.478E-06	6.478E-06

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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:  CGS                                METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma=desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0LOW POPULATION ZONE CALCULATIONS:
 DIRECTION-INDEPENDENT (S.R.P 2.3.4) MODEL.
 MINIMUM BOUNDARY DISTANCE = 4827.0 METERS.
 BUILDING WAKE CREDIT ALLOWED:  C=   .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0  2.751E-04  1.306E-04  1.162E-04  5.874E-05  5.745E-05  5.514E-05  3.872E-05  2.921E-05  2.727E-05  2.706E-05
       1.046      1.805      4.870      5.477     11.125     13.891     17.013     18.379     24.333     24.697
   1.04614    1.80468    4.87042    5.47724   11.12516   13.89064   17.01327   18.37863   24.33312   24.69659
0  2.480E-05  2.323E-05  1.943E-05  1.838E-05  1.456E-05  1.386E-05  1.226E-05  1.164E-05  1.143E-05  1.103E-05
      27.039     27.377     27.468     32.026     32.045     35.240     40.572     40.582     42.070     43.654
   27.03856   27.37674   27.46839   32.02592   32.04488   35.24020   40.57206   40.58154   42.07016   43.65360
0  9.225E-06  8.967E-06  8.267E-06  6.912E-06  6.569E-06  6.478E-06  6.235E-06  5.651E-06  5.526E-06  4.960E-06
      44.283     44.286     49.308     49.693     49.782     49.785     54.106     57.686     57.756     61.192
   44.28255   44.28572   49.30784   49.69343   49.78193   49.78509   54.10557   57.68648   57.75601   61.19154
0  4.256E-06  4.149E-06  3.809E-06  3.109E-06  2.873E-06  2.773E-06  2.486E-06  2.285E-06  2.097E-06  1.914E-06
      61.217     63.808     67.551     70.363     73.676     73.932     75.079     77.626     77.718     78.110
   61.21682   63.80848   67.55058   70.36347   73.67574   73.93174   75.07903   77.62643   77.71809   78.11000
0  1.912E-06  1.432E-06  1.383E-06  1.371E-06  1.145E-06  9.651E-07  9.245E-07  8.853E-07  8.820E-07  6.972E-07
      79.839     81.874     81.928     82.541     83.568     83.916     84.674     84.953     85.401     85.954
   79.83882   81.87423   81.92796   82.54111   83.56829   83.91595   84.67448   84.95261   85.40141   85.95451
0  6.372E-07  5.547E-07  4.639E-07  4.378E-07  4.075E-07  3.476E-07  2.951E-07  2.780E-07  2.226E-07  2.141E-07
      86.034     86.514     86.830     87.459     88.682     89.027     89.697     89.905     90.474     90.544
   86.03353   86.51394   86.82999   87.45895   88.68208   89.02658   89.69662   89.90521   90.47411   90.54365
0  2.015E-07  1.771E-07  1.481E-07  1.358E-07  1.110E-07  1.024E-07  8.873E-08  8.149E-08  6.833E-08  6.816E-08
      93.040     93.464     93.698     95.509     95.815     97.225     97.317     98.334     98.404     98.982
   93.04049   93.46400   93.69788   95.50888   95.81545   97.22506   97.31672   98.33442   98.40395   98.98234
   5.108E-08  4.084E-08  3.145E-08  2.272E-08
      99.687     99.899     99.994    100.000
   99.68714   99.89890   99.99371   100.00000
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0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

                                                  HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=  13.890
                                                  BACK EXTRAPOLATION FOR  1 PERCENTILE.
     2.813E-04                1.000                1.000
     1.568E-04                3.000                3.000
     1.150E-04                5.000                5.000
     7.136E-05               10.000               10.000
     5.078E-05               15.000               15.000
     3.656E-05               20.000               20.000
     2.757E-05               25.000               25.000
     2.121E-05               30.000               30.000
     1.652E-05               35.000               35.000
     1.304E-05               40.000               40.000
     1.034E-05               45.000               45.000
     8.153E-06               50.000               50.000
     6.429E-06               55.000               55.000
     5.186E-06               60.000               60.000
     4.243E-06               65.000               65.000
     3.414E-06               70.000               70.000
     2.667E-06               75.000               75.000
     2.038E-06               80.000               80.000
     1.553E-06               85.000               85.000
     1.104E-06               90.000               90.000
0    1.150E-04                5.0                  5.00
0K= 17     FIVEXQ(K)= 1.150E-04     FIVEPR(K)= 5.000
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1USNRC COMPUTER CODE-PAVAN, VERSION 2.0          RUN DATE:  11/19/2003     TIME:  23: 4:56
/PLANT NAME:   CGS                               METEOROLOGICAL INSTRUMENTATION
 DATA PERIOD: JFD 1996-1999                      WIND SENSORS HEIGHT:  10.0 METERS
 TYPE OF RELEASE: GROUND LEVEL RELEASE           DELTA-T HEIGHTS:    10 - 75 METERS
 SOURCE OF DATA:  MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
 COMMENTS:  input file: P96-99-F.inp   output file: P96-99-F.out  sigma-desert + P-G
 PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0LOW POPULATION ZONE CALCULATIONS:
0FIVE PERCENT OVERALL SITE LIMIT
 BUILDING WAKE CREDIT ALLOWED:   C=   .5     A=  2861.     D=   70.0
 CORRECTION FACTORS USED IN THE ANNUAL AVERAGE CALCULATIONS.
0BELOW 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.
0   1.663E-04   8.912E-05   7.022E-05   4.368E-05   3.763E-05   3.530E-05   3.302E-05   2.921E-05   2.323E-05   2.298E-05
        1.046       1.805       4.870       5.477       8.243      13.891      17.013      18.379      18.717      19.080
      1.04614     1.80468     4.87042     5.47724     8.24273    13.89065    17.01328    18.37864    18.71681    19.08027
0   1.943E-05   1.880E-05   1.844E-05   1.569E-05   1.456E-05   1.331E-05   1.164E-05   1.103E-05   9.704E-06   9.225E-06
       19.172      25.126      27.468      32.026      32.045      35.240      35.250      36.833      38.322      38.951
     19.17193    25.12642    27.46839    32.02591    32.04487    35.24019    35.24967    36.83311    38.32174    38.95069
0   9.185E-06   8.967E-06   7.174E-06   6.912E-06   6.569E-06   6.478E-06   5.885E-06   5.526E-06   4.955E-06   4.816E-06
       44.283      44.286      49.308      49.693      49.782      49.785      54.106      54.175      57.611      61.192
     44.28255    44.28571    49.30784    49.69342    49.78191    49.78508    54.10556    54.17509    57.61062    61.19153
0   4.256E-06   4.149E-06   3.498E-06   3.109E-06   2.773E-06   2.762E-06   2.486E-06   2.271E-06   2.097E-06   1.914E-06
       61.217      63.808      67.551      70.363      70.619      73.932      75.079      77.626      77.718      78.110
     61.21682    63.80848    67.55060    70.36349    70.61951    73.93179    75.07906    77.62647    77.71815    78.11007
0   1.912E-06   1.432E-06   1.383E-06   1.371E-06   1.145E-06   9.651E-07   9.245E-07   8.853E-07   8.820E-07   6.972E-07
       79.839      81.874      81.928      82.541      83.568      83.916      84.675      84.953      85.401      85.955
     79.83890    81.87431    81.92804    82.54119    83.56837    83.91602    84.67455    84.95268    85.40147    85.95458
0   6.372E-07   5.547E-07   4.639E-07   4.378E-07   4.075E-07   3.476E-07   2.951E-07   2.780E-07   2.226E-07   2.141E-07
       86.034      86.514      86.830      87.459      88.682      89.027      89.697      89.905      90.474      90.544
     86.03362    86.51403    86.83009    87.45904    88.68218    89.02668    89.69672    89.90532    90.47424    90.54378
0   2.015E-07   1.771E-07   1.481E-07   1.358E-07   1.110E-07   1.024E-07   8.873E-08   8.149E-08   6.833E-08   6.816E-08
       93.041      93.464      93.698      95.509      95.816      97.225      97.317      98.335      98.404      98.982
     93.04061    93.46414    93.69803    95.50903    95.81561    97.22522    97.31687    98.33457    98.40411    98.98248
0   5.108E-08   4.084E-08   3.145E-08   2.272E-08
       99.687      99.899      99.994     100.000
     99.68729    99.89906    99.99388    100.00020
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0          X/Q PERCENTILES
 (BASED ON THE UPPER ENVELOPE OF THE
 ORDERED X/Q-FREQUENCY VALUES, AND AS
 PLOTTED ON A LOG-NORMAL GRAPH.)
0 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

                                                    HANDCHECK GRAPH:  SLOPE LT -1.0 FOR LOW PERCENTAGES.  XSAVE( 2)=  17.015
0  K   I    XQSAVE(K,I)   XQINT(K,I) XQSLOP(K,I)
  18   1       -8.70159 -11.45492  -1.19201
  18   2      -10.31825 -11.77526  -1.52795
  18   3      -11.06239 -11.83590  -1.65794
  18   4      -11.59799 -11.81478  -1.51074
  18   5      -12.24366 -11.80168  -1.55691
  18   6      -12.79953 -11.74034  -1.65260
  18   7      -12.99534 -11.94083  -1.38860
  18   8      -17.27483      NUMXQ(K)=  8

                                                    BACK EXTRAPOLATION FOR  1 PERCENTILE.
     1.697E-04                1.000               1.000
     9.979E-05                3.000               3.000
     7.532E-05                5.000               5.000
     4.883E 05               10.000              10.000
     3.645E-05               15.000              15.000
     2.783E-05               20.000              20.000
     2.155E-05               25.000              25.000
     1.713E-05               30.000              30.000
     1.370E-05               35.000              35.000
     1.101E-05               40.000              40.000
     8.937E-06               45.000              45.000
     7.394E-06               50.000              50.000
     6.118E-06               55.000              55.000
     5.046E-06               60.000              60.000
     4.115E-06               65.000              65.000
     3.314E-06               70.000              70.000
     2.614E-06               75.000              75.000
     2.026E-06               80.000              80.000
     1.546E-06               85.000              85.000
     1.100E-06               90.000              90.000
0    7.532E-05                5.0                 5.00
0K= 18      FIVEXQ(K)= 7.532E-05      FIVEPR(K)= 5.000
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0 K	HIGHPR	PR	GRNDVT(K)
1	-2.61661	.44404	7.11613
2	-1.71313	4.33443	5.59889
3	-2.82209	.23857	3.79337
4	-3.07684	.10461	1.66485
5	-3.17775	.07422	1.20432
6	-3.16909	.07647	1.52234
7	-3.07900	.10386	4.75939
8	-2.81393	.24471	10.15150
9	-2.77724	.27412	12.08469
10	-2.89051	.19231	8.67808
11	-2.81861	.24117	5.83414
12	-2.83395	.22988	4.17912
13	-2.80459	.25191	4.74070
14	-2.78353	.26886	8.25809
15	-2.65606	.39530	10.87648
16	-2.57624	.49942	9.53793

0 K	HOURS(K)	TOTHRS
1	38.89814	38.89814
2	379.69570	418.59380
3	20.89852	439.49240
4	9.16350	448.65590
5	6.50165	455.15750
6	6.69849	461.85600
7	9.09771	470.95370
8	21.43632	492.39000
9	24.01254	516.40260
10	16.84674	533.24930
11	21.12617	554.37550
12	20.13777	574.51320
13	22.06758	596.58080
14	23.55254	620.13340
15	34.62811	654.76150
16	43.74879	698.51030

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 0 K    FIVEXQ      SVANN     SLTIME     TIMINT  I    TIME         XQT
   1 7.647E-05 6.008E-07     -.5780    -9.0780
                                                 1     8.0    -10.27984
                                                 2    16.0    -10.68046
                                                 3    72.0    -11.54980
                                                 4   624.0    -12.79794
   2 7.304E-05 5.082E-07     -.5925    -9.1138
                                                 1     8.0    -10.34582
                                                 2    16.0    -10.75649
                                                 3    72.0    -11.64760
                                                 4   624.0    -12.92701
   3 5.164E-05 3.158E-07     -.6078    -9.4500
                                                 1     8.0    -10.71394
                                                 2    16.0    -11.13526
                                                 3    72.0    -12.04950
                                                 4   624.0    -13.36212
   4 2.165E-05 1.501E-07     -.5929   -10.3294
                                                 1     8.0    -11.56231
                                                 2    16.0    -11.97328
                                                 3    72.0    -12.86505
                                                 4   624.0    -14.14541
   5 8.352E-06 1.056E-07     -.5212   -11.3318
                                                 1     8.0    -12.41562
                                                 2    16.0    -12.77690
                                                 3    72.0    -13.56087
                                                 4   624.0    -14.68644
   6 9.392E-06 1.071E-07     -.5336   -11.2058
                                                 1     8.0    -12.31535
                                                 2    16.0    -12.68519
                                                 3    72.0    -13.48774
                                                 4   624.0    -14.63999
   7 3.164E-05 2.461E-07     -.5792    -9.9595
                                                 1     8.0    -11.16386
                                                 2    16.0    -11.56532
                                                 3    72.0    -12.43644
                                                 4   624.0    -13.68716
   8 5.635E-05 5.126E-07     -.5605    -9.3955
                                                 1     8.0    -10.56099
                                                 2    16.0    -10.94950
                                                 3    72.0    -11.79253
                                                 4   624.0    -13.00292
   9 6.006E-05 6.050E-07     -.5483    -9.3401
                                                 1     8.0    -10.48037
                                                 2    16.0    -10.86045
                                                 3    72.0    -11.68520
                                                 4   624.0    -12.86933
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10 4.765E-05 4.214E-07    -.5639   -9.5607
                                    1    8.0   -10.73326
                                    2   16.0   -11.12411
                                    3   72.0   -11.97223
                                    4  624.0   -13.18991
11 4.977E-05 3.836E-07    -.5803   -9.5059
                                    1    8.0   -10.71255
                                    2   16.0   -11.11476
                                    3   72.0   -11.98753
                                    4  624.0   -13.24062
12 4.561E-05 3.402E-07    -.5842   -9.5903
                                    1    8.0   -10.80515
                                    2   16.0   -11.21008
                                    3   72.0   -12.08875
                                    4  624.0   -13.35031
13 5.081E-05 3.939E-07    -.5796   -9.4857
                                    1    8.0   -10.69089
                                    2   16.0   -11.09260
                                    3   72.0   -11.96430
                                    4  624.0   -13.21585
14 5.636E-05 5.362E-07    -.5552   -9.3989
                                    1    8.0   -10.55334
                                    2   16.0   -10.93814
                                    3   72.0   -11.77314
                                    4  624.0   -12.97199
15 7.205E-05 7.353E-07    -.5468   -9.1591
                                    1    8.0   -10.29611
                                    2   16.0   -10.67512
                                    3   72.0   -11.49755
                                    4  624.0   -12.67835
16 8.167E-05 7.239E-07    -.5636   -9.0222
                                    1    8.0   -10.19414
                                    2   16.0   -10.58479
                                    3   72.0   -11.43247
                                    4  624.0   -12.64953
17 1.150E-04 7.353E-07    -.6026   -8.6529
                                    1    8.0    -9.90591
                                    2   16.0   -10.32357
                                    3   72.0   -11.22985
                                    4  624.0   -12.53105
18 7.532E-05 7.353E-07    -.5521   -9.1111
                                    1    8.0   -10.25915
                                    2   16.0   -10.64182
                                    3   72.0   -11.47219
                                    4  624.0   -12.66440
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10	4.765E-05	4.214E-07	-.5639	-9.5607		
					1	8.0 -10.73326
					2	16.0 -11.12411
					3	72.0 -11.97223
					4	624.0 -13.18991
11	4.977E-05	3.836E-07	-.5803	-9.5059		
					1	8.0 -10.71255
					2	16.0 -11.11476
					3	72.0 -11.98753
					4	624.0 -13.24062
12	4.561E-05	3.402E-07	-.5842	-9.5903		
					1	8.0 -10.80515
					2	16.0 -11.21008
					3	72.0 -12.08875
					4	624.0 -13.35031
13	5.081E-05	3.939E-07	-.5796	-9.4857		
					1	8.0 -10.69089
					2	16.0 -11.09260
					3	72.0 -11.96430
					4	624.0 -13.21585
14	5.636E-05	5.362E-07	-.5552	-9.3989		
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					2	16.0 -10.93814
					3	72.0 -11.77314
					4	624.0 -12.97199
15	7.205E-05	7.353E 07	-.5468	-9.1591		
					1	8.0 -10.29611
					2	16.0 -10.67512
					3	72.0 -11.49755
					4	624.0 -12.67835
16	8.167E-05	7.239E-07	-.5636	-9.0222		
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					2	16.0 -10.58479
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					4	624.0 -12.64953
17	1.150E-04	7.353E-07	-.6026	-8.6529		
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					4	624.0 -12.53105
18	7.532E-05	7.353E-07	-.5521	-9.1111		
					1	8.0 -10.25915
					2	16.0 -10.64182
					3	72.0 -11.47219
					4	624.0 -12.66440

1USNRC COMPUTER CODE-PAVAN, VERSION 2.0 RUN DATE: 11/19/2003 TIME: 23: 4:56
/PLANT NAME: CGS METEOROLOGICAL INSTRUMENTATION
DATA PERIOD: JFD 1996-1999 WIND SENSORS HEIGHT: 10.0 METERS
TYPE OF RELEASE: GROUND LEVEL RELEASE DELTA-T HEIGHTS: 10 - 75 METERS
SOURCE OF DATA: MET DATA TAKEN FROM FRAMATOME JFD FILES FOR 96-99
COMMENTS: input file: P96-99-F.inp output file: P96-99-F.out sigma=desert + P-G
PROGRAM: PAVAN, 10/76, 8/79 REVISION, IMPLEMENTATION OF REGULATORY GUIDE 1.145
0 RELATIVE CONCENTRATION (X/Q) VALUES (SEC/CUBIC METER)

		VERSUS AVERAGING TIME						HOURS PER YEAR MAX 0-2 HR X/Q IS EXCEEDED	
DOWNWIND SECTOR	DISTANCE (METERS)	0-2 HOURS	0-8 HOURS	8-24 HOURS	1-4 DAYS	4-30 DAYS	ANNUAL AVERAGE	IN SECTOR	DOWNWIND SECTOR
S	4827.	7.65E-05	3.43E-05	2.30E-05	9.64E-06	2.77E-06	6.01E-07	38.9	S
SSW	4827.	7.30E-05	3.21E-05	2.13E-05	8.74E-06	2.43E-06	5.08E-07	379.7	SSW
SW	4827.	5.16E-05	2.22E-05	1.46E-05	5.85E-06	1.57E-06	3.16E-07	20.9	SW
WSW	4827.	2.17E-05	9.52E-06	6.31E-06	2.59E-06	7.19E-07	1.50E-07	9.2	WSW
W	4827.	8.35E-06	4.05E-06	2.83E-06	1.29E-06	4.19E-07	1.06E-07	6.5	W
WNW	4827.	9.39E-06	4.48E-06	3.10E-06	1.39E-06	4.38E-07	1.07E-07	6.7	WNW
NW	4827.	3.16E-05	1.42E-05	9.49E-06	3.97E-06	1.14E-06	2.46E-07	9.1	NW
NNW	4827.	5.63E-05	2.59E-05	1.76E-05	7.56E-06	2.25E-06	5.13E-07	21.4	NNW
N	4827.	6.01E-05	2.81E-05	1.92E-05	8.42E-06	2.58E-06	6.05E-07	24.0	N
NNE	4827.	4.77E-05	2.18E-05	1.48E 05	6.32E-06	1.87E-06	4.21E-07	16.8	NNE
NE	4827.	4.98E-05	2.23E-05	1.49E-05	6.22E-06	1.78E-06	3.84E-07	21.1	NE
ENE	4827.	4.56E-05	2.03E-05	1.35E-05	5.62E-06	1.59E-06	3.40E-07	20.1	ENE
E	4827.	5.08E-05	2.28E-05	1.52E-05	6.37E-06	1.82E-06	3.94E-07	22.1	E
ESE	4827.	5.64E-05	2.61E-05	1.78E-05	7.71E-06	2.32E-06	5.36E-07	23.6	ESE
SE	4827.	7.21E-05	3.38E-05	2.31E-05	1.02E-05	3.12E-06	7.35E-07	34.6	SE
SSE	4827.	8.17E-05	3.74E-05	2.53E-05	1.08E-05	3.21E-06	7.24E-07	43.7	SSE
MAX X/Q		8.17E-05				TOTAL HOURS AROUND SITE:		698.5	
SRP 2.3.4	4827.	1.15E-04	4.99E-05	3.28E-05	1.33E-05	3.61E-06	7.35E-07		
SITE LIMIT		7.53E-05	3.50E-05	2.39E-05	1.04E-05	3.16E-06	7.35E-07		

0THE FIVE-PERCENT-FOR-THE-ENTIRE-SITE X/Q IS LIMITING.
0**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.

ENERGY NORTHWEST
People·Vision·Solutions

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