INSERTION INSTRUCTIONS FOR AMENDMENT 1

Remove old pages and insert Amendment 1 pages as instructed below (amendment pages bear the amendment number and date at the foot of the page).

Vertical bars (change bars) have been placed in the outside margins of revised text pages and tables to show the location of any technical changes originating with this amendment. A few unrevised pages have been reprinted because they fall within a run of closely spaced revised pages. No change bars are used on figures or on new sections, appendices, questions and responses, etc.

Transmittal letters along with these insertion instructions should either be filed or entered in Volume I of Part I, in front of any existing letters, instructions, distribution lists, etc.

LEGEND

Remove/Insert Columns

Entries beginning with "T" or "F" designate table or figure numbers, respectively. All other entries are page numbers:

T2.3-14 = Table 2.3-14 F2.3-14 = Figure 2.3-14

2.1-9 = Page 2.1-9 EP2-1 = Page EP2-1 vii = Page vii

Pages printed back to back are indicated by a "/":

1.2-5/6 = Page 1.2-5 backed by Page 1.2-6

T2.3-14(5 of 5)/15(1 of 3) = Table 2.3-14, sheet 5 of 5, backed by Table 2.3-15, sheet 1 of 3

Location Column

Ch = Chapter, S = Section, Ap = Appendix

Remove	Insert	Location
	VOLUME 1	
EP2-1/2	EP2-1/2	After Ch. 2 Tab
EP2-3/4	EP2-3/4	
EP2-5/6	EP2-5/6	
EP2-7/8	EP2-7/8	

INSERTION INSTRUCTIONS FOR AMENDMENT 1 (Cont)

Remove	Insert	Location
2.1-7/8	2.1-7/8	S 2.1
2.1-11/12	2.1-11/12	
F2.1-24	F2.1-24	
	VOLUME 2	
2.3-7/8	2.3-7/8	S 2.3
2.3-9/10	2.3-9/10	
2.3-11/12	2.3-11/12	
T2.3-3/4	T2.3-3/4	
T2.3-5/6	T2.3-5/6	
T2.3-7/8	T2.3-7/8	
T2.3-11/12	T2.3-11/12	
T2.3-13/14(1 of 13)	T2.3-13/14(1 of 13)	
T2.3-14(2 of 13)/3 of 13	T2.3-14(2 of 13)/3 of 13	
T2.3-14(4 of 13)/5 of 13	T2.3-14(4 of 13)/5 of 13	
T2.3-14(6 of 13)/7 of 13	T2.3-14(6 of 13)/7 of 13	
T2.3-14(8 of 13)/9 of 13	T2.3-14(8 of 13)/9 of 13	
T2.3-14(10 of 13)/11 of 13	T2.3-14(10 of 13)/11 of 13	
T2.3-14(12 of 13)/13 of 13	T2.3-14(11 of 13)/13 of 13	
T2.3-17/18	T2.3-17/18	
T2.3-19(1 of 2)/2 of 2	T2.3-19(1 of 2)/2 of 2	
T2.3-20/21	T2.3-20/21	
T2.3-22/23(1 of 8)	T2.3-22/23(1 of 8)	
T2.3-27/28	T2.3-27/28	

INSERTION INSTRUCTIONS FOR AMENDMENT 1 (Cont)

Remove	Insert	Location
T2.3-32/33	T2.3-32/33	
T2.3-34/35	T2.3-34/35	
T2.3-36/37	T2.3-36/37	
T2.3-38/39(1 of 3)	T2.3-38/39(1 of 3)	
T2.3-39(2 of 3)/3 of 3	T2.3-39(2 of 3)/3 of 3	
T2.3-40/41	T2.3-40/41	
T2.3-42/43	T2.3-42/43	
T2.3-46/47	T2.3-46/47	
T2.3-48/49	T2.3-48/49	
T2.3-52/53	T2.3-52/53	
T2.3-56/57	T2.3-56/57	
T2.3-58/59	T2.3-58/59	
T2.3-66/67	T2.3-66/67	
EP3-1/2	EP3-1/2	After Ch. 3 Tab
T3.6-1(1 of 3)/2 of 3	T3.6-1(1 of 3)/2 of 3	
T3.6-1(3 of 3)/2	T3.6-1(3 of 3)/2	
EP5-1/2	EP5-1/2	After Ch. 5 Tab
EP5-3	EP5-3	
T5.6-1/2	T5.6-1/2	S5.6

The only change made to the following tables was that they went from a single-spaced copy to a double-spaced copy:

Tables

2.3-42

2.3-43

2.3-48

2.3-53

2.3-56

2.3-57

2.3-58

2.3-66

LIST OF EFFECTIVE PAGES

(t) = turn
(c) = color

Page, Table (T), or Figure (F)	Amendment Number	Computer Address u1217913er
2-i thru 2-xvii	0	2rz
2.1-1 thru 2.1-6	0	2aq
2.1-7 thru 2.1-8	1	alf
2.1-9 thru 2.1-10	0	2aq
2.1-11	1	ale
2.1-12 thru 2.1-30	0	2aq
T2.1-1 (1 of 1)	0	2ex
T2.1-2 (1 of 1)	0	2ey
T2.1-3 (1 of 1)	0	2ez
T2.1-4 (1 of 1)	0	2fa
T2.1-5 (1 of 1)	0	2fb
T2.1-6 (1 of 1)	0	2fc
T2.1-7 (1 of 1)	0	2fd
T2.1-8 (1 of 1)	0	2fe
T2.1-9 (1 of 1)	0	2ff
T2.1-10 (1 of 1)	0	2fg
T2.1-11 (1 of 1)	0	2fh
T2.1-12 (1 of 1)	0	2fi
T2.1-13 (1 of 1)	0	2fj
T2.1-14 (1 of 1)	0	2fk
T2.1-15 (1 of 1)	0	2fl
T2.1-16 (1 of 1)	0	2fm
T2.1-17 (1 of 1)	0	2fn
T2.1-18 (1 of 1)	0	2fo
T2.1-19 (1 of 1)	0	2fp
T2.1-20 (1 of 1)	0	2fq
T2.1-21 (1 thru 2 of 2)	0	2jh (t)
T2.1-22 (1 of 1)	0	2ji (t)
T2.1-23 (1 of 1)	0	2jj
T2.1-24 (1 thru 2 of 2)	0	2jk (t)
T2.1-25 (1 thru 3 of 3)	0	2jl (t)
T2.1-26 (1 of 1)	0	2jm (t)
T2.1-27 (1 thru 3 of 3)	0	2jn (t)
T2.1-28 (1 of 1)	0	2jo
T2.1-29 (1 of 1)	0	2jp
T2.1-30 (1 of 1)	0	2jq
T2.1-31 (1 of 1)	0	2jr (t)
T2.1-32 (1 thru 3 of 3)	0	2js
T2.1-33 (1 of 1)	0	2jt
T2.1-34 (1 thru 3 of 3)	0	2gy (t)
T2.1-35 (1 thru 4 of 4)	0	2gz (t)
T2.1-36 (1 thru 2 of 2)	0	2in
T2.1-37 (1 of 1)	0	2it
T2.1-38 (1 thru 2 of 2)	0	2is

LIST OF EFFECTIVE PAGES (Cont)

(t) = turn
(c) = color

Page, Table (T), or Figure (F)	Amendment Number	Computer Address u1217913er
T2.1-39 (1 of 1)	0	2ir
T2.1-40 (1 thru 2 of 2)	0	2iq
T2.1-41 (1 thru 2 of 2)	0	2iu
T2.1-42 (1 of 1)	0	2iw (t)
T2.1-43 (1 of 1)	0	2iv
T2.1-44 (1 of 1)	0	2iz
T2.1-45 (1 of 1)	0	2iy
T2.1-46 (1 of 1)	0	2ix (t)
T2.1-47 (1 thru 2 of 2)	0	2ja
T2.1-48 (1 thru 2 of 2)	0	2jc
T2.1-49 (1 of 1)	0	2jb (t)
F2.1-1	0	11x17
F2.1-2	0	11x17
F2.1-3	0	11x17
F2.1-4	0	11x17
F2.1-5	0	11x17
F2.1-6	0	11x17
F2.1-7	0	11x17 (c)
F2.1-8	0	11x17 (c)
F2.1-9	0	11x17 (c)
F2.1-10	0	11x17 (c)
F2.1-11	0	11x17 (c)
F2.1-12	0	11x17 (c)
F2.1-13	0	11x17 (c)
F2.1-14	0	11x17 (c)
F2.1-15	0	11x17 (c)
F2.1-16	0	11x17 (c)
F2.1-17	0	11x17 (c)
F2.1-18	0	11x17 (c)
F2.1-19	0	11x17 (c)
F2.1-20	0	11x17 (c)
F2.1-21	0	11x17 (c)
F2.1-22	0	11x17
F2.1-23	0	11x17 (c)
F2.1-24	1	11x23 (c)
F2.1-25	0	11x23
F2.1-26	0	11x23
F2.1-27	0	11x17
F2.1-28	0	11x23
F2.1-29	0	11x23
F2.1-30	0	11x17
F2.1-31	0	11x17 (c)
F2.1-32	0	11x17 (c)
F2.1-33	0	11x17 (c)

LIST OF EFFECTIVE PAGES (Cont)

(t) = turn
(c) = color

Page, Table (T), or Figure (F)	Amendment Number	Computer Address u1217913er
F2.1-34	0	11x17 (c)
F2.1-35	0	11x17
F2.1-36	0	11x17 (c)
F2.1-37	0	11x17
F2.1-38	0	11x17
F2.1-39	0	11x17
2.2-1 thru 2.2-104	0	2as
T2.2-1 (1 thru 10 of 10)	0	2av
T2.2-2 (1 thru 2 of 2)	0	2aw (t)
T2.2-3 (1 of 1)	0	2ax (t)
T2.2-4 (1 thru 3 of 3)	0	2ay (t)
T2.2-5 (1 of 1)	0	2fr
T2.2-6 (1 of 1)	0	2az (t)
T2.2-7 (1 thru 2 of 2)	0	2lr
T2.2-8 (1 of 1)	0	2ls
T2.2-9 (1 thru 2 of 2)	0	2lt
T2.2-10 (1 thru 2 of 2)	0	2lu
T2.2-11 (1 of 1)	0	2lw (t)
T2.2-12 (1 of 1)	0	2lx (t)
T2.2-13 (1 of 1)	0	2ly (t)
T2.2-14 (1 of 1)	0	2lz
T2.2-15 (1 of 1)	0	2mi
T2.2-16 (1 thru 7 of 7)	0	2mg
T2.2-17 (1 thru 3 of 3)	0	2mf (t)
T2.2-18 (1 of 1)	0	2me (t)
T2.2-19 (1 of 1)	0	2md (t)
T2.2-20 (1 of 1)	0	2mc (t)
T2.2-21 (1 of 1)	0	2mb (t)
T2.2-22 (1 thru 4 of 4)	0	2oa
T2.2-23 (1 thru 2 of 2)	0	2od (t)
T2.2-24 (1 of 1)	0	2oe (t)
T2.2-25 (1 thru 4 of 4)	0	2oh
T2.2-26 (1 thru 2 of 2)	0	2og (t)
T2.2-27 (1 of 1)	0	2op (t)
T2.2-28 (1 of 1)	0	2os (t)
T2.2-29 (1 thru 2 of 2)	0	2on
T2.2-30 (1 thru 10 of 10)	0	2om
T2.2-31 (1 thru 3 of 3)	0	2ol (t)
T2.2-32 (1 of 1)	0	2ok (t)
T2.2-33 (1 of 1)	0	2oj (t)
T2.2-34 (1 thru 3 of 3)	0	2oi
T2.2-35 (1 of 1)	0	2oq
T2.2-36 (1 of 1)	0	2py (t)

LIST OF EFFECTIVE PAGES (Cont)

(t) = turn
(c) = color

Page, Table (T), or Figure (F)	Amendment Number	Computer Address u1217913er
T2.2-37 (1 of 1)	0	2px
T2.2-38 (1 of 1)	0	2pw
T2.2-39 (1 of 1)	0	2pu
T2.2-40 (1 of 1)	0	2pr (t)
T2.2-41 (1 thru 2 of 2)	0	2ps (t)
T2.2-42 (1 of 1)	0	2pt
T2.2-43 (1 of 1)	0	2qb
T2.2-44 (1 of 1)	0	2qc
T2.2-45 (1 of 1)	0	2qd
T2.2-46 (1 thru 3 of 3)	0	2qq (t)
T2.2-47 (1 of 1)	0	2qp (t)
T2.2-48 (1 thru 2 of 2)	0	2qo
T2.2-49 (1 of 1)	0	2qn (t)
T2.2-50 (1 of 1)	0	2qm
T2.2-51 (1 of 1)	0	2ql (t)
T2.2-52 (1 thru 2 of 2)	0	2qk
T2.2-53 (1 of 1)	0	2qj (t)
T2.2-54 (1 of 1)	0	2qi
T2.2-55 (1 of 1)	0	2qh
T2.2-56 (1 of 1)	0	2qg (t)
F2.2-1	0	8 1/2x11 (t)
F2.2-2	0	8 1/2x11
F2.2-3	0	8 1/2x11 (t)
F2.2-4	0	8 1/2x11 (t)
F2.2-5	0	8 1/2x11
F2.2-6	0	8 1/2x11
F2.2-7	0	8 1/2x11
F2.2-8	0	8 1/2x11
F2.2-9	0	8 1/2x11 (t)
F2.2-10	0	8 1/2x11
F2.2-11	0	8 1/2x11
F2.2-12 (3 sheets)	0	8 1/2x11
F2.2-13	0	8 1/2x11
F2.2-14	0	8 1/2x11
F2.2-15	0	8 1/2x11
F2.2-16 (3 sheets)	0	8 1/2x11 (t)
F2.2-17	0	8 1/2x11
F2.2-18	0	8 1/2x11 (t)
F2.2-19	0	8 1/2x11
F2.2-20	0	8 1/2x11
F2.2-21	0	8 1/2x11
F2.2-22	0	8 1/2x11 (t)
F2.2-23	0	8 1/2x11
F2.2-24 (3 sheets)	0	8 1/2x11

LIST OF EFFECTIVE PAGES (Cont)

(t) = turn.
(c) = color

Page, Table (T), or Figure (F)	Amendment Number	Computer Address u1217913er
F2.2-25	0	8 1/2x11
F2.2-26	0	8 1/2x11
F2.2-27	0	8 1/2x11
F2.2-28 (2 sheets)	0	8 1/2x11
F2.2-29	0	8 1/2x11 (t)
F2.2-30	0	8 1/2x11
F2.2-31	0	8 1/2x11
F2.2-32	0	8 1/2x11
F2.2-33	0	8 1/2x11
F2.2-34	0	8 1/2x11
F2.2-35	0	8 1/2x11
F2.2-36	0	8 1/2x11
F2.2-37	0	8 1/2x11
F2.2-38	0	8 1/2x11
F2.2-39	0	8 1/2x11
F2.2-40	0	8 1/2x11
F2.2-41	0	8 1/2x11
F2.2-42	0	8 1/2x11
F2.2-43	0	8 1/2x11
F2.2-44	0	8 1/2x11
F2.2-45	0	8 1/2x11
F2.2-46	0	8 1/2x11
F2.2-47	0	8 1/2x11
F2.2-48	0	8 1/2x11
F2.2-49	0	8 1/2x11
F2.2-50	0	8 1/2x11
F2.2-51	0	8 1/2x11
Summary TC i thru ii	0	2rx
2.3-1	0	2f
2.3-2	1	a1b
2.3-3 thru 2.3-6	0	2f
2.3-7	1	a1a
2.3-8	1	a1a
2.3-9	1	a1a
2.3-10	1	a1a
2.3-11	0	2f
2.3-12	1	a1c
2.3-13 thru 2.3-24	0	2f
T2.3-1 (1 of 1)	0	2h (t)
T2.3-2 (1 of 1)	0	2i (t)
T2.3-3 (1 of 1)	1	2j (t)
T2.3-4 (1 of 1)	0	2k

LIST OF EFFECTIVE PAGES (Cont)

(t) = turn
(c) = color

Page, Table (T), or Figure (F)	Amendment Number	Computer Address u1217913er
T2.3-5 (1 of 1)	0	2l
T2.3-6 (1 of 1)	1	2m
T2.3-7 (1 of 1)	0	2n
T2.3-8 (1 of 1)	1	2o
T2.3-9 (1 of 1)	0	2p
T2.3-10 (1 of 1)	0	2q
T2.3-11 (1 of 1)	1	2r (t)
T2.3-12 (1 of 1)	0	2s
T2.3-13 (1 of 1)	0	2t
T2.3-14 (1 thru 13 of 13)	1	2u (t)
T2.3-15 (1 thru 13 of 13)	0	2v (t)
T2.3-16 (1 of 1)	0	2w (t)
T2.3-17 (1 of 1)	0	2x (t)
T2.3-18 (1 of 1)	1	2y (t)
T2.3-19 (1 thru 2 of 2)	1	2z (t)
T2.3-20 (1 of 1)	1	2aa (t)
T2.3-21 (1 of 1)	1	2ab
T2.3-22 (1 of 1)	1	2ac
T2.3-23 (1 thru 8 of 8)	0	2ak (t)
T2.3-24 (1 thru 3 of 3)	0	2ag
T2.3-25 (1 of 1)	0	2ad (t)
T2.3-26 (1 of 1)	0	2ae (t)
T2.3-27 (1 of 1)	0	2af (t)
T2.3-28 (1 of 1)	1	2ah (t)
T2.3-29 (1 thru 12 of 12)	0	2aj (t)
T2.3-30 (1 of 1)	0	2ai
T2.3.31 (1 of 1)	0	2by
T2.3-32 (1 of 1)	1	2qt
T2.3-33 (1 of 1)	0	2qs
T2.3-34 (1 of 1)	1	2vn
T2.3-35 (1 of 1)	1	2vm
T2.3-36 (1 of 1)	1	2eg
T2.3-37 (1 of 1)	1	2ij
T2.3-38 (1 of 1)	1	2eh
T2.3-39 (1 thru 3 of 3)	1	2hm
T2.3-40 (1 of 1)	1	2hn (t)
T2.3-41 (1 of 1)	0	2ho (t)
T2.3-42 (1 of 1)	1	2nw
T2.3-43 (1 of 1)	1	2nx (t)
T2.3-44 (1 of 1)	0	2np (t)
T2.3-45 (1 of 1)	0	2hq
T2.3-46 (1 of 1)	0	2hr (t)
T2.3-47 (1 of 1)	1	2hs (t)
T2.3-48 (1 of 1)	1	2nu (t)

LIST OF EFFECTIVE PAGES (Cont)

(t) = turn
(c) = color

Page, Table (T), or Figure (F)	Amendment Number	Computer Address u1217913er
T2.3-49 (1 of 1)	0	2nt (t)
T2.3-50 (1 of 1)	0	2ht
T2.3-51 (1 of 1)	0	2hu
T2.3-52 (1 of 1)	0	2hv (t)
T2.3-53 (1 of 1)	1	2hw (t)
T2.3-54 (1 of 1)	0	2ns (t)
T2.3-55 (1 of 1)	0	2nr (t)
T2.3-56 (1 of 1)	1	2hx
T2.3-57 (1 of 1)	1	2hy
T2.3-58 (1 of 1)	1	2hz
T2.3-59 (1 of 1)	0	2ia
T2.3-60 (1 of 1)	0	2ib
T2.3-61 (1 of 1)	0	2ic
T2.3-62 (1 of 1)	0	2id
T2.3-63 (1 of 1)	0	2ie
T2.3-64 (1 of 1)	0	2if
T2.3-65 (1 of 1)	0	2ig
T2.3-66 (1 of 1)	1	2ih
T2.3-67 (1 of 1)	0	2tx
T2.3-68 (1 of 1)	0	2tw
T2.3-69 (1 of 1)	0	2tv
F2.3-1	0	8 1/2x11 (t)
F2.3-2	0	8 1/2x11 (t)
F2.3-3	0	8 1/2x11 (t)
F2.3-4 (2 sheets)	0	8 1/2x11 (t)
F2.3-5 (2 sheets)	0	8 1/2x11 (t)
F2.3-6 (2 sheets)	0	11x17
F2.3-7	0	8 1/2x11
2.4-1 thru 2.4-17	0	2bn
T2.4-1 (1 thru 3 of 3)	0	2bp (t)
T2.4-2 (1 of 1)	0	2be (t)
T2.4-3 (1 of 1)	0	2bf
T2.4-4 (1 of 1)	0	2bg
T2.4-5 (1 of 1)	0	2ei (t)
F2.4-1	0	8 1/2x11 (t)
F2.4-2	0	8 1/2x11
F2.4-3	0	8 1/2x11
F2.4-4	0	8 1/2x11 (t)
F2.4-5	0	8 1/2x11 (v)
F2.4-6	0	8 1/2x11 (v)
F2.4-7	0	8 1/2x11 (t)
F2.4-8	0	8 1/2x11 (v)
F2.4-9	0	8 1/2x11 (v)

LIST OF EFFECTIVE PAGES (Cont)

(t) = turn
(c) = color

Page, Table (T), or Figure (F)	Amendment Number	Computer Address u1217913er
F2.4-10	0	8 1/2x11 (v)
F2.4-11	0	8 1/2x11 (v)
F2.4-12	0	8 1/2x11 (v)
F2.4-13	0	8 1/2x11 (t)
2.5-1 thru 2.5-2	0	2b
F2.5-1	0	11x17 (t)
F2.5-2	0	11x17 (t)
2.6-1 thru 2.6-3	0	2vl
T2.6-1 (1 thru 2 of 2)	0	2ky (t)
T2.6-2 (1 of 1)	0	2kz
Attachment 2.6A (Cover) - 1 page	0	21a
Attachment 2.6A - 1 page	0	21b
Attachment 2.6A (letter) - 3 pages	0	not on system
Attachment 2.6A (list) - 15 pages	0	not on system
Attachment 2.6B (cover) - 1 page	0	2vh
Attachment 2.6B - 1 page	0	2vg
Attachment 2.6B (letter) - 2 pages	0	not on system
2.7-1 thru 2.7-3	0	2dd
T2.7-1 (1 of 1)	0	2dc
T2.7-2 (1 of 1)	0	2de (t)
T2.7-3 (1 thru 2 of 2)	0	- (wide - needs reduction; not on system)
F2.7-1	0	8 1/2x11 (t)

utilities are shown at New London (Waterford) and Groton/New London (Trumbull) Airports, the Port of New London, and the Millstone site. Commercial development is scattered along major roads. | 1

Growth is occurring throughout the 10-km (6-mile) region, particularly the expansion of suburban development. Growth of mixed urban uses is taking place adjacent to the town centers of New London and Groton.

It is expected that Waterford will experience some multi-family development along Boston Post Road and Rope Ferry Road in response to new sewer lines. Approximately 200 new elderly housing and condominium units have been approved for development north and north-northeast of the site, between 4 and 8 km (2.5 and 5 miles). A major shopping mall has been approved for development on Route 85 between Interstate 95 and Route 52 (Connecticut Turnpike) near the area targeted for industrial development by town zoning (Telecon, Ellis 1981o; Waterford Planning and Zoning Commission 1977).

Suburban residential development in Old Lyme is expected to continue in the 10-km (6-mile) region. Land south of Interstate 95 at Interchange 71 has been designated for industrial development (Town of Old Lyme, Conn. 1975). The town garage and some small firms with two to three employees are located in this area.

Zoning maps for the six zoning jurisdictions within the 10-km (6-mile) region are shown on Figures 2.1-25 through 2.1-30. There are presently no moritoriums on growth in any of the towns within the 10-km region.

Transportation

The area within 10 km (6-miles) of Millstone 3 is served by interstate, state, and local roads. These and other transportation facilities are shown on Figure 2.1-31.

Average daily traffic counts (ADT) in the vicinity of Millstone 3 ranged from 2,300 on Route 213 near Goshen Road, to 30,100 on I-95, east of the junction with Route 52 (Telecon, Ellis 1981f). Several ADT counts for the 10-km region are provided in Table 2.1-23.

Two major highway improvements are presently planned for the 10-km (6-mile) region. The section of Route 85 between I-95 and Route 52 will be widened in connection with the new shopping mall to be built on Route 85 (Telecon, Ellis 1981e). A new bridge between Waterford and East Lyme is currently in design by the Connecticut Department of Transportation and will replace the Niantic River Bridge with a high-rise bridge one mile long (Telecon, Ellis 1981o; Telecon, Ellis 1981e).

Major local roads in Waterford include Rope Ferry Road (Route 156), Great Neck Road (Route 213), Boston Post Road (U.S. Highway 1), Niantic River Road, and Spithead Road.

1 | Two airports are located within the 10-km (6-mile) region. The Groton/New London Airport, Trumbull Airport is located in Groton, approximately 10 km (6-miles) east-northeast of Millstone 3. In addition to charter, private, rental, and instructional activities, Trumbull has commercial service by Pilgrim Airlines (for which it is a base of operations) and U.S. Air. There were a total of 125,000 operations in 1980 (Telecon, Ellis 1981n).

1 | The New London (Waterford) Airport has charter service and private planes. No data are available on use, and there are currently no 1 | plans to expand the facilities or services. New London Airport is located approximately 7 km (4.3 miles) north-northeast of Millstone 3.

1 | The Consolidated Rail Corporation (ConRail), Providence and Worcester Co., and Central Vermont Railway operate freight trains within the 10-km region. Amtrak owns the trackage of the Shore Line, which crosses the Millstone site. Amtrak provides passenger service, and Conrail provides freight service on that line. As discussed in Section 2.1.3.1.2, the Northeast Corridor Rail Improvement Plan is expected to make improved rail service possible between Boston and Washington, D.C. Improvements to trackage in Massachusetts and Connecticut are nearly complete, and all other improvements are expected to be complete by 1985 (Telecon, Ellis 1981k).

Major Industries

Major industries (companies with 50 or more employees) are listed in Table 2.1-24 and on Figure 2.1-32. The largest employer, with 20,600 employees, is General Dynamics Corporation - Electric Boat Division, located on the Thames River in Groton, approximately 8.2 km (5 miles) east-northeast of Millstone 3 (Southeastern Connecticut Chamber of Commerce 1977). Electric Boat Division is involved in the design and construction of nuclear submarines. The largest manufacturing employer in Waterford is the Bureau of Business Practices, which employs 315 people in publishing training materials (Southeastern Connecticut Chamber of Commerce 1977). The Bureau of Business Practices is located approximately 4.5 km (2.8 miles) northeast of Millstone 3.

Educational Facilities

Schools and colleges in the 10-km (6-mile) region are listed in Table 2.1-25, which includes the town or city where the school is located, its distance and direction from the site, grades taught, and student enrollment. Programs for children with special needs are located in Waterford and New London.

Several colleges and graduate programs are located in New London and Groton. The U.S. Coast Guard Academy, with 987 boarding students, is located approximately 9 km (5.6 miles) northeast of the site. The 1 | Connecticut College Campus 9 km (5.6 miles) north-northeast of the site is also the location of the Connecticut College Program for Children with Special Needs and the Williams School, a private school

Several state-owned areas offer access to lakes and streams for fresh water fishing in the 10-km (6-mile) region. These facilities are shown in Table 2.1-28. Those on Pataguanset Lake, Dodge Pond, and Gorton Pond have boat launches. The boat launch site on the Niantic River and all other salt water based recreational facilities are discussed in Section 2.1.3.2. Additional state boat launch access points are planned for the Thames River, under the Gold Star Memorial Bridge in Groton and in New London.

Sites of historic, scenic, or cultural significance in the 10-km (6-mile) region are discussed in Section 2.6.1.

Other Major Institutions

Lawrence and Memorial Hospital in New London is the only hospital in the 10-km (6-mile) region. With 325 beds and 1,200 staff (Telecon, Ellis 1981r), it serves Waterford, New London, and surrounding communities. Five nursing homes licensed for 50 or more beds are located in the 10-km (6-mile) region. These major medical facilities are shown on Figure 2.1-32 and in Table 2.1-29.

Seaside Regional Center provides training and housing for handicapped citizens. There are 185 residents, 100 day students, and 260 full- and part-time staff on the Waterford Campus (Telecon, Ellis 1981q), located approximately 3 km (1.9 miles) east-southeast of the site.

The Connecticut Correctional Institute at Niantic and the J.B. Gates Correctional Unit occupy 341 hectares (843 acres) in East Lyme, 6.2 km (3.9 miles) west-northwest of the site. The facility contains a total of 307 inmates and 171 full-time and 7 part-time staff (Cerino 1981).

Also in East Lyme, the Connecticut National Guard runs Camp O'Neill and Stone Ranch Military Reservation. Camp O'Neill (named for the present governor, identified in earlier reports as Camp Grasso or Meskill) is the barracks area. Stone Ranch is the training ground for between 500 and 600 National Guard Troops from the end of May to mid-August. Camp barracks have a capacity for 800 people and, with tents, can accommodate up to 1,000 (Telecon, Ellis 1981i). Camp O'Neill includes 31 hectares (76 acres) and is 3.2 km (2 miles) northwest of Millstone 3. Stone Ranch (with 366 hectares or 904 acres) is turned over to the Connecticut Department of Environmental Protection from November 15 to December 31 for hunting.

2.1.3.1.2 Land Use Within 80 km

The 80-km region surrounding Millstone 3 includes portions of Connecticut, Rhode Island, and Suffolk County, New York. Major features of the region are identified on Figure 2.1-35. Surface water bodies within 80 km (50 miles) include: Long Island Sound, Block Island Sound, the Atlantic Ocean south of Long Island, and Rhode Island Sound. The Connecticut River and Thames River in Connecticut, Narragansett Bay and the Providence River in Rhode

Island, and the bays of eastern Long Island (Gardner's, Great Peconic, Shinnecock, and Moriches) are also shown on Figure 2.1-35.

The cities and towns within the 80-km (50-mile) region are major locations for industrial and commercial development, and educational, recreational and cultural facilities. Hartford, the capital of Connecticut, is located on the Connecticut River, approximately 63 km (39 miles) northwest of the Millstone site. Providence, Rhode Island, is located northeast of Millstone at the boundary of the 80-km region, at the head of Narragansett Bay. Development in Suffolk County, New York, in the 80-km (50-mile) region is mainly residential, with most towns oriented to seasonal use.

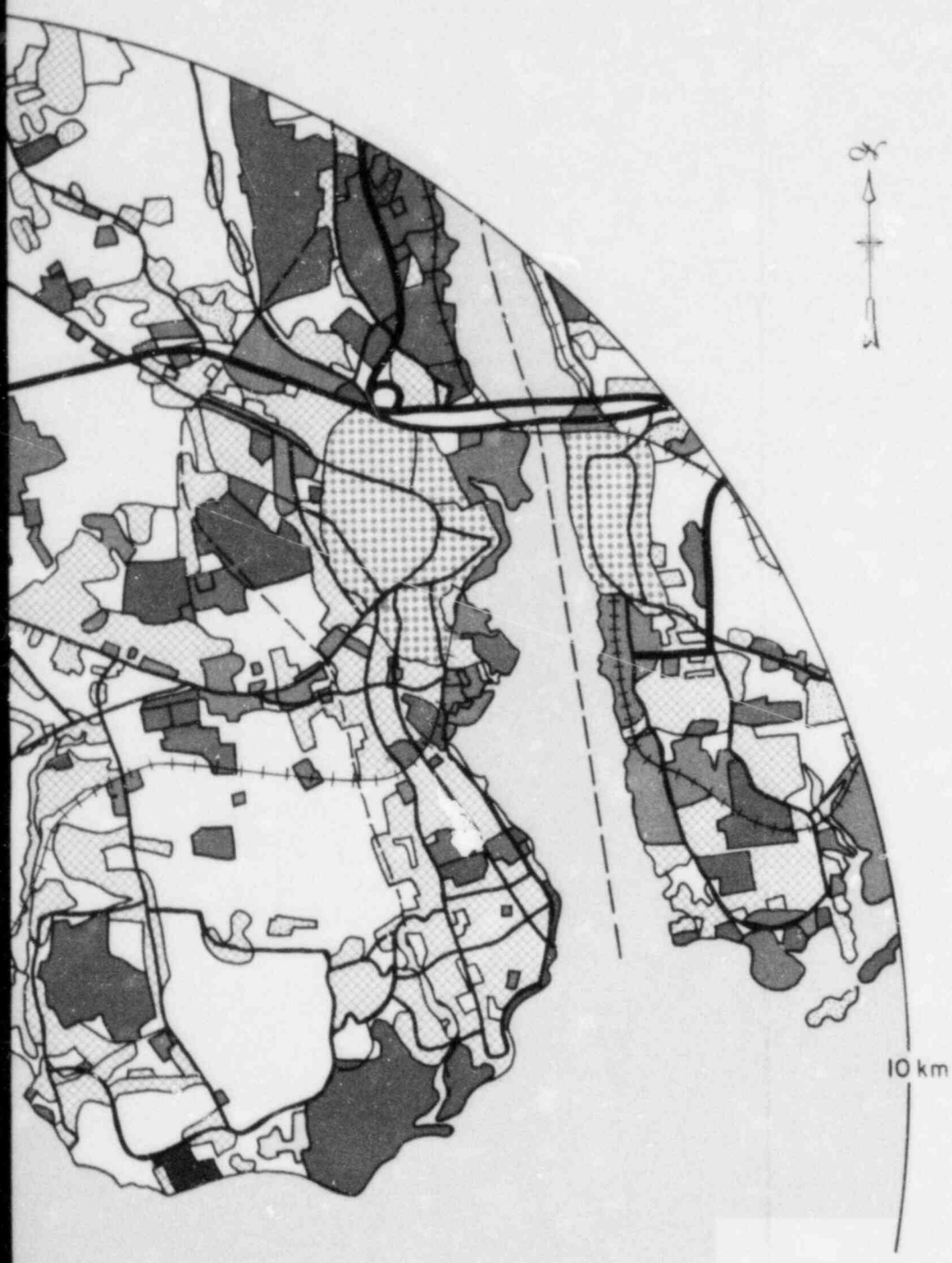
Urban and suburban areas in the 80-km (50-mile) region are located along major rivers, transportation routes, and the seacoast. The extensive shoreline created by bays, barrier beaches, and islands is an important resource throughout the region. Most of the coastline is characterized by seasonal developments which contain many recreational, cultural and tourist facilities.

Land use, as it appeared in 1970, is shown on Figure 2.1.-36. As shown on the generalized land use map, the 80-km (50-mile) region is characterized by extensive areas of forest and agricultural lands and numerous lakes and ponds (U. S. Department of the Interior, U. S. Geological Survey 1972-78). Built-up lands (commercial, industrial, and mixed urban uses) and suburban development (residential use) predominate in the Hartford-Bridgeport corridor, northwest and west of the site.

Cities and towns such as New Britain, Meriden, Wallingford, Hamden, New Haven, and Milford comprise the corridor which follows major highway and rail lines between Hartford and New York City. Bristol and Waterbury are additional locations of urban and suburban development west of the Hartford-Bridgeport corridor in the 80-km (50-mile) region. New London, Groton, and Norwich, Connecticut form a secondary corridor of development along the Thames River. Figure 2.1-36 also shows small areas of mixed urban development at Putnam and Danielson and primarily residential land use along the shore of Long Island Sound in Connecticut (The Continuing Committee on State Planning and Development, State of Connecticut 1979).

The second major area of built-up land and residential development is 70 km (43.5 miles) northeast of Millstone 3 at Providence, Cranston, and Warwick, Rhode Island. Newport, Kingston, and Westerly, Rhode Island are also centers for mixed urban and residential land uses.

The most extensive areas of agriculture in the 80-km (50-mile) region are located in Suffolk County, New York (U. S. Department of the Interior, U. S. Geological Survey 1972-73). As indicated on Figure 2.1-36, residential development with scattered occurrences of mixed urban uses characterize the towns along the Atlantic coast. Riverhead and Brookhaven also contain some mixed urban use.



LEGEND:

- RESIDENTIAL - LOW DENSITY
- RESIDENTIAL - MEDIUM & HIGH DENSITY
- MIXED URBAN USES
- COMMERCIAL & INDUSTRIAL
- INSTITUTIONAL - INTENSIVE & EXTENSIVE
- TRANSPORTATION, COMMUNICATIONS & UTILITIES
- ACTIVE RECREATION
- RESERVED OPEN SPACE
- UNDEVELOPED OR AGRICULTURE
- WATER
- * SITE
- TOWN BOUNDARIES
- INTERSTATE HIGHWAY
- MAJOR ROADS

0 1/2 1
SCALE - MILES

0 1 2
SCALE - KILOMETERS

FIGURE 2.1-24
LAND USES WITHIN 10 km
MILLSTONE NUCLEAR POWER STATION
UNIT 3
ENVIRONMENTAL REPORT
OPERATING LICENSE STAGE

high for periods up to several days during the warmer months. Table 2.3-13 (NOAA 1970, 1974, 1975, 1978, 1981; NOAA 1949-1980) gives the monthly, seasonal, and annual averages and extremes of relative humidity.

2.3.1.15 Meteorological Effects on Ultimate Heat Sink

A depression of water levels in Long Island Sound may result from an intense storm or hurricane moving up the Atlantic coast. The most conservatively calculated depression (Millstone 3 PSAR Question 2.11) does not exceed the operable depth of safety related service water pumps in the intake structure (Section 2.4).

2.3.2 Site Meteorology

2.3.2.1 Data Sources

Local meteorology for the Millstone site is described by weather observations taken over a 32-year period (1949 through 1980) at Bridgeport and by data collected during an 8-year period (1974 through 1980) by an instrumented meteorological tower at Millstone. | 1
The Bridgeport weather facility at Sikorsky Airport is located southeast of Bridgeport (an urban industrial area) and about 1 mile from Long Island Sound. The Millstone meteorological tower is located on a point of land right at the shore and is surrounded by water on three sides. The water temperatures in the eastern end of Long Island Sound (Millstone area) tend to be somewhat cooler than water temperatures in the western end (Bridgeport) because of water exchange with the Atlantic Ocean. This is particularly true in the summer. In spite of these differences in location, the meteorological conditions are similar. Millstone data were compared for an 8-year period (1974 through 1981), where possible, to Bridgeport data for the same period. The comparisons indicated that meteorological conditions at the two locations were similar and thus that the 32-year Bridgeport data base can be used to reasonably represent long-term meteorology at Millstone.

2.3.2.2 Normal and Extreme Values of Meteorological Parameters

2.3.2.2.1 Wind Conditions

Table 2.3-14 shows monthly and annual summaries of wind speed and direction at Bridgeport for the 1949 through 1980 period. Table 2.3-15 shows monthly and annual summaries of wind speed and direction at Millstone for 1974 through 1981, taken from the 10-meter level on the meteorological tower.

Table 2.3-16 (NOAA 1949-1980) compares the frequency of wind directions by quadrant at Millstone and Bridgeport for the comparison period (1974 through 1980 and 1974 through 1981) and relates both to | 1
the long-term Bridgeport data base. There is good agreement between the sites. Table 2.3-17 (NOAA 1949-1980) compares the frequency of wind speeds by quadrant in a similar manner. Wind speeds at Bridgeport are somewhat higher; this may be due to the greater elevation of the wind sensor at Bridgeport for a part of the

comparison period and most of the long-term period. Nonetheless, there is reasonable agreement between the sites. Table 2.3-18 shows the directional persistence by compass sector of 10-meter winds at Millstone from 1974 through 1981. Table 2.3-2 shows the directional persistence by compass sector of winds at Bridgeport from 1949 through 1965.

2.3.2.2.2 Air Temperature and Water Vapor

Tables 2.3-11 and 2.3-13 give the normal and extreme values of air temperature and humidity for Bridgeport data. Table 2.3-19 presents normal and extreme values of air temperature, dew point temperature, absolute humidity, and relative humidity for 8 years of Millstone data at the 10-meter level. Tables 2.3-20 and 2.3-21 compare Bridgeport and Millstone data for the same data period. Temperatures at Millstone are slightly cooler than at Bridgeport, probably reflecting both cooler water temperatures around Millstone and the presence of an urban heat island affecting Bridgeport. Dew point temperatures are about the same at both sites. Relative humidity values are slighly higher at Millstone than at Bridgeport, reflecting the cooler temperatures at Millstone.

2.3.2.2.3 Precipitation

Tables 2.3-6 through 2.3-9 give the normal and extreme values of precipitation based on long-term Bridgeport data. No precipitation data are collected at Millstone.

2.3.2.2.4 Fog and Smog

Table 2.3-10 provides a summary of fog conditions based on long-term Bridgeport data. Most of the heavy fog in the Millstone area is an advection type caused by the passage of warm moist air over relatively cold water. Since Millstone has greater exposure to the cooler waters of eastern Long Island Sound and the Atlantic Ocean, the frequency of heavy fog there is expected to be somewhat greater than at Bridgeport. This expectation is borne out in Table 2.3-22, which compares heavy fog occurrence at Bridgeport to that at Block Island (NOAA 1970, 1974, 1978, 1981). Block Island has greater exposure to cool waters in all directions and experiences a higher frequency of heavy fog, especially in late spring and summer when the differences between air and water temperatures are most pronounced. The frequency of heavy fog at Millstone is probably greater than that at Bridgeport but less than that at Block Island. The Millstone meteorological tower has a visibility monitor. Joint frequency summaries of visibility, wind direction, and atmospheric stability are provided for 8 years of Millstone data in Table 2.3-23. The visibility monitor reflects the occurrence of haze, rain, and snow as well as fog and, consequently, may not be directly compared to either Bridgeport or Block Island fog occurrence data, which are derived from actual visual observations of fog.

Table 2.3-24 provides monthly frequencies of the duration of poor visibility conditions (less than 1.6 km (1 mile)) as measured by the

Millstone visibility monitor for an 8-year period. Similar information for Bridgeport is not available.

2.3.2.2.5 Atmospheric Stability

Table 2.3-25 shows the percentage distribution of stability data within the seven classes specified by Regulatory Guide 1.23 for the period 1949 through 1980 at Bridgeport. The method used to assign a datum to a particular stability class is based on a parameterization of incoming solar radiation and wind speed and is referred to as the STAR method. This method yields a low percentage of cases in the "A" stability class at Bridgeport, since a solar angle of at least 60 degrees concurrent with relatively clear skies is required for this condition. This requirement is fulfilled only on sunny June and July days for a few hours around solar noon. In addition, E, F, and G stabilities are constrained to occur only during nighttime hours by this program, and the Bridgeport data are thus unable to reflect daytime occurrences of stable conditions such as those associated with the shallow inversions associated with a sea breeze off Long Island Sound.

Table 2.3-26 shows the percentage distribution of stability data within seven classes for the 1974 through 1981 period at Millstone, based on vertical temperature difference measurement at three levels on the meteorological tower. Table 2.3-27 shows the same information based on wind direction fluctuation measurements at the four wind instrument levels on the tower.

Table 2.3-28 compares the stability class distribution at Bridgeport to that at Millstone for the periods 1974 through 1980 and 1974 through 1981. The distributions are not particularly comparable because of the differences in methodology.

Table 2.3-29 shows cumulative frequency distributions of the duration of inversion conditions (E, F, and G stability class) by month for the 1974 through 1981 data at Millstone, based on vertical temperature difference measurements at three levels on the meteorological tower. | 1

2.3.2.2.6 Seasonal and Annual Mixing Heights

Seasonal and annual mixing height data for Millstone are adopted from Holzworth (1972) and shown in Table 2.3-30. No direct measurements of mixing height are available near the site region.

2.3.2.3 Potential Influence of the Plant and Its Facilities on Local Meteorology

Millstone 3 will use a once-through cooling water system, discharging its cooling water into an existing quarry and thence into Long Island Sound. Thin wisps of steam fog will occasionally form over the quarry and less frequently over the discharge plume during the winter months, depending on tidal conditions and temperature differences between air and water. This fog will dissipate rapidly as it moves

away from the warm water area. Because the maximum discharge plume (defined by the 0.83°C (1.5°F) isotherm of temperature differential with all three Millstone units at full power) will be approximately an ellipsoid of 1,500 meters by 800 meters, the extent of the steam fog resulting from this discharge plume, under the full spectrum of meteorological conditions, will be negligible.

2.3.2.4 Local Meteorological Conditions for Design and Operating Bases

2.3.2.4.1 Design Basis Tornado

The design basis tornado (DBT) for Millstone (used for missile damage estimates) was developed from Regulatory Guide 1.76. The specifications are as follows:

Maximum wind speed	576 km/hr (360 mph)
Maximum rotational speed	464 km/hr (290 mph)
Maximum translational speed	112 km/hr (70 mph)
Pressure drop	0.21 kg/sq cm (3.0 psi)
Rate of pressure drop	0.14 kg/sq cm (2.0 psi/sec)

Based on descriptions of Connecticut tornadoes (NOAA 1959-1981; Pautz 1969), a tornado with an intensity that was more severe than the DBT has never been observed.

2.3.2.4.2 Design Basis Hurricane

The design basis hurricane for Millstone (used for flooding and setdown estimates) was developed in the Millstone 3 PSAR (Question 2.10). The specifications are:

Central pressure index	96.24 cm (27.26 inches)
Peripheral pressure	77.62 cm (30.56 inches)
Radius to maximum winds	88 km (55 miles)
Angle of maximum wind from direction of travel	115 degrees
Maximum gradient wind	198.4 km/hr (124 mph)
Speed of translation	27.2 km/hr (17 mph)

This design hurricane is considerably more intense than the worst on record (the hurricane of 1938).

2.3.2.4.3 Snow Load

1 The design total snow load (Section 2.3.1.9) for Millstone (used for building design) is 293 kg/sq meter (60 lb/sq ft) (depth of 2,540 mm (100 inches)). This is assumed to consist of a preexisting snowpack of depth 1,219 mm (48 inches) and a 2-day winter snowstorm delivering

another 1,321 mm (52 inches). Conditions like this have never been recorded on the Connecticut shoreline.

2.3.2.4.4 Rainfall

The design maximum rainfall rates for Millstone (used for building design and flood estimates) are 76.2 mm (3.00 inches) in 1 hour and 180 mm (7.10 inches) in 24 hours for a return period of 100 years (Section 2.3.1). The maximum 24-hour rainfall recorded at Bridgeport was 175 mm (6.89 inches) in June 1972.

2.3.2.4.5 Adverse Diffusion Conditions

The occurrence of adverse diffusion conditions (low winds, stable conditions, sea breeze fumigation, long directional persistence of winds, or long persistence of high stabilities) used for diffusion estimates at Millstone, are considered in the methodology of the diffusion estimates that appear in Sections 2.3.4 and 2.3.5.

2.3.3 Topograpical Description

The topography around Millstone is marked by low rolling hills, rising inland from the shoreline. The maximum height of the surrounding terrain within 8 km (5 miles) of the site is about 76.2 meters (250 feet) above mean sea level (msl) at 5.1 km (3.2 miles) to the north-northwest. To the south of the site, from east through west, is open water. Figure 2.3-1 shows the general topography of the Millstone area to 8 km (5 miles). Figures 2.3-2 and 2.3-3 show vertical profiles of maximum elevations versus distance from the plant for each of 16 compass sectors to 8 km (5 miles). Figures 2.3-4 and 2.3-5 show the vertical profiles to 80 km (50 miles). Figure 2.3-6 shows the general topography to 80 km (50 miles).

The inland terrain in Connecticut is not pronounced enough to produce any significant local modifications of synoptic conditions at the shoreline. The shoreline areas do, however, experience local modifications of synoptic patterns because of the temperature differences between air over land and air over water. The most pronounced modification is the development of a diurnal sea breeze, commonly experienced in the months of April through October on sunny days. During the daytime on these days, solar heating of land causes relative low pressure over land near ground level and relative high pressure over water offshore. This results in the development of a mesoscale wind circulation near the shoreline from water to land, with a return flow aloft. This sea breeze is sometimes strong enough to develop in the face of an offshore pressure gradient (ie, northerly winds), but it most commonly occurs as a reinforcement of the typical summertime southwesterly wind flow associated with an offshore high pressure system.

2.3.4 Short-Term (Accident) Diffusion Estimates

2.3.4.1 Objective

1| Accidents at Millstone 3 are assumed to result in ground level effluent releases from the containment structure and containment ventilation vent. For various time periods after an accident, atmospheric dilution factors (X/Q) were calculated for emissions from Millstone 3 at the exclusion area boundary (EAB) and at the low population zone (LPZ) for each downwind sector. The emission outlets used in determining X/Q's were the outer surface of the containment
1| structure and ventilation vent. For the time period of 0 to 2 hours, 0 to 8 hours, 8 to 24 hours, 1 to 4 days, and 4 to 30 days, diffusion estimates were calculated at the EAB and LPZ for the engineered safety features building (ESF) leakage. Tables 2.3-31 through 2.3-34 present 50-percent equal risk ground level X/Q values (as stated in Regulatory Guide 4.2) at the EAB and LPZ.

1| Tables 2.3-35 through 2.3-38 list 50-percent elevated and fumigation X/Q values at the EAB and LPZ. These values are presented as information only (i.e., not used in any dose calculations).

2.3.4.2 Calculations

1| The X/Q dilution factors listed in Table 2.3-31 through 2.3-34 were calculated utilizing the bi-variate normal, or Gaussian, diffusion model (Regulatory Guide 1.145), modified for source configuration, and lateral meander under neutral and stable conditions. Input parameters were determined from onsite meteorological data acquired during the January 1, 1974 through December 31, 1981 period. These parameters included hourly average values (based upon 15-minute averages) of wind speed and wind direction at the 10-meter and 114-meter levels along with atmospheric stability determined from the temperature differences measured between the 10- and 43-meter and 10- and 114-meter levels. Atmospheric stability was classified according to the temperature gradient values listed for the various Pasquill stability categories.

Hourly average X/Q values for the one-hour (representative of the 0- to 2-hour period) accident period were calculated using Equations 2.3.4-1 through 2.3.4-3 for D to G stability conditions, when the wind speed at the 10-meter level is less than 6 meters per second:

$$\frac{X}{Q} = (\bar{u}_{10} \pi \Sigma_y \sigma_z)^{-1} \qquad (2.3.4\text{-}1)$$

where:

TABLE 2.3-3

MONTHLY, SEASONAL, AND ANNUAL FREQUENCY DISTRIBUTIONS
OF WIND SPEED AT BRIDGEPORT, CONN.

(1949 - 1980)

	Frequency Distribution (%) Wind Speed Class km/hr (mph)								
	km/hr (mph) Calm	1.6-4.8 (1-3)	6.4-11.2 (4-7)	12.8-19.2 (8-12)	20.8-28.8 (13-18)	30.4-38.4 (19-24)	≥40 (≥25)	Total	Total Hours
December	3.0		16.2	28.1	29.8	11.2	5.6	100.0	10,616
January	2.9		15.2	25.6	29.1	13.0	6.5	100.0	11,123
February	2.9	.7	14.1	25.4	30.1	14.5	6.4	100.0	10,140
Winter	2.9	6.8	15.1	26.4	29.7	12.9	6.2	100.0	31,879
March	2.9	6.7	13.7	26.8	29.8	13.6	6.5	100.0	10,645
April	2.7	6.7	14.9	28.0	29.9	12.3	5.5	100.0	10,304
May	3.1	7.0	18.5	32.1	28.3	9.0	2.1	100.0	10,646
Spring	2.9	6.8	15.7	29.0	29.3	11.6	4.7	100.0	31,595
June	2.8	6.7	23.4	36.9	24.9	4.5	0.8	100.0	10,773
July	3.1	7.6	22.7	40.1	22.9	3.2	0.4	100.0	11,140
August	3.3	8.3	21.9	38.9	23.7	3.6	0.3	100.0	11,140
Summer	3.0	7.5	22.7	38.6	23.9	3.8	0.5	100.0	33,053
September	2.8	6.9	18.5	33.7	29.9	6.9	1.2	100.0	10,291
October	2.4	6.3	18.0	32.6	29.3	9.0	2.6	100.0	10,645
November	2.4	6.4	16.9	29.0	28.9	11.6	4.7	100.0	10,291
Fall	2.5	6.5	17.8	31.7	29.4	9.2	2.8	100.0	31,227
Annual	2.9	6.9	17.8	31.4	28.1	9.4	3.6	100.0	127,754

TABLE 2.3-4

MONTHLY, SEASONAL, AND ANNUAL WIND SPEED EXTREMES
AT BRIDGEPORT, CONN.
(1961-1981)

	Fastest-Mile Wind Speed km/hr (mph)		Wind Direction* of Fastest-Mile Wind Speed
December	84.8	(53)	WSW
January	107	(67)	NNW
February	104	(65)	NNW
Winter	107	(67)	NNW
March	92.8	(58)	E
April	88	(55)	NW
May	80	(50)	NNW
Spring	92.8	(58)	E
June	60.8	(38)	WNW
July	64	(40)	WNW
August	92.8	(58)	NE
Summer	92.8	(58)	NE
September	75.2	(47)	NNE
October	92.8	(58)	N
November	92.8	(58)	SE
Fall	92.8	(58)	SE
Annual	107	(67)	NNW

NOTE:

*Based on a 16-compass-point system

TABLE 2.3-5

MEAN NUMBER OF DAYS OF THUNDERSTORM OCCURRENCE
AT BRIDGEPORT, CONN.

(1951-1981)

	Number of Days
December	*
January	*
February	*
Winter	*
March	1
April	2
May	3
Spring	6
June	4
July	5
August	4
Summer	13
September	2
October	1
November	*
Fall	3
Annual	22

NOTE:

* Less than 1 day every 2 years

TABLE 2.3-6

MONTHLY, SEASONAL, AND ANNUAL AVERAGES AND EXTREMES
OF PRECIPITATION AT BRIDGEPORT, CONN.

(1901-June 1982)

Precipitation mm (inches)

	Normal Total	Maximum Monthly	Minimum Monthly	Maximum In 24 Hours	Mean Number of Days with Precipitation 0.25 mm (0.01 Inch) or More
Length of Record	*	**	**	***	****
December	87.4 (3.44)	250 -(9.85)	8.4 - (0.33)	93.7 -(3.69)	11
January	68.8 (2.71)	284 -(11.20)	10.0 -(0.40)	116.0 -(4.55)	11
February	68.8 (2.71)	169 -(6.65)	21.6 -(0.85)	58.7 -(2.31)	10
Winter	255.0 (8.86)	-	-	93.7 -(3.69)	32
March	86.6 (3.49)	245 -(9.64)	7.4 - (0.29)	117 - (4.60)	11
April	86.1 (3.39)	239 -(9.41)	17.5 -(0.69)	84.0 -(3.32)	11
May	90.7 (3.57)	258.6 -(10.18)	12.4 -(0.49)	82.0 -(3.23)	11
Spring	265.4 (10.45)	-	-	117 -(4.60)	33
June	65.0 (2.56)	449.6 -(17.70)	1.8 -(0.07)	175 -(6.89)	9
July	87.4 (3.44)	476.8 -(18.77)	11.4 -(0.45)	151 -(5.95)	8
August	96.5 (3.80)	337.6 -(13.29)	5.1 -(0.20)	101 -(3.97)	9
Summer	248.9 (9.80)	-	-	175 -(6.89)	26
September	73.2 (2.88)	359.4 -(14.15)	2.3 -(0.09)	119 -(4.67)	9
October	70.9 (2.79)	272.3 -(10.72)	7.6 -(0.30)	109 -(4.28)	7
November	97.3 (3.83)	259.6 -(10.22)	9.1 -(0.36)	103 -(4.07)	10
Fall	241.4 (9.50)	-	-	119 -(4.67)	26
Annual	980.7 (38.61)	-	-	175 -(6.89)	117

NOTES:

* 1941 through 1981 (40 years) (NOAA 1970, 1974, 1975, 1978, 1981)
** 1901 through 1981 (81 years) (NOAA 1970, 1974, 1975, 1978, 1981)
1 *** 1949 through June 1982 (33.5 years) (NOAA 1970, 1974, 1975, 1978, 1981, January through June 1982)
**** 1949 through 1981 (33 years) (NOAA 1970, 1974, 1975, 1978, 1981)

TABLE 2.3-7

ESTIMATED PRECIPITATION EXTREMES FOR PERIODS
UP TO 24 HOURS AND RECURRENCE INTERVALS UP TO 100 YEARS

Period of Rainfall	Estimated Precipitating Extremes mm (inches) at Different Recurrence Intervals			
	1 Year	10 Years	50 Years	100 Years
30 minutes	22.9 (0.90)	41.9 (1.65)	53.3 (2.10)	61.0 (2.40)
1 hour	27.9 (1.10)	53.3 (2.10)	67.3 (2.65)	76.2 (3.00)
2 hours	36.8 (1.45)	64.8 (2.55)	83.8 (3.30)	92.7 (3.65)
3 hours	39.4 (1.55)	71.1 (2.80)	92.7 (3.65)	103 (4.05)
6 hours	47.0 (1.85)	90.2 (3.55)	112 (4.40)	130 (5.10)
12 hours	62.2 (2.45)	107 (4.20)	135 (5.30)	155 (6.10)
24 hours	68.6 (2.70)	127 (5.00)	163 (6.40)	180 (7.10)

TABLE 2.3-8

MONTHLY, SEASONAL, AND ANNUAL AVERAGES AND EXTREMES OF SNOWFALL AT BRIDGEPORT, CONN.

(1921-JUNE 1982)

	Snow, Ice Mean Total mm (inches)	Pellets Maximum Monthly mm (inches)	Maximum in 24 Hours mm (inches)	Mean Number of Days with 25.4 mm (1.0 Inch) or More Snow and Pellets
Length of Record	*	**	***	*
December	124.5 (4.9)	655 (25.8)	198 (7.8)	2
January	190.5 (7.5)	770 (30.3)	424 (16.7)	2
February	200.7 (7.9)	1,194 (47.0)	424 (16.7)	2
Winter	515.6 (20.3)	1,194 (47.0)	424 (16.7)	6
March	129.5 (5.1)	554 (21.8)	282 (11.1)	1
April	10.2 (0.4)	206 (8.1)	94 (3.7)	+
May	T	T	T	0
Spring	139.7 (5.5)	554 (21.8)	282 (11.1)	1
June	0.0	0.0	0.0	0
July	0.0	0.0	0.0	0
August	0.0	0.0	0.0	0
Summer	0.0	0.0	0.0	0
September	0.0	0.0	0.0	0
October	T	T	T	0
November	12.7 (0.5)	358 (14.1)	137 (5.4)	+
Fall	12.7 (0.5)	358 (14.1)	137 (5.4)	+
Annual	668.0 (26.3)	1,194 (47.0)	424 (16.7)	7

NOTES:

T = trace
+ Less than 1 day every 2 years
* 1949 through 1981 (33 years) (NOAA 1970, 1974, 1975, 1978, 1981)
** 1921 through 1981 (61 years) (NOAA 1970, 1974, 1975, 1978, 1981)
*** 1949 through June 1982 (33.5 years) (NOAA, 1970, 1974, 1975, 1978, 1981, Jan - June 1982)

TABLE 2.3-11

MONTHLY, SEASONAL, AND ANNUAL AVERAGES AND EXTREMES OF TEMPERATURE AT BRIDGEPORT, CONN.
(1901-1981)

	Temperature °C (°F)						
	Normal	Average Maximum	Absolute Maximum	Highest Average Minimum	Lowest Absolute Minimum	Highest Monthly Average	Lowest Monthly Average
Length of Record	*	*	**	*	**	***	***
December	1.0 (33.8)	4.7 (40.5)	19.4 (67)	-2.7 (27.1)	-24 (-12)	3.8 (38.8)	-3.1 (26.4)
January	-1.0 (30.2)	2.7 (36.9)	20.0 (68)	-4.8 (23.4)	-26 (-14)	3.8 (38.8)	-5.7 (21.8)
February	-0.6 (30.9)	3.3 (37.9)	21.1 (70)	-4.5 (23.9)	-29 (-20)	2.8 (37.1)	-9.1 (15.6)
Winter	-0.2 (31.6)	3.6 (38.4)	21.1 (70)	-4.0 (24.8)	-29 (-20)	-	-
March	3.3 (37.9)	7.2 (45.0)	28.3 (83)	-0.7 (30.8)	-16 (3)	8.0 (46.4)	0.1 (32.1)
April	9.1 (48.4)	13.6 (56.5)	33.9 (93)	4.6 (40.3)	-13 (9)	11.8 (53.3)	6.3 (43.4)
May	14.6 (58.3)	19.3 (66.7)	35.0 (95)	9.9 (49.9)	-2 (28)	17.3 (63.2)	10.6 (51.1)
Spring	9.0 (48.2)	13.4 (56.1)	35.0 (95)	4.6 (40.3)	-16 (3)	-	-
June	19.9 (67.9)	24.4 (76.0)	35.6 (96)	15.4 (59.8)	1 (34)	22.6 (72.6)	17.8 (64.0)
July	23.2 (73.8)	27.5 (81.5)	39.4 (103)	18.9 (66.1)	7 (44)	25.2 (77.4)	21.2 (70.1)
August	22.6 (72.7)	26.9 (80.4)	38.3 (101)	18.3 (64.9)	6 (42)	24.5 (76.1)	20.0 (68.0)
Summer	21.9 (71.5)	26.3 (79.3)	39.4 (103)	17.6 (63.6)	1 (34)	-	-
September	19.2 (66.5)	23.6 (74.5)	37.2 (99)	14.7 (58.4)	0 (32)	21.4 (70.5)	16.4 (61.5)
October	13.8 (56.8)	18.4 (65.1)	32.2 (90)	9.2 (48.5)	-7 (20)	15.7 (60.2)	9.7 (49.4)
November	7.8 (46.0)	11.8 (53.3)	25.6 (78)	3.7 (38.7)	-13 (9)	10.3 (50.5)	3.6 (38.4)
Fall	13.6 (56.4)	17.9 (64.3)	37.2 (99)	9.2 (48.5)	-13 (9)	-	-
Annual	11.1 (51.9)	15.3 (59.5)	39.4 (103)	6.8 (44.3)	-29 (-20)	-	-

NOTES:

* 1941 through 1970 (30 years) (NOAA 1970, 1974, 1975, 1978, 1981)
** 1901 through 1981 (81 years) (NOAA 1954, 1959, 1963, 1970, 1974, 1975, 1978, 1981; Pautz 1969)
*** 1931 through 1981 (51 years) (NOAA 1970, 1974, 1975, 1978, 1981)

11

TABLE 2.3-12

MEAN NUMBER OF DAYS WITH SELECTED TEMPERATURE CONDITIONS AT BRIDGEPORT, CONN.

(1966-1981)

	Mean Number of Days			
	Maximum Temperature		Minimum Temperature	
	32°C (90°F) and Above	0°C (32°F) and Below	0°C (32°F) and Below	-18°C (0°F) and Below
December	0	5	22	*
January	0	11	26	*
February	0	8	24	*
Winter	0	24	72	*
March	0	1	17	0
April	0	0	4	0
May	*	0	*	0
Spring	*	1	21	0
June	1	0	0	0
July	3	0	0	0
August	2	0	0	0
Summer	6	0	0	0
September	*	0	0	0
October	0	0	1	0
November	0	*	7	0
Fall	*	*	8	0
Annual	6	25	101	0

NOTE:

* Less than 1 day every 2 years

TABLE 2.3-13

MONTHLY, SEASONAL, AND ANNUAL AVERAGES AND EXTREMES OF RELATIVE HUMIDITY AT BRIDGEPORT, CONN.

(1949-1981)

	Relative Humidity (%)					
	1 AM (EST)	7 AM (EST)	1 PM (EST)	7 PM (EST)	Absolute Maximum	Absolute Minimum
Length of Record	*	**	**	**	***	***
December	72	73	62	68	100	14
January	69	71	61	64	100	22
February	67	71	59	62	100	9
Winter	69	72	61	65	100	9
March	69	72	58	62	100	11
April	70	69	53	60	100	9
May	79	76	60	67	100	12
Spring	73	72	57	63	100	9
June	83	78	62	70	100	20
July	82	78	60	69	100	24
August	83	79	61	71	100	24
Summer	83	78	61	70	100	20
September	83	82	63	72	100	24
October	77	78	60	69	100	21
November	75	77	61	69	100	20
Fall	78	79	61	70	100	20
Annual	76	75	60	67	100	9

NOTES:

* 1968 through 1981 (14 Years) (NOAA 1970, 1974, 1975, 1978, 1981)
** 1966 through 1981 (16 Years) (NOAA 1978, 1981)
*** 1949 through 1980 (26 Years; 1/1/49 through 4/30/53, 5/1/60 through 12/31/80)

TABLE 2.3-14

MONTHLY AND ANNUAL WIND DIRECTION AND SPEED DISTRIBUTIONS
FOR SURFACE WINDS, AT BRIDGEPORT, CONN.

(1949-1980)

A. JANUARY

Wind Direction	km/hr (mph)	Wind Speed Distribution (%) within Wind Speed Class						
		1.6-4.8 (1-3)	6.4-11.2 (4-7)	12.8-19.2 (8-12)	20.8-28.8 (13-18)	30.4-38.4 (19-24)	≥40 (25)	All Speeds
N		0.76	1.46	2.54	2.46	0.73	0.26	8.22
NNE		0.64	1.12	1.55	1.29	0.43	0.16	5.18
NE		1.45	1.82	2.51	2.21	1.20	0.41	9.60
ENE		0.64	1.07	1.59	1.61	0.40	0.32	5.64
E		0.35	0.58	0.96	0.76	0.38	0.19	3.22
ESE		0.22	0.34	0.43	0.30	0.12	0.04	1.44
SE		0.20	0.26	0.35	0.16	0.07	0.01	1.05
SSE		0.20	0.31	0.19	0.11	0.05	0.03	0.87
S		0.21	0.40	0.38	0.21	0.18	0.23	1.60
SSW		0.19	0.38	0.62	0.47	0.22	0.12	1.99
SW		0.46	0.92	1.37	1.38	0.54	0.14	4.80
WSW		0.33	1.03	1.95	2.40	1.44	0.55	7.69
W		0.58	1.31	3.22	4.67	1.88	0.98	13.65
WNW		0.42	1.31	3.15	4.58	2.11	1.05	12.62
NW		0.78	1.47	2.70	3.90	1.94	1.21	12.00
NNW		0.36	1.41	2.09	2.57	1.35	0.78	8.56
All Sectors		7.78	15.16	25.58	29.08	13.03	6.47	

Calm = 2.89

Amendment 1

February 1983

TABLE 2.3-14 (Cont)

B. FEBRUARY

Wind Direction	km/hr (mph)	Wind Speed Distribution (%) within Wind Speed Class						
		1.6-4.8 (1-3)	6.4-11.2 (4-7)	12.8-19.2 (8-12)	20.8-28.8 (13-18)	30.4-38.4 (19-24)	≥40 (25)	All Speeds
N		0.78	1.44	2.46	2.66	0.97	0.50	8.81
NNE		0.57	0.82	1.20	1.[illegible]	0.61	0.22	4.94
NE		0.89	1.46	2.29	2.35	0.71	0.22	7.91
ENE		0.39	0.79	1.43	2.10	0.95	0.51	6.16
E		0.30	0.80	1.22	1.31	0.74	0.31	4.68
ESE		0.13	0.48	0.67	0.39	0.16	0.02	1.84
SE		0.25	0.49	0.41	0.32	0.11	0.01	1.59
SSE		0.17	0.27	0.37	0.19	0.07	0.04	1.10
S		0.30	0.27	0.68	0.34	0.16	0.18	1.91
SSW		0.34	0.59	0.59	0.53	0.17	0.09	2.31
SW		0.43	0.97	1.61	1.37	0.33	0.16	4.86
WSW		0.29	1.20	2.23	2.47	1.08	0.26	7.52
W		0.34	1.19	2.94	3.06	1.39	0.61	9.53
WNW		0.41	1.05	2.55	3.89	2.41	1.02	11.32
NW		0.69	1.18	2.41	4.82	3.00	1.42	13.52
NNW		0.40	1.08	2.38	2.83	1.65	0.83	9.16
All Sectors		6.66	14.07	25.43	30.13	14.48	6.38	

Calm = 2.85

TABLE 2.3-14 (Cont)

C. MARCH

Wind Direction	km/hr (mph)	Wind Speed Distribution (%) within Wind Speed Class						
		1.6-4.8 (1-3)	6.4-11.2 (4-7)	12.8-19.2 (8-12)	20.8-28.8 (13-18)	30.4-38.4 (19-24)	≥40 (25)	All Speeds
N		0.47	1.10	2.37	3.11	1.18	0.34	8.57
NNE		0.48	1.11	1.70	1.20	0.30	0.15	4.94
NE		0.96	1.43	1.90	1.69	0.57	0.22	6.76
ENE		0.52	0.98	1.78	2.03	0.81	0.65	6.75
E		0.28	0.90	1.92	2.45	1.27	0.79	7.61
ESE		0.25	0.63	1.15	1.14	0.44	0.13	3.74
SE		0.19	0.56	0.80	0.43	0.11	0.00	2.09
SSE		0.18	0.39	0.53	0.32	0.10	0.10	1.62
S		0.42	0.67	0.92	0.58	0.34	0.09	3.03
SSW		0.23	0.49	1.08	1.13	0.46	0.11	3.50
SW		0.55	1.21	2.41	1.75	0.40	0.12	6.45
WSW		0.53	0.83	2.04	1.65	0.55	0.17	5.76
W		0.44	0.95	2.30	2.05	0.94	0.52	7.20
WNW		0.39	0.71	1.67	2.75	1.78	1.17	8.47
NW		0.46	0.80	2.10	4.01	2.48	1.27	11.12
NNW		0.39	0.90	2.12	3.50	1.84	0.76	9.52
All Sectors		6.73	13.65	26.78	29.79	13.57	6.60	

Calm = 2.88

TABLE 2.3-14 (Cont)

D. APRIL

Wind Direction	km/hr (mph)	Wind Speed Distribution (%) within Wind Speed Class						
		1.6-4.8 (1-3)	6.4-11.2 (4-7)	12.8-19.2 (8-12)	20.8-28.8 (13-18)	30.4-38.4 (19-24)	≥40 (25)	All Speeds
N		0.57	1.03	2.00	2.59	0.74	0.10	7.03
NNE		0.44	0.79	1.37	1.23	0.15	0.08	4.05
NE		0.64	0.97	1.83	1.47	0.50	0.10	5.49
ENE		0.35	0.96	1.20	1.76	0.87	0.44	5.58
E		0.39	0.86	2.00	2.34	1.13	0.71	7.42
ESE		0.22	0.62	1.04	0.90	0.28	0.11	3.17
SE		0.35	0.63	0.76	0.52	0.08	0.00	2.34
SSE		0.16	0.56	0.97	0.45	0.07	0.03	2.23
S		0.39	0.88	1.75	1.20	0.40	0.11	4.73
SSW		0.34	0.77	1.32	1.84	0.85	0.21	5.34
SW		0.64	1.36	2.50	2.85	0.74	0.11	8.20
WSW		0.51	1.45	3.24	2.66	0.76	0.21	8.82
W		0.38	1.36	2.83	2.16	0.76	0.39	7.87
WNW		0.38	0.82	1.50	2.20	1.63	1.04	7.66
NW		0.52	0.84	1.75	2.90	1.68	1.22	8.91
NNW		0.40	0.94	1.99	2.71	1.72	0.62	8.47
All Sectors		6.67	14.93	28.04	29.88	12.33	5.46	

Calm = 2.69

TABLE 2.3-14 (Cont)

E. MAY

Wind Direction	km/hr (mph)	Wind Speed Distribution (%) within Wind Speed Class						
		1.6-4.8 (1-3)	6.4-11.2 (4-7)	12.8-19.2 (8-12)	20.8-28.8 (13-18)	30.4-38.4 (19-24)	≥40 (25)	All Speeds
N		0.51	1.09	1.81	1.55	0.39	0.09	5.44
NNE		0.43	1.01	1.39	1.02	0.27	0.09	4.23
NE		0.63	1.43	1.65	1.44	0.48	0.06	5.68
ENE		0.28	1.15	1.75	2.03	0.36	0.16	5.72
E		0.46	1.42	3.56	3.93	0.91	0.27	10.55
ESE		0.26	1.27	2.00	1.53	0.28	0.09	5.43
SE		0.52	0.89	1.22	0.60	0.12	0.06	3.41
SSE		0.32	0.73	1.16	0.66	0.12	0.01	3.00
S		0.38	1.36	1.93	1.37	0.49	0.11	5.64
SSW		0.37	1.09	2.13	1.99	0.81	0.06	6.44
SW		0.63	1.31	3.49	2.86	0.74	0.06	9.08
WSW		0.40	1.36	3.64	2.85	0.73	0.12	9.09
W		0.48	1.60	2.40	1.59	0.44	0.15	6.65
WNW		0.38	0.86	1.28	1.42	0.79	0.33	5.04
NW		0.59	0.92	1.17	1.64	0.94	0.33	5.60
NNW		0.34	1.01	1.49	1.85	1.14	0.09	5.93
All Sectors		6.96	18.50	32.07	28.32	9.01	2.08	

Calm = 3.07

TABLE 2.3-14 (Cont)

F. JUNE

Wind Direction	km/hr (mph)	Wind Speed Distribution (%) within Wind Speed Class						
		1.6-4.8 (1-3)	6.4-11.2 (4-7)	12.8-19.2 (8-12)	20.8-28.8 (13-18)	30.4-38.4 (19-24)	≥40 (25)	All Speeds
N		0.48	1.51	1.80	1.21	0.33	0.06	5.38
NNE		0.35	1.24	1.02	0.73	0.05	0.01	3.41
NE		0.71	1.04	1.31	0.[illegible]	0.17	0.03	4.22
ENE		0.35	0.91	1.23	0.96	0.25	0.05	3.74
E		0.45	1.39	2.27	1.73	0.45	0.10	6.38
ESE		0.30	1.08	2.00	0.88	0.27	0.05	4.57
SE		0.44	1.18	1.32	0.63	0.06	0.00	3.59
SSE		0.29	1.07	1.43	0.38	0.03	0.00	3.19
S		0.60	1.86	2.90	1.83	0.31	0.02	7.51
SSW		0.29	1.45	3.02	2.40	0.38	0.07	7.60
SW		0.62	2.89	5.84	4.19	0.39	0.03	13.95
WSW		0.55	2.58	5.84	3.29	0.36	0.03	12.64
W		0.32	2.11	3.21	1.63	0.14	0.01	7.42
WNW		0.26	1.17	1.22	1.13	0.36	0.14	4.28
NW		0.39	0.98	1.24	1.73	0.58	0.18	5.09
NNW		0.33	0.96	1.23	1.24	0.43	0.05	4.23
All Sectors		6.69	23.40	36.85	24.92	4.53	0.81	

Calm = 2.79

TABLE 2.3-14 (Cont)

G. JULY

Wind Direction	km/hr (mph)	Wind Speed Distribution (%) within Wind Speed Class						
		1.6-4.8 (1-3)	6.4-11.2 (4-7)	12.8-19.2 (8-12)	20.8-28.8 (13-18)	30.4-38.4 (19-24)	>40 (25)	All Speeds
N		0.49	1.71	2.02	1.04	0.14	0.02	5.40
NNE		0.69	1.12	1.32	0.49	0.07	0.00	3.69
NE		0.76	1.38	1.51	0.78	0.12	0.00	4.55
ENE		0.33	0.68	0.97	0.70	0.14	0.00	2.83
E		0.39	0.82	1.69	1.12	0.26	0.14	4.42
ESE		0.19	0.75	1.60	0.72	0.23	0.00	3.48
SE		0.28	0.93	1.53	0.51	0.01	0.00	3.26
SSE		0.35	0.98	1.60	0.54	0.01	0.00	3.47
S		0.45	1.68	3.46	1.95	0.25	0.00	7.78
SSW		0.29	1.33	3.25	3.12	0.35	0.00	8.33
SW		0.64	2.58	6.80	4.24	0.34	0.01	14.60
WSW		0.64	2.70	6.30	3.15	0.26	0.03	13.08
W		0.67	2.52	3.62	1.16	0.14	0.02	8.12
WNW		0.46	1.39	1.50	1.15	0.29	0.10	4.88
NW		0.66	1.07	1.49	1.11	0.35	0.07	4.76
NNW		0.33	1.07	1.44	1.17	0.21	0.05	4.26
All Sectors		7.61	22.70	40.07	22.94	3.16	0.43	

Calm = 3.09

TABLE 2.3-14 (Cont)

H. AUGUST

Wind Direction	km/hr (mph)	Wind Speed Distribution (%) within Wind Speed Class						
		1.6-4.8 (1-3)	6.4-11.2 (4-7)	12.8-19.2 (8-12)	20.8-28.8 (13-18)	30.4-38.4 (19-24)	≥40 (25)	All Speeds
N		0.93	2.28	2.62	1.12	0.22	0.01	7.17
NNE		0.91	1.45	1.86	0.98	0.05	0.02	5.26
NE		1.28	1.64	1.86	1.52	0.20	0.01	6.51
ENE		0.31	0.78	0.93	0.82	0.15	0.00	2.99
E		0.39	0.76	1.51	1.21	0.26	0.01	4.14
ESE		0.27	0.66	1.28	0.95	0.11	0.03	3.30
SE		0.26	0.91	1.21	0.63	0.04	0.01	3.05
SSE		0.26	0.81	1.63	0.54	0.04	0.01	3.28
S		0.49	1.82	3.30	1.54	0.11	0.01	7.28
SSW		0.40	1.27	3.63	2.62	0.34	0.02	8.27
SW		0.52	2.28	5.83	4.20	0.41	0.02	13.26
WSW		0.40	1.84	4.60	3.05	0.49	0.04	10.41
W		0.37	1.37	3.32	1.14	0.28	0.00	6.48
WNW		0.39	1.15	1.86	1.00	0.28	0.02	4.69
NW		0.70	1.34	1.80	1.27	0.38	0.09	5.57
NNW		0.46	1.52	1.72	1.13	0.24	0.04	5.10
All Sectors		8.32	21.88	38.93	23.72	3.59	0.31	

Calm = 3.25

TABLE 2.3-14 (Cont)

I. SEPTEMBER

Wind Direction	km/hr (mph)	Wind Speed Distribution (%) within Wind Speed Class						
		1.6-4.8 (1-3)	6.4-11.2 (4-7)	12.8-19.2 (8-12)	20.8-28.8 (13-18)	30.4-38.4 (19-24)	≥40 (25)	All Speeds
N		0.83	2.14	2.87	1.96	0.39	0.07	8.25
NNE		0.97	1.94	2.20	1.69	0.49	0.12	7.41
NE		1.11	2.21	3.41	3.43	0.69	0.19	11.03
ENE		0.23	0.65	1.41	1.77	0.63	0.14	4.83
E		0.16	0.64	1.18	1.57	0.44	0.12	4.10
ESE		0.18	0.63	1.23	1.31	0.31	0.05	3.71
SE		0.25	0.66	1.15	0.75	0.09	0.02	2.91
SSE		0.19	0.55	1.28	0.62	0.11	0.02	2.77
S		0.21	1.04	1.95	1.16	0.19	0.02	4.57
SSW		0.22	0.76	1.65	1.77	0.67	0.17	5.24
SW		0.45	1.40	3.47	3.76	0.76	0.07	9.90
WSW		0.15	0.86	2.60	2.95	0.54	0.02	7.12
W		0.24	0.94	3.04	1.87	0.34	0.06	6.49
WNW		0.28	1.11	2.35	1.76	0.36	0.07	5.93
NW		0.82	1.79	1.97	1.89	0.42	0.11	6.99
NNW		0.66	1.21	1.90	1.65	0.51	0.01	5.93
All Sectors		6.94	18.52	33.66	29.91	6.91	1.22	

Calm = 2.84

TABLE 2.3-14 (Cont)

J. OCTOBER

Wind Direction	km/hr (mph)	Wind Speed Distribution (%) within Wind Speed Class						
		1.6-4.8 (1-3)	6.4-11.2 (4-7)	12.8-19.2 (8-12)	20.8-28.8 (13-18)	30.4-38.4 (19-24)	≥40 (25)	All Speeds
N		0.68	2.39	2.93	2.30	0.58	0.08	8.95
NNE		0.80	1.69	2.36	1.25	0.27	0.04	6.41
NE		1.03	2.18	3.30	3.44	0.83	0.10	10.88
ENE		0.31	0.65	1.46	1.45	0.52	0.17	4.55
E		0.21	0.66	0.96	0.94	0.46	0.22	3.44
ESE		0.22	0.32	0.85	0.74	0.24	0.14	2.50
SE		0.28	0.55	0.81	0.54	0.14	0.01	2.33
SSE		0.24	0.65	0.81	0.36	0.09	0.05	2.19
S		0.23	0.83	1.43	0.94	0.12	0.04	3.38
SSW		0.22	0.72	1.25	1.15	0.32	0.07	3.72
SW		0.41	1.19	2.72	3.02	0.77	0.24	8.35
WSW		0.28	0.85	2.73	3.11	0.88	0.35	8.20
W		0.24	1.17	3.27	3.46	0.97	0.26	9.37
WNW		0.23	1.34	3.12	2.57	0.86	0.26	8.38
NW		0.48	1.47	2.44	2.42	1.00	0.32	8.13
NNW		0.41	1.35	2.13	1.79	0.95	0.24	6.89
All Sectors		6.26	18.01	32.56	29.26	8.99	2.57	

Calm = 2.35

TABLE 2.3-14 (Cont)

K. NOVEMBER

Wind Direction	km/hr (mph)	Wind Speed Distribution (%) within Wind Speed Class						
		1.6-4.8 (1-3)	6.4-11.2 (4-7)	12.8-19.2 (8-12)	20.8-28.8 (13-18)	30.4-38.4 (19-24)	>40 (25)	All Speeds
N		0.97	2.15	2.93	1.95	0.56	0.20	8.77
NNE		0.67	1.70	2.00	1.30	0.25	0.06	5.99
NE		1.07	1.95	2.94	2.58	0.54	0.17	9.25
ENE		0.26	0.68	1.04	1.29	0.54	0.24	4.06
E		0.22	0.48	0.75	0.91	0.54	0.56	3.47
ESE		0.13	0.45	0.51	0.40	0.30	0.15	1.92
SE		0.25	0.42	0.57	0.34	0.19	0.12	1.90
SSE		0.15	0.41	0.68	0.53	0.07	0.04	1.88
S		0.20	0.58	1.00	0.65	0.16	0.07	2.66
SSW		0.07	0.39	0.97	1.08	0.35	0.13	2.98
SW		0.32	0.80	1.81	2.22	0.65	0.29	6.08
WSW		0.25	0.85	2.04	2.53	1.11	0.40	7.17
W		0.20	1.14	3.07	3.54	1.59	0.48	10.02
WNW		0.45	1.34	3.63	4.03	1.58	0.54	11.58
NW		0.71	2.03	2.83	2.94	1.85	0.62	10.98
NNW		0.49	1.56	2.22	2.62	1.34	0.63	8.86
All Sectors		6.41	16.92	28.99	28.92	11.64	4.69	

Calm = 2.43

TABLE 2.3-14 (Cont)

L. DECEMBER

Wind Direction	km/hr (mph)	Wind Speed Distribution (%) within Wind Speed Class						
		1.6-4.8 (1-3)	6.4-11.2 (4-7)	12.8-19.2 (8-12)	20.8-28.8 (13-18)	30.4-38.4 (19-24)	≥40 (25)	All Speeds
N		0.83	2.04	2.69	2.27	0.66	0.25	8.72
NNE		0.61	1.52	1.66	1.25	0.40	0.03	5.46
NE		0.91	1.86	2.57	3.06	0.84	0.14	9.38
ENE		0.35	1.06	1.63	2.04	0.49	0.24	5.81
E		0.17	0.58	0.71	0.56	0.20	0.23	2.43
ESE		0.14	0.38	0.44	0.23	0.17	0.20	1.55
SE		0.24	0.30	0.34	0.26	0.07	0.00	1.21
SSE		0.10	0.38	0.25	0.37	0.19	0.03	1.31
S		0.12	0.49	0.41	0.31	0.14	0.04	1.52
SSW		0.13	0.33	0.56	0.57	0.13	0.12	1.84
SW		0.29	0.63	1.36	1.14	0.54	0.12	4.08
WSW		0.27	0.84	1.64	1.73	0.63	0.34	5.45
W		0.30	1.06	3.67	4.46	1.75	0.77	12.02
WNW		0.36	1.53	4.38	5.07	2.20	1.07	14.61
NW		0.71	1.67	3.19	3.99	1.89	1.12	12.57
NNW		0.55	1.52	2.59	2.52	0.92	0.90	9.00
All Sectors		6.09	16.16	28.08	29.82	11.22	5.59	

Calm = 3.04

TABLE 2.3-14 (Cont)

M. ANNUAL

Wind Direction	km/hr (mph)	Wind Speed Distribution (%) within Wind Speed Class						
		1.6-4.8 (1-3)	6.4-11.2 (4-7)	12.8-19.2 (8-12)	20.8-28.8 (13-18)	30.4-38.4 (19-24)	≥40 (≥25)	All Speeds
N		0.69	1.69	2.41	2.01	0.57	0.16	7.53
NNE		0.63	1.29	1.63	1.16	0.28	0.08	5.06
NE		0.95	1.61	2.24	2.07	0.57	0.14	7.58
ENE		0.36	0.86	1.36	1.54	0.50	0.24	4.87
E		0.31	0.83	1.56	1.57	0.58	0.30	5.14
ESE		0.21	0.64	1.10	0.79	0.24	0.08	3.06
SE		0.29	0.65	0.88	0.47	0.09	0.02	2.40
SSE		0.22	0.60	0.91	0.42	0.08	0.03	2.25
S		0.34	1.00	1.69	1.00	0.24	0.08	4.33
SSW		0.26	0.80	1.69	1.57	0.42	0.10	4.83
SW		0.50	1.47	3.30	2.76	0.55	0.11	8.69
WSW		0.38	1.37	3.27	2.66	0.73	0.21	8.62
W		0.38	1.40	3.08	2.57	0.88	0.35	8.67
WNW		0.37	1.15	2.35	2.63	1.21	0.56	8.27
NW		0.63	1.29	2.09	2.70	1.36	0.66	8.73
NNW		0.42	1.22	1.93	2.12	1.01	0.41	7.12
All Sectors		6.93	17.87	31.51	28.01	9.31	3.52	

Calm = 2.85

TABLE 2.3-17

COMPARISON OF AVERAGE WIND SPEED BY QUADRANT AT BRIDGEPORT, CONN. AND MILLSTONE

	Valid Data (hr)	Date Period	Average Wind Speed by Quadrant km/hr (mph) Onshore ESE-S	Onshore SSW-W	Offshore WNW-N	Offshore NNE-E
Millstone*	58,193	1/1/74-12/31/80	13.7 (8.5)	18.0 (11.2)	15.0 (9.3)	14.2 (8.8)
Millstone*	66,392	1/1/74-12/31/81	13.7 (8.5)	17.9 (11.1)	15.1 (9.4)	13.8 (8.6)
Bridgeport***	21,882	1/1/74-12/31/81	16.1 (10.0)	19.5(12.1)	21.1 (13.1)	19.3 (12.0)
Bridgeport**,***	127,933	1/1/49-4/30/53 5/1/60-12/31/80	16.3 (10.2)	19.0 (11.9)	20.6 (12.9)	18.7 (11.6)

NOTES:

* Wind direction measured at the 33-foot tower level

** Observations recorded every third hour beginning March 1, 1965

*** Wind speed measured at 48 feet above ground level until 6/19/61, at 84 feet above ground from 6/19/61-4/18/74 and 33 feet above ground from 4/18/74-12/31/78

TABLE 2.3-18

OCCURRENCE OF WIND PERSISTENCE EPISODES WITHIN THE SAME 22.5-DEGREE SECTOR AT MILLSTONE

(1974-1981)

Wind Direction	Hours of Persistence																					
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	>22	Total
N	367	159	81	34	32	16	12	12	5	6	2	2	2	1	1	2	0	0	0	0	0	3	737
NNE	345	177	108	65	45	18	17	20	9	4	11	4	2	3	0	1	0	0	0	0	1	1	831
NE	333	121	45	30	17	14	5	4	1	1	1	2	3	1	0	0	0	0	0	0	0	1	579
ENE	198	84	34	24	8	8	8	1	4	3	1	2	0	0	1	0	0	1	0	0	0	1	378
E	209	101	50	50	37	16	15	8	7	7	4	4	2	3	0	1	2	0	1	0	0	0	517
ESE	319	134	72	43	28	22	12	6	3	2	1	0	1	0	1	0	1	0	0	0	0	0	645
SE	299	131	58	42	16	9	6	3	1	0	0	0	0	1	0	0	0	0	0	0	0	0	566
SSE	247	102	32	16	11	6	2	1	1	1	2	0	0	0	0	0	0	0	0	1	0	0	422
S	301	120	49	21	17	5	3	4	1	2	0	0	1	0	0	0	0	2	0	0	0	0	526
SSW	389	163	76	38	28	15	5	8	5	2	1	3	0	3	0	1	0	0	0	0	0	0	737
SW	624	233	152	79	45	23	10	7	9	4	0	3	0	2	0	0	0	0	0	0	0	0	1,191
WSW	593	303	181	96	65	44	19	24	5	9	7	1	0	0	2	0	2	0	0	0	0	0	1,351
W	521	195	96	76	51	18	17	12	10	4	0	6	3	1	3	3	5	4	2	1	2	4	1,040
WNW	621	309	154	71	49	14	14	11	5	1	5	0	2	1	0	1	1	1	0	0	0	0	1,260
NW	665	317	161	108	62	26	36	20	17	7	8	2	2	4	1	2	0	1	0	1	0	1	1,441
NNW	473	270	149	114	66	47	23	13	8	10	4	3	3	5	2	1	0	0	3	3	1	5	1,203
Total	6,504	2,919	1,498	907	577	301	204	154	97	63	47	32	21	25	11	12	11	9	6	6	4	16	13,424

TABLE 2.3-19

MILLSTONE CLIMATOLOGICAL SUMMARY

(1974-1981)

	Average Daily Mean °C (°F)	Average Daily Maximum °C (°F)	Average Daily Minimum °C (°F)	Exterme Maximum °C (°F)	Extreme Minimum °C (°F)	
A. Monthly and Annual Ambient Temperature						
January	-1.9 (28.6)	1.4 (34.5)	-5.2 (22.7)	14.0 (57.2)	-19.0 (-2.2)	
February	-1.5 (29.3)	1.7 (35.0)	-4.7 (23.5)	16.0 (60.8)	-19.5 (-3.1)	
March	2.7 (36.9)	5.8 (42.5)	-0.4 (31.3)	19.0 (66.2)	14.0 (6.8)	
April	7.7 (45.8)	10.8 (51.5)	-4.4 (40.0)	27.5 (18.5)	-4.5 (23.9)	
May	12.5 (54.5)	15.4 (59.7)	9.6 (49.2)	27.0 (80.6)	1.0 (23.9)	
June	16.8 (62.3)	19.6 (67.3)	14.1 (57.3)	28.5 (83.3)	6.5 (43.7)	
July	20.3 (68.6)	22.8 (73.1)	17.8 (64.0)	31.5 (88.7)	10.5 (50.9)	
August	20.4 (68.8)	23.1 (73.5)	17.8 (64.0)	30.0 (86.0)	9.0 (48.2)	1
September	16.7 (62.1)	19.8 (67.7)	13.6 (56.5)	27.0 (80.6)	3.5 (38.3)	
October	11.2 (52.1)	14.4 (57.9)	7.9 (46.2)	22.0 (71.6)	-2.0 (28.4)	
November	7.2 (45.0)	10.2 (50.3)	-4.3 (39.7)	21.5 (70.7)	-6.0 (21.2)	
December	1.2 (34.1)	4.5 (40.1)	-2.2 (28.1)	28.1 (59.9)	-20.5 (-4.9)	
1/1/74 - 12/31/81	9.5 (49.1)	12.5 (54.5)	-6.4 (43.6)	31.5 (88.7)	-20.5 (-4.9)	
B. Monthly and Annual Dew Point						
January	-5.0 (23.0)	-1.6 (29.1)	-8.4 (16.8)	12.0 (53.6)	-27.5 (-17.5)	
February	-4.9 (23.1)	-1.8 (28.8)	-8.1 (17.4)	10.0 (50.0)	-24.0 (-11.2)	
March	-1.8 (28.7)	1.5 (34.7)	-5.2 (22.6)	10.5 (50.9)	-21.0 (-5.8)	
April	1.8 (35.2)	4.8 (40.7)	-1.3 (29.7)	14.0 (57.2)	-13.0 (8.6)	
May	7.4 (45.4)	9.9 (49.8)	5.8 (41.0)	17.5 (63.5)	-9.5 (14.9)	
June	12.4 (54.3)	14.5 (58.1)	10.2 (50.4)	20.5 (68.9)	-1.5 (29.3)	
July	15.9 (60.6)	17.8 (64.0)	13.9 (57.1)	22.5 (72.5)	4.0 (39.2)	1
August	16.4 (61.5)	18.5 (65.3)	14.3 (57.7)	23.5 (74.3)	5.0 (41.0)	
September	12.9 (55.2)	15.6 (60.0)	10.2 (50.3)	22.0 (71.6)	-3.0 (26.6)	
October	6.5 (43.7)	9.6 (49.2)	3.4 (38.1)	19.5 (67.1)	-7.5 (18.5)	
November	2.6 (36.7)	5.7 (42.2)	-0.4 (31.2)	16.0 (60.8)	-13.0 (8.6)	
December	-2.4 (27.6)	1.2 (34.2)	-6.1 (21.0)	13.0 (55.4)	-27.5 (-17.5)	
1/1/74 - 12/31/81	5.2 (41.3)	8.0 (46.4)	2.3 (36.1)	23.5 (74.3)	-27.5 (-17.5)	

TABLE 2.3-19 (Cont)

	Average Daily Mean (g/m^3)	Average Daily Maximum (g/m^3)	Average Daily Minimum (g/m^3)	Extreme Maximum (g/m^3)	Extreme Minimum (g/m^3)
C. Monthly and Annual Absolute Humidity					
January	3.8	4.7	2.9	10.7	0.5
February	3.8	4.6	2.9	9.4	0.7
March	4.6	5.6	3.5	9.7	0.9
April	5.8	6.9	4.6	12.1	1.7
May	8.3	9.5	7.0	14.8	2.3
June	11.1	12.6	9.6	17.7	4.3
July	13.7	15.3	12.1	19.9	6.1
August	14.2	15.9	12.4	21.2	6.5
September	11.6	13.5	9.7	19.4	3.8
October	8.0	9.5	6.4	16.8	2.7
November	6.13	7.5	5.0	13.7	1.8
December	4.5	5.6	3.4	11.3	0.6
1/1/74 - 12/31/81	8.0	9.3	6.6	21.2	0.5
D. Montly and Annual Relative Humidity (%)					
January	78.7	92.5	64.8	100.0	26.0
February	77.3	92.7	61.9	100.0	24.0
March	72.5	89.0	55.9	100.0	22.0
April	69.4	85.9	52.9	100.0	16.0
May	73.7	87.8	59.5	100.0	16.0
June	76.3	90.1	62.5	100.0	27.0
July	76.6	89.0	64.1	100.0	29.0
August	77.9	90.6	65.2	100.0	28.0
September	77.1	90.5	63.6	100.0	27.0
October	72.9	87.4	58.3	100.0	23.0
November	73.1	86.6	59.6	100.0	24.0
December	76.4	89.9	62.9	100.0	30.0
1/1/74 - 12/31/81	75.2	89.3	61.0	100.0	16.0

TABLE 2.3-20

COMPARISON OF MONTHLY AND ANNUAL AVERAGE DRY-BULB AND DEWPOINT TEMPERATURE AVERAGES AT BRIDGEPORT, CONN. AND MILLSTONE

Location and Period	Dry-Bulb Temperature				Dewpoint Temperature			
	Bridgeport 1949-1980* °C (°F)	Bridgeport 1974-1980 °C (°F)	Millstone 1974-1980 °C (°F)	Millstone 1974-1981 °C (°F)	Bridgeport 1949-1980* °C (°F)	Bridgeport 1974-1980 °C (°F)	Millstone 1974-1980 °C (°F)	Millstone 1974-1981 °C (°F)
January	-0.61 (30.9)	-1.2 (29.8)	1.4 (29.5)	-1.8 (28.7)	-5.9 (21.3)	-6.7 (20.0)	-4.2 (24.4)	-1.1 (30.0)
February	-0.67 (30.8)	-1.39 (29.5)	-1.94 (28.5)	-1.5 (29.3)	-6.6 (20.2)	-8.3 (17.1)	-5.4 (22.2)	-5.1 (22.9)
March	3.3 (38.0)	3.83 (38.9)	2.9 (37.2)	2.8 (37.1)	-2.8 (26.9)	-3.2 (26.3)	-1.6 (29.1)	-1.8 (28.7)
April	8.8 (47.9)	9.2 (48.5)	7.3 (45.2)	7.4 (45.4)	1.9 (35.5)	1.2 (34.1)	1.5 (34.7)	1.6 (34.9)
May	14.2 (57.6)	15.0 (59.0)	12.3 (54.1)	12.3 (54.2)	8.2 (46.7)	8.8 (47.8)	7.4 (45.4)	7.4 (45.4)
June	19.7 (67.4)	19.4 (66.9)	16.5 (61.7)	16.7 (62.0)	14.2 (57.5)	13.7 (56.7)	12.3 (54.1)	12.4 (54.3)
July	22.9 (73.2)	22.3 (73.9)	20.1 (68.2)	20.2 (68.4)	17.4 (63.4)	17.7 (63.8)	15.8 (60.4)	15.9 (60.6)
August	22.4 (72.3)	23.6 (74.4)	20.6 (69.0)	20.5 (68.9)	17.3 (63.1)	18.4 (65.2)	16.6 (61.9)	16.6 (61.8)
September	18.6 (65.5)	19.1 (66.3)	17.1 (62.7)	17.1 (62.7)	13.4 (56.2)	14.4 (58.0)	12.9 (55.2)	12.8 (55.1)
October	13.4 (56.1)	13.1 (55.5)	11.5 (52.7)	11.4 (52.5)	7.7 (45.8)	7.8 (46.0)	6.6 (43.9)	6.4 (43.6)
November	7.4 (45.4)	8.3 (46.9)	7.4 (45.4)	7.3 (45.2)	1.9 (35.4)	2.8 (37.0)	3.0 (37.4)	2.6 (36.7)
December	0.94 (33.7)	1.6 (34.9)	1.2 (34.2)	1.2 (34.1)	-4.3 (24.3)	-4.2 (24.4)	-2.4 (27.6)	-2.6 (27.3)
Annual	10.9 (51.7)	11.9 (53.5)	9.3 (48.7)	9.3 (48.7)	5.3 (41.5)	6.1 (42.9)	5.1 (41.1)	4.9 (40.9)

NOTE:

* 1949 through 1980 (26 years) (NOAA 1/1/49 through 4/30/53, 5/1/60 through 12/31/80)

TABLE 2.3-21

COMPARISON OF MONTHLY AND ANNUAL AVERAGE
RELATIVE HUMIDITY AVERAGES AT BRIDGEPORT AND MILLSTONE

1|

	Relative Humidity (%)			
	Bridgeport* 1949-1980	Bridgeport 1974-1980	Millstone 1974-1980	Millstone 1974-1981
January	69	69	82	80
February	67	62	78	78
March	67	64	74	73
April	66	61	70	70
May	71	70	75	75
June	73	72	78	77
July	74	73	77	77
August	75	75	79	79
September	74	76	78	77
October	70	72	74	73
November	70	71	75	74
December	70	68	78	77
Annual	71	70	76	76

*1949-1980 (26 years) (NOAA /1/49 through 4/30/53, 5/1/60 through 12/31/80)

TABLE 2.3-22

MEAN NUMBER OF DAYS WITH HEAVY FOG
AT BRIDGEPORT, CONN. AND BLOCK ISLAND

(1951-1981) [1]

	Mean Number of Days	
	Bridgeport 1951-1981	Block Island 1968-1981
January	3	4
February	3	4
March	3	5
April	3	9
May	4	11
June	4	11
July	2	12
August	1	11
September	1	5
October	2	4
November	1	3
December	2	3
Annual	29	82

(NOAA 1981)

TABLE 2.3-23

WIND DIRECTION/STABILITY CLASS/VISIBILITY JOINT FREQUENCY DISTRIBUTION AT MILLSTONE

Data Period = 1 Jan 74/0000 EST - 31 Dec 74/2300 EST

Wind Direction	Visibility meters (feet) 0-400 (0-1,312)					400-800 (1,312-2,625)					800-1600 (2,625-5,249)					1600-2400 (5,249-7,874)					2400-4800 (7,874-15,748)					GT 4800 (15,748)
	C	D	E	F	G	C	D	E	F	G	C	D	E	F	G	C	D	E	F	G	C	D	E	F	G	Any Stability Class
NNE	0	0	0	0	0	0	0	0	0	1	0	0	1	0	7	0	0	0	0	6	0	0	1	1	16	540
NE	0	0	0	0	2	0	0	0	0	0	0	0	0	1	1	0	0	0	0	5	0	0	0	0	10	346
ENE	0	0	0	0	6	0	0	0	0	1	0	0	0	0	4	0	0	0	0	4	0	0	0	2	15	249
E	0	0	0	0	4	0	0	0	0	10	0	0	0	0	10	0	0	0	0	9	0	0	0	0	31	298
ESE	0	0	0	0	4	0	0	0	0	6	0	0	0	0	11	0	0	0	0	3	0	0	0	0	22	267
SE	0	0	0	0	4	0	0	0	0	6	0	0	0	0	7	0	0	0	0	10	0	0	0	1	20	226
SSE	0	0	0	0	4	0	0	0	0	5	0	0	0	0	5	0	0	0	0	4	0	0	0	0	21	227
S	0	0	0	0	2	0	0	0	0	6	0	0	0	0	6	0	0	0	0	5	0	0	0	0	15	232
SSW	0	0	0	0	8	0	0	0	0	2	0	0	0	0	13	0	0	0	0	11	0	0	0	0	28	407
SW	0	0	0	0	18	0	0	0	0	14	0	0	0	0	15	0	0	0	0	10	0	0	0	0	41	628
WSW	0	0	0	0	14	0	0	0	0	10	0	0	0	0	20	0	0	0	0	4	0	0	1	3	38	703
W	0	0	0	0	5	0	0	0	0	7	0	0	0	1	8	0	0	0	0	2	0	0	0	1	20	502
WNW	0	0	0			0	0	0	0	2	0	0	0	0	2	0	0	0	0	8	0	0	0	0	24	580
NW	0	0	0	0	2	0	0	0	0	1	0	0	0	0	2	0	0	0	0	5	0	0	0	1	19	768
NNW	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	1	13	638
N	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	2	0	1	1	0	13	552
All Directions	0	0	0	0	75	0	0	0	0	74	0	0	1	2	114	0	0	0	0	88	0	1	3	10	346	7,163

NOTES:

Total number of good visibility data = 8,008

Number of good visibility data <4,800 meters (15,748 feet) = 829

Number of good C-G stability data (for visibility <4,800 meters) = 715

Number of good wind direction data (for visibility <4,800 meters) = 82

Total number of missing visibility data = 752

Number of missing C-G stability data (for visibility <4,800 meters) = 114

Number of missing wind direction data (for visibility <4,800 meters) = 3

TABLE 2.3-27

MILLSTONE STABILITY CLASS DISTRIBUTION
USING SIGMA THETA FOR STABILITY DETERMINATION

Wind Instrument Level Meters	(ft)	Valid Data (hr)	Data Period	Pasquill Stability Class Frequency (%) A	B	C	D	E	F	G
10	33	66,831	1/174-12/31/81	5.4	3.2	8.9	32.1	34.6	13.0	2.6
43	142	66,867	1/1/74-12/31/81	2.5	1.5	4.2	19.5	42.1	20.2	10.0
114	374	66,743	1/1/74-12/31/81	1.5	0.8	2.2	9.7	38.1	26.2	23.6
136	447	66,286	1/1/74-12/31/81	1.4	0.7	2.1	8.9	35.3	27.3	24.3

NOTE:

Sigma Theta = Wind direction fluctuation

TABLE 2.3-28

COMPARISON OF PASQUILL STABILITY CLASS DISTRIBUTION AT BRIDGEPORT, CONN. AND MILLSTONE

		Valid Data (hr)	Data Period	Pasquill Stability Class Frequency (%)						
				A	B	C	D	E	F	G
1	Millstone*	57,469	1/1/74-12/31/80	6.6	6.6	13.1	33.0	19.7	12.2	7.7
	Millstone**	57,726	1/1/74-12/31/80	0.9	2.4	8.2	45.6	29.7	11.1	1.9
	Millstone***	57,452	1/1/74-12/31/80	0.3	0.8	6.5	47.9	32.6	10.4	1.1
	Bridgeport****	21,462	1/1/74-12/31/80	0.0	2.3	8.9	71.3	11.5	5.4	0.6
1	Millstone*	65,582	1/1/74-12/31/81	6.4	6.5	13.3	33.2	19.5	12.3	7.6
	Millstone**	66,001	1/1/74-12/31/81	0.9	2.4	8.4	45.3	29.7	11.2	1.9
	Millstone***	65,728	1/1/74-12/31/81	0.3	0.8	6.4	47.7	32.8	10.6	1.1

NOTES:

* Stability class determined by the 10-43-meter (33-142-foot) temperature difference, using 10-meter (33-foot) level winds

1 ** Stability class determined by the 10-114-meter (33-374-foot) temperature difference, using 114-meter (374-foot) level winds

*** Stability class determined by the 10-136-meter (33-447-foot) temperature difference, using 136-meter (447-foot) level winds

**** Stability class determined by the STAR (Millstone Unit 3 PSAR Amendment 22 Q 2.11) program of the National Climate Center observations recorded every third hour beginning March 1, 1965

TABLE 2.3-32

MEDIAN (50-PERCENT EQUAL RISK) GROUND-LEVEL X/Q VALUES
($\times 10^{-6}$ sec/m^3) AT THE LOW POPULATION ZONE FOR THE
0- TO 30-DAY PERIOD FOLLOWING AN ACCIDENT
(Containment Building)

Downwind Sector	Distance (m)	0-2 hr	0-8 hr	8-24 hr	1-4 day	4-30 day	
N	3862	2.71	1.92	1.61	1.11	0.644	
NNE	3862	6.50	4.06	3.21	1.93	0.926	
NE	3862	13.20	7.72	5.90	3.30	1.43	
ENE	3862	11.10	6.68	5.19	3.01	1.37	
E	3862	5.12	3.41	2.78	1.79	0.52	
ESE	3862	5.14	3.48	2.36	1.87	1.02	
SE	3862*	4.89	3.31	2.72	1.78	0.970	| 1
SSE	3862*	4.42	2.97	2.44	1.58	0.853	| 1
S	3862*	4.78	3.29	2.74	1.83	1.02	| 1
SSW	3862*	5.01	3.54	2.98	2.04	1.19	| 1
SW	3862	1.93	1.51	1.33	1.01	0.686	
WSW	3862	0.232	0.232	0.232	0.232	0.232	
W	3862	1.04	0.781	0.676	0.494	0.315	
WNW	3862	2.46	1.69	1.40	0.934	0.521	
NW	3862	1.48	1.15	1.01	0.770	0.520	
NNW	3862	0.289	0.289	0.289	0.289	0.289	

NOTES:

*Overwater sector

\| 1

TABLE 2.3-33

MEDIAN (50-PERCENT EQUAL RISK) GROUND-LEVEL X/Q VALUES
($\times 10^{-5}$ sec/m^3) AT THE EXCLUSION AREA BOUNDARY FOR
THE 0-720-HOUR PERIOD FOLLOWING AN ACCIDENT
(Containment Ventilation Vent)

Downwind Sector	Distance (m)	0-2 hr	0-8 hr	8-24 hr	1-4 day	4-30 day
N	722	3.41	2.91	2.69	2.26	1.77
NNE	1383	2.68	1.97	1.69	1.21	0.752
NE	706	10.70	8.18	7.15	5.33	3.50
ENE	600	10.80	8.67	7.77	6.12	4.34
E	600*	7.00	5.87	5.38	4.44	3.38
ESE	600*	7.00	5.98	5.52	4.65	3.64
SE	600*	6.92	5.88	5.42	4.55	3.53
SSE	600*	6.53	5.48	5.02	4.15	3.16
S	600*	6.77	5.84	5.43	4.63	3.68
SSW	600*	7.00	6.20	5.84	5.12	4.24
SW	600*	4.10	3.74	3.57	3.23	2.80
WSW	600*	1.29	1.29	1.29	1.29	1.29
W	600*	2.35	2.05	1.91	1.65	1.33
WNW	600*	4.15	3.47	3.18	2.62	1.98
NW	600	3.13	2.85	2.71	2.45	2.11
NNW	644	1.39	1.39	1.39	1.39	1.39

NOTE:

*Overwater sector

TABLE 2.3-34

MEDIAN (50-PERCENT EQUAL RISK) ELEVATED X/Q VALUES ($x10^{-6}$ sec/m^3) AT THE LOW POPULATION ZONE FOR THE 0- TO 720-HOUR PERIOD FOLLOWING AN ACCIDENT (Containment Ventilation Vent)

Downwind Sectors	Distance (meters)	0-2 hr	0-8 hr	8-24 hr	1-4 day	4-30 day
N	3862	2.74	1.93	1.62	1.11	0.646
NNE	3862	6.59	4.11	3.24	1.94	0.936
NE	3862	13.60	7.92	6.04	3.35	1.44
ENE	3862	11.50	6.90	5.35	3.07	1.39
E	3862	5.14	3.42	2.79	1.80	0.953
ESE	3862	5.14	3.48	2.86	1.87	1.02
SE	3862*	4.91	3.32	2.73	1.79	0.971
SSE	3862*	4.42	2.97	2.44	1.58	0.853
S	3862*	4.78	3.29	2.74	1.83	1.02
SSW	3862*	5.11	3.60	3.02	2.06	1.20
SW	3862	1.95	1.52	1.34	1.02	0.688
WSW	3862	0.232	0.232	0.232	0.232	0.232
W	3862	1.05	0.782	0.677	0.494	0.315
WNW	3862	2.48	1.70	1.41	0.939	0.523
NW	3862	1.48	1.15	1.01	0.771	0.521
NNW	3862	0.289	0.289	0.289	0.289	0.289

NOTES:

*Overwater sector

TABLE 2.3-35

MEDIAN (50-PERCENT EQUAL RISK) ELEVATED χ/Q VALUES ($\times 10^{-7}$ sec/m^3)
AT THE EXCLUSION AREA BOUNDARY
FOR THE 0- TO 2-HOUR PERIOD FOLLOWING AN ACCIDENT
(Millstone 1 Stack)

Downwind Sector	Distance (meters)	0-2 hr
N	1,695	16.30
NNE	813	28.10
NE	496	17.80
ENE*	496	14.50
E*	496	11.60
ESE*	496	8.91
SE*	496	8.02
SSE*	496	6.71
S*	496	4.15
SSW*	496	5.09
SW*	496	6.02
WSW*	496	3.24
W*	496	5.34
WNW	649	4.10
NW	710	3.62
NNW	1,029	0.54

NOTES:

1 | χ/Q values in this table are not used for any dose calculations but are presented for information only.

* Overwater sector

TABLE 2.3-36

MEDIAN (50-PERCENT EQUAL RISK) ELEVATED X/Q VALUES ($x10^{-7}$ sec/m^3)
AT THE LOW POPULATION ZONE
FOR THE 30-DAY PERIOD FOLLOWING AN ACCIDENT
(Millstone 1 Stack) |1

Downwind Sectors	Distance (meters)	0-2 hr	0-8 hr	8-24 hr	1-4 day	4-30 day
N	3862	16.30	9.48	7.23	4.01	1.72
NNE	3862	26.70	15.30	11.60	6.32	2.65
NE	3862	17.80	9.75	7.23	3.77	1.48
ENE	3862	14.10	8.68	6.81	4.03	1.90
E	3862	11.00	6.74	5.28	3.11	1.45
ESE	3862	8.86	5.43	4.25	2.49	1.16
SE	3862*	8.00	5.11	4.08	2.51	1.25
SSE	3862*	6.71	4.16	3.27	1.95	0.92
S	3862*	4.15	2.45	1.88	1.06	0.46
SSW	3862*	5.09	3.07	2.39	1.38	0.63
SW	3862	6.02	3.67	2.87	1.67	0.77
WSW	3862	3.24	1.98	1.55	0.91	0.42
W	3862	5.34	3.20	2.48	1.42	0.64
WNW	3862	4.10	2.82	2.33	1.55	0.86
NW	3862	3.56	2.53	2.13	1.47	0.86
NNW	3862	0.54	0.54	0.54	0.54	0.54

NOTES:

X/Q values in this table are not used for any dose calculations |1
but are presented for information only.

*Overwater sector

TABLE 2.3-37

MEDIAN (50-PERCENT EQUAL RISK) FUMIGATION X/Q VALUES ($x10^{-5}$ sec/m^3)
AT THE EXCLUSION AREA BOUNDARY
FOR THE ELEVATED RELEASE DOSE CALCULATION
(MILLSTONE 1 STACK)

Downwind Sector	Distance (meters)	X/Q
N	1,695	0.79
NNE	813	1.32
NE	496	1.97
ENE	496	1.91
E	496	1.91
ESE	496	1.86
WSW	496	1.81
W	496	1.81
WNW	649	1.45
NW	710	1.34
NNW	1,029	1.03

NOTE:

1 X/Q values in this table are not used for any dose calculations but are presented for information only.

TABLE 2.3-38

MEDIAN (50-PERCENT) FUMIGATION X/Q VALUES ($\times 10^{-6}$ sec/m^3)
AT THE LOW POPULATION ZONE
FOR ELEVATED RELEASE DOSE CALCULATIONS
(MILLSTONE 1 STACK)

Downwind Sector	Distance (meters)	X/Q
N	3862	5.25
NNE	3862	5.61
NE	3862	3.77
ENE	3862	3.80
E	3862	3.52
ESE	3862	3.01
SW	3862	2.93
WSW	3862	3.20
W	3862	3.10
WNW	3862	4.94
NW	3862	5.96
NNW	3862	6.47

NOTE:

X/Q values in this table are not used for any dose calculations but are presented for information only. | 1

TABLE 2.3-39

RADIOLOGICAL PATHWAY ANALYSES DISTANCES (to 8 km - 5 miles) (a) FOR MILLSTONE 3
VENTILATION VENT AND MILLSTONE 1 114-METER (375-FOOT) STACK (IN PARENTHESES) (g)

	Nearest Milk Cow	Nearest Meat Animal (b)	Nearest Milk Goat km (mile)	Nearest Residence km (mile)	Nearest Vegetable Garden km (mile) (c)	Nearest Site Boundary km (mile) (d,e)	Nearest Land km (mile) (f)
N	-	-	3.2 (2.0)	0.92 (0.58) (NNW-1.19 (0.74))	0.92 (0.58) (NNW-1.19 (0.74))	0.92 (0.58) (NNW-1.19 (0.74))	0.92 (0.58) (NNW-1.19 (0.74))
NNE	-	-	2.4 (1.5)	1.55 (0.97) (N-1.73 (1.08))	1.55 (0.97) (N-1.73 (1.08))	1.55 (0.97) (N-1.73 (1.08))	1.55 (0.97) (N-1.73 (1.08))
NE	-	-	-	0.84 (0.53) (NNE-0.81 (0.51)	0.84 (0.53) (NNE-0.81 (0.51)	0.84 (0.53) (NNE-0.81 (0.51)	0.84 (0.53) (NNE-0.81 (0.51)
ENE	-	-	3.2 (2.0)	0.81 (0.51) (NE-0.78 (0.49))	0.81 (0.51) (NE-0.78 (0.49))	0.60 (0.38) (NE-0.50 (0.31))	0.60 (0.38) (NE-0.50 (0.31))
E	-	-	-	1.30 (0.81) (ENE-1.10 (0.69))	1.30 (0.81) (ENE-1.10 (0.69))	0.60 (0.38) (ENE-0.35 (0.22))	1.30 (0.81) (ENE-1.10 (0.69)
ESE	-	-	-	1.69 (1.05) (E-1.40 (0.88))	1.69 (1.06) (E-1.40 (0.88))	0.60 (0.38) (ESE-0.28 (0.18))	1.69 (1.06) (E-1.40 (0.88))
SE	-	-	-	33.0 (20.6) (SE-33.0 (20.6))	33.0 (20.6) (SE-33.0 (20.6))	0.60 (0.38) (SE-0.28 (0.18))	33.0 (20.6) (SE-33.0 (20.6))
SSE	-	-	-	22.2 (13.9) (SSE-22.2 (13.9))	22.2 (13.9) (SSE-22.2 (13.9))	0.63 (0.39) (SSW-0.44 (0.28)	22.2 (13.9) (SSE-22.2 (13.9))
S	-	-	-	16.1 (10.1) (S-16.1 (10.1))	16.1 (10.1) (S-16.1 (10.1))	0.60 (0.38) (SSW-0.42 (0.26))	16.1 (10.1) (S-16.1 (10.1))
SSW	-	-	-	18.3 (11.4) (SSW-18.3 (11.4))	18.3 (11.4) (SSW-18.3 (11.4))	0.60 (0.38) (SW-0.48 (0.30))	18.3 (11.4) (SSW-18.3 (11.4))
SW	-	-	-	3.38 (2.11) (WSW-3.48 (2.18))	3.38 (2.11) (WSW-3.48 (2.18))	0.60 (0.38) (WSW-0.66 (0.41))	3.38 (2.11) (WSW-3.48 (2.18))
WSW	-	-	-	3.05 (1.91) (W-3.08 (1.93))	3.05 (1.91) (W-3.08 (1.93))	0.60 (0.38) (W-0.77 (0.48))	3.05 (1.91) (W-3.08 (1.93))

TABLE 2.3-39 (Cont)

	Nearest Milk Cow	Nearest Meat Animal (b)	Nearest Milk Goat km (mile)	Nearest Residence km (mile)	Nearest Vegetable Garden km (mile) (c)	Nearest Site Boundary km (mile) (d,e)	Nearest Land km (mile) (f)
W	-	-	4.0 (2.5)	2.70 (1.69) (NNW-2.66 (1.66))	2.70 (1.69) (NNW-2.66 (1.66))	0.60 (0.38) (W-0.85 (0.53))	2.70 (1.69) (NNW-2.66 (1.66))
WNW	72. (4.5)	-	-	2.31 (1.44) (NNW-2.56 (1.6))	2.31 (1.44) (NNW-2.56 (1.6))	0.60 (0.38) (WNW-0.90 (0.56))	2.31 (1.44) (NNW-2.56 (1.6))
NW	-	-	4.8 (3.0)	0.68 (0.43) (NW-1.00 (0.63))	0.68 (0.43) (NW-1.00 (0.63))	0.60 (0.38) (NW-0.92 (0.58))	0.68 (0.43) (NW-1.00 (0.63))
NNW	-	-	-	0.69 (0.43) (NNW-1.01 (0.63))	0.69 (0.43) (NNW-1.01 (0.63))	0.69 (0.43) (NNW-1.01 (0.63))	0.69 (0.43) (NNW-1.01 (0.63))
				Radiological Pathway Analyses Distance (to 8 km - 5 miles) for Millstone 3 Turbine Building Vent			
N	-	-	3.2 (2.0)	0.92 (0.58)	0.92 (0.58)	0.92 (0.58	0.92 (0.58)
NNE	-	-	2.4 (1.5)	1.58 (0.99)	1.58 (0.99)	1.58 (0.99)	1.58 (0.99)
NE	-	-	-	0.87 (0.54)	0.87 (0.54)	0.87 (0.54)	0.87 (0.54)
ENE	-	-	3.2 (2.0)	0.83 (0.52)	0.82 (0.52)	0.62(d) (0.39)	0.62 (0.39)
E	-	-	-	1.32 (0.83)	1.32 (0.83)	0.62 (0.39)	1.32 (0.83)
ESE	-	-	-	1.70 (1.06)	1.70 (1.06)	0.62 (0.39)	1.70 (1.06)
SE	-	-	-	33.0 (20.6)	33.0 (20.6)	0.62 (0.39)	33.0 (20.6)
SSE	-	-	-	22.2 (13.9)	22.2 (13.9)	0.62 (0.39)	22.2 (13.9)
S	-	-	-	16.1 (10.1)	16.1 (10.1)	0.62 (0.39)	16.1 (10.1)
SSW	-	-	-	18.3 (11.4)	18.3 (11.4)	0.62 (0.39)	18.3 (11.4)
SW	-	-	-	3.35 (2.10)	3.36 (2.10)	0.62 (0.39)	3.36 (2.10)
WSW	-	-	-	3.03 (1.89)	3.03 (1.89)	0.62 (0.39)	3.03 (1.89)

TABLE 2.3-39 (Cont)

	Nearest Milk Cow	Nearest Meat Animal (b)	Nearest Milk Goat km (mile)	Nearest Residence km (mile)	Nearest Vegetable Garden km (mile) (c)	Nearest Site Boundary km (mile) (d,e)	Nearest Land km (mile) (f)
W	-	-	4.0 (2.5)	2.69 (1.68)	2.69 (1.68)	0.62 (0.39)	2.69 (1.68)
WNW	7.2 (4.5)	-	-	2.31 (1.44)	2.31 (1.44)	0.62 (0.39)	2.31 (1.44)
NW	-	-	4.8 (3.0)	1.01 (0.63)	1.01 (0.63)	0.62 (0.39)	1.01 (0.63)
NNW	-	-	-	0.69 (0.43)	0.69 (0.43)	0.65 (0.41)	0.69 (0.43)

NOTES:

(a) All distances are in kilometers (miles)

(b) There are no commercial facilities within 8 km (5 miles)

(c) For conservatism, it is assumed that there is a vegetable garden greater than 500m^3 (5,380 ft^2) in area at the nearest residence

(d) Shortest site boundary distance in any landward sector

(e) For water sectors, (d) is used where greater than the distance to the shoreline

(f) For waterfront sectors, the distance to the land across the body of water is applied

(g) EX. Location from the MP-1 stack corresponding to the nearest residence 0.92 km (0.58 miles) north of the MP-3 ventilation vent is NNW-1.19 km (0.74 miles). For normal operational effluent releases, the MP-3 vent will be the primary dose contributor. However, for calculation of maximum individual doses, the additional incremental dose from the corresponding MP-1 stack location is added to the MP-3 vent doses.

TABLE 2.3-40

ANNUAL AVERAGE X/Q VALUES (sec/m³) FOR
MILLSTONE 1 STACK RELEASE

Population Receptor Distances (km)

Downwind Sector	Property Boundary	1	3	5	7	9	15	30	50	70
S	2.14E-9*	1.60E-8	1.04E-8	8.70E-9	7.11E-9	5.83E-9	3.76E-9	2.25E-9	1.10E-9	7.21E-10
SSW	3.34E-9	1.62E-8	1.25E-8	1.04E-8	8.27E-9	6.64E-9	4.52E-9	2.76E-9	1.46E-9	7.47E-10
SW	1.48E-9	1.35E-8	1.39E-8	1.09E-8	8.03E-9	6.56E-9	4.05E-9	2.17E-9	1.61E-9	1.15E-9
WSW	4.74E-9	3.63E-9	1.17E-8	8.75E-9	8.78E-9	7.32E-9	4.05E-9	1.81E-9	1.04E-9	9.91E-10
W	5.45E-9	6.48E-9	1.07E-8	1.27E-8	1.10E-8	1.06E-8	5.37E-9	3.42E-9	1.91E-9	1.26E-9
WNW	8.70E-9	9.75E-9	1.38E-8	2.25E-8	1.41E-8	1.40E-8	8.53E-9	3.77E-9	1.91E-9	1.22E-9
NW	6.80E-9	7.09E-9	2.91E-8	2.22E-8	2.18E-8	1.91E-8	1.06E-8	4.24E-9	2.16E-9	1.39E-9
NNW	7.13E-9	5.03E-9	1.13E-8	2.86E-8	1.47E-8	1.50E-8	1.13E-8	4.39E-9	2.25E-9	1.44E-9
N	5.20E-9	1.27E-8	2.11E-8	3.06E-8	2.33E-8	2.42E-8	1.51E-8	5.92E-9	3.05E-9	1.97E-9
NNE	1.18E-8	1.16E-8	5.01E-8	4.91E-8	2.94E-8	3.26E-8	1.96E-8	8.42E-9	4.35E-9	2.80E-9
NE	1.13E-8	1.37E-8	3.14E-8	3.13E-8	2.87E-8	3.24E-8	2.45E-8	1.14E-8	5.85E-9	3.76E-9
ENE	9.29E-9	1.78E-8	3.88E-8	3.10E-8	2.18E-8	2.20E-8	1.97E-8	8.98E-9	5.85E-9	3.61E-9
E	1.96E-9	2.37E-8	3.06E-8	2.13E-8	1.28E-8	1.05E-8	8.29E-9	5.10E-9	2.34E-9	1.32E-9
ESE	6.11E-10	3.26E-8	2.58E-8	1.76E-8	1.26E-8	1.02E-8	7.36E-9	2.99E-9	2.02E-9	1.14E-9
SE	3.04E-9	7.42E-8	3.53E-8	2.38E-8	1.80E-8	1.40E-8	8.13E-9	4.47E-9	2.07E-9	1.38E-9
SSE	2.52E-9	4.37E-8	2.12E-8	1.65E-8	1.29E-8	1.03E-8	6.20E-9	3.24E-9	1.65E-9	1.11E-9

NOTE:

* E-9 = 10^{-9}

TABLE 2.3-41

ANNUAL AVERAGE D/Q VALUES (m^{-2}) FOR
MILLSTONE 1 STACK RELEASE

Population Receptor Distances (km)

Downwind Sector	Property Boundary	1	3	5	7	9	15	30	50	70
S	3.58E-9*	2.56E-9	5.73E-10	2.35E-10	1.25E-10	7.54E-11	3.11E-11	1.03E-11	4.64E-12	2.69E-12
SSW	2.80E-9	2.85E-9	6.98E-10	2.89E-10	1.54E-10	9.29E-11	3.83E-11	1.24E-11	5.52E-12	3.26E-12
SW	8.75E-10	2.35E-9	6.12E-10	2.56E-10	1.36E-10	8.21E-11	3.38E-11	1.11E-11	4.82E-12	2.95E-12
WSW	1.33E-9	1.03E-9	4.21E-10	1.82E-10	9.75E-11	5.87E-11	2.41E-11	7.80E-12	3.37E-12	1.89E-12
W	1.33E-9	1.35E-9	4.40E-10	1.88E-10	1.00E-10	6.73E-11	2.56E-11	1.66E-11	5.76E-12	3.06E-12
WNW	1.57E-9	1.53E-9	3.79E-10	1.76E-10	8.92E-11	6.16E-11	4.05E-11	1.29E-11	5.15E-12	2.74E-12
NW	1.15E-9	1.13E-9	3.12E-10	1.27E-10	7.39E-11	6.80E-11	3.98E-11	1.26E-11	5.02E-12	2.67E-12
NNW	1.12E-9	6.82E-10	2.13E-10	1.04E-10	5.06E-11	3.85E-11	3.95E-11	1.22E-11	4.86E-12	2.58E-12
N	7.05E-10	8.67E-10	2.43E-10	1.13E-10	5.96E-11	7.46E-11	5.39E-11	1.65E-11	6.60E-12	3.51E-12
NNE	5.82E-10	1.25E-9	4.17E-10	1.77E-10	8.84E-11	9.29E-11	9.17E-11	2.67E-11	1.06E-11	5.64E-12
NE	1.28E-9	1.97E-9	5.79E-10	2.45E-10	1.31E-10	8.81E-11	1.35E-10	3.91E-11	1.56E-11	8.27E-12
ENE	2.16E-9	3.16E-9	8.22E-10	3.43E-10	1.82E-10	1.10E-10	4.98E-11	2.73E-11	1.75E-11	1.16E-11
E	3.12E-9	4.28E-9	9.24E-10	3.77E-10	2.00E-10	1.21E-10	5.00E-11	1.64E-11	7.50E-12	4.36E-12
ESE	5.27E-9	5.95E-9	1.17E-9	4.70E-10	2.49E-10	1.51E-10	6.23E-11	2.08E-11	9.50E-12	5.54E-12
SE	1.17E-8	1.23E-8	2.00E-9	7.80E-10	4.11E-10	2.50E-10	1.03E-10	3.50E-11	1.64E-10	9.66E-12
SSE	3.57E-9	6.60E-9	1.24E-9	4.96E-10	2.62E-10	1.59E-10	6.58E-11	2.20E-11	1.01E-11	5.91E-12

NOTE:

* E-9 = 10^{-9}

TABLE 2.3-42

GROWING SEASON X/Q VALUES (sec/m³) FOR
MILLSTONE I STACK RELEASE

Population Receptor Distances (km)

Downwind Sector	Property Boundary	1	3	5	7	9	15	30	50	70
S	3.60E-9*	2.16E-8	9.61E-9	7.23E-9	5.82E-9	4.81E-9	3.39E-9	2.05E-9	1.00E-9	6.69E-10
SSW	4.87E-9	2.15E-8	1.27E-8	9.73E-9	7.63E-9	6.13E-9	4.26E-9	2.76E-9	1.49E-9	7.39E-10
SW	2.45E-9	1.95E-8	1.53E-8	1.10E-8	7.93E-9	6.40E-9	3.93E-9	2.43E-9	1.68E-9	1.24E-9
WSW	7.66E-9	5.54E-9	1.08E-8	8.02E-9	8.13E-9	6.84E-9	3.84E-9	1.74E-9	1.01E-9	1.00E-9
W	8.73E-9	1.02E-8	1.32E-8	1.53E-8	1.34E-8	1.30E-8	6.65E-9	4.37E-9	2.50E-9	1.65E-9
WNW	1.26E-8	1.42E-8	1.76E-8	2.84E-8	1.78E-8	1.76E-8	1.07E-8	4.68E-9	2.38E-9	1.52E-9
NW	1.03E-8	1.08E-8	3.74E-8	2.89E-8	2.84E-8	2.48E-8	1.35E-8	5.39E-9	2.74E-9	1.75E-9
NNW	1.08E-8	6.48E-9	1.46E-8	3.75E-8	1.94E-8	1.96E-8	1.47E-8	5.74E-9	2.93E-9	1.89E-9
N	6.74E-9	1.83E-8	2.68E-8	4.05E-8	3.10E-8	3.21E-8	2.02E-8	7.88E-9	4.06E-9	2.61E-9
NNE	1.47E-8	1.33E-8	6.22E-8	6.34E-8	3.81E-8	4.25E-8	2.55E-8	1.09E-8	5.62E-9	3.61E-9
NE	1.40E-8	1.29E-8	3.37E-8	3.68E-8	3.52E-8	4.10E-8	3.16E-8	1.49E-8	7.65E-9	4.94E-9
ENE	1.29E-8	1.24E-8	3.54E-8	3.16E-8	2.31E-8	2.47E-8	2.40E-8	1.12E-8	7.48E-9	4.63E-9
E	1.99E-9	5.58E-9	1.69E-8	1.44E-8	9.00E-9	7.95E-9	7.42E-9	5.29E-9	2.41E-9	1.32E-9
ESE	1.55E-10	1.08E-8	1.29E-8	9.86E-9	7.47E-9	6.33E-9	5.24E-9	2.22E-9	1.71E-9	9.40E-10
SE	2.90E-9	5.15E-8	2.20E-8	1.56E-8	1.22E-8	9.83E-9	6.03E-9	3.74E-9	1.72E-9	1.19E-9
SSE	4.21E-9	4.46E-8	1.67E-8	1.25E-8	9.91E-9	8.04E-9	5.01E-9	2.80E-9	1.45E-9	1.00E-9

NOTE:

* E-9 = 10^{-9}

TABLE 2.3-43

GROWING SEASON D/Q VALUES (m^{-2}) FOR
MILLSTONE I STACK RELEASE

Population Receptor Distances (km)

Downwind Sector	Property Boundary	1	3	5	7	9	15	30	50	70
S	4.50E-9*	2.87E-9	4.94E-10	1.95E-10	1.03E-10	6.24E-11	2.58E-11	8.69E-12	4.04E-12	2.37E-12
SSW	3.92E-9	3.27E-9	6.61E-10	2.67E-10	1.41E-10	8.58E-11	3.54E-11	1.16E-11	5.28E-12	3.13E-12
SW	1.11E-9	2.98E-9	6.38E-10	2.60E-10	1.38E-10	8.34E-11	3.44E-11	1.14E-11	5.04E-12	3.12E-12
WSW	1.90E-9	1.14E-9	3.79E-10	1.62E-10	8.64E-11	5.21E-11	2.14E-11	6.97E-12	3.04E-12	1.72E-12
W	1.87E-9	1.85E-9	5.27E-10	2.22E-10	1.18E-10	7.91E-11	3.03E-11	1.94E-11	6.74E-12	3.57E-12
WNW	2.18E-9	2.16E-9	4.78E-10	2.17E-10	1.10E-10	7.40E-11	4.92E-11	1.57E-11	6.27E-12	3.33E-12
NW	1.59E-9	1.54E-9	3.80E-10	1.55E-10	8.88E-11	8.32E-11	4.93E-11	1.56E-11	6.24E-12	3.31E-12
NNW	1.56E-9	8.84E-10	2.68E-10	1.30E-10	6.35E-11	4.46E-11	4.90E-11	1.51E-11	6.02E-12	3.20E-12
N	9.06E-10	1.14E-9	2.90E-10	1.32E-10	7.00E-11	9.00E-11	6.78E-11	2.08E-11	8.31E-12	4.41E-12
NNE	7.14E-10	1.41E-9	4.53E-10	1.93E-10	9.64E-11	1.05E-10	1.17E-10	3.35E-11	1.33E-11	7.06E-12
NE	1.45E-9	1.70E-9	5.36E-10	2.28E-10	1.22E-10	8.19E-11	1.69E-10	4.76E-11	1.90E-11	1.01E-11
ENE	1.77E-9	2.06E-9	6.04E-10	2.55E-10	1.36E-10	8.19E-11	3.75E-11	2.69E-11	1.96E-11	1.37E-11
E	1.87E-9	1.32E-9	4.13E-10	1.75E-10	9.34E-11	5.63E-11	2.32E-11	7.48E-12	3.32E-12	1.90E-12
ESE	1.68E-9	2.17E-9	5.53E-10	2.30E-10	1.22E-10	7.39E-11	3.05E-11	1.00E-11	4.47E-12	2.57E-12
SE	7.21E-9	7.63E-9	1.26E-9	4.94E-10	2.60E-10	1.58E-10	6.55E-11	2.21E-11	1.03E-11	6.09E-12
SSE	4.48E-9	5.90E-9	9.69E-10	3.79E-10	2.00E-10	1.21E-10	5.03E-11	1.70E-11	7.94E-12	4.68E-12

NOTE:

* E-9 = 10^{-9}

TABLE 2.3-46

ANNUAL AVERAGE X/Q VALUES (sec/m³) FOR
CONTAINMENT VENTILATION VENT RELEASE

Population Receptor Distances (km)

Downwind Sector	Property Boundary	1	3	5	7	9	15	30	50	70
S	1.36E-6*	7.43E-7	1.33E-7	6.20E-8	3.77E-8	2.63E-8	1.35E-8	6.92E-9	3.19E-9	2.02E-9
SSW	1.47E-6	7.99E-7	1.35E-7	6.18E-8	3.75E-8	2.61E-8	1.48E-8	7.78E-9	3.96E-9	2.06E-9
SW	1.14E-6	6.39E-7	1.36E-7	5.91E-8	3.33E-8	2.32E-8	1.16E-8	5.46E-9	3.50E-9	2.26E-9
WSW	6.29E-7	3.65E-7	1.15E-7	4.57E-8	3.25E-8	2.30E-8	1.03E-8	3.94E-9	2.12E-9	1.79E-9
W	9.25E-7	5.06E-7	1.15E-7	6.36E-8	3.99E-8	2.91E-8	1.27E-8	5.09E-9	2.58E-9	1.65E-9
WNW	8.75E-7	4.80E-7	1.46E-7	9.53E-8	4.99E-8	3.39E-8	1.49E-8	5.78E-9	2.94E-9	1.88E-9
NW	8.96E-7	4.82E-7	2.71E-7	1.05E-7	5.98E-8	3.85E-8	1.69E-8	6.63E-9	3.40E-9	2.19E-9
NNW	8.06E-7	5.45E-7	1.66E-7	1.03E-7	5.21E-8	3.50E-8	1.55E-8	6.07E-9	3.10E-9	1.99E-9
N	1.22E-6	1.15E-6	2.54E-7	1.21E-7	6.52E-8	4.25E-8	1.88E-8	7.38E-9	3.79E-9	2.44E-9
NNE	6.82E-7	1.30E-6	4.14E-7	1.63E-7	8.51E-8	5.68E-8	2.50E-8	9.86E-9	5.07E-9	3.27E-9
NE	1.95E-6	1.61E-6	3.98E-7	1.74E-7	1.05E-7	7.54E-8	3.38E-8	1.34E-8	6.87E-9	4.43E-9
ENE	3.99E-6	2.03E-6	4.91E-7	2.00E-7	1.08E-7	8.22E-8	4.14E-8	1.64E-8	8.48E-9	5.48E-9
E	2.23E-6	1.23E-6	3.33E-7	1.36E-7	6.58E-8	4.60E-8	2.79E-8	1.32E-8	6.14E-9	3.44E-9
ESE	1.96E-6	1.09E-6	2.25E-7	9.25E-8	5.19E-8	3.63E-8	2.20E-8	7.94E-9	5.18E-9	2.84E-9
SE	2.58E-6	1.41E-6	2.38E-7	1.00E-7	5.95E-8	4.08E-8	1.99E-8	9.93E-9	4.38E-9	2.87E-9
SSE	1.94E-6	1.15E-6	1.94E-7	8.75E-8	5.25E-8	3.63E-8	1.79E-8	8.40E-9	4.07E-9	2.68E-9

NOTE:

* E-6 = 10^{-6}

TABLE 2.3-47

ANNUAL AVERAGE D/Q VALUES (m^{-2}) FOR
CONTAINMENT VENTILATION VENT RELEASE

Population Receptor Distances (km)

Downwind Sector	Property Boundary	1	3	5	7	9	15	30	50	70
S	1.77E-8*	1.00E-8	1.09E-9	3.70E-10	1.84E-10	1.10E-10	4.25E-11	2.13E-11	5.74E-12	3.44E-12
SSW	1.92E-8	1.08E-8	1.15E-9	3.86E-10	1.92E-10	1.15E-10	4.41E-11	2.17E-11	8.69E-12	3.51E-12
SW	1.56E-8	8.95E-9	1.03E-9	3.41E-10	1.68E-10	1.00E-10	3.86E-11	1.19E-11	7.31E-12	3.90E-12
WSW	9.71E-9	5.71E-9	7.22E-10	2.36E-10	1.18E-10	7.18E-11	2.66E-11	8.04E-12	3.42E-12	2.78E-12
W	1.70E-8	8.87E-9	9.09E-10	3.12E-10	1.60E-10	1.26E-10	4.93E-11	1.53E-11	6.10E-12	3.24E-12
WNW	1.31E-8	6.88E-9	7.56E-10	4.13E-10	1.92E-10	1.20E-10	4.63E-11	1.42E-11	5.66E-12	3.00E-12
NW	1.15E-8	5.99E-9	1.07E-9	3.88E-10	2.02E-10	1.19E-10	4.59E-11	1.41E-11	5.61E-12	2.98E-12
NNW	8.76E-9	5.38E-9	5.69E-10	3.63E-10	1.65E-10	1.02E-10	3.99E-11	1.22E-11	4.87E-12	2.59E-12
N	1.02E-8	9.00E-9	7.43E-10	4.49E-10	2.18E-10	1.29E-10	4.99E-11	1.53E-11	6.10E-12	3.24E-12
NNE	5.26E-9	1.29E-8	1.86E-9	6.83E-10	3.20E-10	1.94E-10	7.47E-11	2.29E-11	9.13E-12	4.85E-12
NE	2.07E-8	1.62E-8	1.56E-9	5.04E-10	3.06E-10	2.76E-10	1.07E-10	3.28E-11	1.31E-11	6.94E-12
ENE	4.93E-8	2.37E-8	2.20E-9	7.03E-10	3.76E-10	2.81E-10	1.42E-10	4.36E-11	1.74E-11	9.22E-12
E	3.65E-8	1.88E-8	1.96E-9	6.05E-10	2.86E-10	1.70E-10	1.00E-10	4.03E-11	1.47E-11	5.12E-12
ESE	3.79E-8	2.01E-8	2.03E-9	6.57E-10	3.21E-10	1.91E-10	7.34E-11	2.24E-11	1.38E-11	5.59E-12
SE	5.35E-8	2.83E-8	2.79E-9	9.07E-10	4.47E-10	2.68E-10	1.03E-10	4.11E-11	1.39E-11	8.15E-12
SSE	3.63E-8	2.08E-8	2.08E-9	6.89E-10	3.41E-10	2.05E-10	7.85E-11	2.46E-11	1.09E-11	6.44E-12

NOTE:

* E-8 = 10^{-8}

TABLE 2.3-48

GROWING SEASON X/Q VALUES (sec/m^3) FOR
CONTAINMENT VENTILATION VENT RELEASE

Population Receptor Distances (km)

Downwind Sector	Property Boundary	1	3	5	7	9	15	30	50	70
S	1.28E-6*	6.82E-7	1.17E-7	5.58E-8	3.47E-8	2.40E-8	1.31E-8	7.33E-9	3.33E-9	2.12E-9
SSW	1.53E-6	8.15E-7	1.31E-7	6.03E-8	3.68E-8	2.58E-8	1.50E-8	8.20E-9	4.21E-9	2.15E-9
SW	1.14E-6	6.40E-7	1.32E-7	5.78E-8	3.27E-8	2.30E-8	1.17E-8	5.66E-9	3.70E-9	2.39E-9
WSW	5.25E-7	3.14E-7	1.15E-7	4.69E-8	3.46E-8	2.48E-8	1.12E-8	4.32E-9	2.36E-9	2.02E-9
W	1.01E-6	5.70E-7	1.41E-7	7.77E-8	4.82E-8	3.48E-8	1.52E-8	6.05E-9	3.06E-9	1.95E-9
WNW	9.90E-7	5.59E-7	1.85E-7	1.19E-7	6.24E-8	4.22E-8	1.85E-8	7.18E-9	3.65E-9	2.34E-9
NW	1.07E-6	5.87E-7	3.61E-7	1.39E-7	7.91E-8	5.09E-8	2.22E-8	8.71E-9	4.46E-9	2.86E-9
NNW	9.20E-7	6.42E-7	2.18E-7	1.35E-7	6.88E-8	4.61E-8	2.04E-8	7.96E-9	4.06E-9	2.60E-9
N	1.54E-6	1.46E-6	3.35E-7	1.59E-7	8.61E-8	5.63E-8	2.48E-8	9.75E-9	5.00E-9	3.22E-9
NNE	8.59E-7	1.61E-6	5.51E-7	2.17E-7	1.13E-7	7.53E-8	3.32E-8	1.31E-8	6.77E-9	4.37E-9
NE	2.42E-6	1.99E-6	5.06E-7	2.24E-7	1.36E-7	9.80E-8	4.41E-8	1.75E-8	9.00E-9	5.82E-9
ENE	4.71E-6	2.38E-6	6.13E-7	2.54E-7	1.38E-7	1.06E-7	5.38E-8	2.15E-8	1.11E-8	7.22E-9
E	1.82E-6	9.74E-7	3.34E-7	1.44E-7	6.86E-8	4.90E-8	3.19E-8	1.58E-8	7.34E-9	4.05E-9
ESE	1.34E-6	7.38E-7	1.79E-7	7.79E-8	4.50E-8	3.25E-8	2.22E-8	8.02E-9	5.74E-9	3.04E-9
SE	1.86E-6	1.01E-6	1.82E-7	8.11E-8	5.00E-8	3.52E-8	1.80E-8	1.01E-8	4.37E-9	2.91E-9
SSE	1.62E-6	9.37E-7	1.60E-7	7.48E-8	4.61E-8	3.25E-8	1.67E-8	8.40E-9	4.08E-9	2.74E-9

NOTE:

* E-6 = 10^{-6}

TABLE 2.3-49

GROWING SEASON D/Q VALUES (m^{-2}) FOR CONTAINMENT VENTILATION VENT RELEASE

Downwind Sector	Property Boundary	Population Receptor Distances (km) 1	3	5	7	9	15	30	50	70
S	1.56E-8*	8.54E-9	3.77E-10	2.95E-10	1.47E-10	8.81E-11	3.42E-11	2.02E-11	64.85-12	3.00E-12
SSW	1.89E-8	1.04E-8	1.07E-9	3.56E-10	1.76E-10	1.06E-10	4.07E-11	2.14E-11	8.59E-12	3.40E-12
SW	1.63E-8	9.17E-8	1.01E-9	3.34E-10	1.64E-10	9.85E-10	3.80E-11	1.19E-11	7.29E-12	3.87E-12
WSW	7.77E-9	4.76E-9	6.36E-10	2.10E-10	1.06E-10	6.39E-11	2.39E-11	7.29E-12	3.14E-12	2.71E-12
W	1.81E-8	9.79E-9	1.05E-9	3.67E-10	1.88E-10	1.51E-10	5.89E-11	1.84E-11	7.31E-12	3.89E-12
WNW	1.46E-8	7.84E-9	8.93E-10	5.12E-10	2.37E-10	1.49E-10	5.74E-11	1.77E-11	7.02E-12	3.73E-12
NW	1.36E-8	7.12E-9	1.36E-9	5.07E-10	2.64E-10	1.56E-10	6.01E-11	1.85E-11	7.35E-12	3.90E-12
NNW	9.31E-9	5.83E-9	6.50E-10	4.68E-10	2.12E-10	1.32E-10	5.14E-11	1.58E-11	6.28E-12	3.33E-12
N	1.13E-8	1.00E-8	8.31E-10	5.74E-10	2.78E-10	1.65E-10	6.38E-11	1.96E-11	7.80E-12	4.14E-12
NNE	5.78E-9	1.42E-8	2.24E-9	8.51E-10	3.99E-10	2.42E-10	9.31E-11	2.86E-11	1.14E-11	6.04E-12
NE	2.21E-8	1.72E-8	1.62E-9	5.34E-9	3.43E-10	3.32E-10	1.28E-10	3.95E-11	1.57E-11	8.34E-12
ENE	4.72E-8	2.26E-8	2.05E-9	6.73E-10	3.79E-10	3.04E-10	1.62E-10	4.98E-11	1.98E-11	1.05E-11
E	1.87E-8	9.63E-9	1.03E-9	3.25E-10	1.51E-10	8.99E-10	7.89E-11	3.58E-11	1.24E-11	3.08E-12
ESE	1.83E-8	1.00E-8	1.08E-9	3.52E-10	1.73E-10	1.03E-10	4.01E-11	1.20E-11	1.03E-11	3.21E-12
SE	3.31E-8	1.78E-8	1.78E-9	5.81E-10	2.87E-10	1.72E-10	6.60E-11	3.17E-11	9.12E-12	5.47E-12
SSE	2.80E-8	1.58E-8	1.53E-9	5.07E-10	2.51E-10	1.51E-10	5.80E-11	1.84E-11	8.33E-12	5.08E-12

NOTE:

* E-8 = 10^{-8}

TABLE 2.3-52

ANNUAL AVERAGE X/Q VALUES (sec/m^3) FOR
TURBINE BUILDING VENTILATION VENT RELEASE

Population Receptor Distances (km)

Downwind Sector	Property Boundary	1	3	5	7	9	15	30	50	70
S	4.27E-6*	2.16E-6	2.49E-7	9.93E-8	5.63E-8	3.77E-8	1.81E-8	8.45E-9	3.99E-9	2.52E-9
SSW	4.84E-6	2.41E-6	2.65E-7	1.04E-7	5.86E-8	3.91E-8	1.98E-8	9.17E-9	4.66E-9	2.62E-9
SW	2.72E-6	1.40E-6	1.93E-7	7.58E-8	4.11E-8	2.77E-8	1.32E-8	5.68E-9	3.48E-9	2.23E-9
WSW	1.92E-5	1.00E-6	1.71E-7	6.29E-8	4.07E-8	2.78E-8	1.21E-8	4.59E-9	2.42E-9	1.91E-9
W	2.65E-6	1.34E-6	1.80E-7	8.21E-8	4.79E-8	3.26E-8	1.42E-8	5.57E-9	2.82E-9	1.80E-9
WNW	2.84E-6	1.46E-6	2.30E-7	1.13E-7	5.93E-8	3.85E-8	1.69E-8	6.63E-9	3.38E-9	2.17E-9
NW	2.82E-6	1.44E-6	3.37E-7	1.22E-7	6.61E-8	4.23E-8	1.87E-8	7.36E-9	3.78E-9	2.44E-9
NNW	2.64E-6	1.50E-6	2.51E-7	1.17E-7	6.09E-8	3.96E-8	1.74E-8	6.85E-9	3.51E-9	2.26E-9
N	2.79E-6	2.54E-6	3.58E-7	1.44E-7	7.64E-8	4.91E-8	2.17E-8	8.54E-9	4.38E-9	2.82E-9
NNE	1.34E-6	3.05E-6	5.21E-7	1.91E-7	1.00E-7	6.50E-8	2.87E-8	1.13E-8	5.84E-9	3.77E-9
NE	5.53E-6	4.59E-6	6.29E-7	2.44E-7	1.38E-7	9.21E-8	4.11E-8	1.64E-8	8.44E-9	5.46E-9
ENE	1.01E-5	5.05E-6	6.92E-7	2.60E-7	1.38E-7	9.66E-8	4.52E-8	1.79E-8	9.23E-9	5.96E-9
E	6.45E-6	3.27E-6	5.00E-7	1.89E-7	9.27E-8	6.23E-8	3.36E-8	1.47E-8	7.07E-9	4.12E-9
ESE	5.57E-6	2.80E-6	3.57E-7	1.34E-7	7.26E-8	4.89E-8	2.69E-8	9.76E-9	5.94E-9	3.38E-9
SE	6.72E-6	3.34E-6	3.74E-7	1.42E-7	7.97E-8	5.30E-8	2.47E-8	1.15E-8	5.20E-9	3.37E-9
SSE	6.67E-6	3.38E-6	3.66E-7	1.42E-7	7.91E-8	5.26E-8	2.45E-8	1.07E-8	5.19E-9	3.37E-9

NOTE:

* E-6 = 10^{-6}

TABLE 2.3-53

ANNUAL AVERAGE D/Q VALUES (m^{-2}) FOR
TURBINE BUILDING VENTILATION VENT RELEASE

Population Receptor Distances (km)

Downwind Sector	Property Boundary	1	3	5	7	9	15	30	50	70
S	3.66E-8*	1.80E-8	1.48E-9	4.64E-10	2.24E-10	1.32E-10	5.07E-11	2.27E-11	6.42E-12	3.64E-12
SSW	4.31E-8	2.08E-8	1.65E-9	5.15E-10	2.48E-10	1.46E-10	5.92E-11	2.18E-11	8.68E-12	3.96E-12
SW	2.55E-8	1.27E-8	1.09E-9	3.44E-10	1.66E-10	9.84E-11	3.77E-11	1.23E-11	6.28E-12	3.34E-12
WSW	2.03E-8	1.01E-8	8.89E-10	2.75E-10	1.39E-10	8.78E-11	3.06E-11	9.15E-12	3.78E-12	2.66E-12
W	3.40E-8	1.62E-8	1.27E-9	4.00E-10	2.01E-10	1.36E-10	5.24E-11	1.62E-11	6.44E-12	3.42E-12
WNW	2.94E-8	1.41E-8	1.13E-9	4.58E-10	2.17E-10	1.29E-10	4.95E-11	1.52E-11	6.05E-12	3.21E-12
NW	2.41E-8	1.17E-8	1.36E-9	4.19E-10	2.02E-10	1.19E-10	4.56E-11	1.40E-11	5.57E-12	2.96E-12
NNW	1.99E-8	1.03E-8	8.36E-10	3.72E-10	1.74E-10	1.04E-10	4.00E-11	1.23E-11	4.88E-12	2.59E-12
N	1.74E-8	1.53E-8	1.17E-9	4.73E-10	2.26E-10	1.33E-10	5.13E-11	1.57E-11	6.26E-12	3.33E-12
NNE	8.32E-9	2.28E-8	2.24E-9	6.93E-10	3.29E-10	1.94E-10	7.47E-11	2.29E-11	9.13E-12	4.85E-12
NE	4.35E-8	3.48E-8	2.64E-9	8.15E-10	4.52E-10	2.90E-10	1.12E-10	3.43E-11	1.37E-11	7.26E-12
ENE	9.30E-8	4.36E-8	3.28E-9	1.01E-9	4.99E-10	3.21E-10	1.35E-10	4.14E-11	1.65E-11	8.76E-12
E	7.21E-8	3.42E-8	2.66E-9	8.18E-10	3.82E-10	2.25E-10	1.17E-10	3.57E-11	1.62E-11	6.04E-12
ESE	6.87E-8	3.29E-8	2.58E-9	7.94E-10	3.80E-10	2.24E-10	1.04E-10	2.62E-11	1.49E-11	5.96E-12
SE	8.75E-8	4.21E-8	3.30E-9	1.02E-9	4.91E-10	2.90E-10	1.11E-10	4.46E-11	1.39E-11	7.68E-12
SSE	7.79E-8	3.75E-8	2.94E-9	9.13E-10	4.38E-10	2.59E-10	9.91E-11	3.11E-11	1.24E-11	6.91E-12

NOTE:

* E-8 = 10^{-8}

TABLE 2.3-56

ANNUAL AVERAGE χ/Q VALUES (sec/m^3) AT
THE NEAREST SIGNIFICANT RECEPTOR LOCATION
FOR TURBINE BUILDING VENTILATION VENT RELEASE

Sector	Resident	Vegetable Garden	Milk Cow	Milk Goat
N	2.79E-6*	2.79E-6	**	3.15E-7
NNE	1.34E-6	1.34E-6	**	8.43E-7
NE	5.53E-6	5.53E-6	**	**
ENE	6.51E-6	6.51E-6	**	6.09E-7
E	2.09E-6	2.09E-6	**	**
ESE	1.02E-6	1.02E-6	**	**
SE	1.01E-8	1.01E-8	**	**
SSE	1.58E-8	1.58E-8	**	**
S	1.65E-8	1.65E-8	**	**
SSW	1.50E-8	1.50E-8	**	**
SW	1.57E-7	1.57E-7	**	**
WSW	1.68E-7	1.68E-7	**	**
W	2.21E-7	2.21E-7	**	1.05E-7
WNW	3.81E-7	3.81E-7	5.63E-8	**
NW	1.42E-6	1.42E-6	**	1.32E-7
NNW	2.43E-6	2.43E-6	**	**

NOTES:

* E-6 = 10^{-6}

** No receptor within this sector

TABLE 2.3-57

ANNUAL AVERAGE D/Q VALUES (m^{-2}) AT
THE NEAREST SIGNIFICANT RECEPTOR LOCATIONS
FOR TURBINE BUILDING VENTILATION VENT RELEASE

Sector	Resident	Vegetable Garden	Milk Cow	Milk Goat
N	1.74E-8*	1.74E-8	**	1.01E-9
NNE	8.32E-9	8.32E-9	**	3.86E-9
NE	4.35E-8	4.35E-8	**	**
ENE	5.87E-8	5.87E-8	**	2.81E-9
E	2.00E-8	2.00E-8	**	**
ESE	1.02E-8	1.02E-8	**	**
SE	3.78E-11	3.78E-11	**	**
SSE	5.21E-11	5.21E-11	**	**
S	4.48E-11	4.48E-11	**	**
SSW	4.27E-11	4.27E-11	**	**
SW	8.42E-10	8.42E-10	**	**
WSW	8.70E-10	8.70E-10	**	**
W	1.64E-9	1.64E-9	**	6.48E-10
WNW	2.14E-9	2.14E-9	2.05E-10	**
NW	1.15E-8	1.15E-8	**	4.59E-10
NNW	1.82E-8	1.82E-8	**	**

NOTES:

* E-8 = 10^{-8}

** No receptor within this sector

TABLE 2.3-58

GROWING SEASON X/Q VALUES (sec/m^3) AT
THE NEAREST SIGNIFICANT RECEPTOR LOCATIONS
FOR MILLSTONE 1 STACK RELEASE

Sector	Resident	Vegetable Garden	Milk Cow	Milk Goat
N	4.55E-8*	4.55E-8	**	2.66E-8
NNE	4.77E-8	4.77E-8	**	6.71E-8
NE	7.58E-8	7.58E-8	**	**
ENE	3.97E-8	3.97E-8	**	3.53E-8
E	3.54E-8	3.54E-8	**	**
ESE	1.69E-8	1.69E-8	**	**
SE	3.36E-9	3.36E-9	**	**
SSE	3.86E-9	3.86E-9	**	**
S	2.98E-9	2.98E-9	**	**
SSW	3.47E-9	3.47E-9	**	**
SW	1.07E-8	1.07E-8	**	**
WSW	1.74E-8	1.74E-8	**	**
W	4.55E-8	4.55E-8	**	1.21E-8
WNW	4.55E-8	4.55E-8	1.72E-8	**
NW	4.27E-8	4.27E-8	**	3.01E-8
NNW	4.55E-8	4.55E-8	**	**

NOTES:

* E-8 = 10^{-8}

** No receptor within this sector

TABLE 2.3-59

GROWING SEASON D/Q VALUES (m^{-2}) AT
THE NEAREST SIGNIFICANT RECEPTOR LOCATION
FOR MILLSTONE 1 STACK RELEASE

Sector	Resident	Vegetable Garden	Milk Cow	Milk Goat
N	9.06E-10*	9.06E-10	**	2.61E-10
NNE	7.14E-10	7.14E-10	**	6.77E-10
NE	1.45E-9	1.45E-9	**	**
ENE	1.72E-9	1.72E-9	**	5.44E-10
E	2.07E-9	2.07E-9	**	**
ESE	1.24E-9	1.24E-9	**	**
SE	1.90E-11	1.90E-11	**	**
SSE	2.71E-11	2.71E-11	**	**
S	2.30E-11	2.30E-11	**	**
SSW	2.58E-11	2.58E-11	**	**
SW	2.99E-10	2.99E-10	**	**
WSW	5.06E-10	5.06E-10	**	**
W	3.20E-10	3.20E-10	**	3.28E-10
WNW	3.41E-10	3.41E-10	1.04E-10	**
NW	1.54E-9	1.54E-9	**	1.67E-10
NNW	8.85E-10	8.85E-10	**	**

NOTES:

* E-10 = 10^{-10}

** No receptor within this sector

TABLE 2.3-66

INTERMITTENT D/Q VALUES (m^{-2}) AT
THE NEAREST SIGNIFICANT RECEPTOR LOCATION
FOR CONTAINMENT VENTILATION VENT RELEASE

Sector	Resident	Vegetable Garden	Milk Cow	Milk Goat
N	4.51E-8*	4.51E-8	**	3.12E-9
NNE	2.03E-8	2.03E-8	**	7.51E-9
NE	8.78E-8	8.78E-8	**	**
ENE	1.06E-7	1.06E-7	**	5.69E-9
E	4.34E-8	4.34E-8	**	**
ESE	2.47E-8	2.47E-8	**	**
SE	7.35E-11	7.35E-11	**	**
SSE	1.28E-10	1.28E-10	**	**
S	1.61E-10	1.61E-10	**	**
SSW	1.46E-10	1.46E-10	**	**
SW	2.76E-9	2.76E-9	**	**
WSW	2.79E-9	2.79E-9	**	**
W	4.61E-9	4.61E-9	**	1.93E-9
WNW	6.66E-9	6.66E-9	5.73E-7	**
NW	7.20E-8	7.20E-8	**	1.27E-9
NNW	6.10E-8	6.10E-8	**	**

NOTES:
* E-8 = 10^{-8}
** No receptor within this sector

TABLE 2.3-67

INTERMITTENT X/Q (sec/m^3) AND D/Q (m^{-2})
AT THE SITE BOUNDARY (GROWING SEASON)
FROM THE CONTAINMENT VENTILATION VENT

Sector	Property Boundary X/Q	Property Boundary D/Q
N	1.35E-5*	5.43E-8
NNE	5.17E-6	2.32E-8
NE	1.79E-5	1.01E-7
ENE	2.92E-5	1.78E-7
E	2.85E-5	1.25E-7
ESE	2.88E-5	1.33E-7
SE	2.44E-5	1.49E-7
SSE	2.01E-5	1.30E-7
S	2.69E-5	1.08E-7
SSW	2.86E-5	1.24E-7
SW	2.13E-5	9.08E-8
WSW	1.54E-5	7.03E-8
W	1.39E-5	1.06E-7
WNW	1.84E-5	1.14E-7
NW	2.36E-5	1.09E-7
NNW	1.77E-5	7.38E-8

NOTE:

* E-5 = 10^{-5}

LIST OF EFFECTIVE PAGES

(t) = turn

Page, Table (T), or Figure (F)	Amendment Number	Computer Address u1217913er2
3-i thru 3-v	0	sa
3.1-1	0	ku
F3.1-1	0	8 1/2x11 (photo)
3.2-1 thru 3.2-3	0	dx
F3.2-1	0	11x17
F3.2-2	0	11x17
F3.2-3	0	8 1/2x11
3.3-1 thru 3.3-2	0	d
T3.3-1 (1 of 1)	0	e
F3.3-1	0	8 1/2x11 (t)
3.4-1 thru 3.4-6	0	rw
T3.4-1 (1 of 1)	0	co (t)
F3.4-1	0	11x17
F3.4-2	0	8 1/2x11 (t)
F3.4-3	0	11x17
F3.4-4 (2 sheets)	0	11x17 (t)
3.5-1 thru 3.5-12	0	th
T3.5-1 (1 of 1)	0	ti
T3.5-2 (1 thru 2 of 2)	0	il
T3.5-3 (1 thru 3 of 3)	0	tj
T3.5-4 (1 of 1)	0	tk
T3.5-5 (1 of 1)	0	tl
T3.5-6 (1 thru 2 of 2)	0	tm
T3.5-7 (1 thru 2 of 2)	0	tn
T3.5-8 (1 thru 3 of 3)	0	kl
T3.5-9 (1 of 1)	0	km (t)
T3.5-10 (1 of 1)	0	uo
T3.5-11 (1 thru 2 of 2)	0	un
T3.5-12 (1 thru 3 of 3)	0	kj (t)
T3.5-13 (1 thru 2 of 2)	0	ko
T3.5-14 (1 thru 3 of 3)	0	up
T3.5-15 (1 of 1)	0	kp
T3.5-16 (1 of 1)	0	um
T3.5-17 (1 of 1)	0	kr
F3.5-1	0	11x17
F3.5-2	0	11x17
F3.5-3	0	11x17
F3.5-4	0	11x17
3.6-1 thru 3.6-5	0	do
T3.6-1 (1 thru 3 of 3)	1	qf (t)

LIST OF EFFECTIVE PAGES (Cont)

Page, Table (T), or Figure (F)	Amendment Number	(t) = turn Computer Address u1217913er2
T3.6-2 (1 of 1)	0	dp
T3.6-3 (1 of 1)	0	si
F3.6-1	0	8 1/2x11 (t)
3.7-1 thru 3.7-3	0	bk
T3.7-1 (1 of 1)	0	cy
T3.7-2 (1 of 1)	0	gq
T3.7-3 (1 of 1)	0	bs
T3.7-4 (1 of 1)	0	bt
T3.7-5 (1 of 1)	0	bv
T3.7-6 (1 of 1)	0	bw
3.8-1	0	a
3.9-1 thru 3.9-3	0	kg
F3.9-1	0	11x17
F3.9-2	0	8 1/2x11

TABLE 3.6-1

CHEMICAL ADDITIONS TO WATER USED FOR STATION OPERATION

Chemical Use and System Involved	Reason for Use or Source of Chemical	Estimated Monthly Quantities (lb/mo) Addition to System Average	Addition to System Maximum	Station Discharge Average	Station Discharge Maximum	Frequency of Chemical Addition	
Boron (as B):							
Reactor coolant system	Soluble neutron adsorber	20,000 lb/yr	NA	0.86	0.17 lb/day	NA	
Chromates (as $K_2 CrO_7$):							1
Neutron shield tank cooling	Corrosion control	10 lb/yr	NA	None	None	NA	
Ammonia (as NH_3 (25%):							1
Reactor plant component cooling water, charging pumps cooling, safety injection pumps cooling	Corrosion control	90 lb/yr	NA	None	None	NA	
Auxiliary steam and condensate	Corrosion control	6	12	None	None	Continuous	
Steam and power conversion	Corrosion control	26,100	27,900	None	None	Continuous	
Hydrazine (as N_2H_4) (40%):							1
Auxiliary steam and condensate	Corrosion control	62.5	125	None	None	Continuous	
Steam and power conversion	Corrosion control	735	870	None	None	Continuous	
Chilled water system	Maintain pH; control O	7.5	12.5	None	None	Once per day	
Chlorine (as Cl_2):							1
Service water system	Biofouling control	507.6	1268.7	507.6	1268.7	3 times per day	

TABLE 3.6-1 (Cont)

Chemical Use and System Involved	Reason for Use or Source of Chemical	Estimated Monthly Quantities (lb/mo) Addition to System Average	Addition to System Maximum	Station Discharge Average	Station Discharge Maximum	Frequency of Chemical Addition	
Sodium Hypochlorite (as Cl_2 (15%):							1
Makeup ultrafiltration system	Ultrafiltration cleaning cycle	1,070	4,270	1,070	4,270	Once per day	
Sulfuric Acid (as H_2SO_4) (100%):							1
Makeup demineralizer equipment	Regeneration of ion exchange resins	11,600	23,200	11,600	23,200	Once every 3 days	
Condensate polishing mixed bed	Regeneration of ion exchange resins	6,200	49,300	6,200	49,300	Once every 4 days	
Sodium Hydroxide (as NaOH) (50%):							1
Makeup demineralizer equipment	Regeneration of ion exchange resins	17,800	35,600	17,800	35,600	Once every 3 days	
Condensate polishing mixed bed	Regeneration of ion exchange resins	4,800	37,800	4,800	37,800	Once every 4 days	
Makeup ultra-filtration system	pH adjustment	NA	NA	NA	NA	As necessary	
Lime (as $Ca(OH)_2$) (100%):							1
Condensate polishing mixed bed	Regeneration of ion exchange resins	400	3,200	400	3,200	Once every 4 days	
Sodium Sulfite (as Na_2SO_3) (100%):							1
Waste treating system	Neutralization of sodium hypochlorite	270	1,084	270	1,084	Once per day	
Dow Binder:							
Radioactive solid waste	Waste solidification agent	32,500 lb/yr	40,000 lb/yr	None	None	Once per year	

TABLE 3.6-1 (Cont)

Chemical Use and System Involved	Reason for Use or Source of Chemical	Estimated Monthly Quantities (lb/mo) Addition to System Average	Addition to System Maximum	Station Discharge Average	Station Discharge Maximum	Frequency of Chemical Addition
Dow Catalyst:						
Radioactive solid waste	Waste solidification agent	800 lb/yr	1,000 lb/yr	None	None	Once per year
Dow Promoter:						
Radioactive solid waste	Waste solidification agent	32 lb/yr	40 lb/yr	None	None	Once per year

NOTE:

NA = Not available

TABLE 3.6-2

CHEMICAL COMPOSITION OF REGENERATION WASTES
FROM MAKEUP DEMINERALIZER SYSTEM

Parameter	Concentration as Ion (ppm)
Sodium	1,460
Calcium	115
Magnesium	57
Total iron	0.7
Sulfate	3,230
Bicarbonate	290
Silica	89
Total dissolved solids	5,300

LIST OF EFFECTIVE PAGES

Page, Table (T), or Figure (F)	Amendment Number	(t)=turn Computer Address u1217913er2
5-i thru 5-viii	0	fw
5.1-1 thru 5.1-79	0	cd
T5.1-1 (1 of 1)	0	ce
T5.1-2 (1 of 1)	0	cf (t)
T5.1-3 (1 of 1)	0	cg
T5.1-4 (1 thru 2 of 2)	0	re (t)
T5.1-5 (1 of 1)	0	rf (t)
T5.1-6 (1 thru 3 of 3)	0	rg (t)
T5.1-7 (1 of 1)	0	rh
T5.1-8 (1 of 1)	0	ri
T5.1-9 (1 of 1)	0	rd (t)
T5.1-10 (1 of 1)	C	rk
T5.1-11 (1 of 1)	0	rl (t)
T5.1-12 (1 of 1)	0	rm
T5.1-13 (1 of 1)	0	rn (t)
T5.1-14 (1 of 1)	0	ro (t)
T5.1-15 (1 of 1)	0	rp
T5.1-16 (1 of 1)	0	rq
T5.1-17 (1 of 1)	0	rr
T5.1-18 (1 of 1)	0	rs
T5.1-19 (1 thru 2 of 2)	0	rt
F5.1-1	0	11x17
F5.1-2	0	11x17
F5.1-3	0	11x17
F5.1-4	0	11x17
F5.1-5	0	8 1/2x11
F5.1-6	0	8 1/2x11 (t)
F5.1-7	0	8 1/2x11 (t)
F5.1-8	0	8 1/2x11 (t)
F5.1-9	0	8 1/2x11 (t)
F5.1-10	0	8 1/2x11 (t)
F5.1-11	0	8 1/2x11 (t)
F5.1-12	0	8 1/2x11 (t)
F5.1-13	0	8 1/2x11 (t)
F5.1-14	0	8 1/2x11 (t)
F5.1-15	0	8 1/2x11 (t)
F5.1-16	0	8 1/2x11 (t)
F5.1-17	0	8 1/2x11
F5.1-18	0	8 1/2x11 (t)
F5.1-19	0	8 1/2x11
F5.1-20	0	8 1/2x11
F5.1-21	0	8 1/2x11
F5.1-22	0	8 1/2x11
F5.1-23	0	8 1/2x11
F5.1-24	0	8 1/2x11 (t)
F5.1-25	0	8 1/2x11 (t)

LIST OF EFFECTIVE PAGES (Cont)

Page, Table (T), or Figure (F)	Amendment Number	(t)=turn Computer Address u1217913er2
F5.1-26	0	8 1/2x11 (t)
F5.1-27	0	8 1/2x11 (t)
5.2-1 thru 5.2-15	0	mj
T5.2-1 (1 of 1)	0	mk
T5.2-2 (1 of 1)	0	ml
T5.2-3 (1 of 1)	0	mm
T5.2-4 (1 thru 2 of 2)	0	mn
T5.2-5 (1 of 1)	0	cs
T5.2-6 (1 of 1)	0	mo
T5.2-7 (1 of 1)	0	mp
T5.2-8 (1 of 1)	0	mq (t)
T5.2-9 (1 of 1)	0	mr (t)
T5.2-10 (1 of 1)	0	ms (t)
T5.2-11 (1 of 1)	0	mt (t)
T5.2-12 (1 of 1)	0	mu (t)
T5.2-13 (1 of 1)	0	mw (t)
T5.2-14 (1 of 1)	0	mx (t)
T5.2-15 (1 of 1)	0	my (t)
T5.2-16 (1 of 1)	0	mz (t)
T5.2-17 (1 of 1)	0	na (t)
T5.1-18 (1 of 1)	0	nb (t)
T5.1-19 (1 of 1)	0	nc (t)
T5.2-20 (1 of 1)	0	nd (t)
T5.2-21 (1 of 1)	0	ne (t)
T5.2-22 (1 of 1)	0	nf
T5.2-23 (1 of 1)	0	ng
T5.2-24 (1 of 1)	0	nh
T5.2-25 (1 of 1)	0	ni
F5.2-1	0	8 1/2x11 (t)
F5.2-2	0	8 1/2x11 (t)
F5.2-3	0	8 1/2x11
F5.2-4	0	8 1/2x11
5.3-1 thru 5.3-4	0	ct
T5.3-1 (1 thru 2 of 2)	0	cu
T5.3-2 (1 thru 6 of 6)	0	cv (t)
T5.3-3 (1 of 1)	0	cw
5.4-1 thru 5.4-4	0	cz
T5.4-1 (1 thru 2 of 2)	0	se
5.5-1 thru 5.5-7	0	ks
5.6-1 thru 5.6-6	0	ci
T5.6-1 (1 of 1)	1	da (t)

LIST OF EFFECTIVE PAGES (Cont)

Page, Table (T), or Figure (F)	Amendment Number	(t)=turn Computer Address u1217913er2
T5.6-2 (1 of 1)	0	cm (t)
T5.6-3 (1 of 1)	0	cn (t)
5.7-1	0	kv
5.8-1 thru 5.8-2	0	bd

TABLE 5.6-1

MEASURED AMBIENT OF MILLSTONE 1 AND 2 AND ESTIMATED STATION SOUND PRESSURE LEVELS

In Decibels, A-Scale (dBA) re 0.0002 Microbar

Site	Location	Measured Ambient* 1969/1970 L90	Measured Ambient** 1979/1980 L90	Millstone 1 and 2 Estimated in 1973***	Millstone 1 and 2 Measured in 1979	Millstone 3 Estimated 1980	Millstone 1,2,3 Estimated Total
5	Jordan Cove	38 - 27	43 - 36	37	≤41	34	≤42
2	Pleasure Beach	42 - 28	39 - 30	32	≤37	26	≤37
3	Millstone Road	NM****	47 - 30	30	ND*****	25	31
8	McCook Point	NM****	51 - 36	24	ND*****	17	25
7	Niantic Bay Yacht Club	45 - 26	45 - 32	[illegible]	ND*****	15	25
4	Black Point	38 - 26	35 - 30	23	ND*****	12	23

NOTES:

* Measured Ambient data was taken by Bolt, Beranek, and Newman in 1969-1970. Presented in the Environmental Report for Construction Licensing of Millstone 3 in 1973.

** Measured Ambient data was taken by S&W during 1979-1980. Presented in Section 2.7 of this Environmental Report.

*** Millstone 1 and 2 estimated sound levels determined by COMSOL Program and presented in the Environmental Report for Construction Licensing of Millstone 3 in 1973.

**** NM-Not measured.

***** ND-Not determined since plant noise was often masked by other noise sources.

TABLE 5.6-2

FREQUENCY OF OCCURRENCE* OF CEILING RANGE 0 TO 500 FEET
AND VISIBILITY RANGE 0 TO 1.0 MILE

Hours	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
01-03	57**	58	46	33	93	70	32	11	9	22	11	49	491
	1,330***	1,212	1,272	1,230	1,270	1,227	1,271	1,270	1,230	1,271	1,227	1,257	15,067
	4.29****	4.79	3.62	2.68	7.32	5.70	2.52	0.87	0.73	0.87	0.90	3.90	3.26
04-06	52	57	62	44	108	85	48	32	18	38	23	57	624
	1,332	1,213	1,270	1,230	1,271	1,230	1,269	1,271	1,230	1,271	1,226	1,256	15,069
	3.90	4.70	4.88	3.58	8.50	6.91	3.78	2.52	1.46	2.99	1.88	4.54	4.14
07-09	56	51	69	49	97	82	48	31	24	37	31	45	630
	1,330	1,212	1,270	1,230	1,271	1,228	1,270	1,271	1,230	1,271	1,228	1,267	15,068
	4.21	4.21	5.43	3.98	7.63	7.49	3.78	2.44	1.95	2.91	2.52	3.55	4.18
10-12	67	58	66	40	49	44	17	12	9	15	27	44	448
	1,328	1,212	1,271	1,230	1,271	1,228	1,271	1,271	1,229	1,271	1,230	1,266	15,078
	5.05	4.79	5.20	3.25	3.86	3.58	1.34	0.94	0.73	1.18	2.20	3.48	2.97
13-15	63	59	45	20	21	14	2	1	6	7	17	48	303
	1,333	1,213	1,270	1,230	1,271	1,230	1,271	1,271	1,266	1,271	1,230	1,269	15,065
	4.73	4.86	3.54	1.63	1.65	1.14	0.16	0.08	0.49	0.55	1.38	3.78	2.01
16-18	74	60	42	24	25	6	6	1	5	3	14	52	312
	1,333	1,213	1,270	1,230	1,270	1,229	1,271	1,270	1,224	1,271	1,230	1,269	15,080
	5.55	4.95	3.31	1.95	1.97	0.49	0.47	0.08	0.41	0.24	1.14	4.10	2.07
19-21	57	51	36	20	53	13	11	3	5	5	11	51	316
	1,330	1,213	1,271	1,230	1,270	1,229	1,271	1,269	1,229	1,269	1,229	1,269	15,079
	4.29	4.20	2.83	1.63	4.17	1.06	0.87	0.24	0.41	0.39	0.90	4.02	2.10
22-24	53	56	44	32	70	33	13	6	6	15	7	39	374
	1,330	1,212	1,271	1,230	1,271	1,228	1,270	1,271	1.229	1,270	1,227	1,267	15,076
	3.98	4.62	3.46	2.60	5.51	2.69	1.02	0.47	0.49	1.18	0.57	3.08	2.48
All	479	450	410	262	516	357	177	97	82	142	141	385	3,498
	10,646	9,700	10,165	9,840	10,165	9,829	10,164	10,164	9,827	10,165	9,827	10,120	120,612
	4.50	4.64	4.03	2.66	5.08	3.63	1.74	0.95	0.83	1.40	1.43	3.80	2.90

NOTES:

* Based on meteorological data at Bridgeport, Connecticut from 1/1/49 to 4/30/53 and from 5/1/60 to 12/31/78.

** Number of hours which the condition of ceiling range 0 to 500 feet and visibility range 0 to 1.0 mile occurs.

*** Number of hours all conditions included.

**** Percentage of occurrence which the condition of ceiling range 0 to 500 feet and visibility range 0 to 1.0 mile occurs.

INSERTION INSTRUCTIONS FOR AMENDMENT 1

Remove old pages and insert Amendment 1 pages as instructed below (amendment pages bear the amendment number and date at the foot of the page).

Vertical bars (change bars) have been placed in the outside margins of revised text pages and tables to show the location of any technical changes originating with this amendment. A few unrevised pages have been reprinted because they fall within a run of closely spaced revised pages. No change bars are used on figures or on new sections, appendices, questions and responses, etc.

Transmittal letters along with these insertion instructions should either be filed or entered in Volume I of Part I, in front of any existing letters, instructions, distribution lists, etc.

LEGEND

Remove/Insert Columns

Entries beginning with "T" or "F" designate table or figure numbers, respectively. All other entries are page numbers:

T2.3-14 = Table 2.3-14 F2.3-14 = Figure 2.3-14

2.1-9 = Page 2.1-9 EP2-1 = Page EP2-1 vii = Page vii

Pages printed back to back are indicated by a "/":

1.2-5/6 = Page 1.2-5 backed by Page 1.2-6

5)/15(1 of 3) = Table 2.3-14, sheet 5 of 5, backed by

heet 1 of 3

	Location
Appendix	
	1.3

Insert	Location
2.2-1/2	S 2.2
2.2-3/4	
2.2-5/6	
2.2-7/8	
2.2-13/14	
2.2-19/20	
VOLUME 2	
2.3-3/4	S 2.3
2.3-7/8	
2.3-11/12	
2.3-12a/blank	
2.3-15/16	
2.3-17/18	
2.3-19/20	
2.3-21/22	
T2.3-1(1 of 1)/2(1 of 1)	
T2.3-5(1 of 1)/6(1 of 1)	
T2.3-9(1 of 1)/10(1 of 1)	
T2.3-11(1 of 1)/12(1 of 1)	
T2.3-13(1 of 1)/14(1 of 13)	
T2.3-17(1 of 1)/18(1 of 1)	
2.3-19(1 of 2)/19(2 of 2)	
T2.3-20(1 of 1)/21(1 of 1)	
T2.3-27(1 of 1)/28(1 of 1)	
T2.3-33(8 of 8)/34(1 of 1)	
T2.3-35(1 of 1)/36(1 of 1)	
T2.3-39(1 of 1)/40(1 of 1)	
T2.3-41(1 of 3)/(2 of 3)	
T2.3-41(3 of 3)/42(1 of 1)	
T2.3-47(1 of 1)/48(1 of 1)	
T2.3-51(1 of 1)/52(1 of 1)	
T2.3-53(1 of 1)/54(1 of 1)	
T2.3-55(1 of 1)/56(1 of 1)	
T2.3-57(1 of 1)/58(1 of 1)	
T2.3-59(1 of 1)/60(1 of 1)	
T2.3-67(1 of 1)/68(1 of 1)	
T2.3-69(1 of 1)/Blank	
2.4-25/26	S 2.4
2.5-7/8	S 2.5.1
2.5-25/26	
2.5.2-1/2	S 2.5.2
2.5.2-9/10	
2.5.2-13/14	