VERMONT YANKEE NUCLEAR POWER STATION

EMERGENCY PREPAREDNESS EXERCISE

2001

8.0 OPERATIONAL DATA

8.0 OPERATIONAL DATA

ITEM	PANEL	INSTR. ID	DESCRIPTION	UNITS	00:00	00:15	00:30	00:45	01:00	01:15
			SCENARIO TIME		00:00	00:15	00:30	00:45	01:00	01:15
			CLOCK TIME		08:15	08:30	08:45	09:00	09:15	09:30
1	9-3	FT-23-108-1	HPCI FLOW	GPM	0	0	0	0	0	0
2	9-3	FI-10-139A	RHR A FLOW	GPM	0.063	0.063	0.063	0.063	0.063	0.063
3	9-3	FI-10-139B	RHR B FLOW	GPM	1	1	1	1	1	1
4	9-3	FI-14-50A	CS A FLOW	GPM	0	0	0	0	0	0
5	9-3	FI-14-50B	CS B FLOW	GPM	0	0	0	0	0	0
6	9-3	PI-16-19-12A	DRYWELL PRESS	PSIG	2.3	2.3	2.3	2.3	2.3	2.3
7	9-3	PI-16-19-12B	DRYWELL PRESS	PSIG	2.3	2.3	2.3	2.3	2.3	2.3
8	9-4	FI-13-91	RCIC FLOW	GPM	0	0	0	0	0	0
9	9-4	FI-12-141A	RWCU FLOW	GPM	65	65	65	65	65	65
10	9-4	FI-12-141B	RWCU FLOW	GPM	65	65	65	65	65	65
11	9-4	2-165A	RX COOLANT TEMP	DEG F	527	526	526	526	526	526
12	9-4	2-165B	RX COOLANT TEMP	DEG F	527	526	526	526	526	526
13	9-4	2-159A	RECIRC A LOOP FLOW	KGPM	36	36	36	36	36	36
14	9-4	2-159B	RECIRC B LOOP FLOW	KGPM	34	34	34	34	34	34
15	9-5	7-46A	APRM/IRM A	%	100	100	100	100	100	100
16	9-5	7-46B	APRM/IRM B	%	100	101	101	101	101	101
17	9-5	7-46C	APRM/IRM C	%	99	100	100	100	100	100
18	9-5	7-46D	APRM/IRM D	%	100	101	101	101	101	101
19	9-5	7-46E	APRM/IRM E	%	101	100	100	100	100	100
20	9-5	7-46F	APRM/IRM F	%	101	100	100	100	100	100
21	9-5	7-43A	SRM A	CPS	3.85E+05	4.60E+05	4.60E+05	4.60E+05	4.60E+05	4.61E+05
22	9-5	7-43B	SRM B	CPS	4.59E+05	4.46E+05	4.46E+05	4.46E+05	4.46E+05	4.47E+05
23	9-5	7-43C	SRM C	CPS	5.18E+05	4.51E+05	4.51E+05	4.51E+05	4.51E+05	4.51E+05
24	9-5	7-43D	SRM D	CPS	4.30E+05	4.48E+05	4.48E+05	4.48E+05	4.48E+05	4.48E+05
25	9-5	2-3-95	CORE FLOW	MLB/HR	47	47	47	47	47	47
26	9-5	2-3-95	CORE DP	PSID	18	17	17	17	17	17
27	9-5	FI-3-310	CRD FLOW	GPM	55.9	55.2	55.2	55.2	55.2	55.2
28	9-5	6-96	WIDE RANGE PRESS	PSIG	1008	1013	1013	1013	1013	1013
29	9-5	6-96	NAR RANGE PRESS	PSIG	1008	1010	1010	1010	1010	1010
30	9-5	6-97	FEEDWATER FLOW	MLB/HR	6.3	6.4	6.4	6.4	6.4	6.4
31	9-5	6-97	MAIN STEAM FLOW	MLB/HR	6.4	6.4	6.4	6.4	6.4	6.4
32	9-5	6-98	NAR RANGE LEVEL	INCHES	159	158	158	158	158	158
33	9-5	6-98	WIDE RANGE LEVEL	INCHES	476	200	200	200	200	200
34	9-6	LI-107-5	CST LEVEL	%	60	60	60	60	60	60
35	9-6	LI-102-5A	HOTWELL LEVEL N	%	55	55	55	55	55	55
36	9-6	LI-102-5B	HOTWELL LEVEL S	%	52	52	52	52	52	52
37	9-7	PI-101-1B	STM PKG EXH VAC	IN HG	2.5	2.5	2.2	2.2	2.2	2.2
38	9-8		D/G A BKR		OPEN	OPEN	OPEN	OPEN	OPEN	OPEN
39	9-8		D/G B BKR		OPEN	OPEN	OPEN	OPEN	OPEN	OPEN
40	9-23	16-19-33A/C	TORUS TEMP	DEG F	80	80	80	80	80	80
41	9-25	LI-46A	TORUS LEVEL	FEET	11.05	11.1	11.1	11.1	11.1	11.1
42	9-25	LI-46B	TORUS LEVEL	FEET	11.05	11.1	11.1	11.1	11.1	11.1
43	9-25	TR-16-19-44	TORUS PRESS	PSIG	-1	-1	-1	-1	-1	-1
44	9-25	TR-16-19-44	DRYWELL PRESS	PSIG	1.5	1.5	1.5	1.5	1.5	1.5
45	9-25	PR-1-156-3	DW/TORUS DP	PSID	1.95	1.85	1.85	1.85	1.86	1.86
46	9-25	TR-16-19-45	DRYWELL TEMP	DEG F	145	145	145	145	145	145
47	9-26	PI-1-125-3A	RX BUILDING DP	IN H2O	-1.3	-1.3	-0.125	-0.125	-0.125	-0.125
48	9-26	PI-1-125-3B	RX BUILDING DP	IN H2O	-1.25	-1.25	-0.125	-0.125	-0.125	-0.125
49	9-26	FI-1-125-1A	SGTS FLOW	CFM	0	0	0	0	0	0
50	9-26	FI-1-125-1B	SGTS FLOW	CFM	0	0	0	0	0	0
51	CAD		DW/TORUS O2 CONC.	%	1.2	1.2	1.2	1.2	1.2	1.2

Note: The ops data is dependent on operator actions taken in response to the conditions presented within the scenario. Ops data reflects plant conditions assuming certain basic operator actions being taken. Ops data taken from simulator.

8.0 OPERATIONAL DATA

ITEM	PANEL	INSTR. ID	DESCRIPTION	UNITS						
				SCENARIO TIME	01:30	01:45	02:00	02:15	02:30	02:45
				CLOCK TIME	09:45	10:00	10:15	10:30	10:45	11:00
1	9-3	FT-23-108-1	HPCI FLOW	GPM	0	0	0	0	0	0
2	9-3	FI-10-139A	RHR A FLOW	GPM	0.063	0.063	0.063	7370	7370	7370
3	9-3	FI-10-139B	RHR B FLOW	GPM	1	1	1	1	0	0
4	9-3	FI-14-50A	CS A FLOW	GPM	0	0	0	0	0	0
5	9-3	FI-14-50B	CS B FLOW	GPM	0	0	0	0	0	0
6	9-3	PI-16-19-12A	DRYWELL PRESS	PSIG	2.3	2.3	2.3	2.3	2.3	2.3
7	9-3	PI-16-19-12B	DRYWELL PRESS	PSIG	2.3	2.3	2.3	2.3	2.3	2.3
8	9-4	FI-13-91	RCIC FLOW	GPM	0	0	0	0	409	0
9	9-4	FI-12-141A	RWCU FLOW	GPM	65	65	0	0	0	0
10	9-4	FI-12-141B	RWCU FLOW	GPM	65	65	0	0	0	0
11	9-4	2-165A	RX COOLANT TEMP	DEG F	526	526	526	524	513	507
12	9-4	2-165B	RX COOLANT TEMP	DEG F	526	526	526	524	513	507
13	9-4	2-159A	RECIRC A LOOP FLOW	KGPM	36	36	2	2	2	2
14	9-4	2-159B	RECIRC B LOOP FLOW	KGPM	34	34	1.5	1	1	1
15	9-5	7-46A	APRM/IRM A	%	100	100	R1/5	R1/0	R1/0	R1/0
16	9-5	7-46B	APRM/IRM B	%	101	101	R1/5	R1/0	R1/0	R1/0
17	9-5	7-46C	APRM/IRM C	%	100	100	R1/5	R1/0	R1/0	R1/0
18	9-5	7-46D	APRM/IRM D	%	101	101	R1/5	R1/0	R1/0	R1/0
19	9-5	7-46E	APRM/IRM E	%	100	100	R1/5	R1/0	R1/0	R1/0
20	9-5	7-46F	APRM/IRM F	%	100	100	R1/5	R1/0	R1/0	R1/0
21	9-5	7-43A	SRM A	CPS	4.61E+05	4.60E+05	2.24E+04	2.10E+02	2.10E+02	2.10E+02
22	9-5	7-43B	SRM B	CPS	4.47E+05	4.46E+05	2.24E+04	2.10E+02	2.10E+02	2.10E+02
23	9-5	7-43C	SRM C	CPS	4.51E+05	4.51E+05	2.24E+04	2.10E+02	2.10E+02	2.10E+02
24	9-5	7-43D	SRM D	CPS	4.48E+05	4.48E+05	2.24E+04	2.10E+02	2.10E+02	2.10E+02
25	9-5	2-3-95	CORE FLOW	MLB/HR	47	47	7	6	0	0
26	9-5	2-3-95	CORE DP	PSID	17	17	17	0.5	0.5	0
27	9-5	FI-3-310	CRD FLOW	GPM	55.2	55.2	55.2	55.4	126	55.9
28	9-5	6-96	WIDE RANGE PRESS	PSIG	1013	1013	925	910	860	760
29	9-5	6-96	NAR RANGE PRESS	PSIG	1010	1010	1010	950	950	950
30	9-5	6-97	FEEDWATER FLOW	MLB/HR	6.4	6.4	0	0	0	0
31	9-5	6-97	MAIN STEAM FLOW	MLB/HR	6.4	6.4	0	0	0	0
32	9-5	6-98	NAR RANGE LEVEL	INCHES	158	158	138	144	143	145
33	9-5	6-98	WIDE RANGE LEVEL	INCHES	200	200	140	145	145	160
34	9-6	LI-107-5	CST LEVEL	%	60	60	61	69	72	77
35	9-6	LI-102-5A	HOTWELL LEVEL N	%	55	70	92	97	100	100
36	9-6	LI-102-5B	HOTWELL LEVEL S	%	53	55	70	76	80	85
37	9-7	PI-101-1B	STM PKG EXH VAC	IN HG	2.2	2.2	3.1	6.8	7.5	8.1
38	9-8		D/G A BKR		OPEN	OPEN	OPEN	OPEN	OPEN	OPEN
39	9-8		D/G B BKR		OPEN	OPEN	OPEN	OPEN	OPEN	OPEN
40	9-23	16-19-33A/C	TORUS TEMP	DEG F	80	80	86	91	96	11.37
41	9-25	LI-46A	TORUS LEVEL	FEET	11.1	11.1	11.21	11.31	11.36	11.39
42	9-25	LI-46B	TORUS LEVEL	FEET	11.1	11.1	11.23	11.33	11.38	11.1
43	9-25	TR-16-19-44	TORUS PRESS	PSIG	-1	-1	0	0	0	0.1
44	9-25	TR-16-19-44	DRYWELL PRESS	PSIG	1.5	1.5	2	2	2	2
45	9-25	PR-1-156-3	DW/TORUS DP	PSID	1.86	1.86	1.75	1.65	1.8	1.2
46	9-25	TR-16-19-45	DRYWELL TEMP	DEG F	145	150	155	155	165	160
47	9-26	PI-1-125-3A	RX BUILDING DP	IN H2O	-0.125	-0.6	-0.4	-0.2	-0.2	-0.2
48	9-26	PI-1-125-3B	RX BUILDING DP	IN H2O	-0.125	2	2	2	2	2
49	9-26	FI-1-125-1A	SGTS FLOW	CFM	0	0	0	0	0	0
50	9-26	FI-1-125-1B	SGTS FLOW	CFM	0	0	0	0	0	0
51	CAD		DW/TORUS O2 CONC.	%	1.2	1.2	1.2	1.2	1.2	1.2

Note: The ops data is dependent on operator actions taken in response to the conditions presented within the scenario. Ops data reflects plant conditions assuming certain basic operator actions being taken. Ops data taken from simulator.

8.0 OPERATIONAL DATA

ITEM	PANEL	INSTR. ID	DESCRIPTION	UNITS	SCENARIO TIME / CLOCK TIME 03:00 / 11:15	03:15 / 11:30	03:30 / 11:45	03:45 / 12:00	04:00 / 12:15	04:15 / 12:30
1	9-3	FT-23-108-1	HPCI FLOW	GPM	0	0	0	0	0	0
2	9-3	FI-10-139A	RHR A FLOW	GPM	7370	7370	0	0	0	0
3	9-3	FI-10-139B	RHR B FLOW	GPM	7362	7362	2	2	2	2
4	9-3	FI-14-50A	CS A FLOW	GPM	0	0	0	0	0	0
5	9-3	FI-14-50B	CS B FLOW	GPM	0	0	0	0	0	0
6	9-3	PI-16-19-12A	DRYWELL PRESS	PSIG	2.3	2.3	17	17	17	17
7	9-3	PI-16-19-12B	DRYWELL PRESS	PSIG	2.3	2.3	17	17	17	17
8	9-4	FI-13-91	RCIC FLOW	GPM	0	0	0	0	0	0
9	9-4	FI-12-141A	RWCU FLOW	GPM	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
10	9-4	FI-12-141B	RWCU FLOW	GPM	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
11	9-4	2-165A	RX COOLANT TEMP	DEG F	491	480	540	542	503	513
12	9-4	2-165B	RX COOLANT TEMP	DEG F	491	480	540	542	503	513
13	9-4	2-159A	RECIRC A LOOP FLOW	KGPM	2	2	0	0	0	0
14	9-4	2-159B	RECIRC B LOOP FLOW	KGPM	1	1	0	0	0	0
15	9-5	7-46A	APRM/IRM A	%	R1/0	R1/0	R1/0	R1/0	R1/0	R1/0
16	9-5	7-46B	APRM/IRM B	%	R1/0	R1/0	R1/0	R1/0	R1/0	R1/0
17	9-5	7-46C	APRM/IRM C	%	R1/0	R1/0	R1/0	R1/0	R1/0	R1/0
18	9-5	7-46D	APRM/IRM D	%	R1/0	R1/0	R1/0	R1/0	R1/0	R1/0
19	9-5	7-46E	APRM/IRM E	%	R1/0	R1/0	R1/0	R1/0	R1/0	R1/0
20	9-5	7-46F	APRM/IRM F	%	R1/0	R1/0	R1/0	R1/0	R1/0	R1/0
21	9-5	7-43A	SRM A	CPS	2.10E+02	2.10E+02	2.17E+02	2.05E+02	1.98E+02	1.91E+02
22	9-5	7-43B	SRM B	CPS	2.10E+02	2.10E+02	2.16E+02	2.05E+02	1.98E+02	1.91E+02
23	9-5	7-43C	SRM C	CPS	2.10E+02	2.10E+02	2.16E+02	2.05E+02	1.98E+02	1.91E+02
24	9-5	7-43D	SRM D	CPS	2.10E+02	2.10E+02	2.17E+02	2.05E+02	1.98E+02	1.91E+02
25	9-5	2-3-95	CORE FLOW	MLB/HR	1	5	6	6	8	6
26	9-5	2-3-95	CORE DP	PSID	0	0	0	0	0	0
27	9-5	FI-3-310	CRD FLOW	GPM	55.3	55.4	55.9	55.9	55.9	56
28	9-5	6-96	WIDE RANGE PRESS	PSIG	660	628	959	997	834	764
29	9-5	6-96	NAR RANGE PRESS	PSIG	950	950	958	996	950	950
30	9-5	6-97	FEEDWATER FLOW	MLB/HR	0	0	0	0	0.9	0
31	9-5	6-97	MAIN STEAM FLOW	MLB/HR	0	0	0	0	0	0
32	9-5	6-98	NAR RANGE LEVEL	INCHES	127	127	153	157	142	170
33	9-5	6-98	WIDE RANGE LEVEL	INCHES	160	155	155	157	159	182
34	9-6	LI-107-5	CST LEVEL	%	81	85	89	93	97	102
35	9-6	LI-102-5A	HOTWELL LEVEL N	%	100	100	100	100	100	100
36	9-6	LI-102-5B	HOTWELL LEVEL S	%	85	85	100	100	100	100
37	9-7	PI-101-1B	STM PKG EXH VAC	IN HG	9	12	11.5	11.3	11	10.5
38	9-8		D/G A BKR		OPEN	OPEN	OPEN	OPEN	OPEN	OPEN
39	9-8		D/G B BKR		OPEN	OPEN	OPEN	OPEN	OPEN	OPEN
40	9-23	16-19-33A/C	TORUS TEMP	DEG F	103	104	102	101	103	104
41	9-25	LI-46A	TORUS LEVEL	FEET	11.4	11.43	0.72	0.72	0.75	0.75
42	9-25	LI-46B	TORUS LEVEL	FEET	11.43	11.46	0.72	0.72	0.75	0.75
43	9-25	TR-16-19-44	TORUS PRESS	PSIG	0.3	0.3	16.5	16.4	16.5	16.6
44	9-25	TR-16-19-44	DRYWELL PRESS	PSIG	2	2	17	17	17	17
45	9-25	PR-1-156-3	DW/TORUS DP	PSID	0.6	0.25	0.71	0.85	0.83	0.84
46	9-25	TR-16-19-45	DRYWELL TEMP	DEG F	155	150	147	146	145	144
47	9-26	PI-1-125-3A	RX BUILDING DP	IN H2O	-0.3	0.75	1.54	1.5	1.31	-1.19
48	9-26	PI-1-125-3B	RX BUILDING DP	IN H2O	2	0.75	1.54	1.5	1.31	-1.19
49	9-26	FI-1-125-1A	SGTS FLOW	CFM	1500	1500	1500	1500	1500	1500
50	9-26	FI-1-125-1B	SGTS FLOW	CFM	0	1500	1500	1500	1500	1500
51	CAD		DW/TORUS O2 CONC.	%	1.2	1.2	1.19	1.18	1.18	1.17

Note: The ops data is dependent on operator actions taken in response to the conditions presented within the scenario. Ops data reflects plant conditions assuming certain basic operator actions being taken. Ops data taken from simulator.

8.0 OPERATIONAL DATA

ITEM	PANEL	INSTR. ID	DESCRIPTION	UNITS					
				SCENARIO TIME	04:30	04:45	05:00	05:15	05:30
				CLOCK TIME	12:45	13:00	13:15	13:30	13:45
1	9-3	FT-23-108-1	HPCI FLOW	GPM	0	0	0	0	0
2	9-3	FI-10-139A	RHR A FLOW	GPM	0	0	0	0	0
3	9-3	FI-10-139B	RHR B FLOW	GPM	2	2	2	2	2
4	9-3	FI-14-50A	CS A FLOW	GPM	0	0	0	0	0
5	9-3	FI-14-50B	CS B FLOW	GPM	0	0	0	0	0
6	9-3	PI-16-19-12A	DRYWELL PRESS	PSIG	18	18	18	18	18
7	9-3	PI-16-19-12B	DRYWELL PRESS	PSIG	18	18	18	18	18
8	9-4	FI-13-91	RCIC FLOW	GPM	0	0	0	0	0
9	9-4	FI-12-141A	RWCU FLOW	GPM	0.E+00	0.E+00	0.E+00	0.E+00	0.E+00
10	9-4	FI-12-141B	RWCU FLOW	GPM	0.E+00	0.E+00	0.E+00	0.E+00	0.E+00
11	9-4	2-165A	RX COOLANT TEMP	DEG F	488	487	483	475	470
12	9-4	2-165B	RX COOLANT TEMP	DEG F	488	487	483	475	470
13	9-4	2-159A	RECIRC A LOOP FLOW	KGPM	0	0	0	0	0
14	9-4	2-159B	RECIRC B LOOP FLOW	KGPM	0	0	0	0	0
15	9-5	7-46A	APRM/IRM A	%	R1/0	R1/0	R1/0	R1/0	R1/0
16	9-5	7-46B	APRM/IRM B	%	R1/0	R1/0	R1/0	R1/0	R1/0
17	9-5	7-46C	APRM/IRM C	%	R1/0	R1/0	R1/0	R1/0	R1/0
18	9-5	7-46D	APRM/IRM D	%	R1/0	R1/0	R1/0	R1/0	R1/0
19	9-5	7-46E	APRM/IRM E	%	R1/0	R1/0	R1/0	R1/0	R1/0
20	9-5	7-46F	APRM/IRM F	%	R1/0	R1/0	R1/0	R1/0	R1/0
21	9-5	7-43A	SRM A	CPS	1.86E+02	1.81E+02	1.77E+02	1.72E+02	1.69E+02
22	9-5	7-43B	SRM B	CPS	1.86E+02	1.81E+02	1.77E+02	1.72E+02	1.68E+02
23	9-5	7-43C	SRM C	CPS	1.86E+02	1.81E+02	1.77E+02	1.72E+02	1.68E+02
24	9-5	7-43D	SRM D	CPS	1.86E+02	1.81E+02	1.77E+02	1.72E+02	1.69E+02
25	9-5	2-3-95	CORE FLOW	MLB/HR	6	6	6	6	6
26	9-5	2-3-95	CORE DP	PSID	0	0	0	0	1
27	9-5	FI-3-310	CRD FLOW	GPM	55.9	55.8	56	55.9	55.8
28	9-5	6-96	WIDE RANGE PRESS	PSIG	609	599	579	535	498
29	9-5	6-96	NAR RANGE PRESS	PSIG	950	950	950	950	950
30	9-5	6-97	FEEDWATER FLOW	MLB/HR	0	0	0	0	0
31	9-5	6-97	MAIN STEAM FLOW	MLB/HR	0	0	0	0	0
32	9-5	6-98	NAR RANGE LEVEL	INCHES	156	166	165	165	172
33	9-5	6-98	WIDE RANGE LEVEL	INCHES	177	188	188	191	199
34	9-6	LI-107-5	CST LEVEL	%	106	110	115	119	123
35	9-6	LI-102-5A	HOTWELL LEVEL N	%	100	100	100	100	100
36	9-6	LI-102-5B	HOTWELL LEVEL S	%	100	100	100	100	100
37	9-7	PI-101-1B	STM PKG EXH VAC	IN HG	9.9	9.3	8.8	8.2	7.7
38	9-8		D/G A BKR		OPEN	OPEN	OPEN	OPEN	OPEN
39	9-8		D/G B BKR		OPEN	OPEN	OPEN	OPEN	OPEN
40	9-23	16-19-33A/C	TORUS TEMP	DEG F	108	109	110	111	113
41	9-25	LI-46A	TORUS LEVEL	FEET	0.78	0.79	0.81	0.83	0.85
42	9-25	LI-46B	TORUS LEVEL	FEET	0.78	0.79	0.81	0.83	0.85
43	9-25	TR-16-19-44	TORUS PRESS	PSIG	16.9	17	17.1	17.2	17.2
44	9-25	TR-16-19-44	DRYWELL PRESS	PSIG	18	18	18	18	18
45	9-25	PR-1-156-3	DW/TORUS DP	PSID	0.61	0.61	0.61	0.59	0.67
46	9-25	TR-16-19-45	DRYWELL TEMP	DEG F	142	141	140	139	139
47	9-26	PI-1-125-3A	RX BUILDING DP	IN H2O	-1.11	-1.03	-0.92	-0.77	-0.7
48	9-26	PI-1-125-3B	RX BUILDING DP	IN H2O	-1.11	-1.03	-0.92	-0.77	-0.7
49	9-26	FI-1-125-1A	SGTS FLOW	CFM	1500	1500	1500	1500	1500
50	9-26	FI-1-125-1B	SGTS FLOW	CFM	1500	1500	1500	1500	1500
51	CAD		DW/TORUS O2 CONC.	%	1.16	1.15	1.14	1.14	1.13

Note: The ops data is dependent on operator actions taken in response to the conditions presented within the scenario. Ops data reflects plant conditions assuming certain basic operator actions being taken. Ops data taken from simulator.

VERMONT YANKEE NUCLEAR POWER STATION
EMERGENCY PREPAREDNESS EXERCISE
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ITEM	PANEL	INSTR. ID	DESCRIPTION	SCENARIO TIME / CLOCK TIME / UNITS	06:00 / 14:00	06:15 / 14:15
1	9-3	FI-23-108-1	HPCI FLOW	GPM	0	0
2	9-3	FI-10-139A	RHR A FLOW	GPM	0	0
3	9-3	FI-10-139B	RHR B FLOW	GPM	2	2
4	9-3	FI-14-50A	CS A FLOW	GPM	0	0
5	9-3	FI-14-50B	CS B FLOW	GPM	0	0
6	9-3	PI-16-19-12A	DRYWELL PRESS	PSIG	18	18
7	9-3	PI-16-19-12B	DRYWELL PRESS	PSIG	18	18
8	9-4	FI-13-91	RCIC FLOW	GPM	0	0
9	9-4	FI-12-141A	RWCU FLOW	GPM	0	0
10	9-4	FI-12-141B	RWCU FLOW	GPM	0	0
11	9-4	2-165A	RX COOLANT TEMP	DEG F	472	472
12	9-4	2-165B	RX COOLANT TEMP	DEG F	472	472
13	9-4	2-159A	RECIRC A LOOP FLOW	KGPM	0	0
14	9-4	2-159B	RECIRC B LOOP FLOW	KGPM	0	0
15	9-5	7-46A	APRM/IRM A	%	R1/0	R1/0
16	9-5	7-46B	APRM/IRM B	%	R1/0	R1/0
17	9-5	7-46C	APRM/IRM C	%	R1/0	R1/0
18	9-5	7-46D	APRM/IRM D	%	R1/0	R1/0
19	9-5	7-46E	APRM/IRM E	%	R1/0	R1/0
20	9-5	7-46F	APRM/IRM F	%	R1/0	R1/0
21	9-5	7-43A	SRM A	CPS	1.65E+02	1.65E+02
22	9-5	7-43B	SRM B	CPS	1.65E+02	1.65E+02
23	9-5	7-43C	SRM C	CPS	1.65E+02	1.65E+02
24	9-5	7-43D	SRM D	CPS	1.65E+02	1.65E+02
25	9-5	2-3-95	CORE FLOW	MLB/HR	6	6
26	9-5	2-3-95	CORE DP	PSID	0	0
27	9-5	FI-3-310	CRD FLOW	GPM	55.9	55.9
28	9-5	6-96	WIDE RANGE PRESS	PSIG	518	518
29	9-5	6-96	NAR RANGE PRESS	PSIG	950	950
30	9-5	6-97	FEEDWATER FLOW	MLB/HR	0	0
31	9-5	6-97	MAIN STEAM FLOW	MLB/HR	0	0
32	9-5	6-98	NAR RANGE LEVEL	INCHES	149	149
33	9-5	6-98	WIDE RANGE LEVEL	INCHES	176	176
34	9-6	LI-107-5	CST LEVEL	%	127	127
35	9-6	LI-102-5A	HOTWELL LEVEL N	%	100	100
36	9-6	LI-102-5B	HOTWELL LEVEL S	%	100	100
37	9-7	PI-101-1B	STM PKG EXH VAC	IN HG	7.2	7.2
38	9-8		D/G A BKR		OPEN	OPEN
39	9-8		D/G B BKR		OPEN	OPEN
40	9-23	16-19-33A/C	TORUS TEMP	DEG F	113	113
41	9-25	LI-46A	TORUS LEVEL	FEET	0.86	0.86
42	9-25	LI-46B	TORUS LEVEL	FEET	0.86	0.86
43	9-25	TR-16-19-44	TORUS PRESS	PSIG	17.3	17.3
44	9-25	TR-16-19-44	DRYWELL PRESS	PSIG	18	18
45	9-25	PR-1-156-3	DW/TORUS DP	PSID	0.63	0.63
46	9-25	TR-16-19-45	DRYWELL TEMP	DEG F	138	138
47	9-26	PI-1-125-3A	RX BUILDING DP	IN H2O	-0.68	-0.68
48	9-26	PI-1-125-3B	RX BUILDING DP	IN H2O	-0.68	-0.68
49	9-26	FI-1-125-1A	SGTS FLOW	CFM	1500	1500
50	9-26	FI-1-125-1B	SGTS FLOW	CFM	1500	1500
51	CAD		DW/TORUS O2 CONC.	%	1.12	1.12

Note: The ops data is dependent on operator actions taken in response to the conditions presented within the scenario. Ops data reflects plant conditions assuming certain basic operator actions being taken. Ops data taken from simulator.

VERMONT YANKEE NUCLEAR POWER STATION

EMERGENCY PREPAREDNESS EXERCISE

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9.0 RADIOLOGICAL DATA

9.1 Area Radiation Monitors

9.2 Process Monitors

9.3 In-Plant Radiation Levels

9.4 Plant Chemistry Data

9.5 Plant Stack Release Data

9.6 Field Monitoring Maps and Data

VERMONT YANKEE NUCLEAR POWER STATION
EMERGENCY PREPAREDNESS EXERCISE
2001

9.1 Area Radiation Monitors

9.1AREA RADIATION MONITORS

			SCENARIO TIME CLOCK TIME		00:15 08:30	00:30 08:45	00:45 09:00	01:00 09:15	01:15 09:30	01:30 09:45	01:45 10:00	02:00 10:15
ARM No.	PANEL	BLDGS/ELV	DESCRIPTION	UNITS								
18-154A	9-11	RB-252	By NW Airlock	R/hr	<1	<1	<1	<1	<1	<1	<1	<1
18-154B	9-11	RB-252	By SW Airlock	R/hr	<1	<1	<1	<1	<1	<1	<1	<1
18-154C	9-11	RB-252	TIP Room	R/hr	<1	<1	<1	<1	<1	<1	<1	<1
1	9-11	RB-232	Torus Catwalk	mr/hr	8	8	8	8	8	8	8	>0
2	9-11	RB-252	By Elevator	mr/hr	4	4	4	4	3	3	3	0.2
3	9-11	RB-252	By RR Airlock	mr/hr	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
4	9-11	RB-252	By TIP Room	mr/hr	5	5	5	5	5	5	5	5
5	9-11	RB-252	By DW Airlock	mr/hr	520	520	520	600	600	600	600	2000
6	9-11	RB-280	By Elevator	mr/hr	8	8	8	8	8	7	7	1
7	9-11	RB-252	By CRD Repair Room	mr/hr	11	11	11	11	10	11	11	7
8	9-11	RB-303	By Elevator	mr/hr	4	4	4	4	5	5	5	3
9	9-11	RB-303	By RWCU Pump Rooms	mr/hr	4	4	4	4	4	4	4	2
10	9-11	RB-318	By Elevator	mr/hr	7	7	7	6	6	6	6	1
11	9-11	RB-318	By RWCU Precoat	mr/hr	4	4	4	4	4	3	5	4
12	9-11	RB-345	By Elevator	mr/hr	4	4	4	4	4	3	3	<1
14	9-11	RB-345	Refuel Floor West	mr/hr	5	5	5	4	4	4	5	1
15	9-11	RB-345	Spent Fuel Pool	mr/hr	16	16	16	15	14	14	14	8
16	9-11	RB-318	By Vent Duct	mr/hr	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4
17	9-11	RW-252	Radwaste BLDG Sample Sink	mr/hr	1	1	1	1	1	1	1	1
18	9-11	RW-252	Radwaste BLDG Decon Area	mr/hr	1	1	1	1	1	1	1	1
19	9-11	RW-230	Radwaste BLDG Lower Level	mr/hr	1.5	1.5	1.5	1.5	1.5	1.5	1	1
20	9-11	TB-248	Over FW Pump Room	mr/hr	2	2	2	2	2	2	2	2
21	9-11	TB-248	Steam Line Stairs	mr/hr	190	190	190	190	200	250	250	50
22	9-11	TB-232	Cond Demin Panel	mr/hr	0.3	0.3	0.3	0.3	0.3	0.5	0.2	0.1
23	9-11	TB-252	Machine Shop	mr/hr	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.2
24	9-11	TB-272	No 2 CIV Railing	mr/hr	8	8	8	8	8	7	8	8
25	9-11	TB-272	Outside Control Room	mr/hr	0.46	0.46	0.46	0.42	0.38	0.5	0.33	0.1
26	9-11	TB-252	MUD Train Area	mr/hr	0.2	0.2	0.2	0.2	0.2	0.2	0.2	.01
13	9-11	TB-228	On North Wall	mr/hr	110	110	110	110	120	120	120	1

9.1AREA RADIATION MONITORS

			SCENARIO TIME		02:15	02:30	02:45	03:00	03:15	03:30	03:45	04:00
			CLOCK TIME		10:30	10:45	11:00	11:15	11:30	11:45	12:00	12:15
ARM No.	PANEL	BLDGS/ELV	DESCRIPTION	UNITS								
18-154A	9-11	RB-252	By NW Airlock	R/hr	<1	<1	<1	<1	3	9	9	9
18-154B	9-11	RB-252	By SW Airlock	R/hr	<1	<1	<1	<1	2.5	2.9	2.9	2.5
18-154C	9-11	RB-252	TIP Room	R/hr	<1	<1	<1	<1	<1	1	1	2
1	9-11	RB-232	Torus Catwalk	mr/hr	8	8	8	8	600	900	900	900
2	9-11	RB-252	By Elevator	mr/hr	0.2	0.2	0.2	0.2	10K	OSH	OSH	OSH
3	9-11	RB-252	By RR Airlock	mr/hr	0.3	0.3	0.3	0.3	1000	OSH	OSH	OSH
4	9-11	RB-252	By TIP Room	mr/hr	5	5	5	5	1000	OSH	OSH	OSH
5	9-11	RB-252	By DW Airlock	mr/hr	4000	5000	5500	5500	5500	200K	5500	5500
6	9-11	RB-280	By Elevator	mr/hr	1	1	1	1	OSH	OSH	OSH	OSH
7	9-11	RB-252	By CRD Repair Room	mr/hr	5	5	5	5	120	360	600	600
8	9-11	RB-303	By Elevator	mr/hr	4	4	4	4	OSH	OSH	OSH	OSH
9	9-11	RB-303	By RWCU Pump Rooms	mr/hr	2	2	2	2	OSH	OSH	OSH	OSH
10	9-11	RB-318	By Elevator	mr/hr	1	1	1	1	8500	330	9000	9000
11	9-11	RB-318	By RWCU Precoat	mr/hr	4	4	4	4	850	900	900	900
12	9-11	RB-345	By Elevator	mr/hr	<1	<1	<1	<1	7500	7500	7500	7000
14	9-11	RB-345	Refuel Floor West	mr/hr	1	1	1	1	1000	3000	4000	4000
15	9-11	RB-345	Spent Fuel Pool	mr/hr	8	8	8	8	1250	3000	4000	4000
16	9-11	RB-318	By Vent Duct	mr/hr	0.5	0.5	0.5	0.5	300	660	670	700
17	9-11	RW-252	Radwaste BLDG Sample Sink	mr/hr	1	1	1	1	1	1	1	1
18	9-11	RW-252	Radwaste BLDG Decon Area	mr/hr	1	1	1	1	1	1	1	1
19	9-11	RW-230	Radwaste BLDG Lower Level	mr/hr	1.5	1.5	1.5	1.5	1.5	1.5	1.5	200
20	9-11	TB-248	Over FW Pump Room	mr/hr	2	2	2	2	2	2	2	2
21	9-11	TB-248	Steam Line Stairs	mr/hr	35	30	20	20	20	34	34	34
22	9-11	TB-232	Cond Demin Panel	mr/hr	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
23	9-11	TB-252	Machine Shop	mr/hr	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
24	9-11	TB-272	No 2 CIV Railing	mr/hr	8	8	8	8	8	8	8	8
25	9-11	TB-272	Outside Control Room	mr/hr	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
26	9-11	TB-252	MUD Train Area	mr/hr	DS	DS	DS	DS	DS	DS	DS	DS
13	9-11	TB-228	On North Wall	mr/hr	1	1	1	1	1	1	1	1

9.1AREA RADIATION MONITORS

			SCENARIO TIME CLOCK TIME		04:15 12:30	04:30 12:45	04:45 13:00	05:00 13:15	05:15 13:30	05:30 13:45	05:45 14:00	06:45 15:00
ARM No.	PANEL	BLDGS/ELV	DESCRIPTION	UNITS								
18-154A	9-11	RB-252	By NW Airlock	R/hr	9.5	9.5	9.5	6.5	3	2	1.5	.33
18-154B	9-11	RB-252	By SW Airlock	R/hr	2.9	2.8	2.5	2	1.5	1.0	.7	.1
18-154C	9-11	RB-252	TIP Room	R/hr	1	1	1	1	1	1	0	0
1	9-11	RB-232	Torus Catwalk	mr/hr	900	800	700	600	550	525	500	90
2	9-11	RB-252	By Elevator	mr/hr	OSH	OSH	OSH	OSH	6K	3K	1100	325
3	9-11	RB-252	By RR Airlock	mr/hr	OSH	OSH	OSH	OSH	1000	1000	1000	325
4	9-11	RB-252	By TIP Room	mr/hr	1300	1200	1100	1100	1000	1000	1000	325
5	9-11	RB-252	By DW Airlock	mr/hr	5500	450K	425K	5500	5500	5500	5500	5500
6	9-11	RB-280	By Elevator	mr/hr	OSH	OSH	OSH	OSH	OSH	OSH	OSH	2K
7	9-11	RB-252	By CRD Repair Room	mr/hr	570	550	520	500	470	450	420	35
8	9-11	RB-303	By Elevator	mr/hr	OSH	OSH	OSH	OSH	10K	5K	1100	350
9	9-11	RB-303	By RWCU Pump Rooms	mr/hr	OSH	OSH	OSH	OSH	8K	3K	1K	350
10	9-11	RB-318	By Elevator	mr/hr	9000	8900	8800	7000	5000	2000	1000	300
11	9-11	RB-318	By RWCU Precoat	mr/hr	475	450	600	550	500	400	450	300
12	9-11	RB-345	By Elevator	mr/hr	7000	6000	5000	4000	3000	2000	1000	500
14	9-11	RB-345	Refuel Floor West	mr/hr	4000	3500	3250	3000	2750	2500	2250	150
15	9-11	RB-345	Spent Fuel Pool	mr/hr	3750	3500	3250	3000	2750	2500	2250	150
16	9-11	RB-318	By Vent Duct	mr/hr	92	83	750	670	590	500	420	160
17	9-11	RW-252	Radwaste BLDG Sample Sink	mr/hr	1	1	1	1	1	1	1	1
18	9-11	RW-252	Radwaste BLDG Decon Area	mr/hr	1	1	1	1	1	1	1	1
19	9-11	RW-230	Radwaste BLDG Lower Level	mr/hr	200	200	200	200	200	200	200	200
20	9-11	TB-248	Over FW Pump Room	mr/hr	2	2	2	2	2	2	2	2
21	9-11	TB-248	Steam Line Stairs	mr/hr	20	20	20	20	20	20	20	20
22	9-11	TB-232	Cond Demin Panel	mr/hr	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
23	9-11	TB-252	Machine Shop	mr/hr	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
24	9-11	TB-272	No 2 CIV Railing	mr/hr	8	8	8	8	8	8	8	8
25	9-11	TB-272	Outside Control Room	mr/hr	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
26	9-11	TB-252	MUD Train Area	mr/hr	DS	DS	DS	DS	DS	DS	DS	DS
13	9-11	TB-228	On North Wall	mr/hr	1	1	1	1	1	1	1	1

VERMONT YANKEE NUCLEAR POWER STATION

EMERGENCY PREPAREDNESS EXERCISE

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9.2 Process Monitors

9.2 PROCESS MONITORS

ARM NO.	PANEL	BLDG/ELV	DESCRIPTION	UNITS	00:15 08:30	00:30 08:45	00:45 09:00	01:00 09:15	01:15 09:30	01:30 09:45	01:45 10:00
	9-2	ST/257	STACK GAS MON-GAS 1	cpm	180	180	180	180	180	180	NP
	9-2	ST/257	STACK GAS MON-GAS 2	cpm	280	280	280	280	280	280	NP
	9-2	ST/257	STACK HI RANGE	mR/hr	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	9-2	RB/280	CONTAINMENT MON GAS	cpm	475	475	475	475	475	475	363
	9-2	RB/280	CONTAINMENT MON-PART	cpm	1150	1150	1150	1150	1150	1150	726
27	9-2	DW/252	DRYWELL CH A	R/hr	3	3	3	3	3	3	7
28	9-2	DW/252	DRYWELL CH B	R/hr	3	3	3	3	3	3	7
	9-2	RB/280	RX BLDG VENT GAS	cpm	150	150	149	149	149	149	149
	9-2	RB/280	RX BLDG VENT - PART	cpm	1400	1490	1490	1490	1490	1490	1490
31	9-10	RB/280	RX BLDG VENT NORTH	mR/hr	2	2	2	2	2	2	0.1
32	9-10	RB/280	RX BLDG VENT SOUTH	mR/hr	2	2	2	2	2	2	0.1
453A	9-10	RB/345	SPENT FUEL POOL WEST	mR/hr	3	3	3	3	3	3	3
453B	9-10	RB/345	SPENT FUEL POOL EAST	mR/hr	3	3	3	3	3	3	3
	9-10	RB/256	MAIN STM LINE A	mR/hr	183	183	183	183	183	183	NP
	9-10	RB/256	MAIN STM LINE B	mR/hr	179	179	179	179	179	179	34
	9-10	RB/256	MAIN STM LINE C	mR/hr	180	180	180	180	180	180	NP
	9-10	RB/256	MAIN STM LINE D	mR/hr	180	180	180	180	180	180	31
38		RM-17-150A	SJAE(AIR EJECTOR)	mR/hr	85	85	85	85	85	85	NP

DS=DOWNSCALE
NP=NO POWER
OSH=OFF SCALE HIGH

9.2 PROCESS MONITORS

ARM NO.	PANEL	BLDG/ELV	DESCRIPTION	UNITS	2:00 10:15	02:15 10:30	02:30 10:45	02:45 11:00	03:00 11:15	03:15 11:30	3:30 11:45
	9-2	ST/257	STACK GAS MON-GAS 1	cpm	NP	NP	NP	NP	NP	OSH	OSH
	9-2	ST/257	STACK GAS MON-GAS 2	cpm	NP	NP	NP	NP	NP	OSH	OSH
	9-2	ST/257	STACK HI RANGE	mR/hr	0.1	0.1	0.1	0.1	0.1	216	8660
	9-2	RB/280	CONTAINMENT MON GAS	cpm	20	20	20	20	20	20	20
	9-2	RB/280	CONTAINMENT MON-PART	cpm	680	626	579	544	499	455	407
27	9-2	DW/252	DRYWELL CH A	R/hr	19	30	40	45	45	45	45
28	9-2	DW/252	DRYWELL CH B	R/hr	19	30	40	45	45	45	45
	9-2	RB/280	RX BLDG VENT GAS	cpm	150	149	150	150	150	773	796
	9-2	RB/280	RX BLDG VENT - PART	cpm	1490	1490	1490	1490	1490	$6.4X10^6$	OSH
31	9-10	RB/280	RX BLDG VENT NORTH	mR/hr	0.1	0.1	0.2	0.7	1	67	266
32	9-10	RB/280	RX BLDG VENT SOUTH	mR/hr	0.1	0.1	0.2	0.7	1	67	266
453A	9-10	RB/345	SPENT FUEL POOL WEST	mR/hr	3	3	3	3	3	1333	5332
453B	9-10	RB/345	SPENT FUEL POOL EAST	mR/hr	3	3	3	3	3	1333	5332
	9-10	RB/256	MAIN STM LINE A	mR/hr	NP	NP	NP	NP	17	17	17
	9-10	RB/256	MAIN STM LINE B	mR/hr	23	21	20	19	19	18	18
	9-10	RB/256	MAIN STM LINE C	mR/hr	NP	NP	NP	NP	18	18	18
	9-10	RB/256	MAIN STM LINE D	mR/hr	22	19	18	17	17	16	16
38		RM-17-150A	SJAE(AIR EJECTOR)	mR/hr	NP	NP	NP	NP	DS	DS	DS

DS=DOWNSCALE
NP=NO POWER
OSH=OFF SCALE HIGH

9.2 PROCESS MONITORS

ARM NO.	PANEL	BLDG/ELV	DESCRIPTION	UNITS	3:45 12:00	4:00 12:15	4:15 12:30	4:30 12:45	4:45 13:00	5:00 13:15	5:15 13:30
	9-2	ST/257	STACK GAS MON-GAS 1	cpm	OSH	OSH	OSH	OSH	OSH	OSH	OSH
	9-2	ST/257	STACK GAS MON-GAS 2	cpm	OSH	OSH	OSH	OSH	OSH	OSH	OSH
	9-2	ST/257	STACK HI RANGE	mR/hr	150,000	180,000	170,000	160,000	15,000	14,000	1300
	9-2	RB/280	CONTAINMENT MON GAS	cpm	20	20	20	20	20	20	20
	9-2	RB/280	CONTAINMENT MON-PART	cpm	375	346	319	294	271	250	231
27	9-2	DW/252	DRYWELL CH A	R/hr	45	45	45	45	45	45	45
28	9-2	DW/252	DRYWELL CH B	R/hr	45	45	45	45	45	45	45
	9-2	RB/280	RX BLDG VENT GAS	cpm	762	675	150	150	150	150	150
	9-2	RB/280	RX BLDG VENT - PART	cpm	OSH	OSH	OSH	$9.1X10^6$	$6.1X10^6$	$4.2X10^6$	$3.0X10^6$
31	9-10	RB/280	RX BLDG VENT NORTH	mR/hr	OSH	OSH	OSH	OSH	OSH	OSH	OSH
32	9-10	RB/280	RX BLDG VENT SOUTH	mR/hr	OSH	OSH	OSH	OSH	OSH	OSH	OSH
453A	9-10	RB/345	SPENT FUEL POOL WEST	mR/hr	8000	8000	7751	7500	7250	6998	6747
453B	9-10	RB/345	SPENT FUEL POOL EAST	mR/hr	8000	8000	7751	7500	7250	6998	6747
	9-10	RB/256	MAIN STM LINE A	mR/hr	17	17	16	16	16	16	16
	9-10	RB/256	MAIN STM LINE B	mR/hr	18	18	18	17	17	17	17
	9-10	RB/256	MAIN STM LINE C	mR/hr	17	17	17	17	17	17	16
	9-10	RB/256	MAIN STM LINE D	mR/hr	16	16	16	16	15	15	15
38		RM-17-150	SJAE(AIR EJECTOR)	mR/hr	DS	DS	DS	DS	DS	DS	DS

DS=DOWNSCALE
NP=NO POWER
OSH=OFF SCALE HIGH

9.2 PROCESS MONITORS

ARM NO.	PANEL	BLDG/ELV	DESCRIPTION	UNITS	5:30 13:45	5:45 14:00	6:00 14:15	6:15 14:30	6:30 14:45	6:45 15:00
	9-2	ST/257	STACK GAS MON-GAS 1	cpm	OSH	OSH	OSH	OSH	OSH	OSH
	9-2	ST/257	STACK GAS MON-GAS 2	cpm	OSH	OSH	OSH	OSH	OSH	OSH
	9-2	ST/257	STACK HI RANGE	mR/hr	1200	1100	1000	900	800	700
	9-2	RB/280	CONTAINMENT MON GAS	cpm	20	20	20	20	20	20
	9-2	RB/280	CONTAINMENT MON-PART	cpm	213	196	171	157	134	121
27	9-2	DW/252	DRYWELL CH A	R/hr	45	45	45	45	45	45
28	9-2	DW/252	DRYWELL CH B	R/hr	45	45	45	45	45	45
	9-2	RB/280	RX BLDG VENT GAS	cpm	150	150	150	150	150	150
	9-2	RB/280	RX BLDG VENT - PART	cpm	$2.1X10^6$	$1.4X10^6$	$.9X10^6$	$.6X10^6$	$.4X10^6$	$.2X10^6$
31	9-10	RB/280	RX BLDG VENT NORTH	mR/hr	250	225	200	175	150	125
32	9-10	RB/280	RX BLDG VENT SOUTH	mR/hr	250	225	200	175	150	125
453A	9-10	RB/345	SPENT FUEL POOL WEST	mR/hr	6496	6245	6008	5814	5620	5401
453B	9-10	RB/345	SPENT FUEL POOL EAST	mR/hr	6496	6245	6008	5814	5620	5401
	9-10	RB/256	MAIN STM LINE A	mR/hr	16	16	16	16	16	16
	9-10	RB/256	MAIN STM LINE B	mR/hr	17	17	17	17	17	17
	9-10	RB/256	MAIN STM LINE C	mR/hr	16	16	16	16	16	16
	9-10	RB/256	MAIN STM LINE D	mR/hr	15	15	15	15	15	15
38		RM-17-150	SJAE(AIR EJECTOR)	mR/hr	DS	DS	DS	DS	DS	DS

DS=DOWNSCALE
NP=NO POWER
OSH=OFF SCALE HIGH

VERMONT YANKEE NUCLEAR POWER STATION

EMERGENCY PREPAREDNESS DRILL

2001

9.3 IN-PLANT RADIATION LEVELS

TABLE 9.3-1
Reactor Building Refuel Deck, Elevation 345'
(mR/hr unless otherwise noted)

Clock Time	ARM 12	ARM 14	ARM 15	PRM 453A	PRM 453B	Zone I	Zone II	Zone III	Zone IV
0815	4	1	16	3	3	5	3	3	3
0900	4	1	16	3	3	5	3	3	3
1000	4	1	16	DS	3	5	3	3	3
1100	3	1	8	DS	3	1	1	1	1
1130	7500	1000	1250	DS	2500	7000	3000	2000	2000
1200	7500	4000	4000	DS	2500	7100	3000	2000	2000
1300	5000	3250	3250	DS	2000	7000	3000	1000	1000
1400	1000	2250	2250	DS	1500	1000	500	200	200
1500	500	150	150	DS	1000	500	100	50	50

NOTES: DS=DOWNSCALE
General area contamination levels: Before 11:30 <1K dpm /100cm2
After 11:30 10K-20K dpm/100cm2 in all zones

REACTOR BUILDING
ELEVATION 345'

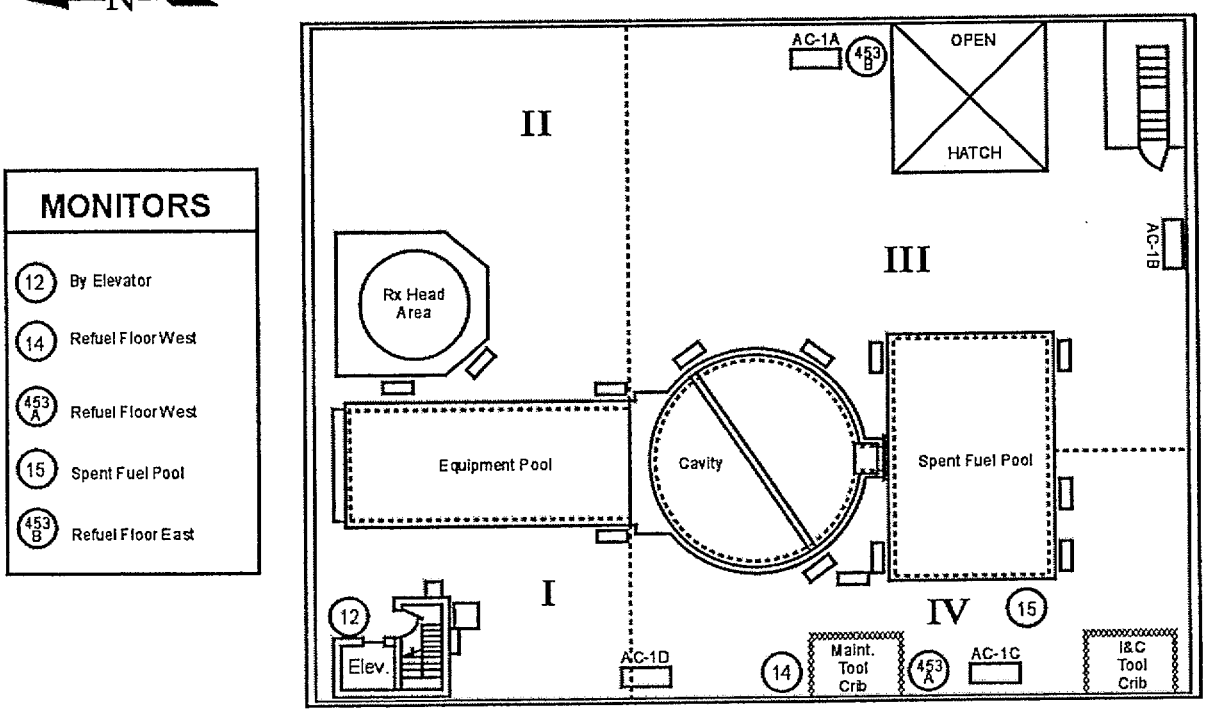

FIGURE 9.3-1

TABLE 9.3-2
Reactor Building, Elevation 318'
(mR/hr unless otherwise noted)

Clock	ARM	ARM	ARM	Zone	Zone	Zone	Zone	Zone	Zone	Zone
Time	10	11	16	I	II	III	IV	V	VI	VII
0815	1	5	.5	3	3	5	3	3	.5	.5
0900	1	5	.5	3	3	5	3	3	.5	.5
1000	1	5	.5	3	3	5	3	3	.5	.5
1100	1	3	.3	1	3	5	5	3	.5	.5
1130	8500	850	300	8500	700	1500	700	600	300	300
1200	9000	900	670	9000	800	1500	700	600	300	300
1300	8800	600	750	8800	700	4250	1000	900	600	600
1400	1000	325	420	1000	100	325	500	300	100	100
1500	350	300	160	350	300	300	120	100	80	80

NOTES: General area contamination levels: Before 11:30 <1K dpm /100cm2
After 11:30 20K-50K dpm/100cm2 in all zones

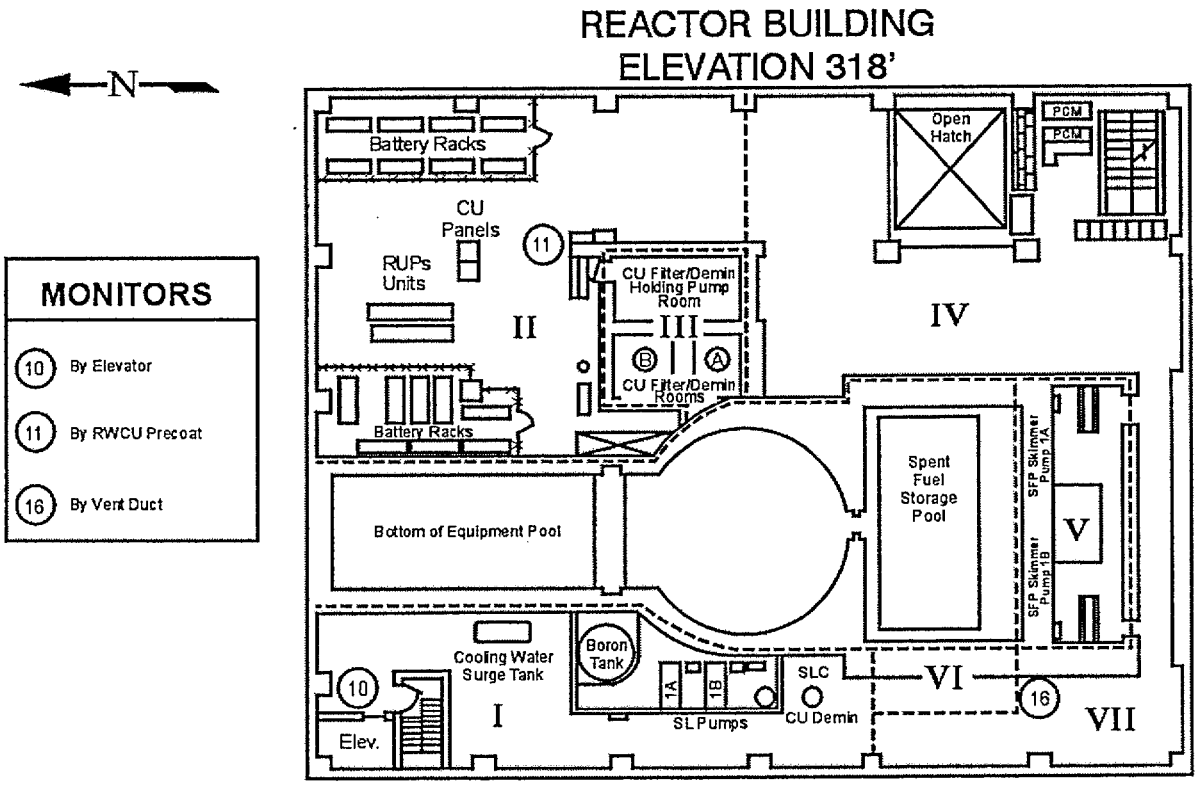

FIGURE 9.3-2

TABLE 9.3-3
Reactor Building, Elevation 303'
(mR/hr unless otherwise noted)

Clock	ARM	ARM	Zone	Zone	Zone	Zone	Zone	Zone	Zone
Time	8	9	I	II	III	IV	V	VI	VII
0815	4	5	16	3	3	5	3	3	.2
0900	4	5	16	3	3	5	3	3	.2
1000	4	2	16	3	3	5	3	3	.2
1100	4	2	16	3	3	5	3	3	.2
1130	18000	15000	16000	8000	1000	750	750	750	750
1200	19000	16000	17000	9000	1000	850	850	900	750
1300	18500	15000	16000	8000	1000	700	700	700	650
1400	1100	1000	1000	900	1000	500	500	600	500
1500	350	350	350	350	1000	50	50	50	50

NOTES:

General area contamination levels: Before 11:30 <1K dpm /100cm2
After 11:30 18K-30K dpm/100cm2 in all zones

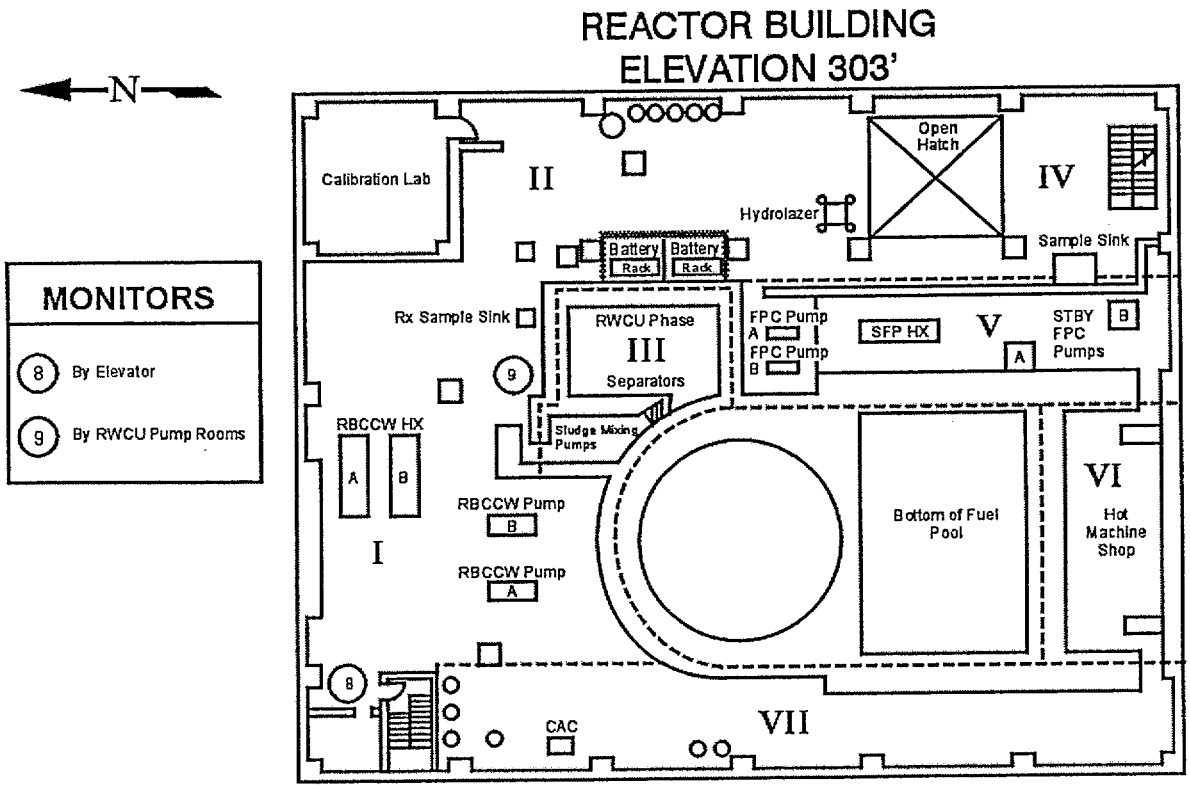

FIGURE 9.3-3

TABLE 9.3-4
Reactor Building, Elevation 280'
(mR/hr unless otherwise noted)

Clock Time	ARM 6	RB Vent North 17-455A* (31)	RB Vent South 17-455B (32)	Zone I	Zone II	Zone III	Zone IV	Zone V	Zone VI	Zone VII	Zone VIII
0815	5	2	2	5	20	7	5	1.4	1.4	1.4	5
0900	5	2	2	5	20	7	5	1.4	1.4	1.4	5
1000	5	2	2	5	20	7	5	1.4	1.4	1.4	5
1100	1	DS	D2	1	20	4	3	1	1	1	3
1130	70K	DS	OSH	70K	70K	28K	5K	4K	2K	18K	50K
1200	350K	DS	OSH	350K	350K	30K	5.5K	4.5K	4.3K	19K	50K
1300	500K	DS	OSH	500K	500K	25K	5K	4K	4.1K	18K	40K
1400	20K	DS	OSH	20K	20K	3K	1K	800	750	2K	5K
1500	2K	DS	800	2K	2K	500	500	250	120	250	2K

NOTES: DS=DOWNSCALE
General area contamination levels: Before 11:30 <1K dpm /100cm2
After 11:30 50K-100K dpm/100cm2 in all zones

REACTOR BUILDING
ELEVATION 280'

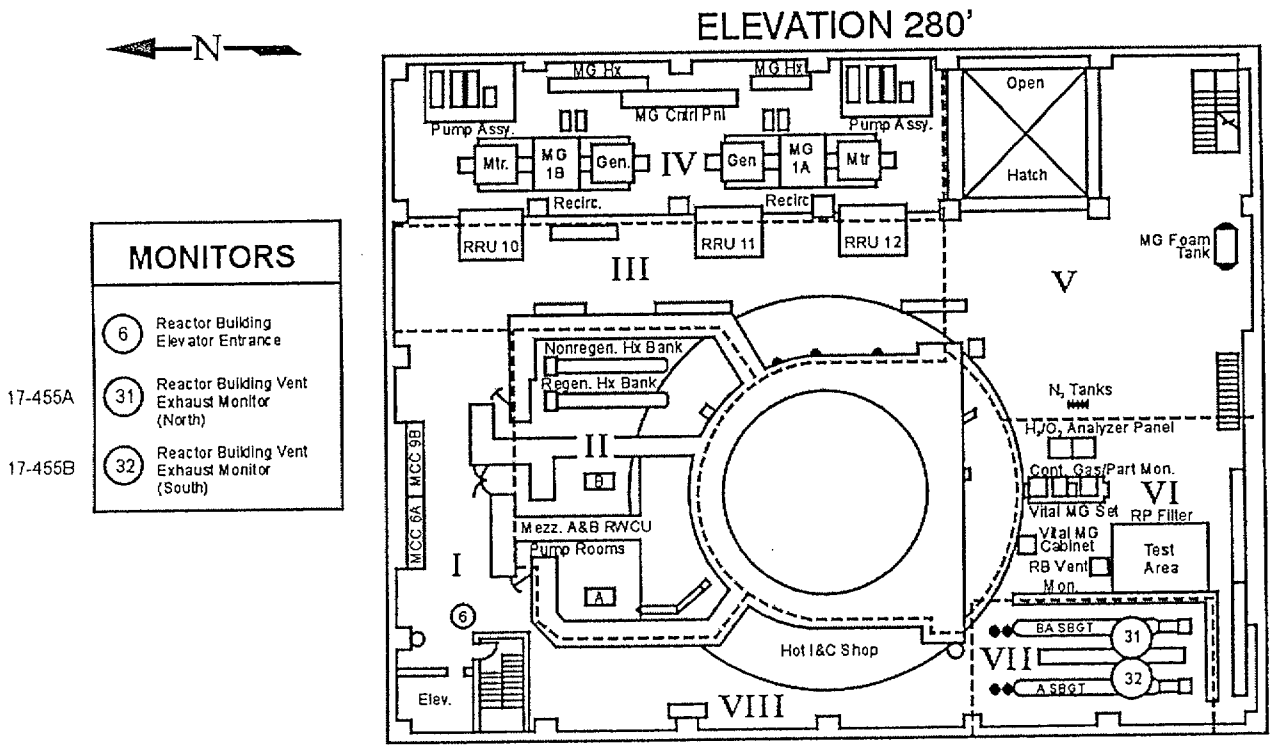

FIGURE 9.3-4

TABLE 9.3-5
Reactor Building, Elevation 252'
(mR/hr unless otherwise noted)

Clock Time	ARM 2	ARM 3	ARM 4	ARM 5	ARM 7	RM-14 #29	Zone I	Zone II	Zone III	Zone IV	Zone V	Zone VI	Zone VII
0815	.2	.3	5	700	12	.2	5	3	.3	700	.3	12	150
0900	.2	.2	5	700	12	.2	5	3	.3	700	.3	12	150
1000	.2	.2	5	1000	5	.2	5	3	.3	1000	.3	5	150
1030	.2	.2	5	4000	5	.2	5	3	.3	4000	.3	5	75
1100	.2	.2	5	6000	5	.2	5	3	.3	6000	.3	5	25
1130	10K	1000	1000	6000	120	1500	8K	9K	5K	6000	2.5K	250	250
1200	11K	1300	1300	6000	600	1500	8.5K	9.5K	5.5K	6000	2.9K	250	250
1300	10.5K	1100	1100	5500	520	1250	8K	9K	5K	5500	2.5K	180	180
1400	1100	1000	1000	5500	420	750	1000	1500	1000	5500	700	110	110
1500	325	325	325	5500	35	50	325	325	250	5500	200	80	80

NOTES: Zone readings are average dose rates throughout the RHR. RCIC, and HPCI Quad elevation areas.
General area contamination levels: Before 11:30 <1K dpm /100cm2
After 11:30 10K-20K dpm/100cm2 in all zones

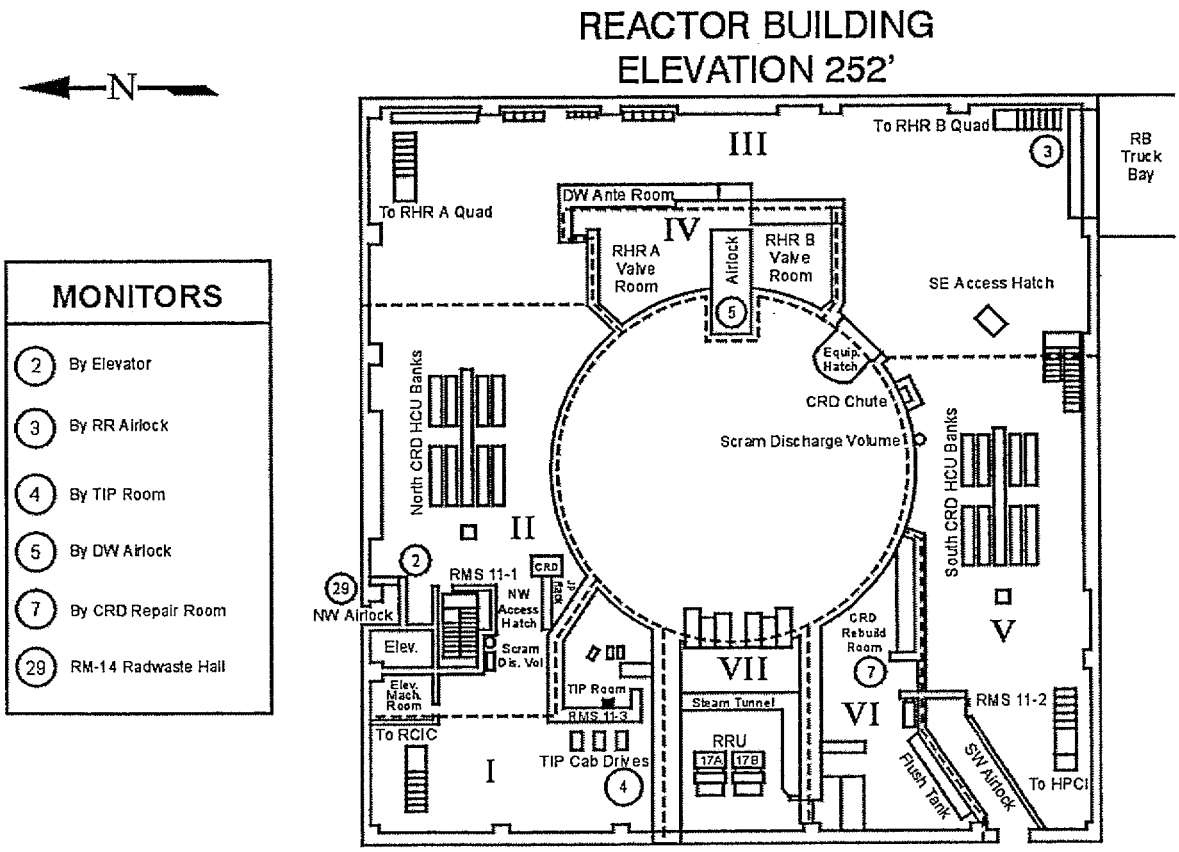

FIGURE 9.3-5

TABLE 9.3-6
Torus Area (Catwalk and Torus Elevation Areas)
(mR/hr unless otherwise noted)

Clock	ARM	Zone
Time	1	V
0815	8	8
0900	8	8
1000	8	8
1030	8	8
1100	8	8
1130	600	600
1200	900	900
1300	700	700
1400	500	500
1500	60	60

NOTE: Zone readings are average dose rates throughout the Torus Catwalk and Torus elevation areas.

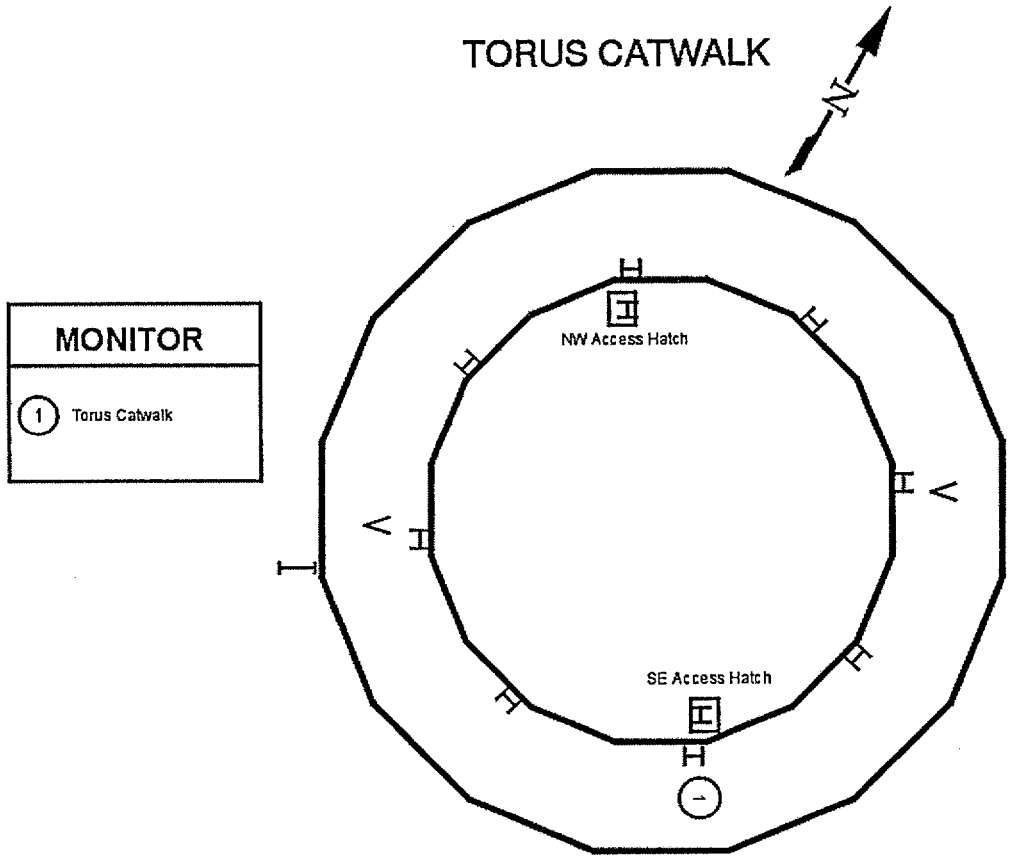

FIGURE 9.3-6

TABLE 9.3-7
Turbine Deck, Elevation 272'
(mR/hr unless otherwise noted)

Clock	ARM 24	ARM 25	Zone I	Zone II	Zone III	Turbine Deck CAM (cpm)	
Time						NG	Particulate
0815	8	.8	5	5	10	250	900
0900	7	.8	5	5	10	250	900
1000	7	.8	5	5	10	250	900
1030	7	0	2	2	5	250	900
1100	7	0	2	2	4	250	900
1130 to END	6	0	2	2	2	250	900

NOTES: Zone readings are average dose rates throughout zone.
General area contamination levels: <1K dpm /100cm2

TURBINE DECK
ELEVATION 272'

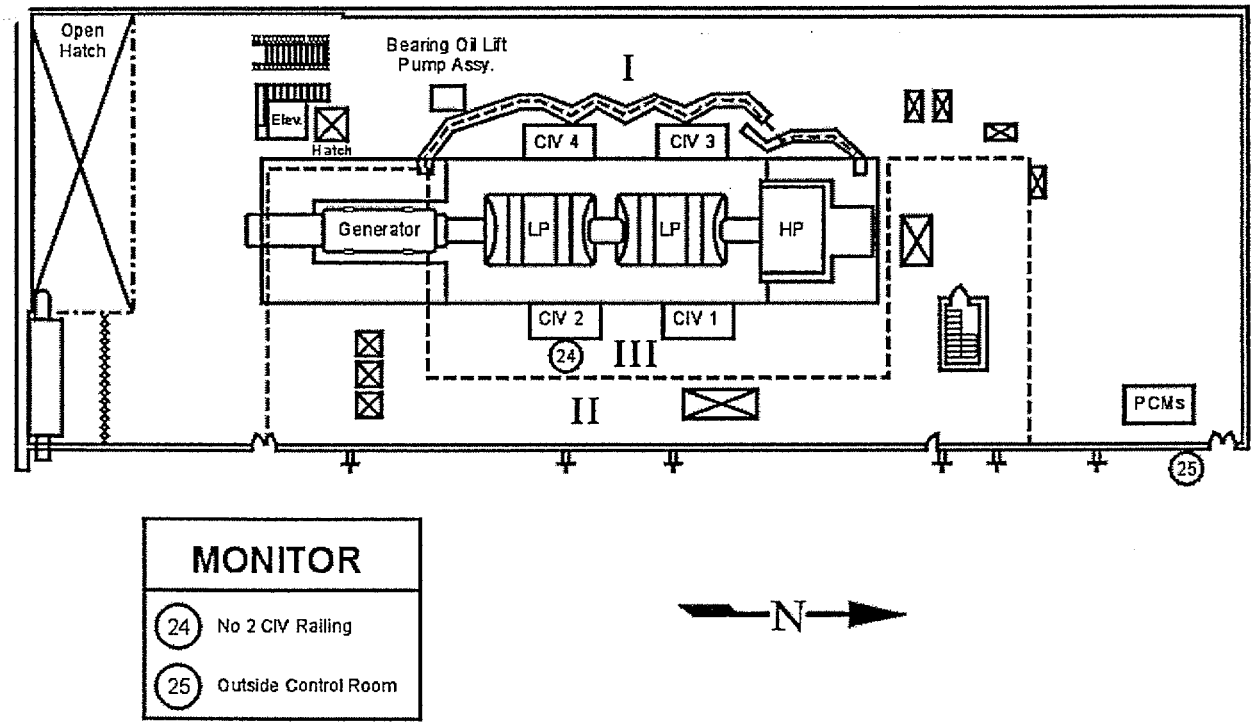

FIGURE 9.3-7

TABLE 9.3-8
Turbine Building Loading Bay, Make-Up Demineralization Cond.
Demineralization Areas, Elevation 252'
(mR/hr unless otherwise noted)

Clock	ARM	ARM	RM-14 #36	Zone	Zone	Zone	Zone
Time	23	26	(cpm)	I	II	III	IV
0815	.2	.2	150	.2	.2	.1	.2
0900	.2	.2	150	.2	.2	.1	.2
1000	.2	.2	150	.2	.2	.1	.2
1030	.2	.01	150	.2	.2	.1	.2
1100	.2	.01	150	.2	.2	.1	.2
1130 to END	.2	.01	150	.2	.2	.1	.2

NOTES: Zone readings are average dose rates throughout zone.
General area contamination levels <1k dpm /100 cm2.

PRETREATMENT ROOM, BOILER ROOM, TURBINE LOADING BAY, MUDs, DIESELS, COND. DEMIN. HATCH
ELEVATION 252'

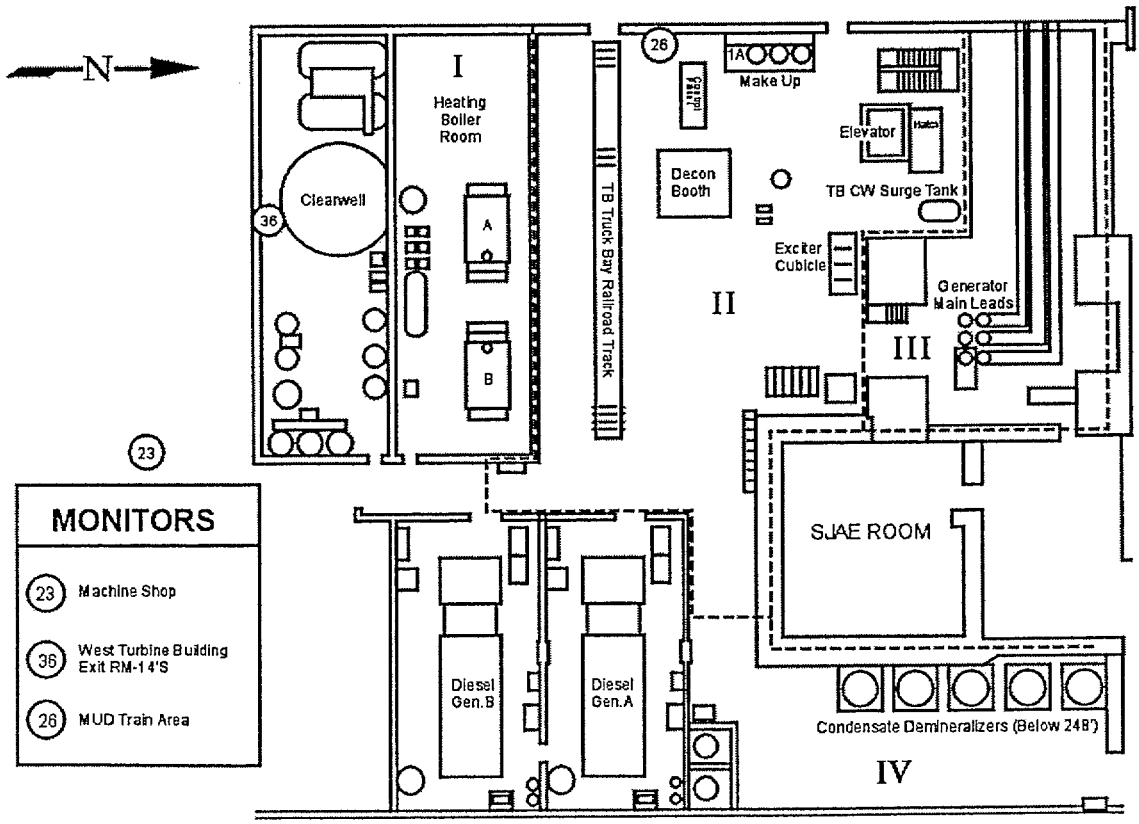

FIGURE 9.3-8

TABLE 9.3-9
Turbine Building Cond. Bay, Elevation 248'
(mR/hr unless otherwise noted)

Clock Time	ARM 20	ARM 21	Zone III	Zone IV	Zone V	Zone VI	Zone VII	Zone VIII
0815	2	180	2	2	3	3	180	2
0900	2	180	2	2	3	3	180	2
1000	2	180	2	2	3	3	180	2
1030	2	50	2	2	2	2	50	2
1100	1	20	1	1	1	1	20	1
1130 to END	1	20	1	1	1	1	20	1

NOTES: Zone readings are average dose rates throughout zone.
General area contamination levels <1K dpm/1 00 cm2.

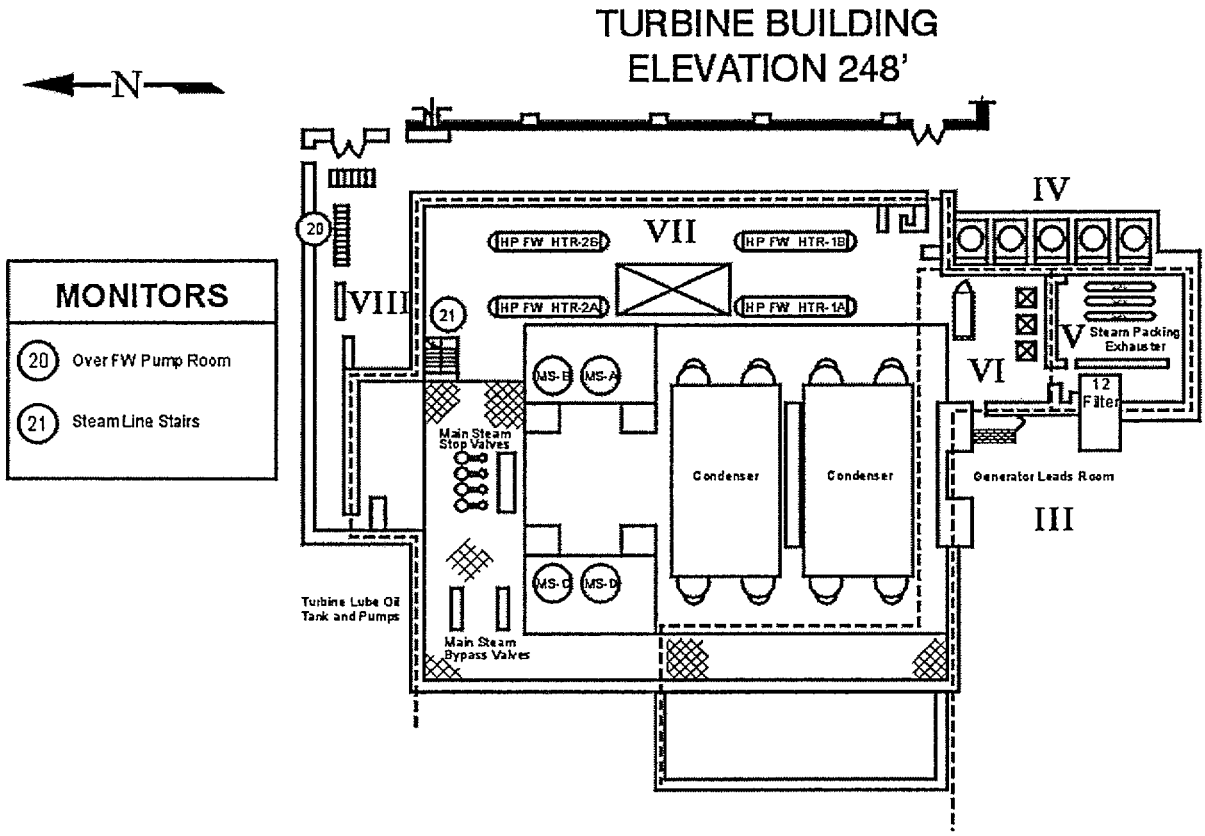

FIGURE 9.3-9

TABLE 9.3-10
Turbine Building, Demineralization/OG Areas, Elevation 232'
(mR/hr unless otherwise noted)

Clock	ARM	17-150A/B PRM (38)	Zone	Zone	Zone
Time	22		I	II	III
0815	.3	8	.3	.3	.2
0900	.3	9	.3	.3	.2
1000	.3	DS	.3	.3	.2
1030	.2	DS	.2	.2	.2
1100	.1	DS	.1	.1	.2
1130 to END	.1	DS	.1	.1	.2

NOTES: Zone readings are average dose rates throughout zone.
General area contamination levels <1K dpm/100 cm2.
DS = Downscale

TURBINE BUILDING
ELEVATION 232'

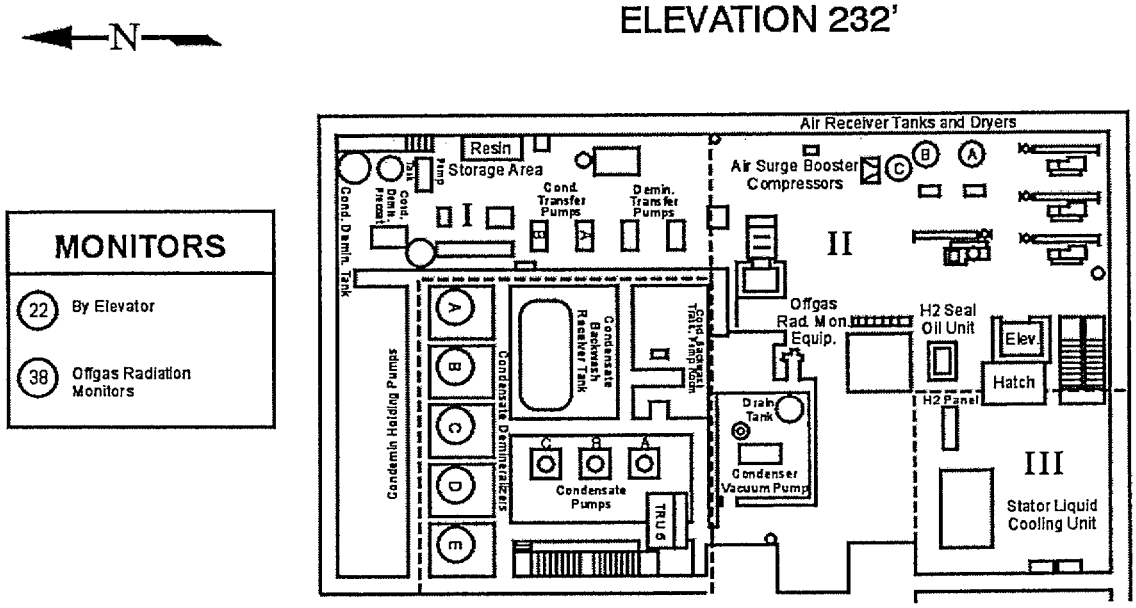

FIGURE 9.3-10

TABLE 9.3-11
Turbine Building Cond. Bay, Elevation 222'6" 228'6"
(mR/hr unless otherwise noted)

Clock Time	ARM 13	Zone I	Zone II	Zone III	Zone IV	Zone V	Zone VI
0815	150	3	1	50	150	2	75
0900	150	3	1	48	145	2	73
1000	150	1	1	48	145	2	73
1030	1	1	1	10	20	2	25
1100	1	1	1	5	15	2	10
1135 to END	1	1	1	2	10	2	5

NOTES: Zone readings are average dose rates throughout zone.

TURBINE BUILDING
ELEVATIONS 222' AND 228'

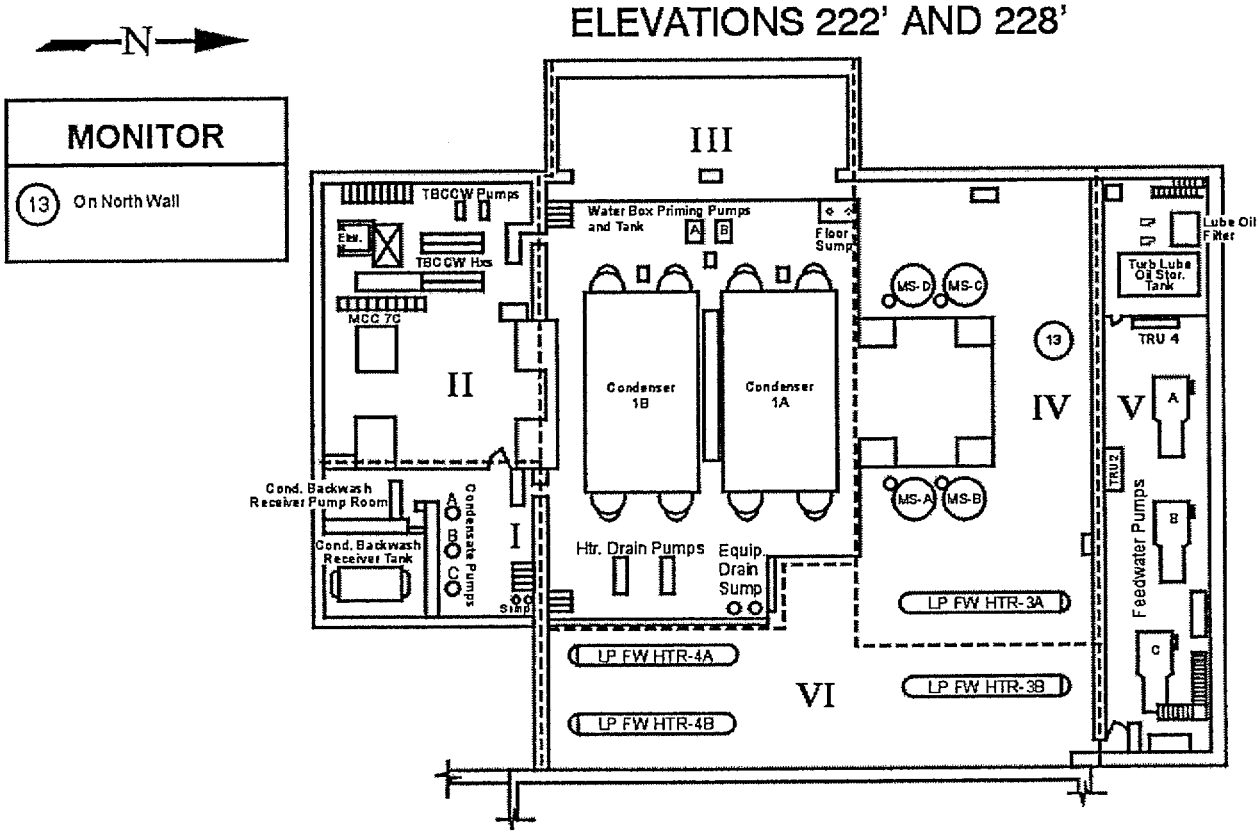

FIGURE 9.3-11

VERMONT YANKEE NUCLEAR POWER STATION

EMERGENCY PREPAREDNESS EXERCISE

2001

9.4 Plant Chemistry Data

VERMONT YANKEE NUCLEAR POWER STATION
EMERGENCY PREPAREDNESS EXERCISE
2001

9.4 PLANT CHEMISTRY DATA

SECTION

9.4.1 Reactor Coolant Data
- A. Reactor Coolant Activity Concentrations (uCi/ml)
- B. Reactor Coolant Gas Sample Dose Rates
- C. Reactor Coolant Liquid (Iodine) Sample Dose Rates

9.4.2 Primary Containment Data

9.4.3 Reactor Building Data

VERMONT YANKEE NUCLEAR POWER STATION
EMERGENCY PREPARDNESS EXERCISE
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9.4.1 REACTOR COOLANT DATA

A. Reactor Coolant Activity Concentrations (uCi/ml)

Isotope	Prior to 0955	0955 - 1015	1015 - 1030	1030 - 1045	1045 - 1100	1100 - 1115	1115 - End
I-131	2.5E-03	2.2E-01	5.3E-00	4.3E+02	4.2E+02	3.8E+02	3.8E+02
I-132	2.8E-03	5.9E-01	6.4E-00	5.2E+02	4.7E+02	3.9E+02	3.9E+02
I-133	5.2E-03	7.1E-01	1.0E-01	8.4E+02	8.2E+02	7.3E+02	7.3E+02
I-134	4.1E-03	1.2E-00	6.9E-00	5.6E+02	4.5E+02	3.3E+02	3.3E+02
I-135	4.5E-03	7.7E-01	9.3E-00	7.5E+02	7.2E+02	6.3E+02	6.3E+02
Total Iodine	1.9E-02	3.4E-00	3.8E-01	3.1E+03	2.9E+03	2.5E+03	2.5E+03
I-131 D.E.	4.5E-03	5.2E-01	9.2E-00	7.5E+02	7.3E+02	6.5E+02	6.5E+02

Kr-83m	1.2E-03	3.8E-03	3.5E-01	2.8E+01	2.8E+01	2.6E+01	2.6E+01
Kr-85m	2.5E-02	6.4E-02	5.8E-01	4.7E+01	4.5E+01	3.9E+01	3.9E+01
Kr-85	4.8E-03	3.3E-03	3.0E-02	2.4E+00	2.4E+00	2.1E+00	2.1E+00
Kr-87	2.9E-03	9.2E-02	8.3E-01	6.7E+01	5.7E+01	4.5E+01	4.5E+01
Kr-88	1.0E-03	1.5E-01	1.4E+00	1.1E+02	1.0E+02	8.8E+01	8.8E+01
Xe-131m	9.1E-05	2.6E-03	2.0E-03	3.3E-01	3.3E-01	1.4E+01	1.4E+01
Xe-133m	7.3E-04	1.8E-02	1.6E-01	1.3E+01	1.3E+01	1.1E+01	1.1E+01
Xe-133	5.3E-03	5.9E-01	5.3E+00	4.3E+02	4.3E+02	3.9E+02	3.9E+02
Xe-135m	5.8E-03	1.5E-01	1.4E+00	1.1E+02	1.1E+02	9.9E+01	9.9E+01
Xe-135	2.2E-03	1.8E-01	1.6E+00	1.3E+02	1.4E+02	1.3E+02	1.3E+02
Total Gas	4.9E-02	1.3E-00	1.2E+01	9.4E+02	9.3E+02	8.3E+02	8.3E+02

VERMONT YANKEE NUCLEAR POWER STATION
EMERGENCY PREPAREDNESS DRILL
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9.4.1 REACTOR COOLANT DATA

B. Reactor Coolant Gas Sample Dose Rates

	Unshielded (mR/hr per cc)*		Shielded (1 inch lead) (mR/hr per cc)*	
Time	Contact	1 ft	Contact	1 ft
Prior to 0955	1.4E-02	9.8E-05	1.7E-04	1.2E-06
0955 - 1015	3.8E-01	2.6E-03	4.6E-03	3.3E-05
1015 - 1030	2.9E-01	2.0E-01	3.5E-01	2.5E-03
1030 - 1045	2.7E+02	1.9E+00	3.3E+00	2.4E-02
1045 - 1100	2.7E+02	1.9E+00	3.3E+00	2.3E-02
1100 - 1115	2.4E+02	1.7E+00	2.9E+00	2.1E-02
1115 - End	2.2E+02	1.5E+00	2.7E+00	1.9E-02

*Values must be multiplied by the sample volume in cubic centimeters to obtain dose rate in mR/hr.

VERMONT YANKEE NUCLEAR POWER STATION
EMERGENCY PREPAREDNESS DRILL
2001

9.4.1 REACTOR COOLANT DATA

C. Reactor Coolant Liquid (Iodine) Sample Dose Rates

	Unshielded (mR/hr per cc)*			Shielded (1 inch lead) (mR/hr per cc)*	
Time	Contact	1 ft		Contact	1 ft
Prior to 0955	1.5E-02	1.0E-04		1.9E-04	1.3E-06
0955 - 1015	2.7E-00	1.8E-02		3.3E-02	2.2E-04
1015 - 1030	3.0E+01	2.1E-01		3.7E-01	2.5E-03
1030 - 1045	2.7E+02	1.8E+00		3.3E+00	2.2E-02
1045 - 1100	2.4E+03	1.7E+01		3.0E+01	2.1E-01
1100 - 1115	2.3E+03	1.6E+01		2.8E+01	1.9E-01
1115 - End	2.0E+03	1.4E+01		2.4E+01	1.7E-01

*Values must be multiplied by the sample volume in cubic centimeters to obtain dose rate in mR/hr.

VERMONT YANKEE NUCLEAR POWER STATION
EMERGENCY PREPAREDNESS EXERCISE
2001

9.4.2 Primary Containment Sample Dose Rates

A. Gas Samples

	Unshielded (mR/hr per cc)*			Shielded (1 in. lead in mR/hr per cc)*	
Time	Contact	1ft		Contact	1ft
Prior to 0955	2.9E-06	2.0E-08		3.6E-08	2.5E-10
0955-END	1.2E-04	8.2E-07		1.5E-06	1/0E-08

Notes * Values must be multiplied by the sample volume in cubic centimeters for gas Samples to obtain the sample dose rate in mR/hr.

VERMONT YANKEE NUCLEAR POWER STATION
EMERGENCY
PREPAREDNESS EXERCISE
2001

9.4.3 REACTOR BUILDING AIR ACTIVITY DATA

A. Reactor Building Air Activity Concentrations – See Attached Sheets for Activity Levels Beyond 11:30

Isotope	Prior to 1130
I-131	*
I-132	*
I-133	*
I-134	*
I-135	*
Total Iodine	*
I-131 D.E.	*
Kr-83m	*
Kr-85m	*
Kr-85	*
Kr-87	*
Kr-88	*
Xe-131m	*
Xe-133m	*
Xe-133	*
Xe-135m	*
Xe-135	*
Xe-138	*
Total Noble Gas	*

Notes:

1. (*) Denotes Activity Concentrations below MDL

RB Elevation 252 / 303 /318

Nuclide	DAC uci/cc		Activity uci/cc	Fractional DAC	CEDE Rate mr/hr
I-131	2.00E-08		3.05E-04	1.53E+04	3.81E+04
I-132	3.00E-06		3.45E-04	1.15E+02	2.88E+02
I-133	1.00E-07		6.00E-04	6.00E+03	1.50E+04
I-134	2.00E-05		3.30E-04	1.65E+01	4.13E+01
I-135	7.00E-07		5.00E-04	7.14E+02	1.79E+03
		TOTAL	2.08E-03		5.52E+04
Kr-83m	1.00E-02		1.60E-03	1.60E-01	4.00E-01
Kr-85m	1.00E-05		3.20E-03	3.20E+02	8.00E+02
Kr-85	1.00E-04		1.75E-04	1.75E+00	4.38E+00
Kr-87	1.00E-06		4.15E-03	4.15E+03	1.04E+04
Kr-88	1.00E-06		7.50E-03	7.50E+03	1.88E+04
Xe-131m	4.00E-04		1.00E-04	2.50E-01	6.25E-01
Xe-133m	1.00E-04		9.00E-04	9.00E+00	2.25E+01
Xe-133	1.00E-04		3.10E-02	3.10E+02	7.75E+02
Xe-135m	9.00E-06		4.10E-03	4.56E+02	1.14E+03
Xe-135	1.00E-05		8.00E-03	8.00E+02	2.00E+03
Xe-138	4.00E-06		1.85E-03	4.63E+02	1.16E+03
		TOTAL	6.26E-02		5.09E+03

Zone	I	II	III	IV	V	VI
Airborne dose mr/hr	5093	4583	3310	1273	509	509
R/hr	5.09	4.58	3.31	1.27	0.51	0.51

RB Elevation 252 / 303 /318

Nuclide	DAC uci/cc		Activity uci/cc	Fractional DAC	CEDE Rate mr/hr
I-131	2.00E-08		1.85E-03	9.25E+04	2.31E+05
I-132	3.00E-06		1.95E-03	6.50E+02	1.63E+03
I-133	1.00E-07		3.60E-03	3.60E+04	9.00E+04
I-134	2.00E-05		1.65E-03	8.25E+01	2.06E+02
I-135	7.00E-07		3.10E-03	4.43E+03	1.11E+04
		TOTAL	1.22E-02		3.34E+05
Kr-83m	1.00E-02		9.50E-03	9.50E-01	2.38E+00
Kr-85m	1.00E-05		1.90E-02	1.90E+03	4.75E+03
Kr-85	1.00E-04		1.05E-03	1.05E+01	2.63E+01
Kr-87	1.00E-06		2.20E-02	2.20E+04	5.50E+04
Kr-88	1.00E-06		4.35E-02	4.35E+04	1.09E+05
Xe-131m	4.00E-04		6.00E-04	1.50E+00	3.75E+00
Xe-133m	1.00E-04		5.50E-03	5.50E+01	1.38E+02
Xe-133	1.00E-04		1.90E-01	1.90E+03	4.75E+03
Xe-135m	9.00E-06		1.80E-02	2.00E+03	5.00E+03
Xe-135	1.00E-05		5.00E-02	5.00E+03	1.25E+04
Xe-138	4.00E-06		5.50E-03	1.38E+03	3.44E+03
		TOTAL	3.65E-01		2.58E+04

Zone	I	II	III	IV	V	VI
Airborne dose mr/hr	25825	23243	16786	6456	2583	2583
R/hr	25.83	23.24	16.79	4.30	2.58	2.58

RB Elevation 252 / 303 /318

Nuclide	DAC uci/cc		Activity uci/cc	Fractional DAC	CEDE Rate mr/hr
I-131	2.00E-08		3.20E-03	1.60E+05	4.00E+05
I-132	3.00E-06		3.10E-03	1.03E+03	2.58E+03
I-133	1.00E-07		6.00E-03	6.00E+04	1.50E+05
I-134	2.00E-05		2.30E-03	1.15E+02	2.88E+02
I-135	7.00E-07		5.00E-03	7.14E+03	1.79E+04
		TOTAL	1.96E-02		5.71E+05
Kr-83m	1.00E-02		1.50E-02	1.50E+00	3.75E+00
Kr-85m	1.00E-05		3.10E-02	3.10E+03	7.75E+03
Kr-85	1.00E-04		1.80E-03	1.80E+01	4.50E+01
Kr-87	1.00E-06		3.30E-02	3.30E+04	8.25E+04
Kr-88	1.00E-06		7.00E-02	7.00E+04	1.75E+05
Xe-131m	4.00E-04		1.05E-03	2.63E+00	6.56E+00
Xe-133m	1.00E-04		9.50E-03	9.50E+01	2.38E+02
Xe-133	1.00E-04		3.25E-01	3.25E+03	8.13E+03
Xe-135m	9.00E-06		2.35E-02	2.61E+03	6.53E+03
Xe-135	1.00E-05		9.00E-02	9.00E+03	2.25E+04
Xe-138	4.00E-06		4.45E-03	1.11E+03	2.78E+03
		TOTAL	6.04E-01		4.02E+04

Zone	I	II	III	IV	V	VI
Airborne dose mr/hr	40172	36154	26111	10043	4017	4017
R/hr	40.17	36.15	26.11	4.02	2.68	4.02

RB Elevation 252 / 303 /318

Nuclide	DAC uci/cc		Activity uci/cc	Fractional DAC	CEDE Rate mr/hr
I-131	2.00E-08		5.50E-03	2.75E+05	6.88E+05
I-132	3.00E-06		4.40E-03	1.47E+03	3.67E+03
I-133	1.00E-07		1.00E-02	1.00E+05	2.50E+05
I-134	2.00E-05		2.60E-03	1.30E+02	3.25E+02
I-135	7.00E-07		8.00E-03	1.14E+04	2.86E+04
		TOTAL	3.05E-02		9.70E+05
Kr-83m	1.00E-02		2.25E-02	2.25E+00	5.63E+00
Kr-85m	1.00E-05		4.80E-02	4.80E+03	1.20E+04
Kr-85	1.00E-04		3.00E-03	3.00E+01	7.50E+01
Kr-87	1.00E-06		4.15E-02	4.15E+04	1.04E+05
Kr-88	1.00E-06		1.05E-01	1.05E+05	2.63E+05
Xe-131m	4.00E-04		1.70E-03	4.25E+00	1.06E+01
Xe-133m	1.00E-04		1.55E-02	1.55E+02	3.88E+02
Xe-133	1.00E-04		5.50E-01	5.50E+03	1.38E+04
Xe-135m	9.00E-06		2.65E-02	2.94E+03	7.36E+03
Xe-135	1.00E-05		1.50E-01	1.50E+04	3.75E+04
Xe-138	4.00E-06		1.70E-03	4.25E+02	1.06E+03
		TOTAL	9.65E-01		6.01E+04

Zone	I	II	III	IV	V	VI
Airborne dose mr/hr	60061	54055	39040	15015	6006	6006
R/hr	60.06	54.06	39.04	4.29	3.00	6.01

RB Elevation 252 / 303 /318

Nuclide	DAC uci/cc		Activity uci/cc	Fractional DAC	CEDE Rate mr/hr
I-131	2.00E-08		5.00E-03	2.50E+05	6.25E+05
I-132	3.00E-06		3.90E-03	1.30E+03	3.25E+03
I-133	1.00E-07		9.50E-03	9.50E+04	2.38E+05
I-134	2.00E-05		2.05E-03	1.03E+02	2.56E+02
I-135	7.00E-07		7.50E-03	1.07E+04	2.68E+04
		TOTAL	2.80E-02		8.93E+05
Kr-83m	1.00E-02		2.00E-02	2.00E+00	5.00E+00
Kr-85m	1.00E-05		4.45E-02	4.45E+03	1.11E+04
Kr-85	1.00E-04		2.90E-03	2.90E+01	7.25E+01
Kr-87	1.00E-06		3.50E-02	3.50E+04	8.75E+04
Kr-88	1.00E-06		9.50E-02	9.50E+04	2.38E+05
Xe-131m	4.00E-04		1.65E-03	4.13E+00	1.03E+01
Xe-133m	1.00E-04		1.50E-02	1.50E+02	3.75E+02
Xe-133	1.00E-04		5.00E-01	5.00E+03	1.25E+04
Xe-135m	9.00E-06		1.35E-02	1.50E+03	3.75E+03
Xe-135	1.00E-05		1.40E-01	1.40E+04	3.50E+04
Xe-138	4.00E-06		8.00E-04	2.00E+02	5.00E+02
		TOTAL	8.68E-01		5.21E+04

Zone	I	II	III	IV	V	VI
Airborne dose mr/hr	52125	46913	33881	13031	5213	5213
R/hr	52.13	46.91	33.88	3.26	2.61	5.21

RB Elevation 252 / 303 /318

Nuclide	DAC uci/cc		Activity uci/cc	Fractional DAC	CEDE Rate mr/hr
I-131	2.00E-08		4.85E-03	2.43E+05	6.06E+05
I-132	3.00E-06		3.50E-03	1.17E+03	2.92E+03
I-133	1.00E-07		9.00E-03	9.00E+04	2.25E+05
I-134	2.00E-05		1.60E-03	8.00E+01	2.00E+02
I-135	7.00E-07		7.00E-03	1.00E+04	2.50E+04
		TOTAL	2.60E-02		8.59E+05
Kr-83m	1.00E-02		1.75E-02	1.75E+00	4.38E+00
Kr-85m	1.00E-05		4.10E-02	4.10E+03	1.03E+04
Kr-85	1.00E-04		2.75E-03	2.75E+01	6.88E+01
Kr-87	1.00E-06		2.90E-02	2.90E+04	7.25E+04
Kr-88	1.00E-06		8.50E-02	8.50E+04	2.13E+05
Xe-131m	4.00E-04		1.60E-03	4.00E+00	1.00E+01
Xe-133m	1.00E-04		1.45E-02	1.45E+02	3.63E+02
Xe-133	1.00E-04		4.90E-01	4.90E+03	1.23E+04
Xe-135m	9.00E-06		7.00E-03	7.78E+02	1.94E+03
Xe-135	1.00E-05		1.35E-01	1.35E+04	3.38E+04
Xe-138	4.00E-06		3.60E-04	9.00E+01	2.25E+02
		TOTAL	8.24E-01		4.85E+04

Zone	I	II	III	IV	V	VI
Airborne dose mr/hr	48532	43679	31546	12133	4853	4853
R/hr	48.53	43.68	31.55	3.03	3.24	4.85

RB Elevation 252 / 303 /318

Nuclide	DAC uci/cc		Activity uci/cc	Fractional DAC	CEDE Rate mr/hr
I-131	2.00E-08		2.40E-03	1.20E+05	3.00E+05
I-132	3.00E-06		1.75E-03	5.83E+02	1.46E+03
I-133	1.00E-07		4.50E-03	4.50E+04	1.13E+05
I-134	2.00E-05		8.00E-04	4.00E+01	1.00E+02
I-135	7.00E-07		3.50E-03	5.00E+03	1.25E+04
		TOTAL	1.30E-02		4.27E+05
Kr-83m	1.00E-02		8.50E-03	8.50E-01	2.13E+00
Kr-85m	1.00E-05		2.05E-02	2.05E+03	5.13E+03
Kr-85	1.00E-04		1.40E-03	1.40E+01	3.50E+01
Kr-87	1.00E-06		1.45E-02	1.45E+04	3.63E+04
Kr-88	1.00E-06		4.25E-02	4.25E+04	1.06E+05
Xe-131m	4.00E-04		8.00E-04	2.00E+00	5.00E+00
Xe-133m	1.00E-04		7.50E-03	7.50E+01	1.88E+02
Xe-133	1.00E-04		2.45E-01	2.45E+03	6.13E+03
Xe-135m	9.00E-06		3.50E-03	3.89E+02	9.72E+02
Xe-135	1.00E-05		7.00E-02	7.00E+03	1.75E+04
Xe-138	4.00E-06		1.80E-04	4.50E+01	1.13E+02
		TOTAL	4.14E-01		2.49E+04

Zone	I	II	III	IV	V	VI
Airborne dose mr/hr	24897	22408	16183	6224	2490	2490
R/hr	24.90	22.41	16.18	2.07	1.66	2.49

RB Elevation 252 / 303 /318

Nuclide	DAC uci/cc		Activity uci/cc	Fractional DAC	CEDE Rate mr/hr
I-131	2.00E-08		1.20E-03	6.00E+04	1.50E+05
I-132	3.00E-06		9.00E-04	3.00E+02	7.50E+02
I-133	1.00E-07		2.25E-03	2.25E+04	5.63E+04
I-134	2.00E-05		4.00E-04	2.00E+01	5.00E+01
I-135	7.00E-07		1.75E-03	2.50E+03	6.25E+03
		TOTAL	6.50E-03		2.13E+05
Kr-83m	1.00E-02		4.25E-03	4.25E-01	1.06E+00
Kr-85m	1.00E-05		1.05E-02	1.05E+03	2.63E+03
Kr-85	1.00E-04		7.00E-04	7.00E+00	1.75E+01
Kr-87	1.00E-06		7.50E-03	7.50E+03	1.88E+04
Kr-88	1.00E-06		2.15E-02	2.15E+04	5.38E+04
Xe-131m	4.00E-04		4.00E-04	1.00E+00	2.50E+00
Xe-133m	1.00E-04		3.75E-03	3.75E+01	9.38E+01
Xe-133	1.00E-04		1.25E-01	1.25E+03	3.13E+03
Xe-135m	9.00E-06		1.75E-03	1.94E+02	4.86E+02
Xe-135	1.00E-05		3.50E-02	3.50E+03	8.75E+03
Xe-138	4.00E-06		9.00E-05	2.25E+01	5.63E+01
		TOTAL	2.10E-01		1.25E+04

Zone	I	II	III	IV	V	VI
Airborne dose mr/hr	12511	11260	8132	3128	1251	1251
R/hr	12.51	11.26	8.13	1.04	0.83	1.25

RB Elevation 252 / 303 /318

Nuclide	DAC uci/cc		Activity uci/cc	Fractional DAC	CEDE Rate mr/hr
I-131	2.00E-08		1.20E-04	6.00E+03	1.50E+04
I-132	3.00E-06		9.00E-05	3.00E+01	7.50E+01
I-133	1.00E-07		2.25E-04	2.25E+03	5.63E+03
I-134	2.00E-05		4.00E-05	2.00E+00	5.00E+00
I-135	7.00E-07		1.75E-04	2.50E+02	6.25E+02
		TOTAL	6.50E-04		2.13E+04
Kr-83m	1.00E-02		4.25E-04	4.25E-02	1.06E-01
Kr-85m	1.00E-05		1.05E-03	1.05E+02	2.63E+02
Kr-85	1.00E-04		7.00E-05	7.00E-01	1.75E+00
Kr-87	1.00E-06		7.50E-04	7.50E+02	1.88E+03
Kr-88	1.00E-06		2.15E-03	2.15E+03	5.38E+03
Xe-131m	4.00E-04		4.00E-05	1.00E-01	2.50E-01
Xe-133m	1.00E-04		3.75E-04	3.75E+00	9.38E+00
Xe-133	1.00E-04		1.25E-02	1.25E+02	3.13E+02
Xe-135m	9.00E-06		1.75E-04	1.94E+01	4.86E+01
Xe-135	1.00E-05		3.50E-03	3.50E+02	8.75E+02
Xe-138	4.00E-06		9.00E-06	2.25E+00	5.63E+00
		TOTAL	2.10E-02		1.25E+03

Zone	I	II	III	IV	V	VI
Airborne dose mr/hr	1251	1126	813	313	125	125
R/hr	1.25	1.13	0.81	0.31	0.13	0.13

RB Elevation 252 / 303 /318

Nuclide	DAC uci/cc		Activity uci/cc	Fractional DAC	CEDE Rate mr/hr
I-131	2.00E-08		1.20E-05	6.00E+02	1.50E+03
I-132	3.00E-06		9.00E-07	3.00E-01	7.50E-01
I-133	1.00E-07		2.25E-05	2.25E+02	5.63E+02
I-134	2.00E-05		4.00E-06	2.00E-01	5.00E-01
I-135	7.00E-07		1.75E-05	2.50E+01	6.25E+01
		TOTAL	5.69E-05		2.13E+03
Kr-83m	1.00E-02		4.25E-05	4.25E-03	1.06E-02
Kr-85m	1.00E-05		1.05E-04	1.05E+01	2.63E+01
Kr-85	1.00E-04		7.00E-06	7.00E-02	1.75E-01
Kr-87	1.00E-06		7.50E-05	7.50E+01	1.88E+02
Kr-88	1.00E-06		2.15E-04	2.15E+02	5.38E+02
Xe-131m	4.00E-04		4.00E-06	1.00E-02	2.50E-02
Xe-133m	1.00E-04		3.75E-05	3.75E-01	9.38E-01
Xe-133	1.00E-04		1.25E-03	1.25E+01	3.13E+01
Xe-135m	9.00E-06		1.75E-05	1.94E+00	4.86E+00
Xe-135	1.00E-05		3.50E-04	3.50E+01	8.75E+01
Xe-138	4.00E-06		9.00E-07	2.25E-01	5.63E-01
		TOTAL	2.10E-03		1.25E+02

Zone	I	II	III	IV	V	VI
Airborne dose mr/hr	125	113	81	31	13	13
R/hr	0.13	0.11	0.08	0.03	0.01	0.01

RB Elevation 252 / 303 /318

Nuclide	DAC uci/cc		Activity uci/cc	Fractional DAC	CEDE Rate mr/hr
I-131	2.00E-08		1.20E-06	6.00E+01	1.50E+02
I-132	3.00E-06		9.00E-08	3.00E-02	7.50E-02
I-133	1.00E-07		2.25E-06	2.25E+01	5.63E+01
I-134	2.00E-05		4.00E-07	2.00E-02	5.00E-02
I-135	7.00E-07		1.75E-06	2.50E+00	6.25E+00
		TOTAL	5.69E-06		2.13E+02
Kr-83m	1.00E-02		4.25E-06	4.25E-04	1.06E-03
Kr-85m	1.00E-05		1.05E-05	1.05E+00	2.63E+00
Kr-85	1.00E-04		7.00E-07	7.00E-03	1.75E-02
Kr-87	1.00E-06		7.50E-06	7.50E+00	1.88E+01
Kr-88	1.00E-06		2.15E-05	2.15E+01	5.38E+01
Xe-131m	4.00E-04		4.00E-07	1.00E-03	2.50E-03
Xe-133m	1.00E-04		3.75E-06	3.75E-02	9.38E-02
Xe-133	1.00E-04		1.25E-04	1.25E+00	3.13E+00
Xe-135m	9.00E-06		1.75E-05	1.94E+00	4.86E+00
Xe-135	1.00E-05		3.50E-05	3.50E+00	8.75E+00
Xe-138	4.00E-06		9.00E-08	2.25E-02	5.63E-02
		TOTAL	2.26E-04		1.69E+01

Zone	I	II	III	IV	V	VI
Airborne dose mr/hr	17	15	11	4	2	2
R/hr	0.02	0.02	0.01	0.00	0.00	0.00

RB Elevation 280

Nuclide	DAC uci/cc		Activity uci/cc	Fractional DAC	CEDE Rate mr/hr
I-131	2.00E-08		6.10E-04	3.05E+04	7.63E+04
I-132	3.00E-06		6.90E-04	4.00E+02	1.00E+03
I-133	1.00E-07		1.20E-03	1.00E+04	2.50E+04
I-134	2.00E-05		6.60E-04	3.30E+01	8.25E+01
I-135	7.00E-07		1.00E-03	1.43E+03	3.57E+03
		TOTAL	4.16E-03		1.06E+05
Kr-83m	1.00E-02		3.20E-03	3.20E-01	8.00E-01
Kr-85m	1.00E-05		6.40E-03	6.40E+02	1.60E+03
Kr-85	1.00E-04		3.50E-04	3.50E+00	8.75E+00
Kr-87	1.00E-06		8.30E-03	8.30E+03	2.08E+04
Kr-88	1.00E-06		1.50E-02	1.50E+04	3.75E+04
Xe-131m	4.00E-04		2.00E-04	5.00E-01	1.25E+00
Xe-133m	1.00E-04		1.80E-03	1.80E+01	4.50E+01
Xe-133	1.00E-04		6.20E-02	6.20E+02	1.55E+03
Xe-135m	9.00E-06		8.20E-03	9.11E+02	2.28E+03
Xe-135	1.00E-05		1.60E-02	1.60E+03	4.00E+03
Xe-138	4.00E-06		3.70E-03	9.25E+02	2.31E+03
		TOTAL	1.25E-01		7.00E+04

Zone	I	II	III	IV	V	VI	VII	VIII
Airborne dose mr/hr	66544	70046	63041	35023	887	887	42028	63041
R/hr	66.54	70.05	63.04	35.02	0.89	0.89	42.03	63.04

RB Elevation 280

Nuclide	DAC uci/cc		Activity uci/cc	Fractional DAC	CEDE Rate mr/hr
I-131	2.00E-08		3.70E-03	1.85E+05	4.63E+05
I-132	3.00E-06		3.90E-03	1.30E+03	3.25E+03
I-133	1.00E-07		7.20E-03	7.20E+04	1.80E+05
I-134	2.00E-05		3.30E-03	1.65E+02	4.13E+02
I-135	7.00E-07		6.20E-03	8.86E+03	2.21E+04
		TOTAL	2.43E-02		6.68E+05
Kr-83m	1.00E-02		1.90E-02	1.90E+00	4.75E+00
Kr-85m	1.00E-05		3.80E-02	3.80E+03	9.50E+03
Kr-85	1.00E-04		2.10E-03	2.10E+01	5.25E+01
Kr-87	1.00E-06		4.40E-02	4.40E+04	1.10E+05
Kr-88	1.00E-06		8.70E-02	8.70E+04	2.18E+05
Xe-131m	4.00E-04		1.20E-03	3.00E+00	7.50E+00
Xe-133m	1.00E-04		1.10E-02	1.10E+02	2.75E+02
Xe-133	1.00E-04		3.80E-01	3.80E+03	9.50E+03
Xe-135m	9.00E-06		3.60E-02	4.00E+03	1.00E+04
Xe-135	1.00E-05		1.00E-01	1.00E+04	2.50E+04
Xe-138	4.00E-06		1.10E-02	2.75E+03	6.88E+03
		TOTAL	7.29E-01		3.89E+05

Zone	I	II	III	IV	V	VI	VII	VIII
Airborne dose mr/hr	369279	388715	349843	194357	4920	4920	233229	349843
R/hr	369.28	388.71	349.84	194.36	3.28	3.28	233.23	349.84

RB Elevation 280

Nuclide	DAC uci/cc		Activity uci/cc	Fractional DAC	CEDE Rate mr/hr
I-131	2.00E-08		6.40E-03	3.20E+05	8.00E+05
I-132	3.00E-06		6.20E-03	2.07E+03	5.17E+03
I-133	1.00E-07		1.20E-02	1.20E+05	3.00E+05
I-134	2.00E-05		4.60E-03	2.30E+02	5.75E+02
I-135	7.00E-07		1.00E-02	1.43E+04	3.57E+04
		TOTAL	3.92E-02		1.14E+06
Kr-83m	1.00E-02		3.00E-02	3.00E+00	7.50E+00
Kr-85m	1.00E-05		6.20E-02	6.20E+03	1.55E+04
Kr-85	1.00E-04.		3.60E-03	3.60E+01	9.00E+01
Kr-87	1.00E-06		6.60E-02	6.60E+04	1.65E+05
Kr-88	1.00E-06		1.40E-01	1.40E+05	3.50E+05
Xe-131m	4.00E-04		2.10E-03	5.25E+00	1.31E+01
Xe-133m	1.00E-04		1.90E-02	1.90E+02	4.75E+02
Xe-133	1.00E-04		6.50E-01	6.50E+03	1.63E+04
Xe-135m	9.00E-06		4.70E-02	5.22E+03	1.31E+04
Xe-135	1.00E-05		1.80E-01	1.80E+04	4.50E+04
Xe-138	4.00E-06		8.90E-03	2.23E+03	5.56E+03
		TOTAL	1.21E+00		6.11E+05

Zone	I	II	III	IV	V	VI	VII	VIII
Airborne dose mr/hr	580406	610954	549858	305477	7734	7734	366572	549858
R/hr	580.41	610.95	549.86	305.48	3.87	3.87	366.57	549.86

RB Elevation 280

Nuclide	DAC uci/cc		Activity uci/cc	Fractional DAC	CEDE Rate mr/hr
I-131	2.00E-08		1.10E-02	5.50E+05	1.38E+06
I-132	3.00E-06		8.80E-03	2.93E+03	7.33E+03
I-133	1.00E-07		2.00E-02	2.00E+05	5.00E+05
I-134	2.00E-05		5.20E-03	2.60E+02	6.50E+02
I-135	7.00E-07		1.60E-02	2.29E+04	5.71E+04
		TOTAL	6.10E-02		1.94E+06
Kr-83m	1.00E-02		4.50E-02	4.50E+00	1.13E+01
Kr-85m	1.00E-05		9.60E-02	9.60E+03	2.40E+04
Kr-85	1.00E-04		6.00E-03	6.00E+01	1.50E+02
Kr-87	1.00E-06		8.30E-02	8.30E+04	2.08E+05
Kr-88	1.00E-06		2.10E-01	2.10E+05	5.25E+05
Xe-131m	4.00E-04		3.40E-03	8.50E+00	2.13E+01
Xe-133m	1.00E-04		3.10E-02	3.10E+02	7.75E+02
Xe-133	1.00E-04		1.10E+00	1.10E+04	2.75E+04
Xe-135m	9.00E-06		5.30E-02	5.89E+03	1.47E+04
Xe-135	1.00E-05		3.00E-01	3.00E+04	7.50E+04
Xe-138	4.00E-06		3.40E-03	8.50E+02	2.13E+03
		TOTAL	1.93E+00		8.77E+05

Zone	I	II	III	IV	V	VI	VII	VIII
Airborne dose mr/hr	832964	876805	789124	438402	11099	11099	526083	789124
R/hr	832.96	876.80	789.12	438.40	4.44	4.44	526.08	789.12

RB Elevation 280

Nuclide	DAC uci/cc		Activity uci/cc	Fractional DAC	CEDE Rate mr/hr
I-131	2.00E-08		1.00E-02	5.00E+05	1.25E+06
I-132	3.00E-06		7.80E-03	2.60E+03	6.50E+03
I-133	1.00E-07		1.90E-02	1.90E+05	4.75E+05
I-134	2.00E-05		4.10E-03	2.05E+02	5.13E+02
I-135	7.00E-07		1.50E-02	2.14E+04	5.36E+04
		TOTAL	5.59E-02		1.79E+06
Kr-83m	1.00E-02		4.00E-02	4.00E+00	1.00E+01
Kr-85m	1.00E-05		8.90E-02	8.90E+03	2.23E+04
Kr-85	1.00E-04		5.80E-03	5.80E+01	1.45E+02
Kr-87	1.00E-06		7.00E-02	7.00E+04	1.75E+05
Kr-88	1.00E-06		1.90E-01	1.90E+05	4.75E+05
Xe-131m	4.00E-04		3.30E-03	8.25E+00	2.06E+01
Xe-133m	1.00E-04		3.00E-02	3.00E+02	7.50E+02
Xe-133	1.00E-04		1.00E+00	1.00E+04	2.50E+04
Xe-135m	9.00E-06		2.70E-02	3.00E+03	7.50E+03
Xe-135	1.00E-05		2.80E-01	2.80E+04	7.00E+04
Xe-138	4.00E-06		1.60E-03	4.00E+02	1.00E+03
		TOTAL	1.74E+00		7.77E+05

Zone	I	II	III	IV	V	VI	VII	VIII
Airborne dose mr/hr	737842	776676	699008	388338	9831	9831	466005	699008
R/hr	737.84	776.68	699.01	388.34	4.92	4.92	466.01	699.01

RB Elevation 280

Nuclide	DAC uci/cc		Activity uci/cc	Fractional DAC	CEDE Rate mr/hr
I-131	2.00E-08		9.70E-03	4.85E+05	1.21E+06
I-132	3.00E-06		7.00E-03	2.33E+03	5.83E+03
I-133	1.00E-07		1.80E-02	1.80E+05	4.50E+05
I-134	2.00E-05		3.20E-03	1.60E+02	4.00E+02
I-135	7.00E-07		1.40E-02	2.00E+04	5.00E+04
		TOTAL	5.19E-02		1.72E+06
Kr-83m	1.00E-02		3.50E-02	3.50E+00	8.75E+00
Kr-85m	1.00E-05		8.20E-02	8.20E+03	2.05E+04
Kr-85	1.00E-04		5.50E-03	5.50E+01	1.38E+02
Kr-87	1.00E-06		5.80E-02	5.80E+04	1.45E+05
Kr-88	1.00E-06		1.70E-01	1.70E+05	4.25E+05
Xe-131m	4.00E-04		3.20E-03	8.00E+00	2.00E+01
Xe-133m	1.00E-04		2.90E-02	2.90E+02	7.25E+02
Xe-133	1.00E-04		9.80E-01	9.80E+03	2.45E+04
Xe-135m	9.00E-06		1.40E-02	1.56E+03	3.89E+03
Xe-135	1.00E-05		2.70E-01	2.70E+04	6.75E+04
Xe-138	4.00E-06		7.20E-04	1.80E+02	4.50E+02
		TOTAL	1.65E+00		6.88E+05

Zone	I	II	III	IV	V	VI	VII	VIII
Airborne dose mr/hr	653344	687730	618957	343865	8705	8705	412638	618957
R/hr	653.34	687.73	618.96	343.87	4.35	4.35	412.64	618.96

RB Elevation 280

Nuclide	DAC uci/cc		Activity uci/cc	Fractional DAC	CEDE Rate mr/hr
I-131	2.00E-08		4.80E-03	2.40E+05	6.00E+05
I-132	3.00E-06		3.50E-03	1.17E+03	2.92E+03
I-133	1.00E-07		9.00E-03	9.00E+04	2.25E+05
I-134	2.00E-05		1.60E-03	8.00E+01	2.00E+02
I-135	7.00E-07		7.00E-03	1.00E+04	2.50E+04
		TOTAL	2.59E-02		8.53E+05
Kr-83m	1.00E-02		1.70E-02	1.70E+00	4.25E+00
Kr-85m	1.00E-05		4.10E-02	4.10E+03	1.03E+04
Kr-85	1.00E-04		2.80E-03	2.80E+01	7.00E+01
Kr-87	1.00E-06		2.90E-02	2.90E+04	7.25E+04
Kr-88	1.00E-06		8.50E-02	8.50E+04	2.13E+05
Xe-131m	4.00E-04		1.60E-03	4.00E+00	1.00E+01
Xe-133m	1.00E-04		1.50E-02	1.50E+02	3.75E+02
Xe-133	1.00E-04		4.90E-01	4.90E+03	1.23E+04
Xe-135m	9.00E-06		7.00E-03	7.78E+02	1.94E+03
Xe-135	1.00E-05		1.40E-01	1.40E+04	3.50E+04
Xe-138	4.00E-06		3.60E-04	9.00E+01	2.25E+02
		TOTAL	8.29E-01		3.45E+05

Zone	I	II	III	IV	V	VI	VII	VIII
Airborne dose mr/hr	327872	345129	310616	172564	4369	4369	207077	310616
R/hr	327.87	345.13	310.62	172.56	4.37	4.37	207.08	310.62

RB Elevation 280

Nuclide	DAC uci/cc		Activity uci/cc	Fractional DAC	CEDE Rate mr/hr
I-131	2.00E-08		2.40E-03	1.20E+05	3.00E+05
I-132	3.00E-06		1.80E-03	6.00E+02	1.50E+03
I-133	1.00E-07		4.50E-03	4.50E+04	1.13E+05
I-134	2.00E-05		8.00E-04	4.00E+01	1.00E+02
I-135	7.00E-07		3.50E-03	5.00E+03	1.25E+04
		TOTAL	1.30E-02		4.27E+05
Kr-83m	1.00E-02		8.50E-03	8.50E-01	2.13E+00
Kr-85m	1.00E-05		2.10E-02	2.10E+03	5.25E+03
Kr-85	1.00E-04		1.40E-03	1.40E+01	3.50E+01
Kr-87	1.00E-06		1.50E-02	1.50E+04	3.75E+04
Kr-88	1.00E-06		4.30E-02	4.30E+04	1.08E+05
Xe-131m	4.00E-04		8.00E-04	2.00E+00	5.00E+00
Xe-133m	1.00E-04		7.50E-03	7.50E+01	1.88E+02
Xe-133	1.00E-04		2.50E-01	2.50E+03	6.25E+03
Xe-135m	9.00E-06		3.50E-03	3.89E+02	9.72E+02
Xe-135	1.00E-05		7.00E-02	7.00E+03	1.75E+04
Xe-138	4.00E-06		1.80E-04	4.50E+01	1.13E+02
		TOTAL	4.21E-01		1.75E+05

Zone	I	II	III	IV	V	VI	VII	VIII
Airborne dose mr/hr	166549	175314	157783	87657	2219	2219	105189	157783
R/hr	166.55	175.31	157.78	87.66	2.22	2.22	105.19	157.78

RB Elevation 280

Nuclide	DAC uci/cc		Activity uci/cc	Fractional DAC	CEDE Rate mr/hr
I-131	2.00E-08		2.40E-04	1.20E+04	3.00E+04
I-132	3.00E-06		1.80E-04	6.00E+01	1.50E+02
I-133	1.00E-07		4.50E-04	4.50E+03	1.13E+04
I-134	2.00E-05		8.00E-05	4.00E+00	1.00E+01
I-135	7.00E-07		3.50E-04	5.00E+02	1.25E+03
		TOTAL	1.30E-03		4.27E+04
Kr-83m	1.00E-02		8.50E-04	8.50E-02	2.13E-01
Kr-85m	1.00E-05		2.10E-03	2.10E+02	5.25E+02
Kr-85	1.00E-04		1.40E-04	1.40E+00	3.50E+00
Kr-87	1.00E-06		1.50E-03	1.50E+03	3.75E+03
Kr-88	1.00E-06		4.30E-03	4.30E+03	1.08E+04
Xe-131m	4.00E-04		8.00E-05	2.00E-01	5.00E-01
Xe-133m	1.00E-04		7.50E-04	7.50E+00	1.88E+01
Xe-133	1.00E-04		2.50E-02	2.50E+02	6.25E+02
Xe-135m	9.00E-06		3.50E-04	3.89E+01	9.72E+01
Xe-135	1.00E-05		7.00E-03	7.00E+02	1.75E+03
Xe-138	4.00E-06		1.80E-05	4.50E+00	1.13E+01
		TOTAL	4.21E-02		1.75E+04

Zone	I	II	III	IV	V	VI	VII	VIII
Airborne dose mr/hr	16655	17531	15778	8766	222	222	10519	15778
R/hr	16.65	17.53	15.78	8.77	0.22	0.22	10.52	15.78

RB Elevation 280

Nuclide	DAC uci/cc		Activity uci/cc	Fractional DAC	CEDE Rate mr/hr
I-131	2.00E-08		2.40E-05	1.20E+03	3.00E+03
I-132	3.00E-06		1.80E-06	6.00E-01	1.50E+00
I-133	1.00E-07		4.50E-05	4.50E+02	1.13E+03
I-134	2.00E-05		8.00E-06	4.00E-01	1.00E+00
I-135	7.00E-07		3.50E-05	5.00E+01	1.25E+02
		TOTAL	1.14E-04		4.25E+03
Kr-83m	1.00E-02		8.50E-05	8.50E-03	2.13E-02
Kr-85m	1.00E-05		2.10E-04	2.10E+01	5.25E+01
Kr-85	1.00E-04		1.40E-05	1.40E-01	3.50E-01
Kr-87	1.00E-06		1.50E-04	1.50E+02	3.75E+02
Kr-88	1.00E-06		4.30E-04	4.30E+02	1.08E+03
Xe-131m	4.00E-04		8.00E-06	2.00E-02	5.00E-02
Xe-133m	1.00E-04		7.50E-05	7.50E-01	1.88E+00
Xe-133	1.00E-04		2.50E-03	2.50E+01	6.25E+01
Xe-135m	9.00E-06		3.50E-05	3.89E+00	9.72E+00
Xe-135	1.00E-05		7.00E-04	7.00E+01	1.75E+02
Xe-138	4.00E-06		1.80E-06	4.50E-01	1.13E+00
		TOTAL	4.21E-03		1.75E+03

Zone	I	II	III	IV	V	VI	VII	VIII
Airborne dose mr/hr	1665	1753	1578	877	22	22	1052	1578
R/hr	1.67	1.75	1.58	0.88	0.02	0.02	1.05	1.58

RB Elevation 280

Nuclide	DAC uci/cc		Activity uci/cc	Fractional DAC	CEDE Rate mr/hr
I-131	2.00E-08		2.40E-06	1.20E+02	3.00E+02
I-132	3.00E-06		1.80E-07	6.00E-02	1.50E-01
I-133	1.00E-07		4.50E-06	4.50E+01	1.13E+02
I-134	2.00E-05		8.00E-07	4.00E-02	1.00E-01
I-135	7.00E-07		3.50E-06	5.00E+00	1.25E+01
		TOTAL	1.14E-05		4.25E+02
Kr-83m	1.00E-02		8.50E-06	8.50E-04	2.13E-03
Kr-85m	1.00E-05		2.10E-05	2.10E+00	5.25E+00
Kr-85	1.00E-04		1.40E-06	1.40E-02	3.50E-02
Kr-87	1.00E-06		1.50E-05	1.50E+01	3.75E+01
Kr-88	1.00E-06		4.30E-05	4.30E+01	1.08E+02
Xe-131m	4.00E-04		8.00E-07	2.00E-03	5.00E-03
Xe-133m	1.00E-04		7.50E-06	7.50E-02	1.88E-01
Xe-133	1.00E-04		2.50E-04	2.50E+00	6.25E+00
Xe-135m	9.00E-06		3.50E-05	3.89E+00	9.72E+00
Xe-135	1.00E-05		7.00E-05	7.00E+00	1.75E+01
Xe-138	4.00E-06		1.80E-07	4.50E-02	1.13E-01
		TOTAL	4.52E-04		1.84E+02

Zone	I	II	III	IV	V	VI	VII	VIII
Airborne dose mr/hr	175	184	166	92	2	2	110	166
R/hr	0.17	0.18	0.17	0.09	0.00	0.00	0.11	0.17

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9.5 Plant Stack Release Data

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9.5 PLANT VENT STACK DATA

A. Plant Vent Stack Activity Release Concentrations (uCi/cc)*

Isotope	Prior to 1125	1130 – 1145	1145 – 1200	1200 - 1215	1215 - 1230	1230 – 1245	1245 - 1300
I-131	3.3E-13	5.7E-07	3.5E-05	5.9E-04	7.1E-04	6.7E-04	6.3E-04
I-132	4.8E-13	6.3E-07	3.5E-05	5.7E-04	6.2E-04	5.8E-04	5.5E-04
I-133	7.5E-13	1.1E-06	6.7E-05	1.1E-03	1.3E-03	1.2E-03	1.2E-03
I-134	6.6E-13	6.1E-07	3.1E-05	4.3E-04	4.5E-04	4.2E-04	4.0E-04
I-135	6.3E-13	9.6E-07	5.7E-05	9.6E-04	1.1E-03	1.0E-03	9.8E-04
Total Iodine	2.9E-12	3.9E-06	2.3E-04	3.7E-03	4.1E-03	3.9E-03	3.7E-03
I-131 D.E.	6.1E-13	9.8E-07	6.0E-05	1.0E-03	1.2E-03	1.1E-03	1.1E-03
Kr-83m	**	2.9E-04	1.7E-02	2.7E-01	2.9E-01	2.7E-01	2.6E-01
Kr-85m	**	5.9E-04	3.5E-02	5.7E-01	6.3E-01	5.9E-01	5.6E-01
Kr-85	**	3.1E-05	2.0E-03	3.3E-02	3.8E-02	3.6E-02	3.4E-02
Kr-87	**	7.7E-04	4.1E-02	6.1E-01	6.7E-01	6.3E-01	6.0E-01
Kr-88	**	1.4E-03	8.0E-02	1.3E+00	1.5E+00	1.4E+00	1.3E+00
Xe-131m	**	1.8E-05	1.1E-03	1.9E-02	2.1E-02	2.0E-02	1.9E-02
Xe-133m	**	1.7E-04	1.0E-02	1.7E-01	2.1E-01	2.0E-01	1.9E-01
Xe-133	**	5.7E-03	3.5E-01	5.9E+00	7.0E+00	6.6E+00	6.2E+00
Xe-135m	**	7.7E-04	3.3E-02	4.5E-01	4.7E-01	4.4E-01	4.2E-01
Xe-135	**	1.5E-03	9.4E-02	1.6E+00	1.8E+00	1.7E+00	1.6E+00
Xe-138	**	3.3E-04	1.0E-02	8.2E-02	3.4E-02	3.2E-02	3.0E-02
Total Noble Gas	**	1.2E-02	6.8E-01	1.1E+01	1.3E+01	1.2E+01	1.1E+01

* Activity concentrations (in uCi/cc) may be converted to activity release rates (uCi/sec) by multiplying by the assumed stack flow rate of 3.49E7 cc/sec.

Plant vent stack sample dose rates provided Page 9.5.3.

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9.5 PLANT VENT STACK RELEASE DATA

A. Plant Vent Stack Activity Release Concentrations (uCi/cc)*

Isotope	1300-1315	Post 1315					
I-131	5.9E-05	5.5E-06					
I-132	5.2E-05	4.8E-06					
I-133	1.1E-04	1.0E-05					
I-134	3.8E-05	3.5E-06					
I-135	9.2E-05	8.6E-06					
Total Iodine	3.4E-04	3.2E-05					
I-131 D.E.	1.0E-04	9.4E-06					

Kr-83m	2.4E-02	2.3E-03					
Kr-85m	5.3E-02	4.9E-03					
Kr-85	3.2E-03	3.0E-04					
Kr-87	5.6E-02	5.2E-03					
Kr-88	1.3E-01	1.2E-02					
Xe-131m	1.8E-03	1.6E-04					
Xe-133m	1.8E-02	1.6E-03					
Xe-133	5.9E-01	5.5E-02					
Xe-135m	3.9E-02	1.9E-03					
Xe-135	1.5E-01	1.4E-02					
Xe-138	2.8E-03	6.7E-05					
Total Noble Gas	1.1E+00	9.7E-02					

* Activity concentrations (in uCi/cc) may be converted to activity release rates (uCi/sec) by multiplying by the assumed stack flow rate of 3.49E7 cc/sec.

Plant vent stack sample dose rates provided Page 9.5.3.

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9.5 Plant Vent Stack Sample Dose Rates

B. Gas (Grab Sample)

	Unshielded			Shielded (1 inch lead)		
	(mR/hr per cc)*			(mR/hr per cc)*		
Time	Contact	1 ft		Contact	1 ft	
Prior to 1125 **	As Read	As Read		As Read	As Read	
1130 - 1145	3.4E-03	2.4E-05		4.2E-05	3.0E-07	
1145 - 1200	1.9E-01	1.4E-03		2.4E-03	1.7E-05	
1200 - 1215	3.1E+00	2.2E-02		3.9E-02	2.8E-04	
1215 - 1230	4.3E+00	3.0E-02		5.3E-02	3.8E-04	
1230 - 1245	4.1E+00	2.8E-02		5.0E-02	3.6E-04	
1245 - 1300	3.8E+00	2.7E-02		4.7E-02	3.4E-04	
1300 - 1315	3.6E-01	2.5E-03		4.4E-03	3.2E-05	
POST 1315	3.4E-02	2.3E-04		4.1E-04	3.0E-06	

C. PVS Air Sample (Iodine Cartridge)

	Unshielded			Shielded (1 inch lead)		
	(mR/hr per cc)*			(mR/hr per cc)*		
Time	Contact	1 ft		Contact	1 ft	
Prior to 1125 **	As Read	As Read		As Read	As Read	
1130 - 1145	3.0E-06	2.1E-08		3.7E-08	2.6E-10	
1145 - 1200	1.8E-04	1.2E-06		2.2E-06	1.5E-08	
1200 - 1215	2.8E-03	2.0E-05		3.5E-05	2.5E-07	
1215 - 1230	3.7E-03	2.6E-05		4.6E-05	3.2E-07	
1230 - 1245	3.5E-03	2.4E-05		4.3E-05	3.0E-07	
1245 - 1300	3.3E-03	2.3E-05		4.1E-05	2.9E-07	
1300 - 1315	3.1E-04	2.2E-06		3.9E-06	2.7E-08	
POST 1315	2.9E-05	2.0E-07		3.6E-07	2.5E-09	

D. General Area Exposure Rates at Stack (mR/hr)

Time	At Stack Door			Inside		
Prior to 1125	As Read			As Read		
1130 - 1145	20			60		
1145 – 1200	100			300		
1200 – 1215	1700			5000		
1215 – 1230	2200			65000		
1230 – 1245	2000			7000		
1245 – 1300	1500			6000		
1300 – 1315	150			600		
POST 1315	Dose Rates Continue to Decline					

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9.6 FIELD MONITORING MAPS AND DATA

Plume gamma dose rates and radioiodine concentrations have been estimated as a function of time and distance from the plant site using a variable trajectory dose assessment model (METPAC). Geographical representations of the plume are provided in this section for each 15 minute average of the meteorological conditions, starting at clock time 1130 (scenario time 03:15). During the exercise, Controllers will use the information contained in this section to provide field monitoring teams with the appropriate survey results and radiological data for various times and locations.

The designated field monitoring teams will be directed to monitor and track the plume relative to the meteorological conditions postulated for the scenario. Figures 9.6-1 through 9.6-9 depict the plume location at various times throughout the scenario. These figures represent a plume width that is equivalent to a 3-sigma value of the centerline conditions. Since the figures show a plume width relative to the centerline, survey results were calculated for various color-coded map areas (blue, yellow, and green). Field data tables have been developed for Vermont Yankee, State of Vermont, State of New Hampshire and Commonwealth of Massachusetts field monitoring teams. The tables contain the radiological data to be provided to the field monitoring teams for various times and locations. (The tables follow the figure for a given scenario time period.)

Radiological data on the tables has been provided for each plume segment and colored map area shown on the associated figures. Radiological data for locations between two plume segments can be estimated by interpolating between the values for those segments.

Before the exercise, training will be provided to Controllers on the use of the figures and tables. The Controllers should use the following specific instructions:

1. As field monitoring teams are designated, check that the appropriate procedures are followed by team members. This will include the initial equipment check.

2. While traveling to assigned monitoring locations, or while traversing the plume, or at assigned monitoring locations, use the attached figures and tables to issue appropriate radiological data.

3. Attempt to estimate the team's accrued radiation exposure as a function of time spent in an affected area. Use the values provided for the PIC-6 or the closed window, waist level reading for the gamma dose rate. Do not issue pocket dosimeter results to team members, unless they actually simulate checking their dosimeter reading. The pocket dosimeters have specific ranges and intervals in mR or R values. Ask them the ranges associated with the pocket dosimeter utilized. Attempt to provide values that reflect the team's accrued exposure and range of the pocket dosimeter.

4. Ask the field monitoring teams what equipment they have available for their use. Ask them the scales associated with the equipment; log the answers to ensure that you do not provide them with data that is not consistent with the range of the equipment. If a situation occurs where the lower range or upper range of the equipment is exceeded, issue them an "off-scale low" value and "off-scale high" value, respectively.

5. For gamma (dose rates) survey readings taken by field monitoring teams, the following information should be used:

   a. If an RM-14/HP-210 is used to track the plume, the meter count rate of 3,500 cpm on the RM-14/HP-210 is equivalent to approximately 1.0 mR/hr. Therefore, 14 mR/hr will cause the RM-14/HP-210 to read "off-scale high." The upper range of the RM-14/HP-210 is 50,000 cpm.

   b. Whenever a team takes a "ground level" survey, the results should be the same as the "waist level" survey.

   c. Certain field monitoring teams may take open window <u>and</u> closed window readings with their dose rate survey meters. If a team is located in the plume and air concentration is greater than zero, assume the open window reading is <u>two times</u> the closed window reading for the gamma dose rate reading.

6. For air sample measurements taken by field monitoring teams, the following information should be used:

   a. The field monitoring teams will substitute a charcoal cartridge instead of the absorber media cartridge (silver zeolite) contained in the field monitoring kits. All air sample data will be given as though the absorber media cartridges (silver zeolite) were being used in the kits.

   b. Air sample volume assumptions have been used in the calculation of the net count rates for the air sample results. The sample volume was assumed to be 10-cubic foot (283 liters) for Vermont Yankee; 354 liters for State of Vermont; 10-cubic foot (283 liters) for State of New Hampshire and 20-cubic foot (566 liters) Massachusetts field monitoring teams. If different volumes are collected, the air sample data provided in the tables should be adjusted proportionally.

c. Air sample net count rates for the absorber media cartridges (silver zeolite) provided in the field data tables have been developed using METPAC thyroid dose rate projections. The formula used is as follows:

$$Conc.(uCi/cc) = \frac{netcpmxConversionFactor}{ExFxT}$$

<u>where:</u>

E = Instrument Detector Efficiency in cpm/dpm (counts per disintegration)

F = Flow rate of sample in lpm or cfm

T = Sample collection time in minutes

CF = Conversion Factor (4.5 E-10 □Ci-liter/dpm-cc for flow rate in lpm OR 1.6 E-11 □CI-ft^3/dpm-cc for flow rate in cfm

d. For air sample net count rate for the particulate filter paper, it is assumed that a G-M survey meter is used to obtain the sample count rates. Filter count rates (cpm) were estimated from the I-131 air concentration for the respective standard air sample volume taken.

NOTE:

THE PLUME PLOT FIGURES ARE GRAPHIC REPRESENTATIVES OF ATMOSPHERIC DISPERSION. LARGER FIGURES WILL BE AVAILABLE TO SITE AND OFF-SITE MONITORING CONTROLLERS FOR THEIR USE ON PROVIDING DATA TO FIELD MONITORING TEAMS.

TABLE
9.6.1

ON-SITE VERMONT YANKEE
FIELD DATA

CLOCK TIME	MAP AREA	GAMMA DOSE RATE PIC-6 (mR/hr)	GAMMA DOSE RATE RM-14 (CPM)	AIR SAMPLE DATA* (RM-14)** CONC. I-131 (uCi/cc)	RADECO/ HV-1BC 10 CF SILVER ZEOLITE (NET CPM)	PARTICULATE FILTER*** (NET CPM)
1130-1145	BLUE	2	6544	1.31E-09	<40	<40
	YELLOW	<1	654	1.31E-10	<40	<40
	GREEN	<1	65	1.31E-11	<40	<40
1145-1200	BLUE	76	OSH	5.30E-08	82	107
	YELLOW	8	26496	5.30E-09	<40	<40
	GREEN	1	2650	5.30E-10	<40	<40
1200-1215	BLUE	1427	OSH	9.99E-07	1555	2008
	YELLOW	143	OSH	9.99E-08	155	201
	GREEN	14	49938	9.99E-09	<40	<40
1215-1230	BLUE	1572	OSH	1.10E-06	1713	2212
	YELLOW	157	OSH	1.10E-07	171	221
	GREEN	16	OSH	1.10E-08	<40	<40
1230-1245	BLUE	1458	OSH	1.02E-06	1588	2051
	YELLOW	146	OSH	1.02E-07	159	205
	GREEN	15	OSH	1.02E-08	<40	<40
1245-1300	BLUE	1415	OSH	9.91E-07	1542	1991
	YELLOW	142	OSH	9.91E-08	154	199
	GREEN	14	49533	9.91E-09	<40	<40
1300_1315	BLUE	152	OSH	1.07E-07	166	214
	YELLOW	15	OSH	1.07E-08	<40	<40
	GREEN	2	5332	1.07E-09	<40	<40
1315-END	BLUE	152	OSH	1.07E-07	166	214
	YELLOW	15	OSH	1.07E-08	<40	<40
	GREEN	2	5332	1.07E-09	<40	<40

See Notes next page

tes:

* Air sample data are based on a sample volume of 10 cubic feet for the air sampler. If different volumes are collected, the air sample data provided in the tables should be adjusted proportionally. For example, if a 5 cubic feet sample was collected instead of 10 cubic feet, divide the value given in the table by 2 and provide the resulting value to the players.

** The RM-14 detector efficiency for I-131 was assumed to be 0.0025 cpm/dpm with silver zeolite cartridge.

*** The particulate filter sample count rate (cpm) was estimated from the I-131 air concentrations for 10 cubic feet.

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PLAN SHOWING
EXCLUSION AREA AND RESTRICTED
AREA BOUNDARIES

FIGURE 9.6.1

TABLE
9.6.2a

VERMONT YANKEE FIELD DATA AT CLOCK TIME 1130-1145 (SCENARIO TIME 0315-0330)

PLUME SEGMENT NO.	DISTANCE (MILES)	MAP AREA	GAMMA DOSE RATE PIC-6 (mR/hr)	GAMMA DOSE RATE RM-14 (CPM)	AIR SAMPLE DATA* (RM-14)** CONC. I-131 (uCi/cc)	RADECO/HV-1BC 10 CF SILVER ZEOLITE (NET CPM)	PARTICULATE*** FILTER (NET CPM)
1.00	0.10	BLUE	2	6544	1.31E-09	<40	<40
		YELLOW	<1	654	1.31E-10	<40	<40
		GREEN	<1	65	1.31E-11	<40	<40
2.00	0.80	BLUE	3	11263	2.25E-09	<40	<40
		YELLOW	<1	1126	2.25E-10	<40	<40
		GREEN	<1	113	2.25E-11	<40	<40
3.00	1.50	BLUE	4	13224	2.64E-09	<40	<40
		YELLOW	<1	1322	2.64E-10	<40	<40
		GREEN	<1	132	2.64E-11	<40	<40

Notes:

* Air sample data are based on a sample volume of 10 cubic feet for the air sampler. If different volumes are collected, the air sample data provided in the tables should be adjusted proportionally. For example, if a 5 cubic feet sample was collected instead of 10 cubic feet, divide the value given in the table by 2 and provide the resulting value to the players.

** The RM-14 detector efficiency for I-131 was assumed to be 0.0025 cpm/dpm with silver zeolite cartridge.

*** The particulate filter sample count rate (cpm) was estimated from the I-131 air concentrations for 10 cubic feet.

TABLE
9.6.2b

STATE OF VERMONT FIELD DATA AT CLOCK TIME 1130-1145 (SCENARIO TIME 0315-0330)

PLUME SEGMENT NO.	DISTANCE (MILES)	MAP AREA	GAMMA SURVEY DATA WAIST AND GROUND LEVEL READINGS CLOSED WINDOW (mR/hr)	OPEN WINDOW (mR/hr)	AIR SAMPLE DATA (354 LITERS)* CONC. I-131 (uCi/cc)	LUDLUM 2220 AGX-2** CARTRIDGE (NET CPM)	G-M METER PARTICULATE*** FILTER (NET CPM)
1.00	0.10	BLUE	2	4	1.31E-09	<500	<50
		YELLOW	0.2	0.4	1.31E-10	<500	<50
		GREEN	<.1	<.1	1.31E-11	<500	<50
2.00	0.80	BLUE	3	6	2.25E-09	<500	<50
		YELLOW	0.3	1	2.25E-10	<500	<50
		GREEN	<.1	<.1	2.25E-11	<500	<50
3.00	1.50	BLUE	4	8	2.64E-09	<500	<50
		YELLOW	0.4	1	2.64E-10	<500	<50
		GREEN	<.1	<.1	2.64E-11	<500	<50

Notes:

* Air sample data are based on a sample volume of 354 liters.. If different volumes are collected, the air sample data provided in the tables should be adjusted proportionally. For example, if a 177 liter sample was collected instead of 354 liters, divide the value given in the table by 2 and provide the resulting value to the players.

** The Ludlum 2220 detector efficiency for I-131 was assumed to be 0.080 cpm/dpm with the AGX-2 cartridge.

*** For analysis of the particulate filter, it is assumed the a G-M survey meter is used to obtain the sample count rates. The filter count rate was estimated from the I-131 air concentration for 354 liter sample volume.

TABLE
9.6.2c

STATE OF MA FIELD DATA AT CLOCK TIME 1130-1145
(SCENARIO TIME 0315-0330)

PLUME SEGMENT NO.	DISTANCE (MILES)	GAMMA SURVEY DATA WAIST AND GROUND LEVEL READINGS MAP AREA	CLOSED WINDOW (mR/hr)	OPEN WINDOW (mR/hr)	AIR SAMPLE DATA (20 CU FT)* CONC. I-131 (uCi/cc)	E-140/HP-210 AGX-2** CARTRIDGE (NET CPM)	G-M METER PARTICULATE*** FILTER (NET CPM)
1.00	0.10	BLUE	2	4	1.31E-09	<50	<50
		YELLOW	0.2	0.4	1.31E-10	<50	<50
		GREEN	<.1	<.1	1.31E-11	<50	<50
2.00	0.80	BLUE	3	6	2.25E-09	<50	<50
		YELLOW	0.3	1	2.25E-10	<50	<50
		GREEN	<.1	<.1	2.25E-11	<50	<50
3.00	1.50	BLUE	4	8	2.64E-09	<50	<50
		YELLOW	0.4	1	2.64E-10	<50	<50
		GREEN	<.1	<.1	2.64E-11	<50	<50

Notes:

* Air sample data are based on a sample volume of 20 cu ft. If different volumes are collected, the air sample data provided in the tables should be adjusted proportionally. For example, if a 40 cu ft. sample was collected instead of the 20 cu ft. multiply the value given in the table by 2 and provide the resulting value to the players.

** The E-140/HP-210 detector efficiency for I-131 was assumed to be 0.0024 cpm/dpm with the AGX-2 cartridge.

*** For analysis of the particulate filter, it is assumed the a G-M survey meter is used to obtain the sample count rates. The filter count rate was estimated from the I-131 air concentration for 20 cu ft. sample volume

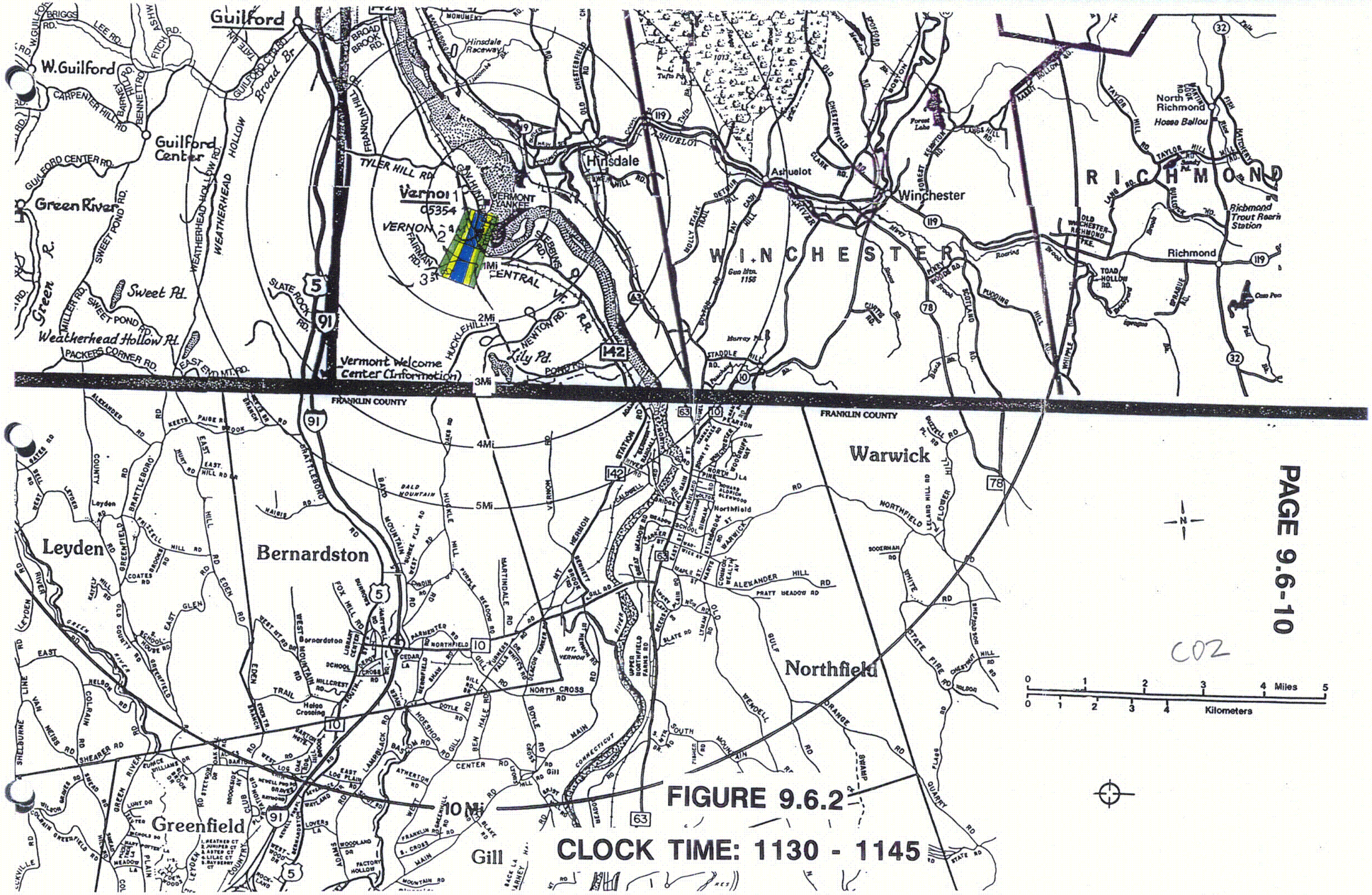

FIGURE 9.6.2

CLOCK TIME: 1130 - 1145

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TABLE
9.6.3a

VERMONT YANKEE FIELD DATA AT CLOCK TIME 1145-1200 (SCENARIO TIME 0330-0345)

PLUME SEGMENT NO.	DISTANCE (MILES)	MAP AREA	GAMMA DOSE RATE PIC-6 (mR/hr)	GAMMA DOSE RATE RM-14 (CPM)	AIR SAMPLE DATA* (RM-14)** CONC. I-131 (uCi/cc)	AIR SAMPLE DATA* (RM-14)** RADECO/HV-1BC 10 CF SILVER ZEOLITE (NET CPM)	AIR SAMPLE DATA* (RM-14)** PARTICULATE*** FILTER (NET CPM)
1.00	0.10	BLUE	76	OSH	5.30E-08	82	107
		YELLOW	8	26496	5.30E-09	<40	<40
		GREEN	1	2650	5.30E-10	<40	<40
2.00	0.80	BLUE	133	OSH	9.31E-08	145	187
		YELLOW	13	46560	9.31E-09	<40	<40
		GREEN	1	4656	9.31E-10	<40	<40
3.00	1.60	BLUE	149	OSH	1.04E-07	162	210
		YELLOW	15	OSH	1.04E-08	<40	<40
		GREEN	1	5213	1.04E-09	<40	<40
4.00	2.30	BLUE	3	9211	1.84E-09	<40	<40
		YELLOW	<1	921	1.84E-10	<40	<40
		GREEN	<1	92	1.84E-11	<40	<40
5.00	3.10	BLUE	2	7205	1.44E-09	<40	<40
		YELLOW	<1	720	1.44E-10	<40	<40
		GREEN	<1	72	1.44E-11	<40	<40

Notes:

* Air samples data are based on a sample volume of 10 cubic feet for the air sampler. If different volumes are collected, the air sample data provided in the tables should be adjusted proportionally. For example, if a 5 cubic feet sample was collected instead of 10 cubic feet, divide the value given in the table by two (2) and provide the resulting value to the players.

* The RM-14 detector efficiency for I-131 was assumed to be 0.0025 cpm/dpm with the silver zeolite cartridgfe.

* The particulate filter sample count rate (cpm) was estimated from the I-131 air concentrations for a 10 cubic feet sample.

* OSH = Off-Scale High

TABLE
9.6.3b
STATE OF VERMONT FIELD DATA AT CLOCK TIME 1145-1200 (SCENARIO TIME 0330-0345)

PLUME SEGMENT NO.	DISTANCE (MILES)	MAP AREA	GAMMA SURVEY DATA WAIST AND GROUND LEVEL READINGS CLOSED WINDOW (mR/hr)	OPEN WINDOW (mR/hr)	AIR SAMPLE DATA (354 LITERS)* CONC. I-131 (uCi/cc)	LUDLUM 2220 AGX-2** CARTRIDGE (NET CPM)	G-M METER PARTICULATE*** FILTER (NET CPM)
1.00	0.1	BLUE	76	151	5.30E-08	3302	189
		YELLOW	8	15	5.30E-09	<500	<50
		GREEN	1	2	5.30E-10	<500	<50
2.00	0.8	BLUE	133	266	9.31E-08	5802	332
		YELLOW	13	27	9.31E-09	580	<50
		GREEN	1	3	9.31E-10	<500	<50
3.00	1.6	BLUE	149	298	1.04E-07	6496	372
		YELLOW	15	30	1.04E-08	650	<50
		GREEN	1	3	1.04E-09	<500	<50
4.00	2.3	BLUE	3	5	1.84E-09	<500	<50
		YELLOW	0.3	0.5	1.84E-10	<500	<50
		GREEN	<.1	<.1	1.84E-11	<500	<50
5.00	3.1	BLUE	2	4	1.44E-09	<500	<50
		YELLOW	0.2	0.4	1.44E-10	<500	<50
		GREEN	<.1	<.1	1.44E-11	<500	<50

Notes:

* Air sample data are based on a sample volume of 354 liters. If different volumes are collected, the air sample data provided in the tables should be adjusted proportionally. For example, if 177 sample was collected instead of 354 liters, divide the value given in the table by 2 and provide the resulting value to the players

** The Ludlum 2220 detector efficiency for I-131 was assumed to be 0.080 cpm/dpm with the AGX-2 cartridge.

*** For analysis of the particulate filter, it is assumed tha a G-M survey meter is used to obtain the sample count rates. The filter count rate was estimated from the I-131 air concentration for a 354 sample volume.

TABLE
9.6.3c

STATE OF MA FIELD DATA AT CLOCK TIME 1145-1200
(SCENARIO TIME 0330-0345)

PLUME SEGMENT NO.	DISTANCE (MILES)	GAMMA SURVEY DATA WAIST AND GROUND LEVEL READINGS MAP AREA	CLOSED WINDOW (mR/hr)	OPEN WINDOW (mR/hr)	AIR SAMPLE DATA (20 CU FT)* CONC. I-131 (uCi/cc)	E-140/HP-210 AGX-2** CARTRIDGE (NET CPM)	G-M METER PARTICULATE*** FILTER (NET CPM)
1.00	0.1	BLUE	76	151	5.30E-08	165	302
		YELLOW	8	15	5.30E-09	<50	<50
		GREEN	1	2	5.30E-10	<50	<50
2.00	0.8	BLUE	133	266	9.31E-08	290	531
		YELLOW	13	27	9.31E-09	<50	53
		GREEN	1	3	9.31E-10	<50	<50
3.00	1.6	BLUE	149	298	1.04E-07	325	595
		YELLOW	15	30	1.04E-08	<50	59
		GREEN	1	3	1.04E-09	<50	<50
4.00	2.3	BLUE	3	5	1.84E-09	<50	<50
		YELLOW	0.3	0.5	1.84E-10	<50	<50
		GREEN	<.1	<.1	1.84E-11	<50	<50
5.00	3.1	BLUE	2	4	1.44E-09	<50	<50
		YELLOW	0.2	0.4	1.44E-10	<50	<50
		GREEN	<.1	<.1	1.44E-11	<50	<50

Notes:

* Air sample data are based on a sample volume of 20 cu ft. If different volumes are collected, the air sample data provided in the tables should be adjusted proportionally. For example, if a 40 cu ft. sample was collected instead of the 20 cu ft. multiply the value given in the table by 2 and provide the resulting value to the players.

** The E-140/HP-210 detector efficiency for I-131 was assumed to be 0.0024 cpm/dpm with the AGX-2 cartridge.

*** For analysis of the particulate filter, it is assumed the a G-M survey meter is used to obtain the sample count rates. The filter count rate was estimated from the I-131 air concentration for 20 cu ft. sample volume

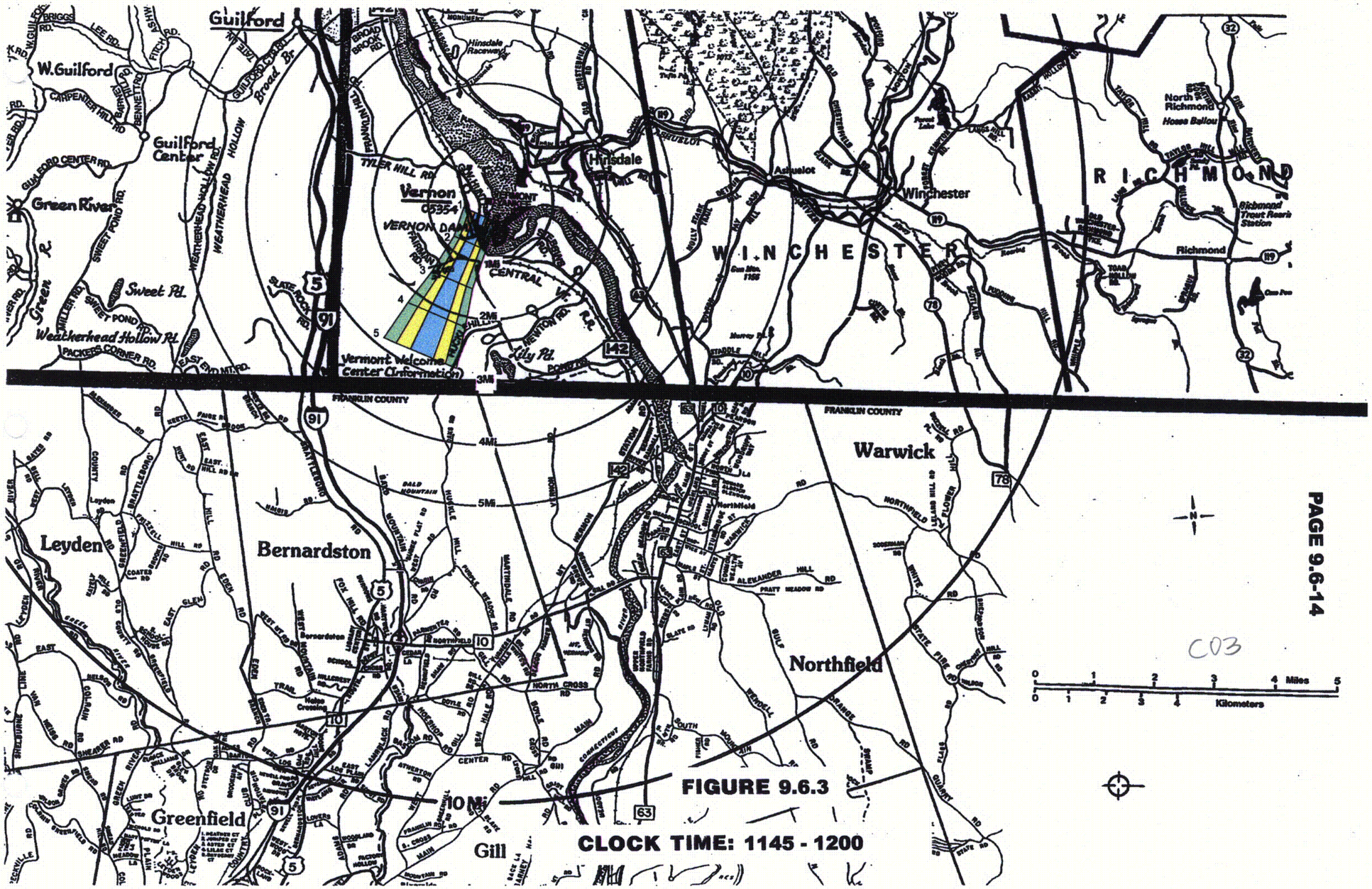


FIGURE 9.6.3

CLOCK TIME: 1145 - 1200

C03

TABLE
9.6.4a

VERMONT YANKEE FIELD DATA AT CLOCK TIME 1200-1215 (SCENARIO TIME 0345-0400)

PLUME SEGMENT NO.	DISTANCE (MILES)	MAP AREA	GAMMA DOSE RATE PIC-6 (mR/hr)	GAMMA DOSE RATE RM-14 (CPM)	AIR SAMPLE DATA* (RM-14)** CONC. I-131 (uCi/cc)	RADECO/HV-1BC 10 CF SILVER ZEOLITE (NET CPM)	PARTICULATE*** FILTER (NET CPM)
1.00	0.1	BLUE	1427	OSH	9.99E-07	1555	2008
		YELLOW	143	OSH	9.99E-08	155	201
		GREEN	14	49938	9.99E-09	<40	<40
2.00	0.8	BLUE	3405	OSH	2.38E-06	3710	4792
		YELLOW	341	OSH	2.38E-07	371	479
		GREEN	34	OSH	2.38E-08	<40	48
3.00	1.5	BLUE	3510	OSH	2.46E-06	3824	4938
		YELLOW	351	OSH	2.46E-07	382	494
		GREEN	35	OSH	2.46E-08	<40	49
4.00	2.3	BLUE	109	OSH	7.64E-08	119	154
		YELLOW	11	38208	7.64E-09	<40	<40
		GREEN	1	3821	7.64E-10	<40	<40
5.00	3.1	BLUE	84	OSH	5.88E-08	91	118
		YELLOW	8	29376	5.88E-09	<40	<40
		GREEN	<1	2938	5.88E-10	<40	<40
6.00	3.8	BLUE	2	5290	1.06E-09	<40	<40
		YELLOW	<1	529	1.06E-10	<40	<40
		GREEN	<1	53	1.06E-11	<40	<40
7.00	4.6	BLUE	1	4400	8.80E-10	<40	<40
		YELLOW	<1	440	8.80E-11	<40	<40
		GREEN	<1	44	8.80E-12	<40	<40

Notes: OSH = Off-Scale High

* Air sample data are based on a sample volume of 10 cubic feet for the air sampler. If different volumes are collected, the air sample data provided in the tables should be adjusted proportionally. For example, if a 5 cubic feet sample was collected instead of 10 cubic feet, divide the value given in the table by 2 and provide the resulting value to the players.

** The RM-14 detector efficiency for I-131 was assumed to be 0.0025 cpm/dpm with silver zeolite cartridge.

*** The particulate filter sample count rate (cpm) was estimated from the I-131 air concentrations for 10 cubic feet.

ATE OF VERMONT FIELD DATA AT CLOCK TIME 1200-1215 (SCENARIO TIME 0345-0400)

TABLE 9.6.4b

PLUME SEGMENT NO.	DISTANCE (MILES)	MAP AREA	GAMMA SURVEY DATA WAIST AND GROUND LEVEL READINGS CLOSED WINDOW (mR/hr)	OPEN WINDOW (mR/hr)	AIR SAMPLE DATA (354 LITERS)* CONC. I-131 (uCi/cc)	LUDLUM 2220 AGX-2** CARTRIDGE (NET CPM)	G-M METER PARTICULATE*** FILTER (NET CPM)
1.00	0.1	BLUE	1427	2854	9.99E-07	62227	3563
		YELLOW	143	285	9.99E-08	6223	356
		GREEN	14	29	9.99E-09	622	<50
2.00	0.8	BLUE	3405	6811	2.38E-06	148520	8505
		YELLOW	341	681	2.38E-07	14852	851
		GREEN	34	68	2.38E-08	1485	85
3.00	1.5	BLUE	3510	7020	2.46E-06	153073	8766
		YELLOW	351	702	2.46E-07	15307	877
		GREEN	35	70	2.46E-08	1531	88
4.00	2.3	BLUE	109	218	7.64E-08	4761	273
		YELLOW	11	22	7.64E-09	<500	<50
		GREEN	1	2	7.64E-10	<500	<50
5.00	3.1	BLUE	84	168	5.88E-08	3660	210
		YELLOW	8	17	5.88E-09	<500	<50
		GREEN	1	2	5.88E-10	<500	<50
6.00	3.8	BLUE	2	3	1.06E-09	<500	<50
		YELLOW	0.2	0.3	1.06E-10	<500	<50
		GREEN	<.1	<.1	1.06E-11	<500	<50
7.00	4.6	BLUE	1	3	8.80E-10	<500	<50
		YELLOW	<.1	0.3	8.80E-11	<500	<50
		GREEN	<.1	<.1	8.80E-12	<500	<50

Notes:

* Air sample data are based on a sample volume of 354 liters. If different volumes are collected, the air sample data provided in tables should be adjusted proportionally. For example, if 177 sample was collected instead of 354 liters, divide the value given in table by 2 and provide the resulting value to the players

** The Ludlum 2220 detector efficiency for I-131 was assumed to be 0.080 cpm/dpm with the AGX-2 cartridge.

*** For analysis of the particulate filter, it is assumed tha a G-M survey meter is used to obtain the sample count rates. The filter count rate was estimated from the I-131 air concentration for a 354 sample volume.

TABLE
9.6.4c

STATE OF MA FIELD DATA AT CLOCK TIME 1200-1215
(SCENARIO TIME 0345-0400)

PLUME SEGMENT NO.	DISTANCE (MILES)	MAP AREA	GAMMA SURVEY DATA WAIST AND GROUND LEVEL READINGS CLOSED WINDOW (mR/hr)	OPEN WINDOW (mR/hr)	AIR SAMPLE DATA (20 CU FT)* CONC. I-131 (uCi/cc)	E-140/HP-210 AGX-2** CARTRIDGE (NET CPM)	G-M METER PARTICULATE*** FILTER (NET CPM)
1.00	0.1	BLUE	1427	2854	9.99E-07	3109	5696
		YELLOW	143	285	9.99E-08	311	570
		GREEN	14	29	9.99E-09	<50	57
2.00	0.8	BLUE	3405	6811	2.38E-06	7421	13596
		YELLOW	341	681	2.33E-07	742	1360
		GREEN	34	68	2.33E-08	74	136
3.00	1.5	BLUE	3510	7020	2.46E-06	7648	14013
		YELLOW	351	702	2.46E-07	765	1401
		GREEN	35	70	2.46E-08	76	140
4.00	2.3	BLUE	109	218	7.64E-08	238	436
		YELLOW	11	22	7.64E-09	<50	<50
		GREEN	1	2	7.64E-10	<50	<50
5.00	3.1	BLUE	84	168	5.88E-08	183	335
		YELLOW	8	17	5.88E-09	<50	<50
		GREEN	1	2	5.88E-10	<50	<50
6.00	3.8	BLUE	2	3	1.06E-09	<50	<50
		YELLOW	0.2	0.3	1.06E-10	<50	<50
		GREEN	<.1	<.1	1.06E-11	<50	<50
7.00	4.6	BLUE	1	3	8.80E-10	<50	<50
		YELLOW	<.1	0.3	8.80E-11	<50	<50
		GREEN	<.1	<.1	8.80E-12	<50	<50

Notes:

* Air sample data are based on a sample volume of 20 cu ft. If different volumes are collected, the air sample data provided in t tables should be adjusted proportionally. For example, if a 40 cu ft. sample was collected instead of the 20 cu ft. multiply the valu given in the table by 2 and provide the resulting value to the players.

The E-140/HP-210 detector efficiency for I-131 was assumed to be 0.0024 cpm/dpm with the AGX-2 cartridge.

*** For analysis of the particulate filter, it is assumed the a G-M survey meter is used to obtain the sample count rates. The filter count rate was estimated from the I-131 air concentration for 20 cu ft. sample volume

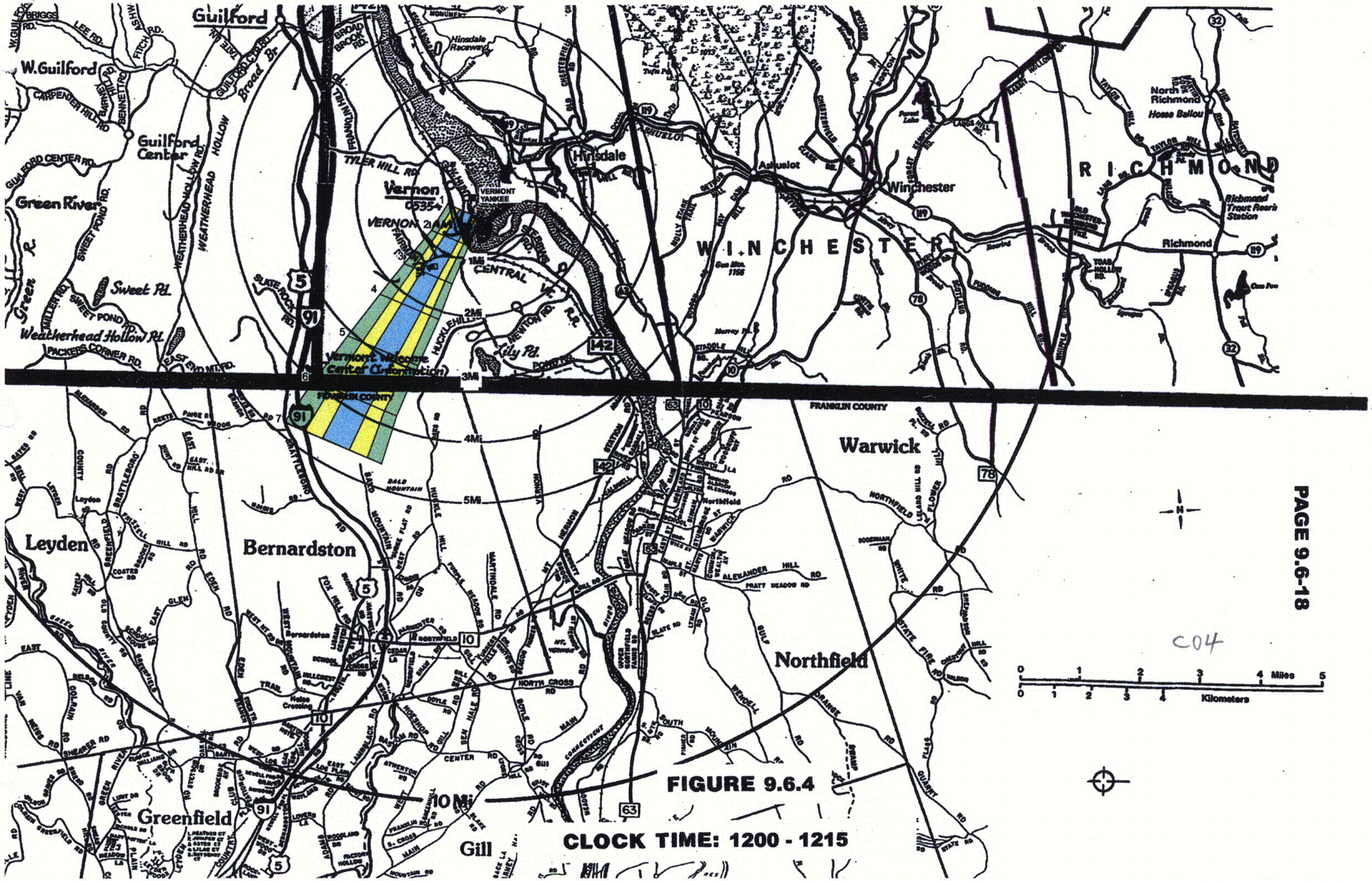


FIGURE 9.6.4

CLOCK TIME: 1200 - 1215

TABLE
9.6.5a

VERMONT YANKEE FIELD DATA AT CLOCK TIME 1215-1230 (SCENARIO TIME 0400-0415)

PLUME SEGMENT NO.	DISTANCE (MILES)	MAP AREA	GAMMA DOSE RATE PIC-6 (mR/hr)	GAMMA DOSE RATE RM-14 (CPM)	AIR SAMPLE DATA* (RM-14)** CONC. I-131 (uCi/cc)	RADECO/HV-1BC 10 CF SILVER ZEOLITE (NET CPM)	PARTICULATE FILTER (NET CPM)
1.00	0.1	BLUE	1572	OSH	1.10E-06	1713	2212
		YELLOW	157	OSH	1.10E-07	171	221
		GREEN	16	OSH	1.10E-08	<40	<40
2.00	0.9	BLUE	3579	OSH	2.51E-06	3900	5036
		YELLOW	358	OSH	2.51E-07	390	504
		GREEN	36	OSH	2.51E-08	<40	50
3.00	1.9	BLUE	3144	OSH	2.20E-06	3426	4424
		YELLOW	314	OSH	2.20E-07	343	442
		GREEN	31	OSH	2.20E-08	<40	44
4.00	2.6	BLUE	1785	OSH	1.25E-06	1945	2511
		YELLOW	178	OSH	1.25E-07	194	251
		GREEN	18	OSH	1.25E-08	<40	<40
5.00	3.4	BLUE	1372	OSH	9.60E-07	1495	1931
		YELLOW	137	OSH	9.60E-08	149	193
		GREEN	14	48024	9.60E-09	<40	<40
6.00	4.2	BLUE	54	OSH	3.80E-08	59	76
		YELLOW	5	19008	3.80E-09	<40	<40
		GREEN	1	1901	3.80E-10	<40	<40
7.00	5	BLUE	46	OSH	3.24E-08	51	65
		YELLOW	5	16224	3.24E-09	<40	<40
		GREEN	<1	1622	3.24E-10	<40	<40
8.00	5.7	BLUE	1	3238	6.48E-10	<40	<40
		YELLOW	<1	324	6.48E-11	<40	<40
		GREEN	<1	<50	6.48E-12	<40	<40
9.00	6.50	BLUE	1	2827	5.65E-10	<40	<40
		YELLOW	<1	283	5.65E-11	<40	<40
		GREEN	<1	<50	5.65E-12	<40	<40

tes:

* Air sample data are based on a sample volume of 10 cubic feet for the air sampler. If different volumes are collected, the air sample c provided in the tables should be adjusted proportionally. For example, if a 5 cubic feet sample was collected instead of 10 cubic feet, divide t value given in the table by 2 and provide the resulting value to the players.

** The RM-14 detector efficiency for I-131 was assumed to be 0.0025 cpm/dpm with silver zeolite cartridge.

*** The particulate filter sample count rate (cpm) was estimated from the I-131 air concentrations for 10 cubic feet.

OSH = Off-Scale High

TABLE
9.6.5b

STATE OF VERMONT FIELD DATA AT CLOCK TIME 1215-1230 (SCENARIO TIME 0400-0415)

PLUME SEGMENT NO.	DISTANCE (MILES)	MAP AREA	GAMMA SURVEY DATA WAIST AND GROUND LEVEL READINGS CLOSED WINDOW (mR/hr)	OPEN WINDOW (mR/hr)	AIR SAMPLE DATA (354 LITERS)* CONC. I-131 (uCi/cc)	LUDLUM 2220 AGX-2** CARTRIDGE (NET CPM)	G-M METER PARTICULATE*** FILTER (NET CPM)
1.00	0.1	BLUE	1572	3144	1.10E-06	68569	3927
		YELLOW	157	314	1.10E-07	6857	393
		GREEN	16	31	1.10E-08	686	<50
2.00	0.9	BLUE	3579	7159	2.51E-06	156109	8940
		YELLOW	358	716	2.51E-07	15611	894
		GREEN	36	72	2.51E-08	1561	89
3.00	1.9	BLUE	3144	6289	2.20E-06	137137	7853
		YELLOW	314	629	2.20E-07	13714	785
		GREEN	31	63	2.20E-08	1371	79
4.00	2.6	BLUE	1785	3569	1.25E-06	77838	4457
		YELLOW	178	357	1.25E-07	7784	446
		GREEN	18	36	1.25E-08	778	<50
5.00	3.4	BLUE	1372	2744	9.60E-07	59842	3427
		YELLOW	137	274	9.60E-08	5984	343
		GREEN	14	27	9.60E-09	598	<50
6.00	4.2	BLUE	54	109	3.80E-08	2369	136
		YELLOW	5	11	3.80E-09	<500	<50
		GREEN	0.5	1	3.80E-10	<500	<50
7.00	5	BLUE	46	93	3.24E-08	2022	116
		YELLOW	5	9	3.24E-09	<500	<50
		GREEN	0.5	1	3.24E-10	<500	<50
8.00	5.7	BLUE	1	2	6.48E-10	<500	<50
		YELLOW	<.1	0.2	6.48E-11	<500	<50
		GREEN	<.1	<.1	6.48E-12	<500	<50
9.00	6.5	BLUE	1	2	5.65E-10	<500	<50
		YELLOW	<.1	0.2	5.65E-11	<500	<50
		GREEN	<.1	<.1	5.65E-12	<500	<50

Notes:

Air sample data are based on a sample volume of 354 liters.. If different volumes are collected, the air sample data provided in the tables should be adjusted proportionally. For example, if a 177 liter sample was collected instead of 354 liters, divide the value given in the table by 2 and provide the resulting value to the players.

** The Ludlum 2220 detector efficiency for I-131 was assumed to be 0.080 cpm/dpm with the AGX-2 cartridge.

*** For analysis of the particulate filter, it is assumed the a G-M survey meter is used to obtain the sample count rates. The filter count rate was estimated from the I-131 air concentration for 354 liter sample volume.

TABLE
9.6.5c

STATE OF MA FIELD DATA AT CLOCK TIME 1215-1230
(SCENARIO TIME 0400-0415)

PLUME SEGMENT NO.	DISTANCE (MILES)	MAP AREA	GAMMA SURVEY DATA WAIST AND GROUND LEVEL READINGS CLOSED WINDOW (mR/hr)	OPEN WINDOW (mR/hr)	AIR SAMPLE DATA (20 CU FT)* CONC. I-131 (uCi/cc)	E-140/HP-210 AGX-2** CARTRIDGE (NET CPM)	G-M METER PARTICULATE*** FILTER (NET CPM)
1.00	0.1	BLUE	1572	3144	1.10E-06	3426	6277
		YELLOW	157	314	1.10E-07	343	628
		GREEN	16	31	1.10E-08	<50	63
2.00	0.9	BLUE	3579	7159	2.51E-06	7800	14291
		YELLOW	358	716	2.51E-07	780	1429
		GREEN	36	72	2.51E-08	78	143
3.00	1.9	BLUE	3144	6289	2.20E-06	6852	12554
		YELLOW	314	629	2.20E-07	685	1255
		GREEN	31	63	2.20E-08	69	126
4.00	2.6	BLUE	1785	3569	1.25E-06	3889	7126
		YELLOW	178	357	1.25E-07	389	713
		GREEN	18	36	1.25E-08	<50	71
5.00	3.4	BLUE	1372	2744	9.60E-07	2990	5478
		YELLOW	137	274	9.60E-08	299	548
		GREEN	14	27	9.60E-09	30	55
6.00	4.2	BLUE	54	109	3.80E-08	118	217
		YELLOW	5	11	3.80E-09	<50	<50
		GREEN	0.5	1	3.80E-10	<50	<50
7.00	5	BLUE	46	93	3.24E-08	101	185
		YELLOW	5	9	3.24E-09	<50	<50
		GREEN	0.5	1	3.24E-10	<50	<50
8.00	5.7	BLUE	1	2	6.48E-10	<50	<50
		YELLOW	<.1	0.2	6.48E-11	<50	<50
		GREEN	<.1	<.1	6.48E-12	<50	<50
9.00	6.5	BLUE	1	2	5.65E-10	<50	<50
		YELLOW	<.1	0.2	5.65E-11	<50	<50
		GREEN	<.1	<.1	5.65E-12	<50	<50

Notes:

Air sample data are based on a sample volume of 20 cu ft. If different volumes are collected, the air sample data provided in the tables should be adjusted proportionally. For example, if a 40 cu ft. sample was collected instead of the 20 cu ft. multiply the value given in the table by 2 and provide the resulting value to the players.

** The E-140/HP-210 detector efficiency for I-131 was assumed to be 0.0024 cpm/dpm with the AGX-2 cartridge.

*** For analysis of the particulate filter, it is assumed the a G-M survey meter is used to obtain the sample count rates. The filter count rate was estimated from the I-131 air concentration for 20 cu ft. sample volume

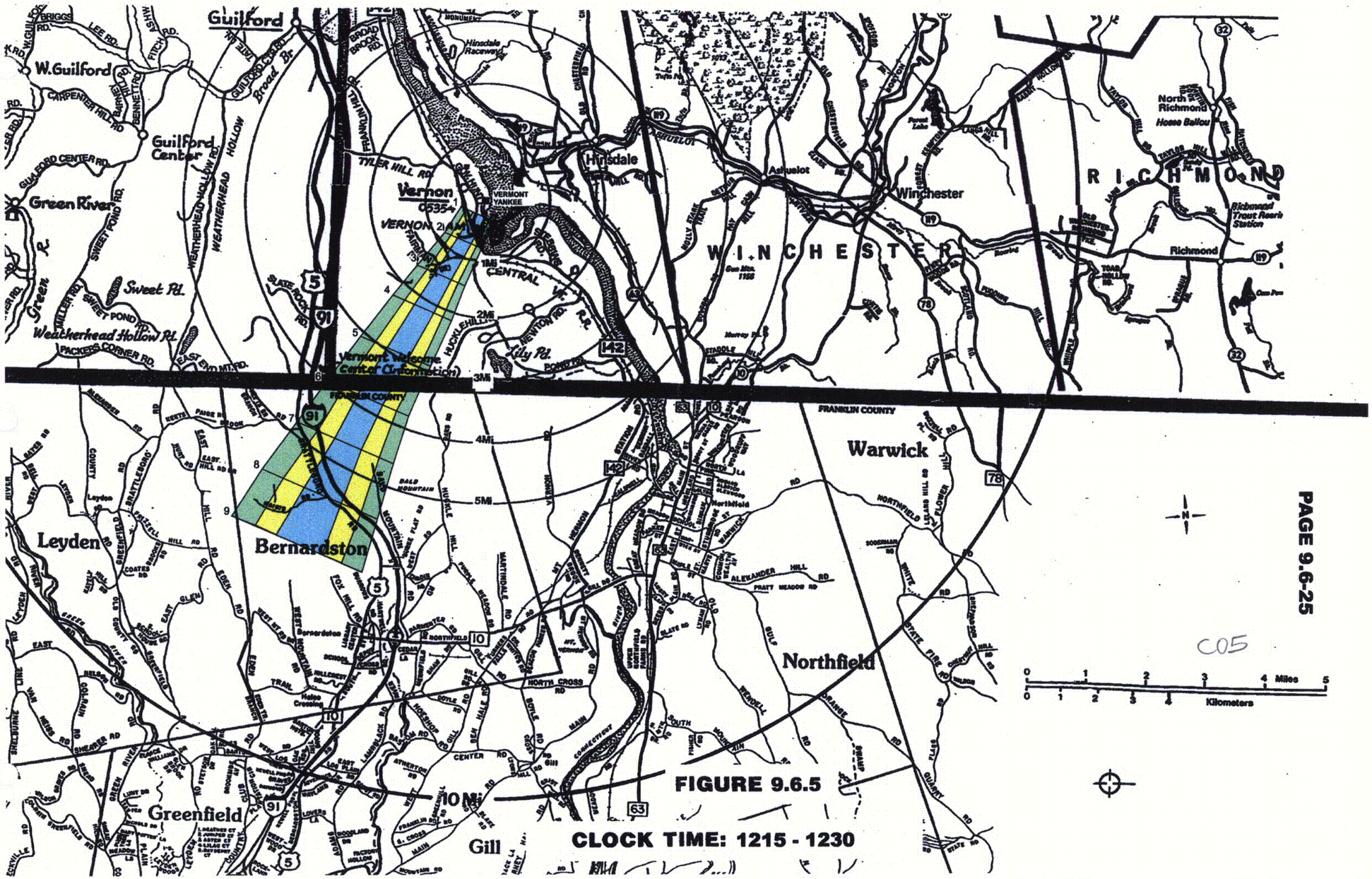


FIGURE 9.6.5

CLOCK TIME: 1215 - 1230

TABLE
9.6.6a

VERMONT YANKEE FIELD DATA AT CLOCK TIME 1230-1245 (SCENARIO TIME 0415-0430)

PLUME SEGMENT NO.	DISTANCE (MILES)	MAP AREA	GAMMA DOSE RATE PIC-6 (mR/hr)	GAMMA DOSE RATE RM-14 (CPM)	AIR SAMPLE DATA* (RM-14)** CONC. I-131 (uCi/cc)	RADECO/HV-1BC 10 CF SILVER ZEOLITE (NET CPM)	PARTICULATE FILTER (NET CPM)
1.00	0.1	BLUE	1458	OSH	1.02E-06	1588	2051
		YELLOW	146	OSH	1.02E-07	159	205
		GREEN	15	OSH	1.02E-08	<40	<40
2.00	0.7	BLUE	3520	OSH	2.46E-06	3835	4952
		YELLOW	352	OSH	2.46E-07	383	495
		GREEN	35	OSH	2.46E-08	<40	50
3.00	1.4	BLUE	3422	OSH	2.40E-06	3729	4815
		YELLOW	342	OSH	2.40E-07	373	482
		GREEN	34	OSH	2.40E-08	37	48
4.00	2.1	BLUE	2330	OSH	1.63E-06	2539	3279
		YELLOW	233	OSH	1.63E-07	254	328
		GREEN	23	OSH	1.63E-08	<40	<40
5.00	3	BLUE	1529	OSH	1.07E-06	1666	2151
		YELLOW	153	OSH	1.07E-07	167	215
		GREEN	15	OSH	1.07E-08	<40	<40
6.00	4	BLUE	1286	OSH	9.00E-07	1402	1810
		YELLOW	129	OSH	9.00E-08	140	181
		GREEN	13	45023	9.00E-09	<40	<40
7.00	4.7	BLUE	900	OSH	6.30E-07	980	1266
		YELLOW	90	OSH	6.30E-08	98	127
		GREEN	9	31494	6.30E-09	<40	<40
8.00	5.5	BLUE	741	OSH	5.19E-07	807	1042
		YELLOW	74	OSH	5.19E-08	81	104
		GREEN	7	25926	5.19E-09	<40	<40
9.00	6.3	BLUE	33	OSH	2.28E-08	<40	46
		YELLOW	3	11424	2.28E-09	<40	<40
		GREEN	<1	1142	2.28E-10	<40	<40
10.00	7.1	BLUE	29	OSH	2.04E-08	<40	41
		YELLOW	3	10176	2.04E-09	<40	<40
		GREEN	<1	1018	2.04E-10	<40	<40

11.00	7.8	BLUE	1	2161	4.32E-10	<40	<40
		YELLOW	<1	216	4.32E-11	<40	<40
		GREEN	<1	<50	4.32E-12	<40	<40
12.00	8.6	BLUE	1	1933	3.87E-10	<40	<40
		YELLOW	<1	193	3.87E-11	<40	<40
		GREEN	<1	<50	3.87E-12	<40	<40

Notes:

* Air sample data are based on a sample volume of 10 cubic feet for the air sampler. If different volumes are collected, the air sample data provided in the tables should be adjusted proportionally. For example, if a 5 cubic feet sample was collected instea 10 cubic feet, divide the value given in the table by 2 and provide the resulting value to the players.

** The RM-14 detector efficiency for I-131 was assumed to be 0.0025 cpm/dpm with silver zeolite cartridge.

*** The particulate filter sample count rate (cpm) was estimated from the I-131 air concentrations for 10 cubic feet.

*** OSH = Off-Scale High

TABLE
9.6.6b

STATE OF VERMONT FIELD DATA AT CLOCK TIME 1230-1245 (SCENARIO TIME 0415-0430)

PLUME SEGMENT NO.	DISTANCE (MILES)	MAP AREA	GAMMA SURVEY DATA WAIST AND GROUND LEVEL READINGS CLOSED WINDOW (mR/hr)	OPEN WINDOW (mR/hr)	AIR SAMPLE DATA (354 LITERS)* CONC. I-131 (uCi/cc)	LUDLUM 2220 AGX-2** CARTRIDGE (NET CPM)	G-M METER PARTICULATE*** FILTER (NET CPM)
1.00	0.1	BLUE	1458	2916	1.02E-06	63583	3641
		YELLOW	146	292	1.02E-07	6358	364
		GREEN	15	29	1.02E-08	636	<50
2.00	0.7	BLUE	3520	7039	2.46E-06	153504	8790
		YELLOW	352	704	2.46E-07	15350	879
		GREEN	35	70	2.46E-08	1535	88
3.00	1.4	BLUE	3422	6844	2.40E-06	149247	8547
		YELLOW	342	684	2.40E-07	14925	855
		GREEN	34	68	2.40E-08	1492	85
4.00	2.1	BLUE	2330	4660	1.63E-06	101627	5820
		YELLOW	233	466	1.63E-07	10163	582
		GREEN	23	47	1.63E-08	1016	58
5.00	3	BLUE	1529	3057	1.07E-06	66672	3818
		YELLOW	153	306	1.07E-07	6667	382
		GREEN	15	31	1.07E-08	667	<50
6.00	4	BLUE	1286	2573	9.00E-07	56102	3213
		YELLOW	129	257	9.00E-08	5610	321
		GREEN	13	26	9.00E-09	561	<50
7.00	4.7	BLUE	900	1800	6.30E-07	39244	2247
		YELLOW	90	180	6.30E-08	3924	225
		GREEN	9	18	6.30E-09	<500	<50
8.00	5.5	BLUE	741	1481	5.19E-07	32306	1850
		YELLOW	74	148	5.19E-08	3231	185
		GREEN	7	15	5.19E-09	<500	<50
9.00	6.3	BLUE	33	65	2.28E-08	1424	82
		YELLOW	3	7	2.28E-09	<500	<50
		GREEN	0.3	0.7	2.28E-10	<500	<50
10.00	7.1	BLUE	29	58	2.04E-08	1268	73
		YELLOW	3	6	2.04E-09	<500	<50
		GREEN	0.3	0.6	2.04E-10	<500	<50

11.00	7.8	BLUE	1	1	4.32E-10	<500	<50
		YELLOW	<.1	<.1	4.32E-11	<500	<50
		GREEN	<.1	<.1	4.32E-12	<500	<50
12.00	8.6	BLUE	1	1	3.87E-10	<500	<50
		YELLOW	<.1	<.1	3.87E-11	<500	<50
		GREEN	<.1	<.1	3.87E-12	<500	<50

Notes:

* Air sample data are based on a sample volume of 354 liters. If different volumes are collected, the air sample data provided in tables should be adjusted proportionally. For example, if 177 sample was collected instead of 354 liters, divide the value given in table by 2 and provide the resulting value to the players

** The Ludlum 2220 detector efficiency for I-131 was assumed to be 0.080 cpm/dpm with the AGX-2 cartridge.

*** For analysis of the particulate filter, it is assumed tha a G-M survey meter is used to obtain the sample count rates. The filter count rate was estimated from the I-131 air concentration for a 354 sample volume.

TABLE
9.6.6c

STATE OF MA FIELD DATA AT CLOCK TIME 1230-1245
(SCENARIO TIME 0415-0430)

PLUME SEGMENT NO.	DISTANCE (MILES)	MAP AREA	GAMMA SURVEY DATA WAIST AND GROUND LEVEL READINGS CLOSED WINDOW (mR/hr)	OPEN WINDOW (mR/hr)	AIR SAMPLE DATA (20 CU FT)* CONC. I-131 (uCi/cc)	E-140/HP-210 AGX-2** CARTRIDGE (NET CPM)	G-M METER PARTICULATE*** FILTER (NET CPM)
1.00	0.1	BLUE	1458	2916	1.02E-06	3177	5821
		YELLOW	146	292	1.02E-07	318	582
		GREEN	15	29	1.02E-08	<50	58
2.00	0.7	BLUE	3520	7039	2.46E-06	7670	14052
		YELLOW	352	704	2.46E-07	767	1405
		GREEN	35	70	2.46E-08	77	141
3.00	1.4	BLUE	3422	6844	2.40E-06	7457	13663
		YELLOW	342	684	2.40E-07	746	1366
		GREEN	34	68	2.40E-08	75	137
4.00	2.1	BLUE	2330	4660	1.63E-06	5078	9303
		YELLOW	233	466	1.63E-07	508	930
		GREEN	23	47	1.63E-08	51	93
5.00	3	BLUE	1529	3057	1.07E-06	3331	6103
		YELLOW	153	306	1.07E-07	333	610
		GREEN	15	31	1.07E-08	<50	61
6.00	4	BLUE	1286	2573	9.00E-07	2803	5136
		YELLOW	129	257	9.00E-08	280	514
		GREEN	13	26	9.00E-09	<50	51
7.00	4.7	BLUE	900	1800	6.30E-07	1961	3593
		YELLOW	90	180	6.30E-08	196	359
		GREEN	9	18	6.30E-09	<50	<50
8.00	5.5	BLUE	741	1481	5.19E-07	1614	2957
		YELLOW	74	148	5.19E-08	161	296
		GREEN	7	15	5.19E-09	<50	<50
9.00	6.3	BLUE	33	65	2.28E-08	71	130
		YELLOW	3	7	2.28E-09	<50	<50
		GREEN	0.3	0.7	2.28E-10	<50	<50
10.00	7.1	BLUE	29	58	2.04E-08	63	116
		YELLOW	3	6	2.04E-09	<50	<50
		GREEN	0.3	0.6	2.04E-10	<50	<50

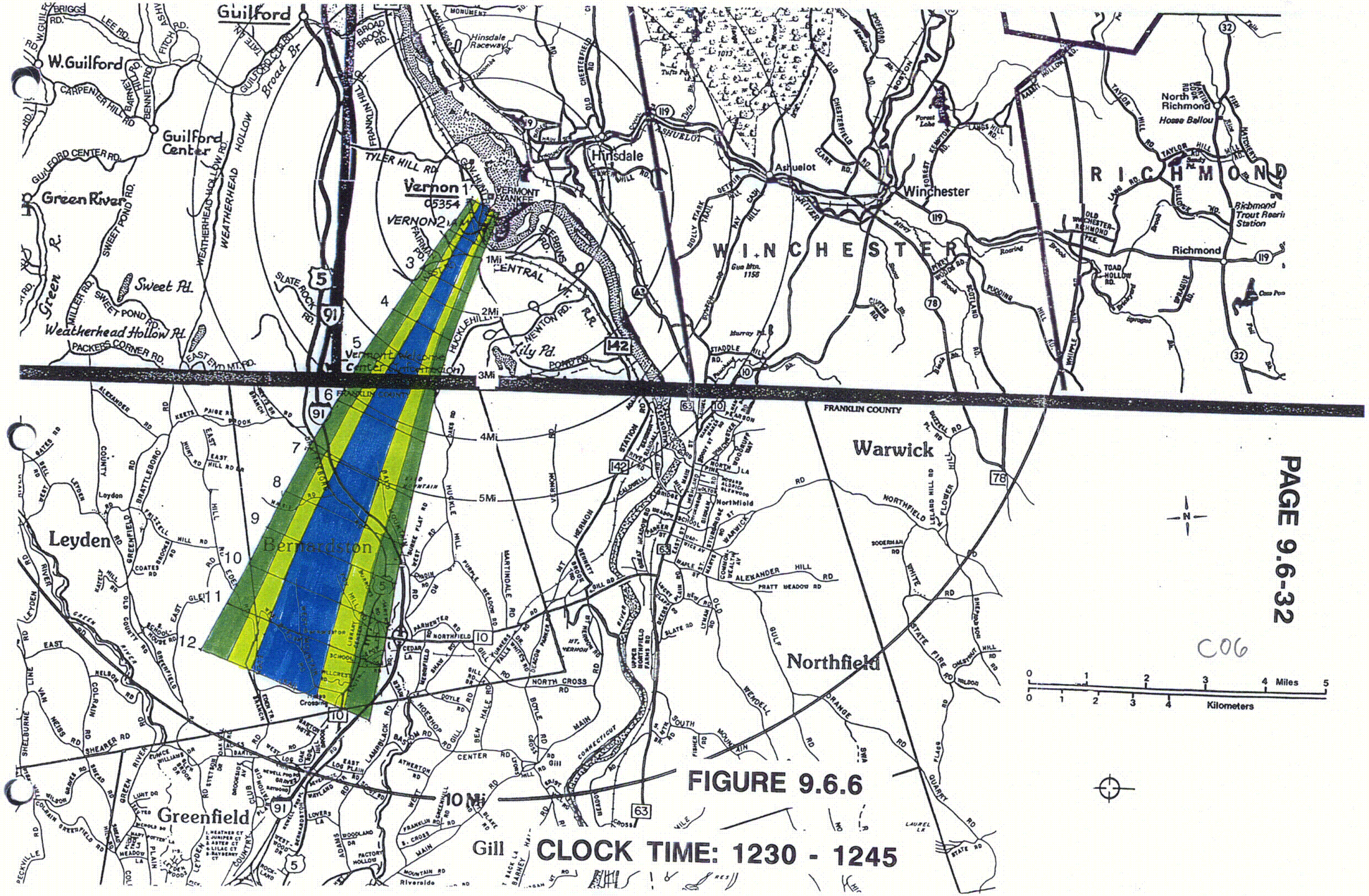
11.00	7.8	BLUE	1	1	4.32E-10	<50	<50
		YELLOW	<.1	<.1	4.32E-11	<50	<50
		GREEN	<.1	<.1	4.32E-12	<50	<50
12.00	8.6	BLUE	1	1	3.87E-10	<50	<50
		YELLOW	<.1	<.1	3.87E-11	<50	<50
		GREEN	<.1	<.1	3.87E-12	<50	<50

Notes:

* Air sample data are based on a sample volume of 20 cu ft. If different volumes are collected, the air sample data provided in the tables should be adjusted proportionally. For example, if a 40 cu ft. sample was collected instead of the 20 cu ft. multiply the value given in the table by 2 and provide the resulting value to the players.

** The E-140/HP-210 detector efficiency for I-131 was assumed to be 0.0024 cpm/dpm with the AGX-2 cartridge.

*** For analysis of the particulate filter, it is assumed the a G-M survey meter is used to obtain the sample count rates. The filter count rate was estimated from the I-131 air concentration for 20 cu ft. sample volume



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C06

FIGURE 9.6.6

CLOCK TIME: 1230 - 1245

TABLE
9.6.7a

VERMONT YANKEE FIELD DATA AT CLOCK TIME 1245-1300 (SCENARIO TIME 0430-0445)

PLUME SEGMENT NO.	DISTANCE (MILES)	MAP AREA	GAMMA DOSE RATE PIC-6 (mR/hr)	GAMMA DOSE RATE RM-14 (CPM)	AIR SAMPLE DATA* (RM-14)** CONC. I-131 (uCi/cc)	RADECO/HV-1BC 10 CF SILVER ZEOLITE (NET CPM)	PARTICULATE FILTER (NET CPM)
1.00	0.1	BLUE	1415	OSH	9.91E-07	1542	1991
		YELLOW	142	OSH	9.91E-08	154	199
		GREEN	14	49533	9.91E-09	<40	<40
2.00	0.70	BLUE	3416	OSH	2.39E-06	3722	4806
		YELLOW	342	OSH	2.39E-07	372	481
		GREEN	34	OSH	2.39E-08	<40	48
3.00	1.40	BLUE	3272	OSH	2.29E-06	3565	4604
		YELLOW	327	OSH	2.29E-07	357	460
		GREEN	33	OSH	2.29E-08	<40	46
4.00	2.1	BLUE	2096	OSH	1.47E-06	2284	2949
		YELLOW	210	11200	1.47E-07	228	295
		GREEN	21	1100	1.47E-08	<40	<40
5.00	2.8	BLUE	1458	OSH	1.02E-06	1588	2051
		YELLOW	146	OSH	1.02E-07	159	205
		GREEN	15	OSH	1.02E-08	<40	<40
6.00	3.5	BLUE	1177	OSH	8.24E-07	1283	1657
		YELLOW	118	OSH	8.24E-08	128	166
		GREEN	12	41206	8.24E-09	<40	<40
7.00	4.2	BLUE	1000	OSH	7.00E-07	1090	1408
		YELLOW	100	OSH	7.00E-08	109	141
		GREEN	10	35014	7.00E-09	<40	<40
8.00	5.2	BLUE	808	OSH	5.66E-07	880	1137
		YELLOW	81	OSH	5.66E-08	88	114
		GREEN	8	28275	5.66E-09	<40	<40
9.00	6.1	BLUE	740	OSH	5.18E-07	806	1041
		YELLOW	74	OSH	5.18E-08	81	104
		GREEN	7	25883	5.18E-09	<40	<40
10.00	6.8	BLUE	562	OSH	3.93E-07	612	790
		YELLOW	56	OSH	3.93E-08	61	79
		GREEN	6	19662	3.93E-09	<40	<40

11.00	7.6	BLUE	480	OSH	3.36E-07	523	676
		YELLOW	48	OSH	3.36E-08	52	68
		GREEN	5	16808	3.36E-09	<40	<40
12.00	8.4	BLUE	22	OSH	1.55E-08	<40	<40
		YELLOW	2	7766	1.55E-09	<40	<40
		GREEN	<1	777	1.55E-10	<40	<40
13.00	9.2	BLUE	20	OSH	1.43E-08	<40	<40
		YELLOW	2	7162	1.43E-09	<40	<40
		GREEN	<1	716	1.43E-10	<40	<40
14.00	9.9	BLUE	<1	1566	3.13E-10	<40	<40
		YELLOW	<1	157	3.13E-11	<40	<40
		GREEN	<1	<50	3.13E-12	<40	<40

Notes:

* Air sample data are based on a sample volume of 10 cubic feet for the air sampler. If different volumes are collected, the air sample data provided in the tables should be adjusted proportionally. For example, if a 5 cubic feet sample was collected instea 10 cubic feet, divide the value given in the table by 2 and provide the resulting value to the players.

** The RM-14 detector efficiency for I-131 was assumed to be 0.0025 cpm/dpm with silver zeolite cartridge.

* The particulate filter sample count rate (cpm) was estimated from the I-131 air concentrations for 10 cubic feet.

*** OSH = Off-Scale High

TABLE
9.6.7b

STATE OF VERMONT FIELD DATA AT CLOCK TIME 1245-1300 (SCENARIO TIME 0430-0445)

PLUME SEGMENT NO.	DISTANCE (MILES)	MAP AREA	GAMMA SURVEY DATA WAIST AND GROUND LEVEL READINGS CLOSED WINDOW (mR/hr)	OPEN WINDOW (mR/hr)	AIR SAMPLE DATA (354 LITERS)* CONC. I-131 (uCi/cc)	LUDLUM 2220 AGX-2** CARTRIDGE (NET CPM)	G-M METER PARTICULATE*** FILTER (NET CPM)
1.00	0.1	BLUE	1415	2830	9.91E-07	61722	3535
		YELLOW	142	283	9.91E-08	6172	353
		GREEN	14	28	9.91E-09	617	<50
2.00	0.7	BLUE	3416	6831	2.39E-06	148966	8531
		YELLOW	342	683	2.39E-07	14897	853
		GREEN	34	68	2.39E-08	1490	85
3.00	1.4	BLUE	3272	6545	2.29E-06	142716	8173
		YELLOW	327	654	2.29E-07	14272	817
		GREEN	33	65	2.29E-08	1427	82
4.00	2.1	BLUE	2096	4192	1.47E-06	91411	5235
		YELLOW	210	419	1.47E-07	9141	523
		GREEN	21	42	1.47E-08	914	52
5.00	2.8	BLUE	1458	2916	1.02E-06	63583	3641
		YELLOW	146	292	1.02E-07	6358	364
		GREEN	15	29	1.02E-08	636	<50
6.00	3.5	BLUE	1177	2355	8.24E-07	51345	2940
		YELLOW	118	235	8.24E-08	5135	294
		GREEN	12	24	8.24E-09	513	<50
7.00	4.2	BLUE	1000	2001	7.00E-07	43630	2498
		YELLOW	100	200	7.00E-08	4363	250
		GREEN	10	20	7.00E-09	<500	<50
8.00	5.2	BLUE	808	1616	5.66E-07	35233	2018
		YELLOW	81	162	5.66E-08	3523	202
		GREEN	8	16	5.66E-09	<500	<50
9.00	6.1	BLUE	740	1479	5.18E-07	32252	1847
		YELLOW	74	148	5.18E-08	3225	185
		GREEN	7	15	5.18E-09	<500	<50
10.00	6.8	BLUE	562	1124	3.93E-07	24500	1403
		YELLOW	56	112	3.93E-08	2450	140
		GREEN	6	11	3.93E-09	<500	<50

11.00	7.6	BLUE	480	960	3.36E-07	20945	1199
		YELLOW	48	96	3.36E-08	2094	120
		GREEN	5	10	3.36E-09	<500	<50
12.00	8.4	BLUE	22	44	1.55E-08	968	55
		YELLOW	2	4	1.55E-09	<500	<50
		GREEN	0.2	0.4	1.55E-10	<500	<50
13.00	9.2	BLUE	20	41	1.43E-08	892	51
		YELLOW	2	4	1.43E-09	<500	<50
		GREEN	0.2	0.4	1.43E-10	<500	<50
14.00	9.9	BLUE	0.5	1	3.13E-10	<500	<50
		YELLOW	<.1	<.1	3.13E-11	<500	<50
		GREEN	<.1	<.1	3.13E-12	<500	<50

Notes:

* Air sample data are based on a sample volume of 354 liters. If different volumes are collected, the air sample data provided in tables should be adjusted proportionally. For example, if 177 sample was collected instead of 354 liters, divide the value given in table by 2 and provide the resulting value to the players

** The Ludlum 2220 detector efficiency for I-131 was assumed to be 0.080 cpm/dpm with the AGX-2 cartridge.

* For analysis of the particulate filter, it is assumed that a G-M survey meter is used to obtain the sample count rates. The filter unt rate was estimated from the I-131 air concentration for a 354 sample volume.

TABLE
9.6.7c

STATE OF MA FIELD DATA AT CLOCK TIME 1245-1300
(SCENARIO TIME 0430-0445)

PLUME SEGMENT NO.	DISTANCE (MILES)	MAP AREA	GAMMA SURVEY DATA WAIST AND GROUND LEVEL READINGS CLOSED WINDOW (mR/hr)	OPEN WINDOW (mR/hr)	AIR SAMPLE DATA (20 CU FT)* CONC. I-131 (uCi/cc)	E-140/HP-210 AGX-2** CARTRIDGE (NET CPM)	G-M METER PARTICULATE*** FILTER (NET CPM)
1.00	0.1	BLUE	1415	2830	9.91E-07	3084	5650
		YELLOW	142	283	9.91E-08	308	565
		GREEN	14	28	9.91E-09	<50	57
2.00	0.7	BLUE	3416	6831	2.39E-06	7443	13637
		YELLOW	342	683	2.39E-07	744	1364
		GREEN	34	68	2.39E-08	74	136
3.00	1.4	BLUE	3272	6545	2.29E-06	7131	13065
		YELLOW	327	654	2.29E-07	713	1306
		GREEN	33	65	2.29E-08	71	131
4.00	2.1	BLUE	2096	4192	1.47E-06	4567	8368
		YELLOW	210	419	1.47E-07	457	837
		GREEN	21	42	1.47E-08	<50	84
5.00	2.8	BLUE	1458	2916	1.02E-06	3177	5821
		YELLOW	146	292	1.02E-07	318	582
		GREEN	15	29	1.02E-08	<50	58
6.00	3.5	BLUE	1177	2355	8.24E-07	2565	4700
		YELLOW	118	235	8.24E-08	257	470
		GREEN	12	24	8.24E-09	<50	<50
7.00	4.2	BLUE	1000	2001	7.00E-07	2180	3994
		YELLOW	100	200	7.00E-08	218	399
		GREEN	10	20	7.00E-09	<50	<50
8.00	5.2	BLUE	808	1616	5.66E-07	1760	3225
		YELLOW	81	162	5.66E-08	176	323
		GREEN	8	16	5.66E-09	<50	<50
9.00	6.1	BLUE	740	1479	5.18E-07	1611	2952
		YELLOW	74	148	5.18E-08	161	295
		GREEN	7	15	5.18E-09	<50	<50
10.00	6.8	BLUE	562	1124	3.93E-07	1224	2243
		YELLOW	56	112	3.93E-08	122	224
		GREEN	6	11	3.93E-09	<50	<50

11.00	7.6	BLUE	480	960	3.36E-07	1046	1917
		YELLOW	48	96	3.36E-08	105	192
		GREEN	5	10	3.36E-09	<50	<50
12.00	8.4	BLUE	22	44	1.55E-08	<50	89
		YELLOW	2	4	1.55E-09	<50	<50
		GREEN	0.2	0.4	1.55E-10	<50	<50
13.00	9.2	BLUE	20	41	1.43E-08	<50	82
		YELLOW	2	4	1.43E-09	<50	<50
		GREEN	0.2	0.4	1.43E-10	<50	<50
14.00	9.9	BLUE	0.5	1	3.13E-10	<50	<50
		YELLOW	<.1	<.1	3.13E-11	<50	<50
		GREEN	<.1	<.1	3.13E-12	<50	<50

Notes:

* Air sample data are based on a sample volume of 20 cu ft. If different volumes are collected, the air sample data provided in t tables should be adjusted proportionally. For example, if a 40 cu ft. sample was collected instead of the 20 cu ft. multiply the valu given in the table by 2 and provide the resulting value to the players.

** The E-140/HP-210 detector efficiency for I-131 was assumed to be 0.0024 cpm/dpm with the AGX-2 cartridge.

*** For analysis of the particulate filter, it is assumed the a G-M survey meter is used to obtain the sample count rates. The filter unt rate was estimated from the I-131 air concentration for 20 cu ft. sample volume

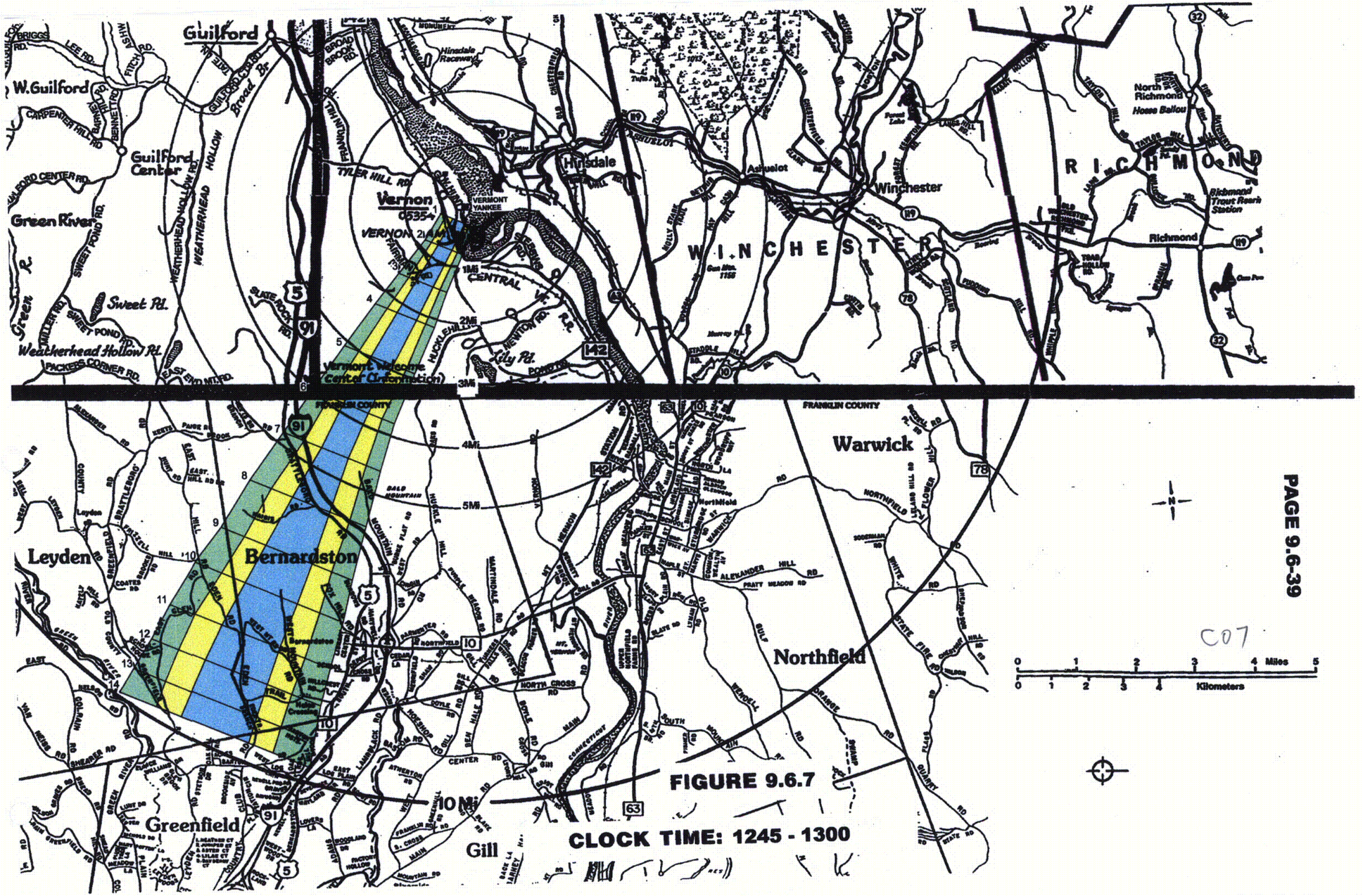

FIGURE 9.6.7

CLOCK TIME: 1245 - 1300

C07

TABLE
9.6.8a

VERMONT YANKEE FIELD DATA AT CLOCK TIME 1300-1315 (SCENARIO TIME 0445-0500)

PLUME SEGMENT NO.	DISTANCE (MILES)	MAP AREA	GAMMA DOSE RATE PIC-6 (mR/hr)	GAMMA DOSE RATE RM-14 (CPM)	AIR SAMPLE DATA* (RM-14)** CONC. I-131 (uCi/cc)	AIR SAMPLE DATA* (RM-14)** RADECO/HV-1BC 10 CF SILVER ZEOLITE (NET CPM)	G-M METER PARTICULATE*** FILTER (NET CPM)
1.00	0.1	BLUE	152	OSH	1.07E-07	166	214
		YELLOW	15	OSH	1.07E-08	<40	<40
		GREEN	2	5332	1.07E-09	<40	<40
2.00	0.70	BLUE	358	OSH	2.50E-07	390	503
		YELLOW	36	OSH	2.50E-08	<40	50
		GREEN	4	12515	2.50E-09	<40	<40
3.00	1.40	BLUE	223	OSH	1.56E-07	243	314
		YELLOW	22	OSH	1.56E-08	<40	<40
		GREEN	2	7814	1.56E-09	<40	<40
4.00	2.1	BLUE	1648	OSH	1.15E-06	1796	2319
		YELLOW	165	OSH	1.15E-07	180	232
		GREEN	16	OSH	1.15E-08	<40	<40
5.00	2.8	BLUE	1296	OSH	9.07E-07	1412	1823
		YELLOW	130	OSH	9.07E-08	141	182
		GREEN	13	45353	9.07E-09	<40	<40
6.00	3.5	BLUE	1015	OSH	7.11E-07	1106	1428
		YELLOW	102	OSH	7.11E-08	111	143
		GREEN	10	35530	7.11E-09	<40	<40
7.00	4.2	BLUE	824	OSH	5.76E-07	897	1159
		YELLOW	82	OSH	5.76E-08	90	116
		GREEN	8	28823	5.76E-09	<40	<40
8.00	5.2	BLUE	708	OSH	4.95E-07	771	996
		YELLOW	71	OSH	4.95E-08	77	100
		GREEN	7	24766	4.95E-09	<40	<40
9.00	6.1	BLUE	641	OSH	4.48E-07	698	901
		YELLOW	64	OSH	4.48E-08	70	90
		GREEN	6	22418	4.48E-09	<40	<40
10.00	6.8	BLUE	556	OSH	3.89E-07	606	783
		YELLOW	56	OSH	3.89E-08	61	78
		GREEN	6	19466	3.89E-09	<40	<40

11.00	7.6	BLUE	528	OSH	3.70E-07	576	743
		YELLOW	53	OSH	3.70E-08	58	74
		GREEN	5	18488	3.70E-09	<40	<40
12.00	8.4	BLUE	416	OSH	2.91E-07	453	585
		YELLOW	42	OSH	2.91E-08	45	58
		GREEN	4	14546	2.91E-09	<40	<40
13.00	9.2	BLUE	363	OSH	2.54E-07	395	511
		YELLOW	36	OSH	2.54E-08	40	51
		GREEN	4	12702	2.54E-09	<40	<40
14.00	9.9	BLUE	17	OSH	1.20E-08	<40	<40
		YELLOW	2	6019	1.20E-09	<40	<40
		GREEN	<1	602	1.20E-10	<40	<40

Notes:

* Air sample data are based on a sample volume of 10 cubic feet for the air sampler. If different volumes are collected, the air sample data provided in the tables should be adjusted proportionally. For example, if a 5 cubic feet sample was collected instead of 10 cubic feet, divide the value given in the table by 2 and provide the resulting value to the players.

** The RM-14 detector efficiency for I-131 was assumed to be 0.0025 cpm/dpm with silver zeolite cartridge.

* The particulate filter sample count rate (cpm) was estimated from the I-131 air concentrations for 10 cubic feet.

*** OSH = Off-Scale High

TABLE
9.6.8b

STATE OF VERMONT FIELD DATA AT CLOCK TIME 1300-1315 (SCENARIO TIME 0445-0500)

PLUME SEGMENT NO.	DISTANCE (MILES)	MAP AREA	GAMMA SURVEY DATA WAIST AND GROUND LEVEL READINGS CLOSED WINDOW (mR/hr)	OPEN WINDOW (mR/hr)	AIR SAMPLE DATA (354 LITERS)* CONC. I-131 (uCi/cc)	LUDLUM 2220 AGX-2** CARTRIDGE (NET CPM)	G-M METER PARTICULATE*** FILTER (NET CPM)
1.00	0.1	BLUE	152	305	1.07E-07	6644	380
		YELLOW	15	30	1.07E-08	664	<50
		GREEN	2	3	1.07E-09	<500	<50
2.00	0.7	BLUE	358	715	2.50E-07	15595	893
		YELLOW	36	72	2.50E-08	1560	89
		GREEN	4	7	2.50E-09	<500	<50
3.00	1.4	BLUE	223	447	1.56E-07	9737	558
		YELLOW	22	45	1.56E-08	974	56
		GREEN	2	4	1.56E-09	<500	<50
4.00	2.1	BLUE	1648	3296	1.15E-06	71879	4116
		YELLOW	165	330	1.15E-07	7188	412
		GREEN	16	33	1.15E-08	719	<50
5.00	2.8	BLUE	1296	2592	9.07E-07	56513	3236
		YELLOW	130	259	9.07E-08	5651	324
		GREEN	13	26	9.07E-09	565	<50
6.00	3.5	BLUE	1015	2030	7.11E-07	44273	2535
		YELLOW	102	203	7.11E-08	4427	254
		GREEN	10	20	7.11E-09	<500	<50
7.00	4.2	BLUE	824	1647	5.76E-07	35915	2057
		YELLOW	82	165	5.76E-08	3592	206
		GREEN	8	16	5.76E-09	<500	<50
8.00	5.2	BLUE	708	1415	4.95E-07	30860	1767
		YELLOW	71	142	4.95E-08	3086	177
		GREEN	7	14	4.95E-09	<500	<50
9.00	6.1	BLUE	641	1281	4.48E-07	27934	1600
		YELLOW	64	128	4.48E-08	2793	160
		GREEN	6	13	4.48E-09	<500	<50
10.00	6.8	BLUE	556	1112	3.89E-07	24257	1389
		YELLOW	56	111	3.89E-08	2426	139
		GREEN	6	11	3.89E-09	<500	<50

11.00	7.6	BLUE	528	1056	3.70E-07	23037	1319
		YELLOW	53	106	3.70E-08	2304	132
		GREEN	5	11	3.70E-09	<500	<50
12.00	8.4	BLUE	416	831	2.91E-07	18126	1038
		YELLOW	42	83	2.91E-08	1813	104
		GREEN	4	8	2.91E-09	<500	<50
13.00	9.2	BLUE	363	726	2.54E-07	15828	906
		YELLOW	36	73	2.54E-08	1583	91
		GREEN	4	7	2.54E-09	<500	<50
14.00	9.9	BLUE	17	34	1.20E-08	750	<50
		YELLOW	2	3	1.20E-09	<500	<50
		GREEN	0.2	0.3	1.20E-10	<500	<50

Notes:

* Air sample data are based on a sample volume of 354 liters. If different volumes are collected, the air sample data provided in the tables should be adjusted proportionally. For example, if 177 sample was collected instead of 354 liters, divide the value given in the table by 2 and provide the resulting value to the players

** The Ludlum 2220 detector efficiency for I-131 was assumed to be 0.080 cpm/dpm with the AGX-2 cartridge.

* For analysis of the particulate filter, it is assumed tha a G-M survey meter is used to obtain the sample count rates. The filter count rate was estimated from the I-131 air concentration for a 354 sample volume.

TABLE
9.6.8c

STATE OF MA FIELD DATA AT CLOCK TIME 1300-1315
(SCENARIO TIME 0445-0500)

PLUME SEGMENT NO.	DISTANCE (MILES)	MAP AREA	GAMMA SURVEY DATA WAIST AND GROUND LEVEL READINGS CLOSED WINDOW (mR/hr)	OPEN WINDOW (mR/hr)	AIR SAMPLE DATA (20 CU FT)* CONC. I-131 (uCi/cc)	E-140/HP-210 AGX-2** CARTRIDGE (NET CPM)	G-M METER PARTICULATE*** FILTER (NET CPM)
1.00	0.1	BLUE	152	305	1.07E-07	332	608
		YELLOW	15	30	1.07E-08	<50	61
		GREEN	2	3	1.07E-09	<50	<50
2.00	0.7	BLUE	358	715	2.50E-07	779	1428
		YELLOW	36	72	2.50E-08	78	143
		GREEN	4	7	2.50E-09	<50	<50
3.00	1.4	BLUE	223	447	1.56E-07	487	891
		YELLOW	22	45	1.56E-08	<50	89
		GREEN	2	4	1.56E-09	<50	<50
4.00	2.1	BLUE	1648	3296	1.15E-06	3591	6580
		YELLOW	165	330	1.15E-07	359	658
		GREEN	16	33	1.15E-08	<50	66
5.00	2.8	BLUE	1296	2592	9.07E-07	2824	5173
		YELLOW	130	259	9.07E-08	282	517
		GREEN	13	26	9.07E-09	<50	52
6.00	3.5	BLUE	1015	2030	7.11E-07	2212	4053
		YELLOW	102	203	7.11E-08	221	405
		GREEN	10	20	7.11E-09	<50	<50
7.00	4.2	BLUE	824	1647	5.76E-07	1794	3288
		YELLOW	82	165	5.76E-08	179	329
		GREEN	8	16	5.76E-09	<50	<50
8.00	5.2	BLUE	708	1415	4.95E-07	1542	2825
		YELLOW	71	142	4.95E-08	154	283
		GREEN	7	14	4.95E-09	<50	<50
9.00	6.1	BLUE	641	1281	4.48E-07	1396	2557
		YELLOW	64	128	4.48E-08	140	256
		GREEN	6	13	4.48E-09	<50	<50
10.00	6.8	BLUE	556	1112	3.89E-07	1212	2221
		YELLOW	56	111	3.89E-08	121	222
		GREEN	6	11	3.89E-09	<50	<50

11.00	7.6	BLUE	528	1056	3.70E-07	1151	2109
		YELLOW	53	106	3.70E-08	115	211
		GREEN	5	11	3.70E-09	<50	<50
12.00	8.4	BLUE	416	831	2.91E-07	906	1659
		YELLOW	42	83	2.91E-08	91	166
		GREEN	4	8	2.91E-09	<50	<50
13.00	9.2	BLUE	363	726	2.54E-07	791	1449
		YELLOW	36	73	2.54E-08	79	145
		GREEN	4	7	2.54E-09	<50	<50
14.00	9.9	BLUE	17	34	1.20E-08	<50	69
		YELLOW	2	3	1.20E-09	<50	<50
		GREEN	0.2	0.3	1.20E-10	<50	<50

Notes:

* Air sample data are based on a sample volume of 20 cu ft. If different volumes are collected, the air sample data provided in the tables should be adjusted proportionally. For example, if a 40 cu ft. sample was collected instead of the 20 cu ft. multiply the value given in the table by 2 and provide the resulting value to the players.

** The E-140/HP-210 detector efficiency for I-131 was assumed to be 0.0024 cpm/dpm with the AGX-2 cartridge.

*** For analysis of the particulate filter, it is assumed the a G-M survey meter is used to obtain the sample count rates. The filter count rate was estimated from the I-131 air concentration for 20 cu ft. sample volume

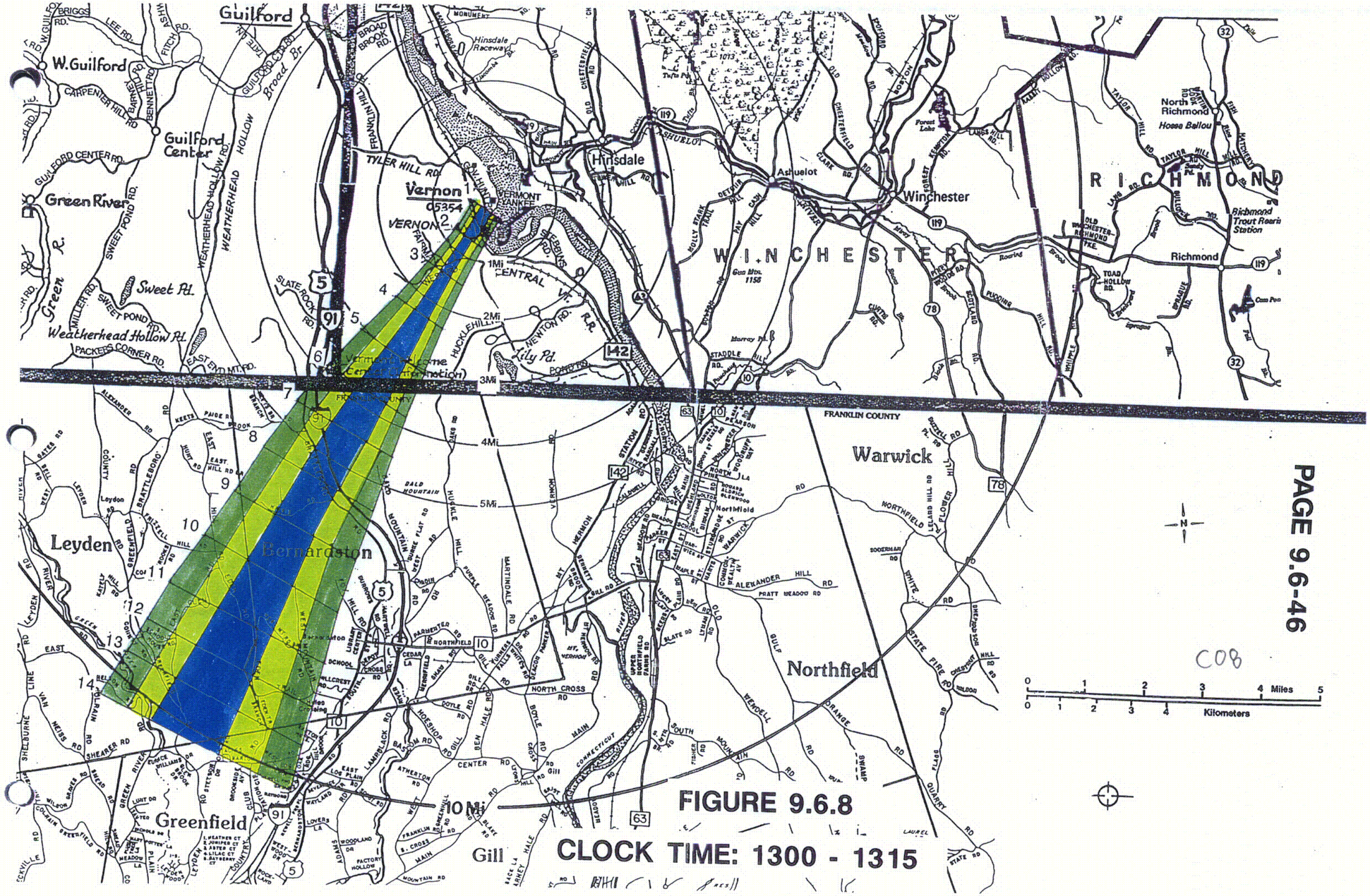

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FIGURE 9.6.8

CLOCK TIME: 1300 - 1315

TABLE
9.6.9a

VERMONT YANKEE FIELD DATA AT CLOCK TIME 1315-END (SCENARIO TIME 0500-END)

PLUME SEGMENT NO.	DISTANCE (MILES)	MAP AREA	GAMMA DOSE RATE PIC-6 (mR/hr)	GAMMA DOSE RATE RM-14 (CPM)	AIR SAMPLE DATA* (RM-14)** CONC. I-131 (Uci/cc)	RADECO/HV-1BC 10 CF SILVER ZEOLITE (NET CPM)	G-M METER PARTICULATE FILTER (NET CPM)
1.00	0.1	BLUE	149	OSH	1.05E-07	163	210
		YELLOW	15	OSH	1.05E-08	<40	<40
		GREEN	1	5227	1.05E-09	<40	<40
2.00	0.90	BLUE	354	OSH	2.48E-07	386	498
		YELLOW	35	OSH	2.48E-08	<40	50
		GREEN	4	12399	2.48E-09	<40	<40
3.00	1.70	BLUE	310	OSH	2.17E-07	338	437
		YELLOW	31	OSH	2.17E-08	<40	<40
		GREEN	3	10866	2.17E-09	<40	<40
4.00	2.6	BLUE	184	OSH	1.29E-06	200	259
		YELLOW	18	OSH	1.29E-07	<40	<40
		GREEN	2	6431	1.29E-08	<40	<40
5.00	3.4	BLUE	127	OSH	8.91E-07	139	179
		YELLOW	13	44567	8.91E-08	<40	<40
		GREEN	1	4457	8.91E-09	<40	<40
6.00	4.2	BLUE	896	OSH	6.27E-07	976	1260
		YELLOW	90	OSH	6.27E-08	98	126
		GREEN	9	31350	6.27E-09	<40	<40
7.00	4.9	BLUE	758	OSH	5.31E-07	826	1067
		YELLOW	76	OSH	5.31E-08	83	107
		GREEN	8	26543	5.31E-09	<40	<40
8.00	5.6	BLUE	639	OSH	4.47E-07	696	899
		YELLOW	64	OSH	4.47E-08	70	90
		GREEN	6	22363	4.47E-09	<40	<40
9.00	6.3	BLUE	553	OSH	3.87E-07	603	778
		YELLOW	55	OSH	3.87E-08	60	78
		GREEN	6	19364	3.87E-09	<40	<40
10.00	7	BLUE	488	OSH	3.42E-07	532	687
		YELLOW	49	OSH	3.42E-08	53	69
		GREEN	5	17080	3.42E-09	<40	<40

11.00	7.7	BLUE	459	OSH	3.21E-07	506	645
		YELLOW	46	OSH	3.21E-08	50	65
		GREEN	5	16055	3.21E-09	<40	<40
12.00	8.6	BLUE	416	OSH	2.91E-07	453	585
		YELLOW	42	OSH	2.91E-08	45	58
		GREEN	4	14551	2.91E-09	<40	<40
13.00	9.5	BLUE	405	OSH	2.83E-07	441	569
		YELLOW	40	OSH	2.83E-08	44	57
		GREEN	4	14159	2.83E-09	<40	<40
14.00	10.3	BLUE	326	OSH	2.28E-07	355	459
		YELLOW	33	OSH	2.28E-08	<40	46
		GREEN	3	11414	2.28E-09	<40	<40
15.00	11	BLUE	288	OSH	2.02E-07	314	406
		YELLOW	29	OSH	2.02E-08	<40	41
		GREEN	3	10092	2.02E-09	40	<40

Notes:

Air sample data are based on a sample volume of 10 cubic feet for the air sampler. If different volumes are collected, e air sample data provided in the tables should be adjusted proportionally. For example, if a 5 cubic feet sample was collected instead of 10 cubic feet, divide the value given in the table by 2 and provide the resulting value to the players.

** The RM-14 detector efficiency for I-131 was assumed to be 0.0025 cpm/dpm with silver zeolite cartridge.

*** The particulate filter sample count rate (cpm) was estimated from the I-131 air concentrations for 10 cubic feet.

TABLE
9.6.9b

STATE OF VERMONT FIELD DATA AT CLOCK TIME 1315-END (SCENARIO TIME 0500-END)

PLUME SEGMENT NO.	DISTANCE (MILES)	MAP AREA	GAMMA SURVEY DATA WAIST AND GROUND LEVEL READINGS CLOSED WINDOW (mR/hr)	OPEN WINDOW (mR/hr)	AIR SAMPLE DATA (354 LITERS)* CONC. I-131 (uCi/cc)	LUDLUM 2220 AGX-2** CARTRIDGE (NET CPM)	G-M METER PARTICULATE*** FILTER (NET CPM)
1.00	0.1	BLUE	149	299	1.05E-07	6513	373
		YELLOW	15	30	1.05E-08	651	<50
		GREEN	1	3	1.05E-09	<500	<50
2.00	0.9	BLUE	354	709	2.48E-07	15450	885
		YELLOW	35	71	2.48E-08	1545	88
		GREEN	4	7	2.48E-09	<500	<50
3.00	1.7	BLUE	310	621	2.17E-07	13540	775
		YELLOW	31	62	2.17E-08	1354	78
		GREEN	3	6	2.17E-09	<500	<50
4.00	2.6	BLUE	184	367	1.29E-07	8013	459
		YELLOW	18	37	1.29E-08	801	<50
		GREEN	2	4	1.29E-09	<500	<50
5.00	3.4	BLUE	127	255	8.91E-08	5553	318
		YELLOW	13	25	8.91E-09	555	<50
		GREEN	1	3	8.91E-10	<500	<50
6.00	4.2	BLUE	896	1791	6.27E-07	39065	2237
		YELLOW	90	180	6.27E-08	3906	224
		GREEN	9	18	6.27E-09	<500	<50
7.00	4.9	BLUE	758	1517	5.31E-07	33075	1894
		YELLOW	76	152	5.31E-08	3307	189
		GREEN	8	16	5.31E-09	<500	<50
8.00	5.6	BLUE	639	1278	4.47E-07	27866	1596
		YELLOW	64	128	4.47E-08	2787	160
		GREEN	6	12	4.47E-09	<500	<50
9.00	6.3	BLUE	553	1107	3.87E-07	24130	1382
		YELLOW	55	110	3.87E-08	2413	138
		GREEN	6	12	3.87E-09	<500	<50
10.00	7.0	BLUE	488	976	3.42E-07	21283	1219
		YELLOW	49	98	3.42E-08	2128	122
		GREEN	5	10	3.42E-09	<500	<50

11.00	7.7	BLUE	459	917	3.21E-07	20006	1146
		YELLOW	46	92	3.21E-08	2001	115
		GREEN	5	11	3.21E-09	<500	<50
12.00	8.6	BLUE	416	831	2.91E-07	18131	1038
		YELLOW	42	83	2.91E-08	1813	104
		GREEN	4	8	2.91E-09	<500	<50
13.00	9.5	BLUE	405	810	2.83E-07	17644	1010
		YELLOW	40	80	2.83E-08	1764	101
		GREEN	4	8	2.83E-09	<500	<50
14.00	10.3	BLUE	326	652	2.28E-07	14223	814
		YELLOW	33	66	2.28E-08	1422	81
		GREEN	3	6	2.28E-09	<500	<50
15.00	11	BLUE	288	576	2.02E-07	12575	720
		YELLOW	29	58	2.02E-08	1258	72
		GREEN	3	6	2.02E-09	<500	<50

Notes:

* Air sample data are based on a sample volume of 354 liters. If different volumes are collected, the air sample data ovided in the tables should be adjusted proportionally. For example, if 177 sample was collected instead of 354 liters, vide the value given in the table by 2 and provide the resulting value to the players

** The Ludlum 2220 detector efficiency for I-131 was assumed to be 0.080 cpm/dpm with the AGX-2 cartridge.

*** For analysis of the particulate filter, it is assumed tha a G-M survey meter is used to obtain the sample count rates. The filter count rate was estimated from the I-131 air concentration for a 354 sample volume.

TABLE
9.6.9c

STATE OF MA FIELD DATA AT CLOCK TIME 1315-END
(SCENARIO TIME 0500-END)

PLUME SEGMENT NO.	DISTANCE (MILES)	MAP AREA	GAMMA SURVEY DATA WAIST AND GROUND LEVEL READINGS CLOSED WINDOW (mR/hr)	OPEN WINDOW (mR/hr)	AIR SAMPLE DATA (20 CU FT)* CONC. I-131 (uCi/cc)	E-140/HP-210 AGX-2** CARTRIDGE (NET CPM)	G-M METER PARTICULATE*** FILTER (NET CPM)
1.00	0.1	BLUE	149	299	1.05E-07	325	596
		YELLOW	15	30	1.05E-08	<50	60
		GREEN	1	2	1.05E-09	<50	<50
2.00	0.9	BLUE	354	709	2.48E-07	772	1414
		YELLOW	35	71	2.48E-08	77	141
		GREEN	4	7	2.48E-09	<50	<50
3.00	1.7	BLUE	310	621	2.17E-07	677	1240
		YELLOW	31	62	2.17E-08	68	124
		GREEN	3	6	2.17E-09	<50	<50
4.00	2.6	BLUE	184	367	1.29E-06	400	734
		YELLOW	18	37	1.29E-07	<50	73
		GREEN	2	4	1.29E-08	<50	<50
5.00	3.4	BLUE	127	254	8.91E-08	277	508
		YELLOW	13	26	8.91E-09	<50	51
		GREEN	1	2	8.91E-10	<50	<50
6.00	4.2	BLUE	896	1791	6.27E-07	1952	3576
		YELLOW	90	179	6.27E-08	195	358
		GREEN	9	18	6.27E-09	<50	<50
7.00	4.9	BLUE	758	1517	5.31E-07	1653	3028
		YELLOW	76	152	5.31E-08	165	303
		GREEN	8	15	5.31E-09	<50	<50
8.00	5.6	BLUE	639	1278	4.47E-07	1392	2551
		YELLOW	64	128	4.47E-08	139	255
		GREEN	6	13	4.47E-09	<50	<50
9.00	6.3	BLUE	553	1107	3.87E-07	1206	2209
		YELLOW	55	111	3.87E-08	121	221
		GREEN	6	11	3.87E-09	<50	<50
10.00	6.7	BLUE	488	976	3.42E-07	1063	1948
		YELLOW	49	98	3.42E-08	106	195
		GREEN	5	10	3.42E-09	<50	<50

11.00	7.7	BLUE	459	918	3.21E-07	1000	1831
		YELLOW	46	92	3.21E-08	100	183
		GREEN	5	9	3.21E-09	<50	<50
12.00	8.6	BLUE	416	831	2.91E-07	906	1660
		YELLOW	42	83	2.91E-08	91	166
		GREEN	4	8	2.91E-09	<50	<50
13.00	9.5	BLUE	405	810	2.83E-07	882	1615
		YELLOW	40	81	2.83E-08	88	162
		GREEN	4	7	2.83E-09	<50	<50
14.00	10.3	BLUE	326	652	2.28E-07	711	1302
		YELLOW	32	64	2.28E-08	71	130
		GREEN	3	6	2.28E-09	<50	<50
15.00	11	BLUE	288	576	2.02E-07	628	1151
		YELLOW	29	58	2.02E-08	62	115
		GREEN	3	6	2.02E-09	<50	<50

Notes:

* Air sample data are based on a sample volume of 20 cu ft. If different volumes are collected, the air sample data provided in the tables should be adjusted proportionally. For example, if a 40 cu ft. sample was collected instead of the 20 cu ft. multiply the value given in the table by 2 and provide the resulting value to the players.

** The E-140/HP-210 detector efficiency for I-131 was assumed to be 0.0024 cpm/dpm with the AGX-2 cartridge.

*** For analysis of the particulate filter, it is assumed the a G-M survey meter is used to obtain the sample count rates. The filter count rate was estimated from the I-131 air concentration for 20 cu ft. sample volume

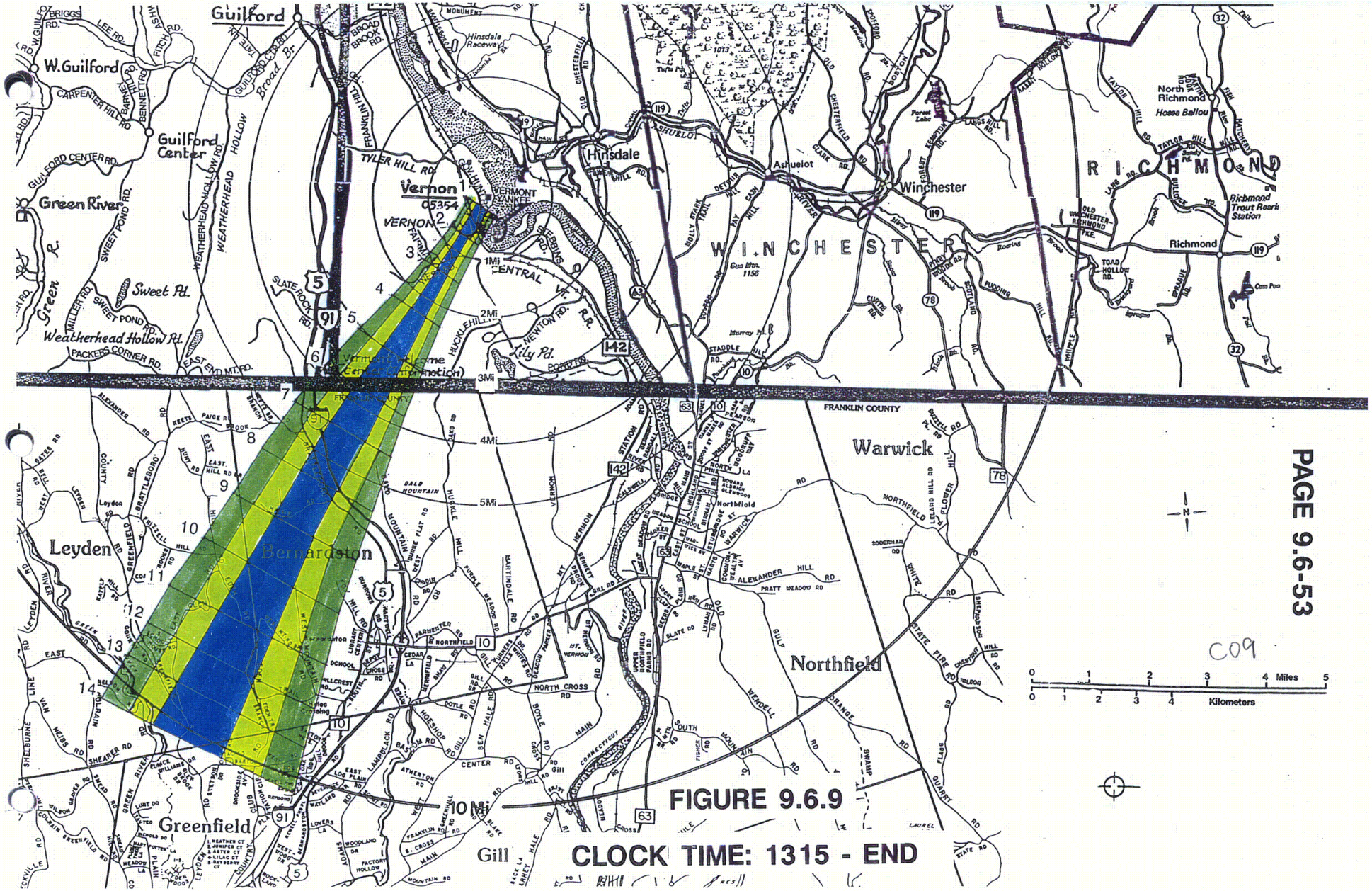

FIGURE 9.6.9

CLOCK TIME: 1315 - END

VERMONT YANKEE NUCLEAR POWER STATION

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10.0 METEOROLOGICAL DATA

10.1 On-Site Meteorological Data

10.2 General Area NWS Forcasts

VERMONT YANKEE NUCLEAR POWER STATION
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10.1 ON-SITE METEOROLOGICAL DATA

LOC TIME	UPPER SPEED MPH	UPPER DIR DEGREES	UPPER DELTAT DEGF (Note 1)	LOWER SPEED MPH	LOWER DIR DEGREES	LOWER DELTAT DEGF (Note 2)	RAIN INCHES 1/4 HR	LOWER TEMP DEGF	TM PRES INCHES MERCURY
08:00	4.80	7.00	-1.20	4.20	6.72	-1.40	0.00	56.00	30.50
08:15	5.00	8.00	-1.20	4.00	7.68	-1.40	0.00	56.00	30.40
08:30	5.00	10.00	-1.20	4.30	9.60	-1.50	0.00	58.00	30.40
08:45	5.00	8.00	-1.20	4.30	7.68	-1.50	0.00	60.00	30.20
09:00	10.00	12.00	-1.20	8.00	11.50	-1.50	0.00	62.00	30.10
09:15	10.00	14.00	-1.20	6.00	1.34	-1.50	0.05	63.00	30.00
09:30	8.00	15.00	-1.20	6.00	14.40	-1.50	0.08	64.00	29.90
09:45	6.00	12.00	-1.50	5.00	11.50	-1.50	0.09	66.00	29.85
10:00	3.00	10.00	-1.50	2.60	9.50	-1.50	0.10	66.00	29.81
10:15	6.50	355.00	-1.50	5.00	341.00	-1.50	0.10	68.00	29.80
10:30	9.00	340.00	-1.50	7.50	326.00	-1.50	0.20	68.00	29.80
10:45	8.50	320.00	-1.50	7.00	304.00	-1.50	0.10	67.00	29.83
11:00	9.00	350.00	-1.80	8.00	336.00	-1.50	0.20	70.00	29.85
11:15	7.00	6.00	-1.80	5.00	5.64	-1.40	0.00	71.00	30.00
1:30	6.20	10.50	-1.80	5.20	10.10	-1.40	0.00	72.00	30.10
11:45	6.40	11.20	-1.80	5.40	10.60	-1.40	0.00	72.00	30.12
12:00	6.00	14.40	-1.90	5.20	13.80	-1.40	0.00	73.00	30.18
12:15	7.50	18.10	-1.90	5.20	17.20	-1.40	0.00	75.00	30.20
12:30	8.40	20.90	-1.90	4.80	20.00	-1.50	0.00	75.00	30.21
12:45	8.50	22.80	-1.90	5.40	21.70	-1.50	0.00	76.00	30.28
13:00	7.00	23.00	-1.90	5.80	22.10	-1.50	0.00	77.00	30.29
13:15	6.80	27.20	-1.80	5.60	26.10	-1.40	0.00	78.00	30.29
13:30	6.40	30.10	-1.80	5.40	28.90	-1.40	0.00	78.00	30.30
13:45	6.60	32.30	-1.70	5.60	31.00	-1.20	0.00	77.00	30.20
14:00	5.40	35.40	-1.70	4.20	34.00	-1.20	0.00	77.00	30.20
14:15	5.20	35.00	-1.60	3.90	32.00	-1.10	0.00	76.00	30.20
14:30	5.30	34.50	-1.60	3.80	31.00	-1.20	0.00	75.00	30.20

NOTES:

1. The height differential for the upper delta temperature on the primary tower is 262 ft.

2. The height differential for the lower delta temperature on the primary tower is 165 ft.

VERMONT YANKEE NUCLEAR POWER STATION
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10.2 GENERAL AREA NWS FORECASTS (See Note) -

Synopsis (08:00)

A high pressure system is currently centered over Montreal, Canada. The combination of a warm and relatively humid air mass and solar heating may result in severe thunderstorms this morning. At 04:30 am EDT, the National Weather Service in Albany NY issued a severe thunderstorm warning for Windham County Vermont, Cheshire County New Hampshire, and Franklin County Massachusetts effective until 12:00pm. EDT.

Valid (08:00-12:00)

Partly cloudy this morning. Temperatures rising from current 50's into the low 70's. Northerly winds from 3 to 6 mph. Chance of a strong thunderstorm.

Valid (12:00-16:00)

Mostly cloudy. Temperatures rising to the Upper 70's. Northerly winds becoming northeasterly mid afternoon; wind speeds around 5 MPH.

Valid (16:00-23:00)

Clearing skies. Low temperatures in the mid 50's Winds light and variable.

PLANT/EOF WEATHER OBSERVATIONS (See Note) - Valid (08:00-17:00)

Time	General Observations
08:00-09:00	Mostly cloudy with moderate winds; thunderstorms in area.
09:00-10:00	Thunderstorms with moderate rainfall and winds in area.
10:00-11:00	Thunderstorms with moderate rainfall and gusty winds in area.
11:00-12:00	Mostly cloudy with moderate winds.
12:00-17:00	Partly cloudy with light winds.

NOTE: GENERAL AREA NWS FORECASTS SHOULD BE PROVIDED UPON REQUEST. PLANT/EOF WEATHER OBSERVATIONS WILL BE POSTED AS APPROPRIATE.

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10.2 VERMONT YANKEE SITE FORECAST

To be provided to the ESC Meteorologist by the ESC Controller at 10:00.

WEATHER FORECAST FOR SITE: VY - VERNON

Date of Forecast: 09-05-01
Time of Forecast: 10:00

Current Site Meteorology (as of 10:00):

Sensor	Wind Speed	Wind Direction	Delta Temperature	Stab. Class	Precipitation
Lower	2.6 MPH	10 DEG FROM	-1.5 DEG F	C	0.10 IN/15 MIN
Upper	3.0 MPH	10 DEG FROM	-1.5 DEG F	D	

Forecast Site Meteorology:

Time	Sensor	Wind Speed	Wind Direction	Delta Temperature	Stab. Class	Precipitation
10:00-12:00	Lower	3.5 MPH	8 DEG FROM	-1.5 DEG F	C	0.20 IN/15 MIN
	Upper	3.4 MPH	10 DEG FROM	-1.2 DEG F	D	
12:00-14:00	Lower	4.5 MPH	20 DEG FROM	-1.4 DEG F	C	0.10 IN/15 MIN
	Upper	7.5 MPH	25 DEG FROM	-1.8 DEG F	D	
14:00-16:00	Lower	3.5 MPH	30 DEG FROM	-1.30 DEG F	D	0.00 IN/15 MIN
	Upper	6.5 MPH	40 DEG FROM	-1.95DEG F	D	

National Weather Service Forecast for site region:

Partly cloudy with temperatures rising from the 50s to the low 70"s. Light northerly winds becoming northeasterly mid afternoon. Chance of a thunderstorm.

Special Weather Statements:

At 5:30 AM EDT, NATIONAL WEATHER SERVICE RADAR INDICATED SEVERE THUNDERSTRORMS DEVELOPING OVER WINDHAM COUNTY VERMONT AND CHESHIRE COUNTY NEW HAMPSHIRE. EXPECT POTENTIALLY HEAVY RAINFALL, STRONG WINDS, AND LIGHTNING.

VERMONT YANKEE NUCLEAR POWER STATION
EMERGENCY PREPAREDNESS EXERCISE
2001

10.2 VERMONT YANKEE SITE FORECAST

To be provided to the ESC Meteorologist by the ESC Controller at 11:30.

WEATHER FORECAST FOR SITE: VY - VERNON

Date of Forecast: 09-05-01
Time of Forecast: 11:30

Current Site Meteorology (as of 11:30):

Sensor	Wind Speed	Wind Direction	Delta Temperature	Stab. Class	Precipitation
Lower	5.2 MPH	10 DEG FROM	-1.4 DEG F	C	0.00 IN/15 MIN
Upper	6.2 MPH	10 DEG FROM	-1.8 DEG F	D	

Forecast Site Meteorology:

Time	Sensor	Wind Speed	Wind Direction	Delta Temperature	Stab. Class	Precipitation
12:00-14:00	Lower	4.5 MPH	20 DEG FROM	-1.4 DEG F	C	0.00 IN/15 MIN
	Upper	7.5 MPH	25 DEG FROM	-1.8 DEG F	D	
14:00-16:00	Lower	3.5 MPH	30 DEG FROM	-1.0 DEG F	D	0.00 IN/15 MIN
	Upper	6.5 MPH	40 DEG FROM	-1.5 DEG F	D	
16:00-18:00	Lower	4.0 MPH	20 DEG FROM	-0.5 DEG F	D	0.00 IN/15 MIN
	Upper	8.5 MPH	15 DEG FROM	-1.1DEG F	D	

National Weather Service Forecast for site region:

Mostly cloudy with temperatures rising into the upper 70"s. Light northerly winds becoming northeasterly mid afternoon.

Special Weather Statements:

THE SEVERE THUNDERSTORM WARNING FOR WINDHAM COUNTY VERMONT, CHESHIRE COUNTY HEWHAMPSHIRE, AND FRANKLIN COUNTY MASSACHUSETTS HAS BEEN CANCELLED AS OF 11:30 AM EDT.

THE STORM HAS PASSED OVER THE REGION AND NATIONAL WEATHER SERVICE RADAR INDICATED THE STORM IS MOVING SOUTH AT 10 TO 15 MPH.

VERMONT YANKEE NUCLEAR POWER STATION
EMERGENCY PREPAREDNESS EXERCISE
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10.2 VERMONT YANKEE SITE FORECAST

To be provided to the ESC Meteorologist by the ESC Controller at 12:30.

WEATHER FORECAST FOR SITE: VY - VERNON

Date of Forecast: 09-05-01
Time of Forecast: 12:30

Current Site Meteorology (as of 12:30):

Sensor	Wind Speed	Wind Direction	Delta Temperature	Stab. Class	Precipitation
Lower	4.8 MPH	20 DEG FROM	-1.5 DEG F	C	0.00 IN/15 MIN
Upper	8.4 MPH	21 DEG FROM	-1.9 DEG F	D	

Forecast Site Meteorology:

Time	Sensor	Wind Speed	Wind Direction	Delta Temperature	Stab. Class	Precipitation
14:00-16:00	Lower	4.5 MPH	30 DEG FROM	-1.0 DEG F	D	0.00 IN/15 MIN
	Upper	7.5 MPH	40 DEG FROM	-1.5 DEG F	D	
16:00-18:00	Lower	4.0 MPH	20 DEG FROM	-0.5 DEG F	D	0.00 IN/15 MIN
	Upper	8.5 MPH	15 DEG FROM	-1.1 DEG F	D	
18:00-20:00	Lower	3.5 MPH	35 DEG FROM	0.0 DEG F	E	0.00 IN/15 MIN
	Upper	7.0 MPH	30 DEG FROM	-0.3 DEG F	E	

National Weather Service Forecast for site region:

Mostly cloudy with temperatures rising to the mid to upper 70's. Light northerly winds becoming northeasterly mid afternoon.

Special Weather Statements:

None