NRC TLD Direct Radiation Monitoring Network

Progress Report
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Preface

This is the final report of the U. S. Nuclear Regulatory Commission (NRC) Direct Radiation Monitoring Network, covering the fourth quarter of 1997. The Network was operated by the NRC in cooperation with participating states to provide continuous measurement of the ambient radiation levels around licensed NRC facilities, primarily power reactors. Ambient radiation levels result from naturally occurring radionuclides present in the soil, cosmic radiation constantly bombarding the earth from outer space, and the contribution, if any, from the monitored facilities and other man-made sources. The Network was intended to measure radiation levels during routine facility operations and to establish background radiation levels used to assess the radiological impact of an unusual condition, such as an accident. This report presents the radiation levels measured around all facilities in the Network for the fourth quarter of 1997. A complete listing of the site facilities monitored is included. In some instances, two power reactor facilities are monitored by the same set of dosimeters (e.g., Kewaunee and Point Beach).

All radiation measurements are made using small, passive detectors called thermoluminescent dosimeters (TLDs), which provide a quantitative measurement of the radiation levels in the area in which they are placed. Each site is monitored by arranging approximately 40 to 50 TLD stations in two concentric rings extending to about five miles from the facility. All TLD stations are outside the site boundary of the facility. A complete description of the program can be found in NUREG-0837, Volume 2, Number 4. A similar description can also be found in the fourth quarter report of each subsequent year through 1996. The National Institute of Standards and Technology (formerly the National Bureau of Standards) has performed an independent study of the following characteristics of the NRC dosimetry system; energy response, angular dependence, temperature and humidity sensitivity, fading, light dependence, self-irradiation, and reproducibility. NIST has also tested the response of the NRC's dosimetry system against the requirements of ANSI N545-1975 and NRC Regulatory Guide 4.13. Details of this testing can be found in NUREG/CR-3775.

The radiation levels are presented as gross and net exposures. The gross exposure includes naturally occurring background radiation, radiation levels resulting from a facility's operation, and the exposure received during transport and storage of the TLD. Net exposures are obtained by subtracting an estimate of the exposure received by the dosimeters during transit from the gross exposures. All exposures are normalized to a 90-day quarter (standard quarter) and reported in units of milliroentgens (mR). Station numbers for which no data are reported included stations which have been deleted, stations for which the TLD was lost during the quarter, or stations for which the TLD was damaged. When control dosimeter data are unavailable, no net exposures are calculated.

Three sets of data are presented for each site. The first set includes the TLD station number, its direction and distance from the site, the integrated gross exposure for the period, the net exposure normalized to a 90-day quarter (standard quarter), and the historical average and standard deviation for the station. All measurements for the current quarter are listed with their respective random and total uncertainties. The uncertainties are listed in the following format:

$$X \pm S_x; U_x$$

where X = value of the result
 S_x = random uncertainty expressed as one standard deviation
 U_x = combined total uncertainty

The second set of data summarizes the average net exposure measured in each of the 16 standard windrose sectors around the facility, normalized to a standard quarter. The third set of data summarizes the average net exposure measured at three ranges of distances from the facility, normalized to a standard quarter. When average net exposures cannot be reported because of the unavailability of the site's transit control dosimeter, the average gross exposures, normalized to a standard quarter, are reported in these two sets of data. The "Std.Dev." refers to the standard deviation of the measurements made in each sector and range, respectively.

Sites Monitored During the Fourth Quarter 1997

1. Arkansas Nuclear One	37. Millstone
2. Beaver Valley	38. Monticello
3. Big Rock Point	39. North Anna
4. Braidwood	40. Oconee
5. Browns Ferry	41. Oyster Creek
6. Brunswick	42. Palisades
7. Byron	43. Palo Verde
8. Callaway	44. Peach Bottom
9. Calvert Cliffs	45. Perry
10. Catawba	46. Pilgrim
11. Clinton	47. Prairie Island
12. Comanche Peak	48. Quad Cities
13. Cooper	49. Rancho Seco
14. Crystal River	50. River Bend
15. Davis Besse	51. Robinson
16. D.C. Cook	52. Salem/Hope Creek
17. Diablo Canyon	53. San Onofre
18. Dresden	54. Seabrook
19. Duane Arnold	55. Sequoyah
20. Farley	56. South Texas
21. Fermi	57. St. Lucie
22. FitzPatrick/Nine Mile Point	58. Summer
23. Fort Calhoun	59. Surry
24. Fort St. Vrain	60. Susquehanna
25. Ginna	61. Three Mile Island
26. Grand Gulf	62. Trojan
27. Haddam Neck	63. Turkey Point
28. Harris	64. Vermont Yankee
29. Hatch	65. Vogtle
30. Indian Point	66. Washington Nuclear 2
31. Kewaunee/Point Beach	67. Waterford
32. Lacrosse	68. Watts Bar
33. LaSalle	69. Wolf Creek
34. Limerick	70. Yankee Rowe
35. Maine Yankee	71. Zion
36. McGuire	

ARKANSAS

TLD Direct Radiation Environmental Monitoring

For the period 970908-980205 151 Days

Field Time: 85 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)		Gross Exposure (mR) +-Rdm; Tot.		Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.		Hist. Range Net Exp Rate +-1 Std Dev	
1	4	0.4	25.0	+- 0.7; 3.7	16.4	+- 1.0; 5.3	17.2	+- 1.2
2	353	4.1	24.8	+- 0.7; 3.7	16.2	+- 0.9; 5.3	17.4	+- 1.1
3	32	1.3	25.8	+- 0.8; 3.9	17.2	+- 1.0; 5.4	18.1	+- 1.0
4	13	3.3	25.4	+- 0.8; 3.8	16.8	+- 1.0; 5.4	16.8	+- 1.2
5	53	1.5	23.5	+- 0.7; 3.5	14.7	+- 0.9; 5.1	17.4	+- 1.2
6	37	3.6	24.5	+- 0.7; 3.7	15.9	+- 0.9; 5.3	16.6	+- 1.1
7	78	2.5	26.7	+- 0.8; 4.0	18.2	+- 1.0; 5.5	18.8	+- 1.3
8	60	3.2	27.2	+- 0.8; 4.1	18.7	+- 1.0; 5.6	20.1	+- 2.2
9	92	0.5	26.2	+- 0.8; 3.9	17.7	+- 1.0; 5.5	19.1	+- 1.5
10	83	5.5	25.8	+- 0.8; 3.9	17.3	+- 1.0; 5.4	17.5	+- 1.1
11	122	2.1	23.0	+- 0.7; 3.4	14.2	+- 0.9; 5.1	16.4	+- 1.1
12	109	6.8	25.8	+- 0.8; 3.9	17.2	+- 1.0; 5.4	18.1	+- 1.2
13	138	2.6	24.1	+- 0.7; 3.6	15.4	+- 0.9; 5.2	15.2	+- 1.2
14	130	4.9	24.2	+- 0.7; 3.6	15.5	+- 0.9; 5.2	16.1	+- 1.2
16	167	4.4	24.2	+- 0.7; 3.6	15.5	+- 0.9; 5.2	17.4	+- 1.1
17	171	0.4	25.2	+- 0.8; 3.8	16.6	+- 1.0; 5.3	17.1	+- 1.3
18	189	3.2	Missing Dosimeter		No Net Data		17.4	+- 1.2
19	205	2.9	24.9	+- 0.7; 3.7	16.2	+- 0.9; 5.3	16.9	+- 1.3
20	195	5.8	23.0	+- 0.7; 3.4	14.2	+- 0.9; 5.1	16.0	+- 1.6
21	235	0.5	27.3	+- 0.8; 4.1	18.8	+- 1.0; 5.6	19.5	+- 1.4
22	230	3.6	22.4	+- 0.7; 3.4	13.6	+- 0.9; 5.0	14.5	+- 1.2
23	257	2.8	22.5	+- 0.7; 3.4	13.7	+- 0.9; 5.0	16.0	+- 1.6
24	243	4.5	23.5	+- 0.7; 3.5	14.8	+- 0.9; 5.1	16.6	+- 1.3
25	279	1.2	27.6	+- 0.8; 4.1	19.2	+- 1.0; 5.6	20.1	+- 1.3
26	263	4.3	23.6	+- 0.7; 3.5	14.9	+- 0.9; 5.2	17.4	+- 1.3
27	298	0.4	25.8	+- 0.8; 3.9	17.3	+- 1.0; 5.4	18.8	+- 1.3
28	293	5.8	24.6	+- 0.7; 3.7	15.9	+- 0.9; 5.3	17.0	+- 1.2
29	326	1.9	25.4	+- 0.8; 3.8	16.8	+- 1.0; 5.4	18.0	+- 1.1
30	308	4.8	24.9	+- 0.7; 3.7	16.3	+- 1.0; 5.3	17.8	+- 1.4
31	345	1.3	25.4	+- 0.8; 3.8	16.8	+- 1.0; 5.4	18.6	+- 1.4
32	335	4.2	24.5	+- 0.7; 3.7	15.9	+- 0.9; 5.3	15.8	+- 1.4
33	110	0.8	25.6	+- 0.8; 3.8	17.1	+- 1.0; 5.4	18.6	+- 1.4
39	112	6.0	25.0	+- 0.7; 3.7	16.4	+- 1.0; 5.3	18.4	+- 1.4
40	147	8.0	24.7	+- 0.7; 3.7	16.0	+- 0.9; 5.3	18.3	+- 1.2
41	106	17.0	24.9	+- 0.7; 3.7	16.2	+- 0.9; 5.3	17.7	+- 1.1
42	310	17.0	23.8	+- 0.7; 3.6	15.1	+- 0.9; 5.2	16.0	+- 1.3
43	105	5.2	24.5	+- 0.7; 3.7	15.8	+- 0.9; 5.3	18.2	+- 1.4
44	315	13.0	24.5	+- 0.7; 3.7	15.8	+- 0.9; 5.3	17.6	+- 1.2
45	47	8.9	22.8	+- 0.7; 3.4	14.0	+- 0.9; 5.1	15.6	+- 1.6
46	115	8.3	26.0	+- 0.8; 3.9	17.4	+- 1.0; 5.4	18.4	+- 1.5
47	208	20.0	24.9	+- 0.7; 3.7	16.3	+- 1.0; 5.3	17.1	+- 1.3
48	179	19.0	26.0	+- 0.8; 3.9	17.5	+- 1.0; 5.4	17.3	+- 1.3
49	150	22.0	25.1	+- 0.8; 3.8	16.5	+- 1.0; 5.3	18.1	+- 1.5

Transit Dose = 9.5 +- 0.5; 3.4

ARKANSAS

For the period 970908-980205

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	16.3 +- 0.1	2
11.26 - 33.75 NNE	17.0 +- 0.3	2
33.76 - 56.25 NE	14.9 +- 1.0	3
56.26 - 78.75 ENE	18.4 +- 0.4	2
78.76 - 101.25 E	17.5 +- 0.3	2
101.26 - 123.75 ESE	16.3 +- 1.1	7
123.76 - 146.25 SE	15.5 +- 0.1	2
146.26 - 168.75 SSE	15.8 +- 0.4	2
168.76 - 191.25 S	16.6 +- 0.0	1
191.26 - 213.75 SSW	15.2 +- 1.4	2
213.76 - 236.25 SW	16.2 +- 3.7	2
236.26 - 258.75 WSW	14.2 +- 0.8	2
258.76 - 281.25 W	17.0 +- 3.1	2
281.26 - 303.75 WNW	16.6 +- 0.9	2
303.76 - 326.25 NW	16.0 +- 0.7	4
326.26 - 348.75 NNW	16.3 +- 0.6	2

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	17.1 +- 1.2	11
2 - 5	15.7 +- 1.4	16
> 5	16.0 +- 1.1	12
Upwind Control	16.8 +- 0.6	3

NRC TLD DOSES FOR ARKANSAS AREA

Miles

0 2 4

Legend

Water

— Highways

--- Railroads

--- Roads

★ Plant..site

BEAVER VALLEY

TLD Direct Radiation Environmental Monitoring

For the period 970910-980126 139 Days

Field Time: 98 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)		Gross Exposure (mR) +-Rdm; Tot.		Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.		Hist. Range Net Exp Rate +-1 Std Dev	
1	340	15.8	23.7	+- 0.7; 3.6	16.4	+- 0.8; 4.5	16.7	+- 1.2
2	3	13.1	25.0	+- 0.7; 3.7	17.6	+- 0.8; 4.6	17.1	+- 1.4
4	29	11.9	24.6	+- 0.7; 3.7	17.3	+- 0.8; 4.6	19.2	+- 2.4
5	53	8.2	25.3	+- 0.8; 3.8	17.9	+- 0.8; 4.6	18.3	+- 1.3
6	58	9.1	26.9	+- 0.8; 4.0	19.4	+- 0.8; 4.8	19.2	+- 1.2
7	97	8.0	27.6	+- 0.8; 4.1	19.9	+- 0.9; 4.9	19.5	+- 1.3
8	110	4.2	26.4	+- 0.8; 4.0	18.9	+- 0.8; 4.8	18.6	+- 1.4
9	111	1.9	28.3	+- 0.8; 4.2	20.6	+- 0.9; 5.0	19.9	+- 1.3
10	92	2.2	27.0	+- 0.8; 4.1	19.4	+- 0.8; 4.8	19.3	+- 1.2
11	64	3.6	26.7	+- 0.8; 4.0	19.1	+- 0.8; 4.8	19.3	+- 1.5
12	148	4.0	28.2	+- 0.8; 4.2	20.6	+- 0.9; 4.9	20.7	+- 1.3
13	171	4.4	26.0	+- 0.8; 3.9	18.5	+- 0.8; 4.7	18.4	+- 1.2
14	183	4.4	25.2	+- 0.8; 3.8	17.8	+- 0.8; 4.6	18.3	+- 1.3
15	198	3.6	25.6	+- 0.8; 3.8	18.1	+- 0.8; 4.7	18.4	+- 1.3
16	254	5.7	27.6	+- 0.8; 4.1	20.0	+- 0.9; 4.9	18.1	+- 1.0
17	267	6.5	Missing Dosimeter		No Net Data		17.3	+- 1.5
18	231	2.5	25.7	+- 0.8; 3.9	18.3	+- 0.8; 4.7	18.4	+- 1.3
19	266	2.5	27.7	+- 0.8; 4.1	20.0	+- 0.9; 4.9	19.9	+- 1.4
20	291	3.8	24.7	+- 0.7; 3.7	17.3	+- 0.8; 4.6	16.8	+- 1.7
21	287	1.8	28.6	+- 0.9; 4.3	20.9	+- 0.9; 5.0	20.7	+- 1.3
22	219	1.5	25.9	+- 0.8; 3.9	18.4	+- 0.8; 4.7	17.6	+- 1.2
23	252	2.4	28.7	+- 0.9; 4.3	21.0	+- 0.9; 5.0	21.1	+- 1.8
24	207	2.2	27.9	+- 0.8; 4.2	20.2	+- 0.9; 4.9	19.4	+- 1.3
25	187	2.2	28.3	+- 0.8; 4.2	20.6	+- 0.9; 5.0	19.8	+- 1.3
26	158	2.2	26.2	+- 0.8; 3.9	18.7	+- 0.8; 4.7	18.6	+- 1.6
27	135	1.9	25.5	+- 0.8; 3.8	18.1	+- 0.8; 4.7	19.4	+- 1.6
28	99	1.4	30.6	+- 0.9; 4.6	22.7	+- 0.9; 5.2	20.2	+- 1.4
29	64	1.4	25.2	+- 0.8; 3.8	17.8	+- 0.8; 4.6	18.2	+- 1.3
30	53	1.0	26.8	+- 0.8; 4.0	19.2	+- 0.8; 4.8	18.9	+- 1.2
31	320	1.4	Missing Dosimeter		No Net Data		21.5	+- 1.6
32	320	3.5	25.3	+- 0.8; 3.8	17.9	+- 0.8; 4.6	18.4	+- 1.7
33	335	2.5	26.5	+- 0.8; 4.0	19.0	+- 0.8; 4.8	18.8	+- 1.5
34	340	5.2	21.8	+- 0.7; 3.3	14.6	+- 0.7; 4.3	16.3	+- 2.1
35	4	3.5	27.4	+- 0.8; 4.1	19.8	+- 0.8; 4.9	19.5	+- 1.2
36	23	3.2	28.8	+- 0.9; 4.3	21.1	+- 0.9; 5.0	21.5	+- 1.7
37	42	2.8	23.9	+- 0.7; 3.6	16.6	+- 0.8; 4.5	16.4	+- 1.2
38	27	1.6	23.5	+- 0.7; 3.5	16.2	+- 0.8; 4.5	17.0	+- 1.5
39	348	1.6	Missing Dosimeter		No Net Data		18.8	+- 1.5
40	340	15.8	23.1	+- 0.7; 3.5	15.8	+- 0.7; 4.4	16.2	+- 1.3
41	340	15.8	24.6	+- 0.7; 3.7	17.2	+- 0.8; 4.6	16.8	+- 1.0

Transit Dose = 5.9 +- 0.4; 3.3

BEAVER VALLEY

For the period 970910-980126

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	18.7 +- 1.6	2
11.26 - 33.75 NNE	18.2 +- 2.6	3
33.76 - 56.25 NE	17.9 +- 1.3	3
56.26 - 78.75 ENE	18.8 +- 0.9	3
78.76 - 101.25 E	20.7 +- 1.8	3
101.26 - 123.75 ESE	19.7 +- 1.2	2
123.76 - 146.25 SE	18.1 +- 0.0	1
146.26 - 168.75 SSE	19.6 +- 1.3	2
168.76 - 191.25 S	18.9 +- 1.5	3
191.26 - 213.75 SSW	19.2 +- 1.5	2
213.76 - 236.25 SW	18.3 +- 0.1	2
236.26 - 258.75 WSW	20.5 +- 0.7	2
258.76 - 281.25 W	20.0 +- 0.0	1
281.26 - 303.75 WNW	19.1 +- 2.5	2
303.76 - 326.25 NW	17.9 +- 0.0	1
326.26 - 348.75 NNW	16.8 +- 3.1	2

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	19.2 +- 2.1	8
2 - 5	19.1 +- 1.3	19
> 5	18.1 +- 1.9	7
Upwind Control	16.5 +- 0.7	3

NRC TLD DOSES FOR BEAVER VALLEY AREA

Miles

Legend

Water

Highways

Roads

Plant..site

BIG ROCK

TLD Direct Radiation Environmental Monitoring

For the period 970908-980209 155 Days

Field Time: 106 Days

NRC Sta	Location		Gross		Net Exposure Rate		Hist. Range	
	Azimuth/Dist		Exposure (mR)		(mR/Std. Qtr.)		Net Exp Rate	
	(Deg)/(Mi)		+ - Rdm; Tot.		+ - Rdm; Tot.		+ - 1 Std Dev	
1	208	4.9	22.0 +- 0.7; 3.3		13.3 +- 0.7; 4.2		13.1 +- 0.9	
2	220	3.6	21.3 +- 0.6; 3.2		12.7 +- 0.7; 4.1		12.1 +- 0.8	
3	204	2.4	21.4 +- 0.6; 3.2		12.8 +- 0.7; 4.1		12.3 +- 0.9	
4	176	3.3	21.8 +- 0.7; 3.3		13.2 +- 0.7; 4.1		12.2 +- 1.0	
5	161	4.6	21.8 +- 0.7; 3.3		13.1 +- 0.7; 4.1		12.4 +- 0.9	
6	133	4.7	24.1 +- 0.7; 3.6		15.1 +- 0.7; 4.3		13.8 +- 1.4	
7	116	3.7	24.5 +- 0.7; 3.7		15.4 +- 0.7; 4.4		14.4 +- 1.3	
8	111	4.7	24.6 +- 0.7; 3.7		15.5 +- 0.7; 4.4		14.0 +- 1.6	
9	98	4.5	21.9 +- 0.7; 3.3		13.2 +- 0.7; 4.1		12.7 +- 0.8	
10	88	12.0	21.4 +- 0.6; 3.2		12.8 +- 0.7; 4.1		12.1 +- 0.8	
11	83	16.0	20.1 +- 0.6; 3.0		11.7 +- 0.6; 4.0		12.1 +- 1.4	
12	83	16.0	20.3 +- 0.6; 3.0		11.8 +- 0.6; 4.0		12.0 +- 1.0	
13	83	16.0	20.9 +- 0.6; 3.1		12.4 +- 0.7; 4.1		12.2 +- 1.1	
14	77	3.4	20.8 +- 0.6; 3.1		12.3 +- 0.7; 4.1		11.6 +- 0.7	
15	96	1.8	23.0 +- 0.7; 3.4		14.1 +- 0.7; 4.2		13.4 +- 0.9	
16	118	2.0	22.9 +- 0.7; 3.4		14.1 +- 0.7; 4.2		13.1 +- 1.1	
17	134	2.0	22.0 +- 0.7; 3.3		13.3 +- 0.7; 4.1		13.1 +- 1.1	
18	222	1.9	20.3 +- 0.6; 3.0		11.9 +- 0.6; 4.0		11.9 +- 1.5	
19	194	1.4	24.8 +- 0.7; 3.7		15.7 +- 0.7; 4.4		14.4 +- 1.3	
20	179	1.5	22.7 +- 0.7; 3.4		13.9 +- 0.7; 4.2		12.7 +- 0.9	
21	153	1.1	21.7 +- 0.7; 3.3		13.1 +- 0.7; 4.1		12.4 +- 1.0	

Transit Dose = 6.3 +- 0.5; 3.6

BIG ROCK
For the period 970908-980209

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	No Data +- No Data	0
11.26 - 33.75 NNE	No Data +- No Data	0
33.76 - 56.25 NE	No Data +- No Data	0
56.26 - 78.75 ENE	12.3 +- 0.0	1
78.76 - 101.25 E	13.4 +- 0.7	3
101.26 - 123.75 ESE	15.0 +- 0.8	3
123.76 - 146.25 SE	14.2 +- 1.3	2
146.26 - 168.75 SSE	13.1 +- 0.0	2
168.76 - 191.25 S	13.5 +- 0.5	2
191.26 - 213.75 SSW	13.9 +- 1.5	3
213.76 - 236.25 SW	12.3 +- 0.6	2
236.26 - 258.75 WSW	No Data +- No Data	0
258.76 - 281.25 W	No Data +- No Data	0
281.26 - 303.75 WNW	No Data +- No Data	0
303.76 - 326.25 NW	No Data +- No Data	0
326.26 - 348.75 NNW	No Data +- No Data	0

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	13.7 +- 1.2	7
2 - 5	13.7 +- 1.2	10
> 5	12.8 +- 0.0	1
Upwind Control	12.0 +- 0.4	3

NRC TLD DOSES FOR BIG ROCK POINT AREA

Miles

0 2 4

Legend

Water

Railroads

Plant..site

Highways

Roads

BRAIDWOOD

TLD Direct Radiation Environmental Monitoring

For the period 970909-980210 155 Days

Field Time: 100 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)		Gross Exposure (mR) +-Rdm; Tot.			Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.			Hist. Range Net Exp Rate +-1 Std Dev	
1	28	0.8	21.9	+-	0.7; 3.3	11.6	+-	0.8; 4.5	13.7	+- 3.1
2	29	1.3	25.5	+-	0.8; 3.8	14.9	+-	0.8; 4.8	14.7	+- 1.7
3	53	2.0	22.5	+-	0.7; 3.4	12.1	+-	0.8; 4.5	12.2	+- 2.8
4	72	2.1	26.6	+-	0.8; 4.0	15.8	+-	0.9; 4.9	14.9	+- 1.6
5	87	2.0	24.9	+-	0.7; 3.7	14.3	+-	0.8; 4.7	14.4	+- 2.0
6	119	2.5	21.3	+-	0.6; 3.2	11.1	+-	0.7; 4.4	13.5	+- 3.0
7	133	3.3	25.4	+-	0.8; 3.8	14.8	+-	0.8; 4.8	14.7	+- 1.6
8	151	3.3	25.1	+-	0.8; 3.8	14.5	+-	0.8; 4.8	14.0	+- 1.5
9	172	3.9	28.3	+-	0.8; 4.2	17.4	+-	0.9; 5.1	17.8	+- 3.7
10	197	2.8	26.1	+-	0.8; 3.9	15.4	+-	0.8; 4.9	14.7	+- 1.8
11	212	1.4	22.1	+-	0.7; 3.3	11.8	+-	0.8; 4.5	13.7	+- 2.0
12	232	1.0	21.7	+-	0.6; 3.2	11.4	+-	0.7; 4.4	13.3	+- 2.0
13	255	1.0	26.5	+-	0.8; 4.0	15.7	+-	0.9; 4.9	13.8	+- 1.4
14	278	1.2	20.0	+-	0.6; 3.0	9.9	+-	0.7; 4.3	14.1	+- 2.3
15	310	1.3	20.1	+-	0.6; 3.0	9.9	+-	0.7; 4.3	13.9	+- 2.3
16	342	1.3	20.8	+-	0.6; 3.1	10.6	+-	0.7; 4.4	12.2	+- 2.6
17	8	1.5	26.0	+-	0.8; 3.9	15.3	+-	0.8; 4.8	14.3	+- 1.8
18	18	3.5	23.9	+-	0.7; 3.6	13.4	+-	0.8; 4.6	17.1	+- 3.1
19	42	6.3	22.1	+-	0.7; 3.3	11.8	+-	0.8; 4.5	13.1	+- 2.2
20	69	5.7	23.8	+-	0.7; 3.6	13.2	+-	0.8; 4.6	15.5	+- 2.3
21	86	7.0	23.8	+-	0.7; 3.6	13.3	+-	0.8; 4.6	16.3	+- 2.2
22	103	11.4	23.3	+-	0.7; 3.5	12.8	+-	0.8; 4.6	15.6	+- 3.2
23	45	4.9	21.7	+-	0.7; 3.3	11.4	+-	0.7; 4.4	14.9	+- 2.2
24	70	4.2	26.0	+-	0.8; 3.9	15.3	+-	0.8; 4.8	14.3	+- 1.9
25	86	4.1	21.2	+-	0.6; 3.2	10.9	+-	0.7; 4.4	12.2	+- 2.6
26	125	5.0	22.6	+-	0.7; 3.4	12.2	+-	0.8; 4.5	12.9	+- 3.0
27	142	7.2	21.9	+-	0.7; 3.3	11.6	+-	0.8; 4.5	16.1	+- 3.0
28	161	6.1	25.3	+-	0.8; 3.8	14.7	+-	0.8; 4.8	14.4	+- 1.8
29	180	5.9	28.7	+-	0.9; 4.3	17.7	+-	0.9; 5.1	18.7	+- 2.9
30	187	5.8	30.9	+-	0.9; 4.6	19.7	+-	1.0; 5.3	19.5	+- 2.1
31	225	5.4	28.3	+-	0.8; 4.2	17.4	+-	0.9; 5.1	17.1	+- 1.8
32	253	4.0	26.6	+-	0.8; 4.0	15.9	+-	0.9; 4.9	14.8	+- 1.9
33	289	4.1	23.0	+-	0.7; 3.4	12.6	+-	0.8; 4.6	16.1	+- 2.5
34	315	4.0	Damaged Dosimeter			No Net Data			15.9	+- 2.0
35	333	4.0	24.5	+-	0.7; 3.7	13.9	+-	0.8; 4.7	15.1	+- 2.6
36	0	5.5	25.2	+-	0.8; 3.8	14.5	+-	0.8; 4.8	14.4	+- 2.2
37	21	5.0	20.7	+-	0.6; 3.1	10.5	+-	0.7; 4.3	12.0	+- 2.9
38	224	14.7	20.5	+-	0.6; 3.1	10.3	+-	0.7; 4.3	13.9	+- 2.5
39	224	14.7	20.3	+-	0.6; 3.0	10.2	+-	0.7; 4.3	13.7	+- 1.9
40	187	10.3	27.4	+-	0.8; 4.1	16.5	+-	0.9; 5.0	18.0	+- 2.4

Transit Dose = 9.0 +- 0.5; 3.7

BRAIDWOOD

For the period 970909-980210

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	14.9 +- 0.5	2
11.26 - 33.75 NNE	12.6 +- 1.9	4
33.76 - 56.25 NE	11.8 +- 0.4	3
56.26 - 78.75 ENE	14.8 +- 1.4	3
78.76 - 101.25 E	12.8 +- 1.7	3
101.26 - 123.75 ESE	11.9 +- 1.2	2
123.76 - 146.25 SE	12.9 +- 1.7	3
146.26 - 168.75 SSE	14.6 +- 0.1	2
168.76 - 191.25 S	18.2 +- 1.3	3
191.26 - 213.75 SSW	13.6 +- 2.6	2
213.76 - 236.25 SW	13.0 +- 3.8	3
236.26 - 258.75 WSW	15.8 +- 0.1	2
258.76 - 281.25 W	9.9 +- 0.0	1
281.26 - 303.75 WNW	12.6 +- 0.0	1
303.76 - 326.25 NW	9.9 +- 0.0	1
326.26 - 348.75 NNW	12.2 +- 2.4	2

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	12.5 +- 2.2	11
2 - 5	13.7 +- 2.1	15
> 5	14.3 +- 2.9	11
Upwind Control	13.4 +- 4.5	2

NRC TLD DOSES FOR BRAIDWOOD AREA

BROWNS FERRY

TLD Direct Radiation Environmental Monitoring

For the period 970909-980126 140 Days

Field Time: 86 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)		Gross Exposure (mR) +-Rdm; Tot.		Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.		Hist. Range Net Exp Rate +-1 Std Dev	
1	133	8.8	Missing Dosimeter		No Net Data		14.5 +- 1.9	
2	135	5.4	18.5 +- 0.6; 2.8		16.0 +- 0.7; 4.1		15.7 +- 1.9	
3	153	4.3	21.1 +- 0.6; 3.2		18.8 +- 0.7; 4.4		16.9 +- 1.1	
4	212	5.9	23.6 +- 0.7; 3.5		21.5 +- 0.8; 4.7		18.1 +- 2.2	
5	222	6.2	20.3 +- 0.6; 3.0		17.9 +- 0.7; 4.3		15.3 +- 1.9	
6	247	4.5	22.2 +- 0.7; 3.3		19.9 +- 0.8; 4.5		18.6 +- 2.0	
7	269	4.7	20.3 +- 0.6; 3.0		17.9 +- 0.7; 4.3		16.4 +- 2.0	
8	257	11.1	20.4 +- 0.6; 3.1		18.0 +- 0.7; 4.3		15.9 +- 1.9	
9	296	7.0	20.8 +- 0.6; 3.1		18.5 +- 0.7; 4.4		16.5 +- 2.2	
10	292	4.5	21.4 +- 0.6; 3.2		19.1 +- 0.7; 4.4		16.7 +- 1.9	
11	270	1.9	21.6 +- 0.6; 3.2		19.3 +- 0.7; 4.4		17.0 +- 1.9	
12	241	2.7	20.1 +- 0.6; 3.0		17.8 +- 0.7; 4.3		15.8 +- 2.0	
13	220	1.7	20.2 +- 0.6; 3.0		17.9 +- 0.7; 4.3		18.8 +- 2.5	
14	268	17.0	20.9 +- 0.6; 3.1		18.5 +- 0.7; 4.4		17.2 +- 2.0	
15	205	4.0	21.6 +- 0.6; 3.2		19.3 +- 0.8; 4.4		17.4 +- 2.0	
16	183	2.8	19.5 +- 0.6; 2.9		17.1 +- 0.7; 4.2		15.4 +- 2.2	
17	51	9.5	22.8 +- 0.7; 3.4		20.6 +- 0.8; 4.6		17.7 +- 1.9	
18	51	3.4	22.2 +- 0.7; 3.3		19.9 +- 0.8; 4.5		16.2 +- 1.8	
19	61	3.0	21.8 +- 0.7; 3.3		19.5 +- 0.8; 4.5		16.5 +- 2.0	
20	84	2.7	23.1 +- 0.7; 3.5		20.9 +- 0.8; 4.6		18.9 +- 1.9	
21	114	2.9	22.0 +- 0.7; 3.3		19.7 +- 0.8; 4.5		19.4 +- 1.9	
22	58	0.9	24.2 +- 0.7; 3.6		22.0 +- 0.8; 4.8		20.2 +- 2.0	
23	90	25.0	19.9 +- 0.6; 3.0		17.5 +- 0.7; 4.2		16.4 +- 2.2	
24	110	0.6	22.6 +- 0.7; 3.4		20.4 +- 0.8; 4.6		18.2 +- 1.8	
25	42	2.1	21.3 +- 0.6; 3.2		19.0 +- 0.7; 4.4		18.1 +- 2.2	
26	23	1.7	24.4 +- 0.7; 3.7		22.2 +- 0.8; 4.8		20.2 +- 2.0	
27	330	1.9	20.1 +- 0.6; 3.0		17.7 +- 0.7; 4.3		16.5 +- 1.8	
28	330	1.0	21.6 +- 0.6; 3.2		19.3 +- 0.7; 4.4		18.5 +- 2.3	
29	26	3.7	21.5 +- 0.6; 3.2		19.2 +- 0.7; 4.4		17.8 +- 2.0	
30	358	4.0	20.4 +- 0.6; 3.1		18.1 +- 0.7; 4.3		15.6 +- 2.0	
31	334	5.6	22.5 +- 0.7; 3.4		20.3 +- 0.8; 4.6		18.7 +- 1.9	
32	312	12.0	21.3 +- 0.6; 3.2		19.0 +- 0.7; 4.4		18.0 +- 2.1	
33	356	1.5	22.8 +- 0.7; 3.4		20.6 +- 0.8; 4.6		19.6 +- 2.0	
34	52	6.5	20.7 +- 0.6; 3.1		18.3 +- 0.7; 4.3		16.5 +- 2.3	
35	96	5.2	21.0 +- 0.6; 3.2		18.7 +- 0.7; 4.4		17.4 +- 2.0	
36	68	5.5	21.6 +- 0.6; 3.2		19.4 +- 0.8; 4.5		18.3 +- 2.2	
37	150	9.5	22.2 +- 0.7; 3.3		19.9 +- 0.8; 4.5		17.0 +- 2.0	
38	166	7.0	17.7 +- 0.5; 2.7		15.3 +- 0.6; 4.0		14.2 +- 1.9	

Transit Dose = 3.2 +- 0.3; 2.7

BROWNS FERRY
For the period 970909-980126

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	19.3 +- 1.8	2
11.26 - 33.75 NNE	20.7 +- 2.1	2
33.76 - 56.25 NE	19.5 +- 1.0	4
56.26 - 78.75 ENE	20.3 +- 1.5	3
78.76 - 101.25 E	19.0 +- 1.7	3
101.26 - 123.75 ESE	20.0 +- 0.4	2
123.76 - 146.25 SE	16.0 +- 0.0	1
146.26 - 168.75 SSE	18.0 +- 2.4	3
168.76 - 191.25 S	17.1 +- 0.0	1
191.26 - 213.75 SSW	20.4 +- 1.5	2
213.76 - 236.25 SW	17.9 +- 0.0	2
236.26 - 258.75 WSW	18.9 +- 1.5	2
258.76 - 281.25 W	18.6 +- 1.0	2
281.26 - 303.75 WNW	18.8 +- 0.4	2
303.76 - 326.25 NW	19.0 +- 0.0	1
326.26 - 348.75 NNW	19.1 +- 1.3	3

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	19.9 +- 1.7	8
2 - 5	19.0 +- 1.0	14
> 5	18.7 +- 1.7	13
Upwind Control	18.3 +- 0.4	2

NRC TLD DOSES FOR BROWNS FERRY AREA

Miles

Legend

Water
Highways

Railroads
Roads

Plant site

BRUNSWICK

TLD Direct Radiation Environmental Monitoring

For the period 970909-980211 156 Days

Field Time: 98 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)		Gross Exposure (mR) +-Rdm; Tot.		Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.		Hist. Range Net Exp Rate +-1 Std Dev	
1	260	2.2	16.8	+- 0.5; 2.5	8.9	+- 0.6; 3.9	10.1	+- 1.5
2	245	3.4	16.3	+- 0.5; 2.4	8.4	+- 0.6; 3.9	9.7	+- 1.6
3	231	3.8	15.1	+- 0.5; 2.3	7.4	+- 0.6; 3.8	9.2	+- 1.9
4	210	4.9	19.0	+- 0.6; 2.9	10.9	+- 0.7; 4.1	12.0	+- 1.7
5	186	4.3	18.9	+- 0.6; 2.8	10.9	+- 0.7; 4.1	12.0	+- 1.8
6	270	4.5	18.3	+- 0.5; 2.7	10.3	+- 0.7; 4.0	10.1	+- 1.3
7	272	4.4	16.7	+- 0.5; 2.5	8.8	+- 0.6; 3.9	10.5	+- 1.7
8	73	1.3	17.5	+- 0.5; 2.6	9.5	+- 0.6; 4.0	11.7	+- 1.8
9	97	1.0	16.7	+- 0.5; 2.5	8.8	+- 0.6; 3.9	11.6	+- 1.9
10	120	1.5	19.3	+- 0.6; 2.9	11.2	+- 0.7; 4.1	12.2	+- 1.5
11	131	0.9	17.2	+- 0.5; 2.6	9.3	+- 0.6; 4.0	11.4	+- 1.7
12	156	1.1	18.6	+- 0.6; 2.8	10.6	+- 0.7; 4.1	12.0	+- 1.7
13	180	1.1	18.4	+- 0.6; 2.8	10.4	+- 0.7; 4.1	11.2	+- 1.5
14	194	2.4	16.8	+- 0.5; 2.5	8.9	+- 0.6; 3.9	11.0	+- 1.9
15	201	2.0	17.1	+- 0.5; 2.6	9.2	+- 0.6; 4.0	10.4	+- 1.5
16	218	1.2	15.8	+- 0.5; 2.4	8.0	+- 0.6; 3.8	11.1	+- 2.4
17	252	1.1	18.1	+- 0.5; 2.7	10.2	+- 0.7; 4.0	11.5	+- 1.6
18	272	1.2	Missing Dosimeter		No Net Data		10.9	+- 2.0
19	19	1.1	17.5	+- 0.5; 2.6	9.5	+- 0.6; 4.0	10.5	+- 1.5
20	2	1.1	16.1	+- 0.5; 2.4	8.3	+- 0.6; 3.9	10.2	+- 1.7
21	288	1.3	18.2	+- 0.5; 2.7	10.2	+- 0.7; 4.0	9.9	+- 1.9
22	307	1.5	17.1	+- 0.5; 2.6	9.2	+- 0.6; 3.9	10.4	+- 1.4
23	338	2.1	17.6	+- 0.5; 2.6	9.6	+- 0.6; 4.0	11.1	+- 1.5
24	325	4.9	17.4	+- 0.5; 2.6	9.5	+- 0.6; 4.0	10.1	+- 1.5
25	338	3.8	17.4	+- 0.5; 2.6	9.5	+- 0.6; 4.0	11.2	+- 1.5
26	356	5.2	17.2	+- 0.5; 2.6	9.3	+- 0.6; 4.0	10.3	+- 1.6
27	30	6.4	15.7	+- 0.5; 2.4	7.9	+- 0.6; 3.8	10.4	+- 1.5
28	43	9.0	15.7	+- 0.5; 2.4	7.9	+- 0.6; 3.8	11.4	+- 2.2
29	50	8.5	17.6	+- 0.5; 2.6	9.7	+- 0.6; 4.0	10.9	+- 1.9
30	59	7.2	17.9	+- 0.5; 2.7	10.0	+- 0.6; 4.0	11.1	+- 1.8
31	65	6.5	19.1	+- 0.6; 2.9	11.1	+- 0.7; 4.1	11.1	+- 1.6
32	74	5.8	18.5	+- 0.6; 2.8	10.5	+- 0.7; 4.1	11.6	+- 2.0
33	88	4.1	16.2	+- 0.5; 2.4	8.4	+- 0.6; 3.9	10.3	+- 1.9
34	12	17.0	18.3	+- 0.5; 2.7	10.3	+- 0.7; 4.1	11.7	+- 1.6
35	16	18.0	17.2	+- 0.5; 2.6	9.3	+- 0.6; 4.0	10.4	+- 1.5
36	284	15.0	17.4	+- 0.5; 2.6	9.5	+- 0.6; 4.0	11.5	+- 2.2
37	284	16.0	16.4	+- 0.5; 2.5	8.6	+- 0.6; 3.9	11.7	+- 2.5
38	284	15.0	17.3	+- 0.5; 2.6	9.4	+- 0.6; 4.0	11.3	+- 1.8
39	287	4.6	18.1	+- 0.5; 2.7	10.1	+- 0.7; 4.0	10.7	+- 1.4
40	271	0.7	20.0	+- 0.6; 3.0	11.9	+- 0.7; 4.2	12.7	+- 1.6

Transit Dose = 7.1 +- 0.5; 3.5

BRUNSWICK

For the period 970909-980211

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	8.8 +- 0.7	2
11.26 - 33.75 NNE	9.3 +- 1.0	4
33.76 - 56.25 NE	8.8 +- 1.2	2
56.26 - 78.75 ENE	10.3 +- 0.7	4
78.76 - 101.25 E	8.6 +- 0.3	2
101.26 - 123.75 ESE	11.2 +- 0.0	1
123.76 - 146.25 SE	9.3 +- 0.0	1
146.26 - 168.75 SSE	10.6 +- 0.0	1
168.76 - 191.25 S	10.6 +- 0.3	2
191.26 - 213.75 SSW	9.7 +- 1.1	3
213.76 - 236.25 SW	7.7 +- 0.4	2
236.26 - 258.75 WSW	9.3 +- 1.2	2
258.76 - 281.25 W	10.0 +- 1.4	4
281.26 - 303.75 WNW	10.2 +- 0.1	2
303.76 - 326.25 NW	9.3 +- 0.2	2
326.26 - 348.75 NNW	9.6 +- 0.1	2

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	9.7 +- 1.1	14
2 - 5	9.3 +- 1.0	13
> 5	9.6 +- 1.1	9
Upwind Control	9.2 +- 0.5	3

NRC TLD DOSES FOR BRUNSWICK AREA

BYRON

TLD Direct Radiation Environmental Monitoring

For the period 970909-980210 155 Days

Field Time: 113 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)		Gross Exposure (mR) +-Rdm; Tot.	Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.	Hist. Range Net Exp Rate +-1 Std Dev
1	10	1.1	28.1 +- 0.8; 4.2	20.7 +- 0.7; 4.3	19.0 +- 1.9
2	27	1.0	26.4 +- 0.8; 4.0	19.4 +- 0.7; 4.2	18.6 +- 1.7
3	53	1.6	24.9 +- 0.7; 3.7	18.2 +- 0.7; 4.1	17.5 +- 1.6
4	68	1.6	24.1 +- 0.7; 3.6	17.6 +- 0.6; 4.0	20.0 +- 2.1
5	97	1.4	29.7 +- 0.9; 4.5	22.0 +- 0.8; 4.5	20.9 +- 2.0
6	120	1.3	29.3 +- 0.9; 4.4	21.7 +- 0.8; 4.4	19.2 +- 1.6
7	146	1.4	Missing Dosimeter	No Net Data	19.9 +- 2.2
8	175	2.2	26.8 +- 0.8; 4.0	19.7 +- 0.7; 4.2	18.6 +- 1.5
9	177	0.6	23.7 +- 0.7; 3.6	17.3 +- 0.6; 3.9	16.2 +- 1.5
10	183	0.5	23.9 +- 0.7; 3.6	17.4 +- 0.6; 4.0	18.7 +- 2.2
11	193	0.6	27.2 +- 0.8; 4.1	20.1 +- 0.7; 4.3	17.8 +- 2.1
12	220	0.9	26.2 +- 0.8; 3.9	19.2 +- 0.7; 4.2	18.4 +- 1.4
13	239	0.8	25.5 +- 0.8; 3.8	18.7 +- 0.7; 4.1	17.6 +- 1.4
14	262	0.7	28.0 +- 0.8; 4.2	20.7 +- 0.7; 4.3	19.2 +- 1.8
15	283	0.8	26.9 +- 0.8; 4.0	19.8 +- 0.7; 4.2	18.2 +- 2.0
16	303	1.0	24.5 +- 0.7; 3.7	17.9 +- 0.6; 4.0	17.0 +- 1.4
17	326	1.6	21.6 +- 0.6; 3.2	15.6 +- 0.6; 3.8	16.3 +- 1.8
18	23	4.0	22.9 +- 0.7; 3.4	16.6 +- 0.6; 3.9	15.7 +- 1.3
19	17	4.1	24.8 +- 0.7; 3.7	18.1 +- 0.7; 4.0	14.6 +- 1.5
20	5	4.3	24.2 +- 0.7; 3.6	17.6 +- 0.6; 4.0	17.3 +- 1.3
21	340	4.2	24.3 +- 0.7; 3.6	17.7 +- 0.6; 4.0	18.3 +- 2.0
22	322	4.9	23.6 +- 0.7; 3.5	17.2 +- 0.6; 3.9	18.9 +- 2.4
23	298	6.9	23.8 +- 0.7; 3.6	17.3 +- 0.6; 3.9	16.0 +- 1.2
24	262	4.8	22.3 +- 0.7; 3.3	16.1 +- 0.6; 3.8	15.7 +- 1.3
25	244	4.6	24.6 +- 0.7; 3.7	18.0 +- 0.6; 4.0	16.0 +- 1.3
26	224	4.8	20.7 +- 0.6; 3.1	14.9 +- 0.6; 3.7	16.1 +- 1.7
27	208	5.2	20.1 +- 0.6; 3.0	14.4 +- 0.6; 3.6	14.8 +- 1.2
28	209	14.0	Damaged Dosimeter	No Net Data	14.5 +- 1.1
29	215	13.0	25.3 +- 0.8; 3.8	18.5 +- 0.7; 4.1	17.5 +- 1.4
30	215	13.0	26.4 +- 0.8; 4.0	19.4 +- 0.7; 4.2	18.3 +- 1.5
31	204	4.6	20.6 +- 0.6; 3.1	14.8 +- 0.6; 3.7	13.6 +- 1.2
32	178	4.4	22.5 +- 0.7; 3.4	16.3 +- 0.6; 3.8	15.9 +- 1.2
33	155	3.9	25.8 +- 0.8; 3.9	18.9 +- 0.7; 4.1	17.6 +- 1.5
34	138	4.6	26.4 +- 0.8; 4.0	19.4 +- 0.7; 4.2	17.8 +- 1.5
35	118	4.4	25.8 +- 0.8; 3.9	18.9 +- 0.7; 4.1	18.6 +- 1.9
36	81	3.8	24.5 +- 0.7; 3.7	17.9 +- 0.6; 4.0	17.1 +- 1.6
37	70	5.5	24.7 +- 0.7; 3.7	18.0 +- 0.6; 4.0	16.5 +- 2.0
38	45	4.0	21.2 +- 0.6; 3.2	15.3 +- 0.6; 3.7	15.1 +- 1.4
39	40	6.8	27.2 +- 0.8; 4.1	20.0 +- 0.7; 4.3	18.2 +- 1.2
40	45	15.0	Missing Dosimeter	No Net Data	14.5 +- 1.2
41	220	3.0	30.6 +- 0.9; 4.6	22.8 +- 0.8; 4.6	19.6 +- 2.1

Transit Dose = 2.0 +- 0.3; 3.4

BYRON

For the period 970909-980210

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	19.2 +- 2.2	2
11.26 - 33.75 NNE	18.1 +- 1.4	3
33.76 - 56.25 NE	17.8 +- 2.4	3
56.26 - 78.75 ENE	17.8 +- 0.3	2
78.76 - 101.25 E	20.0 +- 2.9	2
101.26 - 123.75 ESE	20.3 +- 2.0	2
123.76 - 146.25 SE	19.4 +- 0.0	1
146.26 - 168.75 SSE	18.9 +- 0.0	1
168.76 - 191.25 S	17.7 +- 1.4	4
191.26 - 213.75 SSW	16.4 +- 3.2	3
213.76 - 236.25 SW	19.0 +- 4.0	3
236.26 - 258.75 WSW	18.3 +- 0.5	2
258.76 - 281.25 W	18.4 +- 3.2	2
281.26 - 303.75 WNW	18.3 +- 1.3	3
303.76 - 326.25 NW	16.4 +- 1.1	2
326.26 - 348.75 NNW	17.7 +- 0.0	1

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	19.1 +- 1.8	15
2 - 5	17.7 +- 2.0	17
> 5	17.4 +- 2.3	4
Upwind Control	18.9 +- 0.6	2

NRC TLD DOSES FOR BYRON AREA

CALLAWAY

TLD Direct Radiation Environmental Monitoring

For the period 970909-980310 183 Days

Field Time: 134 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)		Gross Exposure (mR) +-Rdm; Tot.			Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.			Hist. Range Net Exp Rate +-1 Std Dev	
1	247	2.1	37.1	+-	1.1; 5.6	21.8	+-	0.8; 4.7	20.9	+- 2.4
2	259	1.4	34.3	+-	1.0; 5.1	20.0	+-	0.8; 4.5	19.7	+- 1.7
3	282	1.3	32.0	+-	1.0; 4.8	18.4	+-	0.7; 4.3	19.5	+- 1.6
4	304	1.3	34.9	+-	1.0; 5.2	20.3	+-	0.8; 4.5	20.3	+- 2.4
5	330	1.7	29.1	+-	0.9; 4.4	16.4	+-	0.7; 4.1	17.9	+- 1.9
6	1	1.7	28.8	+-	0.9; 4.3	16.3	+-	0.7; 4.1	17.1	+- 0.8
7	23	2.0	28.8	+-	0.9; 4.3	16.3	+-	0.7; 4.1	17.0	+- 0.9
8	77	0.7	31.2	+-	0.9; 4.7	17.9	+-	0.7; 4.3	17.8	+- 0.7
9	85	1.4	31.8	+-	1.0; 4.8	18.3	+-	0.7; 4.3	18.8	+- 1.0
10	98	1.5	26.8	+-	0.8; 4.0	14.9	+-	0.6; 3.9	17.3	+- 1.0
11	121	2.0	33.8	+-	1.0; 5.1	19.6	+-	0.8; 4.4	18.7	+- 2.5
12	140	2.0	27.2	+-	0.8; 4.1	15.2	+-	0.6; 4.0	18.5	+- 1.8
13	158	2.5	28.5	+-	0.9; 4.3	16.1	+-	0.7; 4.0	17.7	+- 1.0
14	183	3.7	27.1	+-	0.8; 4.1	15.1	+-	0.6; 4.0	18.4	+- 2.0
15	188	1.7	30.6	+-	0.9; 4.6	17.5	+-	0.7; 4.2	18.7	+- 1.2
16	202	0.7	29.1	+-	0.9; 4.4	16.4	+-	0.7; 4.1	17.5	+- 1.1
17	237	0.7	32.8	+-	1.0; 4.9	18.9	+-	0.7; 4.4	19.3	+- 1.5
18	312	11.0	34.7	+-	1.0; 5.2	20.3	+-	0.8; 4.5	18.0	+- 1.8
19	292	10.0	30.1	+-	0.9; 4.5	17.1	+-	0.7; 4.2	17.6	+- 1.0
20	268	9.0	29.1	+-	0.9; 4.4	16.4	+-	0.7; 4.1	17.9	+- 1.0
21	247	8.0	37.4	+-	1.1; 5.6	22.0	+-	0.8; 4.7	20.2	+- 2.0
22	225	8.0	30.6	+-	0.9; 4.6	17.5	+-	0.7; 4.2	17.7	+- 0.9
23	220	8.0	28.5	+-	0.9; 4.3	16.1	+-	0.7; 4.1	19.0	+- 2.0
24	205	5.5	26.6	+-	0.8; 4.0	14.8	+-	0.6; 3.9	16.3	+- 2.1
25	157	4.0	37.6	+-	1.1; 5.6	22.2	+-	0.8; 4.7	20.5	+- 2.2
26	134	5.0	24.7	+-	0.7; 3.7	13.5	+-	0.6; 3.8	16.1	+- 1.1
27	115	4.2	37.3	+-	1.1; 5.6	22.0	+-	0.8; 4.7	21.0	+- 2.1
28	95	3.5	31.6	+-	0.9; 4.7	18.1	+-	0.7; 4.3	20.7	+- 2.0
29	67	3.4	30.8	+-	0.9; 4.6	17.6	+-	0.7; 4.2	19.5	+- 1.0
30	48	4.5	27.0	+-	0.8; 4.1	15.1	+-	0.6; 3.9	16.7	+- 0.8
31	14	6.5	32.3	+-	1.0; 4.8	18.6	+-	0.7; 4.3	18.8	+- 0.9
32	2	5.1	31.2	+-	0.9; 4.7	17.9	+-	0.7; 4.2	18.7	+- 1.0
33	335	3.6	26.5	+-	0.8; 4.0	14.8	+-	0.6; 3.9	16.2	+- 1.1
34	288	4.3	33.2	+-	1.0; 5.0	19.2	+-	0.7; 4.4	18.8	+- 0.9
35	310	5.2	30.5	+-	0.9; 4.6	17.4	+-	0.7; 4.2	18.9	+- 0.9
36	264	3.2	Missing Dosimeter			No Net Data			14.3	+- 1.3
37	237	3.0	35.6	+-	1.1; 5.3	20.8	+-	0.8; 4.6	20.0	+- 1.4
38	270	15.0	32.7	+-	1.0; 4.9	18.9	+-	0.7; 4.4	16.9	+- 1.7
39	270	15.0	33.9	+-	1.0; 5.1	19.7	+-	0.8; 4.5	17.3	+- 2.7
40	203	20.0	30.1	+-	0.9; 4.5	17.1	+-	0.7; 4.2	18.5	+- 0.8

Transit Dose = 4.6 +- 0.5; 4.3

CALLAWAY

For the period 970909-980310

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	17.1 +- 1.1	2
11.26 - 33.75 NNE	17.5 +- 1.6	2
33.76 - 56.25 NE	15.1 +- 0.0	1
56.26 - 78.75 ENE	17.7 +- 0.2	2
78.76 - 101.25 E	17.1 +- 1.9	3
101.26 - 123.75 ESE	20.8 +- 1.7	2
123.76 - 146.25 SE	14.4 +- 1.2	2
146.26 - 168.75 SSE	19.1 +- 4.3	2
168.76 - 191.25 S	16.3 +- 1.7	2
191.26 - 213.75 SSW	15.6 +- 1.2	2
213.76 - 236.25 SW	16.8 +- 1.0	2
236.26 - 258.75 WSW	20.9 +- 1.4	4
258.76 - 281.25 W	18.2 +- 2.5	2
281.26 - 303.75 WNW	18.3 +- 1.0	3
303.76 - 326.25 NW	19.3 +- 1.7	3
326.26 - 348.75 NNW	15.6 +- 1.2	2

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	17.6 +- 1.7	14
2 - 5	18.0 +- 3.1	12
> 5	17.8 +- 2.1	10
Upwind Control	18.6 +- 1.3	3

NRC TLD DOSES FOR CALLAWAY AREA

Miles

0 2 4

Legend

Water

Highways

Railroads

Roads

Plant..site

CALVERT CLIFFS

TLD Direct Radiation Environmental Monitoring

For the period 970911-980126 138 Days

Field Time: 99 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)		Gross Exposure (mR) +-Rdm; Tot.	Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.	Hist. Range Net Exp Rate +-1 Std Dev
1	275	1.5	Damaged Dosimeter	No Net Data	13.6 +- 1.9
3	284	1.7	18.6 +- 0.6; 2.8	15.6 +- 0.6; 3.7	13.6 +- 1.8
4	323	2.4	17.1 +- 0.5; 2.6	14.3 +- 0.5; 3.6	13.6 +- 1.2
5	297	3.1	20.2 +- 0.6; 3.0	17.1 +- 0.6; 3.9	14.2 +- 1.8
6	324	4.7	19.8 +- 0.6; 3.0	16.8 +- 0.6; 3.8	14.3 +- 1.9
7	324	5.5	20.7 +- 0.6; 3.1	17.5 +- 0.6; 3.9	13.1 +- 1.5
8	256	6.1	18.0 +- 0.5; 2.7	15.0 +- 0.6; 3.7	12.6 +- 2.0
9	273	4.1	17.1 +- 0.5; 2.6	14.3 +- 0.5; 3.6	13.2 +- 1.4
10	253	3.7	20.7 +- 0.6; 3.1	17.5 +- 0.6; 3.9	14.9 +- 1.6
11	230	4.0	18.8 +- 0.6; 2.8	15.8 +- 0.6; 3.7	14.8 +- 1.2
12	243	1.3	17.9 +- 0.5; 2.7	14.9 +- 0.6; 3.6	14.4 +- 1.2
13	222	1.5	22.0 +- 0.7; 3.3	18.7 +- 0.7; 4.0	15.4 +- 1.9
14	208	1.8	15.8 +- 0.5; 2.4	13.1 +- 0.5; 3.5	12.3 +- 1.3
15	176	2.4	22.5 +- 0.7; 3.4	19.1 +- 0.7; 4.1	17.0 +- 1.9
16	160	1.5	19.3 +- 0.6; 2.9	16.3 +- 0.6; 3.8	16.1 +- 1.4
19	159	3.8	Missing Dosimeter	No Net Data	14.3 +- 1.3
20	139	4.7	19.3 +- 0.6; 2.9	16.3 +- 0.6; 3.8	12.9 +- 1.8
21	201	4.0	18.3 +- 0.5; 2.7	15.3 +- 0.6; 3.7	13.8 +- 1.2
22	187	4.7	17.5 +- 0.5; 2.6	14.6 +- 0.5; 3.6	13.2 +- 0.9
23	201	8.7	19.1 +- 0.6; 2.9	16.1 +- 0.6; 3.8	14.3 +- 1.3
24	190	7.8	15.6 +- 0.5; 2.3	12.9 +- 0.5; 3.5	12.4 +- 1.1
25	325	6.7	18.0 +- 0.5; 2.7	15.0 +- 0.6; 3.7	13.6 +- 1.2
26	314	11.0	17.0 +- 0.5; 2.5	14.2 +- 0.5; 3.6	13.0 +- 1.2
27	314	11.0	17.0 +- 0.5; 2.5	14.1 +- 0.5; 3.6	13.0 +- 1.1
28	315	10.0	21.0 +- 0.6; 3.1	17.8 +- 0.6; 3.9	15.2 +- 1.6
29	186	12.0	23.0 +- 0.7; 3.4	19.6 +- 0.7; 4.1	15.9 +- 1.5

Transit Dose = 1.4 +- 0.3; 3.0

CALVERT CLIFFS
For the period 970911-980126

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	No Data +- No Data	0
11.26 - 33.75 NNE	No Data +- No Data	0
33.76 - 56.25 NE	No Data +- No Data	0
56.26 - 78.75 ENE	No Data +- No Data	0
78.76 - 101.25 E	No Data +- No Data	0
101.26 - 123.75 ESE	No Data +- No Data	0
123.76 - 146.25 SE	16.3 +- 0.0	1
146.26 - 168.75 SSE	16.3 +- 0.0	1
168.76 - 191.25 S	16.6 +- 3.3	4
191.26 - 213.75 SSW	14.8 +- 1.5	3
213.76 - 236.25 SW	17.3 +- 2.0	2
236.26 - 258.75 WSW	15.8 +- 1.5	3
258.76 - 281.25 W	14.3 +- 0.0	1
281.26 - 303.75 WNW	16.4 +- 1.0	2
303.76 - 326.25 NW	15.9 +- 1.5	4
326.26 - 348.75 NNW	No Data +- No Data	0

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	15.7 +- 2.0	5
2 - 5	16.1 +- 1.6	10
> 5	16.0 +- 2.3	6
Upwind Control	15.4 +- 2.1	3

NRC TLD DOSES FOR CALVERT CLIFFS AREA

Miles

Legend

Water

Highways

Railroads

Roads

Plant..site

CATAWBA

TLD Direct Radiation Environmental Monitoring

For the period 970910-980211 155 Days

Field Time: 106 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)	Gross Exposure (mR) +-Rdm; Tot.	Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.	Hist. Range Net Exp Rate +-1 Std Dev
1	134 0.1	29.3 +- 0.9; 4.4	18.3 +- 0.9; 4.9	19.3 +- 1.8
2	162 0.4	25.5 +- 0.8; 3.8	15.0 +- 0.8; 4.5	15.9 +- 2.1
3	132 0.8	28.9 +- 0.9; 4.3	17.9 +- 0.8; 4.9	18.6 +- 1.8
4	111 1.3	28.5 +- 0.9; 4.3	17.5 +- 0.8; 4.8	16.2 +- 1.6
5	45 0.7	23.8 +- 0.7; 3.6	13.6 +- 0.7; 4.4	15.8 +- 1.7
6	298 1.3	27.0 +- 0.8; 4.0	16.3 +- 0.8; 4.7	17.7 +- 1.8
7	4 0.6	25.3 +- 0.8; 3.8	14.8 +- 0.8; 4.5	15.4 +- 2.0
8	332 1.5	28.9 +- 0.9; 4.3	17.9 +- 0.8; 4.9	19.1 +- 2.0
9	318 1.6	21.0 +- 0.6; 3.1	11.2 +- 0.7; 4.2	12.6 +- 2.2
10	176 1.8	25.5 +- 0.8; 3.8	15.0 +- 0.8; 4.5	16.5 +- 2.3
11	203 1.5	26.0 +- 0.8; 3.9	15.4 +- 0.8; 4.6	16.6 +- 1.8
12	225 1.5	25.0 +- 0.8; 3.8	14.6 +- 0.8; 4.5	16.7 +- 2.6
13	250 1.9	22.3 +- 0.7; 3.3	12.3 +- 0.7; 4.3	14.6 +- 2.2
14	270 1.4	20.1 +- 0.6; 3.0	10.4 +- 0.7; 4.1	12.5 +- 2.0
15	331 3.0	21.6 +- 0.6; 3.2	11.7 +- 0.7; 4.2	14.3 +- 1.9
16	311 3.9	23.2 +- 0.7; 3.5	13.1 +- 0.7; 4.3	13.4 +- 2.0
17	296 9.5	27.8 +- 0.8; 4.2	17.0 +- 0.8; 4.8	18.0 +- 2.1
18	324 4.8	Missing Dosimeter	No Net Data	15.1 +- 2.6
19	352 4.8	21.2 +- 0.6; 3.2	11.4 +- 0.7; 4.2	13.2 +- 2.0
20	22 4.0	25.4 +- 0.8; 3.8	14.9 +- 0.8; 4.5	16.8 +- 2.0
21	290 3.9	25.2 +- 0.8; 3.8	14.8 +- 0.8; 4.5	15.1 +- 1.6
22	266 4.0	24.9 +- 0.7; 3.7	14.5 +- 0.8; 4.5	16.1 +- 2.1
23	251 4.0	21.7 +- 0.7; 3.3	11.8 +- 0.7; 4.2	11.7 +- 2.1
24	229 3.9	Missing Dosimeter	No Net Data	12.4 +- 1.9
25	202 4.4	26.4 +- 0.8; 4.0	15.8 +- 0.8; 4.6	17.2 +- 1.4
26	51 4.3	27.5 +- 0.8; 4.1	16.8 +- 0.8; 4.7	18.3 +- 1.4
27	64 7.9	22.1 +- 0.7; 3.3	12.1 +- 0.7; 4.2	12.2 +- 1.7
28	61 4.9	27.0 +- 0.8; 4.0	16.3 +- 0.8; 4.7	15.6 +- 1.9
29	49 1.9	22.7 +- 0.7; 3.4	12.6 +- 0.7; 4.3	14.7 +- 2.7
30	64 1.8	23.7 +- 0.7; 3.6	13.5 +- 0.7; 4.4	14.9 +- 1.6
31	87 1.6	22.9 +- 0.7; 3.4	12.8 +- 0.7; 4.3	14.5 +- 1.8
32	121 2.6	26.7 +- 0.8; 4.0	16.1 +- 0.8; 4.7	15.5 +- 1.6
33	114 7.6	20.8 +- 0.6; 3.1	11.1 +- 0.7; 4.1	14.2 +- 2.3
34	93 4.5	27.5 +- 0.8; 4.1	16.7 +- 0.8; 4.7	17.4 +- 2.2
35	132 4.3	30.7 +- 0.9; 4.6	19.4 +- 0.9; 5.0	20.6 +- 1.5
36	163 8.9	23.2 +- 0.7; 3.5	13.1 +- 0.7; 4.3	12.6 +- 1.7
37	173 4.9	23.4 +- 0.7; 3.5	13.2 +- 0.7; 4.4	13.8 +- 1.2
38	157 4.6	28.7 +- 0.9; 4.3	17.7 +- 0.8; 4.8	18.3 +- 0.9
39	248 10.0	29.5 +- 0.9; 4.4	18.4 +- 0.9; 4.9	16.3 +- 2.6
40	229 12.0	25.7 +- 0.8; 3.9	15.2 +- 0.8; 4.6	15.3 +- 1.2
41	218 13.0	21.3 +- 0.6; 3.2	11.5 +- 0.7; 4.2	12.6 +- 2.7
42	213 16.0	22.3 +- 0.7; 3.3	12.3 +- 0.7; 4.3	15.3 +- 1.4

Transit Dose = 7.8 +- 0.5; 3.7

CATAWBA

For the period 970910-980211

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	13.1 +- 2.4	2
11.26 - 33.75 NNE	14.9 +- 0.0	1
33.76 - 56.25 NE	14.3 +- 2.2	3
56.26 - 78.75 ENE	14.0 +- 2.1	3
78.76 - 101.25 E	14.7 +- 2.8	2
101.26 - 123.75 ESE	14.9 +- 3.4	3
123.76 - 146.25 SE	18.5 +- 0.8	3
146.26 - 168.75 SSE	15.3 +- 2.3	3
168.76 - 191.25 S	14.1 +- 1.3	2
191.26 - 213.75 SSW	15.6 +- 0.2	2
213.76 - 236.25 SW	14.6 +- 0.0	1
236.26 - 258.75 WSW	14.2 +- 3.7	3
258.76 - 281.25 W	12.5 +- 2.9	2
281.26 - 303.75 WNW	16.0 +- 1.1	3
303.76 - 326.25 NW	12.1 +- 1.4	2
326.26 - 348.75 NNW	14.8 +- 4.4	2

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	14.7 +- 2.4	17
2 - 5	14.9 +- 2.4	15
> 5	14.3 +- 3.2	5
Upwind Control	13.0 +- 1.9	3

NRC TLD DOSES FOR CATAWBA AREA

Miles

Legend

Water

--- Railroads

Plant..site

— Highways

--- Roads

CLINTON

TLD Direct Radiation Environmental Monitoring

For the period 970909-980210 155 Days

Field Time: 99 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)		Gross Exposure (mR) +-Rdm; Tot.		Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.		Hist. Range Net Exp Rate +-1 Std Dev
1	5	0.6	25.1	+- 0.8; 3.8	19.2	+- 0.8; 4.5	18.9 +- 2.3
2	40	0.7	28.4	+- 0.9; 4.3	22.2	+- 0.8; 4.8	18.7 +- 1.2
3	35	0.8	31.8	+- 1.0; 4.8	25.3	+- 0.9; 5.2	21.4 +- 1.7
4	163	0.5	27.2	+- 0.8; 4.1	21.1	+- 0.8; 4.7	19.0 +- 1.5
5	210	0.5	26.8	+- 0.8; 4.0	20.7	+- 0.8; 4.7	19.4 +- 1.5
6	223	0.6	28.3	+- 0.8; 4.2	22.1	+- 0.8; 4.8	19.3 +- 1.4
7	235	0.8	28.1	+- 0.8; 4.2	21.9	+- 0.8; 4.8	18.9 +- 1.3
8	62	1.9	24.8	+- 0.7; 3.7	18.9	+- 0.8; 4.5	18.4 +- 1.4
9	78	1.8	25.4	+- 0.8; 3.8	19.5	+- 0.8; 4.5	18.2 +- 1.3
10	79	2.6	26.8	+- 0.8; 4.0	20.7	+- 0.8; 4.7	18.4 +- 1.8
11	100	2.3	27.1	+- 0.8; 4.1	21.0	+- 0.8; 4.7	18.7 +- 1.3
12	115	3.0	26.9	+- 0.8; 4.0	20.8	+- 0.8; 4.7	16.9 +- 2.1
13	127	3.2	25.7	+- 0.8; 3.8	19.7	+- 0.8; 4.5	18.6 +- 1.4
14	155	2.1	26.1	+- 0.8; 3.9	20.1	+- 0.8; 4.6	19.0 +- 1.3
15	185	3.0	23.8	+- 0.7; 3.6	18.0	+- 0.7; 4.4	18.5 +- 1.9
16	203	3.2	23.8	+- 0.7; 3.6	18.0	+- 0.7; 4.4	17.7 +- 1.4
17	230	3.7	27.6	+- 0.8; 4.1	21.4	+- 0.8; 4.7	18.5 +- 1.6
18	255	2.8	26.1	+- 0.8; 3.9	20.1	+- 0.8; 4.6	19.1 +- 1.3
19	275	2.3	26.0	+- 0.8; 3.9	20.0	+- 0.8; 4.6	18.5 +- 1.2
20	302	0.9	25.8	+- 0.8; 3.9	19.8	+- 0.8; 4.6	18.2 +- 1.3
21	336	0.8	25.8	+- 0.8; 3.9	19.8	+- 0.8; 4.6	18.0 +- 1.3
22	0	0.6	24.3	+- 0.7; 3.6	18.4	+- 0.7; 4.4	18.3 +- 1.4
23	358	4.6	27.2	+- 0.8; 4.1	21.0	+- 0.8; 4.7	19.2 +- 1.5
24	20	3.9	25.7	+- 0.8; 3.9	19.7	+- 0.8; 4.6	18.3 +- 1.3
25	46	5.0	27.2	+- 0.8; 4.1	21.1	+- 0.8; 4.7	19.0 +- 1.1
26	62	5.5	24.8	+- 0.7; 3.7	18.9	+- 0.8; 4.5	16.9 +- 1.1
27	90	4.8	25.8	+- 0.8; 3.9	19.8	+- 0.8; 4.6	17.8 +- 1.5
28	115	5.2	25.0	+- 0.8; 3.8	19.1	+- 0.8; 4.5	17.5 +- 1.1
29	128	5.1	26.2	+- 0.8; 3.9	20.1	+- 0.8; 4.6	18.1 +- 1.3
30	153	5.8	26.0	+- 0.8; 3.9	20.0	+- 0.8; 4.6	18.5 +- 1.5
31	173	5.2	25.7	+- 0.8; 3.9	19.7	+- 0.8; 4.6	18.0 +- 1.2
32	205	4.7	26.0	+- 0.8; 3.9	20.0	+- 0.8; 4.6	18.2 +- 1.4
33	238	6.1	25.2	+- 0.8; 3.8	19.3	+- 0.8; 4.5	18.3 +- 1.4
34	252	5.8	24.1	+- 0.7; 3.6	18.3	+- 0.7; 4.4	17.4 +- 2.0
35	260	6.6	Missing Dosimeter		No Net Data		14.8 +- 1.4
36	272	4.8	27.0	+- 0.8; 4.1	20.9	+- 0.8; 4.7	18.5 +- 1.4
37	288	4.8	24.4	+- 0.7; 3.7	18.5	+- 0.7; 4.4	17.5 +- 1.3
38	297	7.6	24.3	+- 0.7; 3.6	18.5	+- 0.7; 4.4	16.2 +- 1.3
39	315	5.1	25.4	+- 0.8; 3.8	19.4	+- 0.8; 4.5	18.3 +- 1.7
40	342	4.8	25.6	+- 0.8; 3.8	19.6	+- 0.8; 4.5	18.3 +- 1.3
41	65	12.0	23.5	+- 0.7; 3.5	17.8	+- 0.7; 4.3	17.6 +- 1.9
42	148	12.0	33.0	+- 1.0; 5.0	26.4	+- 1.0; 5.4	19.0 +- 2.5
43	148	12.0	32.6	+- 1.0; 4.9	26.0	+- 0.9; 5.3	19.5 +- 2.2
44	206	14.0	23.2	+- 0.7; 3.5	17.4	+- 0.7; 4.3	15.8 +- 1.3

Transit Dose = 4.0 +- 0.4; 3.2

CLINTON

For the period 970909-980210

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	19.5 +- 1.4	3
11.26 - 33.75 NNE	19.7 +- 0.0	1
33.76 - 56.25 NE	22.8 +- 2.2	3
56.26 - 78.75 ENE	18.8 +- 0.7	4
78.76 - 101.25 E	20.5 +- 0.6	3
101.26 - 123.75 ESE	20.0 +- 1.2	2
123.76 - 146.25 SE	19.9 +- 0.3	2
146.26 - 168.75 SSE	20.4 +- 0.6	3
168.76 - 191.25 S	18.9 +- 1.2	2
191.26 - 213.75 SSW	19.6 +- 1.4	3
213.76 - 236.25 SW	21.8 +- 0.4	3
236.26 - 258.75 WSW	19.2 +- 0.9	3
258.76 - 281.25 W	20.4 +- 0.7	2
281.26 - 303.75 WNW	18.9 +- 0.7	3
303.76 - 326.25 NW	19.4 +- 0.0	1
326.26 - 348.75 NNW	19.7 +- 0.1	2

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	20.7 +- 1.9	12
2 - 5	20.0 +- 1.0	18
> 5	19.1 +- 0.8	10
Upwind Control	23.3 +- 5.1	3

NRC TLD DOSES FOR CLINTON AREA

Miles

Legend

Water
Highways

Railroads
Roads

Plant..site

COMANCHE PEAK

TLD Direct Radiation Environmental Monitoring

For the period 970908-980209 155 Days

Field Time: 93 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)		Gross Exposure (mR) +-Rdm; Tot.		Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.		Hist. Range Net Exp Rate +-1 Std Dev	
1	306	1.4	22.1	+- 0.7; 3.3	17.2	+- 0.7; 4.4	15.5	+- 1.1
2	285	1.5	22.9	+- 0.7; 3.4	18.0	+- 0.8; 4.4	16.1	+- 1.1
3	268	1.1	20.0	+- 0.6; 3.0	15.1	+- 0.7; 4.1	14.1	+- 0.8
4	253	0.9	21.4	+- 0.6; 3.2	16.5	+- 0.7; 4.3	15.4	+- 1.0
5	218	1.0	21.2	+- 0.6; 3.2	16.3	+- 0.7; 4.3	15.5	+- 0.9
6	200	1.0	20.4	+- 0.6; 3.1	15.6	+- 0.7; 4.2	13.9	+- 1.2
7	180	1.4	21.5	+- 0.6; 3.2	16.6	+- 0.7; 4.3	14.0	+- 1.0
8	163	1.6	21.6	+- 0.6; 3.2	16.8	+- 0.7; 4.3	16.1	+- 1.7
9	140	1.3	22.0	+- 0.7; 3.3	17.1	+- 0.7; 4.3	15.8	+- 0.8
10	118	1.5	21.2	+- 0.6; 3.2	16.4	+- 0.7; 4.3	14.2	+- 1.2
11	93	1.9	24.7	+- 0.7; 3.7	19.8	+- 0.8; 4.6	15.5	+- 2.5
12	73	2.4	Missing Dosimeter		No Net Data		17.3	+- 0.9
13	245	1.7	20.8	+- 0.6; 3.1	15.9	+- 0.7; 4.2	14.4	+- 1.0
14	156	4.3	19.8	+- 0.6; 3.0	15.0	+- 0.7; 4.1	14.0	+- 1.1
15	186	7.0	21.3	+- 0.6; 3.2	16.4	+- 0.7; 4.3	15.1	+- 1.3
16	183	4.1	21.0	+- 0.6; 3.1	16.1	+- 0.7; 4.2	15.5	+- 1.3
17	205	4.3	21.1	+- 0.6; 3.2	16.3	+- 0.7; 4.3	15.5	+- 0.9
18	225	3.4	19.7	+- 0.6; 3.0	14.9	+- 0.7; 4.1	13.0	+- 1.1
19	245	5.2	21.7	+- 0.7; 3.3	16.8	+- 0.7; 4.3	15.5	+- 0.8
20	264	5.8	20.3	+- 0.6; 3.1	15.5	+- 0.7; 4.2	14.0	+- 0.9
21	258	3.2	21.1	+- 0.6; 3.2	16.3	+- 0.7; 4.3	14.0	+- 1.0
22	284	5.1	19.9	+- 0.6; 3.0	15.1	+- 0.7; 4.1	13.6	+- 1.0
23	313	5.8	23.1	+- 0.7; 3.5	18.2	+- 0.8; 4.5	15.3	+- 1.0
24	332	4.9	20.8	+- 0.6; 3.1	15.9	+- 0.7; 4.2	14.4	+- 1.0
25	9	4.6	21.3	+- 0.6; 3.2	16.5	+- 0.7; 4.3	15.0	+- 1.1
26	26	4.5	21.1	+- 0.6; 3.2	16.2	+- 0.7; 4.3	14.8	+- 1.2
27	47	4.1	20.8	+- 0.6; 3.1	16.0	+- 0.7; 4.2	14.6	+- 1.1
28	6	1.8	21.6	+- 0.6; 3.2	16.8	+- 0.7; 4.3	15.1	+- 1.1
29	16	1.9	20.9	+- 0.6; 3.1	16.0	+- 0.7; 4.2	14.7	+- 1.1
30	102	3.0	21.4	+- 0.6; 3.2	16.6	+- 0.7; 4.3	15.8	+- 1.3
31	108	3.9	20.7	+- 0.6; 3.1	15.9	+- 0.7; 4.2	14.9	+- 1.0
32	135	4.6	20.5	+- 0.6; 3.1	15.7	+- 0.7; 4.2	15.7	+- 1.1
33	152	6.3	20.1	+- 0.6; 3.0	15.2	+- 0.7; 4.1	14.0	+- 1.1
34	47	2.9	19.2	+- 0.6; 2.9	14.4	+- 0.7; 4.1	13.7	+- 1.3
35	85	4.8	21.1	+- 0.6; 3.2	16.3	+- 0.7; 4.3	15.1	+- 1.1
36	115	7.5	20.3	+- 0.6; 3.0	15.5	+- 0.7; 4.2	15.4	+- 1.3
37	355	9.4	21.3	+- 0.6; 3.2	16.4	+- 0.7; 4.3	14.5	+- 1.1
38	337	9.2	21.8	+- 0.7; 3.3	16.9	+- 0.7; 4.3	14.4	+- 1.1
39	310	9.9	19.2	+- 0.6; 2.9	14.4	+- 0.7; 4.1	14.3	+- 1.2
40	302	8.1	20.5	+- 0.6; 3.1	15.7	+- 0.7; 4.2	13.8	+- 1.2
41	248	7.9	22.7	+- 0.7; 3.4	17.8	+- 0.7; 4.4	16.0	+- 1.0
42	90	0.5	22.0	+- 0.7; 3.3	17.1	+- 0.7; 4.3	14.6	+- 1.6
43	18	9.8	21.3	+- 0.6; 3.2	16.4	+- 0.7; 4.3	14.9	+- 1.0
44	263	1.7	20.1	+- 0.6; 3.0	15.3	+- 0.7; 4.1	14.0	+- 1.9
45	218	12.0	21.3	+- 0.6; 3.2	16.5	+- 0.7; 4.3	14.9	+- 0.9
46	140	12.0	21.7	+- 0.7; 3.3	16.9	+- 0.7; 4.3	14.9	+- 1.1
47	301	21.0	21.5	+- 0.6; 3.2	16.7	+- 0.7; 4.3	14.6	+- 0.9

Transit Dose = 4.3 +- 0.4; 3.1

COMANCHE PEAK
For the period 970908-980209

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	16.5 +- 0.2	3
11.26 - 33.75 NNE	16.2 +- 0.2	3
33.76 - 56.25 NE	15.2 +- 1.1	2
56.26 - 78.75 ENE	No Data +- No Data	0
78.76 - 101.25 E	17.7 +- 1.8	3
101.26 - 123.75 ESE	16.1 +- 0.5	4
123.76 - 146.25 SE	16.5 +- 0.8	3
146.26 - 168.75 SSE	15.7 +- 1.0	3
168.76 - 191.25 S	16.4 +- 0.2	3
191.26 - 213.75 SSW	15.9 +- 0.5	2
213.76 - 236.25 SW	15.9 +- 0.9	3
236.26 - 258.75 WSW	16.7 +- 0.7	5
258.76 - 281.25 W	15.3 +- 0.2	3
281.26 - 303.75 WNW	16.4 +- 1.2	4
303.76 - 326.25 NW	16.6 +- 2.0	3
326.26 - 348.75 NNW	16.4 +- 0.7	2

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	16.7 +- 1.1	16
2 - 5	15.9 +- 0.7	14
> 5	16.3 +- 1.0	16
Upwind Control	No Data +- No Data	0

NRC TLD DOSES FOR COMANCHE PEAK AREA

Miles

Legend

Water

--- Railroads

* Plant..site

— Highways

--- Roads

COOPER

TLD Direct Radiation Environmental Monitoring

For the period 970908-980210 156 Days

Field Time: 91 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)	Gross Exposure (mR) +-Rdm; Tot.	Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.	Hist. Range Net Exp Rate +-1 Std Dev
1	350 2.3	27.6 +- 0.8; 4.1	18.9 +- 0.9; 5.3	18.5 +- 2.6
2	6 3.5	27.3 +- 0.8; 4.1	18.6 +- 0.9; 5.3	19.0 +- 1.2
3	18 2.7	28.9 +- 0.9; 4.3	20.2 +- 1.0; 5.5	19.6 +- 1.5
4	16 3.2	29.0 +- 0.9; 4.3	20.2 +- 1.0; 5.5	19.9 +- 1.5
5	47 1.9	28.5 +- 0.9; 4.3	19.8 +- 1.0; 5.4	19.5 +- 1.3
6	40 3.6	28.4 +- 0.9; 4.3	19.7 +- 1.0; 5.4	18.9 +- 1.6
7	75 2.7	27.1 +- 0.8; 4.1	18.4 +- 0.9; 5.2	18.8 +- 1.9
8	55 2.8	27.8 +- 0.8; 4.2	19.1 +- 1.0; 5.3	18.8 +- 1.8
9	80 2.1	28.8 +- 0.9; 4.3	20.1 +- 1.0; 5.4	20.4 +- 1.6
10	98 3.7	27.4 +- 0.8; 4.1	18.7 +- 0.9; 5.3	18.6 +- 1.3
11	118 2.3	28.2 +- 0.8; 4.2	19.5 +- 1.0; 5.4	20.2 +- 1.6
12	109 4.6	27.2 +- 0.8; 4.1	18.5 +- 0.9; 5.3	19.8 +- 1.3
13	141 3.2	28.5 +- 0.9; 4.3	19.8 +- 1.0; 5.4	19.5 +- 1.3
14	126 5.6	28.5 +- 0.9; 4.3	19.8 +- 1.0; 5.4	18.4 +- 1.8
15	159 2.7	27.6 +- 0.8; 4.1	18.9 +- 0.9; 5.3	18.8 +- 1.4
16	167 4.9	25.0 +- 0.8; 3.8	16.3 +- 0.9; 5.0	19.0 +- 2.5
17	205 0.3	30.3 +- 0.9; 4.5	21.5 +- 1.0; 5.6	19.5 +- 1.9
18	186 4.7	29.2 +- 0.9; 4.4	20.5 +- 1.0; 5.5	20.5 +- 1.5
19	213 3.0	26.9 +- 0.8; 4.0	18.2 +- 0.9; 5.2	19.4 +- 1.4
20	195 4.9	30.6 +- 0.9; 4.6	21.9 +- 1.0; 5.7	20.5 +- 1.7
21	222 2.0	28.5 +- 0.9; 4.3	19.8 +- 1.0; 5.4	18.5 +- 1.4
22	215 5.7	29.1 +- 0.9; 4.4	20.3 +- 1.0; 5.5	20.4 +- 1.6
23	256 1.5	29.3 +- 0.9; 4.4	20.6 +- 1.0; 5.5	20.2 +- 1.7
24	238 5.2	29.4 +- 0.9; 4.4	20.6 +- 1.0; 5.5	20.2 +- 1.6
25	276 2.2	29.9 +- 0.9; 4.5	21.1 +- 1.0; 5.6	20.5 +- 1.4
26	260 3.8	29.8 +- 0.9; 4.5	21.1 +- 1.0; 5.6	20.7 +- 1.4
27	301 1.8	30.2 +- 0.9; 4.5	21.5 +- 1.0; 5.6	20.1 +- 1.5
28	286 4.3	29.0 +- 0.9; 4.3	20.3 +- 1.0; 5.5	20.0 +- 1.8
29	324 2.8	28.0 +- 0.8; 4.2	19.3 +- 1.0; 5.3	19.3 +- 2.1
30	333 3.7	30.3 +- 0.9; 4.5	21.6 +- 1.0; 5.6	19.9 +- 1.5
31	343 2.6	29.6 +- 0.9; 4.4	20.9 +- 1.0; 5.5	20.4 +- 1.8
32	333 3.7	29.3 +- 0.9; 4.4	20.6 +- 1.0; 5.5	19.9 +- 2.0
33	215 1.0	27.8 +- 0.8; 4.2	19.1 +- 1.0; 5.3	20.2 +- 2.2
34	175 18.0	30.4 +- 0.9; 4.6	21.7 +- 1.0; 5.6	20.6 +- 2.1
35	333 23.0	29.5 +- 0.9; 4.4	20.8 +- 1.0; 5.5	18.9 +- 1.8
36	210 19.0	28.4 +- 0.9; 4.3	19.7 +- 1.0; 5.4	20.0 +- 2.4
37	64 7.0	Missing Dosimeter	No Net Data	23.1 +- 3.1
38	329 9.0	33.6 +- 1.0; 5.0	24.8 +- 1.1; 6.0	21.6 +- 2.8
39	273 10.0	29.0 +- 0.9; 4.3	20.3 +- 1.0; 5.5	19.3 +- 1.8
40	300 2.5	30.7 +- 0.9; 4.6	22.0 +- 1.0; 5.7	22.2 +- 2.1
42	93 3.5	28.9 +- 0.9; 4.3	20.2 +- 1.0; 5.4	19.2 +- 1.5
43	270 2.2	29.9 +- 0.9; 4.5	21.2 +- 1.0; 5.6	19.9 +- 1.7

Transit Dose = 8.5 +- 0.5; 3.4

COOPER

For the period 970908-980210

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	18.8 +- 0.2	2
11.26 - 33.75 NNE	20.2 +- 0.0	2
33.76 - 56.25 NE	19.5 +- 0.4	3
56.26 - 78.75 ENE	18.4 +- 0.0	1
78.76 - 101.25 E	19.7 +- 0.8	3
101.26 - 123.75 ESE	19.0 +- 0.7	2
123.76 - 146.25 SE	19.8 +- 0.0	2
146.26 - 168.75 SSE	17.6 +- 1.8	2
168.76 - 191.25 S	20.5 +- 0.0	1
191.26 - 213.75 SSW	20.6 +- 2.1	3
213.76 - 236.25 SW	19.8 +- 0.6	3
236.26 - 258.75 WSW	20.6 +- 0.0	2
258.76 - 281.25 W	20.9 +- 0.4	4
281.26 - 303.75 WNW	21.3 +- 0.9	3
303.76 - 326.25 NW	19.3 +- 0.0	1
326.26 - 348.75 NNW	22.0 +- 1.9	4

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	20.4 +- 1.0	6
2 - 5	19.8 +- 1.3	27
> 5	21.2 +- 2.1	5
Upwind Control	20.7 +- 1.0	3

NRC TLD DOSES FOR COOPER AREA

Miles

Legend

Water
Highways

Railroads
Roads

Plant..site

CRYSTAL RIVER

TLD Direct Radiation Environmental Monitoring

For the period 970909-980310 183 Days

Field Time: 105 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)		Gross Exposure (mR) +-Rdm; Tot.	Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.	Hist. Range Net Exp Rate +-1 Std Dev
6	61	4.2	18.2 +- 0.5; 2.7	10.5 +- 0.6; 3.8	11.8 +- 2.3
7	50	3.8	18.6 +- 0.6; 2.8	10.9 +- 0.6; 3.9	12.0 +- 2.5
8	20	5.2	19.7 +- 0.6; 3.0	11.8 +- 0.6; 4.0	12.5 +- 2.2
9	6	5.4	20.0 +- 0.6; 3.0	12.1 +- 0.6; 4.0	14.3 +- 2.3
10	348	5.0	21.2 +- 0.6; 3.2	13.1 +- 0.7; 4.1	13.7 +- 2.2
11	334	4.8	18.4 +- 0.6; 2.8	10.7 +- 0.6; 3.8	12.9 +- 2.3
12	318	4.8	20.0 +- 0.6; 3.0	12.1 +- 0.6; 4.0	12.7 +- 2.6
13	79	3.8	19.3 +- 0.6; 2.9	11.5 +- 0.6; 3.9	13.0 +- 2.3
14	95	4.1	17.5 +- 0.5; 2.6	9.9 +- 0.6; 3.8	12.5 +- 2.5
15	89	1.8	21.4 +- 0.6; 3.2	13.3 +- 0.7; 4.1	15.1 +- 2.4
16	113	5.0	18.6 +- 0.6; 2.8	10.9 +- 0.6; 3.9	11.9 +- 1.4
17	133	5.5	19.0 +- 0.6; 2.9	11.2 +- 0.6; 3.9	13.5 +- 2.8
18	74	8.1	18.7 +- 0.6; 2.8	11.0 +- 0.6; 3.9	12.3 +- 2.4
19	127	7.6	18.5 +- 0.6; 2.8	10.8 +- 0.6; 3.9	12.7 +- 2.3
20	150	12.0	18.6 +- 0.6; 2.8	10.9 +- 0.6; 3.9	11.6 +- 2.3
21	159	13.0	18.7 +- 0.6; 2.8	11.0 +- 0.6; 3.9	12.8 +- 2.5
22	150	13.0	19.6 +- 0.6; 2.9	11.7 +- 0.6; 3.9	12.7 +- 2.5
23	150	21.0	17.3 +- 0.5; 2.6	9.8 +- 0.6; 3.8	13.7 +- 3.5
24	150	21.0	17.9 +- 0.5; 2.7	10.3 +- 0.6; 3.8	11.7 +- 2.3
25	56	6.1	Missing Dosimeter	No Net Data	14.1 +- 3.3
26	357	5.2	18.9 +- 0.6; 2.8	11.1 +- 0.6; 3.9	13.2 +- 2.4
27	90	13.0	19.8 +- 0.6; 3.0	11.9 +- 0.6; 4.0	12.8 +- 2.4
28	140	4.8	19.0 +- 0.6; 2.9	11.2 +- 0.6; 3.9	13.2 +- 2.2

Transit Dose = 5.9 +- 0.4; 3.5

CRYSTAL RIVER

For the period 970909-980310

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	11.6 +- 0.7	2
11.26 - 33.75 NNE	11.8 +- 0.0	1
33.76 - 56.25 NE	10.9 +- 0.0	1
56.26 - 78.75 ENE	10.8 +- 0.3	2
78.76 - 101.25 E	11.6 +- 1.4	4
101.26 - 123.75 ESE	10.9 +- 0.0	1
123.76 - 146.25 SE	11.1 +- 0.3	3
146.26 - 168.75 SSE	10.9 +- 0.1	2
168.76 - 191.25 S	No Data +- No Data	0
191.26 - 213.75 SSW	No Data +- No Data	0
213.76 - 236.25 SW	No Data +- No Data	0
236.26 - 258.75 WSW	No Data +- No Data	0
258.76 - 281.25 W	No Data +- No Data	0
281.26 - 303.75 WNW	No Data +- No Data	0
303.76 - 326.25 NW	12.1 +- 0.0	1
326.26 - 348.75 NNW	11.9 +- 1.7	2

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	13.3 +- 0.0	1
2 - 5	11.2 +- 0.9	9
> 5	11.3 +- 0.5	9
Upwind Control	10.6 +- 1.0	3

NRC TLD DOSES FOR CRYSTAL RIVER AREA

DAVIS BESSE

TLD Direct Radiation Environmental Monitoring

For the period 970908-980205 151 Days

Field Time: 118 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)		Gross Exposure (mR) +-Rdm; Tot.	Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.	Hist. Range Net Exp Rate +-1 Std Dev
1	50	0.6	17.8 +- 0.5; 2.7	12.6 +- 0.5; 3.4	12.4 +- 1.3
2	86	0.9	20.2 +- 0.6; 3.0	14.4 +- 0.5; 3.6	13.8 +- 1.2
3	116	1.4	18.9 +- 0.6; 2.8	13.4 +- 0.5; 3.5	13.1 +- 1.2
4	172	0.8	21.4 +- 0.6; 3.2	15.3 +- 0.6; 3.6	15.7 +- 1.8
5	200	1.5	27.2 +- 0.8; 4.1	19.7 +- 0.7; 4.1	19.5 +- 1.8
6	226	1.0	22.2 +- 0.7; 3.3	15.9 +- 0.6; 3.7	16.2 +- 1.3
7	249	1.5	24.2 +- 0.7; 3.6	17.5 +- 0.6; 3.9	17.1 +- 1.3
8	267	1.8	23.0 +- 0.7; 3.4	16.5 +- 0.6; 3.8	17.1 +- 1.5
9	285	1.8	24.9 +- 0.7; 3.7	18.0 +- 0.6; 3.9	17.5 +- 1.5
10	306	1.5	20.2 +- 0.6; 3.0	14.4 +- 0.5; 3.6	14.9 +- 1.5
11	344	0.9	20.8 +- 0.6; 3.1	14.9 +- 0.5; 3.6	14.5 +- 1.1
12	142	4.5	25.3 +- 0.8; 3.8	18.3 +- 0.6; 4.0	18.3 +- 1.6
13	158	4.0	26.9 +- 0.8; 4.0	19.5 +- 0.7; 4.1	19.4 +- 1.6
14	180	3.8	25.4 +- 0.8; 3.8	18.4 +- 0.6; 4.0	16.4 +- 1.5
15	207	4.8	25.1 +- 0.8; 3.8	18.1 +- 0.6; 3.9	17.5 +- 2.0
16	225	4.5	25.6 +- 0.8; 3.8	18.5 +- 0.6; 4.0	17.4 +- 1.6
17	254	2.7	30.4 +- 0.9; 4.6	22.2 +- 0.7; 4.4	20.9 +- 1.6
18	269	3.0	24.8 +- 0.7; 3.7	17.9 +- 0.6; 3.9	17.8 +- 1.6
19	295	5.3	29.1 +- 0.9; 4.4	21.2 +- 0.7; 4.3	19.8 +- 1.7
20	25	0.5	18.0 +- 0.5; 2.7	12.7 +- 0.5; 3.4	12.5 +- 1.7
21	132	9.7	22.0 +- 0.7; 3.3	15.8 +- 0.6; 3.7	16.8 +- 1.3
22	210	6.5	25.2 +- 0.8; 3.8	18.2 +- 0.6; 3.9	17.4 +- 3.1

Transit Dose = 1.3 +- 0.3; 3.5

DAVIS BESSE
For the period 970908-980205

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	No Data +- No Data	0
11.26 - 33.75 NNE	12.7 +- 0.0	1
33.76 - 56.25 NE	12.6 +- 0.0	1
56.26 - 78.75 ENE	No Data +- No Data	0
78.76 - 101.25 E	14.4 +- 0.0	1
101.26 - 123.75 ESE	13.4 +- 0.0	1
123.76 - 146.25 SE	18.3 +- 0.0	1
146.26 - 168.75 SSE	19.5 +- 0.0	1
168.76 - 191.25 S	16.8 +- 2.2	2
191.26 - 213.75 SSW	18.9 +- 1.2	2
213.76 - 236.25 SW	17.2 +- 1.8	2
236.26 - 258.75 WSW	19.8 +- 3.3	2
258.76 - 281.25 W	17.2 +- 1.0	2
281.26 - 303.75 WNW	19.6 +- 2.2	2
303.76 - 326.25 NW	14.4 +- 0.0	1
326.26 - 348.75 NNW	14.9 +- 0.0	1

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	15.4 +- 2.2	12
2 - 5	19.0 +- 1.5	7
> 5	21.2 +- 0.0	1
Upwind Control	17.0 +- 1.7	2

NRC TLD DOSES FOR DAVIS-BESSE AREA

Miles

Legend

Water

Highways

--- Railroads

--- Roads

Plant..site

DC COOK

TLD Direct Radiation Environmental Monitoring

For the period 970908-980209 155 Days

Field Time: 102 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)	Gross Exposure (mR) +-Rdm; Tot.	Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.	Hist. Range Net Exp Rate +-1 Std Dev
1	54 1.7	21.4 +- 0.6; 3.2	13.4 +- 0.7; 4.2	13.6 +- 0.7
2	67 1.3	26.7 +- 0.8; 4.0	18.1 +- 0.8; 4.7	16.1 +- 2.1
3	89 1.1	19.5 +- 0.6; 2.9	11.7 +- 0.6; 4.0	12.5 +- 0.9
4	58 0.7	19.6 +- 0.6; 2.9	11.8 +- 0.6; 4.0	12.5 +- 0.7
5	19 2.3	21.0 +- 0.6; 3.2	13.1 +- 0.7; 4.1	13.5 +- 0.7
6	111 1.6	23.1 +- 0.7; 3.5	14.9 +- 0.7; 4.3	13.5 +- 0.9
7	135 1.5	21.1 +- 0.6; 3.2	13.1 +- 0.7; 4.2	12.9 +- 0.9
8	158 1.4	25.8 +- 0.8; 3.9	17.3 +- 0.8; 4.6	15.4 +- 2.4
9	171 1.9	21.5 +- 0.6; 3.2	13.5 +- 0.7; 4.2	12.8 +- 0.8
10	199 1.5	20.9 +- 0.6; 3.1	13.0 +- 0.7; 4.1	13.1 +- 0.7
11	195 3.9	Missing Dosimeter	No Net Data	13.0 +- 0.8
12	200 6.6	20.9 +- 0.6; 3.1	12.9 +- 0.7; 4.1	13.6 +- 1.1
13	179 3.9	25.0 +- 0.7; 3.7	16.5 +- 0.8; 4.5	16.0 +- 1.1
14	151 4.4	24.1 +- 0.7; 3.6	15.8 +- 0.7; 4.4	17.0 +- 1.1
15	130 4.6	25.6 +- 0.8; 3.8	17.0 +- 0.8; 4.6	17.3 +- 1.0
16	110 3.7	24.0 +- 0.7; 3.6	15.6 +- 0.7; 4.4	15.0 +- 1.1
17	88 3.6	22.1 +- 0.7; 3.3	14.0 +- 0.7; 4.2	14.0 +- 0.8
18	67 3.8	22.7 +- 0.7; 3.4	14.5 +- 0.7; 4.3	14.2 +- 1.5
19	24 3.8	20.3 +- 0.6; 3.0	12.4 +- 0.7; 4.1	12.8 +- 1.1
20	43 3.3	22.9 +- 0.7; 3.4	14.7 +- 0.7; 4.3	15.6 +- 2.4
21	26 9.9	Missing Dosimeter	No Net Data	17.1 +- 3.2
22	121 18.0	22.5 +- 0.7; 3.4	14.4 +- 0.7; 4.3	14.0 +- 0.8
23	121 18.0	22.7 +- 0.7; 3.4	14.5 +- 0.7; 4.3	14.4 +- 1.0
24	121 18.0	22.4 +- 0.7; 3.4	14.3 +- 0.7; 4.3	15.4 +- 2.0

Transit Dose = 6.2 +- 0.4; 3.5

DC COOK

For the period 970908-980209

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	No Data +- No Data	0
11.26 - 33.75 NNE	12.7 +- 0.5	2
33.76 - 56.25 NE	14.0 +- 0.9	2
56.26 - 78.75 ENE	14.8 +- 3.1	3
78.76 - 101.25 E	12.8 +- 1.6	2
101.26 - 123.75 ESE	15.3 +- 0.5	2
123.76 - 146.25 SE	15.1 +- 2.8	2
146.26 - 168.75 SSE	16.5 +- 1.1	2
168.76 - 191.25 S	15.0 +- 2.2	2
191.26 - 213.75 SSW	12.9 +- 0.0	2
213.76 - 236.25 SW	No Data +- No Data	0
236.26 - 258.75 WSW	No Data +- No Data	0
258.76 - 281.25 W	No Data +- No Data	0
281.26 - 303.75 WNW	No Data +- No Data	0
303.76 - 326.25 NW	No Data +- No Data	0
326.26 - 348.75 NNW	No Data +- No Data	0

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	14.1 +- 2.3	9
2 - 5	14.8 +- 1.6	9
> 5	12.9 +- 0.0	1
Upwind Control	14.4 +- 0.1	3

NRC TLD DOSES FOR D.C. COOK AREA

DIABLO CANYON

TLD Direct Radiation Environmental Monitoring

For the period 970908-980209 155 Days

Field Time: 89 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)	Gross Exposure (mR) +-Rdm; Tot.	Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.	Hist. Range Net Exp Rate +-1 Std Dev
1	132 0.9	31.3 +- 0.9; 4.7	23.7 +- 1.1; 5.8	23.2 +- 1.2
2	119 3.9	29.0 +- 0.9; 4.3	21.4 +- 1.0; 5.5	21.1 +- 1.1
3	107 7.2	24.9 +- 0.7; 3.7	17.2 +- 0.9; 5.0	19.4 +- 1.2
4	111 10.3	26.0 +- 0.8; 3.9	18.4 +- 0.9; 5.1	18.5 +- 1.0
5	115 13.9	26.3 +- 0.8; 3.9	18.7 +- 0.9; 5.2	19.6 +- 1.5
6	68 9.4	25.2 +- 0.8; 3.8	17.6 +- 0.9; 5.1	18.1 +- 0.8
7	359 11.1	24.7 +- 0.7; 3.7	17.1 +- 0.9; 5.0	16.2 +- 1.9
8	359 6.6	20.7 +- 0.6; 3.1	13.0 +- 0.8; 4.6	14.2 +- 1.4
9	339 4.8	23.4 +- 0.7; 3.5	15.7 +- 0.8; 4.9	13.4 +- 0.9
10	327 3.6	21.1 +- 0.6; 3.2	13.5 +- 0.8; 4.6	13.6 +- 1.2
11	325 1.2	21.8 +- 0.7; 3.3	14.2 +- 0.8; 4.7	14.3 +- 1.3
12	36 20.7	29.5 +- 0.9; 4.4	21.9 +- 1.0; 5.6	21.2 +- 1.1
13	36 20.7	29.2 +- 0.9; 4.4	21.6 +- 1.0; 5.5	20.9 +- 1.5
14	36 20.7	30.8 +- 0.9; 4.6	23.2 +- 1.0; 5.7	21.5 +- 1.4

Transit Dose = 7.8 +- 0.5; 3.3

DIABLO CANYON
For the period 970908-980209

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	15.1 +- 2.8	2
11.26 - 33.75 NNE	No Data +- No Data	0
33.76 - 56.25 NE	No Data +- No Data	0
56.26 - 78.75 ENE	17.6 +- 0.0	1
78.76 - 101.25 E	No Data +- No Data	0
101.26 - 123.75 ESE	18.9 +- 1.8	4
123.76 - 146.25 SE	23.7 +- 0.0	1
146.26 - 168.75 SSE	No Data +- No Data	0
168.76 - 191.25 S	No Data +- No Data	0
191.26 - 213.75 SSW	No Data +- No Data	0
213.76 - 236.25 SW	No Data +- No Data	0
236.26 - 258.75 WSW	No Data +- No Data	0
258.76 - 281.25 W	No Data +- No Data	0
281.26 - 303.75 WNW	No Data +- No Data	0
303.76 - 326.25 NW	14.2 +- 0.0	1
326.26 - 348.75 NNW	14.6 +- 1.6	2

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	19.0 +- 6.8	2
2 - 5	16.9 +- 4.1	3
> 5	17.0 +- 2.0	6
Upwind Control	22.3 +- 0.9	3

NRC TLD DOSES FOR DIABLO CANYON AREA

Miles

Legend

Water

Highways

Railroads

Roads

Plant site

DRESDEN

TLD Direct Radiation Environmental Monitoring

For the period 970909-980210 155 Days

Field Time: 101 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)	Gross Exposure (mR) +-Rdm; Tot.	Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.	Hist. Range Net Exp Rate +-1 Std Dev
1	70 4.2	24.2 +- 0.7; 3.6	16.4 +- 0.7; 4.4	17.2 +- 1.7
2	76 3.9	21.8 +- 0.7; 3.3	14.3 +- 0.7; 4.2	15.9 +- 2.4
3	108 3.2	25.7 +- 0.8; 3.8	17.8 +- 0.8; 4.6	17.1 +- 1.5
4	142 1.3	22.1 +- 0.7; 3.3	14.6 +- 0.7; 4.2	14.5 +- 1.5
5	115 1.5	22.9 +- 0.7; 3.4	15.4 +- 0.7; 4.3	14.3 +- 1.6
6	180 1.9	25.7 +- 0.8; 3.9	17.8 +- 0.8; 4.6	17.3 +- 1.9
7	179 0.5	24.1 +- 0.7; 3.6	16.4 +- 0.7; 4.4	16.5 +- 1.5
8	180 0.7	22.6 +- 0.7; 3.4	15.0 +- 0.7; 4.3	14.3 +- 1.3
9	253 0.5	25.7 +- 0.8; 3.9	17.8 +- 0.8; 4.6	18.0 +- 1.5
10	254 1.3	30.3 +- 0.9; 4.5	21.9 +- 0.9; 5.1	24.3 +- 3.6
11	250 1.5	22.8 +- 0.7; 3.4	15.2 +- 0.7; 4.3	14.9 +- 2.2
12	263 2.1	27.0 +- 0.8; 4.1	19.0 +- 0.8; 4.7	17.9 +- 1.3
13	180 4.0	Damaged Dosimeter	No Net Data	13.8 +- 1.4
14	158 4.8	22.8 +- 0.7; 3.4	15.2 +- 0.7; 4.3	14.9 +- 1.5
15	137 4.2	20.6 +- 0.6; 3.1	13.3 +- 0.7; 4.1	14.8 +- 2.1
16	134 8.4	21.9 +- 0.7; 3.3	14.4 +- 0.7; 4.2	14.5 +- 1.1
17	189 7.4	24.5 +- 0.7; 3.7	16.7 +- 0.8; 4.5	15.8 +- 1.5
18	203 4.1	19.0 +- 0.6; 2.8	11.8 +- 0.6; 4.0	13.2 +- 2.4
19	231 4.0	24.6 +- 0.7; 3.7	16.8 +- 0.8; 4.5	18.1 +- 2.3
20	244 6.4	23.7 +- 0.7; 3.6	16.1 +- 0.7; 4.4	16.1 +- 1.8
21	258 8.6	24.5 +- 0.7; 3.7	16.8 +- 0.8; 4.5	16.8 +- 1.5
22	269 4.4	19.8 +- 0.6; 3.0	12.6 +- 0.6; 4.0	14.5 +- 1.5
23	295 3.3	22.7 +- 0.7; 3.4	15.1 +- 0.7; 4.3	15.4 +- 1.4
24	311 3.9	24.2 +- 0.7; 3.6	16.5 +- 0.7; 4.4	16.4 +- 1.7
25	340 4.7	27.3 +- 0.8; 4.1	19.2 +- 0.8; 4.7	18.9 +- 2.1
26	7 4.4	23.4 +- 0.7; 3.5	15.7 +- 0.7; 4.4	15.6 +- 1.7
27	355 2.0	27.0 +- 0.8; 4.0	18.9 +- 0.8; 4.7	20.3 +- 1.7
28	327 1.7	28.2 +- 0.8; 4.2	20.0 +- 0.8; 4.8	20.9 +- 1.7
29	318 1.4	24.2 +- 0.7; 3.6	16.5 +- 0.7; 4.4	18.0 +- 2.0
30	295 2.0	21.6 +- 0.6; 3.2	14.1 +- 0.7; 4.2	15.0 +- 2.4
31	30 1.5	27.7 +- 0.8; 4.2	19.6 +- 0.8; 4.8	19.5 +- 2.1
32	48 1.9	29.2 +- 0.9; 4.4	21.0 +- 0.9; 4.9	20.7 +- 2.0
33	76 1.4	26.1 +- 0.8; 3.9	18.2 +- 0.8; 4.6	18.9 +- 2.2
34	90 1.4	24.7 +- 0.7; 3.7	16.9 +- 0.8; 4.5	17.6 +- 2.4
35	26 4.5	25.3 +- 0.8; 3.8	17.4 +- 0.8; 4.5	17.4 +- 1.8
36	42 3.6	24.1 +- 0.7; 3.6	16.4 +- 0.7; 4.4	15.9 +- 2.0
37	52 11.5	24.2 +- 0.7; 3.6	16.5 +- 0.7; 4.4	16.7 +- 2.4
38	274 21.5	24.7 +- 0.7; 3.7	17.0 +- 0.8; 4.5	17.7 +- 2.4
39	274 21.5	24.8 +- 0.7; 3.7	17.0 +- 0.8; 4.5	17.6 +- 2.0
40	275 21.5	27.5 +- 0.8; 4.1	19.4 +- 0.8; 4.8	19.0 +- 2.6

Transit Dose = 5.7 +- 0.4; 3.4

DRESDEN

For the period 970909-980210

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	17.3 +- 2.3	2
11.26 - 33.75 NNE	18.5 +- 1.5	2
33.76 - 56.25 NE	17.9 +- 2.6	3
56.26 - 78.75 ENE	16.3 +- 1.9	3
78.76 - 101.25 E	16.9 +- 0.0	1
101.26 - 123.75 ESE	16.6 +- 1.7	2
123.76 - 146.25 SE	14.1 +- 0.7	3
146.26 - 168.75 SSE	15.2 +- 0.0	1
168.76 - 191.25 S	16.5 +- 1.1	4
191.26 - 213.75 SSW	11.8 +- 0.0	1
213.76 - 236.25 SW	16.8 +- 0.0	1
236.26 - 258.75 WSW	17.5 +- 2.6	5
258.76 - 281.25 W	15.8 +- 4.5	2
281.26 - 303.75 WNW	14.6 +- 0.7	2
303.76 - 326.25 NW	16.5 +- 0.0	2
326.26 - 348.75 NNW	19.6 +- 0.6	2

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	17.5 +- 2.4	16
2 - 5	15.8 +- 2.2	15
> 5	16.1 +- 1.0	5
Upwind Control	17.8 +- 1.4	3

NRC TLD DOSES FOR DRESDEN AREA

Miles

Legend

Water

Railroads

Plant..site

Highways

Roads

DUANE ARNOLD

TLD Direct Radiation Environmental Monitoring

For the period 970909-980113 127 Days

Field Time: 93 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)		Gross Exposure (mR) +-Rdm; Tot.		Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.		Hist. Range Net Exp Rate +-1 Std Dev	
1	163	9.7	Missing Dosimeter		No Net Data		16.5 +- 1.5	
2	170	6.2	18.9 +- 0.6; 2.8		18.0 +- 0.6; 3.8		18.6 +- 1.3	
3	180	3.5	15.6 +- 0.5; 2.3		14.8 +- 0.5; 3.5		15.4 +- 1.1	
4	216	2.9	20.2 +- 0.6; 3.0		19.2 +- 0.6; 4.0		18.9 +- 1.5	
5	201	2.5	16.3 +- 0.5; 2.4		15.4 +- 0.5; 3.6		15.4 +- 1.3	
6	213	1.0	17.8 +- 0.5; 2.7		16.9 +- 0.6; 3.7		17.2 +- 1.5	
7	248	1.0	20.2 +- 0.6; 3.0		19.2 +- 0.6; 4.0		19.0 +- 1.5	
8	279	1.0	19.8 +- 0.6; 3.0		18.8 +- 0.6; 3.9		18.7 +- 1.5	
9	298	1.0	22.5 +- 0.7; 3.4		21.4 +- 0.7; 4.2		19.8 +- 1.7	
10	320	1.5	19.7 +- 0.6; 3.0		18.7 +- 0.6; 3.9		18.9 +- 1.7	
11	343	1.0	20.3 +- 0.6; 3.0		19.3 +- 0.6; 4.0		19.5 +- 1.6	
12	359	1.2	20.2 +- 0.6; 3.0		19.2 +- 0.6; 4.0		18.2 +- 1.5	
13	237	0.5	19.0 +- 0.6; 2.9		18.1 +- 0.6; 3.8		17.6 +- 1.6	
14	259	3.9	19.8 +- 0.6; 3.0		18.8 +- 0.6; 3.9		18.0 +- 1.8	
15	272	5.0	15.1 +- 0.5; 2.3		14.3 +- 0.5; 3.4		15.1 +- 1.1	
16	285	5.0	16.4 +- 0.5; 2.5		15.5 +- 0.5; 3.6		16.7 +- 1.3	
17	308	4.5	18.4 +- 0.6; 2.8		17.5 +- 0.6; 3.8		18.7 +- 1.6	
18	340	4.5	14.4 +- 0.4; 2.2		13.6 +- 0.5; 3.4		15.3 +- 1.6	
19	291	15.0	Missing Dosimeter		No Net Data		17.3 +- 1.4	
20	291	15.0	Damaged Dosimeter		No Net Data		17.9 +- 1.5	
21	291	15.0	18.2 +- 0.5; 2.7		17.3 +- 0.6; 3.7		16.9 +- 1.4	
22	358	6.1	16.9 +- 0.5; 2.5		16.0 +- 0.5; 3.6		16.1 +- 1.3	
23	7	2.9	16.4 +- 0.5; 2.5		15.5 +- 0.5; 3.6		15.5 +- 1.3	
24	28	3.0	20.3 +- 0.6; 3.0		19.3 +- 0.6; 4.0		19.0 +- 1.7	
25	39	3.5	18.3 +- 0.6; 2.8		17.4 +- 0.6; 3.8		17.5 +- 1.3	
26	64	3.8	Missing Dosimeter		No Net Data		18.0 +- 1.3	
27	50	1.9	16.6 +- 0.5; 2.5		15.7 +- 0.5; 3.6		15.8 +- 1.3	
28	72	2.3	18.1 +- 0.5; 2.7		17.2 +- 0.6; 3.7		17.5 +- 1.3	
29	91	3.0	16.0 +- 0.5; 2.4		15.1 +- 0.5; 3.5		15.9 +- 1.2	
30	93	1.8	19.8 +- 0.6; 3.0		18.9 +- 0.6; 3.9		19.3 +- 1.3	
31	113	2.0	20.0 +- 0.6; 3.0		19.0 +- 0.6; 3.9		19.3 +- 1.4	
32	141	1.6	17.1 +- 0.5; 2.6		16.2 +- 0.5; 3.6		15.6 +- 1.4	
33	153	1.5	19.0 +- 0.6; 2.9		18.1 +- 0.6; 3.8		18.2 +- 1.6	
34	177	1.2	16.5 +- 0.5; 2.5		15.6 +- 0.5; 3.6		15.4 +- 1.6	
35	153	4.2	15.6 +- 0.5; 2.3		14.8 +- 0.5; 3.5		15.2 +- 1.5	
36	135	4.1	17.6 +- 0.5; 2.6		16.7 +- 0.6; 3.7		16.5 +- 1.3	
37	111	4.6	20.3 +- 0.6; 3.0		19.3 +- 0.6; 4.0		18.8 +- 1.5	
38	123	5.1	17.5 +- 0.5; 2.6		16.6 +- 0.6; 3.7		18.8 +- 1.3	
39	132	7.0	19.9 +- 0.6; 3.0		19.0 +- 0.6; 3.9		16.0 +- 1.3	
40	139	7.6	18.1 +- 0.5; 2.7		17.2 +- 0.6; 3.7		17.1 +- 1.2	

Transit Dose = 0.3 +- 0.2; 2.7

DUANE ARNOLD

For the period 970909-980113

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	16.9 +- 2.0	3
11.26 - 33.75 NNE	19.3 +- 0.0	1
33.76 - 56.25 NE	16.6 +- 1.2	2
56.26 - 78.75 ENE	17.2 +- 0.0	1
78.76 - 101.25 E	17.0 +- 2.6	2
101.26 - 123.75 ESE	18.3 +- 1.5	3
123.76 - 146.25 SE	17.3 +- 1.2	4
146.26 - 168.75 SSE	16.4 +- 2.3	2
168.76 - 191.25 S	16.1 +- 1.7	3
191.26 - 213.75 SSW	16.2 +- 1.1	2
213.76 - 236.25 SW	19.2 +- 0.0	1
236.26 - 258.75 WSW	18.6 +- 0.8	2
258.76 - 281.25 W	17.3 +- 2.6	3
281.26 - 303.75 WNW	18.5 +- 4.2	2
303.76 - 326.25 NW	18.1 +- 0.9	2
326.26 - 348.75 NNW	16.5 +- 4.1	2

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	18.2 +- 1.6	14
2 - 5	16.5 +- 1.9	16
> 5	17.3 +- 1.2	5
Upwind Control	17.3 +- 0.0	1

NRC TLD DOSES FOR DUANE ARNOLD AREA

Miles

Legend

Water
Highways

Railroads
Roads

Plant site

FARLEY

TLD Direct Radiation Environmental Monitoring

For the period 970909-980126 140 Days

Field Time: 98 Days

NRC Sta	Location		Gross			Net Exposure Rate			Hist. Range	
	Azimuth/Dist	(Deg)/(Mi)	Exposure (mR)			(mR/Std. Qtr.)			Net Exp Rate	+1 Std Dev
			+-Rdm; Tot.			+-Rdm; Tot.			+-1 Std Dev	
1	268	15.0	17.9	+-	0.5; 2.7	14.4	+-	0.6; 3.7	13.8	+- 2.4
2	252	7.8	20.3	+-	0.6; 3.0	16.6	+-	0.6; 3.9	14.1	+- 2.3
3	217	6.1	21.4	+-	0.6; 3.2	17.6	+-	0.7; 4.0	15.6	+- 2.1
4	155	5.7	24.8	+-	0.7; 3.7	20.8	+-	0.7; 4.4	19.0	+- 2.1
5	170	5.1	19.9	+-	0.6; 3.0	16.2	+-	0.6; 3.9	15.5	+- 2.0
6	197	4.5	19.1	+-	0.6; 2.9	15.5	+-	0.6; 3.8	14.5	+- 2.0
7	191	2.4	22.1	+-	0.7; 3.3	18.3	+-	0.7; 4.1	17.6	+- 2.5
8	200	1.8	20.9	+-	0.6; 3.1	17.2	+-	0.6; 4.0	15.6	+- 2.0
9	220	1.2	19.2	+-	0.6; 2.9	15.7	+-	0.6; 3.8	14.0	+- 2.1
10	235	0.9	22.3	+-	0.7; 3.4	18.5	+-	0.7; 4.1	16.3	+- 2.0
11	300	0.9	22.2	+-	0.7; 3.3	18.4	+-	0.7; 4.1	16.5	+- 2.2
12	319	1.1	20.7	+-	0.6; 3.1	17.0	+-	0.6; 4.0	16.3	+- 2.3
13	338	1.3	19.5	+-	0.6; 2.9	15.9	+-	0.6; 3.9	14.5	+- 2.0
14	6	1.2	20.7	+-	0.6; 3.1	17.0	+-	0.6; 4.0	14.9	+- 2.2
15	16	1.3	24.3	+-	0.7; 3.6	20.3	+-	0.7; 4.3	20.1	+- 2.4
16	264	1.6	20.2	+-	0.6; 3.0	16.6	+-	0.6; 3.9	14.9	+- 2.0
17	253	3.5	23.0	+-	0.7; 3.4	19.1	+-	0.7; 4.2	17.1	+- 2.1
18	233	3.2	20.5	+-	0.6; 3.1	16.8	+-	0.6; 4.0	15.2	+- 2.0
19	267	4.5	21.6	+-	0.6; 3.2	17.8	+-	0.7; 4.1	16.3	+- 2.2
20	295	3.8	21.6	+-	0.6; 3.2	17.8	+-	0.7; 4.1	15.7	+- 2.2
21	315	4.6	20.0	+-	0.6; 3.0	16.4	+-	0.6; 3.9	14.5	+- 2.2
22	332	4.3	19.9	+-	0.6; 3.0	16.3	+-	0.6; 3.9	14.5	+- 2.0
23	251	4.8	19.9	+-	0.6; 3.0	16.3	+-	0.6; 3.9	14.1	+- 2.1
24	32	5.3	21.8	+-	0.7; 3.3	18.0	+-	0.7; 4.1	16.5	+- 2.0
25	54	6.2	20.3	+-	0.6; 3.0	16.7	+-	0.6; 3.9	14.3	+- 2.2
26	64	5.5	21.8	+-	0.7; 3.3	18.0	+-	0.7; 4.1	16.1	+- 2.1
27	88	4.7	21.2	+-	0.6; 3.2	17.4	+-	0.6; 4.0	15.6	+- 2.0
28	124	5.1	23.2	+-	0.7; 3.5	19.3	+-	0.7; 4.2	16.4	+- 2.0
29	153	4.1	20.9	+-	0.6; 3.1	17.2	+-	0.6; 4.0	15.6	+- 2.0
30	142	3.6	19.7	+-	0.6; 3.0	16.1	+-	0.6; 3.9	14.3	+- 2.0
31	130	3.0	18.8	+-	0.6; 2.8	15.3	+-	0.6; 3.8	13.4	+- 2.2
32	110	2.8	19.9	+-	0.6; 3.0	16.3	+-	0.6; 3.9	14.3	+- 2.2
33	78	2.6	20.7	+-	0.6; 3.1	17.0	+-	0.6; 4.0	14.2	+- 2.3
34	58	2.2	18.0	+-	0.5; 2.7	14.5	+-	0.6; 3.7	13.0	+- 2.0
35	34	2.4	25.2	+-	0.8; 3.8	21.1	+-	0.7; 4.4	19.3	+- 2.1
36	19	2.7	22.3	+-	0.7; 3.3	18.5	+-	0.7; 4.1	16.8	+- 2.0
37	284	10.0	21.8	+-	0.7; 3.3	18.1	+-	0.7; 4.1	15.5	+- 2.1
38	289	15.0	24.6	+-	0.7; 3.7	20.6	+-	0.7; 4.4	15.0	+- 3.0
39	293	15.0	19.0	+-	0.6; 2.9	15.5	+-	0.6; 3.8	16.6	+- 1.9

Transit Dose = 2.2 +- 0.3; 3.0

FARLEY

For the period 970909-980126

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	17.0 +- 0.0	1
11.26 - 33.75 NNE	18.9 +- 1.2	3
33.76 - 56.25 NE	18.9 +- 3.1	2
56.26 - 78.75 ENE	16.5 +- 1.8	3
78.76 - 101.25 E	17.4 +- 0.0	1
101.26 - 123.75 ESE	16.3 +- 0.0	1
123.76 - 146.25 SE	16.9 +- 2.1	3
146.26 - 168.75 SSE	19.0 +- 2.5	2
168.76 - 191.25 S	17.3 +- 1.4	2
191.26 - 213.75 SSW	16.4 +- 1.2	2
213.76 - 236.25 SW	17.2 +- 1.2	4
236.26 - 258.75 WSW	17.3 +- 1.5	3
258.76 - 281.25 W	16.3 +- 1.7	3
281.26 - 303.75 WNW	18.1 +- 0.4	2
303.76 - 326.25 NW	16.7 +- 0.4	2
326.26 - 348.75 NNW	16.1 +- 0.3	2

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	17.4 +- 1.5	9
2 - 5	17.1 +- 1.5	18
> 5	17.5 +- 1.8	9
Upwind Control	18.1 +- 2.6	3

NRC TLD DOSES FOR FARLEY AREA

Miles

Legend

— Highways

- - - Railroads

- - - Roads

★ Plant..site

FERMI

TLD Direct Radiation Environmental Monitoring

For the period 970909-980209 154 Days

Field Time: 105 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)		Gross Exposure (mR) +-Rdm; Tot.			Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.			Hist. Range Net Exp Rate +-1 Std Dev	
1	38	2.1	19.7	+-	0.6; 2.9	11.4	+-	0.6; 4.0	12.0	+- 2.0
2	22	2.3	22.6	+-	0.7; 3.4	13.9	+-	0.7; 4.2	14.0	+- 1.2
3	350	1.8	31.7	+-	1.0; 4.8	21.7	+-	0.9; 5.1	19.7	+- 1.6
4	345	1.9	24.9	+-	0.7; 3.7	15.9	+-	0.7; 4.4	15.4	+- 1.5
5	346	1.4	24.4	+-	0.7; 3.7	15.5	+-	0.7; 4.4	16.2	+- 1.3
6	310	1.3	26.9	+-	0.8; 4.0	17.6	+-	0.8; 4.6	16.4	+- 1.7
7	298	1.4	26.2	+-	0.8; 3.9	17.0	+-	0.8; 4.6	16.3	+- 1.5
8	277	1.6	26.7	+-	0.8; 4.0	17.4	+-	0.8; 4.6	16.5	+- 0.9
9	238	1.0	23.2	+-	0.7; 3.5	14.4	+-	0.7; 4.3	14.2	+- 1.8
10	225	1.5	23.5	+-	0.7; 3.5	14.7	+-	0.7; 4.3	13.7	+- 1.0
11	193	0.8	25.3	+-	0.8; 3.8	16.2	+-	0.8; 4.5	15.9	+- 1.0
12	183	0.9	26.0	+-	0.8; 3.9	16.9	+-	0.8; 4.5	16.2	+- 1.0
13	175	0.8	25.2	+-	0.8; 3.8	16.2	+-	0.8; 4.5	15.8	+- 0.8
14	260	1.7	28.0	+-	0.8; 4.2	18.6	+-	0.8; 4.7	18.3	+- 1.3
15	245	2.5	23.0	+-	0.7; 3.5	14.3	+-	0.7; 4.3	14.8	+- 1.0
16	236	5.0	25.9	+-	0.8; 3.9	16.8	+-	0.8; 4.5	18.4	+- 1.0
17	225	6.8	20.6	+-	0.6; 3.1	12.2	+-	0.7; 4.1	13.0	+- 1.2
18	250	7.8	24.1	+-	0.7; 3.6	15.2	+-	0.7; 4.4	13.0	+- 1.2
19	277	6.0	22.7	+-	0.7; 3.4	14.0	+-	0.7; 4.2	13.3	+- 1.1
20	297	6.0	24.7	+-	0.7; 3.7	15.7	+-	0.7; 4.4	15.1	+- 1.2
21	320	3.8	22.3	+-	0.7; 3.3	13.7	+-	0.7; 4.2	15.4	+- 1.2
22	340	4.7	25.9	+-	0.8; 3.9	16.7	+-	0.8; 4.5	17.0	+- 1.0
23	358	4.3	26.3	+-	0.8; 3.9	17.1	+-	0.8; 4.6	17.5	+- 1.5
24	23	5.0	28.5	+-	0.9; 4.3	19.0	+-	0.8; 4.8	18.5	+- 1.0
25	25	7.0	22.3	+-	0.7; 3.3	13.7	+-	0.7; 4.2	13.3	+- 1.1
26	0	7.0	22.9	+-	0.7; 3.4	14.2	+-	0.7; 4.3	13.9	+- 1.1
27	342	8.0	24.7	+-	0.7; 3.7	15.7	+-	0.7; 4.4	15.6	+- 1.0
28	320	9.5	23.5	+-	0.7; 3.5	14.7	+-	0.7; 4.3	14.3	+- 0.8
29	290	11.0	25.5	+-	0.8; 3.8	16.4	+-	0.8; 4.5	16.5	+- 1.5
30	270	11.0	29.4	+-	0.9; 4.4	19.8	+-	0.8; 4.9	17.7	+- 1.6
31	245	10.0	23.8	+-	0.7; 3.6	14.9	+-	0.7; 4.3	14.7	+- 1.2
32	220	11.0	24.0	+-	0.7; 3.6	15.1	+-	0.7; 4.4	15.4	+- 1.1
33	270	15.0	24.0	+-	0.7; 3.6	15.1	+-	0.7; 4.4	14.1	+- 1.1
34	270	15.0	23.7	+-	0.7; 3.6	14.9	+-	0.7; 4.3	14.3	+- 1.0
35	290	16.0	24.7	+-	0.7; 3.7	15.7	+-	0.7; 4.4	15.5	+- 0.9
36	350	0.8	21.7	+-	0.6; 3.2	13.1	+-	0.7; 4.1	13.8	+- 2.2
37	330	0.7	24.5	+-	0.7; 3.7	15.5	+-	0.7; 4.4	15.0	+- 0.9
38	310	0.7	24.0	+-	0.7; 3.6	15.1	+-	0.7; 4.4	15.2	+- 1.9
39	23	10.0	22.0	+-	0.7; 3.3	13.4	+-	0.7; 4.2	16.2	+- 2.1
40	0	9.0	29.7	+-	0.9; 4.4	20.0	+-	0.9; 4.9	17.5	+- 1.5
41	348	9.0	24.8	+-	0.7; 3.7	15.8	+-	0.7; 4.4	13.6	+- 0.9

Transit Dose = 6.4 +- 0.5; 3.6

FERMI

For the period 970909-980209

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	17.2 +- 3.7	5
11.26 - 33.75 NNE	15.0 +- 2.7	4
33.76 - 56.25 NE	11.4 +- 0.0	1
56.26 - 78.75 ENE	No Data +- No Data	0
78.76 - 101.25 E	No Data +- No Data	0
101.26 - 123.75 ESE	No Data +- No Data	0
123.76 - 146.25 SE	No Data +- No Data	0
146.26 - 168.75 SSE	No Data +- No Data	0
168.76 - 191.25 S	16.5 +- 0.5	2
191.26 - 213.75 SSW	16.2 +- 0.0	1
213.76 - 236.25 SW	14.7 +- 1.9	4
236.26 - 258.75 WSW	14.7 +- 0.4	4
258.76 - 281.25 W	17.4 +- 2.5	4
281.26 - 303.75 WNW	16.4 +- 0.6	3
303.76 - 326.25 NW	15.3 +- 1.7	4
326.26 - 348.75 NNW	15.9 +- 0.4	6

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	16.4 +- 2.0	15
2 - 5	15.3 +- 2.4	8
> 5	15.4 +- 2.1	15
Upwind Control	15.2 +- 0.4	3

NRC TLD DOSES FOR FERMI AREA

Miles

Legend

Water
Highways

Railroads
Roads

Plant site

FITZPATRICK/ NINE MI

TLD Direct Radiation Environmental Monitoring

For the period 970911-980205 148 Days

Field Time: 105 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)		Gross Exposure (mR) +-Rdm; Tot.			Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.			Hist. Range Net Exp Rate +-1 Std Dev	
1	230	6.9	22.0	+-	0.7; 3.3	15.6	+-	0.7; 4.0	14.5	+- 1.1
2	184	14.0	22.6	+-	0.7; 3.4	16.1	+-	0.7; 4.1	15.5	+- 1.1
3	122	8.4	20.0	+-	0.6; 3.0	13.9	+-	0.6; 3.9	13.9	+- 1.3
4	76	11.0	20.6	+-	0.6; 3.1	14.4	+-	0.6; 3.9	14.8	+- 1.2
5	91	6.8	21.2	+-	0.6; 3.2	14.9	+-	0.6; 4.0	15.1	+- 1.0
6	112	4.3	20.2	+-	0.6; 3.0	14.1	+-	0.6; 3.9	14.8	+- 1.1
7	138	4.3	20.7	+-	0.6; 3.1	14.5	+-	0.6; 3.9	14.7	+- 1.0
8	152	3.6	19.5	+-	0.6; 2.9	13.5	+-	0.6; 3.8	14.5	+- 1.4
9	183	3.9	20.3	+-	0.6; 3.0	14.1	+-	0.6; 3.9	15.0	+- 1.0
10	205	4.5	19.6	+-	0.6; 2.9	13.6	+-	0.6; 3.8	13.9	+- 1.2
11	220	4.4	21.9	+-	0.7; 3.3	15.5	+-	0.6; 4.0	15.2	+- 1.1
12	230	6.1	21.7	+-	0.7; 3.3	15.4	+-	0.6; 4.0	15.2	+- 1.0
13	245	1.8	21.2	+-	0.6; 3.2	15.0	+-	0.6; 4.0	14.9	+- 1.0
14	223	1.8	20.4	+-	0.6; 3.1	14.3	+-	0.6; 3.9	14.4	+- 1.2
15	204	2.0	20.0	+-	0.6; 3.0	13.8	+-	0.6; 3.9	14.1	+- 1.2
16	181	1.8	20.5	+-	0.6; 3.1	14.3	+-	0.6; 3.9	14.5	+- 0.9
17	157	1.9	20.1	+-	0.6; 3.0	14.0	+-	0.6; 3.9	14.5	+- 1.2
18	137	1.6	21.5	+-	0.6; 3.2	15.1	+-	0.6; 4.0	14.4	+- 1.0
19	115	1.2	20.4	+-	0.6; 3.1	14.2	+-	0.6; 3.9	14.4	+- 1.3
20	92	1.1	22.3	+-	0.7; 3.3	15.9	+-	0.7; 4.1	15.0	+- 1.3
21	229	20.0	20.9	+-	0.6; 3.1	14.7	+-	0.6; 3.9	14.6	+- 1.1
22	229	20.0	20.9	+-	0.6; 3.1	14.7	+-	0.6; 3.9	14.3	+- 0.9
23	229	20.0	21.5	+-	0.6; 3.2	15.2	+-	0.6; 4.0	14.5	+- 1.0
24	196	8.0	21.1	+-	0.6; 3.2	14.8	+-	0.6; 3.9	14.2	+- 1.6
25	168	7.2	20.2	+-	0.6; 3.0	14.0	+-	0.6; 3.9	14.1	+- 1.1
26	152	0.6	21.9	+-	0.7; 3.3	15.5	+-	0.6; 4.0	15.7	+- 1.0

Transit Dose = 3.8 +- 0.4; 3.4

FITZPATRICK/ NINE MI
For the period 970911-980205

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	No Data +- No Data	0
11.26 - 33.75 NNE	No Data +- No Data	0
33.76 - 56.25 NE	No Data +- No Data	0
56.26 - 78.75 ENE	14.4 +- 0.0	1
78.76 - 101.25 E	15.4 +- 0.7	2
101.26 - 123.75 ESE	14.1 +- 0.2	3
123.76 - 146.25 SE	14.8 +- 0.4	2
146.26 - 168.75 SSE	14.2 +- 0.9	4
168.76 - 191.25 S	14.9 +- 1.1	3
191.26 - 213.75 SSW	14.1 +- 0.6	3
213.76 - 236.25 SW	15.2 +- 0.6	4
236.26 - 258.75 WSW	15.0 +- 0.0	1
258.76 - 281.25 W	No Data +- No Data	0
281.26 - 303.75 WNW	No Data +- No Data	0
303.76 - 326.25 NW	No Data +- No Data	0
326.26 - 348.75 NNW	No Data +- No Data	0

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	14.7 +- 0.7	9
2 - 5	14.2 +- 0.7	6
> 5	14.9 +- 0.8	8
Upwind Control	14.8 +- 0.3	3

NRC TLD DOSES FOR FITZPATRICK & NINE MILE PT AREA

FORT CALHOUN

TLD Direct Radiation Environmental Monitoring

For the period 970908-980210 156 Days

Field Time: 91 Days

NRC Sta	Location		Gross		Net Exposure Rate		Hist. Range	
	Azimuth/Dist (Deg)/(Mi)		Exposure (mR) +-Rdm; Tot.		(mR/Std. Qtr.) +-Rdm; Tot.		Net Exp Rate +-1 Std Dev	
1	358	2.0	28.1 +- 0.8; 4.2		20.2 +- 0.9; 5.3		18.7 +- 1.4	
2	351	4.6	28.4 +- 0.9; 4.3		20.5 +- 1.0; 5.3		19.4 +- 1.5	
3	30	2.5	28.9 +- 0.9; 4.3		21.0 +- 1.0; 5.4		19.3 +- 1.7	
4	27	4.6	29.7 +- 0.9; 4.5		21.8 +- 1.0; 5.5		19.9 +- 1.6	
5	53	1.9	28.0 +- 0.8; 4.2		20.2 +- 0.9; 5.3		19.0 +- 1.7	
6	37	3.9	27.9 +- 0.8; 4.2		20.1 +- 0.9; 5.3		19.8 +- 1.5	
7	76	2.3	30.6 +- 0.9; 4.6		22.7 +- 1.0; 5.6		20.3 +- 1.7	
8	59	5.2	27.7 +- 0.8; 4.2		19.8 +- 0.9; 5.3		18.9 +- 1.7	
9	100	2.3	27.3 +- 0.8; 4.1		19.5 +- 0.9; 5.2		17.6 +- 1.7	
10	88	5.6	27.7 +- 0.8; 4.2		19.9 +- 0.9; 5.3		19.9 +- 1.6	
11	122	2.3	28.6 +- 0.9; 4.3		20.7 +- 1.0; 5.4		19.9 +- 1.8	
12	105	5.7	29.0 +- 0.9; 4.3		21.1 +- 1.0; 5.4		19.3 +- 1.8	
13	145	1.9	29.4 +- 0.9; 4.4		21.5 +- 1.0; 5.5		20.1 +- 1.6	
14	128	5.5	27.9 +- 0.8; 4.2		20.0 +- 0.9; 5.3		19.7 +- 1.5	
15	157	1.9	29.2 +- 0.9; 4.4		21.3 +- 1.0; 5.4		20.8 +- 1.5	
16	150	4.9	28.6 +- 0.9; 4.3		20.7 +- 1.0; 5.4		20.1 +- 1.4	
17	173	0.5	29.0 +- 0.9; 4.3		21.1 +- 1.0; 5.4		19.4 +- 1.8	
18	173	5.3	28.4 +- 0.9; 4.3		20.6 +- 1.0; 5.3		20.6 +- 1.5	
19	212	2.5	30.9 +- 0.9; 4.6		23.0 +- 1.0; 5.6		22.7 +- 1.7	
20	204	5.3	29.7 +- 0.9; 4.5		21.8 +- 1.0; 5.5		21.1 +- 1.5	
21	233	2.0	29.8 +- 0.9; 4.5		22.0 +- 1.0; 5.5		21.1 +- 1.7	
22	224	4.6	29.0 +- 0.9; 4.3		21.1 +- 1.0; 5.4		21.5 +- 1.6	
23	239	0.6	30.2 +- 0.9; 4.5		22.3 +- 1.0; 5.6		20.2 +- 1.9	
24	243	6.9	28.5 +- 0.9; 4.3		20.6 +- 1.0; 5.3		18.2 +- 1.6	
25	269	3.3	29.2 +- 0.9; 4.4		21.4 +- 1.0; 5.4		21.8 +- 1.7	
26	262	5.9	31.1 +- 0.9; 4.7		23.2 +- 1.0; 5.7		22.1 +- 1.5	
27	350	3.0	27.1 +- 0.8; 4.1		19.2 +- 0.9; 5.2		18.1 +- 1.8	
28	292	5.0	28.9 +- 0.9; 4.3		21.1 +- 1.0; 5.4		20.2 +- 1.6	
29	311	2.4	29.1 +- 0.9; 4.4		21.3 +- 1.0; 5.4		20.4 +- 1.6	
30	310	5.5	29.8 +- 0.9; 4.5		21.9 +- 1.0; 5.5		20.9 +- 1.4	
31	340	2.3	27.9 +- 0.8; 4.2		20.1 +- 0.9; 5.3		19.2 +- 1.4	
32	338	5.3	Missing Dosimeter		No Net Data		20.1 +- 1.6	
33	182	0.5	28.9 +- 0.9; 4.3		21.1 +- 1.0; 5.4		20.3 +- 2.0	
35	127	2.2	28.1 +- 0.8; 4.2		20.2 +- 0.9; 5.3		18.8 +- 1.5	
39	150	5.0	28.7 +- 0.9; 4.3		20.9 +- 1.0; 5.4		18.9 +- 1.7	
40	73	9.5	29.2 +- 0.9; 4.4		21.3 +- 1.0; 5.4		20.3 +- 1.8	
43	29	8.0	27.4 +- 0.8; 4.1		19.5 +- 0.9; 5.2		18.5 +- 1.4	
44	65	3.5	25.6 +- 0.8; 3.8		17.8 +- 0.9; 5.0		17.7 +- 1.5	
45	182	4.2	28.9 +- 0.9; 4.3		21.0 +- 1.0; 5.4		20.5 +- 1.5	
47	298	4.5	28.9 +- 0.9; 4.3		21.0 +- 1.0; 5.4		19.3 +- 1.4	
48	13	14.0	28.3 +- 0.8; 4.2		20.4 +- 1.0; 5.3		19.7 +- 1.4	
49	207	18.0	29.3 +- 0.9; 4.4		21.5 +- 1.0; 5.4		20.7 +- 1.8	

Transit Dose = 7.6 +- 0.5; 3.3

FORT CALHOUN
For the period 970908-980210

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	20.0 +- 0.7	3
11.26 - 33.75 NNE	20.8 +- 1.2	3
33.76 - 56.25 NE	20.1 +- 0.1	2
56.26 - 78.75 ENE	20.4 +- 2.1	4
78.76 - 101.25 E	19.7 +- 0.3	2
101.26 - 123.75 ESE	20.9 +- 0.2	2
123.76 - 146.25 SE	20.6 +- 0.8	3
146.26 - 168.75 SSE	21.0 +- 0.3	3
168.76 - 191.25 S	20.9 +- 0.3	4
191.26 - 213.75 SSW	22.4 +- 0.9	2
213.76 - 236.25 SW	21.5 +- 0.6	2
236.26 - 258.75 WSW	21.5 +- 1.2	2
258.76 - 281.25 W	22.3 +- 1.3	2
281.26 - 303.75 WNW	21.0 +- 0.0	2
303.76 - 326.25 NW	21.6 +- 0.5	2
326.26 - 348.75 NNW	20.0 +- 0.0	1

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	21.2 +- 0.8	8
2 - 5	20.7 +- 1.1	20
> 5	20.9 +- 1.1	11
Upwind Control	20.9 +- 0.7	2

NRC TLD DOSES FOR FORT CALHOUN AREA

Miles

Legend

Water
Highways

Railroads
Roads

Plant..site

FORT ST. VRAIN
 TLD Direct Radiation Environmental Monitoring
 For the period 970908-980310 184 Days
 Field Time: 98 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)		Gross Exposure (mR) +-Rdm; Tot.			Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.			Hist. Range Net Exp Rate +-1 Std Dev	
1	8	0.8	49.4	+-	1.5; 7.4	36.4	+-	1.4; 7.6	30.2	+- 2.0
2	2	3.3	51.3	+-	1.5; 7.7	38.2	+-	1.5; 7.9	29.7	+- 2.2
3	29	2.6	50.3	+-	1.5; 7.5	37.2	+-	1.5; 7.7	29.9	+- 1.9
4	17	5.4	49.7	+-	1.5; 7.5	36.7	+-	1.5; 7.7	29.7	+- 1.6
5	54	2.1	49.0	+-	1.5; 7.4	36.0	+-	1.4; 7.6	29.3	+- 2.1
6	48	4.8	50.5	+-	1.5; 7.6	37.4	+-	1.5; 7.7	30.8	+- 1.7
7	76	2.6	50.6	+-	1.5; 7.6	37.5	+-	1.5; 7.8	31.8	+- 2.0
8	58	4.2	51.6	+-	1.5; 7.7	38.4	+-	1.5; 7.9	30.5	+- 1.8
9	100	1.5	49.1	+-	1.5; 7.4	36.1	+-	1.4; 7.6	30.7	+- 1.7
10	87	4.5	47.6	+-	1.4; 7.1	34.8	+-	1.4; 7.4	29.3	+- 1.9
11	118	1.6	51.8	+-	1.6; 7.8	38.6	+-	1.5; 7.9	32.9	+- 1.8
12	104	3.0	50.8	+-	1.5; 7.6	37.6	+-	1.5; 7.8	32.3	+- 1.8
13	143	1.6	51.2	+-	1.5; 7.7	38.1	+-	1.5; 7.8	31.4	+- 2.0
14	128	4.5	48.4	+-	1.5; 7.3	35.4	+-	1.4; 7.5	30.6	+- 1.8
15	168	2.3	49.6	+-	1.5; 7.4	36.6	+-	1.5; 7.6	28.7	+- 2.0
16	148	4.6	48.4	+-	1.5; 7.3	35.5	+-	1.4; 7.5	28.6	+- 1.9
17	182	0.8	52.3	+-	1.6; 7.8	39.1	+-	1.5; 8.0	30.4	+- 2.1
18	175	4.8	47.9	+-	1.4; 7.2	35.0	+-	1.4; 7.4	30.7	+- 2.0
19	210	0.9	50.8	+-	1.5; 7.6	37.7	+-	1.5; 7.8	31.1	+- 1.6
20	200	2.9	48.6	+-	1.5; 7.3	35.7	+-	1.4; 7.5	30.7	+- 2.3
21	234	1.3	49.9	+-	1.5; 7.5	36.9	+-	1.5; 7.7	31.4	+- 2.0
22	216	3.3	49.8	+-	1.5; 7.5	36.7	+-	1.5; 7.7	29.2	+- 1.9
23	254	2.5	49.6	+-	1.5; 7.4	36.6	+-	1.5; 7.6	29.3	+- 2.0
24	244	3.8	49.0	+-	1.5; 7.4	36.0	+-	1.4; 7.6	29.6	+- 2.1
25	278	1.5	46.7	+-	1.4; 7.0	33.9	+-	1.4; 7.3	28.6	+- 1.9
26	263	5.4	49.2	+-	1.5; 7.4	36.2	+-	1.4; 7.6	30.1	+- 2.4
27	297	1.7	47.9	+-	1.4; 7.2	35.0	+-	1.4; 7.4	28.6	+- 1.9
28	284	5.6	48.8	+-	1.5; 7.3	35.9	+-	1.4; 7.5	29.6	+- 1.8
29	317	0.9	47.3	+-	1.4; 7.1	34.5	+-	1.4; 7.4	28.8	+- 1.9
30	305	4.2	43.9	+-	1.3; 6.6	31.3	+-	1.3; 6.9	26.9	+- 1.8
31	338	1.4	48.4	+-	1.5; 7.3	35.5	+-	1.4; 7.5	29.0	+- 2.1
32	330	5.0	45.7	+-	1.4; 6.9	33.0	+-	1.4; 7.2	26.5	+- 2.1
33	267	6.5	47.4	+-	1.4; 7.1	34.6	+-	1.4; 7.4	28.4	+- 2.6
34	130	3.7	45.6	+-	1.4; 6.8	32.9	+-	1.4; 7.2	28.7	+- 2.0
35	270	0.1	47.4	+-	1.4; 7.1	34.5	+-	1.4; 7.4	28.5	+- 1.9
38	345	6.7	52.6	+-	1.6; 7.9	39.3	+-	1.5; 8.0	30.8	+- 1.9
39	10	6.0	46.3	+-	1.4; 6.9	33.6	+-	1.4; 7.2	28.3	+- 2.1
40	63	6.0	46.8	+-	1.4; 7.0	34.0	+-	1.4; 7.3	28.3	+- 2.1
41	165	12.0	53.6	+-	1.6; 8.0	40.2	+-	1.6; 8.1	31.9	+- 1.8
42	248	13.0	52.9	+-	1.6; 7.9	39.6	+-	1.5; 8.1	33.1	+- 2.5
45	198	11.0	49.9	+-	1.5; 7.5	36.9	+-	1.5; 7.7	30.4	+- 2.0
46	39	16.0	47.7	+-	1.4; 7.1	34.8	+-	1.4; 7.4	27.6	+- 1.9
47	357	17.0	44.8	+-	1.3; 6.7	32.1	+-	1.3; 7.1	26.8	+- 1.8
48	171	18.0	49.5	+-	1.5; 7.4	36.5	+-	1.4; 7.6	30.7	+- 2.1
49	360	0.5	50.7	+-	1.5; 7.6	37.6	+-	1.5; 7.8	32.1	+- 2.0

Transit Dose = 9.8 +- 0.5; 3.7

FORT ST. VRAIN

For the period 970908-980310

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	36.1 +- 2.3	3
11.26 - 33.75 NNE	36.9 +- 0.4	2
33.76 - 56.25 NE	36.1 +- 1.3	3
56.26 - 78.75 ENE	36.6 +- 2.3	3
78.76 - 101.25 E	35.4 +- 1.0	2
101.26 - 123.75 ESE	38.1 +- 0.6	2
123.76 - 146.25 SE	35.5 +- 2.6	3
146.26 - 168.75 SSE	37.4 +- 2.5	3
168.76 - 191.25 S	37.0 +- 2.9	2
191.26 - 213.75 SSW	36.7 +- 1.0	3
213.76 - 236.25 SW	36.8 +- 0.1	2
236.26 - 258.75 WSW	37.4 +- 1.9	3
258.76 - 281.25 W	34.8 +- 1.0	4
281.26 - 303.75 WNW	35.4 +- 0.6	2
303.76 - 326.25 NW	32.9 +- 2.2	2
326.26 - 348.75 NNW	35.9 +- 3.2	3

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	36.4 +- 1.7	12
2 - 5	35.9 +- 1.9	19
> 5	36.5 +- 2.3	11
Upwind Control	35.4 +- 2.9	3

NRC TLD DOSES FOR FORT ST. VRAIN AREA

GINNA

TLD Direct Radiation Environmental Monitoring

For the period 970911-980205 148 Days

Field Time: 105 Days

NRC Sta	Location		Gross			Net Exposure Rate			Hist. Range	
	Azimuth/Dist (Deg)/(Mi)		Exposure (mR) +-Rdm; Tot.			(mR/Std. Qtr.) +-Rdm; Tot.			Net Exp Rate +-1 Std Dev	
1	95	1.7	20.1	+-	0.6; 3.0	13.1	+-	0.6; 3.9	14.7	+- 0.9
2	108	1.1	20.7	+-	0.6; 3.1	13.6	+-	0.6; 4.0	14.2	+- 1.1
3	142	1.7	19.8	+-	0.6; 3.0	12.8	+-	0.6; 3.9	14.1	+- 1.0
4	154	1.5	19.6	+-	0.6; 2.9	12.6	+-	0.6; 3.9	14.7	+- 1.1
5	174	1.4	21.0	+-	0.6; 3.2	13.8	+-	0.6; 4.0	15.1	+- 1.3
6	212	1.6	19.9	+-	0.6; 3.0	12.8	+-	0.6; 3.9	13.8	+- 1.1
7	244	0.9	20.0	+-	0.6; 3.0	13.0	+-	0.6; 3.9	13.8	+- 0.9
8	230	0.6	20.7	+-	0.6; 3.1	13.6	+-	0.6; 4.0	14.7	+- 1.6
10	266	1.5	21.7	+-	0.6; 3.2	14.4	+-	0.7; 4.1	14.4	+- 1.1
11	264	4.6	22.6	+-	0.7; 3.4	15.2	+-	0.7; 4.1	15.7	+- 1.1
12	245	3.8	19.0	+-	0.6; 2.8	12.1	+-	0.6; 3.8	14.2	+- 1.1
13	235	4.2	19.4	+-	0.6; 2.9	12.4	+-	0.6; 3.9	13.6	+- 1.2
14	200	3.8	18.6	+-	0.6; 2.8	11.7	+-	0.6; 3.8	13.3	+- 1.3
15	178	3.4	21.4	+-	0.6; 3.2	14.2	+-	0.7; 4.0	14.8	+- 1.3
16	160	3.7	19.0	+-	0.6; 2.9	12.1	+-	0.6; 3.8	13.3	+- 1.3
17	134	3.8	17.7	+-	0.5; 2.6	10.9	+-	0.6; 3.7	13.3	+- 1.5
18	115	4.3	19.7	+-	0.6; 3.0	12.7	+-	0.6; 3.9	14.3	+- 1.5
19	88	4.0	19.4	+-	0.6; 2.9	12.5	+-	0.6; 3.9	13.2	+- 1.3
20	90	6.2	19.4	+-	0.6; 2.9	12.5	+-	0.6; 3.9	13.0	+- 1.1
21	123	7.6	19.3	+-	0.6; 2.9	12.4	+-	0.6; 3.9	12.9	+- 1.3
22	151	11.0	20.0	+-	0.6; 3.0	12.9	+-	0.6; 3.9	13.4	+- 1.1
23	105	12.0	19.7	+-	0.6; 2.9	12.7	+-	0.6; 3.9	13.9	+- 1.2
24	212	14.0	26.2	+-	0.8; 3.9	18.3	+-	0.8; 4.5	18.1	+- 1.0
25	223	13.0	19.9	+-	0.6; 3.0	12.8	+-	0.6; 3.9	13.7	+- 1.4
26	242	16.0	22.4	+-	0.7; 3.4	15.0	+-	0.7; 4.1	15.8	+- 1.0
27	254	14.0	22.6	+-	0.7; 3.4	15.2	+-	0.7; 4.1	15.3	+- 1.3
28	234	6.9	20.7	+-	0.6; 3.1	13.5	+-	0.6; 4.0	14.0	+- 0.9
29	185	0.3	21.8	+-	0.7; 3.3	14.5	+-	0.7; 4.1	15.4	+- 1.0
30	264	15.0	20.2	+-	0.6; 3.0	13.1	+-	0.6; 3.9	13.5	+- 1.2

Transit Dose = 4.9 +- 0.4; 3.4

GINNA

For the period 970911-980205

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	No Data +- No Data	0
11.26 - 33.75 NNE	No Data +- No Data	0
33.76 - 56.25 NE	No Data +- No Data	0
56.26 - 78.75 ENE	No Data +- No Data	0
78.76 - 101.25 E	12.7 +- 0.3	3
101.26 - 123.75 ESE	12.8 +- 0.5	4
123.76 - 146.25 SE	11.9 +- 1.3	2
146.26 - 168.75 SSE	12.6 +- 0.4	3
168.76 - 191.25 S	14.2 +- 0.3	3
191.26 - 213.75 SSW	14.3 +- 3.5	3
213.76 - 236.25 SW	13.1 +- 0.6	4
236.26 - 258.75 WSW	12.5 +- 0.6	2
258.76 - 281.25 W	14.8 +- 0.6	2
281.26 - 303.75 WNW	No Data +- No Data	0
303.76 - 326.25 NW	No Data +- No Data	0
326.26 - 348.75 NNW	No Data +- No Data	0

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	13.4 +- 0.7	10
2 - 5	12.6 +- 1.3	9
> 5	13.6 +- 2.1	7
Upwind Control	14.4 +- 1.2	3

NRC TLD DOSES FOR GINNA AREA

Miles

Legend

Water
Highways

Railroads
Roads

Plant..site

GRAND GULF

TLD Direct Radiation Environmental Monitoring

For the period 970910-980126 139 Days

Field Time: 92 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)		Gross Exposure (mR) +-Rdm; Tot.	Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.	Hist. Range Net Exp Rate +-1 Std Dev
1	337	2.0	18.7 +- 0.6; 2.8	13.8 +- 0.7; 4.1	15.9 +- 1.9
2	351	1.6	20.4 +- 0.6; 3.1	15.4 +- 0.7; 4.2	15.2 +- 1.0
3	20	1.5	21.7 +- 0.7; 3.3	16.7 +- 0.7; 4.4	17.6 +- 1.3
4	51	2.3	Missing Dosimeter	No Net Data	17.0 +- 1.1
5	68	2.7	22.2 +- 0.7; 3.3	17.2 +- 0.7; 4.4	17.9 +- 1.4
6	47	4.1	20.4 +- 0.6; 3.1	15.4 +- 0.7; 4.2	16.0 +- 1.3
7	68	4.9	23.2 +- 0.7; 3.5	18.1 +- 0.8; 4.5	19.1 +- 1.2
8	91	3.2	23.7 +- 0.7; 3.6	18.6 +- 0.8; 4.6	19.1 +- 1.1
9	81	1.0	23.0 +- 0.7; 3.4	17.9 +- 0.8; 4.5	17.8 +- 1.0
10	109	0.6	21.8 +- 0.7; 3.3	16.8 +- 0.7; 4.4	19.1 +- 1.1
11	139	0.8	21.4 +- 0.6; 3.2	16.4 +- 0.7; 4.3	19.1 +- 1.3
12	185	1.6	23.7 +- 0.7; 3.6	18.6 +- 0.8; 4.6	18.2 +- 0.9
13	207	1.9	24.3 +- 0.7; 3.6	19.2 +- 0.8; 4.6	19.2 +- 0.8
14	247	1.5	21.0 +- 0.6; 3.2	16.0 +- 0.7; 4.3	17.2 +- 2.5
15	130	4.2	23.4 +- 0.7; 3.5	18.4 +- 0.8; 4.6	18.5 +- 1.0
16	122	4.8	23.5 +- 0.7; 3.5	18.4 +- 0.8; 4.6	18.3 +- 1.1
17	135	5.3	21.8 +- 0.7; 3.3	16.8 +- 0.7; 4.4	17.2 +- 0.9
18	147	4.3	20.5 +- 0.6; 3.1	15.6 +- 0.7; 4.2	15.4 +- 0.9
19	224	6.8	22.8 +- 0.7; 3.4	17.8 +- 0.8; 4.5	18.6 +- 1.1
20	172	3.6	21.5 +- 0.6; 3.2	16.5 +- 0.7; 4.3	16.6 +- 0.8
21	291	12.0	21.6 +- 0.6; 3.2	16.6 +- 0.7; 4.4	17.0 +- 0.9
22	332	8.0	24.5 +- 0.7; 3.7	19.4 +- 0.8; 4.7	19.4 +- 1.1
23	310	7.9	19.2 +- 0.6; 2.9	14.3 +- 0.7; 4.1	15.4 +- 2.8
24	281	7.0	21.1 +- 0.6; 3.2	16.1 +- 0.7; 4.3	16.6 +- 1.0
25	291	4.8	23.5 +- 0.7; 3.5	18.5 +- 0.8; 4.6	18.2 +- 1.0
26	248	9.5	22.1 +- 0.7; 3.3	17.1 +- 0.7; 4.4	16.8 +- 1.0
27	239	13.0	21.4 +- 0.6; 3.2	16.4 +- 0.7; 4.3	16.3 +- 1.1
29	90	0.9	21.9 +- 0.7; 3.3	16.8 +- 0.7; 4.4	17.8 +- 0.9
30	67	51.0	18.4 +- 0.6; 2.8	13.5 +- 0.6; 4.0	13.9 +- 1.4
31	67	51.0	18.9 +- 0.6; 2.8	14.0 +- 0.7; 4.1	14.6 +- 1.3
32	67	51.0	18.9 +- 0.6; 2.8	14.0 +- 0.7; 4.1	14.0 +- 1.4
33	206	4.8	23.1 +- 0.7; 3.5	18.1 +- 0.8; 4.5	18.4 +- 1.0

Transit Dose = 4.6 +- 0.4; 3.1

GRAND GULF

For the period 970910-980126

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	15.4 +- 0.0	1
11.26 - 33.75 NNE	16.7 +- 0.0	1
33.76 - 56.25 NE	15.4 +- 0.0	1
56.26 - 78.75 ENE	17.7 +- 0.7	2
78.76 - 101.25 E	17.8 +- 0.9	3
101.26 - 123.75 ESE	17.6 +- 1.1	2
123.76 - 146.25 SE	17.2 +- 1.0	3
146.26 - 168.75 SSE	15.6 +- 0.0	1
168.76 - 191.25 S	17.6 +- 1.5	2
191.26 - 213.75 SSW	18.7 +- 0.8	2
213.76 - 236.25 SW	17.8 +- 0.0	1
236.26 - 258.75 WSW	16.5 +- 0.6	3
258.76 - 281.25 W	16.1 +- 0.0	1
281.26 - 303.75 WNW	17.5 +- 1.3	2
303.76 - 326.25 NW	14.3 +- 0.0	1
326.26 - 348.75 NNW	16.6 +- 4.0	2

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	16.8 +- 1.6	10
2 - 5	17.5 +- 1.2	10
> 5	16.8 +- 1.5	8
Upwind Control	13.8 +- 0.3	3

NRC TLD DOSES FOR GRAND GULF AREA

HADDAM NECK

TLD Direct Radiation Environmental Monitoring

For the period 970910-980310 182 Days

Field Time: 100 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)		Gross Exposure (mR) +-Rdm; Tot.		Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.		Hist. Range Net Exp Rate +-1 Std Dev
2	17	2.6	30.4 +- 0.9; 4.6		22.6 +- 0.9; 5.1		19.1 +- 1.4
3	45	1.9	Missing Dosimeter		No Net Data		19.3 +- 1.4
4	67	2.3	30.1 +- 0.9; 4.5		22.3 +- 0.9; 5.1		18.2 +- 1.4
5	93	1.6	Missing Dosimeter		No Net Data		16.5 +- 1.2
6	115	2.3	27.4 +- 0.8; 4.1		19.9 +- 0.8; 4.8		16.0 +- 1.2
7	143	1.9	29.5 +- 0.9; 4.4		21.8 +- 0.9; 5.0		18.1 +- 1.3
8	165	0.9	28.7 +- 0.9; 4.3		21.1 +- 0.9; 4.9		16.8 +- 1.2
9	174	1.3	30.6 +- 0.9; 4.6		22.8 +- 0.9; 5.1		18.8 +- 1.4
10	195	0.7	29.9 +- 0.9; 4.5		22.2 +- 0.9; 5.0		16.6 +- 1.2
12	241	0.8	29.3 +- 0.9; 4.4		21.7 +- 0.9; 5.0		17.5 +- 1.3
13	263	0.8	27.9 +- 0.8; 4.2		20.4 +- 0.8; 4.8		16.5 +- 1.3
14	290	1.9	30.1 +- 0.9; 4.5		22.4 +- 0.9; 5.1		18.2 +- 1.2
15	311	1.5	26.4 +- 0.8; 4.0		19.0 +- 0.8; 4.7		15.9 +- 1.2
16	341	1.3	27.0 +- 0.8; 4.0		19.5 +- 0.8; 4.7		16.9 +- 1.1
17	360	2.3	28.6 +- 0.9; 4.3		21.0 +- 0.9; 4.9		19.4 +- 1.4
18	222	2.5	27.9 +- 0.8; 4.2		20.4 +- 0.8; 4.8		16.4 +- 1.1
19	269	3.0	25.3 +- 0.8; 3.8		18.0 +- 0.8; 4.5		16.1 +- 1.3
20	66	3.2	29.3 +- 0.9; 4.4		21.6 +- 0.9; 5.0		16.9 +- 1.2
21	91	2.8	30.1 +- 0.9; 4.5		22.4 +- 0.9; 5.1		18.4 +- 1.2
22	112	3.2	29.0 +- 0.9; 4.4		21.4 +- 0.9; 4.9		17.5 +- 1.5
23	137	2.9	27.9 +- 0.8; 4.2		20.4 +- 0.8; 4.8		17.2 +- 1.4
24	155	7.1	28.7 +- 0.9; 4.3		21.1 +- 0.9; 4.9		16.1 +- 1.2
25	175	5.7	27.0 +- 0.8; 4.0		19.5 +- 0.8; 4.7		16.5 +- 1.2
26	196	2.5	26.9 +- 0.8; 4.0		19.5 +- 0.8; 4.7		15.7 +- 1.2
27	225	1.1	29.0 +- 0.9; 4.3		21.3 +- 0.9; 4.9		17.7 +- 1.2
28	250	3.5	27.5 +- 0.8; 4.1		20.0 +- 0.8; 4.8		17.7 +- 2.0
29	340	20.0	29.4 +- 0.9; 4.4		21.7 +- 0.9; 5.0		19.0 +- 2.3
30	286	3.2	27.5 +- 0.8; 4.1		20.0 +- 0.8; 4.8		16.4 +- 1.1
31	322	2.7	29.4 +- 0.9; 4.4		21.7 +- 0.9; 5.0		17.5 +- 1.3
32	327	2.9	31.4 +- 0.9; 4.7		23.5 +- 0.9; 5.2		19.5 +- 1.0
33	359	6.4	28.3 +- 0.8; 4.2		20.7 +- 0.8; 4.9		16.4 +- 1.2
35	54	10.0	28.9 +- 0.9; 4.3		21.3 +- 0.9; 4.9		17.3 +- 1.4
36	72	8.8	30.1 +- 0.9; 4.5		22.4 +- 0.9; 5.1		19.2 +- 1.4
37	149	6.8	26.7 +- 0.8; 4.0		19.3 +- 0.8; 4.7		15.8 +- 1.1
38	158	5.9	28.4 +- 0.9; 4.3		20.8 +- 0.8; 4.9		15.5 +- 1.3
39	267	8.8	26.5 +- 0.8; 4.0		19.1 +- 0.8; 4.7		16.7 +- 1.2
40	303	9.1	29.6 +- 0.9; 4.4		21.9 +- 0.9; 5.0		18.1 +- 1.2
41	313	9.6	28.4 +- 0.9; 4.3		20.8 +- 0.8; 4.9		16.8 +- 1.2
42	320	13.0	Missing Dosimeter		No Net Data		18.5 +- 1.3
43	324	18.0	26.7 +- 0.8; 4.0		19.3 +- 0.8; 4.7		16.1 +- 1.0
44	328	15.0	29.3 +- 0.9; 4.4		21.6 +- 0.9; 5.0		18.0 +- 1.6
45	343	18.0	29.5 +- 0.9; 4.4		21.9 +- 0.9; 5.0		18.8 +- 1.5
46	144	5.0	30.9 +- 0.9; 4.6		23.1 +- 0.9; 5.1		18.3 +- 1.4
49	340	20.0	30.6 +- 0.9; 4.6		22.8 +- 0.9; 5.1		18.4 +- 1.4

Transit Dose = 5.3 +- 0.4; 3.3

HADDAM NECK

For the period 970910-980310

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	20.9 +- 0.2	2
11.26 - 33.75 NNE	22.6 +- 0.0	1
33.76 - 56.25 NE	21.3 +- 0.0	1
56.26 - 78.75 ENE	22.1 +- 0.4	3
78.76 - 101.25 E	22.4 +- 0.0	1
101.26 - 123.75 ESE	20.7 +- 1.0	2
123.76 - 146.25 SE	21.8 +- 1.3	3
146.26 - 168.75 SSE	20.6 +- 0.9	4
168.76 - 191.25 S	21.2 +- 2.3	2
191.26 - 213.75 SSW	20.9 +- 1.9	2
213.76 - 236.25 SW	20.9 +- 0.7	2
236.26 - 258.75 WSW	20.8 +- 1.2	2
258.76 - 281.25 W	19.2 +- 1.2	3
281.26 - 303.75 WNW	21.4 +- 1.2	3
303.76 - 326.25 NW	20.2 +- 1.3	4
326.26 - 348.75 NNW	21.6 +- 1.4	5

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	21.2 +- 1.2	10
2 - 5	21.1 +- 1.5	16
> 5	20.8 +- 1.1	14
Upwind Control	22.8 +- 0.0	1

NRC TLD DOSES FOR HADDAM NECK AREA

Miles

Legend

Water

--- Railroads

Plant..site

— Highways

--- Roads

HARRIS

TLD Direct Radiation Environmental Monitoring

For the period 970910-980211 155 Days

Field Time: 106 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)		Gross Exposure (mR) +-Rdm; Tot.		Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.		Hist. Range Net Exp Rate +-1 Std Dev	
1	36	2.6	25.2	+- 0.8; 3.8	17.5	+- 0.7; 4.3	16.3	+- 2.0
2	25	3.2	21.0	+- 0.6; 3.1	13.9	+- 0.6; 4.0	14.5	+- 1.6
3	5	2.5	24.1	+- 0.7; 3.6	16.6	+- 0.7; 4.2	16.2	+- 1.8
4	27	1.5	22.0	+- 0.7; 3.3	14.8	+- 0.7; 4.1	16.6	+- 2.4
5	36	0.9	20.8	+- 0.6; 3.1	13.8	+- 0.6; 3.9	13.7	+- 1.6
6	68	0.8	19.2	+- 0.6; 2.9	12.4	+- 0.6; 3.8	12.5	+- 1.5
7	98	0.7	21.3	+- 0.6; 3.2	14.2	+- 0.6; 4.0	14.9	+- 1.5
8	232	0.7	19.6	+- 0.6; 2.9	12.8	+- 0.6; 3.8	13.7	+- 1.5
9	190	0.8	19.2	+- 0.6; 2.9	12.4	+- 0.6; 3.8	12.3	+- 1.4
10	158	0.7	20.1	+- 0.6; 3.0	13.2	+- 0.6; 3.9	13.3	+- 1.8
11	42	4.7	26.0	+- 0.8; 3.9	18.2	+- 0.7; 4.4	18.5	+- 2.4
12	40	8.6	23.2	+- 0.7; 3.5	15.8	+- 0.7; 4.2	16.1	+- 1.6
13	298	13.0	24.7	+- 0.7; 3.7	17.1	+- 0.7; 4.3	14.4	+- 2.0
14	298	12.0	19.5	+- 0.6; 2.9	12.7	+- 0.6; 3.8	13.9	+- 1.7
15	298	11.0	19.1	+- 0.6; 2.9	12.4	+- 0.6; 3.8	12.7	+- 1.6
16	332	4.8	22.5	+- 0.7; 3.4	15.2	+- 0.7; 4.1	14.2	+- 2.0
17	291	4.5	18.5	+- 0.6; 2.8	11.8	+- 0.6; 3.8	11.5	+- 2.2
18	270	5.1	19.1	+- 0.6; 2.9	12.4	+- 0.6; 3.8	13.5	+- 2.1
19	240	5.1	23.5	+- 0.7; 3.5	16.1	+- 0.7; 4.2	16.3	+- 2.0
20	227	4.8	19.4	+- 0.6; 2.9	12.6	+- 0.6; 3.8	12.5	+- 1.4
21	208	4.8	18.2	+- 0.5; 2.7	11.5	+- 0.6; 3.7	12.1	+- 1.5
22	190	4.6	19.9	+- 0.6; 3.0	13.0	+- 0.6; 3.9	13.8	+- 1.6
23	151	4.8	21.5	+- 0.6; 3.2	14.4	+- 0.6; 4.0	13.6	+- 2.1
24	132	4.7	20.6	+- 0.6; 3.1	13.6	+- 0.6; 3.9	13.3	+- 1.8
25	112	5.0	21.8	+- 0.7; 3.3	14.6	+- 0.7; 4.0	15.3	+- 2.1
26	92	4.6	19.5	+- 0.6; 2.9	12.7	+- 0.6; 3.8	12.3	+- 1.6
27	115	2.8	18.6	+- 0.6; 2.8	11.9	+- 0.6; 3.8	13.5	+- 1.9
28	135	2.3	Missing Dosimeter		No Net Data		11.2	+- 1.7
29	164	2.2	19.0	+- 0.6; 2.9	12.3	+- 0.6; 3.8	14.2	+- 2.2
30	49	2.2	19.4	+- 0.6; 2.9	12.6	+- 0.6; 3.8	13.6	+- 1.7
31	276	1.8	19.1	+- 0.6; 2.9	12.3	+- 0.6; 3.8	13.5	+- 1.8
32	292	1.7	22.2	+- 0.7; 3.3	15.0	+- 0.7; 4.1	16.7	+- 2.0
33	314	1.4	21.2	+- 0.6; 3.2	14.1	+- 0.6; 4.0	15.7	+- 1.9
34	329	1.3	20.8	+- 0.6; 3.1	13.8	+- 0.6; 3.9	16.0	+- 2.1
35	350	4.5	21.7	+- 0.7; 3.3	14.6	+- 0.6; 4.0	15.5	+- 1.7
36	338	4.4	22.4	+- 0.7; 3.4	15.2	+- 0.7; 4.1	15.5	+- 3.3
37	16	4.9	20.9	+- 0.6; 3.1	13.9	+- 0.6; 4.0	14.5	+- 3.0
38	68	4.8	18.7	+- 0.6; 2.8	12.0	+- 0.6; 3.8	12.0	+- 1.5
39	80	6.9	22.3	+- 0.7; 3.3	15.1	+- 0.7; 4.1	14.4	+- 1.2
40	80	6.9	21.5	+- 0.6; 3.2	14.4	+- 0.6; 4.0	13.3	+- 2.0
41	118	9.7	26.1	+- 0.8; 3.9	18.2	+- 0.7; 4.4	18.7	+- 1.7
42	260	1.1	20.6	+- 0.6; 3.1	13.6	+- 0.6; 3.9	13.6	+- 1.7
43	333	1.7	22.4	+- 0.7; 3.4	15.1	+- 0.7; 4.1	15.3	+- 2.4
44	50	24.0	26.9	+- 0.8; 4.0	19.0	+- 0.8; 4.5	19.8	+- 2.1

Transit Dose = 4.6 +- 0.4; 3.4

HARRIS

For the period 970910-980211

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	15.6 +- 1.4	2
11.26 - 33.75 NNE	14.2 +- 0.5	3
33.76 - 56.25 NE	16.1 +- 2.6	6
56.26 - 78.75 ENE	12.2 +- 0.3	2
78.76 - 101.25 E	14.1 +- 1.0	4
101.26 - 123.75 ESE	14.9 +- 3.2	3
123.76 - 146.25 SE	13.6 +- 0.0	1
146.26 - 168.75 SSE	13.3 +- 1.1	3
168.76 - 191.25 S	12.7 +- 0.4	2
191.26 - 213.75 SSW	11.5 +- 0.0	1
213.76 - 236.25 SW	12.7 +- 0.2	2
236.26 - 258.75 WSW	16.1 +- 0.0	1
258.76 - 281.25 W	12.7 +- 0.7	3
281.26 - 303.75 WNW	13.4 +- 2.3	2
303.76 - 326.25 NW	14.1 +- 0.0	1
326.26 - 348.75 NNW	14.8 +- 0.7	4

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	13.6 +- 1.0	13
2 - 5	13.9 +- 1.9	20
> 5	15.8 +- 2.3	7
Upwind Control	14.1 +- 2.7	3

NRC TLD DOSES FOR HARRIS AREA

Miles

Legend

Water

--- Railroads

Plant..site

— Highways

--- Roads

HATCH

TLD Direct Radiation Environmental Monitoring

For the period 970909-980209 154 Days

Field Time: 92 Days

NRC Sta	Location		Gross		Net Exposure Rate		Hist. Range	
	Azimuth/Dist (Deg)/(Mi)		Exposure (mR) +-Rdm; Tot.		(mR/Std. Qtr.) +-Rdm; Tot.		Net Exp Rate +-1 Std Dev	
1	342	23.0	21.6 +- 0.6; 3.2		14.9 +- 0.8; 4.5		16.5 +- 1.8	
2	359	7.7	20.4 +- 0.6; 3.1		13.7 +- 0.7; 4.3		14.4 +- 1.8	
3	354	4.5	20.0 +- 0.6; 3.0		13.3 +- 0.7; 4.3		14.6 +- 1.9	
4	336	2.9	18.1 +- 0.5; 2.7		11.5 +- 0.7; 4.1		13.1 +- 1.8	
5	309	4.6	19.2 +- 0.6; 2.9		12.5 +- 0.7; 4.2		13.7 +- 1.9	
6	297	5.6	21.6 +- 0.6; 3.2		14.9 +- 0.8; 4.5		15.8 +- 1.9	
7	24	2.8	20.4 +- 0.6; 3.1		13.7 +- 0.7; 4.3		14.2 +- 2.1	
8	49	2.0	20.3 +- 0.6; 3.1		13.6 +- 0.7; 4.3		14.1 +- 1.8	
9	49	10.0	18.9 +- 0.6; 2.8		12.2 +- 0.7; 4.2		13.6 +- 1.8	
10	28	4.8	19.0 +- 0.6; 2.9		12.3 +- 0.7; 4.2		14.2 +- 1.7	
11	67	5.0	19.9 +- 0.6; 3.0		13.2 +- 0.7; 4.3		14.3 +- 1.7	
12	50	5.1	23.5 +- 0.7; 3.5		16.7 +- 0.8; 4.7		18.2 +- 2.0	
13	353	2.0	18.7 +- 0.6; 2.8		12.0 +- 0.7; 4.2		12.7 +- 1.5	
14	341	1.6	20.1 +- 0.6; 3.0		13.4 +- 0.7; 4.3		14.7 +- 1.9	
15	147	10.0	17.4 +- 0.5; 2.6		10.8 +- 0.7; 4.1		13.0 +- 1.7	
16	232	0.9	19.4 +- 0.6; 2.9		12.7 +- 0.7; 4.2		13.2 +- 1.8	
17	205	1.6	19.4 +- 0.6; 2.9		12.7 +- 0.7; 4.2		14.5 +- 1.8	
18	192	4.2	19.5 +- 0.6; 2.9		12.8 +- 0.7; 4.3		11.5 +- 1.6	
19	184	4.2	17.7 +- 0.5; 2.6		11.0 +- 0.7; 4.1		11.6 +- 1.9	
20	165	4.6	18.3 +- 0.5; 2.7		11.6 +- 0.7; 4.1		12.3 +- 1.8	
21	135	4.4	18.0 +- 0.5; 2.7		11.4 +- 0.7; 4.1		12.8 +- 1.6	
22	120	4.1	18.2 +- 0.5; 2.7		11.5 +- 0.7; 4.1		13.8 +- 1.8	
23	107	3.7	17.8 +- 0.5; 2.7		11.2 +- 0.7; 4.1		13.1 +- 1.9	
24	123	14.0	18.3 +- 0.5; 2.7		11.6 +- 0.7; 4.1		12.3 +- 1.7	
25	114	12.0	19.1 +- 0.6; 2.9		12.4 +- 0.7; 4.2		13.5 +- 1.7	
26	142	1.8	19.3 +- 0.6; 2.9		12.6 +- 0.7; 4.2		14.3 +- 1.7	
27	157	2.2	19.0 +- 0.6; 2.8		12.3 +- 0.7; 4.2		13.2 +- 1.7	
28	171	0.9	20.8 +- 0.6; 3.1		14.1 +- 0.7; 4.4		14.5 +- 1.7	
29	253	1.0	19.2 +- 0.6; 2.9		12.5 +- 0.7; 4.2		13.4 +- 1.7	
30	270	1.0	20.2 +- 0.6; 3.0		13.5 +- 0.7; 4.3		15.3 +- 2.5	
31	292	1.1	18.4 +- 0.6; 2.8		11.8 +- 0.7; 4.2		13.7 +- 1.9	
32	268	4.2	20.0 +- 0.6; 3.0		13.3 +- 0.7; 4.3		13.7 +- 1.5	
33	248	4.3	17.7 +- 0.5; 2.7		11.0 +- 0.7; 4.1		12.2 +- 1.8	
34	216	4.1	17.6 +- 0.5; 2.6		10.9 +- 0.7; 4.1		11.7 +- 1.9	
35	234	12.0	20.7 +- 0.6; 3.1		14.0 +- 0.7; 4.4		14.3 +- 2.2	
36	182	10.0	16.2 +- 0.5; 2.4		9.6 +- 0.6; 3.9		12.6 +- 2.7	
37	177	10.0	16.9 +- 0.5; 2.5		10.2 +- 0.6; 4.0		12.6 +- 1.7	
38	323	12.0	20.4 +- 0.6; 3.1		13.7 +- 0.7; 4.3		15.1 +- 1.7	
39	321	13.0	20.5 +- 0.6; 3.1		13.8 +- 0.7; 4.4		15.3 +- 1.9	
40	323	12.0	20.5 +- 0.6; 3.1		13.8 +- 0.7; 4.4		15.2 +- 1.9	

Transit Dose = 6.4 +- 0.4; 3.2

HATCH

For the period 970909-980209

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	13.0 +- 0.9	3
11.26 - 33.75 NNE	13.0 +- 1.0	2
33.76 - 56.25 NE	14.2 +- 2.3	3
56.26 - 78.75 ENE	13.2 +- 0.0	1
78.76 - 101.25 E	No Data +- No Data	0
101.26 - 123.75 ESE	11.7 +- 0.5	4
123.76 - 146.25 SE	12.0 +- 0.9	2
146.26 - 168.75 SSE	11.6 +- 0.8	3
168.76 - 191.25 S	11.2 +- 2.0	4
191.26 - 213.75 SSW	12.8 +- 0.1	2
213.76 - 236.25 SW	12.5 +- 1.5	3
236.26 - 258.75 WSW	11.8 +- 1.1	2
258.76 - 281.25 W	13.4 +- 0.1	2
281.26 - 303.75 WNW	13.3 +- 2.2	2
303.76 - 326.25 NW	12.5 +- 0.0	1
326.26 - 348.75 NNW	13.3 +- 1.7	3

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	12.9 +- 0.7	10
2 - 5	12.1 +- 1.0	16
> 5	12.8 +- 2.2	11
Upwind Control	13.7 +- 0.1	3

NRC TLD DOSES FOR HATCH AREA

Miles

Legend

Water
Highways

Railroads
Roads

Plant..site

INDIAN POINT

TLD Direct Radiation Environmental Monitoring

For the period 970911-980205 148 Days

Field Time: 94 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)		Gross Exposure (mR) +-Rdm; Tot.		Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.		Hist. Range Net Exp Rate +-1 Std Dev	
1	52	1.4	19.1	+- 0.6; 2.9	12.8	+- 0.7; 4.1	12.3	+- 1.2
2	53	1.0	20.3	+- 0.6; 3.1	14.0	+- 0.7; 4.2	14.2	+- 1.1
3	61	1.5	21.8	+- 0.7; 3.3	15.4	+- 0.7; 4.4	15.1	+- 1.0
4	89	1.2	23.0	+- 0.7; 3.5	16.6	+- 0.8; 4.5	15.4	+- 1.1
5	107	0.9	22.1	+- 0.7; 3.3	15.7	+- 0.7; 4.4	15.2	+- 1.1
6	90	0.5	21.0	+- 0.6; 3.2	14.7	+- 0.7; 4.3	15.4	+- 1.2
7	133	0.8	20.7	+- 0.6; 3.1	14.3	+- 0.7; 4.3	14.6	+- 1.2
8	158	0.8	21.8	+- 0.7; 3.3	15.4	+- 0.7; 4.4	15.9	+- 1.1
9	188	1.2	Missing Dosimeter		No Net Data		16.1	+- 1.2
10	206	0.9	20.6	+- 0.6; 3.1	14.2	+- 0.7; 4.3	14.8	+- 1.4
11	170	1.1	20.1	+- 0.6; 3.0	13.7	+- 0.7; 4.2	13.5	+- 1.0
12	155	2.3	21.2	+- 0.6; 3.2	14.9	+- 0.7; 4.3	14.6	+- 1.1
13	136	3.2	22.1	+- 0.7; 3.3	15.7	+- 0.7; 4.4	15.1	+- 1.1
14	107	3.1	21.1	+- 0.6; 3.2	14.7	+- 0.7; 4.3	13.8	+- 1.1
15	94	3.8	20.7	+- 0.6; 3.1	14.3	+- 0.7; 4.3	14.4	+- 1.0
16	142	5.7	21.2	+- 0.6; 3.2	14.8	+- 0.7; 4.3	15.9	+- 1.0
18	147	9.1	23.1	+- 0.7; 3.5	16.6	+- 0.8; 4.5	16.2	+- 1.0
19	137	12.0	20.5	+- 0.6; 3.1	14.1	+- 0.7; 4.3	14.1	+- 1.4
20	129	12.0	20.9	+- 0.6; 3.1	14.6	+- 0.7; 4.3	14.5	+- 1.1
22	74	7.5	20.8	+- 0.6; 3.1	14.4	+- 0.7; 4.3	15.2	+- 1.1
23	5	100.0	24.5	+- 0.7; 3.7	18.0	+- 0.8; 4.7	16.8	+- 1.3
24	5	100.0	24.5	+- 0.7; 3.7	18.0	+- 0.8; 4.7	16.6	+- 1.3
25	65	4.1	20.9	+- 0.6; 3.1	14.5	+- 0.7; 4.3	14.3	+- 1.2
26	40	4.0	23.5	+- 0.7; 3.5	17.1	+- 0.8; 4.6	17.7	+- 1.2
27	25	5.3	23.3	+- 0.7; 3.5	16.8	+- 0.8; 4.5	16.5	+- 1.1
28	24	2.9	21.9	+- 0.7; 3.3	15.5	+- 0.7; 4.4	15.3	+- 1.2
29	22	2.1	22.0	+- 0.7; 3.3	15.6	+- 0.7; 4.4	15.4	+- 1.1
30	8	1.9	Missing Dosimeter		No Net Data		16.7	+- 1.3
31	356	5.0	21.4	+- 0.6; 3.2	15.0	+- 0.7; 4.3	15.3	+- 1.2
32	330	3.7	20.8	+- 0.6; 3.1	14.5	+- 0.7; 4.3	16.0	+- 1.8
33	338	4.7	23.6	+- 0.7; 3.5	17.1	+- 0.8; 4.6	16.9	+- 1.4
34	354	7.0	25.3	+- 0.8; 3.8	18.8	+- 0.8; 4.8	18.9	+- 3.0
35	297	4.4	22.4	+- 0.7; 3.4	15.9	+- 0.8; 4.4	15.9	+- 1.3
36	309	3.6	26.4	+- 0.8; 4.0	19.8	+- 0.9; 4.9	21.7	+- 5.2
37	350	1.1	22.6	+- 0.7; 3.4	16.1	+- 0.8; 4.5	16.5	+- 1.1
38	337	0.9	22.4	+- 0.7; 3.4	15.9	+- 0.8; 4.4	16.4	+- 1.5
39	315	1.0	20.6	+- 0.6; 3.1	14.2	+- 0.7; 4.3	15.0	+- 1.1
40	294	1.1	23.9	+- 0.7; 3.6	17.4	+- 0.8; 4.6	16.6	+- 1.3
41	274	1.1	24.3	+- 0.7; 3.6	17.8	+- 0.8; 4.7	18.6	+- 2.0
42	248	1.5	23.1	+- 0.7; 3.5	16.6	+- 0.8; 4.5	17.0	+- 2.0
44	5	100.0	24.6	+- 0.7; 3.7	18.0	+- 0.8; 4.7	16.7	+- 1.5
45	227	2.4	21.8	+- 0.7; 3.3	15.4	+- 0.7; 4.4	16.0	+- 1.9
46	209	3.2	20.0	+- 0.6; 3.0	13.6	+- 0.7; 4.2	14.3	+- 1.8
47	218	5.3	21.6	+- 0.6; 3.2	15.2	+- 0.7; 4.4	15.0	+- 1.8
48	201	4.6	22.1	+- 0.7; 3.3	15.7	+- 0.7; 4.4	16.0	+- 1.3
49	187	5.2	19.9	+- 0.6; 3.0	13.6	+- 0.7; 4.2	13.6	+- 1.6
50	171	7.1	20.3	+- 0.6; 3.0	14.0	+- 0.7; 4.2	14.3	+- 1.3

Transit Dose = 5.7 +- 0.4; 3.2

INDIAN POINT

For the period 970911-980205

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	16.6 +- 1.9	3
11.26 - 33.75 NNE	15.9 +- 0.7	3
33.76 - 56.25 NE	14.6 +- 2.2	3
56.26 - 78.75 ENE	14.8 +- 0.5	3
78.76 - 101.25 E	15.2 +- 1.2	3
101.26 - 123.75 ESE	15.2 +- 0.7	2
123.76 - 146.25 SE	14.7 +- 0.6	5
146.26 - 168.75 SSE	15.6 +- 0.9	3
168.76 - 191.25 S	13.8 +- 0.2	3
191.26 - 213.75 SSW	14.5 +- 1.1	3
213.76 - 236.25 SW	15.3 +- 0.1	2
236.26 - 258.75 WSW	16.6 +- 0.0	1
258.76 - 281.25 W	17.8 +- 0.0	1
281.26 - 303.75 WNW	16.7 +- 1.0	2
303.76 - 326.25 NW	17.0 +- 4.0	2
326.26 - 348.75 NNW	15.8 +- 1.3	3

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	15.3 +- 1.4	16
2 - 5	15.6 +- 1.5	16
> 5	15.3 +- 1.6	10
Upwind Control	18.0 +- 0.0	3

NRC TLD DOSES FOR INDIAN POINT AREA

Miles

0 2 4

Legend

Water

Highways

--- Railroads

--- Roads

Plant..site

KEWAUNEE/PT. BEACH

TLD Direct Radiation Environmental Monitoring

For the period 970908-980209 155 Days

Field Time: 98 Days

NRC Sta	Location		Gross		Net Exposure Rate		Hist. Range	
	Azimuth/Dist (Deg)/(Mi)		Exposure (mR) +-Rdm; Tot.		(mR/Std. Qtr.) +-Rdm; Tot.		Net Exp Rate +-1 Std Dev	
1	189	8.1	22.2 +- 0.7; 3.3		15.6 +- 0.7; 4.3		12.6 +- 1.3	
2	195	7.0	24.7 +- 0.7; 3.7		17.9 +- 0.8; 4.5		17.2 +- 2.2	
3	163	4.9	22.2 +- 0.7; 3.3		15.6 +- 0.7; 4.3		12.9 +- 1.3	
4	183	3.3	25.0 +- 0.7; 3.7		18.2 +- 0.8; 4.6		16.5 +- 1.7	
5	210	3.2	19.5 +- 0.6; 2.9		13.1 +- 0.6; 4.0		12.2 +- 1.6	
6	223	3.7	24.2 +- 0.7; 3.6		17.4 +- 0.8; 4.5		16.4 +- 1.9	
7	242	5.7	23.0 +- 0.7; 3.5		16.4 +- 0.7; 4.4		13.9 +- 1.1	
8	202	1.8	25.5 +- 0.8; 3.8		18.6 +- 0.8; 4.6		17.0 +- 1.5	
9	180	1.8	24.7 +- 0.7; 3.7		17.9 +- 0.8; 4.5		15.6 +- 1.5	
10	158	1.9	20.9 +- 0.6; 3.1		14.4 +- 0.7; 4.2		12.8 +- 1.4	
11	235	1.2	25.8 +- 0.8; 3.9		18.9 +- 0.8; 4.7		16.9 +- 1.7	
12	258	1.4	24.0 +- 0.7; 3.6		17.2 +- 0.8; 4.5		15.4 +- 1.6	
13	273	1.4	24.3 +- 0.7; 3.6		17.5 +- 0.8; 4.5		15.7 +- 1.8	
14	290	0.9	25.3 +- 0.8; 3.8		18.4 +- 0.8; 4.6		16.4 +- 1.5	
15	333	0.8	21.5 +- 0.6; 3.2		14.9 +- 0.7; 4.2		15.1 +- 1.7	
16	342	1.9	24.2 +- 0.7; 3.6		17.5 +- 0.8; 4.5		15.3 +- 1.6	
17	317	2.0	21.1 +- 0.6; 3.2		14.6 +- 0.7; 4.2		13.4 +- 2.0	
18	310	3.4	27.5 +- 0.8; 4.1		20.4 +- 0.8; 4.8		17.5 +- 1.5	
19	293	4.0	22.0 +- 0.7; 3.3		15.5 +- 0.7; 4.3		14.3 +- 1.7	
20	273	4.0	22.9 +- 0.7; 3.4		16.2 +- 0.7; 4.4		14.5 +- 2.1	
21	300	5.6	23.9 +- 0.7; 3.6		17.1 +- 0.8; 4.5		14.6 +- 1.4	
22	316	5.9	25.0 +- 0.8; 3.8		18.2 +- 0.8; 4.6		15.5 +- 1.6	
23	345	2.7	24.6 +- 0.7; 3.7		17.8 +- 0.8; 4.5		16.5 +- 1.6	
24	219	1.3	22.9 +- 0.7; 3.4		16.3 +- 0.7; 4.4		14.7 +- 1.7	
25	247	1.4	26.0 +- 0.8; 3.9		19.1 +- 0.8; 4.7		16.6 +- 1.6	
26	263	1.3	25.8 +- 0.8; 3.9		18.9 +- 0.8; 4.7		16.2 +- 1.6	
27	290	1.4	26.7 +- 0.8; 4.0		19.7 +- 0.8; 4.7		16.8 +- 1.6	
28	320	1.3	27.0 +- 0.8; 4.1		20.0 +- 0.8; 4.8		17.0 +- 2.0	
29	342	1.1	23.4 +- 0.7; 3.5		16.7 +- 0.7; 4.4		15.4 +- 2.2	
30	329	0.6	25.4 +- 0.8; 3.8		18.5 +- 0.8; 4.6		16.4 +- 1.7	
31	13	1.0	23.6 +- 0.7; 3.5		16.9 +- 0.7; 4.4		15.0 +- 1.6	
32	353	2.1	24.3 +- 0.7; 3.6		17.5 +- 0.8; 4.5		16.0 +- 1.7	
33	301	3.9	22.8 +- 0.7; 3.4		16.1 +- 0.7; 4.3		14.6 +- 1.6	
34	299	8.4	25.6 +- 0.8; 3.8		18.7 +- 0.8; 4.6		15.7 +- 1.4	
35	323	3.8	20.3 +- 0.6; 3.1		13.9 +- 0.7; 4.1		13.9 +- 1.9	
36	336	3.3	25.8 +- 0.8; 3.9		18.9 +- 0.8; 4.7		16.8 +- 1.9	
37	6	3.1	22.4 +- 0.7; 3.4		15.8 +- 0.7; 4.3		14.4 +- 1.4	
38	14	3.7	24.9 +- 0.7; 3.7		18.1 +- 0.8; 4.6		15.3 +- 1.7	
39	13	7.6	22.0 +- 0.7; 3.3		15.4 +- 0.7; 4.3		13.4 +- 1.7	
40	247	4.3	29.5 +- 0.9; 4.4		22.3 +- 0.9; 5.1		18.5 +- 1.6	
41	8	23.0	21.5 +- 0.6; 3.2		15.0 +- 0.7; 4.2		12.9 +- 1.8	
42	8	23.0	22.6 +- 0.7; 3.4		16.0 +- 0.7; 4.3		13.5 +- 1.5	
43	8	23.0	20.6 +- 0.6; 3.1		14.1 +- 0.7; 4.1		12.7 +- 1.6	

Transit Dose = 5.2 +- 0.4; 3.3

KEWAUNEE/PT. BEACH
For the period 970908-980209

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	16.7 +- 1.2	2
11.26 - 33.75 NNE	16.8 +- 1.3	3
33.76 - 56.25 NE	No Data +- No Data	0
56.26 - 78.75 ENE	No Data +- No Data	0
78.76 - 101.25 E	No Data +- No Data	0
101.26 - 123.75 ESE	No Data +- No Data	0
123.76 - 146.25 SE	No Data +- No Data	0
146.26 - 168.75 SSE	15.0 +- 0.8	2
168.76 - 191.25 S	17.2 +- 1.4	3
191.26 - 213.75 SSW	16.5 +- 3.0	3
213.76 - 236.25 SW	17.5 +- 1.3	3
236.26 - 258.75 WSW	18.7 +- 2.6	4
258.76 - 281.25 W	17.5 +- 1.4	3
281.26 - 303.75 WNW	17.6 +- 1.6	6
303.76 - 326.25 NW	17.4 +- 3.0	5
326.26 - 348.75 NNW	17.4 +- 1.4	6

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	17.6 +- 1.7	18
2 - 5	17.1 +- 2.4	15
> 5	17.0 +- 1.3	7
Upwind Control	15.0 +- 0.9	3

NRC TLD DOSES FOR KEWAUNEE AREA

Miles

Legend

Water

Highways

Railroads

Roads

Plant..site

LACROSSE

TLD Direct Radiation Environmental Monitoring

For the period 970909-980209 154 Days

Field Time: 92 Days

NRC Sta	Location		Gross Exposure (mR)			Net Exposure Rate (mR/Std. Qtr.)			Hist. Range Net Exp Rate	
	Azimuth/Dist (Deg)/(Mi)		+-Rdm; Tot.			+-Rdm; Tot.			+-1 Std Dev	
1	5	20.0	22.3	+-	0.7; 3.3	13.4	+-	0.8; 4.7	14.8	+- 1.6
2	5	20.0	22.8	+-	0.7; 3.4	13.9	+-	0.8; 4.7	15.3	+- 1.3
3	3	20.0	23.9	+-	0.7; 3.6	15.0	+-	0.8; 4.9	15.8	+- 1.0
4	343	3.8	22.5	+-	0.7; 3.4	13.7	+-	0.8; 4.7	14.7	+- 1.2
5	313	3.8	25.1	+-	0.8; 3.8	16.2	+-	0.9; 5.0	16.2	+- 0.9
6	291	3.0	23.0	+-	0.7; 3.4	14.1	+-	0.8; 4.8	15.7	+- 1.1
7	261	4.8	25.6	+-	0.8; 3.8	16.7	+-	0.9; 5.0	17.6	+- 1.5
8	249	3.2	23.4	+-	0.7; 3.5	14.5	+-	0.8; 4.8	17.0	+- 1.7
9	214	5.0	25.0	+-	0.8; 3.8	16.1	+-	0.9; 5.0	15.8	+- 1.5
10	171	9.8	23.0	+-	0.7; 3.5	14.2	+-	0.8; 4.8	14.6	+- 1.2
11	176	5.1	22.8	+-	0.7; 3.4	13.9	+-	0.8; 4.7	15.0	+- 1.0
12	165	4.9	24.9	+-	0.7; 3.7	16.0	+-	0.9; 5.0	16.2	+- 0.9
13	138	3.5	26.1	+-	0.8; 3.9	17.2	+-	0.9; 5.1	16.9	+- 1.1
14	114	4.2	24.4	+-	0.7; 3.7	15.5	+-	0.9; 4.9	15.7	+- 1.1
15	97	3.9	23.3	+-	0.7; 3.5	14.5	+-	0.8; 4.8	14.7	+- 0.9
16	94	3.0	24.2	+-	0.7; 3.6	15.4	+-	0.9; 4.9	16.6	+- 1.2
17	105	2.0	22.5	+-	0.7; 3.4	13.6	+-	0.8; 4.7	15.9	+- 2.2
18	52	1.5	21.9	+-	0.7; 3.3	13.0	+-	0.8; 4.6	14.3	+- 1.1
19	16	1.5	22.7	+-	0.7; 3.4	13.9	+-	0.8; 4.7	14.5	+- 0.9
20	1	1.0	20.5	+-	0.6; 3.1	11.6	+-	0.8; 4.5	13.4	+- 1.0
21	358	0.5	24.3	+-	0.7; 3.6	15.4	+-	0.9; 4.9	17.0	+- 1.1
22	180	0.6	25.5	+-	0.8; 3.8	16.6	+-	0.9; 5.0	16.2	+- 1.0
23	134	1.7	22.2	+-	0.7; 3.3	13.4	+-	0.8; 4.7	16.1	+- 1.5
24	58	0.6	25.7	+-	0.8; 3.8	16.7	+-	0.9; 5.0	17.5	+- 1.5
25	59	3.1	24.3	+-	0.7; 3.6	15.4	+-	0.9; 4.9	17.0	+- 1.5
26	16	1.5	24.1	+-	0.7; 3.6	15.2	+-	0.9; 4.9	16.5	+- 1.3
27	26	5.1	23.2	+-	0.7; 3.5	14.3	+-	0.8; 4.8	15.3	+- 1.1
28	25	7.0	24.3	+-	0.7; 3.6	15.4	+-	0.9; 4.9	14.4	+- 1.5
29	4	4.8	24.2	+-	0.7; 3.6	15.3	+-	0.9; 4.9	16.0	+- 1.1

Transit Dose = 8.6 +- 0.5; 3.4

LACROSSE

For the period 970909-980209

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	14.1 +- 2.1	3
11.26 - 33.75 NNE	14.7 +- 0.7	4
33.76 - 56.25 NE	13.0 +- 0.0	1
56.26 - 78.75 ENE	16.1 +- 0.9	2
78.76 - 101.25 E	14.9 +- 0.6	2
101.26 - 123.75 ESE	14.6 +- 1.3	2
123.76 - 146.25 SE	15.3 +- 2.7	2
146.26 - 168.75 SSE	16.0 +- 0.0	1
168.76 - 191.25 S	14.9 +- 1.5	3
191.26 - 213.75 SSW	No Data +- No Data	0
213.76 - 236.25 SW	16.1 +- 0.0	1
236.26 - 258.75 WSW	14.5 +- 0.0	1
258.76 - 281.25 W	16.7 +- 0.0	1
281.26 - 303.75 WNW	14.1 +- 0.0	1
303.76 - 326.25 NW	16.2 +- 0.0	1
326.26 - 348.75 NNW	13.7 +- 0.0	1

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	14.4 +- 1.7	9
2 - 5	15.4 +- 1.0	13
> 5	14.4 +- 0.7	4
Upwind Control	14.1 +- 0.8	3

NRC TLD DOSES FOR LACROSSE AREA

Miles

Legend

Water

Highways

Railroads

Roads

Plant site

LASALLE

TLD Direct Radiation Environmental Monitoring

For the period 970909-980210 155 Days

Field Time: 94 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)	Gross Exposure (mR) +-Rdm; Tot.	Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.	Hist. Range Net Exp Rate +-1 Std Dev
1	302 10.0	23.3 +- 0.7; 3.5	17.7 +- 0.8; 4.5	17.5 +- 1.2
2	335 5.3	26.7 +- 0.8; 4.0	20.9 +- 0.8; 4.9	19.7 +- 1.5
3	343 5.8	Missing Dosimeter	No Net Data	15.8 +- 1.0
4	38 5.5	Missing Dosimeter	No Net Data	19.0 +- 2.1
5	39 4.3	21.4 +- 0.6; 3.2	15.9 +- 0.7; 4.3	14.8 +- 1.1
6	27 3.8	23.7 +- 0.7; 3.6	18.0 +- 0.8; 4.5	17.2 +- 1.3
7	2 4.1	26.6 +- 0.8; 4.0	20.8 +- 0.8; 4.9	19.6 +- 1.3
8	304 4.6	25.9 +- 0.8; 3.9	20.1 +- 0.8; 4.8	19.2 +- 1.3
9	292 3.9	24.2 +- 0.7; 3.6	18.5 +- 0.8; 4.6	19.9 +- 2.6
10	281 3.7	28.5 +- 0.9; 4.3	22.6 +- 0.9; 5.1	19.3 +- 1.7
11	248 4.0	25.0 +- 0.8; 3.8	19.3 +- 0.8; 4.7	18.5 +- 1.2
12	222 12.0	24.9 +- 0.7; 3.7	19.2 +- 0.8; 4.7	17.8 +- 1.1
13	212 18.0	25.1 +- 0.8; 3.8	19.3 +- 0.8; 4.7	18.4 +- 1.1
14	212 18.0	25.6 +- 0.8; 3.8	19.9 +- 0.8; 4.7	19.0 +- 1.2
15	212 18.0	25.2 +- 0.8; 3.8	19.5 +- 0.8; 4.7	18.8 +- 1.3
16	215 4.4	26.7 +- 0.8; 4.0	20.9 +- 0.8; 4.9	19.8 +- 1.1
17	204 4.0	26.5 +- 0.8; 4.0	20.7 +- 0.8; 4.8	19.2 +- 1.1
18	173 4.6	27.9 +- 0.8; 4.2	22.0 +- 0.9; 5.0	19.7 +- 1.2
19	174 6.4	Missing Dosimeter	No Net Data	17.3 +- 1.0
20	158 3.6	25.4 +- 0.8; 3.8	19.7 +- 0.8; 4.7	18.7 +- 1.3
21	124 4.2	25.7 +- 0.8; 3.8	19.9 +- 0.8; 4.8	19.2 +- 1.7
22	114 3.8	25.7 +- 0.8; 3.9	19.9 +- 0.8; 4.8	18.9 +- 1.1
23	97 4.5	26.0 +- 0.8; 3.9	20.2 +- 0.8; 4.8	18.3 +- 1.4
24	72 4.7	27.2 +- 0.8; 4.1	21.4 +- 0.9; 4.9	20.0 +- 1.4
25	41 2.0	26.2 +- 0.8; 3.9	20.4 +- 0.8; 4.8	19.0 +- 1.2
26	11 1.6	25.6 +- 0.8; 3.8	19.8 +- 0.8; 4.7	18.7 +- 1.3
27	358 1.5	26.8 +- 0.8; 4.0	21.0 +- 0.9; 4.9	19.3 +- 1.2
28	336 1.6	24.3 +- 0.7; 3.6	18.6 +- 0.8; 4.6	18.5 +- 1.2
29	310 2.3	23.1 +- 0.7; 3.5	17.5 +- 0.8; 4.5	17.8 +- 1.4
30	301 2.0	28.0 +- 0.8; 4.2	22.1 +- 0.9; 5.0	21.2 +- 1.1
31	271 1.7	24.9 +- 0.7; 3.7	19.2 +- 0.8; 4.7	18.6 +- 1.1
32	256 1.8	Damaged Dosimeter	No Net Data	19.6 +- 1.7
33	227 2.4	27.8 +- 0.8; 4.2	22.0 +- 0.9; 5.0	20.6 +- 1.3
34	204 1.7	25.9 +- 0.8; 3.9	20.2 +- 0.8; 4.8	18.9 +- 1.0
35	165 1.6	28.0 +- 0.8; 4.2	22.1 +- 0.9; 5.0	19.8 +- 1.9
36	149 1.8	27.0 +- 0.8; 4.0	21.2 +- 0.9; 4.9	19.8 +- 1.2
37	139 2.1	25.0 +- 0.7; 3.7	19.3 +- 0.8; 4.7	19.0 +- 1.2
38	111 1.5	24.8 +- 0.7; 3.7	19.1 +- 0.8; 4.7	17.1 +- 1.2
39	265 0.6	27.7 +- 0.8; 4.2	21.9 +- 0.9; 5.0	20.1 +- 1.5

Transit Dose = 4.9 +- 0.4; 3.1

LASALLE

For the period 970909-980210

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	20.6 +- 0.7	3
11.26 - 33.75 NNE	18.0 +- 0.0	1
33.76 - 56.25 NE	18.1 +- 3.2	2
56.26 - 78.75 ENE	21.4 +- 0.0	1
78.76 - 101.25 E	20.2 +- 0.0	1
101.26 - 123.75 ESE	19.5 +- 0.6	2
123.76 - 146.25 SE	19.6 +- 0.5	2
146.26 - 168.75 SSE	21.0 +- 1.2	3
168.76 - 191.25 S	22.0 +- 0.0	1
191.26 - 213.75 SSW	20.4 +- 0.4	2
213.76 - 236.25 SW	20.7 +- 1.4	3
236.26 - 258.75 WSW	19.3 +- 0.0	1
258.76 - 281.25 W	21.2 +- 1.8	3
281.26 - 303.75 WNW	19.4 +- 2.4	3
303.76 - 326.25 NW	18.8 +- 1.9	2
326.26 - 348.75 NNW	19.8 +- 1.6	2

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	20.5 +- 1.3	11
2 - 5	19.9 +- 1.7	18
> 5	19.3 +- 1.6	3
Upwind Control	19.6 +- 0.3	3

✱ Plant..site

LIMERICK

TLD Direct Radiation Environmental Monitoring

For the period 970911-980126 138 Days

Field Time: 113 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)		Gross Exposure (mR) +-Rdm; Tot.			Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.			Hist. Range Net Exp Rate +-1 Std Dev	
1	115	8.5	30.4	+-	0.9; 4.6	23.2	+-	0.8; 4.5	22.8	+- 1.5
3	85	3.7	25.7	+-	0.8; 3.8	19.4	+-	0.7; 4.1	19.0	+- 1.3
4	46	3.3	26.6	+-	0.8; 4.0	20.2	+-	0.7; 4.2	19.5	+- 1.3
5	20	3.7	24.8	+-	0.7; 3.7	18.7	+-	0.6; 4.0	19.3	+- 1.2
6	7	4.6	25.9	+-	0.8; 3.9	19.6	+-	0.7; 4.1	20.0	+- 1.3
7	340	7.2	23.9	+-	0.7; 3.6	18.0	+-	0.6; 3.9	17.8	+- 1.4
8	332	4.0	26.3	+-	0.8; 3.9	19.9	+-	0.7; 4.1	19.1	+- 1.2
9	313	3.4	25.4	+-	0.8; 3.8	19.2	+-	0.7; 4.1	19.1	+- 1.2
10	291	4.9	27.4	+-	0.8; 4.1	20.8	+-	0.7; 4.2	20.9	+- 1.5
11	304	3.0	33.0	+-	1.0; 4.9	25.2	+-	0.8; 4.8	24.5	+- 1.7
12	316	1.9	25.2	+-	0.8; 3.8	19.0	+-	0.7; 4.0	18.3	+- 1.2
13	347	1.9	27.9	+-	0.8; 4.2	21.2	+-	0.7; 4.3	20.4	+- 1.3
14	339	1.5	22.4	+-	0.7; 3.4	16.8	+-	0.6; 3.8	17.3	+- 1.1
15	41	1.7	25.0	+-	0.7; 3.7	18.9	+-	0.6; 4.0	18.3	+- 1.5
16	66	2.6	23.8	+-	0.7; 3.6	17.9	+-	0.6; 3.9	18.9	+- 1.5
17	5	0.6	24.2	+-	0.7; 3.6	18.3	+-	0.6; 4.0	18.4	+- 1.7
18	300	0.7	25.8	+-	0.8; 3.9	19.5	+-	0.7; 4.1	18.8	+- 1.5
19	291	0.7	24.2	+-	0.7; 3.6	18.2	+-	0.6; 4.0	18.5	+- 1.5
20	260	0.7	24.4	+-	0.7; 3.7	18.4	+-	0.6; 4.0	18.2	+- 1.3
21	234	0.9	24.9	+-	0.7; 3.7	18.8	+-	0.6; 4.0	18.3	+- 1.3
22	210	1.1	25.8	+-	0.8; 3.9	19.6	+-	0.7; 4.1	18.9	+- 1.1
23	174	1.7	23.3	+-	0.7; 3.5	17.5	+-	0.6; 3.9	17.1	+- 1.2
24	149	1.5	24.7	+-	0.7; 3.7	18.7	+-	0.6; 4.0	17.6	+- 1.3
25	124	1.0	26.6	+-	0.8; 4.0	20.2	+-	0.7; 4.2	19.6	+- 1.2
26	114	1.1	25.7	+-	0.8; 3.9	19.4	+-	0.7; 4.1	19.8	+- 1.3
27	160	1.0	25.4	+-	0.8; 3.8	19.2	+-	0.7; 4.1	19.0	+- 1.2
28	81	1.0	Missing Dosimeter			No Net Data			18.4	+- 1.1
29	51	0.7	26.3	+-	0.8; 3.9	19.9	+-	0.7; 4.1	19.0	+- 1.3
30	144	3.2	30.2	+-	0.9; 4.5	23.0	+-	0.8; 4.5	22.4	+- 1.6
31	158	2.6	26.5	+-	0.8; 4.0	20.1	+-	0.7; 4.2	19.0	+- 1.8
32	153	7.3	23.5	+-	0.7; 3.5	17.6	+-	0.6; 3.9	17.7	+- 1.3
33	186	4.2	23.8	+-	0.7; 3.6	17.9	+-	0.6; 3.9	17.2	+- 1.3
34	194	3.8	20.8	+-	0.6; 3.1	15.5	+-	0.6; 3.7	16.6	+- 1.3
35	229	5.1	25.6	+-	0.8; 3.8	19.3	+-	0.7; 4.1	18.8	+- 1.2
36	251	4.1	28.3	+-	0.8; 4.2	21.5	+-	0.7; 4.3	20.1	+- 2.1
37	270	3.0	20.9	+-	0.6; 3.1	15.6	+-	0.6; 3.7	15.8	+- 1.1
38	293	11.9	26.9	+-	0.8; 4.0	20.4	+-	0.7; 4.2	20.3	+- 1.5
39	293	11.9	27.7	+-	0.8; 4.2	21.0	+-	0.7; 4.3	20.5	+- 1.5
40	293	11.9	26.9	+-	0.8; 4.0	20.4	+-	0.7; 4.2	20.7	+- 1.5
41	126	2.9	21.9	+-	0.7; 3.3	16.4	+-	0.6; 3.8	16.0	+- 1.0
42	111	4.3	25.3	+-	0.8; 3.8	19.1	+-	0.7; 4.1	19.3	+- 1.5

Transit Dose = 1.3 +- 0.3; 3.4

LIMERICK

For the period 970911-980126

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	18.9 +- 0.9	2
11.26 - 33.75 NNE	18.7 +- 0.0	1
33.76 - 56.25 NE	19.7 +- 0.7	3
56.26 - 78.75 ENE	17.9 +- 0.0	1
78.76 - 101.25 E	19.4 +- 0.0	1
101.26 - 123.75 ESE	20.6 +- 2.2	3
123.76 - 146.25 SE	19.9 +- 3.3	3
146.26 - 168.75 SSE	18.9 +- 1.0	4
168.76 - 191.25 S	17.7 +- 0.3	2
191.26 - 213.75 SSW	17.5 +- 2.9	2
213.76 - 236.25 SW	19.1 +- 0.4	2
236.26 - 258.75 WSW	21.5 +- 0.0	1
258.76 - 281.25 W	17.0 +- 2.0	2
281.26 - 303.75 WNW	19.5 +- 1.3	3
303.76 - 326.25 NW	21.2 +- 3.5	3
326.26 - 348.75 NNW	19.0 +- 2.0	4

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	19.0 +- 1.0	16
2 - 5	19.4 +- 2.5	17
> 5	19.5 +- 2.5	4
Upwind Control	20.6 +- 0.4	3

NRC TLD DOSES FOR LIMERICK AREA

Miles

Legend

Water

--- Railroads

Plant..site

— Highways

--- Roads

MAINE YANKEE

TLD Direct Radiation Environmental Monitoring

For the period 970911-980126 138 Days

Field Time: 91 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)		Gross Exposure (mR) +-Rdm; Tot.			Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.			Hist. Range Net Exp Rate +-1 Std Dev	
1	340	1.0	25.2	+-	0.8; 3.8	20.8	+-	0.8; 4.8	18.8	+- 1.6
2	6	1.4	23.2	+-	0.7; 3.5	18.8	+-	0.8; 4.5	17.8	+- 1.7
3	23	1.5	21.7	+-	0.6; 3.2	17.2	+-	0.7; 4.4	17.5	+- 1.9
4	44	1.8	21.4	+-	0.6; 3.2	17.0	+-	0.7; 4.3	17.3	+- 1.8
5	116	0.5	22.3	+-	0.7; 3.3	17.9	+-	0.7; 4.4	17.2	+- 1.8
6	168	1.0	24.6	+-	0.7; 3.7	20.1	+-	0.8; 4.7	18.3	+- 1.7
7	185	1.6	21.8	+-	0.7; 3.3	17.4	+-	0.7; 4.4	16.8	+- 1.5
8	195	2.3	23.4	+-	0.7; 3.5	18.9	+-	0.8; 4.6	17.8	+- 1.6
9	209	3.8	23.2	+-	0.7; 3.5	18.8	+-	0.8; 4.5	17.3	+- 1.6
10	310	1.7	22.1	+-	0.7; 3.3	17.7	+-	0.7; 4.4	17.3	+- 1.7
11	290	1.8	25.5	+-	0.8; 3.8	21.0	+-	0.8; 4.8	20.1	+- 2.2
12	275	1.7	24.6	+-	0.7; 3.7	20.1	+-	0.8; 4.7	19.0	+- 1.8
13	256	1.9	23.5	+-	0.7; 3.5	19.1	+-	0.8; 4.6	17.8	+- 1.9
14	232	2.5	24.6	+-	0.7; 3.7	20.2	+-	0.8; 4.7	18.9	+- 1.8
15	227	5.3	24.8	+-	0.7; 3.7	20.3	+-	0.8; 4.7	18.6	+- 2.0
16	246	4.4	24.9	+-	0.7; 3.7	20.4	+-	0.8; 4.7	19.6	+- 2.1
17	250	6.6	30.0	+-	0.9; 4.5	25.5	+-	1.0; 5.3	24.0	+- 1.6
18	268	4.7	24.3	+-	0.7; 3.7	19.9	+-	0.8; 4.7	18.6	+- 1.8
19	283	4.4	24.5	+-	0.7; 3.7	20.1	+-	0.8; 4.7	18.4	+- 1.6
20	305	4.7	23.3	+-	0.7; 3.5	18.9	+-	0.8; 4.5	17.8	+- 1.8
21	300	2.9	24.3	+-	0.7; 3.6	19.9	+-	0.8; 4.7	18.4	+- 1.9
22	332	2.7	21.3	+-	0.6; 3.2	16.9	+-	0.7; 4.3	18.6	+- 2.0
23	20	3.9	23.4	+-	0.7; 3.5	18.9	+-	0.8; 4.6	18.8	+- 2.0
24	23	3.0	24.8	+-	0.7; 3.7	20.3	+-	0.8; 4.7	19.3	+- 1.9
25	42	4.7	23.8	+-	0.7; 3.6	19.3	+-	0.8; 4.6	19.0	+- 1.9
26	60	15.0	21.7	+-	0.7; 3.3	17.3	+-	0.7; 4.4	17.2	+- 1.9
27	62	16.0	21.5	+-	0.6; 3.2	17.1	+-	0.7; 4.3	16.2	+- 1.6
28	63	16.0	22.1	+-	0.7; 3.3	17.7	+-	0.7; 4.4	17.5	+- 1.5
29	64	2.1	25.1	+-	0.8; 3.8	20.6	+-	0.8; 4.7	20.2	+- 1.9
30	84	1.5	21.9	+-	0.7; 3.3	17.5	+-	0.7; 4.4	16.9	+- 1.8
31	115	1.6	20.8	+-	0.6; 3.1	16.4	+-	0.7; 4.3	17.0	+- 1.5
32	135	2.0	20.6	+-	0.6; 3.1	16.2	+-	0.7; 4.2	16.5	+- 1.8
33	66	3.5	23.2	+-	0.7; 3.5	18.8	+-	0.8; 4.5	17.8	+- 1.7
34	97	4.9	24.7	+-	0.7; 3.7	20.3	+-	0.8; 4.7	19.1	+- 1.8
35	123	4.8	24.4	+-	0.7; 3.7	20.0	+-	0.8; 4.7	19.0	+- 1.9
36	140	4.9	22.1	+-	0.7; 3.3	17.6	+-	0.7; 4.4	17.2	+- 2.0
37	151	6.0	25.8	+-	0.8; 3.9	21.3	+-	0.8; 4.8	18.8	+- 2.1
38	152	4.2	25.9	+-	0.8; 3.9	21.5	+-	0.8; 4.8	19.7	+- 1.8
39	172	4.9	23.1	+-	0.7; 3.5	18.7	+-	0.8; 4.5	17.7	+- 1.7
40	156	7.4	23.0	+-	0.7; 3.5	18.6	+-	0.8; 4.5	18.1	+- 1.4

Transit Dose = 4.2 +- 0.4; 3.0

MAINE YANKEE

For the period 970911-980126

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	18.8 +- 0.0	1
11.26 - 33.75 NNE	18.8 +- 1.5	3
33.76 - 56.25 NE	18.2 +- 1.6	2
56.26 - 78.75 ENE	19.7 +- 1.3	2
78.76 - 101.25 E	18.9 +- 2.0	2
101.26 - 123.75 ESE	18.1 +- 1.8	3
123.76 - 146.25 SE	16.9 +- 1.0	2
146.26 - 168.75 SSE	20.4 +- 1.3	4
168.76 - 191.25 S	18.0 +- 0.9	2
191.26 - 213.75 SSW	18.8 +- 0.1	2
213.76 - 236.25 SW	20.3 +- 0.1	2
236.26 - 258.75 WSW	21.7 +- 3.4	3
258.76 - 281.25 W	20.0 +- 0.2	2
281.26 - 303.75 WNW	20.3 +- 0.6	3
303.76 - 326.25 NW	18.3 +- 0.9	2
326.26 - 348.75 NNW	18.8 +- 2.8	2

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	18.4 +- 1.6	14
2 - 5	19.5 +- 1.1	19
> 5	21.4 +- 3.0	4
Upwind Control	17.3 +- 0.3	3

NRC TLD DOSES FOR MAINE YANKEE AREA

Miles

0 2 4

Legend

Water

— Highways

--- Railroads

--- Roads

★ Plant..site

MCGUIRE

TLD Direct Radiation Environmental Monitoring

For the period 970910-980211 155 Days

Field Time: 94 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)		Gross Exposure (mR) +-Rdm; Tot.			Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.			Hist. Range Net Exp Rate +-1 Std Dev	
1	97	0.5	21.3	+-	0.6; 3.2	13.2	+-	0.8; 4.5	13.1	+- 2.4
2	323	1.6	25.1	+-	0.8; 3.8	16.9	+-	0.8; 4.8	16.1	+- 1.7
3	336	1.7	24.0	+-	0.7; 3.6	15.8	+-	0.8; 4.7	16.9	+- 2.3
4	303	2.9	23.3	+-	0.7; 3.5	15.1	+-	0.8; 4.7	15.2	+- 3.1
5	321	3.9	25.5	+-	0.8; 3.8	17.3	+-	0.9; 4.9	15.8	+- 1.7
6	334	3.7	22.4	+-	0.7; 3.4	14.2	+-	0.8; 4.6	15.0	+- 2.1
7	352	3.5	18.8	+-	0.6; 2.8	10.8	+-	0.7; 4.2	13.7	+- 2.2
8	287	2.0	27.6	+-	0.8; 4.1	19.2	+-	0.9; 5.1	17.8	+- 2.6
9	273	1.9	19.0	+-	0.6; 2.9	11.0	+-	0.7; 4.2	14.9	+- 2.9
10	244	1.7	20.8	+-	0.6; 3.1	12.7	+-	0.7; 4.4	13.8	+- 2.2
11	225	2.1	20.5	+-	0.6; 3.1	12.4	+-	0.7; 4.4	13.3	+- 2.3
12	212	3.6	21.9	+-	0.7; 3.3	13.8	+-	0.8; 4.5	15.2	+- 2.1
13	232	4.4	27.8	+-	0.8; 4.2	19.4	+-	0.9; 5.1	21.1	+- 1.9
14	253	3.7	23.7	+-	0.7; 3.6	15.5	+-	0.8; 4.7	17.8	+- 2.3
15	261	4.2	21.8	+-	0.7; 3.3	13.7	+-	0.8; 4.5	14.2	+- 1.8
16	288	4.3	28.2	+-	0.8; 4.2	19.9	+-	0.9; 5.2	21.0	+- 2.3
17	288	17.0	30.4	+-	0.9; 4.6	22.0	+-	1.0; 5.4	22.1	+- 1.8
18	287	2.0	25.5	+-	0.8; 3.8	17.2	+-	0.9; 4.9	19.6	+- 2.7
19	286	17.0	27.2	+-	0.8; 4.1	18.9	+-	0.9; 5.1	20.7	+- 3.3
20	233	18.0	28.9	+-	0.9; 4.3	20.5	+-	0.9; 5.3	20.8	+- 2.1
21	204	10.0	22.7	+-	0.7; 3.4	14.5	+-	0.8; 4.6	14.8	+- 2.3
22	239	9.5	25.3	+-	0.8; 3.8	17.1	+-	0.8; 4.9	16.3	+- 2.2
23	115	4.9	18.0	+-	0.5; 2.7	10.0	+-	0.7; 4.1	11.9	+- 2.6
24	132	4.9	18.4	+-	0.6; 2.8	10.4	+-	0.7; 4.2	12.7	+- 1.9
25	156	4.0	16.5	+-	0.5; 2.5	8.6	+-	0.6; 4.0	10.5	+- 2.3
26	175	3.7	19.7	+-	0.6; 3.0	11.7	+-	0.7; 4.3	13.0	+- 1.8
27	198	4.3	Missing Dosimeter			No Net Data			18.3	+- 2.8
28	169	13.0	19.8	+-	0.6; 3.0	11.8	+-	0.7; 4.3	13.1	+- 2.5
29	155	13.0	19.2	+-	0.6; 2.9	11.2	+-	0.7; 4.3	13.2	+- 2.1
30	146	14.0	20.1	+-	0.6; 3.0	12.1	+-	0.7; 4.3	12.6	+- 2.0
31	143	1.9	16.9	+-	0.5; 2.5	9.0	+-	0.7; 4.0	12.4	+- 3.5
32	155	1.3	19.6	+-	0.6; 2.9	11.6	+-	0.7; 4.3	13.6	+- 2.3
33	178	1.6	20.7	+-	0.6; 3.1	12.6	+-	0.7; 4.4	12.1	+- 2.3
34	108	2.0	21.9	+-	0.7; 3.3	13.8	+-	0.8; 4.5	14.0	+- 2.1
35	93	2.2	19.6	+-	0.6; 2.9	11.6	+-	0.7; 4.3	13.0	+- 2.9
36	68	2.5	20.9	+-	0.6; 3.1	12.8	+-	0.7; 4.4	13.6	+- 2.2
37	82	4.7	20.0	+-	0.6; 3.0	12.0	+-	0.7; 4.3	13.3	+- 2.3
38	64	4.9	21.2	+-	0.6; 3.2	13.1	+-	0.8; 4.4	13.6	+- 2.5
39	42	5.0	18.0	+-	0.5; 2.7	10.1	+-	0.7; 4.1	16.4	+- 3.3
40	26	4.3	21.2	+-	0.6; 3.2	13.1	+-	0.7; 4.4	14.1	+- 2.3
41	42	2.0	19.5	+-	0.6; 2.9	11.5	+-	0.7; 4.3	11.9	+- 2.0
42	21	1.6	21.3	+-	0.6; 3.2	13.2	+-	0.8; 4.5	16.0	+- 2.4
43	8	2.6	23.7	+-	0.7; 3.6	15.5	+-	0.8; 4.7	17.0	+- 2.1
44	37	13.0	26.5	+-	0.8; 4.0	18.2	+-	0.9; 5.0	20.0	+- 2.9
45	78	19.0	28.9	+-	0.9; 4.3	20.5	+-	0.9; 5.3	22.3	+- 2.5
46	94	19.0	27.6	+-	0.8; 4.1	19.2	+-	0.9; 5.1	16.9	+- 2.3

Transit Dose = 7.5 +- 0.5; 3.4

MCGUIRE

For the period 970910-980211

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	13.2 +- 3.3	2
11.26 - 33.75 NNE	13.2 +- 0.1	2
33.76 - 56.25 NE	13.3 +- 4.3	3
56.26 - 78.75 ENE	15.5 +- 4.4	3
78.76 - 101.25 E	14.0 +- 3.5	4
101.26 - 123.75 ESE	11.9 +- 2.7	2
123.76 - 146.25 SE	10.5 +- 1.5	3
146.26 - 168.75 SSE	10.4 +- 1.6	3
168.76 - 191.25 S	12.0 +- 0.5	3
191.26 - 213.75 SSW	14.2 +- 0.5	2
213.76 - 236.25 SW	17.5 +- 4.4	3
236.26 - 258.75 WSW	15.1 +- 2.2	3
258.76 - 281.25 W	12.3 +- 1.9	2
281.26 - 303.75 WNW	18.1 +- 2.6	3
303.76 - 326.25 NW	17.1 +- 0.3	2
326.26 - 348.75 NNW	15.0 +- 1.1	2

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	13.4 +- 2.8	12
2 - 5	13.4 +- 3.0	21
> 5	16.1 +- 3.8	9
Upwind Control	19.4 +- 2.4	3

NRC TLD DOSES FOR McGUIRE AREA

Miles

Legend

Water

--- Railroads

Plant..site

— Highways

--- Roads

MILLSTONE

TLD Direct Radiation Environmental Monitoring

For the period 970910-980310 182 Days

Field Time: 100 Days

NRC Sta	Location		Gross		Net Exposure Rate		Hist. Range	
	Azimuth/Dist (Deg)/(Mi)		Exposure (mR) +-Rdm; Tot.		(mR/Std. Qtr.) +-Rdm; Tot.		Net Exp Rate +-1 Std Dev	
1	0	1.0	32.3 +- 1.0; 4.8		24.4 +- 0.9; 5.3		20.2 +- 1.3	
2	24	1.3	24.5 +- 0.7; 3.7		17.4 +- 0.8; 4.5		15.0 +- 1.0	
3	47	1.5	32.0 +- 1.0; 4.8		24.2 +- 0.9; 5.3		19.9 +- 1.2	
4	60	1.7	28.4 +- 0.9; 4.3		20.9 +- 0.8; 4.9		18.3 +- 1.5	
5	85	1.3	31.0 +- 0.9; 4.6		23.3 +- 0.9; 5.1		19.3 +- 1.1	
6	110	1.8	30.5 +- 0.9; 4.6		22.8 +- 0.9; 5.1		18.8 +- 1.1	
7	67	5.3	29.6 +- 0.9; 4.4		22.0 +- 0.9; 5.0		19.9 +- 1.9	
8	49	5.3	26.0 +- 0.8; 3.9		18.7 +- 0.8; 4.6		20.0 +- 1.5	
9	84	5.2	28.2 +- 0.8; 4.2		20.7 +- 0.8; 4.8		18.2 +- 1.0	
11	232	2.5	29.2 +- 0.9; 4.4		21.6 +- 0.9; 4.9		18.0 +- 1.2	
12	256	2.4	32.2 +- 1.0; 4.8		24.3 +- 0.9; 5.3		20.2 +- 1.2	
13	274	2.2	31.2 +- 0.9; 4.7		23.5 +- 0.9; 5.2		20.1 +- 1.4	
14	295	1.9	33.3 +- 1.0; 5.0		25.3 +- 1.0; 5.4		21.3 +- 1.4	
15	315	1.5	27.0 +- 0.8; 4.1		19.7 +- 0.8; 4.7		15.9 +- 1.0	
16	339	1.2	31.8 +- 1.0; 4.8		24.0 +- 0.9; 5.2		20.0 +- 1.1	
17	353	3.5	29.9 +- 0.9; 4.5		22.3 +- 0.9; 5.0		19.0 +- 1.4	
18	24	3.5	32.3 +- 1.0; 4.8		24.4 +- 0.9; 5.3		19.8 +- 1.4	
19	33	3.0	33.4 +- 1.0; 5.0		25.4 +- 1.0; 5.4		21.3 +- 2.0	
20	82	4.0	29.9 +- 0.9; 4.5		22.3 +- 0.9; 5.0		18.1 +- 1.1	
22	59	3.7	29.1 +- 0.9; 4.4		21.6 +- 0.9; 4.9		20.2 +- 1.3	
28	257	5.8	30.7 +- 0.9; 4.6		23.0 +- 0.9; 5.1		22.3 +- 2.5	
29	272	3.7	33.9 +- 1.0; 5.1		25.9 +- 1.0; 5.5		21.9 +- 1.8	
30	295	3.5	33.3 +- 1.0; 5.0		25.4 +- 1.0; 5.4		21.3 +- 1.4	
31	317	3.6	29.4 +- 0.9; 4.4		21.8 +- 0.9; 5.0		18.5 +- 1.3	
32	327	4.3	34.0 +- 1.0; 5.1		26.0 +- 1.0; 5.5		21.9 +- 1.7	
33	41	4.7	30.7 +- 0.9; 4.6		23.0 +- 0.9; 5.1		19.9 +- 1.2	
34	54	5.5	28.0 +- 0.8; 4.2		20.6 +- 0.8; 4.8		21.0 +- 1.3	
37	354	6.8	29.6 +- 0.9; 4.4		22.0 +- 0.9; 5.0		19.4 +- 1.3	
39	1	5.7	29.6 +- 0.9; 4.4		22.0 +- 0.9; 5.0		19.0 +- 1.2	
40	278	8.7	29.4 +- 0.9; 4.4		21.8 +- 0.9; 5.0		17.2 +- 1.2	
41	34	11.0	34.5 +- 1.0; 5.2		26.4 +- 1.0; 5.5		23.9 +- 1.6	
42	84	8.0	31.2 +- 0.9; 4.7		23.5 +- 0.9; 5.2		19.4 +- 1.4	
46	41	0.6	31.1 +- 0.9; 4.7		23.3 +- 0.9; 5.2		18.9 +- 1.4	
48	4	40.0	38.3 +- 1.1; 5.7		29.8 +- 1.1; 6.0		24.5 +- 2.2	
49	4	40.0	38.3 +- 1.1; 5.7		29.8 +- 1.1; 6.0		24.5 +- 2.1	

Transit Dose = 5.2 +- 0.4; 3.3

MILLSTONE

For the period 970910-980310

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	22.7 +- 1.2	4
11.26 - 33.75 NNE	22.4 +- 4.3	3
33.76 - 56.25 NE	22.7 +- 2.7	6
56.26 - 78.75 ENE	21.5 +- 0.5	3
78.76 - 101.25 E	22.4 +- 1.2	4
101.26 - 123.75 ESE	22.8 +- 0.0	1
123.76 - 146.25 SE	No Data +- No Data	0
146.26 - 168.75 SSE	No Data +- No Data	0
168.76 - 191.25 S	No Data +- No Data	0
191.26 - 213.75 SSW	No Data +- No Data	0
213.76 - 236.25 SW	21.6 +- 0.0	1
236.26 - 258.75 WSW	23.6 +- 1.0	2
258.76 - 281.25 W	23.7 +- 2.1	3
281.26 - 303.75 WNW	25.3 +- 0.1	2
303.76 - 326.25 NW	20.7 +- 1.5	2
326.26 - 348.75 NNW	25.0 +- 1.4	2

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	22.5 +- 2.4	10
2 - 5	23.6 +- 1.7	13
> 5	22.1 +- 2.0	10
Upwind Control	29.8 +- 0.0	2

NRC TLD DOSES FOR MILLSTONE AREA

Miles

Legend

Water
Highways

Railroads
Roads

Plant..site

MONTICELLO

TLD Direct Radiation Environmental Monitoring

For the period 970908-980113 128 Days

Field Time: 92 Days

NRC Sta	Location		Gross		Net Exposure Rate			Hist. Range	
	Azimuth/Dist	(Deg)/(Mi)	Exposure (mR)	+--Rdm; Tot.	(mR/Std. Qtr.)	+--Rdm; Tot.		Net Exp Rate	+--1 Std Dev
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
1	133	3.6	23.2 +- 0.7; 3.5		17.6 +- 0.8; 4.6			16.6 +- 1.2	
2	163	4.6	22.5 +- 0.7; 3.4		16.9 +- 0.8; 4.5			17.4 +- 1.3	
3	183	4.1	23.1 +- 0.7; 3.5		17.6 +- 0.8; 4.6			17.8 +- 1.3	
4	206	4.3	22.9 +- 0.7; 3.4		17.3 +- 0.8; 4.5			17.5 +- 1.2	
5	230	4.2	24.9 +- 0.7; 3.7		19.2 +- 0.8; 4.7			19.0 +- 1.9	
6	253	4.6	22.2 +- 0.7; 3.3		16.7 +- 0.8; 4.5			17.7 +- 1.4	
7	269	4.4	22.3 +- 0.7; 3.3		16.7 +- 0.8; 4.5			17.1 +- 1.4	
8	286	4.0	23.8 +- 0.7; 3.6		18.2 +- 0.8; 4.6			18.0 +- 1.4	
9	274	1.9	22.0 +- 0.7; 3.3		16.5 +- 0.7; 4.4			17.0 +- 1.2	
10	244	1.3	19.0 +- 0.6; 2.9		13.5 +- 0.7; 4.1			15.4 +- 1.2	
11	226	0.9	21.9 +- 0.7; 3.3		16.3 +- 0.7; 4.4			16.8 +- 1.3	
12	181	1.8	21.7 +- 0.7; 3.3		16.1 +- 0.7; 4.4			17.0 +- 1.3	
13	137	1.7	19.9 +- 0.6; 3.0		14.4 +- 0.7; 4.2			16.8 +- 1.3	
14	155	1.0	21.5 +- 0.6; 3.2		16.0 +- 0.7; 4.4			17.1 +- 1.1	
15	208	0.6	20.8 +- 0.6; 3.1		15.2 +- 0.7; 4.3			16.6 +- 1.2	
16	284	2.0	21.8 +- 0.7; 3.3		16.2 +- 0.7; 4.4			16.5 +- 1.0	
17	113	1.6	21.6 +- 0.6; 3.2		16.0 +- 0.7; 4.4			17.1 +- 1.3	
18	85	1.1	21.6 +- 0.6; 3.2		16.0 +- 0.7; 4.4			16.6 +- 1.2	
19	63	1.2	20.1 +- 0.6; 3.0		14.5 +- 0.7; 4.2			16.9 +- 1.4	
20	37	1.7	22.2 +- 0.7; 3.3		16.6 +- 0.8; 4.5			16.9 +- 1.0	
21	23	0.8	20.3 +- 0.6; 3.0		14.8 +- 0.7; 4.3			16.9 +- 1.2	
22	354	0.7	24.3 +- 0.7; 3.6		18.7 +- 0.8; 4.7			17.3 +- 1.2	
23	338	0.8	22.1 +- 0.7; 3.3		16.6 +- 0.8; 4.4			17.1 +- 1.4	
24	307	1.8	20.3 +- 0.6; 3.0		14.8 +- 0.7; 4.3			17.0 +- 1.2	
25	339	4.1	23.5 +- 0.7; 3.5		17.9 +- 0.8; 4.6			16.6 +- 1.2	
26	320	6.0	21.1 +- 0.6; 3.2		15.5 +- 0.7; 4.3			16.8 +- 1.2	
27	354	4.5	21.4 +- 0.6; 3.2		15.8 +- 0.7; 4.4			16.8 +- 1.5	
28	17	3.7	21.0 +- 0.6; 3.1		15.4 +- 0.7; 4.3			15.9 +- 1.4	
29	50	4.0	18.8 +- 0.6; 2.8		13.3 +- 0.7; 4.1			15.7 +- 1.4	
30	77	3.6	21.4 +- 0.6; 3.2		15.9 +- 0.7; 4.4			16.9 +- 1.3	
31	115	3.3	20.6 +- 0.6; 3.1		15.1 +- 0.7; 4.3			16.6 +- 1.2	
32	90	4.6	18.5 +- 0.6; 2.8		13.0 +- 0.7; 4.1			15.6 +- 1.6	
33	323	16.0	20.9 +- 0.6; 3.1		15.3 +- 0.7; 4.3			16.5 +- 1.4	
34	323	16.0	20.8 +- 0.6; 3.1		15.3 +- 0.7; 4.3			16.5 +- 1.2	
35	323	16.0	21.4 +- 0.6; 3.2		15.8 +- 0.7; 4.4			17.3 +- 1.3	

Transit Dose = 5.2 +- 0.4; 3.1

MONTICELLO

For the period 970908-980113

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	17.2 +- 2.0	2
11.26 - 33.75 NNE	15.1 +- 0.4	2
33.76 - 56.25 NE	15.0 +- 2.4	2
56.26 - 78.75 ENE	15.2 +- 0.9	2
78.76 - 101.25 E	14.5 +- 2.1	2
101.26 - 123.75 ESE	15.6 +- 0.7	2
123.76 - 146.25 SE	16.0 +- 2.3	2
146.26 - 168.75 SSE	16.4 +- 0.7	2
168.76 - 191.25 S	16.9 +- 1.0	2
191.26 - 213.75 SSW	16.3 +- 1.4	2
213.76 - 236.25 SW	17.8 +- 2.1	2
236.26 - 258.75 WSW	15.1 +- 2.2	2
258.76 - 281.25 W	16.6 +- 0.2	2
281.26 - 303.75 WNW	17.2 +- 1.4	2
303.76 - 326.25 NW	15.2 +- 0.5	2
326.26 - 348.75 NNW	17.2 +- 0.9	2

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	15.8 +- 1.2	16
2 - 5	16.4 +- 1.7	15
> 5	15.5 +- 0.0	1
Upwind Control	15.5 +- 0.3	3

NRC TLD DOSES FOR MONTICELLO AREA

NORTH ANNA

TLD Direct Radiation Environmental Monitoring

For the period 970909-980205 150 Days

Field Time: 99 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)	Gross Exposure (mR) +-Rdm; Tot.	Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.	Hist. Range Net Exp Rate +-1 Std Dev
1	243 1.8	28.5 +- 0.9; 4.3	21.7 +- 0.9; 4.9	21.2 +- 1.5
2	263 1.6	24.3 +- 0.7; 3.6	17.9 +- 0.7; 4.4	17.7 +- 1.2
3	296 1.0	23.5 +- 0.7; 3.5	17.2 +- 0.7; 4.4	17.8 +- 1.4
4	311 1.3	30.4 +- 0.9; 4.6	23.5 +- 0.9; 5.1	22.4 +- 1.3
5	329 1.3	24.9 +- 0.7; 3.7	18.5 +- 0.8; 4.5	19.0 +- 1.2
6	231 3.9	26.9 +- 0.8; 4.0	20.3 +- 0.8; 4.7	20.7 +- 1.4
7	224 1.7	26.1 +- 0.8; 3.9	19.6 +- 0.8; 4.6	20.1 +- 1.3
8	210 1.6	24.6 +- 0.7; 3.7	18.2 +- 0.8; 4.5	18.2 +- 1.2
9	181 1.4	21.7 +- 0.7; 3.3	15.6 +- 0.7; 4.2	16.0 +- 1.1
10	155 1.0	31.3 +- 0.9; 4.7	24.3 +- 0.9; 5.2	23.8 +- 1.4
11	136 1.6	26.1 +- 0.8; 3.9	19.6 +- 0.8; 4.6	18.3 +- 1.5
12	163 3.5	26.1 +- 0.8; 3.9	19.6 +- 0.8; 4.6	19.2 +- 1.1
13	190 3.3	25.3 +- 0.8; 3.8	18.9 +- 0.8; 4.5	17.8 +- 1.4
14	205 4.9	23.2 +- 0.7; 3.5	16.9 +- 0.7; 4.3	16.8 +- 1.3
15	140 4.2	27.1 +- 0.8; 4.1	20.5 +- 0.8; 4.7	19.2 +- 1.1
16	113 4.9	29.7 +- 0.9; 4.5	22.9 +- 0.9; 5.0	22.9 +- 1.6
17	93 3.3	21.8 +- 0.7; 3.3	15.7 +- 0.7; 4.2	16.1 +- 1.1
18	64 4.1	27.1 +- 0.8; 4.1	20.5 +- 0.8; 4.7	19.4 +- 1.2
19	78 2.7	37.2 +- 1.1; 5.6	29.7 +- 1.1; 5.9	29.1 +- 1.4
20	97 1.9	27.9 +- 0.8; 4.2	21.2 +- 0.8; 4.8	20.7 +- 1.7
21	105 1.7	22.1 +- 0.7; 3.3	16.0 +- 0.7; 4.2	16.8 +- 1.2
22	60 2.4	25.0 +- 0.8; 3.8	18.6 +- 0.8; 4.5	17.2 +- 1.2
23	37 1.4	25.6 +- 0.8; 3.8	19.2 +- 0.8; 4.6	18.9 +- 1.4
24	16 1.6	32.9 +- 1.0; 4.9	25.7 +- 1.0; 5.4	24.1 +- 1.4
25	48 3.5	21.5 +- 0.6; 3.2	15.4 +- 0.7; 4.2	15.9 +- 1.7
26	17 3.7	26.8 +- 0.8; 4.0	20.2 +- 0.8; 4.7	19.4 +- 1.4
27	3 4.8	23.1 +- 0.7; 3.5	16.8 +- 0.7; 4.3	17.4 +- 1.6
28	348 4.0	25.1 +- 0.8; 3.8	18.6 +- 0.8; 4.5	17.4 +- 1.1
29	2 1.9	23.3 +- 0.7; 3.5	17.1 +- 0.7; 4.3	16.9 +- 1.1
30	284 5.0	22.4 +- 0.7; 3.4	16.2 +- 0.7; 4.2	17.0 +- 1.4
31	310 4.7	27.2 +- 0.8; 4.1	20.6 +- 0.8; 4.7	20.1 +- 1.3
32	273 4.9	22.5 +- 0.7; 3.4	16.3 +- 0.7; 4.3	14.7 +- 1.7
33	257 5.1	24.6 +- 0.7; 3.7	18.2 +- 0.8; 4.5	18.3 +- 1.4
34	242 7.1	25.3 +- 0.8; 3.8	18.9 +- 0.8; 4.5	19.2 +- 1.7
35	255 11.0	24.0 +- 0.7; 3.6	17.7 +- 0.7; 4.4	18.2 +- 1.6
36	248 15.0	25.1 +- 0.8; 3.8	18.6 +- 0.8; 4.5	18.5 +- 1.4
37	247 17.0	24.3 +- 0.7; 3.6	18.0 +- 0.7; 4.4	17.8 +- 1.4
38	244 19.0	20.6 +- 0.6; 3.1	14.6 +- 0.7; 4.1	17.0 +- 1.6

Transit Dose = 4.6 +- 0.4; 3.2

NORTH ANNA

For the period 970909-980205

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	16.9 +- 0.2	2
11.26 - 33.75 NNE	23.0 +- 3.9	2
33.76 - 56.25 NE	17.3 +- 2.6	2
56.26 - 78.75 ENE	22.9 +- 5.9	3
78.76 - 101.25 E	18.5 +- 3.9	2
101.26 - 123.75 ESE	19.4 +- 4.9	2
123.76 - 146.25 SE	20.0 +- 0.6	2
146.26 - 168.75 SSE	21.9 +- 3.3	2
168.76 - 191.25 S	17.2 +- 2.3	2
191.26 - 213.75 SSW	17.6 +- 0.9	2
213.76 - 236.25 SW	19.9 +- 0.5	2
236.26 - 258.75 WSW	19.1 +- 1.8	4
258.76 - 281.25 W	17.1 +- 1.1	2
281.26 - 303.75 WNW	16.7 +- 0.7	2
303.76 - 326.25 NW	22.0 +- 2.0	2
326.26 - 348.75 NNW	18.5 +- 0.1	2

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	19.7 +- 3.0	15
2 - 5	19.3 +- 3.4	17
> 5	18.2 +- 0.6	3
Upwind Control	17.1 +- 2.2	3

NRC TLD DOSES FOR NORTH ANNA AREA

Miles

0 2 4

Legend

Water
Highways

Railroads
Roads

Plant site

OCONEE

TLD Direct Radiation Environmental Monitoring

For the period 970909-980211 156 Days

Field Time: 112 Days

NRC Sta	Location		Gross			Net Exposure Rate			Hist. Range	
	Azimuth/Dist	(Deg)/(Mi)	Exposure (mR)			(mR/Std. Qtr.)			Net Exp Rate	+1 Std Dev
			+-Rdm; Tot.			+-Rdm; Tot.			+-1 Std Dev	
1	158	7.5	30.5	+-	0.9; 4.6	22.1	+-	0.8; 4.6	22.2	+- 1.9
2	133	4.9	34.5	+-	1.0; 5.2	25.3	+-	0.9; 5.0	25.0	+- 1.7
3	119	4.3	35.8	+-	1.1; 5.4	26.3	+-	0.9; 5.2	24.5	+- 1.4
4	84	4.7	33.6	+-	1.0; 5.0	24.6	+-	0.9; 4.9	24.5	+- 1.2
5	65	4.0	33.0	+-	1.0; 4.9	24.0	+-	0.8; 4.9	23.5	+- 1.5
6	52	1.8	32.7	+-	1.0; 4.9	23.8	+-	0.8; 4.8	24.4	+- 1.6
7	22	3.5	33.3	+-	1.0; 5.0	24.3	+-	0.9; 4.9	24.7	+- 1.5
8	33	1.4	32.5	+-	1.0; 4.9	23.7	+-	0.8; 4.8	24.7	+- 1.4
9	52	1.8	27.0	+-	0.8; 4.1	19.3	+-	0.7; 4.3	19.4	+- 1.3
10	67	1.1	Damaged Dosimeter			No Net Data			17.7	+- 2.1
11	107	1.9	27.0	+-	0.8; 4.1	19.3	+-	0.7; 4.3	18.9	+- 1.2
12	87	1.0	30.4	+-	0.9; 4.6	22.0	+-	0.8; 4.6	21.7	+- 1.4
13	142	0.7	30.8	+-	0.9; 4.6	22.3	+-	0.8; 4.7	22.5	+- 1.3
14	166	0.7	26.7	+-	0.8; 4.0	19.0	+-	0.7; 4.3	18.8	+- 2.3
15	226	1.7	31.5	+-	0.9; 4.7	22.9	+-	0.8; 4.7	21.5	+- 1.3
16	207	1.4	29.6	+-	0.9; 4.4	21.4	+-	0.8; 4.5	21.2	+- 1.2
17	182	2.2	24.9	+-	0.7; 3.7	17.5	+-	0.7; 4.1	18.0	+- 1.5
18	186	3.8	29.4	+-	0.9; 4.4	21.2	+-	0.8; 4.5	19.2	+- 1.2
19	155	4.1	31.7	+-	1.0; 4.8	23.1	+-	0.8; 4.7	23.5	+- 1.2
20	203	8.4	24.7	+-	0.7; 3.7	17.4	+-	0.7; 4.1	17.9	+- 1.8
21	210	4.6	26.2	+-	0.8; 3.9	18.6	+-	0.7; 4.2	18.8	+- 1.2
22	227	4.8	29.0	+-	0.9; 4.3	20.9	+-	0.8; 4.5	21.4	+- 2.5
23	240	3.6	26.4	+-	0.8; 4.0	18.8	+-	0.7; 4.2	19.4	+- 1.9
24	268	3.6	34.0	+-	1.0; 5.1	24.9	+-	0.9; 5.0	23.6	+- 1.3
25	257	1.9	26.3	+-	0.8; 3.9	18.7	+-	0.7; 4.2	18.5	+- 1.4
26	293	3.6	30.8	+-	0.9; 4.6	22.3	+-	0.8; 4.7	21.0	+- 1.5
27	311	3.5	24.9	+-	0.7; 3.7	17.6	+-	0.7; 4.1	17.7	+- 0.9
28	288	2.0	Missing Dosimeter			No Net Data			19.8	+- 1.3
29	275	1.8	25.8	+-	0.8; 3.9	18.3	+-	0.7; 4.2	18.8	+- 1.1
30	321	1.8	30.3	+-	0.9; 4.5	21.9	+-	0.8; 4.6	21.6	+- 1.2
31	344	2.0	24.5	+-	0.7; 3.7	17.3	+-	0.7; 4.1	16.9	+- 1.2
32	336	3.7	36.8	+-	1.1; 5.5	27.2	+-	0.9; 5.3	25.8	+- 1.7
33	358	4.5	28.4	+-	0.9; 4.3	20.4	+-	0.7; 4.4	21.0	+- 1.8
34	256	9.4	36.5	+-	1.1; 5.5	26.9	+-	0.9; 5.2	27.2	+- 1.6
35	149	21.0	30.2	+-	0.9; 4.5	21.8	+-	0.8; 4.6	22.5	+- 1.5
36	126	8.2	33.2	+-	1.0; 5.0	24.3	+-	0.9; 4.9	24.2	+- 1.5
37	96	9.7	34.8	+-	1.0; 5.2	25.5	+-	0.9; 5.1	24.2	+- 1.2
38	32	16.0	40.3	+-	1.2; 6.1	30.0	+-	1.0; 5.6	30.2	+- 1.9
39	31	16.0	35.5	+-	1.1; 5.3	26.1	+-	0.9; 5.1	25.0	+- 1.7
40	29	16.0	35.9	+-	1.1; 5.4	26.4	+-	0.9; 5.2	26.9	+- 1.6

Transit Dose = 3.1 +- 0.4; 3.5

OCONEE

For the period 970909-980211

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	20.4 +- 0.0	1
11.26 - 33.75 NNE	24.0 +- 0.4	2
33.76 - 56.25 NE	21.5 +- 3.2	2
56.26 - 78.75 ENE	24.0 +- 0.0	1
78.76 - 101.25 E	24.0 +- 1.8	3
101.26 - 123.75 ESE	22.8 +- 5.0	2
123.76 - 146.25 SE	24.0 +- 1.5	3
146.26 - 168.75 SSE	21.5 +- 1.7	4
168.76 - 191.25 S	19.4 +- 2.6	2
191.26 - 213.75 SSW	19.1 +- 2.0	3
213.76 - 236.25 SW	21.9 +- 1.4	2
236.26 - 258.75 WSW	21.4 +- 4.7	3
258.76 - 281.25 W	21.6 +- 4.7	2
281.26 - 303.75 WNW	22.3 +- 0.0	1
303.76 - 326.25 NW	19.7 +- 3.0	2
326.26 - 348.75 NNW	22.2 +- 7.0	2

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	20.7 +- 2.2	13
2 - 5	22.3 +- 3.1	16
> 5	23.0 +- 3.4	6
Upwind Control	27.5 +- 2.1	3

OYSTER CREEK

TLD Direct Radiation Environmental Monitoring

For the period 970910-980113 126 Days

Field Time: 91 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)		Gross Exposure (mR) +-Rdm; Tot.		Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.		Hist. Range Net Exp Rate +-1 Std Dev	
1	141	0.5	Missing Dosimeter		No Net Data		11.3 +- 1.1	
2	120	0.9	14.1 +- 0.4; 2.1		10.6 +- 0.5; 3.6		11.1 +- 1.1	
3	105	1.5	14.2 +- 0.4; 2.1		10.8 +- 0.5; 3.6		12.1 +- 0.8	
4	127	1.5	13.0 +- 0.4; 1.9		9.5 +- 0.5; 3.5		11.1 +- 0.8	
5	137	1.3	Missing Dosimeter		No Net Data		11.8 +- 1.0	
6	158	1.2	14.6 +- 0.4; 2.2		11.2 +- 0.5; 3.6		11.4 +- 0.7	
7	176	2.2	14.0 +- 0.4; 2.1		10.6 +- 0.5; 3.6		12.0 +- 0.9	
8	179	1.6	14.8 +- 0.4; 2.2		11.4 +- 0.5; 3.6		11.8 +- 0.8	
9	159	2.8	13.6 +- 0.4; 2.0		10.1 +- 0.5; 3.5		10.6 +- 0.7	
10	187	8.4	14.3 +- 0.4; 2.1		10.8 +- 0.5; 3.6		11.6 +- 1.0	
11	173	4.4	13.8 +- 0.4; 2.1		10.3 +- 0.5; 3.5		11.6 +- 0.8	
12	196	4.2	14.1 +- 0.4; 2.1		10.6 +- 0.5; 3.6		11.7 +- 0.9	
13	198	8.6	12.8 +- 0.4; 1.9		9.4 +- 0.5; 3.4		10.8 +- 0.6	
14	185	10.0	15.3 +- 0.5; 2.3		11.8 +- 0.6; 3.7		13.2 +- 1.0	
15	171	11.0	13.4 +- 0.4; 2.0		9.9 +- 0.5; 3.5		11.4 +- 0.9	
16	154	8.2	Missing Dosimeter		No Net Data		11.9 +- 0.8	
17	126	6.3	15.1 +- 0.5; 2.3		11.7 +- 0.6; 3.6		12.4 +- 0.9	
18	220	4.6	13.8 +- 0.4; 2.1		10.3 +- 0.5; 3.5		11.3 +- 1.0	
19	231	2.3	14.1 +- 0.4; 2.1		10.6 +- 0.5; 3.6		11.3 +- 0.8	
20	211	1.6	13.2 +- 0.4; 2.0		9.7 +- 0.5; 3.5		10.9 +- 0.6	
22	258	1.5	14.3 +- 0.4; 2.1		10.8 +- 0.5; 3.6		11.4 +- 0.8	
23	271	1.2	12.4 +- 0.4; 1.9		9.0 +- 0.5; 3.4		10.8 +- 0.8	
24	297	1.3	12.8 +- 0.4; 1.9		9.4 +- 0.5; 3.4		11.5 +- 1.1	
25	318	1.5	13.1 +- 0.4; 2.0		9.6 +- 0.5; 3.5		10.6 +- 0.8	
26	341	3.2	16.8 +- 0.5; 2.5		13.3 +- 0.6; 3.8		12.9 +- 1.1	
27	330	4.6	14.5 +- 0.4; 2.2		11.0 +- 0.5; 3.6		11.9 +- 0.8	
28	358	3.2	Missing Dosimeter		No Net Data		11.0 +- 0.6	
29	4	1.8	14.4 +- 0.4; 2.2		10.9 +- 0.5; 3.6		11.5 +- 0.8	
30	19	0.8	13.8 +- 0.4; 2.1		10.4 +- 0.5; 3.5		11.4 +- 0.7	
31	69	1.4	16.2 +- 0.5; 2.4		12.7 +- 0.6; 3.7		12.4 +- 1.4	
32	78	2.5	14.2 +- 0.4; 2.1		10.8 +- 0.5; 3.6		10.8 +- 0.8	
33	85	2.2	12.5 +- 0.4; 1.9		9.1 +- 0.5; 3.4		10.7 +- 1.0	
34	38	1.7	13.4 +- 0.4; 2.0		10.0 +- 0.5; 3.5		11.3 +- 0.6	
35	24	1.9	14.0 +- 0.4; 2.1		10.6 +- 0.5; 3.5		12.0 +- 1.1	
36	50	3.0	13.6 +- 0.4; 2.0		10.2 +- 0.5; 3.5		11.9 +- 1.3	
37	46	4.8	13.2 +- 0.4; 2.0		9.8 +- 0.5; 3.5		10.7 +- 1.1	
38	27	4.0	15.4 +- 0.5; 2.3		11.9 +- 0.6; 3.7		12.5 +- 0.6	
39	12	8.9	13.6 +- 0.4; 2.0		10.1 +- 0.5; 3.5		12.0 +- 0.9	
40	10	8.7	12.7 +- 0.4; 1.9		9.2 +- 0.5; 3.4		11.0 +- 0.6	
41	3	9.9	15.6 +- 0.5; 2.3		12.1 +- 0.6; 3.7		11.8 +- 0.8	
42	38	10.0	13.7 +- 0.4; 2.1		10.3 +- 0.5; 3.5		12.1 +- 0.8	
43	46	9.1	14.5 +- 0.4; 2.2		11.1 +- 0.5; 3.6		14.0 +- 0.9	
44	73	6.5	13.4 +- 0.4; 2.0		9.9 +- 0.5; 3.5		10.8 +- 0.6	
45	79	6.0	14.8 +- 0.4; 2.2		11.4 +- 0.5; 3.6		12.1 +- 0.7	
46	278	20.0	14.9 +- 0.4; 2.2		11.4 +- 0.5; 3.6		12.3 +- 0.7	
47	278	20.0	15.6 +- 0.5; 2.3		12.2 +- 0.6; 3.7		12.5 +- 0.5	

Transit Dose = 3.3 +- 0.3; 2.9

OYSTER CREEK
For the period 970910-980113

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	10.8 +- 1.4	3
11.26 - 33.75 NNE	10.7 +- 0.8	4
33.76 - 56.25 NE	10.3 +- 0.5	5
56.26 - 78.75 ENE	11.1 +- 1.4	3
78.76 - 101.25 E	10.2 +- 1.7	2
101.26 - 123.75 ESE	10.7 +- 0.1	2
123.76 - 146.25 SE	10.6 +- 1.5	2
146.26 - 168.75 SSE	10.6 +- 0.7	2
168.76 - 191.25 S	10.8 +- 0.7	6
191.26 - 213.75 SSW	9.9 +- 0.7	3
213.76 - 236.25 SW	10.5 +- 0.2	2
236.26 - 258.75 WSW	10.8 +- 0.0	1
258.76 - 281.25 W	9.0 +- 0.0	1
281.26 - 303.75 WNW	9.4 +- 0.0	1
303.76 - 326.25 NW	9.6 +- 0.0	1
326.26 - 348.75 NNW	12.2 +- 1.6	2

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	10.4 +- 1.0	15
2 - 5	10.7 +- 1.0	13
> 5	10.6 +- 1.0	12
Upwind Control	11.8 +- 0.5	2

NRC TLD DOSES FOR OYSTER CREEK AREA

Miles

Legend

Water
Highways

Railroads
Roads

Plant..site

PALISADES

TLD Direct Radiation Environmental Monitoring

For the period 970908-980209 155 Days

Field Time: 104 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)	Gross Exposure (mR) +-Rdm; Tot.	Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.	Hist. Range Net Exp Rate +-1 Std Dev
1	195 4.9	21.9 +- 0.7; 3.3	12.8 +- 0.7; 4.2	12.8 +- 0.9
2	173 4.6	21.4 +- 0.6; 3.2	12.3 +- 0.7; 4.2	13.2 +- 0.9
3	156 3.9	22.6 +- 0.7; 3.4	13.3 +- 0.7; 4.3	14.4 +- 1.1
4	132 4.6	23.1 +- 0.7; 3.5	13.8 +- 0.7; 4.3	13.6 +- 1.1
5	118 3.3	23.3 +- 0.7; 3.5	14.0 +- 0.7; 4.4	14.5 +- 1.1
6	152 1.8	20.3 +- 0.6; 3.0	11.4 +- 0.7; 4.1	13.1 +- 1.1
7	196 2.2	22.3 +- 0.7; 3.3	13.1 +- 0.7; 4.3	12.8 +- 0.9
8	178 1.6	21.6 +- 0.6; 3.2	12.5 +- 0.7; 4.2	13.5 +- 1.4
9	200 0.9	19.8 +- 0.6; 3.0	10.9 +- 0.7; 4.1	13.2 +- 1.1
10	124 1.8	Missing Dosimeter	No Net Data	13.3 +- 1.7
11	107 1.6	23.4 +- 0.7; 3.5	14.0 +- 0.7; 4.4	14.1 +- 1.2
12	90 1.5	20.8 +- 0.6; 3.1	11.8 +- 0.7; 4.1	12.8 +- 1.1
13	65 1.7	23.1 +- 0.7; 3.5	13.8 +- 0.7; 4.3	13.5 +- 1.3
14	51 1.9	Missing Dosimeter	No Net Data	13.2 +- 1.0
15	74 3.7	21.6 +- 0.6; 3.2	12.5 +- 0.7; 4.2	12.4 +- 1.2
16	90 3.6	Damaged Dosimeter	No Net Data	12.3 +- 1.4
17	98 10.0	22.9 +- 0.7; 3.4	13.6 +- 0.7; 4.3	14.5 +- 1.1
18	47 4.5	23.1 +- 0.7; 3.5	13.8 +- 0.7; 4.3	15.2 +- 0.9
19	23 1.5	20.9 +- 0.6; 3.1	11.8 +- 0.7; 4.1	12.5 +- 1.3
20	32 4.8	23.7 +- 0.7; 3.6	14.3 +- 0.7; 4.4	15.1 +- 1.3
21	29 7.0	22.3 +- 0.7; 3.3	13.1 +- 0.7; 4.3	14.1 +- 0.9
22	99 15.0	22.8 +- 0.7; 3.4	13.5 +- 0.7; 4.3	14.5 +- 0.9
23	98 18.0	23.4 +- 0.7; 3.5	14.0 +- 0.7; 4.4	14.6 +- 1.0
24	98 18.0	23.6 +- 0.7; 3.5	14.2 +- 0.7; 4.4	14.3 +- 1.0

Transit Dose = 7.2 +- 0.5; 3.6

PALISADES

For the period 970908-980209

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	No Data +- No Data	0
11.26 - 33.75 NNE	13.1 +- 1.2	3
33.76 - 56.25 NE	13.8 +- 0.0	1
56.26 - 78.75 ENE	13.2 +- 0.9	2
78.76 - 101.25 E	12.7 +- 1.3	2
101.26 - 123.75 ESE	14.0 +- 0.0	2
123.76 - 146.25 SE	13.8 +- 0.0	1
146.26 - 168.75 SSE	12.4 +- 1.4	2
168.76 - 191.25 S	12.4 +- 0.1	2
191.26 - 213.75 SSW	12.3 +- 1.2	3
213.76 - 236.25 SW	No Data +- No Data	0
236.26 - 258.75 WSW	No Data +- No Data	0
258.76 - 281.25 W	No Data +- No Data	0
281.26 - 303.75 WNW	No Data +- No Data	0
303.76 - 326.25 NW	No Data +- No Data	0
326.26 - 348.75 NNW	No Data +- No Data	0

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	12.3 +- 1.2	7
2 - 5	13.3 +- 0.7	9
> 5	13.3 +- 0.4	2
Upwind Control	13.9 +- 0.3	3

NRC TLD DOSES FOR PALISADES AREA

PALO VERDE

TLD Direct Radiation Environmental Monitoring

For the period 970908-980113 128 Days

Field Time: 92 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)		Gross Exposure (mR) +-Rdm; Tot.	Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.	Hist. Range Net Exp Rate +-1 Std Dev
1	74	23.0	24.1 +- 0.7; 3.6	20.8 +- 0.8; 4.5	20.2 +- 1.2
2	92	21.0	23.6 +- 0.7; 3.5	20.3 +- 0.8; 4.5	20.7 +- 1.4
3	89	15.0	23.5 +- 0.7; 3.5	20.2 +- 0.8; 4.5	20.3 +- 1.4
4	103	11.0	24.9 +- 0.7; 3.7	21.6 +- 0.8; 4.6	20.2 +- 1.2
5	140	7.4	24.7 +- 0.7; 3.7	21.4 +- 0.8; 4.6	21.7 +- 1.4
6	142	3.1	23.4 +- 0.7; 3.5	20.1 +- 0.8; 4.5	20.8 +- 1.4
7	162	2.6	24.2 +- 0.7; 3.6	20.9 +- 0.8; 4.5	20.7 +- 1.3
8	168	2.6	25.2 +- 0.8; 3.8	21.8 +- 0.8; 4.7	21.1 +- 1.4
9	193	2.6	26.8 +- 0.8; 4.0	23.4 +- 0.8; 4.8	22.2 +- 1.1
10	215	3.1	25.9 +- 0.8; 3.9	22.5 +- 0.8; 4.7	22.3 +- 1.4
11	200	1.7	25.6 +- 0.8; 3.8	22.2 +- 0.8; 4.7	22.4 +- 1.3
12	214	1.0	25.9 +- 0.8; 3.9	22.6 +- 0.8; 4.7	21.7 +- 1.4
13	242	0.7	27.0 +- 0.8; 4.0	23.6 +- 0.8; 4.9	23.6 +- 1.4
14	263	0.6	24.2 +- 0.7; 3.6	20.9 +- 0.8; 4.5	21.8 +- 1.5
15	295	0.6	24.9 +- 0.7; 3.7	21.6 +- 0.8; 4.6	21.6 +- 1.4
16	325	1.0	25.1 +- 0.8; 3.8	21.8 +- 0.8; 4.7	21.5 +- 1.3
17	347	1.8	26.7 +- 0.8; 4.0	23.3 +- 0.8; 4.8	22.8 +- 1.7
18	0	2.4	25.3 +- 0.8; 3.8	21.9 +- 0.8; 4.7	22.6 +- 1.2
19	18	1.5	27.1 +- 0.8; 4.1	23.7 +- 0.9; 4.9	20.8 +- 1.8
20	37	2.0	25.4 +- 0.8; 3.8	22.1 +- 0.8; 4.7	21.5 +- 1.0
21	58	2.3	24.8 +- 0.7; 3.7	21.4 +- 0.8; 4.6	22.1 +- 1.3
22	75	2.8	26.0 +- 0.8; 3.9	22.7 +- 0.8; 4.8	22.9 +- 1.0
23	93	4.4	24.1 +- 0.7; 3.6	20.8 +- 0.8; 4.5	22.1 +- 1.4
24	101	3.3	23.8 +- 0.7; 3.6	20.5 +- 0.8; 4.5	21.9 +- 2.0
25	346	2.9	25.7 +- 0.8; 3.9	22.4 +- 0.8; 4.7	21.9 +- 1.4
26	334	4.3	Missing Dosimeter	No Net Data	24.4 +- 1.4
27	333	7.9	29.4 +- 0.9; 4.4	26.0 +- 0.9; 5.2	25.6 +- 2.3
28	0	7.0	27.2 +- 0.8; 4.1	23.8 +- 0.9; 4.9	22.7 +- 1.4
29	9	4.2	26.2 +- 0.8; 3.9	22.9 +- 0.8; 4.8	23.6 +- 1.5
30	27	3.6	24.5 +- 0.7; 3.7	21.2 +- 0.8; 4.6	22.9 +- 1.5
31	49	3.5	25.7 +- 0.8; 3.9	22.3 +- 0.8; 4.7	23.4 +- 1.2
32	120	3.3	Missing Dosimeter	No Net Data	24.1 +- 1.3

Transit Dose = 2.9 +- 0.3; 2.9

PALO VERDE

For the period 970908-980113

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	22.9 +- 0.9	3
11.26 - 33.75 NNE	22.5 +- 1.7	2
33.76 - 56.25 NE	22.2 +- 0.2	2
56.26 - 78.75 ENE	22.1 +- 0.9	2
78.76 - 101.25 E	20.6 +- 0.2	2
101.26 - 123.75 ESE	21.6 +- 0.0	1
123.76 - 146.25 SE	20.8 +- 0.9	2
146.26 - 168.75 SSE	21.3 +- 0.7	2
168.76 - 191.25 S	No Data +- No Data	0
191.26 - 213.75 SSW	22.8 +- 0.8	2
213.76 - 236.25 SW	22.6 +- 0.0	2
236.26 - 258.75 WSW	23.6 +- 0.0	1
258.76 - 281.25 W	20.9 +- 0.0	1
281.26 - 303.75 WNW	21.6 +- 0.0	1
303.76 - 326.25 NW	21.8 +- 0.0	1
326.26 - 348.75 NNW	23.9 +- 1.8	3

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	22.4 +- 1.0	9
2 - 5	21.8 +- 1.0	14
> 5	23.2 +- 2.2	4
Upwind Control	20.4 +- 0.3	3

NRC TLD DOSES FOR PALO VERDE AREA

Miles

0 2 4

Legend

— Highways

- - - Railroads

- - - Roads

Plant site

PEACH BOTTOM

TLD Direct Radiation Environmental Monitoring

For the period 970911-980113 125 Days

Field Time: 99 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)		Gross Exposure (mR) +-Rdm; Tot.		Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.		Hist. Range Net Exp Rate +-1 Std Dev	
1	330	10.3	21.7	+- 0.6; 3.2	18.3	+- 0.6; 4.0	16.9	+- 1.8
2	33	10.5	20.3	+- 0.6; 3.0	17.1	+- 0.6; 3.9	17.1	+- 0.9
3	21	4.8	19.5	+- 0.6; 2.9	16.3	+- 0.6; 3.8	17.7	+- 1.4
4	3	5.0	19.2	+- 0.6; 2.9	16.0	+- 0.6; 3.8	17.0	+- 1.0
5	344	4.1	18.9	+- 0.6; 2.8	15.8	+- 0.6; 3.8	17.4	+- 1.0
6	1	2.2	22.0	+- 0.7; 3.3	18.6	+- 0.7; 4.1	19.1	+- 1.0
7	26	2.4	19.8	+- 0.6; 3.0	16.6	+- 0.6; 3.8	18.0	+- 0.9
8	55	2.8	19.9	+- 0.6; 3.0	16.7	+- 0.6; 3.8	18.5	+- 1.0
9	42	2.0	19.1	+- 0.6; 2.9	16.0	+- 0.6; 3.8	17.2	+- 0.9
10	62	1.7	21.5	+- 0.6; 3.2	18.2	+- 0.6; 4.0	18.9	+- 1.9
11	96	1.9	23.4	+- 0.7; 3.5	19.9	+- 0.7; 4.2	19.2	+- 1.1
12	105	2.3	15.6	+- 0.5; 2.3	12.8	+- 0.5; 3.5	14.2	+- 0.9
13	72	5.0	19.8	+- 0.6; 3.0	16.6	+- 0.6; 3.8	17.1	+- 0.8
14	85	4.6	21.6	+- 0.6; 3.2	18.3	+- 0.6; 4.0	18.8	+- 1.0
15	109	4.3	22.8	+- 0.7; 3.4	19.3	+- 0.7; 4.1	19.2	+- 1.0
16	130	4.6	15.8	+- 0.5; 2.4	12.9	+- 0.5; 3.5	13.6	+- 0.8
17	157	8.9	17.5	+- 0.5; 2.6	14.5	+- 0.5; 3.6	15.2	+- 1.0
18	163	4.6	20.0	+- 0.6; 3.0	16.8	+- 0.6; 3.9	16.6	+- 0.8
19	183	3.9	22.8	+- 0.7; 3.4	19.4	+- 0.7; 4.1	19.1	+- 1.2
20	201	4.8	21.7	+- 0.7; 3.3	18.3	+- 0.6; 4.0	18.8	+- 1.4
21	196	2.3	22.8	+- 0.7; 3.4	19.4	+- 0.7; 4.1	19.3	+- 0.8
22	182	1.7	22.1	+- 0.7; 3.3	18.7	+- 0.7; 4.1	18.9	+- 1.0
23	157	1.8	24.6	+- 0.7; 3.7	21.0	+- 0.7; 4.3	21.7	+- 1.3
24	219	1.8	24.8	+- 0.7; 3.7	21.1	+- 0.7; 4.3	21.0	+- 1.1
25	249	1.7	24.0	+- 0.7; 3.6	20.4	+- 0.7; 4.3	20.1	+- 1.2
26	269	1.8	24.3	+- 0.7; 3.6	20.7	+- 0.7; 4.3	20.7	+- 1.3
27	286	1.9	21.1	+- 0.6; 3.2	17.8	+- 0.6; 4.0	17.7	+- 0.9
28	323	1.8	19.3	+- 0.6; 2.9	16.2	+- 0.6; 3.8	15.9	+- 0.8
29	286	3.6	Damaged Dosimeter		No Net Data		21.2	+- 0.9
30	262	4.0	25.1	+- 0.8; 3.8	21.4	+- 0.7; 4.4	21.3	+- 1.2
31	261	9.9	24.9	+- 0.7; 3.7	21.3	+- 0.7; 4.4	21.3	+- 1.1
32	247	3.2	22.4	+- 0.7; 3.4	19.0	+- 0.7; 4.1	18.4	+- 1.0
33	235	3.6	16.5	+- 0.5; 2.5	13.6	+- 0.5; 3.5	14.0	+- 1.2
34	319	4.9	24.1	+- 0.7; 3.6	20.5	+- 0.7; 4.3	19.6	+- 1.1
35	149	0.7	21.1	+- 0.6; 3.2	17.8	+- 0.6; 4.0	17.5	+- 1.2
36	147	17.9	16.8	+- 0.5; 2.5	13.9	+- 0.5; 3.6	14.2	+- 0.8
37	147	17.9	16.4	+- 0.5; 2.5	13.5	+- 0.5; 3.5	14.5	+- 0.8
38	147	17.9	17.2	+- 0.5; 2.6	14.2	+- 0.5; 3.6	14.4	+- 0.6

Transit Dose = 1.5 +- 0.3; 3.0

PEACH BOTTOM

For the period 970911-980113

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	17.3 +- 1.8	2
11.26 - 33.75 NNE	16.7 +- 0.4	3
33.76 - 56.25 NE	16.3 +- 0.5	2
56.26 - 78.75 ENE	17.4 +- 1.1	2
78.76 - 101.25 E	19.1 +- 1.2	2
101.26 - 123.75 ESE	16.0 +- 4.6	2
123.76 - 146.25 SE	12.9 +- 0.0	1
146.26 - 168.75 SSE	17.5 +- 2.7	4
168.76 - 191.25 S	19.0 +- 0.5	2
191.26 - 213.75 SSW	18.8 +- 0.7	2
213.76 - 236.25 SW	17.4 +- 5.3	2
236.26 - 258.75 WSW	19.7 +- 1.0	2
258.76 - 281.25 W	21.1 +- 0.4	3
281.26 - 303.75 WNW	17.8 +- 0.0	1
303.76 - 326.25 NW	18.3 +- 3.0	2
326.26 - 348.75 NNW	17.1 +- 1.8	2

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	18.9 +- 1.9	11
2 - 5	17.3 +- 2.4	19
> 5	17.8 +- 2.8	4
Upwind Control	13.9 +- 0.3	3

NRC TLD DOSES FOR PEACH BOTTOM AREA

Miles

Legend

Water

--- Railroads

Plant..site

— Highways

--- Roads

PERRY

TLD Direct Radiation Environmental Monitoring

For the period 970909-980205 150 Days

Field Time: 98 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)	Gross Exposure (mR) +-Rdm; Tot.	Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.	Hist. Range Net Exp Rate +-1 Std Dev
1	72 5.0	22.1 +- 0.7; 3.3	15.0 +- 0.7; 4.3	16.0 +- 1.6
3	88 5.5	22.6 +- 0.7; 3.4	15.4 +- 0.7; 4.4	16.1 +- 1.8
4	112 6.0	21.3 +- 0.6; 3.2	14.3 +- 0.7; 4.2	16.9 +- 1.8
5	130 4.0	23.2 +- 0.7; 3.5	16.0 +- 0.7; 4.4	16.6 +- 1.9
6	155 5.0	25.4 +- 0.8; 3.8	18.0 +- 0.8; 4.6	19.8 +- 1.4
7	178 5.2	26.5 +- 0.8; 4.0	19.0 +- 0.8; 4.8	17.7 +- 1.4
8	205 4.6	25.3 +- 0.8; 3.8	18.0 +- 0.8; 4.6	17.1 +- 3.0
9	220 5.2	22.3 +- 0.7; 3.3	15.2 +- 0.7; 4.3	16.2 +- 1.4
10	225 7.4	21.8 +- 0.7; 3.3	14.7 +- 0.7; 4.3	17.1 +- 1.6
11	240 5.8	25.1 +- 0.8; 3.8	17.8 +- 0.8; 4.6	18.9 +- 1.6
12	225 19.0	23.1 +- 0.7; 3.5	15.9 +- 0.7; 4.4	16.5 +- 2.1
13	225 19.0	21.4 +- 0.6; 3.2	14.3 +- 0.7; 4.2	15.7 +- 1.6
14	212 12.0	27.6 +- 0.8; 4.1	20.1 +- 0.9; 4.9	22.1 +- 1.8
15	248 1.4	21.4 +- 0.6; 3.2	14.4 +- 0.7; 4.2	15.7 +- 1.5
16	225 0.8	20.5 +- 0.6; 3.1	13.6 +- 0.7; 4.2	15.5 +- 1.9
17	205 0.7	21.3 +- 0.6; 3.2	14.3 +- 0.7; 4.2	14.2 +- 1.5
18	180 0.8	19.7 +- 0.6; 2.9	12.8 +- 0.7; 4.1	15.5 +- 1.7
19	152 1.8	21.1 +- 0.6; 3.2	14.1 +- 0.7; 4.2	15.9 +- 1.2
20	123 1.6	19.1 +- 0.6; 2.9	12.3 +- 0.7; 4.0	14.1 +- 1.4
21	105 1.4	21.0 +- 0.6; 3.2	14.0 +- 0.7; 4.2	15.5 +- 2.1
22	85 1.2	19.3 +- 0.6; 2.9	12.4 +- 0.7; 4.0	16.1 +- 2.2
23	65 1.4	20.6 +- 0.6; 3.1	13.6 +- 0.7; 4.2	16.2 +- 1.4
24	40 0.6	22.2 +- 0.7; 3.3	15.1 +- 0.7; 4.3	15.6 +- 1.6
25	40 0.6	26.4 +- 0.8; 4.0	19.0 +- 0.8; 4.7	17.9 +- 3.5
26	182 2.8	21.2 +- 0.6; 3.2	14.2 +- 0.7; 4.2	16.3 +- 2.2
27	175 2.8	22.6 +- 0.7; 3.4	15.5 +- 0.7; 4.4	17.1 +- 3.1

Transit Dose = 5.8 +- 0.4; 3.3

PERRY

For the period 970909-980205

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	No Data +- No Data	0
11.26 - 33.75 NNE	No Data +- No Data	0
33.76 - 56.25 NE	17.0 +- 2.7	2
56.26 - 78.75 ENE	14.3 +- 1.0	2
78.76 - 101.25 E	13.9 +- 2.1	2
101.26 - 123.75 ESE	13.5 +- 1.1	3
123.76 - 146.25 SE	16.0 +- 0.0	1
146.26 - 168.75 SSE	16.1 +- 2.8	2
168.76 - 191.25 S	15.4 +- 2.7	4
191.26 - 213.75 SSW	16.1 +- 2.6	2
213.76 - 236.25 SW	14.5 +- 0.8	3
236.26 - 258.75 WSW	16.1 +- 2.4	2
258.76 - 281.25 W	No Data +- No Data	0
281.26 - 303.75 WNW	No Data +- No Data	0
303.76 - 326.25 NW	No Data +- No Data	0
326.26 - 348.75 NNW	No Data +- No Data	0

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	14.1 +- 1.8	11
2 - 5	16.1 +- 1.6	6
> 5	16.1 +- 1.9	6
Upwind Control	16.8 +- 3.0	3

NRC TLD DOSES FOR PERRY AREA

Miles

Legend

Water
Highways

Railroads
Roads

Plant..site

PILGRIM

TLD Direct Radiation Environmental Monitoring

For the period 970910-980113 126 Days

Field Time: 90 Days

NRC Sta	Location		Gross		Net Exposure Rate		Hist. Range	
	Azimuth/Dist	(Deg)/(Mi)	Exposure (mR)	+Rdm; Tot.	(mR/Std. Qtr.)	+Rdm; Tot.	Net Exp Rate	+1 Std Dev
1	288	0.1	123.0	+ 3.7; 18.5	115.6	+ 3.7; 18.7	61.3	+ 41.6
2	310	0.2	27.5	+ 0.8; 4.1	20.1	+ 0.9; 5.3	16.7	+ 2.5
5	289	0.7	27.8	+ 0.8; 4.2	20.4	+ 0.9; 5.3	16.1	+ 1.8
6	261	1.7	24.1	+ 0.7; 3.6	16.7	+ 0.9; 4.9	14.4	+ 1.6
7	270	0.5	27.1	+ 0.8; 4.1	19.7	+ 0.9; 5.2	18.0	+ 1.7
8	247	0.3	27.6	+ 0.8; 4.1	20.1	+ 0.9; 5.3	16.7	+ 1.5
9	224	0.3	26.7	+ 0.8; 4.0	19.3	+ 0.9; 5.2	15.4	+ 2.4
10	205	0.3	27.2	+ 0.8; 4.1	19.8	+ 0.9; 5.2	16.6	+ 3.3
11	184	0.3	31.2	+ 0.9; 4.7	23.7	+ 1.0; 5.7	18.0	+ 3.1
12	159	0.4	25.2	+ 0.8; 3.8	17.8	+ 0.9; 5.0	15.5	+ 1.7
13	146	0.7	22.0	+ 0.7; 3.3	14.5	+ 0.8; 4.6	13.1	+ 1.7
14	155	1.0	25.4	+ 0.8; 3.8	18.0	+ 0.9; 5.0	14.4	+ 1.8
16	136	1.3	23.6	+ 0.7; 3.5	16.2	+ 0.8; 4.8	13.4	+ 1.4
18	212	0.8	22.6	+ 0.7; 3.4	15.2	+ 0.8; 4.7	12.8	+ 1.6
19	232	1.0	23.3	+ 0.7; 3.5	15.9	+ 0.8; 4.8	13.7	+ 1.6
21	256	1.6	21.5	+ 0.6; 3.2	14.0	+ 0.8; 4.6	12.6	+ 2.0
22	130	2.5	21.6	+ 0.6; 3.2	14.1	+ 0.8; 4.6	13.4	+ 1.9
23	146	3.4	23.6	+ 0.7; 3.5	16.2	+ 0.8; 4.8	13.0	+ 1.8
25	168	1.5	25.6	+ 0.8; 3.8	18.2	+ 0.9; 5.0	14.1	+ 1.6
26	180	1.3	22.6	+ 0.7; 3.4	15.2	+ 0.8; 4.7	11.9	+ 1.7
27	231	1.8	22.7	+ 0.7; 3.4	15.3	+ 0.8; 4.7	13.2	+ 1.8
30	153	2.2	25.6	+ 0.8; 3.8	18.2	+ 0.9; 5.0	16.0	+ 1.5
31	179	2.5	22.4	+ 0.7; 3.4	15.0	+ 0.8; 4.7	12.6	+ 1.7
32	217	2.6	21.8	+ 0.7; 3.3	14.4	+ 0.8; 4.6	12.0	+ 1.8
33	234	2.5	22.3	+ 0.7; 3.4	14.9	+ 0.8; 4.7	13.1	+ 2.2
34	320	7.5	22.6	+ 0.7; 3.4	15.2	+ 0.8; 4.7	13.3	+ 1.6
35	318	7.0	21.7	+ 0.7; 3.3	14.2	+ 0.8; 4.6	11.0	+ 1.5
37	264	4.2	23.7	+ 0.7; 3.6	16.3	+ 0.8; 4.8	14.2	+ 1.7
38	152	3.5	21.2	+ 0.6; 3.2	13.8	+ 0.8; 4.6	12.5	+ 1.8
39	155	5.3	21.6	+ 0.6; 3.2	14.1	+ 0.8; 4.6	11.4	+ 1.2
40	272	4.6	24.1	+ 0.7; 3.6	16.6	+ 0.8; 4.9	15.0	+ 1.7
42	281	4.6	21.9	+ 0.7; 3.3	14.5	+ 0.8; 4.6	13.1	+ 1.8
43	291	5.8	25.3	+ 0.8; 3.8	17.8	+ 0.9; 5.0	15.7	+ 1.9
45	197	6.0	22.1	+ 0.7; 3.3	14.7	+ 0.8; 4.7	11.9	+ 1.4
47	301	26.0	28.2	+ 0.8; 4.2	20.8	+ 1.0; 5.3	15.5	+ 2.1
48	301	26.0	25.0	+ 0.8; 3.8	17.6	+ 0.9; 5.0	16.0	+ 2.1
49	301	26.0	24.8	+ 0.7; 3.7	17.3	+ 0.9; 4.9	14.5	+ 1.7

Transit Dose = 7.4 + 0.4; 3.3

PILGRIM

For the period 970910-980113

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	No Data +- No Data	0
11.26 - 33.75 NNE	No Data +- No Data	0
33.76 - 56.25 NE	No Data +- No Data	0
56.26 - 78.75 ENE	No Data +- No Data	0
78.76 - 101.25 E	No Data +- No Data	0
101.26 - 123.75 ESE	No Data +- No Data	0
123.76 - 146.25 SE	15.2 +- 1.1	4
146.26 - 168.75 SSE	16.7 +- 2.1	6
168.76 - 191.25 S	18.0 +- 5.0	3
191.26 - 213.75 SSW	16.6 +- 2.8	3
213.76 - 236.25 SW	15.9 +- 1.9	5
236.26 - 258.75 WSW	17.1 +- 4.3	2
258.76 - 281.25 W	16.8 +- 1.9	5
281.26 - 303.75 WNW	51.3 +- 55.7	3
303.76 - 326.25 NW	16.5 +- 3.1	3
326.26 - 348.75 NNW	No Data +- No Data	0

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	22.9 +- 22.6	19
2 - 5	15.4 +- 1.4	10
> 5	15.2 +- 1.5	5
Upwind Control	18.6 +- 1.9	3

NRC TLD DOSES FOR PILGRIM AREA

PRAIRIE ISLAND

TLD Direct Radiation Environmental Monitoring

For the period 970908-980113 128 Days

Field Time: 90 Days

NRC Sta	Location		Gross		Net Exposure Rate		Hist. Range	
	Azimuth/Dist (Deg)/(Mi)		Exposure (mR) +-Rdm; Tot.		(mR/Std. Qtr.) +-Rdm; Tot.		Net Exp Rate +-1 Std Dev	
1	312	16.5	19.1 +- 0.6; 2.9		16.5 +- 0.6; 4.0		16.9 +- 2.1	
2	310	15.0	19.0 +- 0.6; 2.9		16.4 +- 0.6; 4.0		16.5 +- 1.7	
3	310	15.0	18.4 +- 0.6; 2.8		15.8 +- 0.6; 3.9		16.5 +- 1.8	
4	308	5.5	19.3 +- 0.6; 2.9		16.7 +- 0.7; 4.0		17.3 +- 1.7	
5	297	4.1	18.6 +- 0.6; 2.8		16.0 +- 0.6; 4.0		16.0 +- 1.6	
6	287	1.3	18.2 +- 0.5; 2.7		15.6 +- 0.6; 3.9		16.2 +- 1.9	
7	313	0.8	18.0 +- 0.5; 2.7		15.4 +- 0.6; 3.9		14.9 +- 1.6	
8	244	0.5	18.6 +- 0.6; 2.8		16.0 +- 0.6; 4.0		16.2 +- 1.5	
9	194	0.6	20.0 +- 0.6; 3.0		17.4 +- 0.7; 4.1		16.6 +- 1.4	
10	155	0.5	20.9 +- 0.6; 3.1		18.3 +- 0.7; 4.2		17.4 +- 1.6	
11	129	1.6	19.4 +- 0.6; 2.9		16.8 +- 0.7; 4.0		15.5 +- 1.5	
12	153	1.4	19.3 +- 0.6; 2.9		16.7 +- 0.7; 4.0		16.2 +- 1.4	
13	217	0.6	20.6 +- 0.6; 3.1		18.0 +- 0.7; 4.2		16.8 +- 1.6	
14	178	0.8	20.3 +- 0.6; 3.0		17.7 +- 0.7; 4.1		16.6 +- 1.5	
15	272	1.9	19.2 +- 0.6; 2.9		16.6 +- 0.7; 4.0		15.6 +- 1.5	
16	262	4.6	20.9 +- 0.6; 3.1		18.3 +- 0.7; 4.2		17.7 +- 2.2	
17	250	4.3	21.6 +- 0.6; 3.2		19.0 +- 0.7; 4.3		17.5 +- 1.8	
18	225	4.1	22.2 +- 0.7; 3.3		19.6 +- 0.7; 4.4		17.8 +- 3.1	
19	233	6.7	19.3 +- 0.6; 2.9		16.7 +- 0.7; 4.0		15.2 +- 1.7	
20	200	4.9	22.3 +- 0.7; 3.3		19.7 +- 0.7; 4.4		18.8 +- 1.9	
21	187	4.7	23.1 +- 0.7; 3.5		20.5 +- 0.8; 4.5		19.4 +- 2.0	
22	160	4.4	19.8 +- 0.6; 3.0		17.2 +- 0.7; 4.1		17.4 +- 2.0	
23	140	4.7	21.9 +- 0.7; 3.3		19.3 +- 0.7; 4.3		18.1 +- 1.9	
24	131	6.6	21.0 +- 0.6; 3.2		18.4 +- 0.7; 4.2		17.6 +- 1.7	
25	117	4.9	19.7 +- 0.6; 3.0		17.1 +- 0.7; 4.1		16.3 +- 1.5	
26	88	1.9	19.8 +- 0.6; 3.0		17.2 +- 0.7; 4.1		16.6 +- 1.7	
27	69	1.8	20.3 +- 0.6; 3.0		17.7 +- 0.7; 4.1		16.5 +- 2.0	
28	47	1.6	19.5 +- 0.6; 2.9		16.9 +- 0.7; 4.1		16.9 +- 2.0	
29	19	1.5	19.9 +- 0.6; 3.0		17.3 +- 0.7; 4.1		15.8 +- 1.8	
30	356	1.9	19.3 +- 0.6; 2.9		16.7 +- 0.7; 4.0		16.0 +- 2.0	
31	346	2.4	21.7 +- 0.6; 3.2		19.1 +- 0.7; 4.3		18.5 +- 1.7	
32	340	3.8	21.7 +- 0.7; 3.3		19.1 +- 0.7; 4.3		18.8 +- 2.1	
33	8	4.6	22.8 +- 0.7; 3.4		20.2 +- 0.7; 4.4		19.4 +- 1.9	
34	17	4.7	21.1 +- 0.6; 3.2		18.4 +- 0.7; 4.2		18.9 +- 1.9	
35	45	11.0	20.3 +- 0.6; 3.0		17.7 +- 0.7; 4.2		16.9 +- 1.6	
36	48	4.7	22.3 +- 0.7; 3.3		19.7 +- 0.7; 4.4		18.9 +- 2.0	
37	61	4.2	23.2 +- 0.7; 3.5		20.6 +- 0.8; 4.5		19.1 +- 1.8	
38	86	4.9	21.3 +- 0.6; 3.2		18.7 +- 0.7; 4.3		18.5 +- 1.9	
39	107	9.1	19.0 +- 0.6; 2.9		16.4 +- 0.6; 4.0		16.3 +- 1.5	
40	111	3.7	18.3 +- 0.5; 2.7		15.7 +- 0.6; 3.9		16.1 +- 1.7	
46	0	0.0	20.0 +- 0.6; 3.0		17.4 +- 0.7; 4.1		15.7 +- 1.3	
47	0	0.0	18.7 +- 0.6; 2.8		16.1 +- 0.6; 4.0		15.8 +- 0.8	

Transit Dose = 2.6 +- 0.3; 2.8

PRAIRIE ISLAND
For the period 970908-980113

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	17.6 +- 1.8	4
11.26 - 33.75 NNE	17.9 +- 0.8	2
33.76 - 56.25 NE	18.1 +- 1.4	3
56.26 - 78.75 ENE	19.1 +- 2.1	2
78.76 - 101.25 E	17.9 +- 1.1	2
101.26 - 123.75 ESE	16.4 +- 0.7	3
123.76 - 146.25 SE	18.1 +- 1.3	3
146.26 - 168.75 SSE	17.4 +- 0.8	3
168.76 - 191.25 S	19.1 +- 2.0	2
191.26 - 213.75 SSW	18.5 +- 1.6	2
213.76 - 236.25 SW	18.1 +- 1.5	3
236.26 - 258.75 WSW	17.5 +- 2.1	2
258.76 - 281.25 W	17.5 +- 1.2	2
281.26 - 303.75 WNW	15.8 +- 0.3	2
303.76 - 326.25 NW	16.1 +- 0.9	2
326.26 - 348.75 NNW	19.1 +- 0.0	2

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	16.9 +- 0.8	17
2 - 5	18.7 +- 1.5	17
> 5	17.2 +- 0.8	5
Upwind Control	16.3 +- 0.4	3

NRC TLD DOSES FOR PRAIRIE ISLAND AREA

QUAD CITIES

TLD Direct Radiation Environmental Monitoring

For the period 970909-980210 155 Days

Field Time: 109 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)	Gross Exposure (mR) +-Rdm; Tot.	Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.	Hist. Range Net Exp Rate +-1 Std Dev	
1	3	0.7	19.7 +- 0.6; 3.0	14.5 +- 0.6; 3.7	14.8 +- 1.4
2	16	1.2	24.9 +- 0.7; 3.7	18.8 +- 0.7; 4.1	17.5 +- 2.0
3	35	1.7	21.0 +- 0.6; 3.1	15.6 +- 0.6; 3.8	15.1 +- 1.2
4	45	1.1	21.7 +- 0.7; 3.3	16.1 +- 0.6; 3.8	15.6 +- 1.1
5	90	0.8	23.0 +- 0.7; 3.4	17.2 +- 0.6; 4.0	15.5 +- 1.3
6	138	1.1	24.3 +- 0.7; 3.6	18.3 +- 0.7; 4.1	16.2 +- 1.4
7	175	1.8	22.4 +- 0.7; 3.4	16.7 +- 0.6; 3.9	16.2 +- 1.4
8	165	2.0	23.3 +- 0.7; 3.5	17.5 +- 0.6; 4.0	16.4 +- 1.3
9	186	3.1	22.8 +- 0.7; 3.4	17.0 +- 0.6; 3.9	15.8 +- 1.1
10	188	7.7	18.2 +- 0.5; 2.7	13.3 +- 0.5; 3.6	14.8 +- 4.5
11	156	4.2	22.1 +- 0.7; 3.3	16.5 +- 0.6; 3.9	16.6 +- 1.3
12	142	4.8	24.0 +- 0.7; 3.6	18.0 +- 0.7; 4.1	16.5 +- 1.5
13	123	3.3	22.5 +- 0.7; 3.4	16.8 +- 0.6; 3.9	16.3 +- 1.3
14	122	2.0	19.8 +- 0.6; 3.0	14.6 +- 0.6; 3.7	14.8 +- 1.5
15	86	2.8	24.1 +- 0.7; 3.6	18.1 +- 0.7; 4.1	17.1 +- 1.3
16	57	4.4	24.8 +- 0.7; 3.7	18.8 +- 0.7; 4.1	18.9 +- 1.5
17	48	6.1	22.2 +- 0.7; 3.3	16.5 +- 0.6; 3.9	16.3 +- 1.2
18	39	9.4	Missing Dosimeter	No Net Data	15.8 +- 1.2
19	34	4.7	20.6 +- 0.6; 3.1	15.2 +- 0.6; 3.8	15.4 +- 1.2
20	16	4.3	23.4 +- 0.7; 3.5	17.6 +- 0.6; 4.0	16.7 +- 1.2
21	352	4.2	23.4 +- 0.7; 3.5	17.5 +- 0.6; 4.0	18.3 +- 2.7
22	328	4.1	27.0 +- 0.8; 4.0	20.5 +- 0.7; 4.3	18.4 +- 1.3
23	337	5.7	24.7 +- 0.7; 3.7	18.7 +- 0.7; 4.1	16.9 +- 1.3
24	310	4.4	25.0 +- 0.7; 3.7	18.9 +- 0.7; 4.1	18.2 +- 1.5
25	295	4.1	24.0 +- 0.7; 3.6	18.0 +- 0.7; 4.0	16.2 +- 1.3
26	278	6.9	19.5 +- 0.6; 2.9	14.3 +- 0.6; 3.7	14.1 +- 1.2
27	260	4.3	23.5 +- 0.7; 3.5	17.7 +- 0.6; 4.0	16.3 +- 1.6
28	253	4.0	22.8 +- 0.7; 3.4	17.1 +- 0.6; 3.9	16.6 +- 1.4
29	352	2.8	25.5 +- 0.8; 3.8	19.3 +- 0.7; 4.2	17.4 +- 1.3
30	335	1.9	20.5 +- 0.6; 3.1	15.2 +- 0.6; 3.7	17.0 +- 1.4
31	305	2.6	22.7 +- 0.7; 3.4	17.0 +- 0.6; 3.9	16.9 +- 1.7
32	285	2.5	21.1 +- 0.6; 3.2	15.6 +- 0.6; 3.8	15.0 +- 1.6
33	257	2.0	21.2 +- 0.6; 3.2	15.7 +- 0.6; 3.8	16.3 +- 1.6
34	248	2.2	23.3 +- 0.7; 3.5	17.4 +- 0.6; 4.0	16.6 +- 1.1
35	229	2.6	21.4 +- 0.6; 3.2	15.9 +- 0.6; 3.8	15.9 +- 1.3
36	204	3.4	23.0 +- 0.7; 3.4	17.2 +- 0.6; 4.0	16.0 +- 2.0
37	194	9.3	22.1 +- 0.7; 3.3	16.5 +- 0.6; 3.9	16.1 +- 1.2
38	224	4.9	24.6 +- 0.7; 3.7	18.6 +- 0.7; 4.1	17.3 +- 1.4
39	301	14.0	21.7 +- 0.7; 3.3	16.1 +- 0.6; 3.8	15.7 +- 1.2
40	301	14.0	21.7 +- 0.7; 3.3	16.1 +- 0.6; 3.8	15.2 +- 1.2
41	301	14.0	20.2 +- 0.6; 3.0	14.9 +- 0.6; 3.7	14.6 +- 1.2

Transit Dose = 2.1 +- 0.3; 3.3

QUAD CITIES

For the period 970909-980210

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	17.1 +- 2.4	3
11.26 - 33.75 NNE	18.2 +- 0.9	2
33.76 - 56.25 NE	15.9 +- 0.6	4
56.26 - 78.75 ENE	18.8 +- 0.0	1
78.76 - 101.25 E	17.6 +- 0.6	2
101.26 - 123.75 ESE	15.7 +- 1.6	2
123.76 - 146.25 SE	18.2 +- 0.2	2
146.26 - 168.75 SSE	17.0 +- 0.7	2
168.76 - 191.25 S	15.7 +- 2.1	3
191.26 - 213.75 SSW	16.8 +- 0.5	2
213.76 - 236.25 SW	17.2 +- 1.9	2
236.26 - 258.75 WSW	16.7 +- 0.9	3
258.76 - 281.25 W	16.0 +- 2.4	2
281.26 - 303.75 WNW	16.8 +- 1.7	2
303.76 - 326.25 NW	17.9 +- 1.3	2
326.26 - 348.75 NNW	18.1 +- 2.7	3

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	16.4 +- 1.4	11
2 - 5	17.6 +- 1.2	21
> 5	15.9 +- 2.1	5
Upwind Control	15.7 +- 0.7	3

NRC TLD DOSES FOR QUAD CITIES AREA

RANCHO SECO

TLD Direct Radiation Environmental Monitoring

For the period 970908-980209 155 Days

Field Time: 92 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)		Gross Exposure (mR) +-Rdm; Tot.		Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.		Hist. Range Net Exp Rate +-1 Std Dev	
1	288	16.0	24.0	+- 0.7; 3.6	16.5	+- 0.8; 4.8	16.0	+- 2.5
2	239	12.0	23.6	+- 0.7; 3.5	16.1	+- 0.8; 4.7	17.3	+- 1.6
3	213	16.0	25.0	+- 0.8; 3.8	17.5	+- 0.9; 4.9	18.9	+- 1.4
4	149	9.9	22.7	+- 0.7; 3.4	15.2	+- 0.8; 4.6	16.1	+- 1.2
5	108	8.2	29.8	+- 0.9; 4.5	22.2	+- 1.0; 5.4	22.5	+- 1.6
6	86	10.0	20.7	+- 0.6; 3.1	13.2	+- 0.7; 4.4	14.2	+- 1.2
7	83	9.7	21.0	+- 0.6; 3.1	13.5	+- 0.8; 4.5	14.4	+- 1.1
8	37	7.1	21.6	+- 0.6; 3.2	14.2	+- 0.8; 4.5	14.7	+- 1.1
9	65	0.8	22.5	+- 0.7; 3.4	15.0	+- 0.8; 4.6	15.9	+- 1.3
10	43	0.7	22.7	+- 0.7; 3.4	15.2	+- 0.8; 4.6	16.8	+- 1.8
11	92	0.2	21.6	+- 0.6; 3.2	14.1	+- 0.8; 4.5	14.9	+- 1.4
12	131	1.6	20.9	+- 0.6; 3.1	13.4	+- 0.8; 4.4	14.2	+- 1.1
13	358	0.6	25.1	+- 0.8; 3.8	17.6	+- 0.9; 4.9	17.7	+- 0.9
14	323	0.7	24.2	+- 0.7; 3.6	16.7	+- 0.8; 4.8	16.2	+- 1.2
15	151	0.7	21.3	+- 0.6; 3.2	13.8	+- 0.8; 4.5	15.2	+- 1.3
16	219	0.9	23.0	+- 0.7; 3.5	15.5	+- 0.8; 4.7	16.3	+- 1.4
17	245	1.5	22.8	+- 0.7; 3.4	15.3	+- 0.8; 4.6	15.7	+- 1.3
18	254	2.3	22.5	+- 0.7; 3.4	15.0	+- 0.8; 4.6	14.9	+- 0.8
19	323	7.0	23.2	+- 0.7; 3.5	15.7	+- 0.8; 4.7	16.4	+- 1.1
20	309	6.3	24.1	+- 0.7; 3.6	16.6	+- 0.8; 4.8	17.2	+- 1.5
21	279	5.7	21.8	+- 0.7; 3.3	14.4	+- 0.8; 4.5	15.8	+- 1.3
22	244	6.4	23.9	+- 0.7; 3.6	16.3	+- 0.8; 4.8	17.1	+- 1.2
23	217	4.6	23.0	+- 0.7; 3.4	15.5	+- 0.8; 4.7	16.1	+- 1.2
24	350	11.0	23.1	+- 0.7; 3.5	15.6	+- 0.8; 4.7	16.2	+- 0.9
25	318	17.0	22.7	+- 0.7; 3.4	15.2	+- 0.8; 4.6	16.5	+- 1.2
26	311	22.0	22.4	+- 0.7; 3.4	14.9	+- 0.8; 4.6	16.4	+- 1.2
27	306	27.0	22.0	+- 0.7; 3.3	14.5	+- 0.8; 4.6	15.4	+- 1.0
28	306	27.0	23.4	+- 0.7; 3.5	15.9	+- 0.8; 4.7	15.6	+- 0.9
29	306	27.0	24.0	+- 0.7; 3.6	16.4	+- 0.8; 4.8	15.5	+- 1.6
30	306	27.0	23.1	+- 0.7; 3.5	15.5	+- 0.8; 4.7	15.5	+- 1.7

Transit Dose = 7.2 +- 0.4; 3.3

RANCHO SECO

For the period 970908-980209

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	16.6 +- 1.4	2
11.26 - 33.75 NNE	No Data +- No Data	0
33.76 - 56.25 NE	14.7 +- 0.8	2
56.26 - 78.75 ENE	15.0 +- 0.0	1
78.76 - 101.25 E	13.6 +- 0.4	3
101.26 - 123.75 ESE	22.2 +- 0.0	1
123.76 - 146.25 SE	13.4 +- 0.0	1
146.26 - 168.75 SSE	14.5 +- 1.0	2
168.76 - 191.25 S	No Data +- No Data	0
191.26 - 213.75 SSW	17.5 +- 0.0	1
213.76 - 236.25 SW	15.5 +- 0.0	2
236.26 - 258.75 WSW	15.7 +- 0.6	4
258.76 - 281.25 W	14.4 +- 0.0	1
281.26 - 303.75 WNW	16.5 +- 0.0	1
303.76 - 326.25 NW	16.0 +- 0.6	6
326.26 - 348.75 NNW	No Data +- No Data	0

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	15.2 +- 1.3	9
2 - 5	15.2 +- 0.3	2
> 5	15.9 +- 2.0	16
Upwind Control	15.1 +- 0.7	3

NRC TLD DOSES FOR RANCHO SECO AREA

RIVER BEND

TLD Direct Radiation Environmental Monitoring

For the period 970908-980310 184 Days

Field Time: 141 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)		Gross Exposure (mR) +-Rdm; Tot.		Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.		Hist. Range Net Exp Rate +-1 Std Dev	
1	348	1.3	22.4	+- 0.7; 3.4	12.8	+- 0.5; 3.5	16.5	+- 1.8
2	42	1.1	29.2	+- 0.9; 4.4	17.2	+- 0.6; 3.9	17.6	+- 1.3
3	61	1.1	31.2	+- 0.9; 4.7	18.4	+- 0.7; 4.0	18.4	+- 1.4
4	90	0.8	30.5	+- 0.9; 4.6	18.0	+- 0.6; 4.0	17.5	+- 1.3
5	107	0.6	32.4	+- 1.0; 4.9	19.2	+- 0.7; 4.1	18.2	+- 1.4
6	136	0.8	29.1	+- 0.9; 4.4	17.1	+- 0.6; 3.9	18.7	+- 1.5
7	166	1.0	26.4	+- 0.8; 4.0	15.4	+- 0.6; 3.7	15.5	+- 1.1
8	182	0.9	27.3	+- 0.8; 4.1	16.0	+- 0.6; 3.8	16.4	+- 1.2
9	195	0.6	26.1	+- 0.8; 3.9	15.2	+- 0.6; 3.7	16.5	+- 1.2
10	225	0.7	29.6	+- 0.9; 4.4	17.4	+- 0.6; 3.9	17.0	+- 1.2
11	254	0.4	Missing Dosimeter		No Net Data		16.5	+- 1.4
12	276	0.6	31.9	+- 1.0; 4.8	18.9	+- 0.7; 4.1	18.1	+- 1.2
13	295	0.6	30.6	+- 0.9; 4.6	18.1	+- 0.6; 4.0	18.6	+- 1.2
14	320	0.9	26.0	+- 0.8; 3.9	15.1	+- 0.6; 3.7	17.2	+- 1.4
15	332	2.1	30.9	+- 0.9; 4.6	18.3	+- 0.6; 4.0	18.4	+- 1.4
16	312	2.7	27.6	+- 0.8; 4.1	16.1	+- 0.6; 3.8	17.3	+- 1.9
17	302	3.1	24.4	+- 0.7; 3.7	14.1	+- 0.5; 3.6	15.5	+- 1.2
18	278	3.8	27.1	+- 0.8; 4.1	15.8	+- 0.6; 3.8	14.9	+- 1.8
19	242	2.8	32.9	+- 1.0; 4.9	19.5	+- 0.7; 4.2	19.0	+- 1.4
20	195	5.4	27.8	+- 0.8; 4.2	16.3	+- 0.6; 3.8	17.2	+- 1.5
21	215	3.0	30.9	+- 0.9; 4.6	18.3	+- 0.6; 4.0	17.7	+- 1.2
22	233	7.1	24.6	+- 0.7; 3.7	14.3	+- 0.5; 3.6	14.6	+- 1.7
23	246	9.7	26.4	+- 0.8; 4.0	15.4	+- 0.6; 3.7	17.2	+- 1.3
24	234	7.3	27.2	+- 0.8; 4.1	15.9	+- 0.6; 3.8	15.5	+- 1.8
25	185	7.6	29.8	+- 0.9; 4.5	17.5	+- 0.6; 3.9	17.7	+- 1.3
26	322	7.7	26.5	+- 0.8; 4.0	15.5	+- 0.6; 3.7	16.2	+- 1.5
27	328	10.0	31.7	+- 1.0; 4.8	18.8	+- 0.7; 4.1	18.5	+- 1.5
28	340	7.2	29.6	+- 0.9; 4.4	17.4	+- 0.6; 3.9	17.9	+- 1.1
29	354	9.5	27.3	+- 0.8; 4.1	16.0	+- 0.6; 3.8	16.8	+- 1.2
30	360	5.1	29.1	+- 0.9; 4.4	17.1	+- 0.6; 3.9	18.3	+- 1.2
31	221	6.9	30.3	+- 0.9; 4.5	17.9	+- 0.6; 4.0	18.1	+- 1.3
32	40	4.9	28.5	+- 0.9; 4.3	16.7	+- 0.6; 3.9	17.3	+- 1.2
33	52	8.7	22.6	+- 0.7; 3.4	13.0	+- 0.5; 3.5	14.3	+- 1.4
34	65	8.4	27.9	+- 0.8; 4.2	16.3	+- 0.6; 3.8	16.6	+- 1.2
35	87	6.6	26.0	+- 0.8; 3.9	15.1	+- 0.6; 3.7	15.3	+- 1.0
36	326	5.8	29.1	+- 0.9; 4.4	17.1	+- 0.6; 3.9	17.7	+- 1.4
37	329	22.0	27.9	+- 0.8; 4.2	16.3	+- 0.6; 3.8	17.0	+- 1.1
38	111	3.8	27.1	+- 0.8; 4.1	15.8	+- 0.6; 3.8	16.2	+- 1.3
39	131	5.6	29.4	+- 0.9; 4.4	17.3	+- 0.6; 3.9	17.3	+- 1.1
40	155	6.2	28.6	+- 0.9; 4.3	16.8	+- 0.6; 3.9	17.9	+- 1.2
41	120	9.0	27.5	+- 0.8; 4.1	16.1	+- 0.6; 3.8	16.5	+- 1.5
42	121	11.0	25.7	+- 0.8; 3.9	15.0	+- 0.6; 3.7	14.9	+- 0.8
43	180	1.1	32.2	+- 1.0; 4.8	19.1	+- 0.7; 4.1	18.9	+- 1.2
44	150	28.0	23.2	+- 0.7; 3.5	13.3	+- 0.5; 3.5	14.4	+- 1.2

Transit Dose = 2.3 +- 0.4; 4.3

RIVER BEND

For the period 970908-980310

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	16.5 +- 0.8	2
11.26 - 33.75 NNE	No Data +- No Data	0
33.76 - 56.25 NE	15.6 +- 2.3	3
56.26 - 78.75 ENE	17.4 +- 1.5	2
78.76 - 101.25 E	16.6 +- 2.0	2
101.26 - 123.75 ESE	16.5 +- 1.9	4
123.76 - 146.25 SE	17.2 +- 0.1	2
146.26 - 168.75 SSE	16.1 +- 1.0	2
168.76 - 191.25 S	17.5 +- 1.6	3
191.26 - 213.75 SSW	15.7 +- 0.8	2
213.76 - 236.25 SW	16.7 +- 1.7	5
236.26 - 258.75 WSW	17.4 +- 2.9	2
258.76 - 281.25 W	17.4 +- 2.2	2
281.26 - 303.75 WNW	16.1 +- 2.8	2
303.76 - 326.25 NW	16.0 +- 0.9	4
326.26 - 348.75 NNW	16.7 +- 2.4	5

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	17.0 +- 1.9	14
2 - 5	16.8 +- 1.7	8
> 5	16.2 +- 1.3	20
Upwind Control	13.3 +- 0.0	1

NRC TLD DOSES FOR RIVER BEND AREA

Miles

Legend

Water

--- Railroads

★ Plant..site

— Highways

--- Roads

ROBINSON

TLD Direct Radiation Environmental Monitoring

For the period 970910-980211 155 Days

Field Time: 92 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)	Gross Exposure (mR) +-Rdm; Tot.	Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.	Hist. Range Net Exp Rate +-1 Std Dev
1	191 0.2	19.4 +- 0.6; 2.9	+- 0.7; 4.1 14.2	+- 1.2
2	151 1.9	27.3 +- 0.8; 4.1	21.9 +- 0.9; 5.0	22.1 +- 1.6
3	134 2.0	23.7 +- 0.7; 3.6	18.3 +- 0.8; 4.6	17.7 +- 1.2
4	119 1.9	20.4 +- 0.6; 3.1	15.1 +- 0.7; 4.2	14.2 +- 0.9
5	89 2.1	23.0 +- 0.7; 3.4	17.6 +- 0.8; 4.5	17.5 +- 1.4
6	65 1.0	22.5 +- 0.7; 3.4	17.1 +- 0.8; 4.5	15.9 +- 1.0
7	46 1.8	22.1 +- 0.7; 3.3	16.7 +- 0.7; 4.4	16.7 +- 1.6
8	27 1.9	23.6 +- 0.7; 3.5	18.3 +- 0.8; 4.6	16.8 +- 1.1
9	22 3.5	21.7 +- 0.7; 3.3	16.4 +- 0.7; 4.4	16.3 +- 1.5
10	0 5.0	24.6 +- 0.7; 3.7	19.2 +- 0.8; 4.7	17.9 +- 1.1
11	51 4.8	24.7 +- 0.7; 3.7	19.3 +- 0.8; 4.7	19.1 +- 1.0
12	67 4.1	20.4 +- 0.6; 3.1	15.1 +- 0.7; 4.2	14.4 +- 1.4
13	87 4.5	23.2 +- 0.7; 3.5	17.8 +- 0.8; 4.5	15.7 +- 1.0
14	109 5.0	23.2 +- 0.7; 3.5	17.8 +- 0.8; 4.5	16.2 +- 1.1
15	118 4.8	22.3 +- 0.7; 3.3	16.9 +- 0.8; 4.4	16.3 +- 1.9
16	138 5.3	23.1 +- 0.7; 3.5	17.8 +- 0.8; 4.5	16.8 +- 1.2
17	115 17.1	22.4 +- 0.7; 3.4	17.0 +- 0.8; 4.5	15.4 +- 1.7
18	199 12.6	22.6 +- 0.7; 3.4	17.2 +- 0.8; 4.5	16.3 +- 0.9
19	208 4.8	27.3 +- 0.8; 4.1	21.9 +- 0.9; 5.0	22.0 +- 2.3
20	225 4.0	26.3 +- 0.8; 3.9	20.9 +- 0.9; 4.9	19.3 +- 1.3
21	178 4.6	18.0 +- 0.5; 2.7	12.7 +- 0.6; 4.0	12.7 +- 1.1
22	167 3.7	22.4 +- 0.7; 3.4	17.0 +- 0.8; 4.5	16.0 +- 1.0
23	181 2.3	21.5 +- 0.6; 3.2	16.1 +- 0.7; 4.4	15.3 +- 0.9
24	194 2.0	24.2 +- 0.7; 3.6	18.8 +- 0.8; 4.7	18.9 +- 1.1
25	228 2.1	Missing Dosimeter	No Net Data	18.2 +- 0.9
26	245 1.5	21.2 +- 0.6; 3.2	15.9 +- 0.7; 4.3	14.2 +- 1.1
27	273 1.8	19.4 +- 0.6; 2.9	14.1 +- 0.7; 4.1	13.5 +- 1.0
28	287 2.0	20.4 +- 0.6; 3.1	15.1 +- 0.7; 4.2	13.3 +- 0.9
29	311 1.6	24.7 +- 0.7; 3.7	19.3 +- 0.8; 4.7	17.4 +- 0.9
30	334 1.9	21.1 +- 0.6; 3.2	15.7 +- 0.7; 4.3	16.2 +- 1.7
31	351 2.1	19.7 +- 0.6; 2.9	14.4 +- 0.7; 4.2	15.1 +- 1.8
32	333 4.0	23.0 +- 0.7; 3.4	17.6 +- 0.8; 4.5	16.2 +- 1.1
33	318 4.7	23.9 +- 0.7; 3.6	18.5 +- 0.8; 4.6	17.7 +- 1.1
34	310 6.9	23.1 +- 0.7; 3.5	17.8 +- 0.8; 4.5	15.5 +- 1.8
35	295 4.0	26.6 +- 0.8; 4.0	21.1 +- 0.9; 4.9	20.8 +- 1.2
36	269 4.8	25.2 +- 0.8; 3.8	19.7 +- 0.8; 4.8	18.2 +- 1.6
37	252 4.6	23.1 +- 0.7; 3.5	17.7 +- 0.8; 4.5	17.3 +- 1.3
38	274 10.7	21.7 +- 0.7; 3.3	16.4 +- 0.7; 4.4	18.7 +- 3.3
39	286 15.3	19.9 +- 0.6; 3.0	14.6 +- 0.7; 4.2	14.7 +- 1.2
40	289 16.5	21.0 +- 0.6; 3.2	15.7 +- 0.7; 4.3	14.1 +- 0.9
41	291 17.5	19.6 +- 0.6; 2.9	14.3 +- 0.7; 4.2	15.0 +- 1.4

Transit Dose = 5.0 +- 0.4; 3.1

ROBINSON

For the period 970910-980211

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	16.8 +- 3.4	2
11.26 - 33.75 NNE	17.3 +- 1.3	2
33.76 - 56.25 NE	18.0 +- 1.8	2
56.26 - 78.75 ENE	16.1 +- 1.4	2
78.76 - 101.25 E	17.7 +- 0.2	2
101.26 - 123.75 ESE	16.7 +- 1.2	4
123.76 - 146.25 SE	18.0 +- 0.4	2
146.26 - 168.75 SSE	19.5 +- 3.4	2
168.76 - 191.25 S	14.3 +- 1.7	3
191.26 - 213.75 SSW	19.3 +- 2.4	3
213.76 - 236.25 SW	20.9 +- 0.0	1
236.26 - 258.75 WSW	16.8 +- 1.3	2
258.76 - 281.25 W	16.7 +- 2.8	3
281.26 - 303.75 WNW	18.1 +- 4.3	2
303.76 - 326.25 NW	18.5 +- 0.8	3
326.26 - 348.75 NNW	16.7 +- 1.3	2

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	16.9 +- 2.3	13
2 - 5	17.8 +- 2.3	19
> 5	17.2 +- 0.6	5
Upwind Control	14.8 +- 0.7	3

NRC TLD DOSES FOR ROBINSON AREA

Miles

Legend

Water

Highways

--- Railroads

--- Roads

Plant..site

SALEM (DE)

TLD Direct Radiation Environmental Monitoring

For the period 970910-980113 126 Days

Field Time: 91 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)	Gross Exposure (mR) +-Rdm; Tot.	Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.	Hist. Range Net Exp Rate +-1 Std Dev
17	331 4.2	17.8 +- 0.5; 2.7	15.7 +- 0.6; 3.8	16.7 +- 1.7
18	320 3.8	14.8 +- 0.4; 2.2	12.7 +- 0.5; 3.5	13.7 +- 0.9
19	299 3.4	17.5 +- 0.5; 2.6	15.3 +- 0.6; 3.8	15.9 +- 1.1
20	330 9.5	21.9 +- 0.7; 3.3	19.7 +- 0.7; 4.3	19.2 +- 1.2
21	276 3.6	19.9 +- 0.6; 3.0	17.7 +- 0.7; 4.0	18.0 +- 1.2
22	266 4.7	19.7 +- 0.6; 3.0	17.6 +- 0.6; 4.0	17.6 +- 0.7
23	257 4.4	19.4 +- 0.6; 2.9	17.3 +- 0.6; 4.0	17.3 +- 1.1
24	240 4.4	19.4 +- 0.6; 2.9	17.3 +- 0.6; 4.0	17.9 +- 1.0
25	217 4.9	Missing Dosimeter	No Net Data	17.6 +- 1.3
26	204 3.9	18.9 +- 0.6; 2.8	16.8 +- 0.6; 3.9	16.3 +- 1.1
27	188 4.2	19.5 +- 0.6; 2.9	17.3 +- 0.6; 4.0	18.8 +- 2.2
28	319 18.1	Damaged Dosimeter	No Net Data	19.6 +- 1.7
29	265 6.7	16.3 +- 0.5; 2.4	14.2 +- 0.6; 3.7	14.8 +- 0.9
30	340 12.2	17.0 +- 0.5; 2.5	14.9 +- 0.6; 3.7	14.2 +- 1.1
31	0 18.2	20.0 +- 0.6; 3.0	17.8 +- 0.7; 4.1	17.0 +- 1.0
32	338 8.1	17.1 +- 0.5; 2.6	15.0 +- 0.6; 3.8	15.1 +- 1.1
33	265 9.8	17.9 +- 0.5; 2.7	15.8 +- 0.6; 3.8	17.2 +- 1.2
34	207 11.6	18.1 +- 0.5; 2.7	15.9 +- 0.6; 3.9	16.5 +- 1.1

Transit Dose = 2.0 +- 0.3; 2.8

SALEM (DE)

For the period 970910-980113

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	No Data +- No Data	0
11.26 - 33.75 NNE	No Data +- No Data	0
33.76 - 56.25 NE	No Data +- No Data	0
56.26 - 78.75 ENE	No Data +- No Data	0
78.76 - 101.25 E	No Data +- No Data	0
101.26 - 123.75 ESE	No Data +- No Data	0
123.76 - 146.25 SE	No Data +- No Data	0
146.26 - 168.75 SSE	No Data +- No Data	0
168.76 - 191.25 S	17.3 +- 0.0	1
191.26 - 213.75 SSW	16.3 +- 0.6	2
213.76 - 236.25 SW	No Data +- No Data	0
236.26 - 258.75 WSW	17.3 +- 0.0	2
258.76 - 281.25 W	16.3 +- 1.7	4
281.26 - 303.75 WNW	15.3 +- 0.0	1
303.76 - 326.25 NW	12.7 +- 0.0	1
326.26 - 348.75 NNW	16.8 +- 2.6	3

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	No Data +- No Data	0
2 - 5	16.4 +- 1.6	9
> 5	16.1 +- 2.1	5
Upwind Control	16.3 +- 2.1	2

NRC TLD DOSES FOR SALEM — HOPE CREEK AREA

Miles

Legend

Water

--- Railroads

Plant..site

— Highways

--- Roads

SALEM (NJ)

TLD Direct Radiation Environmental Monitoring

For the period 970910-980113 126 Days

Field Time: 91 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)		Gross Exposure (mR) +-Rdm; Tot.	Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.	Hist. Range Net Exp Rate +-1 Std Dev
1	87	3.3	16.5 +- 0.5; 2.5	13.4 +- 0.6; 3.8	13.9 +- 0.7
2	79	3.4	Missing Dosimeter	No Net Data	13.9 +- 1.2
3	72	3.6	19.2 +- 0.6; 2.9	16.0 +- 0.6; 4.0	16.6 +- 2.2
4	58	4.2	17.6 +- 0.5; 2.6	14.4 +- 0.6; 3.9	15.2 +- 1.4
5	54	4.9	15.6 +- 0.5; 2.3	12.5 +- 0.6; 3.7	13.1 +- 0.9
6	68	8.6	14.2 +- 0.4; 2.1	11.1 +- 0.5; 3.5	11.7 +- 0.9
7	40	5.7	16.1 +- 0.5; 2.4	12.9 +- 0.6; 3.7	13.9 +- 1.0
8	116	12.0	16.0 +- 0.5; 2.4	12.9 +- 0.6; 3.7	13.4 +- 0.8
10	8	5.8	16.7 +- 0.5; 2.5	13.6 +- 0.6; 3.8	13.8 +- 0.9
11	15	8.1	15.4 +- 0.5; 2.3	12.2 +- 0.6; 3.7	13.0 +- 0.8
12	24	8.6	Missing Dosimeter	No Net Data	13.2 +- 0.7
13	49	8.6	15.8 +- 0.5; 2.4	12.6 +- 0.6; 3.7	12.6 +- 0.8
14	90	6.7	14.7 +- 0.4; 2.2	11.5 +- 0.5; 3.6	12.0 +- 1.0
15	105	6.4	13.5 +- 0.4; 2.0	10.4 +- 0.5; 3.5	12.2 +- 0.7

Transit Dose = 3.0 +- 0.3; 2.9

SALEM (NJ)

For the period 970910-980113

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	13.6 +- 0.0	1
11.26 - 33.75 NNE	12.2 +- 0.0	1
33.76 - 56.25 NE	12.7 +- 0.2	3
56.26 - 78.75 ENE	13.8 +- 2.5	3
78.76 - 101.25 E	12.4 +- 1.3	2
101.26 - 123.75 ESE	11.6 +- 1.7	2
123.76 - 146.25 SE	No Data +- No Data	0
146.26 - 168.75 SSE	No Data +- No Data	0
168.76 - 191.25 S	No Data +- No Data	0
191.26 - 213.75 SSW	No Data +- No Data	0
213.76 - 236.25 SW	No Data +- No Data	0
236.26 - 258.75 WSW	No Data +- No Data	0
258.76 - 281.25 W	No Data +- No Data	0
281.26 - 303.75 WNW	No Data +- No Data	0
303.76 - 326.25 NW	No Data +- No Data	0
326.26 - 348.75 NNW	No Data +- No Data	0

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	No Data +- No Data	0
2 - 5	14.0 +- 1.5	4
> 5	12.1 +- 1.1	8
Upwind Control	No Data +- No Data	0

NRC TLD DOSES FOR SALEM - HOPE CREEK AREA

Miles

Legend

Water
Highways

Railroads
Roads

Plant..site

SAN ONOFRE

TLD Direct Radiation Environmental Monitoring

For the period 970908-980209 155 Days

Field Time: 93 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)		Gross Exposure (mR) +-Rdm; Tot.		Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.		Hist. Range Net Exp Rate +-1 Std Dev	
1	346	35.0	32.6	+- 1.0; 4.9	24.6	+- 1.0; 5.7	23.4	+- 1.4
2	346	35.0	30.9	+- 0.9; 4.6	22.9	+- 1.0; 5.5	22.9	+- 1.4
3	346	35.0	30.5	+- 0.9; 4.6	22.5	+- 1.0; 5.5	23.1	+- 1.6
4	327	11.0	24.6	+- 0.7; 3.7	16.8	+- 0.8; 4.8	16.5	+- 1.7
5	308	14.0	26.5	+- 0.8; 4.0	18.6	+- 0.9; 5.0	19.3	+- 1.4
6	307	10.0	25.8	+- 0.8; 3.9	17.9	+- 0.9; 4.9	16.9	+- 1.4
7	318	6.3	26.7	+- 0.8; 4.0	18.8	+- 0.9; 5.0	17.4	+- 1.4
8	322	5.1	25.2	+- 0.8; 3.8	17.3	+- 0.8; 4.9	19.2	+- 1.4
9	311	3.3	25.0	+- 0.7; 3.7	17.1	+- 0.8; 4.8	17.4	+- 1.6
10	331	3.3	26.0	+- 0.8; 3.9	18.2	+- 0.9; 5.0	19.3	+- 2.5
11	300	2.6	27.0	+- 0.8; 4.1	19.1	+- 0.9; 5.1	19.1	+- 1.5
12	285	0.5	30.6	+- 0.9; 4.6	22.6	+- 1.0; 5.5	19.8	+- 3.1
13	320	2.4	25.2	+- 0.8; 3.8	17.3	+- 0.9; 4.9	17.7	+- 1.7
14	320	1.7	24.5	+- 0.7; 3.7	16.7	+- 0.8; 4.8	17.6	+- 1.5
15	333	1.2	25.1	+- 0.8; 3.8	17.2	+- 0.8; 4.9	18.0	+- 1.4
16	30	1.9	28.1	+- 0.8; 4.2	20.2	+- 0.9; 5.2	20.6	+- 1.8
17	8	1.3	22.3	+- 0.7; 3.3	14.5	+- 0.8; 4.6	15.4	+- 1.3
18	39	2.0	28.9	+- 0.9; 4.3	20.9	+- 0.9; 5.3	21.4	+- 1.3
19	55	2.9	25.7	+- 0.8; 3.9	17.9	+- 0.9; 4.9	18.0	+- 1.5
20	77	4.1	27.0	+- 0.8; 4.0	19.1	+- 0.9; 5.1	20.2	+- 1.5
21	87	4.7	27.4	+- 0.8; 4.1	19.5	+- 0.9; 5.1	20.3	+- 1.4
22	25	3.4	30.4	+- 0.9; 4.6	22.4	+- 1.0; 5.5	21.7	+- 1.8
23	357	3.5	28.2	+- 0.8; 4.2	20.2	+- 0.9; 5.2	20.2	+- 1.9
24	25	0.4	25.0	+- 0.7; 3.7	17.1	+- 0.8; 4.9	17.9	+- 1.4
25	81	0.4	28.5	+- 0.9; 4.3	20.6	+- 0.9; 5.2	17.7	+- 2.2
26	126	2.1	22.1	+- 0.7; 3.3	14.3	+- 0.8; 4.5	14.9	+- 1.4
27	130	8.6	21.5	+- 0.6; 3.2	13.7	+- 0.8; 4.5	15.0	+- 1.8
28	99	8.9	22.3	+- 0.7; 3.3	14.6	+- 0.8; 4.6	15.3	+- 1.9
29	135	11.0	23.9	+- 0.7; 3.6	16.1	+- 0.8; 4.7	15.9	+- 1.8
30	126	2.0	19.3	+- 0.6; 2.9	11.6	+- 0.7; 4.3	12.3	+- 1.6
31	128	3.7	22.4	+- 0.7; 3.4	14.6	+- 0.8; 4.6	14.6	+- 1.5
32	140	22.0	24.6	+- 0.7; 3.7	16.8	+- 0.8; 4.8	18.7	+- 2.1
33	120	26.0	23.4	+- 0.7; 3.5	15.6	+- 0.8; 4.7	15.1	+- 1.5

Transit Dose = 7.3 +- 0.4; 3.3

SAN ONOFRE

For the period 970908-980209

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	17.4 +- 4.0	2
11.26 - 33.75 NNE	19.9 +- 2.6	3
33.76 - 56.25 NE	19.4 +- 2.2	2
56.26 - 78.75 ENE	19.1 +- 0.0	1
78.76 - 101.25 E	18.2 +- 3.2	3
101.26 - 123.75 ESE	15.6 +- 0.0	1
123.76 - 146.25 SE	14.5 +- 1.8	6
146.26 - 168.75 SSE	No Data +- No Data	0
168.76 - 191.25 S	No Data +- No Data	0
191.26 - 213.75 SSW	No Data +- No Data	0
213.76 - 236.25 SW	No Data +- No Data	0
236.26 - 258.75 WSW	No Data +- No Data	0
258.76 - 281.25 W	No Data +- No Data	0
281.26 - 303.75 WNW	20.9 +- 2.5	2
303.76 - 326.25 NW	17.7 +- 0.8	7
326.26 - 348.75 NNW	17.4 +- 0.7	3

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	17.9 +- 3.5	9
2 - 5	18.2 +- 2.3	11
> 5	16.6 +- 1.6	10
Upwind Control	23.3 +- 1.1	3

NRC TLD DOSES FOR SAN ONOFRE AREA

SEABROOK

TLD Direct Radiation Environmental Monitoring

For the period 970911-980113 125 Days

Field Time: 100 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)		Gross Exposure (mR) +-Rdm; Tot.			Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.			Hist. Range Net Exp Rate +-1 Std Dev	
1	154	0.6	20.2	+-	0.6; 3.0	18.2	+-	0.6; 3.8	17.3	+- 2.4
2	178	0.7	20.1	+-	0.6; 3.0	18.0	+-	0.6; 3.8	16.9	+- 2.3
3	207	0.7	19.5	+-	0.6; 2.9	17.6	+-	0.6; 3.7	16.5	+- 2.6
4	224	0.9	19.6	+-	0.6; 2.9	17.7	+-	0.6; 3.7	17.7	+- 2.7
5	243	1.2	21.7	+-	0.7; 3.3	19.5	+-	0.6; 3.9	16.3	+- 2.9
6	294	1.0	20.2	+-	0.6; 3.0	18.2	+-	0.6; 3.8	17.3	+- 2.4
7	267	0.7	20.2	+-	0.6; 3.0	18.1	+-	0.6; 3.8	16.9	+- 2.4
8	320	1.1	21.3	+-	0.6; 3.2	19.1	+-	0.6; 3.9	17.8	+- 2.8
9	329	1.6	22.7	+-	0.7; 3.4	20.5	+-	0.7; 4.0	19.4	+- 2.7
10	357	1.9	20.8	+-	0.6; 3.1	18.8	+-	0.6; 3.8	16.9	+- 2.6
11	18	2.5	19.3	+-	0.6; 2.9	17.4	+-	0.6; 3.7	17.0	+- 2.5
12	46	1.9	19.4	+-	0.6; 2.9	17.5	+-	0.6; 3.7	16.5	+- 2.2
13	83	1.7	20.3	+-	0.6; 3.0	18.3	+-	0.6; 3.8	17.2	+- 2.4
14	43	4.1	22.8	+-	0.7; 3.4	20.5	+-	0.7; 4.0	18.2	+- 2.6
15	358	4.2	21.7	+-	0.7; 3.3	19.6	+-	0.6; 3.9	18.0	+- 2.7
16	18	11.8	21.8	+-	0.7; 3.3	19.7	+-	0.6; 3.9	18.2	+- 2.6
17	321	7.4	Missing Dosimeter			No Net Data			19.2	+- 2.9
18	291	3.9	21.8	+-	0.7; 3.3	19.7	+-	0.6; 3.9	18.1	+- 2.4
19	267	3.7	21.3	+-	0.6; 3.2	19.2	+-	0.6; 3.9	17.2	+- 2.4
20	251	4.2	22.9	+-	0.7; 3.4	20.6	+-	0.7; 4.1	19.2	+- 3.0
21	228	4.7	18.1	+-	0.5; 2.7	16.3	+-	0.5; 3.6	16.7	+- 2.6
22	209	6.2	22.2	+-	0.7; 3.3	20.0	+-	0.6; 4.0	19.5	+- 2.6
23	187	6.5	22.8	+-	0.7; 3.4	20.5	+-	0.7; 4.0	19.4	+- 2.7
24	163	7.1	19.2	+-	0.6; 2.9	17.3	+-	0.6; 3.7	16.0	+- 2.6
25	174	4.0	17.9	+-	0.5; 2.7	16.1	+-	0.5; 3.6	15.9	+- 2.8
26	157	4.0	19.8	+-	0.6; 3.0	17.8	+-	0.6; 3.7	16.7	+- 2.6
27	136	2.4	21.7	+-	0.7; 3.3	19.5	+-	0.6; 3.9	17.1	+- 2.7
28	118	1.6	20.4	+-	0.6; 3.1	18.3	+-	0.6; 3.8	16.6	+- 2.4
30	67	2.1	22.8	+-	0.7; 3.4	20.5	+-	0.7; 4.0	18.7	+- 2.8
31	335	5.5	21.4	+-	0.6; 3.2	19.2	+-	0.6; 3.9	18.2	+- 2.6
32	318	3.2	22.1	+-	0.7; 3.3	19.9	+-	0.6; 4.0	18.9	+- 2.9
33	230	19.3	Missing Dosimeter			No Net Data			17.4	+- 3.4
34	230	19.3	21.3	+-	0.6; 3.2	19.2	+-	0.6; 3.9	18.2	+- 3.1
35	230	19.3	21.5	+-	0.6; 3.2	19.4	+-	0.6; 3.9	19.3	+- 3.4

Transit Dose = 0.0 +- 0.2; 2.9

SEABROOK

For the period 970911-980113

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	19.2 +- 0.6	2
11.26 - 33.75 NNE	18.5 +- 1.6	2
33.76 - 56.25 NE	19.0 +- 2.1	2
56.26 - 78.75 ENE	20.5 +- 0.0	1
78.76 - 101.25 E	18.3 +- 0.0	1
101.26 - 123.75 ESE	18.3 +- 0.0	1
123.76 - 146.25 SE	19.5 +- 0.0	1
146.26 - 168.75 SSE	17.8 +- 0.5	3
168.76 - 191.25 S	18.2 +- 2.2	3
191.26 - 213.75 SSW	18.8 +- 1.7	2
213.76 - 236.25 SW	17.8 +- 1.5	3
236.26 - 258.75 WSW	20.1 +- 0.8	2
258.76 - 281.25 W	18.7 +- 0.8	2
281.26 - 303.75 WNW	18.9 +- 1.0	2
303.76 - 326.25 NW	19.1 +- 0.0	1
326.26 - 348.75 NNW	19.9 +- 0.9	2

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	18.4 +- 0.8	13
2 - 5	18.8 +- 1.7	11
> 5	19.3 +- 1.1	6
Upwind Control	19.5 +- 0.5	2

NRC TLD DOSES FOR SEABROOK AREA

SEQUOYAH

TLD Direct Radiation Environmental Monitoring

For the period 970909-980126 140 Days

Field Time: 97 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)		Gross Exposure (mR) +-Rdm; Tot.		Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.		Hist. Range Net Exp Rate +-1 Std Dev	
1	218	12.0	20.5	+- 0.6; 3.1	18.9	+- 0.6; 3.9	16.9	+- 1.5
2	206	13.0	18.3	+- 0.5; 2.7	16.8	+- 0.6; 3.7	14.7	+- 1.4
3	203	3.9	24.7	+- 0.7; 3.7	22.8	+- 0.7; 4.3	20.4	+- 1.5
4	199	2.0	22.8	+- 0.7; 3.4	21.0	+- 0.7; 4.1	17.3	+- 1.5
5	181	1.4	24.0	+- 0.7; 3.6	22.1	+- 0.7; 4.3	21.1	+- 1.3
6	153	1.5	20.2	+- 0.6; 3.0	18.6	+- 0.6; 3.9	15.8	+- 1.3
7	139	1.9	18.4	+- 0.6; 2.8	16.9	+- 0.6; 3.7	14.9	+- 1.2
8	115	1.8	18.7	+- 0.6; 2.8	17.2	+- 0.6; 3.7	16.1	+- 1.8
9	84	1.6	17.5	+- 0.5; 2.6	16.1	+- 0.5; 3.6	14.0	+- 1.4
10	66	1.3	18.7	+- 0.6; 2.8	17.3	+- 0.6; 3.7	15.6	+- 1.3
11	45	1.5	21.5	+- 0.6; 3.2	19.8	+- 0.6; 4.0	16.8	+- 1.5
12	14	2.0	22.6	+- 0.7; 3.4	20.8	+- 0.7; 4.1	18.9	+- 1.2
13	2	2.1	22.7	+- 0.7; 3.4	20.9	+- 0.7; 4.1	19.2	+- 1.6
14	19	3.9	19.1	+- 0.6; 2.9	17.6	+- 0.6; 3.7	16.1	+- 1.3
15	48	4.0	17.8	+- 0.5; 2.7	16.4	+- 0.5; 3.6	13.7	+- 1.2
16	65	4.9	20.0	+- 0.6; 3.0	18.5	+- 0.6; 3.8	15.9	+- 1.1
17	90	3.9	Damaged Dosimeter		No Net Data		17.1	+- 1.7
18	111	3.4	20.1	+- 0.6; 3.0	18.5	+- 0.6; 3.8	16.2	+- 1.5
19	135	3.4	19.0	+- 0.6; 2.8	17.5	+- 0.6; 3.7	16.4	+- 1.1
20	158	3.4	17.5	+- 0.5; 2.6	16.2	+- 0.5; 3.6	14.7	+- 1.8
21	184	4.6	23.6	+- 0.7; 3.5	21.7	+- 0.7; 4.2	18.8	+- 2.3
22	233	11.0	18.3	+- 0.5; 2.7	16.8	+- 0.6; 3.7	14.8	+- 1.2
23	219	4.9	21.0	+- 0.6; 3.2	19.4	+- 0.6; 3.9	18.3	+- 1.2
24	241	4.3	18.3	+- 0.6; 2.8	16.9	+- 0.6; 3.7	15.7	+- 1.3
25	235	2.0	16.9	+- 0.5; 2.5	15.5	+- 0.5; 3.5	13.4	+- 1.1
26	248	1.5	18.0	+- 0.5; 2.7	16.6	+- 0.6; 3.6	15.7	+- 1.9
27	266	1.2	18.5	+- 0.6; 2.8	17.1	+- 0.6; 3.7	15.0	+- 1.3
28	291	1.2	18.8	+- 0.6; 2.8	17.3	+- 0.6; 3.7	15.9	+- 1.5
29	309	1.2	19.6	+- 0.6; 2.9	18.1	+- 0.6; 3.8	16.3	+- 1.4
30	330	0.5	21.6	+- 0.6; 3.2	19.9	+- 0.6; 4.0	17.2	+- 1.5
31	339	1.8	21.1	+- 0.6; 3.2	19.4	+- 0.6; 3.9	17.2	+- 1.3
32	355	4.9	18.2	+- 0.5; 2.7	16.8	+- 0.6; 3.7	15.2	+- 1.1
33	334	3.6	19.1	+- 0.6; 2.9	17.6	+- 0.6; 3.7	15.1	+- 1.2
34	317	4.4	19.9	+- 0.6; 3.0	18.4	+- 0.6; 3.8	16.0	+- 1.6
35	277	5.6	20.8	+- 0.6; 3.1	19.2	+- 0.6; 3.9	16.5	+- 1.4
36	283	3.6	17.0	+- 0.5; 2.6	15.7	+- 0.5; 3.5	14.5	+- 1.1
37	273	4.4	20.0	+- 0.6; 3.0	18.4	+- 0.6; 3.8	15.6	+- 1.4
38	302	19.0	19.1	+- 0.6; 2.9	17.6	+- 0.6; 3.7	15.6	+- 1.3
39	290	18.0	21.0	+- 0.6; 3.2	19.4	+- 0.6; 3.9	16.6	+- 1.2
40	289	18.0	18.1	+- 0.5; 2.7	16.7	+- 0.6; 3.7	15.0	+- 1.4
41	318	6.1	19.8	+- 0.6; 3.0	18.3	+- 0.6; 3.8	16.1	+- 1.2

Transit Dose = 0.1 +- 0.2; 2.8

SEQUOYAH

For the period: 970909-980126

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	18.9 +- 2.9	2
11.26 - 33.75 NNE	19.2 +- 2.3	2
33.76 - 56.25 NE	18.1 +- 2.4	2
56.26 - 78.75 ENE	17.9 +- 0.9	2
78.76 - 101.25 E	16.1 +- 0.0	1
101.26 - 123.75 ESE	17.9 +- 0.9	2
123.76 - 146.25 SE	17.2 +- 0.4	2
146.26 - 168.75 SSE	17.4 +- 1.7	2
168.76 - 191.25 S	21.9 +- 0.3	2
191.26 - 213.75 SSW	20.2 +- 3.1	3
213.76 - 236.25 SW	17.7 +- 1.8	4
236.26 - 258.75 WSW	16.7 +- 0.2	2
258.76 - 281.25 W	18.2 +- 1.1	3
281.26 - 303.75 WNW	16.5 +- 1.2	2
303.76 - 326.25 NW	18.2 +- 0.1	3
326.26 - 348.75 NNW	19.0 +- 1.2	3

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	18.4 +- 1.9	16
2 - 5	18.3 +- 2.0	16
> 5	18.0 +- 1.1	5
Upwind Control	17.9 +- 1.4	3

NRC TLD DOSES FOR SEQUOYAH AREA

SOUTH TEXAS

TLD Direct Radiation Environmental Monitoring

For the period 970908-980209 155 Days

Field Time: 93 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)		Gross Exposure (mR) +-Rdm; Tot.			Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.			Hist. Range Net Exp Rate +-1 Std Dev	
1	90	1.0	22.5	+-	0.7; 3.4	16.0	+-	0.8; 4.5	16.1	+- 1.7
2	63	1.0	22.6	+-	0.7; 3.4	16.1	+-	0.8; 4.5	16.9	+- 1.4
3	40	1.0	22.2	+-	0.7; 3.3	15.8	+-	0.8; 4.5	17.3	+- 1.3
4	19	1.0	21.7	+-	0.6; 3.2	15.2	+-	0.7; 4.4	16.3	+- 1.4
5	4	0.9	22.4	+-	0.7; 3.4	15.9	+-	0.8; 4.5	16.4	+- 1.2
6	339	0.9	23.1	+-	0.7; 3.5	16.6	+-	0.8; 4.6	16.7	+- 1.2
7	318	1.0	21.5	+-	0.6; 3.2	15.0	+-	0.7; 4.4	15.9	+- 1.1
8	294	1.1	24.9	+-	0.7; 3.7	18.3	+-	0.8; 4.8	18.9	+- 1.4
9	267	1.3	25.9	+-	0.8; 3.9	19.3	+-	0.8; 4.9	19.1	+- 1.3
10	126	0.3	20.6	+-	0.6; 3.1	14.2	+-	0.7; 4.3	15.0	+- 1.2
11	180	0.1	22.9	+-	0.7; 3.4	16.4	+-	0.8; 4.5	15.8	+- 1.7
12	257	0.5	20.6	+-	0.6; 3.1	14.1	+-	0.7; 4.3	14.4	+- 1.3
13	262	0.9	20.9	+-	0.6; 3.1	14.4	+-	0.7; 4.3	14.5	+- 1.3
14	250	1.3	20.9	+-	0.6; 3.1	14.5	+-	0.7; 4.3	15.0	+- 1.3
15	227	2.4	21.0	+-	0.6; 3.1	14.5	+-	0.7; 4.3	14.0	+- 1.3
16	210	3.7	19.8	+-	0.6; 3.0	13.4	+-	0.7; 4.2	13.6	+- 1.4
17	175	3.6	20.0	+-	0.6; 3.0	13.6	+-	0.7; 4.2	13.7	+- 1.2
18	158	3.7	21.6	+-	0.6; 3.2	15.2	+-	0.7; 4.4	14.0	+- 1.3
19	143	3.3	19.0	+-	0.6; 2.9	12.7	+-	0.7; 4.2	13.5	+- 1.2
20	122	2.3	20.0	+-	0.6; 3.0	13.6	+-	0.7; 4.2	14.9	+- 1.3
21	121	1.1	21.9	+-	0.7; 3.3	15.5	+-	0.7; 4.4	14.9	+- 1.3
22	257	2.5	23.2	+-	0.7; 3.5	16.6	+-	0.8; 4.6	16.4	+- 1.5
23	262	4.5	25.0	+-	0.7; 3.7	18.4	+-	0.8; 4.8	18.5	+- 1.5
24	282	4.7	22.1	+-	0.7; 3.3	15.6	+-	0.8; 4.5	16.4	+- 1.3
25	304	5.8	20.6	+-	0.6; 3.1	14.2	+-	0.7; 4.3	15.0	+- 1.5
26	242	5.4	21.6	+-	0.6; 3.2	15.1	+-	0.7; 4.4	16.3	+- 1.4
27	223	5.0	Missing Dosimeter			No Net Data			16.2	+- 1.3
28	236	9.6	21.2	+-	0.6; 3.2	14.8	+-	0.7; 4.4	14.3	+- 1.3
29	259	10.0	21.4	+-	0.6; 3.2	14.9	+-	0.7; 4.4	15.6	+- 1.4
30	291	6.2	21.3	+-	0.6; 3.2	14.9	+-	0.7; 4.4	16.3	+- 1.3
31	323	7.8	Missing Dosimeter			No Net Data			17.5	+- 3.5
32	335	7.4	25.6	+-	0.8; 3.8	19.0	+-	0.8; 4.8	20.5	+- 1.7
33	351	5.5	22.1	+-	0.7; 3.3	15.6	+-	0.8; 4.5	14.7	+- 1.4
34	88	4.4	20.7	+-	0.6; 3.1	14.3	+-	0.7; 4.3	14.7	+- 1.4
35	89	6.7	20.3	+-	0.6; 3.0	13.9	+-	0.7; 4.3	14.2	+- 1.3
36	121	3.9	19.9	+-	0.6; 3.0	13.5	+-	0.7; 4.2	14.6	+- 1.4
37	145	8.8	21.0	+-	0.6; 3.2	14.6	+-	0.7; 4.3	14.5	+- 1.6
38	297	12.0	20.6	+-	0.6; 3.1	14.2	+-	0.7; 4.3	14.5	+- 1.5
39	321	9.3	23.3	+-	0.7; 3.5	16.8	+-	0.8; 4.6	17.1	+- 1.2
40	353	12.0	21.6	+-	0.6; 3.2	15.2	+-	0.7; 4.4	14.5	+- 1.3
41	13	18.0	21.7	+-	0.7; 3.3	15.2	+-	0.7; 4.4	15.8	+- 1.4
42	21	5.7	23.1	+-	0.7; 3.5	16.6	+-	0.8; 4.6	16.4	+- 1.9
43	39	5.8	22.9	+-	0.7; 3.4	16.4	+-	0.8; 4.5	16.9	+- 1.4
44	53	5.1	22.8	+-	0.7; 3.4	16.3	+-	0.8; 4.5	17.0	+- 1.9
45	69	7.3	Missing Dosimeter			No Net Data			14.3	+- 1.3
46	66	17.0	25.7	+-	0.8; 3.9	19.1	+-	0.8; 4.9	19.1	+- 1.4

Transit Dose = 6.0 +- 0.4; 3.2

SOUTH TEXAS

For the period 970908-980209

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	15.8 +- 0.2	2
11.26 - 33.75 NNE	15.9 +- 1.0	2
33.76 - 56.25 NE	16.1 +- 0.3	3
56.26 - 78.75 ENE	17.6 +- 2.1	2
78.76 - 101.25 E	14.7 +- 1.1	3
101.26 - 123.75 ESE	14.2 +- 1.1	3
123.76 - 146.25 SE	13.8 +- 1.0	3
146.26 - 168.75 SSE	15.2 +- 0.0	1
168.76 - 191.25 S	15.0 +- 2.0	2
191.26 - 213.75 SSW	13.4 +- 0.0	1
213.76 - 236.25 SW	14.7 +- 0.2	2
236.26 - 258.75 WSW	15.1 +- 1.1	4
258.76 - 281.25 W	16.8 +- 2.4	4
281.26 - 303.75 WNW	16.3 +- 1.8	3
303.76 - 326.25 NW	15.3 +- 1.3	3
326.26 - 348.75 NNW	17.8 +- 1.7	2

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	15.8 +- 1.5	15
2 - 5	14.7 +- 1.7	11
> 5	15.9 +- 1.6	14
Upwind Control	14.9 +- 0.6	3

NRC TLD DOSES FOR SOUTH TEXAS AREA

Miles

Legend

Water

Highways

Railroads

Roads

Plant..site

ST. LUCIE

TLD Direct Radiation Environmental Monitoring

For the period 970910-980310 182 Days

Field Time: 91 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)		Gross Exposure (mR) +-Rdm; Tot.	Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.	Hist. Range Net Exp Rate +-1 Std Dev
1	20	0.3	Damaged Dosimeter	No Net Data	13.6 +- 2.1
2	45	0.2	23.7 +- 0.7; 3.6	18.2 +- 0.8; 4.7	14.1 +- 2.2
3	67	0.2	19.7 +- 0.6; 3.0	14.2 +- 0.7; 4.2	15.2 +- 3.0
4	92	0.3	18.5 +- 0.6; 2.8	13.0 +- 0.7; 4.1	13.2 +- 2.2
5	115	0.4	18.2 +- 0.5; 2.7	12.7 +- 0.7; 4.1	12.6 +- 2.2
6	143	1.1	18.3 +- 0.5; 2.7	12.8 +- 0.7; 4.1	11.7 +- 2.1
7	150	2.0	17.1 +- 0.5; 2.6	11.7 +- 0.6; 4.0	11.6 +- 2.0
8	154	4.7	17.9 +- 0.5; 2.7	12.5 +- 0.7; 4.0	12.2 +- 2.3
9	152	23.0	19.1 +- 0.6; 2.9	13.7 +- 0.7; 4.2	12.7 +- 2.2
10	152	23.0	18.5 +- 0.6; 2.8	13.1 +- 0.7; 4.1	13.0 +- 1.9
11	152	23.0	18.5 +- 0.6; 2.8	13.0 +- 0.7; 4.1	13.8 +- 2.3
12	168	14.0	Missing Dosimeter	No Net Data	12.7 +- 2.0
13	185	10.0	19.8 +- 0.6; 3.0	14.3 +- 0.7; 4.2	12.6 +- 2.3
14	183	11.0	18.5 +- 0.6; 2.8	13.0 +- 0.7; 4.1	14.3 +- 2.4
15	170	8.0	17.6 +- 0.5; 2.6	12.2 +- 0.6; 4.0	12.3 +- 2.2
16	196	7.0	20.0 +- 0.6; 3.0	14.5 +- 0.7; 4.3	12.7 +- 2.2
17	229	7.9	19.2 +- 0.6; 2.9	13.7 +- 0.7; 4.2	15.5 +- 2.7
18	250	6.6	17.3 +- 0.5; 2.6	11.8 +- 0.6; 4.0	11.7 +- 2.2
19	247	4.8	19.0 +- 0.6; 2.8	13.5 +- 0.7; 4.1	12.2 +- 2.3
20	229	5.0	19.3 +- 0.6; 2.9	13.8 +- 0.7; 4.2	12.8 +- 2.0
21	208	3.8	18.4 +- 0.6; 2.8	12.9 +- 0.7; 4.1	12.2 +- 2.3
22	187	3.8	17.4 +- 0.5; 2.6	12.0 +- 0.6; 4.0	12.4 +- 2.3
23	203	2.6	18.8 +- 0.6; 2.8	13.4 +- 0.7; 4.1	12.8 +- 2.3
24	245	1.9	19.0 +- 0.6; 2.8	13.5 +- 0.7; 4.2	12.4 +- 2.4
25	280	2.2	17.3 +- 0.5; 2.6	11.8 +- 0.6; 4.0	12.9 +- 2.2
26	299	3.1	19.1 +- 0.6; 2.9	13.6 +- 0.7; 4.2	13.1 +- 2.2
27	305	3.8	18.7 +- 0.6; 2.8	13.2 +- 0.7; 4.1	12.6 +- 2.2
28	276	4.0	17.8 +- 0.5; 2.7	12.4 +- 0.7; 4.0	12.1 +- 2.1
29	293	5.8	17.1 +- 0.5; 2.6	11.7 +- 0.6; 4.0	12.5 +- 2.2
30	316	7.7	19.5 +- 0.6; 2.9	14.0 +- 0.7; 4.2	12.5 +- 2.3
32	300	11.0	Missing Dosimeter	No Net Data	13.1 +- 2.3
33	322	8.7	18.4 +- 0.6; 2.8	13.0 +- 0.7; 4.1	13.9 +- 2.2
34	339	8.8	19.8 +- 0.6; 3.0	14.3 +- 0.7; 4.2	12.9 +- 2.1
35	342	2.9	18.7 +- 0.6; 2.8	13.2 +- 0.7; 4.1	12.1 +- 2.0
36	346	1.9	19.7 +- 0.6; 3.0	14.2 +- 0.7; 4.2	13.5 +- 2.2
37	353	1.0	19.2 +- 0.6; 2.9	13.8 +- 0.7; 4.2	12.5 +- 2.4
38	226	2.0	17.3 +- 0.5; 2.6	11.8 +- 0.6; 4.0	12.7 +- 2.2

Transit Dose = 5.3 +- 0.4; 3.1

ST. LUCIE

For the period 970910-980310

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	13.8 +- 0.0	1
11.26 - 33.75 NNE	No Data +- No Data	0
33.76 - 56.25 NE	18.2 +- 0.0	1
56.26 - 78.75 ENE	14.2 +- 0.0	1
78.76 - 101.25 E	13.0 +- 0.0	1
101.26 - 123.75 ESE	12.7 +- 0.0	1
123.76 - 146.25 SE	12.8 +- 0.0	1
146.26 - 168.75 SSE	12.1 +- 0.6	2
168.76 - 191.25 S	12.9 +- 1.1	4
191.26 - 213.75 SSW	13.6 +- 0.8	3
213.76 - 236.25 SW	13.1 +- 1.1	3
236.26 - 258.75 WSW	12.9 +- 1.0	3
258.76 - 281.25 W	12.1 +- 0.4	2
281.26 - 303.75 WNW	12.6 +- 1.4	2
303.76 - 326.25 NW	13.4 +- 0.5	3
326.26 - 348.75 NNW	13.9 +- 0.6	3

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	13.6 +- 1.8	10
2 - 5	12.9 +- 0.7	11
> 5	13.3 +- 1.1	10
Upwind Control	13.3 +- 0.4	3

NRC TLD DOSES FOR ST. LUCIE AREA

SUMMER

TLD Direct Radiation Environmental Monitoring

For the period 970910-980211 155 Days

Field Time: 93 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)	Gross Exposure (mR) +-Rdm; Tot.	Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.	Hist. Range Net Exp Rate +-1 Std Dev
1	199 3.7	27.1 +- 0.8; 4.1	19.0 +- 0.9; 5.1	20.5 +- 2.1
2	111 1.0	25.8 +- 0.8; 3.9	17.7 +- 0.9; 5.0	19.3 +- 2.1
3	340 4.1	26.7 +- 0.8; 4.0	18.6 +- 0.9; 5.1	21.8 +- 2.4
4	192 9.3	28.6 +- 0.9; 4.3	20.5 +- 0.9; 5.3	20.8 +- 1.2
5	72 1.8	27.4 +- 0.8; 4.1	19.2 +- 0.9; 5.1	21.8 +- 2.2
6	54 1.5	30.4 +- 0.9; 4.6	22.1 +- 1.0; 5.5	21.7 +- 1.3
7	46 3.0	35.1 +- 1.1; 5.3	26.7 +- 1.1; 6.0	26.4 +- 2.5
8	31 3.0	34.1 +- 1.0; 5.1	25.8 +- 1.1; 5.9	27.7 +- 2.3
9	13 3.9	34.9 +- 1.0; 5.2	26.6 +- 1.1; 6.0	26.5 +- 1.7
10	7 4.0	32.9 +- 1.0; 4.9	24.6 +- 1.1; 5.8	25.7 +- 1.3
11	349 4.3	29.7 +- 0.9; 4.5	21.5 +- 1.0; 5.4	22.6 +- 2.8
12	323 5.0	26.6 +- 0.8; 4.0	18.5 +- 0.9; 5.0	23.4 +- 2.5
13	333 3.0	33.1 +- 1.0; 5.0	24.7 +- 1.1; 5.8	24.5 +- 1.5
14	255 2.8	25.6 +- 0.8; 3.8	17.5 +- 0.9; 4.9	19.2 +- 2.4
15	308 5.6	32.0 +- 1.0; 4.8	23.7 +- 1.0; 5.7	25.2 +- 1.6
16	64 3.5	35.1 +- 1.1; 5.3	26.7 +- 1.1; 6.0	27.1 +- 2.7
17	98 3.1	33.1 +- 1.0; 5.0	24.8 +- 1.1; 5.8	22.7 +- 1.4
18	114 3.5	27.0 +- 0.8; 4.0	18.9 +- 0.9; 5.1	22.4 +- 1.7
19	132 2.0	27.2 +- 0.8; 4.1	19.1 +- 0.9; 5.1	20.5 +- 1.3
20	152 4.5	20.7 +- 0.6; 3.1	12.8 +- 0.7; 4.4	13.8 +- 2.3
21	133 4.1	25.0 +- 0.7; 3.7	16.9 +- 0.8; 4.9	15.6 +- 1.0
22	157 2.4	27.6 +- 0.8; 4.1	19.4 +- 0.9; 5.2	17.8 +- 1.4
23	173 2.4	29.0 +- 0.9; 4.4	20.8 +- 1.0; 5.3	19.6 +- 1.6
24	185 3.9	28.9 +- 0.9; 4.3	20.8 +- 0.9; 5.3	18.9 +- 1.5
25	210 3.3	27.9 +- 0.8; 4.2	19.8 +- 0.9; 5.2	18.8 +- 1.0
26	217 3.3	28.1 +- 0.8; 4.2	19.9 +- 0.9; 5.2	17.6 +- 2.7
27	231 3.1	21.4 +- 0.6; 3.2	13.4 +- 0.8; 4.5	14.6 +- 1.5
28	267 2.7	30.0 +- 0.9; 4.5	21.7 +- 1.0; 5.4	21.8 +- 1.4
29	276 3.4	30.8 +- 0.9; 4.6	22.6 +- 1.0; 5.5	23.4 +- 1.2
30	293 3.8	Missing Dosimeter	No Net Data	24.7 +- 3.7
31	244 3.6	24.7 +- 0.7; 3.7	16.6 +- 0.8; 4.8	19.9 +- 3.3
32	247 6.2	29.7 +- 0.9; 4.5	21.5 +- 1.0; 5.4	23.3 +- 1.8
33	218 9.0	28.1 +- 0.8; 4.2	20.0 +- 0.9; 5.2	20.1 +- 1.2
34	192 9.3	29.2 +- 0.9; 4.4	21.0 +- 1.0; 5.3	20.4 +- 1.2
35	184 14.1	24.3 +- 0.7; 3.6	16.3 +- 0.8; 4.8	15.9 +- 1.0
36	183 14.6	20.3 +- 0.6; 3.0	12.4 +- 0.7; 4.4	14.1 +- 2.3
37	182 14.8	19.1 +- 0.6; 2.9	11.2 +- 0.7; 4.3	13.1 +- 2.4
38	148 20.8	28.1 +- 0.8; 4.2	19.9 +- 0.9; 5.2	20.7 +- 1.7
39	140 25.0	Missing Dosimeter	No Net Data	22.7 +- 2.2
40	135 23.1	25.1 +- 0.8; 3.8	17.0 +- 0.9; 4.9	19.2 +- 2.9

Transit Dose = 7.5 +- 0.5; 3.4

SUMMER

For the period 970910-980211

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	23.1 +- 2.2	2
11.26 - 33.75 NNE	26.2 +- 0.6	2
33.76 - 56.25 NE	24.4 +- 3.3	2
56.26 - 78.75 ENE	22.9 +- 5.3	2
78.76 - 101.25 E	24.8 +- 0.0	1
101.26 - 123.75 ESE	18.3 +- 0.8	2
123.76 - 146.25 SE	17.7 +- 1.2	3
146.26 - 168.75 SSE	17.4 +- 4.0	3
168.76 - 191.25 S	20.8 +- 0.0	2
191.26 - 213.75 SSW	20.1 +- 0.9	4
213.76 - 236.25 SW	17.8 +- 3.8	3
236.26 - 258.75 WSW	18.5 +- 2.6	3
258.76 - 281.25 W	22.2 +- 0.6	2
281.26 - 303.75 WNW	No Data +- No Data	0
303.76 - 326.25 NW	21.1 +- 3.7	2
326.26 - 348.75 NNW	21.6 +- 4.4	2

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	19.5 +- 1.9	4
2 - 5	20.8 +- 4.0	24
> 5	20.5 +- 2.0	7
Upwind Control	13.3 +- 2.6	3

NRC TLD DOSES FOR SUMMER AREA

Miles

Legend

Water

Highways

Railroads

Roads

Plant site

SURRY

TLD Direct Radiation Environmental Monitoring

For the period 970909-980205 150 Days

Field Time: 99 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)		Gross Exposure (mR) +-Rdm; Tot.		Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.		Hist. Range Net Exp Rate +-1 Std Dev	
1	18	19.0	21.5	+- 0.6; 3.2	15.0	+- 0.7; 4.2	15.5	+- 0.9
2	129	17.0	22.0	+- 0.7; 3.3	15.4	+- 0.7; 4.2	16.6	+- 1.2
3	162	17.0	21.4	+- 0.6; 3.2	14.9	+- 0.7; 4.2	16.1	+- 1.5
4	162	17.0	20.6	+- 0.6; 3.1	14.2	+- 0.7; 4.1	13.6	+- 1.1
5	156	5.1	24.1	+- 0.7; 3.6	17.4	+- 0.7; 4.4	17.8	+- 1.1
6	189	4.1	20.4	+- 0.6; 3.1	14.0	+- 0.7; 4.1	14.7	+- 1.0
7	202	2.2	21.4	+- 0.6; 3.2	14.9	+- 0.7; 4.2	15.1	+- 1.2
8	183	1.6	24.7	+- 0.7; 3.7	18.0	+- 0.8; 4.5	17.5	+- 1.0
9	243	0.2	26.8	+- 0.8; 4.0	19.8	+- 0.8; 4.7	20.4	+- 0.9
10	269	0.1	26.9	+- 0.8; 4.0	20.0	+- 0.8; 4.7	22.2	+- 1.5
11	304	0.1	25.1	+- 0.8; 3.8	18.3	+- 0.8; 4.5	21.9	+- 2.7
12	334	0.2	28.7	+- 0.9; 4.3	21.5	+- 0.9; 4.9	22.7	+- 1.6
13	10	1.2	22.6	+- 0.7; 3.4	16.0	+- 0.7; 4.3	16.2	+- 1.1
14	21	2.0	22.9	+- 0.7; 3.4	16.3	+- 0.7; 4.3	16.7	+- 1.1
15	203	4.5	Missing Dosimeter		No Net Data		15.4	+- 1.0
16	224	3.7	20.6	+- 0.6; 3.1	14.2	+- 0.7; 4.1	14.3	+- 0.8
17	212	2.0	23.2	+- 0.7; 3.5	16.6	+- 0.7; 4.3	17.2	+- 0.9
18	248	5.1	21.8	+- 0.7; 3.3	15.3	+- 0.7; 4.2	14.8	+- 1.1
19	259	8.1	22.6	+- 0.7; 3.4	16.0	+- 0.7; 4.3	15.5	+- 1.9
20	285	5.0	17.1	+- 0.5; 2.6	11.0	+- 0.6; 3.8	10.7	+- 1.4
21	270	4.1	24.5	+- 0.7; 3.7	17.7	+- 0.8; 4.5	18.5	+- 1.1
22	123	12.0	25.1	+- 0.8; 3.8	18.3	+- 0.8; 4.5	20.4	+- 2.4
23	102	11.0	26.7	+- 0.8; 4.0	19.8	+- 0.8; 4.7	22.1	+- 1.9
24	106	4.9	22.9	+- 0.7; 3.4	16.3	+- 0.7; 4.3	17.6	+- 0.9
25	90	5.2	24.5	+- 0.7; 3.7	17.7	+- 0.8; 4.5	17.0	+- 1.0
26	69	5.1	27.9	+- 0.8; 4.2	20.9	+- 0.8; 4.8	21.3	+- 1.2
27	23	5.3	24.8	+- 0.7; 3.7	18.0	+- 0.8; 4.5	18.4	+- 1.1
28	49	5.0	23.8	+- 0.7; 3.6	17.1	+- 0.7; 4.4	18.4	+- 1.1
29	7	6.8	22.0	+- 0.7; 3.3	15.5	+- 0.7; 4.2	17.4	+- 1.4
30	359	6.5	21.7	+- 0.6; 3.2	15.1	+- 0.7; 4.2	15.7	+- 1.0
31	1	4.6	19.5	+- 0.6; 2.9	13.2	+- 0.6; 4.0	13.4	+- 1.9
32	332	3.8	22.4	+- 0.7; 3.4	15.8	+- 0.7; 4.3	16.5	+- 1.2
33	314	5.4	23.0	+- 0.7; 3.5	16.4	+- 0.7; 4.3	17.4	+- 1.1
34	308	6.4	20.5	+- 0.6; 3.1	14.1	+- 0.7; 4.1	16.2	+- 1.6
35	348	5.3	19.9	+- 0.6; 3.0	13.5	+- 0.7; 4.0	15.4	+- 0.9
36	343	15.0	21.1	+- 0.6; 3.2	14.6	+- 0.7; 4.1	16.5	+- 1.1
37	340	15.0	20.2	+- 0.6; 3.0	13.9	+- 0.7; 4.1	14.2	+- 1.0
38	339	16.0	22.9	+- 0.7; 3.4	16.3	+- 0.7; 4.3	16.7	+- 2.1
39	153	1.9	25.5	+- 0.8; 3.8	18.7	+- 0.8; 4.6	18.7	+- 1.1
40	144	2.1	28.2	+- 0.8; 4.2	21.1	+- 0.8; 4.9	17.4	+- 3.1

Transit Dose = 5.0 +- 0.4; 3.3

SURREY

For the period 970909-980205

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	15.0 +- 1.2	4
11.26 - 33.75 NNE	16.4 +- 1.5	3
33.76 - 56.25 NE	17.1 +- 0.0	1
56.26 - 78.75 ENE	20.9 +- 0.0	1
78.76 - 101.25 E	17.7 +- 0.0	1
101.26 - 123.75 ESE	18.1 +- 1.8	3
123.76 - 146.25 SE	18.3 +- 4.0	2
146.26 - 168.75 SSE	16.3 +- 2.1	4
168.76 - 191.25 S	16.0 +- 2.8	2
191.26 - 213.75 SSW	15.7 +- 1.2	2
213.76 - 236.25 SW	14.2 +- 0.0	1
236.26 - 258.75 WSW	17.5 +- 3.2	2
258.76 - 281.25 W	17.9 +- 2.0	3
281.26 - 303.75 WNW	11.0 +- 0.0	1
303.76 - 326.25 NW	16.3 +- 2.1	3
326.26 - 348.75 NNW	17.0 +- 4.1	3

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	18.3 +- 1.9	9
2 - 5	15.5 +- 2.8	10
> 5	16.3 +- 2.0	17
Upwind Control	14.9 +- 1.2	3

NRC TLD DOSES FOR SURRY AREA

Miles

Legend

Water

--- Railroads

Plant..site

— Highways

--- Roads

SUSQUEHANNA

TLD Direct Radiation Environmental Monitoring

For the period 970911-980113 125 Days

Field Time: 99 Days

NRC Sta	Location		Gross		Net Exposure Rate		Hist. Range	
	Azimuth/Dist (Deg)/(Mi)		Exposure (mR) +-Rdm; Tot.		(mR/Std. Qtr.) +-Rdm; Tot.		Net Exp Rate +-1 Std Dev	
1	19	1.4	22.7 +- 0.7; 3.4		19.8 +- 0.7; 4.1		18.8 +- 1.2	
2	358	1.4	22.9 +- 0.7; 3.4		19.9 +- 0.7; 4.1		19.2 +- 1.0	
3	332	1.6	21.3 +- 0.6; 3.2		18.5 +- 0.6; 4.0		17.8 +- 1.1	
4	315	1.8	20.5 +- 0.6; 3.1		17.8 +- 0.6; 3.9		17.6 +- 1.1	
5	287	1.7	23.0 +- 0.7; 3.5		20.0 +- 0.7; 4.1		19.2 +- 1.4	
6	270	1.3	22.3 +- 0.7; 3.3		19.4 +- 0.7; 4.1		18.6 +- 1.1	
7	239	1.8	21.4 +- 0.6; 3.2		18.6 +- 0.6; 4.0		18.0 +- 1.3	
8	217	2.0	25.4 +- 0.8; 3.8		22.2 +- 0.7; 4.4		21.2 +- 1.4	
9	201	1.5	21.8 +- 0.7; 3.3		19.0 +- 0.6; 4.0		19.0 +- 1.4	
10	185	1.3	19.5 +- 0.6; 2.9		16.9 +- 0.6; 3.8		17.3 +- 1.3	
11	243	5.1	22.8 +- 0.7; 3.4		19.8 +- 0.7; 4.1		19.1 +- 1.0	
12	252	4.6	21.6 +- 0.6; 3.2		18.8 +- 0.6; 4.0		18.2 +- 1.0	
13	274	3.4	24.2 +- 0.7; 3.6		21.1 +- 0.7; 4.3		21.3 +- 1.3	
14	286	3.6	23.4 +- 0.7; 3.5		20.4 +- 0.7; 4.2		19.7 +- 1.1	
15	1	3.9	26.3 +- 0.8; 3.9		23.0 +- 0.8; 4.5		20.5 +- 1.5	
16	334	4.1	21.0 +- 0.6; 3.1		18.2 +- 0.6; 3.9		19.5 +- 1.2	
17	312	4.4	23.1 +- 0.7; 3.5		20.1 +- 0.7; 4.1		18.9 +- 1.4	
18	33	5.0	23.6 +- 0.7; 3.5		20.5 +- 0.7; 4.2		19.5 +- 1.3	
19	45	9.9	22.1 +- 0.7; 3.3		19.2 +- 0.7; 4.0		19.9 +- 1.1	
20	65	4.7	25.4 +- 0.8; 3.8		22.2 +- 0.7; 4.4		20.9 +- 1.2	
21	43	3.3	22.5 +- 0.7; 3.4		19.6 +- 0.7; 4.1		21.0 +- 1.5	
22	33	0.9	23.0 +- 0.7; 3.5		20.0 +- 0.7; 4.1		18.9 +- 2.0	
23	57	1.2	21.4 +- 0.6; 3.2		18.5 +- 0.6; 4.0		17.7 +- 1.2	
24	87	1.4	22.7 +- 0.7; 3.4		19.7 +- 0.7; 4.1		19.3 +- 1.1	
25	111	1.4	22.7 +- 0.7; 3.4		19.7 +- 0.7; 4.1		18.9 +- 1.2	
26	137	1.5	21.5 +- 0.6; 3.2		18.6 +- 0.6; 4.0		18.9 +- 1.1	
27	152	1.5	22.7 +- 0.7; 3.4		19.8 +- 0.7; 4.1		19.8 +- 1.0	
28	107	3.6	24.1 +- 0.7; 3.6		21.0 +- 0.7; 4.2		20.7 +- 1.3	
29	99	4.3	23.6 +- 0.7; 3.5		20.6 +- 0.7; 4.2		20.3 +- 1.0	
30	138	3.6	23.6 +- 0.7; 3.5		20.5 +- 0.7; 4.2		20.4 +- 1.1	
31	162	3.4	25.1 +- 0.8; 3.8		21.9 +- 0.7; 4.4		22.0 +- 1.3	
32	176	3.5	25.3 +- 0.8; 3.8		22.1 +- 0.7; 4.4		20.7 +- 1.4	
33	192	3.2	24.6 +- 0.7; 3.7		21.5 +- 0.7; 4.3		21.1 +- 1.2	
34	231	4.4	23.4 +- 0.7; 3.5		20.4 +- 0.7; 4.2		19.7 +- 1.1	
35	134	12.3	23.3 +- 0.7; 3.5		20.3 +- 0.7; 4.2		19.8 +- 1.6	
36	114	13.5	25.7 +- 0.8; 3.8		22.4 +- 0.7; 4.4		22.0 +- 1.4	
37	150	15.6	23.0 +- 0.7; 3.4		20.0 +- 0.7; 4.1		19.0 +- 1.4	

Transit Dose = 1.0 +- 0.3; 3.0

SUSQUEHANNA

For the period 970911-980113

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	21.4 +- 2.2	2
11.26 - 33.75 NNE	20.1 +- 0.4	3
33.76 - 56.25 NE	19.4 +- 0.3	2
56.26 - 78.75 ENE	20.4 +- 2.6	2
78.76 - 101.25 E	20.2 +- 0.6	2
101.26 - 123.75 ESE	20.4 +- 0.9	2
123.76 - 146.25 SE	19.6 +- 1.3	2
146.26 - 168.75 SSE	20.9 +- 1.5	2
168.76 - 191.25 S	19.5 +- 3.7	2
191.26 - 213.75 SSW	20.2 +- 1.8	2
213.76 - 236.25 SW	21.3 +- 1.3	2
236.26 - 258.75 WSW	19.1 +- 0.7	3
258.76 - 281.25 W	20.2 +- 1.3	2
281.26 - 303.75 WNW	20.2 +- 0.3	2
303.76 - 326.25 NW	18.9 +- 1.7	2
326.26 - 348.75 NNW	18.3 +- 0.2	2

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	19.3 +- 1.2	16
2 - 5	20.7 +- 1.3	16
> 5	19.5 +- 0.4	2
Upwind Control	20.9 +- 1.3	3

NRC TLD DOSES FOR SUSQUEHANNA AREA

Miles

Legend

Water
Highways

Railroads
Roads

Plant..site

THREE MILE ISLAND

TLD Direct Radiation Environmental Monitoring

For the period 970910-980113 126 Days

Field Time: 100 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)		Gross Exposure (mR) +-Rdm; Tot.		Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.		Hist. Range Net Exp Rate +-1 Std Dev	
1	95	5.9	19.0	+- 0.6; 2.9	16.8	+- 0.6; 3.7	16.2	+- 1.4
2	102	3.9	20.9	+- 0.6; 3.1	18.5	+- 0.6; 3.9	18.3	+- 1.9
3	110	2.7	15.7	+- 0.5; 2.3	13.8	+- 0.5; 3.4	13.6	+- 2.4
4	162	1.8	18.4	+- 0.6; 2.8	16.3	+- 0.5; 3.6	15.6	+- 1.6
5	161	2.3	19.3	+- 0.6; 2.9	17.0	+- 0.6; 3.7	15.3	+- 1.7
6	152	1.1	18.4	+- 0.6; 2.8	16.3	+- 0.5; 3.6	16.1	+- 1.6
7	123	0.5	17.4	+- 0.5; 2.6	15.3	+- 0.5; 3.5	14.1	+- 1.6
8	87	0.4	20.7	+- 0.6; 3.1	18.3	+- 0.6; 3.9	16.2	+- 1.8
9	61	0.5	17.4	+- 0.5; 2.6	15.4	+- 0.5; 3.5	14.9	+- 1.5
10	1	1.7	18.2	+- 0.5; 2.7	16.0	+- 0.5; 3.6	15.3	+- 1.8
11	27	0.8	18.8	+- 0.6; 2.8	16.6	+- 0.6; 3.7	15.1	+- 1.6
12	48	1.0	17.4	+- 0.5; 2.6	15.3	+- 0.5; 3.5	15.6	+- 1.6
13	19	2.0	19.4	+- 0.6; 2.9	17.1	+- 0.6; 3.7	15.8	+- 1.8
14	358	2.4	17.6	+- 0.5; 2.6	15.5	+- 0.5; 3.6	14.5	+- 1.8
15	132	9.0	21.3	+- 0.6; 3.2	18.9	+- 0.6; 3.9	18.3	+- 1.8
16	0	3.0	16.9	+- 0.5; 2.5	14.9	+- 0.5; 3.5	14.3	+- 1.7
18	347	3.5	21.0	+- 0.6; 3.1	18.6	+- 0.6; 3.9	18.4	+- 1.8
19	343	3.1	19.4	+- 0.6; 2.9	17.2	+- 0.6; 3.7	16.8	+- 1.7
20	318	5.0	19.2	+- 0.6; 2.9	16.9	+- 0.6; 3.7	15.7	+- 1.8
21	348	2.7	14.7	+- 0.4; 2.2	12.9	+- 0.5; 3.3	12.5	+- 1.7
22	17	3.1	19.2	+- 0.6; 2.9	16.9	+- 0.6; 3.7	16.0	+- 1.7
23	64	3.7	15.8	+- 0.5; 2.4	13.9	+- 0.5; 3.4	13.0	+- 1.6
24	44	3.6	19.2	+- 0.6; 2.9	17.0	+- 0.6; 3.7	16.8	+- 1.8
25	327	0.4	Missing Dosimeter		No Net Data		12.9	+- 2.9
27	7	7.1	23.2	+- 0.7; 3.5	20.6	+- 0.7; 4.1	20.4	+- 1.8
29	293	0.4	Missing Dosimeter		No Net Data		15.9	+- 3.2
30	314	1.1	Missing Dosimeter		No Net Data		17.3	+- 3.2
31	303	8.6	16.5	+- 0.5; 2.5	14.5	+- 0.5; 3.5	13.6	+- 1.6
32	297	7.6	20.0	+- 0.6; 3.0	17.7	+- 0.6; 3.8	17.0	+- 1.7
33	302	5.8	15.3	+- 0.5; 2.3	13.5	+- 0.5; 3.4	13.4	+- 1.7
34	296	2.3	19.0	+- 0.6; 2.8	16.8	+- 0.6; 3.7	16.5	+- 1.6
35	308	1.8	19.8	+- 0.6; 3.0	17.5	+- 0.6; 3.8	16.5	+- 1.4
36	265	1.2	17.7	+- 0.5; 2.7	15.6	+- 0.5; 3.6	13.4	+- 2.0
37	256	1.4	16.4	+- 0.5; 2.5	14.4	+- 0.5; 3.5	13.8	+- 1.6
38	225	1.9	17.6	+- 0.5; 2.6	15.5	+- 0.5; 3.6	16.3	+- 1.5
39	204	2.0	15.6	+- 0.5; 2.3	13.7	+- 0.5; 3.4	13.1	+- 1.5
40	202	2.5	17.5	+- 0.5; 2.6	15.4	+- 0.5; 3.6	14.7	+- 1.5
41	184	12.6	20.9	+- 0.6; 3.1	18.5	+- 0.6; 3.9	16.7	+- 1.7
42	259	7.4	18.7	+- 0.6; 2.8	16.5	+- 0.6; 3.7	16.0	+- 1.7
43	268	6.2	18.1	+- 0.5; 2.7	15.9	+- 0.5; 3.6	16.4	+- 2.0
44	249	4.3	17.4	+- 0.5; 2.6	15.4	+- 0.5; 3.5	15.1	+- 1.7
45	221	0.5	Missing Dosimeter		No Net Data		13.4	+- 2.4
46	171	3.0	19.1	+- 0.6; 2.9	16.9	+- 0.6; 3.7	15.6	+- 1.8
47	177	5.7	17.0	+- 0.5; 2.5	15.0	+- 0.5; 3.5	15.1	+- 1.8
48	181	9.1	24.0	+- 0.7; 3.6	21.3	+- 0.7; 4.2	21.3	+- 2.0
49	199	1.0	Missing Dosimeter		No Net Data		15.0	+- 2.5
50	145	4.9	20.9	+- 0.6; 3.1	18.5	+- 0.6; 3.9	16.9	+- 2.3

Transit Dose = 0.4 +- 0.3; 2.9

THREE MILE ISLAND
For the period 970910-980113

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	16.8 +- 2.6	4
11.26 - 33.75 NNE	16.9 +- 0.3	3
33.76 - 56.25 NE	16.2 +- 1.2	2
56.26 - 78.75 ENE	14.6 +- 1.0	2
78.76 - 101.25 E	17.6 +- 1.1	2
101.26 - 123.75 ESE	15.9 +- 2.4	3
123.76 - 146.25 SE	18.7 +- 0.3	2
146.26 - 168.75 SSE	16.5 +- 0.4	3
168.76 - 191.25 S	17.9 +- 2.7	4
191.26 - 213.75 SSW	14.6 +- 1.2	2
213.76 - 236.25 SW	15.5 +- 0.0	1
236.26 - 258.75 WSW	15.4 +- 0.0	1
258.76 - 281.25 W	16.2 +- 0.4	2
281.26 - 303.75 WNW	15.6 +- 2.0	4
303.76 - 326.25 NW	16.9 +- 0.0	1
326.26 - 348.75 NNW	16.2 +- 3.0	3

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	16.0 +- 1.2	11
2 - 5	16.2 +- 1.7	17
> 5	17.2 +- 2.5	11
Upwind Control	15.8 +- 1.5	3

NRC TLD DOSES FOR THREE MILE ISLAND AREA

Miles

Legend

Water

--- Railroads

Plant..site

— Highways

--- Roads

TROJAN

TLD Direct Radiation Environmental Monitoring

For the period 970908-980209 155 Days

Field Time: 86 Days

NRC Sta	Location		Gross		Net Exposure Rate		Hist. Range	
	Azimuth/Dist (Deg)/(Mi)		Exposure (mR) +-Rdm; Tot.		(mR/Std. Qtr.) +-Rdm; Tot.		Net Exp Rate +-1 Std Dev	
1	340	0.6	22.4	+- 0.7; 3.4	14.6	+- 0.9; 4.9	12.6	+- 1.1
2	334	1.5	22.7	+- 0.7; 3.4	14.8	+- 0.9; 4.9	14.5	+- 1.1
3	340	1.7	20.5	+- 0.6; 3.1	12.6	+- 0.8; 4.7	11.9	+- 1.0
4	328	3.9	19.0	+- 0.6; 2.9	11.0	+- 0.8; 4.5	12.3	+- 1.2
5	308	4.6	22.1	+- 0.7; 3.3	14.2	+- 0.8; 4.9	14.4	+- 1.1
6	312	4.5	22.2	+- 0.7; 3.3	14.4	+- 0.9; 4.9	15.0	+- 1.1
7	267	4.6	23.4	+- 0.7; 3.5	15.7	+- 0.9; 5.0	14.8	+- 0.8
8	274	3.8	24.3	+- 0.7; 3.6	16.5	+- 0.9; 5.1	15.3	+- 0.9
9	279	1.7	23.0	+- 0.7; 3.5	15.2	+- 0.9; 5.0	14.9	+- 0.9
10	263	2.0	23.0	+- 0.7; 3.5	15.2	+- 0.9; 5.0	15.4	+- 0.8
11	245	1.6	Missing Dosimeter		No Net Data		15.9	+- 0.9
12	223	1.2	24.3	+- 0.7; 3.6	16.6	+- 0.9; 5.1	16.4	+- 1.2
13	196	1.1	24.1	+- 0.7; 3.6	16.4	+- 0.9; 5.1	15.5	+- 0.8
14	180	1.2	20.6	+- 0.6; 3.1	12.7	+- 0.8; 4.7	14.1	+- 1.0
15	165	1.7	19.6	+- 0.6; 2.9	11.7	+- 0.8; 4.6	13.1	+- 1.0
16	212	3.9	23.5	+- 0.7; 3.5	15.8	+- 0.9; 5.0	16.2	+- 1.8
17	230	3.5	22.5	+- 0.7; 3.4	14.7	+- 0.9; 4.9	15.6	+- 1.1
18	162	9.3	23.9	+- 0.7; 3.6	16.1	+- 0.9; 5.1	15.7	+- 0.9
19	172	5.0	21.6	+- 0.6; 3.2	13.7	+- 0.8; 4.8	15.6	+- 1.0
20	334	5.8	21.9	+- 0.7; 3.3	14.0	+- 0.8; 4.8	12.9	+- 0.9
21	345	5.5	21.2	+- 0.6; 3.2	13.3	+- 0.8; 4.8	13.2	+- 0.7
22	356	5.5	21.9	+- 0.7; 3.3	14.0	+- 0.8; 4.8	12.2	+- 0.7
23	8	3.9	20.3	+- 0.6; 3.1	12.4	+- 0.8; 4.7	11.8	+- 0.7
24	15	3.7	22.0	+- 0.7; 3.3	14.2	+- 0.8; 4.9	13.2	+- 0.8
25	27	1.9	20.9	+- 0.6; 3.1	13.0	+- 0.8; 4.7	12.0	+- 0.9
26	37	2.1	23.3	+- 0.7; 3.5	15.5	+- 0.9; 5.0	14.7	+- 0.9
27	60	2.9	23.5	+- 0.7; 3.5	15.7	+- 0.9; 5.0	14.9	+- 0.8
28	55	4.5	21.7	+- 0.7; 3.3	13.9	+- 0.8; 4.8	13.7	+- 0.8
29	69	1.6	19.3	+- 0.6; 2.9	11.3	+- 0.8; 4.6	12.3	+- 1.2
30	83	3.9	21.0	+- 0.6; 3.2	13.1	+- 0.8; 4.7	12.6	+- 0.7
31	93	2.7	23.7	+- 0.7; 3.6	16.0	+- 0.9; 5.1	15.4	+- 0.9
32	119	2.2	23.5	+- 0.7; 3.5	15.7	+- 0.9; 5.0	15.4	+- 0.9
33	106	5.3	21.9	+- 0.7; 3.3	14.1	+- 0.8; 4.8	15.0	+- 2.6
34	134	2.5	20.6	+- 0.6; 3.1	12.7	+- 0.8; 4.7	12.5	+- 0.9
35	145	4.7	21.5	+- 0.6; 3.2	13.6	+- 0.8; 4.8	13.0	+- 0.7
36	270	17.0	23.1	+- 0.7; 3.5	15.3	+- 0.9; 5.0	15.0	+- 1.5
37	270	17.0	22.8	+- 0.7; 3.4	15.0	+- 0.9; 4.9	16.2	+- 1.9
38	270	17.0	25.0	+- 0.8; 3.8	17.3	+- 0.9; 5.2	16.1	+- 1.0

Transit Dose = 8.5 +- 0.5; 3.3

TROJAN

For the period 970908-980209

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	13.2 +- 1.1	2
11.26 - 33.75 NNE	13.6 +- 0.8	2
33.76 - 56.25 NE	14.7 +- 1.2	2
56.26 - 78.75 ENE	13.5 +- 3.1	2
78.76 - 101.25 E	14.5 +- 2.0	2
101.26 - 123.75 ESE	14.9 +- 1.2	2
123.76 - 146.25 SE	13.2 +- 0.6	2
146.26 - 168.75 SSE	13.9 +- 3.2	2
168.76 - 191.25 S	13.2 +- 0.7	2
191.26 - 213.75 SSW	16.1 +- 0.5	2
213.76 - 236.25 SW	15.6 +- 1.4	2
236.26 - 258.75 WSW	No Data +- No Data	0
258.76 - 281.25 W	15.7 +- 0.6	4
281.26 - 303.75 WNW	No Data +- No Data	0
303.76 - 326.25 NW	14.3 +- 0.1	2
326.26 - 348.75 NNW	13.4 +- 1.4	6

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	14.0 +- 1.8	11
2 - 5	14.4 +- 1.5	18
> 5	14.3 +- 1.1	5
Upwind Control	15.9 +- 1.2	3

NRC TLD DOSES FOR TROJAN AREA

Miles

Legend

Water
 Highways

Railroads
 Roads

Plant..site

TURKEY POINT

TLD Direct Radiation Environmental Monitoring

For the period 970910-980310 182 Days

Field Time: 96 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)		Gross Exposure (mR) +-Rdm; Tot.		Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.		Hist. Range Net Exp Rate +-1 Std Dev	
1	310	1.3	19.6	+- 0.6; 2.9	11.7	+- 0.7; 4.2	11.6	+- 1.9
2	292	2.4	17.5	+- 0.5; 2.6	9.8	+- 0.6; 4.0	11.4	+- 2.1
3	340	1.9	20.3	+- 0.6; 3.0	12.4	+- 0.7; 4.3	11.9	+- 1.8
4	354	2.0	19.0	+- 0.6; 2.8	11.1	+- 0.7; 4.2	12.6	+- 2.2
5	314	3.8	18.3	+- 0.5; 2.7	10.5	+- 0.7; 4.1	11.5	+- 1.9
6	331	4.2	17.4	+- 0.5; 2.6	9.7	+- 0.6; 4.0	10.9	+- 1.9
7	291	5.4	19.2	+- 0.6; 2.9	11.4	+- 0.7; 4.2	12.2	+- 2.4
8	263	5.1	17.3	+- 0.5; 2.6	9.6	+- 0.6; 4.0	10.8	+- 2.0
9	242	5.7	19.2	+- 0.6; 2.9	11.3	+- 0.7; 4.2	11.7	+- 2.3
10	234	6.2	19.0	+- 0.6; 2.8	11.2	+- 0.7; 4.2	12.2	+- 1.4
11	220	6.2	19.2	+- 0.6; 2.9	11.4	+- 0.7; 4.2	11.5	+- 2.1
12	213	6.9	18.7	+- 0.6; 2.8	10.9	+- 0.7; 4.1	11.2	+- 2.0
13	199	10.0	18.5	+- 0.6; 2.8	10.7	+- 0.7; 4.1	11.8	+- 1.9
14	90	10.0	17.6	+- 0.5; 2.6	9.9	+- 0.7; 4.0	11.3	+- 2.4
15	180	10.0	21.0	+- 0.6; 3.1	13.0	+- 0.7; 4.3	13.2	+- 1.9
16	171	10.0	19.8	+- 0.6; 3.0	11.9	+- 0.7; 4.2	13.4	+- 1.9
17	165	9.0	20.1	+- 0.6; 3.0	12.2	+- 0.7; 4.3	12.9	+- 2.0
18	203	16.0	18.8	+- 0.6; 2.8	11.0	+- 0.7; 4.1	12.3	+- 1.7
19	203	16.0	18.6	+- 0.6; 2.8	10.8	+- 0.7; 4.1	12.1	+- 2.0
20	203	16.0	19.7	+- 0.6; 2.9	11.8	+- 0.7; 4.2	13.6	+- 1.8
21	268	8.7	16.7	+- 0.5; 2.5	9.0	+- 0.6; 4.0	10.5	+- 2.0
22	256	8.0	17.6	+- 0.5; 2.6	9.9	+- 0.7; 4.0	11.8	+- 1.9
23	275	9.0	17.8	+- 0.5; 2.7	10.0	+- 0.7; 4.0	11.2	+- 2.2
24	285	9.0	19.7	+- 0.6; 3.0	11.9	+- 0.7; 4.2	13.5	+- 2.1
25	293	8.7	20.5	+- 0.6; 3.1	12.5	+- 0.7; 4.3	14.0	+- 2.0
26	301	8.4	20.5	+- 0.6; 3.1	12.6	+- 0.7; 4.3	13.5	+- 1.9
27	311	8.3	19.0	+- 0.6; 2.9	11.2	+- 0.7; 4.2	12.0	+- 1.7
28	327	8.2	20.2	+- 0.6; 3.0	12.3	+- 0.7; 4.3	13.5	+- 1.8
29	339	9.3	19.2	+- 0.6; 2.9	11.4	+- 0.7; 4.2	12.9	+- 1.8
30	350	8.7	19.8	+- 0.6; 3.0	12.0	+- 0.7; 4.2	12.5	+- 2.3
31	359	9.9	18.2	+- 0.5; 2.7	10.5	+- 0.7; 4.1	12.5	+- 1.7
32	2	18.0	19.6	+- 0.6; 2.9	11.7	+- 0.7; 4.2	12.6	+- 1.4
33	2	22.0	19.5	+- 0.6; 2.9	11.6	+- 0.7; 4.2	12.8	+- 1.8
34	18	24.0	19.4	+- 0.6; 2.9	11.6	+- 0.7; 4.2	12.7	+- 2.0
35	28	22.0	19.1	+- 0.6; 2.9	11.2	+- 0.7; 4.2	12.2	+- 2.6
36	15	0.3	17.4	+- 0.5; 2.6	9.7	+- 0.6; 4.0	11.2	+- 1.8
37	228	0.5	20.4	+- 0.6; 3.1	12.5	+- 0.7; 4.3	12.9	+- 1.8

Transit Dose = 7.1 +- 0.5; 3.4

TURKEY POINT

For the period 970910-980310

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	11.4 +- 0.6	5
11.26 - 33.75 NNE	10.8 +- 1.0	3
33.76 - 56.25 NE	No Data +- No Data	0
56.26 - 78.75 ENE	No Data +- No Data	0
78.76 - 101.25 E	9.9 +- 0.0	1
101.26 - 123.75 ESE	No Data +- No Data	0
123.76 - 146.25 SE	No Data +- No Data	0
146.26 - 168.75 SSE	12.2 +- 0.0	1
168.76 - 191.25 S	12.5 +- 0.8	2
191.26 - 213.75 SSW	10.8 +- 0.1	2
213.76 - 236.25 SW	11.7 +- 0.7	3
236.26 - 258.75 WSW	10.6 +- 1.0	2
258.76 - 281.25 W	9.5 +- 0.5	3
281.26 - 303.75 WNW	11.6 +- 1.2	5
303.76 - 326.25 NW	11.1 +- 0.6	3
326.26 - 348.75 NNW	11.5 +- 1.3	4

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	11.5 +- 1.2	5
2 - 5	10.0 +- 0.5	3
> 5	11.3 +- 1.0	26
Upwind Control	11.2 +- 0.5	3

NRC TLD DOSES FOR TURKEY POINT AREA

VERMONT YANKEE

TLD Direct Radiation Environmental Monitoring

For the period 970911-980210 153 Days

Field Time: 106 Days

NRC Sta	Location		Gross			Net Exposure Rate			Hist. Range		
	Azimuth/Dist (Deg)/(Mi)		Exposure (mR) +-Rdm; Tot.			(mR/Std. Qtr.) +-Rdm; Tot.			Net Exp Rate +-1 Std Dev		
1	142	1.0	24.4	+-	0.7; 3.7	No	Net	Data	15.7	+-	1.4
2	158	1.0	24.0	+-	0.7; 3.6	No	Net	Data	16.7	+-	1.0
3	184	1.3	23.4	+-	0.7; 3.5	No	Net	Data	15.9	+-	1.0
4	201	1.4	23.9	+-	0.7; 3.6	No	Net	Data	16.5	+-	1.5
5	220	1.6	24.5	+-	0.7; 3.7	No	Net	Data	16.7	+-	1.6
6	157	3.4	26.9	+-	0.8; 4.0	No	Net	Data	16.8	+-	2.3
7	189	4.9	24.0	+-	0.7; 3.6	No	Net	Data	16.3	+-	1.3
8	201	13.0	25.0	+-	0.7; 3.7	No	Net	Data	15.9	+-	1.0
9	208	5.8	23.6	+-	0.7; 3.5	No	Net	Data	16.0	+-	1.3
10	232	3.7	25.9	+-	0.8; 3.9	No	Net	Data	18.5	+-	1.6
11	277	2.9	25.0	+-	0.8; 3.8	No	Net	Data	17.2	+-	1.7
12	292	1.4	25.0	+-	0.7; 3.7	No	Net	Data	16.9	+-	1.7
13	314	1.4	23.5	+-	0.7; 3.5	No	Net	Data	16.3	+-	1.5
14	310	4.2	23.5	+-	0.7; 3.5	No	Net	Data	16.1	+-	0.9
15	299	4.3	24.4	+-	0.7; 3.7	No	Net	Data	16.1	+-	1.1
16	270	4.5	20.3	+-	0.6; 3.0	No	Net	Data	14.3	+-	1.2
17	331	5.0	24.9	+-	0.7; 3.7	No	Net	Data	16.9	+-	1.0
18	290	19.0	23.8	+-	0.7; 3.6	No	Net	Data	18.5	+-	1.7
19	290	19.0	21.9	+-	0.7; 3.3	No	Net	Data	17.5	+-	1.7
20	290	19.0	23.2	+-	0.7; 3.5	No	Net	Data	17.8	+-	1.8
21	359	3.2	25.3	+-	0.8; 3.8	No	Net	Data	16.7	+-	1.4
23	334	2.2	23.3	+-	0.7; 3.5	No	Net	Data	16.0	+-	1.5
24	4	0.9	25.3	+-	0.8; 3.8	No	Net	Data	16.9	+-	1.2
25	30	1.0	24.4	+-	0.7; 3.7	No	Net	Data	15.5	+-	1.3
26	72	1.5	25.3	+-	0.8; 3.8	No	Net	Data	17.3	+-	1.0
27	44	0.7	25.0	+-	0.7; 3.7	No	Net	Data	16.3	+-	1.3
28	39	2.8	26.6	+-	0.8; 4.0	No	Net	Data	17.7	+-	1.8
29	25	3.8	27.4	+-	0.8; 4.1	No	Net	Data	19.2	+-	1.7
30	72	2.7	26.8	+-	0.8; 4.0	No	Net	Data	18.5	+-	1.8
31	85	2.0	24.2	+-	0.7; 3.6	No	Net	Data	16.7	+-	1.3
32	111	1.8	24.4	+-	0.7; 3.7	No	Net	Data	16.6	+-	1.2
33	134	4.0	24.9	+-	0.7; 3.7	No	Net	Data	16.3	+-	1.1
34	151	6.0	23.4	+-	0.7; 3.5	No	Net	Data	14.7	+-	1.2
35	111	4.3	26.2	+-	0.8; 3.9	No	Net	Data	18.4	+-	1.3
36	92	4.7	27.2	+-	0.8; 4.1	No	Net	Data	19.0	+-	1.5
37	50	15.0	30.0	+-	0.9; 4.5	No	Net	Data	21.0	+-	1.4
39	222	0.3	25.9	+-	0.8; 3.9	No	Net	Data	17.9	+-	1.3
40	250	3.0	25.4	+-	0.8; 3.8	No	Net	Data	16.9	+-	1.4

No Transit Dose Calculated. (Transit Control Is Missing.)

VERMONT YANKEE

For the period 970911-980210

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	14.9 +- 0.0	2
11.26 - 33.75 NNE	15.2 +- 1.2	2
33.76 - 56.25 NE	16.0 +- 1.5	3
56.26 - 78.75 ENE	15.3 +- 0.6	2
78.76 - 101.25 E	15.1 +- 1.2	2
101.26 - 123.75 ESE	14.9 +- 0.8	2
123.76 - 146.25 SE	14.5 +- 0.2	2
146.26 - 168.75 SSE	14.6 +- 1.1	3
168.76 - 191.25 S	13.9 +- 0.3	2
191.26 - 213.75 SSW	14.2 +- 0.4	3
213.76 - 236.25 SW	15.0 +- 0.5	3
236.26 - 258.75 WSW	15.0 +- 0.0	1
258.76 - 281.25 W	13.3 +- 2.0	2
281.26 - 303.75 WNW	14.5 +- 0.2	2
303.76 - 326.25 NW	13.8 +- 0.0	2
326.26 - 348.75 NNW	14.2 +- 0.6	2

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	14.4 +- 0.4	14
2 - 5	14.8 +- 1.0	17
> 5	15.0 +- 1.8	4
Upwind Control	13.5 +- 0.6	3

NRC TLD DOSES FOR VERMONT YANKEE AREA

Miles

Legend

Water
Highways

Railroads
Roads

Plant..site

VOGTLE (GA)

TLD Direct Radiation Environmental Monitoring

For the period 970910-980209 153 Days

Field Time: 92 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)	Gross Exposure (mR) +-Rdm; Tot.	Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.	Hist. Range Net Exp Rate +-1 Std Dev
1	298 1.6	21.3 +- 0.6; 3.2	13.8 +- 0.8; 4.5	14.3 +- 1.7
2	309 1.6	20.4 +- 0.6; 3.1	12.9 +- 0.7; 4.4	14.3 +- 1.9
3	336 1.4	20.1 +- 0.6; 3.0	12.7 +- 0.7; 4.4	14.2 +- 2.4
4	270 1.3	20.1 +- 0.6; 3.0	12.6 +- 0.7; 4.4	14.1 +- 2.1
5	247 1.2	20.3 +- 0.6; 3.0	12.8 +- 0.7; 4.4	14.9 +- 2.0
6	215 1.2	23.9 +- 0.7; 3.6	16.4 +- 0.8; 4.8	18.1 +- 1.9
7	205 1.2	26.1 +- 0.8; 3.9	18.5 +- 0.9; 5.0	17.4 +- 1.9
8	180 1.1	Missing Dosimeter	No Net Data	17.2 +- 1.8
9	153 1.2	23.4 +- 0.7; 3.5	15.8 +- 0.8; 4.7	15.9 +- 2.1
10	134 3.2	23.3 +- 0.7; 3.5	15.8 +- 0.8; 4.7	17.1 +- 1.8
11	103 1.1	18.3 +- 0.6; 2.8	10.9 +- 0.7; 4.2	12.6 +- 2.5
12	134 3.3	21.5 +- 0.6; 3.2	14.0 +- 0.8; 4.5	14.8 +- 1.8
13	123 4.2	21.6 +- 0.6; 3.2	14.1 +- 0.8; 4.5	15.2 +- 1.8
14	141 4.6	18.6 +- 0.6; 2.8	11.2 +- 0.7; 4.2	14.4 +- 3.4
15	153 5.3	19.8 +- 0.6; 3.0	12.3 +- 0.7; 4.3	13.4 +- 1.9
16	162 6.3	21.1 +- 0.6; 3.2	13.6 +- 0.8; 4.5	15.3 +- 2.0
17	157 7.3	20.7 +- 0.6; 3.1	13.2 +- 0.7; 4.4	16.9 +- 2.8
18	191 4.8	19.1 +- 0.6; 2.9	11.7 +- 0.7; 4.3	13.7 +- 1.8
19	208 4.7	19.7 +- 0.6; 3.0	12.2 +- 0.7; 4.3	13.2 +- 2.1
20	232 4.9	20.6 +- 0.6; 3.1	13.1 +- 0.7; 4.4	13.6 +- 2.0
21	250 5.6	22.1 +- 0.7; 3.3	14.6 +- 0.8; 4.6	14.8 +- 2.0
22	264 4.3	Missing Dosimeter	No Net Data	14.3 +- 2.1
23	301 4.2	18.1 +- 0.5; 2.7	10.7 +- 0.7; 4.2	14.3 +- 2.1
24	308 4.6	18.9 +- 0.6; 2.8	11.5 +- 0.7; 4.3	14.3 +- 2.6
25	329 6.7	21.3 +- 0.6; 3.2	13.8 +- 0.8; 4.5	15.8 +- 2.7
26	258 15.0	23.0 +- 0.7; 3.4	15.4 +- 0.8; 4.7	17.4 +- 2.1
27	300 13.0	21.8 +- 0.7; 3.3	14.3 +- 0.8; 4.5	17.0 +- 1.7
28	330 30.0	21.9 +- 0.7; 3.3	14.4 +- 0.8; 4.6	14.2 +- 1.9

Transit Dose = 7.2 +- 0.4; 3.3

VOGTLE (GA)

For the period 970910-980209

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	No Data +- No Data	0
11.26 - 33.75 NNE	No Data +- No Data	0
33.76 - 56.25 NE	No Data +- No Data	0
56.26 - 78.75 ENE	No Data +- No Data	0
78.76 - 101.25 E	No Data +- No Data	0
101.26 - 123.75 ESE	12.5 +- 2.2	2
123.76 - 146.25 SE	13.6 +- 2.3	3
146.26 - 168.75 SSE	13.7 +- 1.5	4
168.76 - 191.25 S	11.7 +- 0.0	1
191.26 - 213.75 SSW	15.4 +- 4.4	2
213.76 - 236.25 SW	14.7 +- 2.3	2
236.26 - 258.75 WSW	13.7 +- 1.3	2
258.76 - 281.25 W	12.6 +- 0.0	1
281.26 - 303.75 WNW	12.3 +- 2.2	2
303.76 - 326.25 NW	12.2 +- 1.1	2
326.26 - 348.75 NNW	13.2 +- 0.8	2

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	14.1 +- 2.4	9
2 - 5	12.7 +- 1.7	9
> 5	13.5 +- 0.8	5
Upwind Control	14.7 +- 0.6	3

NRC TLD DOSES FOR VOGTLE AREA

VOGTLE (SC)

TLD Direct Radiation Environmental Monitoring

For the period 970910-980209 153 Days

Field Time: 92 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)		Gross Exposure (mR) +-Rdm; Tot.	Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.	Hist. Range Net Exp Rate +-1 Std Dev
31	357	5.2	20.3 +- 0.6; 3.0	14.7 +- 0.7; 4.3	17.9 +- 3.8
32	26	4.9	18.3 +- 0.5; 2.7	12.7 +- 0.7; 4.1	12.7 +- 2.5
33	17	3.2	19.6 +- 0.6; 2.9	14.1 +- 0.7; 4.2	13.0 +- 2.3
34	36	3.9	21.0 +- 0.6; 3.2	15.4 +- 0.7; 4.3	14.3 +- 2.3
35	48	2.4	24.4 +- 0.7; 3.7	18.7 +- 0.8; 4.7	19.0 +- 2.7
36	69	2.8	21.4 +- 0.6; 3.2	15.8 +- 0.7; 4.4	14.7 +- 2.5
37	74	4.4	19.4 +- 0.6; 2.9	13.8 +- 0.7; 4.2	14.3 +- 3.8
38	94	4.5	20.9 +- 0.6; 3.1	15.3 +- 0.7; 4.3	14.1 +- 2.5

Transit Dose = 5.3 +- 0.4; 3.1

VOGTLE (SC)

For the period 970910-980209

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	14.7 +- 0.0	1
11.26 - 33.75 NNE	13.4 +- 0.9	2
33.76 - 56.25 NE	17.1 +- 2.4	2
56.26 - 78.75 ENE	14.8 +- 1.4	2
78.76 - 101.25 E	15.3 +- 0.0	1
101.26 - 123.75 ESE	No Data +- No Data	0
123.76 - 146.25 SE	No Data +- No Data	0
146.26 - 168.75 SSE	No Data +- No Data	0
168.76 - 191.25 S	No Data +- No Data	0
191.26 - 213.75 SSW	No Data +- No Data	0
213.76 - 236.25 SW	No Data +- No Data	0
236.26 - 258.75 WSW	No Data +- No Data	0
258.76 - 281.25 W	No Data +- No Data	0
281.26 - 303.75 WNW	No Data +- No Data	0
303.76 - 326.25 NW	No Data +- No Data	0
326.26 - 348.75 NNW	No Data +- No Data	0

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	No Data +- No Data	0
2 - 5	15.1 +- 1.9	7
> 5	14.7 +- 0.0	1
Upwind Control	No Data +- No Data	0

NRC TLD DOSES FOR VOGTLE AREA

Miles

Legend

Water

Railroads

Roads

Plant..site

WASHINGTON NUCLEAR 2

TLD Direct Radiation Environmental Monitoring

For the period 970908-980113 128 Days

Field Time: 85 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)		Gross Exposure (mR) +-Rdm; Tot.			Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.			Hist. Range Net Exp Rate +-1 Std Dev	
1	174	12.0	22.1	+-	0.7; 3.3	18.2	+-	0.8; 4.6	18.0	+- 0.9
2	163	11.0	21.6	+-	0.6; 3.2	17.6	+-	0.8; 4.6	17.8	+- 0.9
3	161	9.0	21.1	+-	0.6; 3.2	17.1	+-	0.8; 4.5	17.4	+- 0.8
4	152	5.0	23.8	+-	0.7; 3.6	20.0	+-	0.8; 4.9	19.0	+- 0.9
5	195	2.0	22.8	+-	0.7; 3.4	18.9	+-	0.8; 4.7	18.0	+- 0.7
6	220	1.5	21.2	+-	0.6; 3.2	17.3	+-	0.8; 4.5	18.4	+- 1.1
7	92	3.0	23.9	+-	0.7; 3.6	20.1	+-	0.8; 4.9	19.4	+- 1.1
8	155	1.0	21.4	+-	0.6; 3.2	17.5	+-	0.8; 4.6	17.5	+- 1.0
9	130	0.5	23.8	+-	0.7; 3.6	20.0	+-	0.8; 4.9	18.5	+- 1.0
10	70	0.5	22.6	+-	0.7; 3.4	18.8	+-	0.8; 4.7	18.8	+- 1.0
11	25	0.8	22.9	+-	0.7; 3.4	19.0	+-	0.8; 4.7	18.7	+- 0.9
12	315	0.5	24.3	+-	0.7; 3.6	20.5	+-	0.9; 4.9	18.9	+- 1.0
13	290	0.5	31.3	+-	0.9; 4.7	27.9	+-	1.1; 5.8	23.4	+- 2.5
14	270	0.5	23.0	+-	0.7; 3.5	19.2	+-	0.8; 4.8	18.8	+- 1.0
15	245	1.8	22.3	+-	0.7; 3.3	18.4	+-	0.8; 4.7	18.7	+- 0.8
16	285	3.0	22.4	+-	0.7; 3.4	18.5	+-	0.8; 4.7	19.2	+- 0.8
17	240	4.0	Missing Dosimeter			No Net Data			17.5	+- 0.9
18	198	7.0	21.2	+-	0.6; 3.2	17.3	+-	0.8; 4.5	17.4	+- 1.0
19	173	8.5	23.5	+-	0.7; 3.5	19.7	+-	0.8; 4.8	18.5	+- 0.9
20	150	20.0	22.1	+-	0.7; 3.3	18.2	+-	0.8; 4.6	18.5	+- 0.8
21	114	7.0	22.5	+-	0.7; 3.4	18.6	+-	0.8; 4.7	18.6	+- 1.1
22	120	8.0	22.2	+-	0.7; 3.3	18.3	+-	0.8; 4.7	18.1	+- 0.9
23	134	6.0	24.3	+-	0.7; 3.6	20.5	+-	0.9; 4.9	20.5	+- 1.1
24	110	4.0	26.5	+-	0.8; 4.0	22.8	+-	0.9; 5.2	22.3	+- 1.2
25	85	5.0	23.1	+-	0.7; 3.5	19.3	+-	0.8; 4.8	19.2	+- 0.8
26	65	5.0	24.7	+-	0.7; 3.7	20.9	+-	0.9; 5.0	20.8	+- 1.0
27	53	4.0	23.5	+-	0.7; 3.5	19.6	+-	0.8; 4.8	18.5	+- 1.2
28	44	8.0	23.4	+-	0.7; 3.5	19.5	+-	0.8; 4.8	20.2	+- 1.0
29	33	10.0	22.3	+-	0.7; 3.3	18.4	+-	0.8; 4.7	19.2	+- 1.5
30	8	9.5	24.0	+-	0.7; 3.6	20.2	+-	0.9; 4.9	20.1	+- 0.9
31	215	15.0	22.0	+-	0.7; 3.3	18.1	+-	0.8; 4.6	17.6	+- 0.7

Transit Dose = 4.9 +- 0.4; 2.9

WASHINGTON NUCLEAR 2
For the period 970908-980113

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	20.2 +- 0.0	1
11.26 - 33.75 NNE	18.7 +- 0.4	2
33.76 - 56.25 NE	19.6 +- 0.1	2
56.26 - 78.75 ENE	19.8 +- 1.5	2
78.76 - 101.25 E	19.7 +- 0.6	2
101.26 - 123.75 ESE	19.9 +- 2.5	3
123.76 - 146.25 SE	20.2 +- 0.3	2
146.26 - 168.75 SSE	18.1 +- 1.1	5
168.76 - 191.25 S	19.7 +- 0.0	1
191.26 - 213.75 SSW	18.1 +- 1.2	2
213.76 - 236.25 SW	17.3 +- 0.0	1
236.26 - 258.75 WSW	18.4 +- 0.0	1
258.76 - 281.25 W	19.2 +- 0.0	1
281.26 - 303.75 WNW	23.2 +- 6.7	2
303.76 - 326.25 NW	20.5 +- 0.0	1
326.26 - 348.75 NNW	No Data +- No Data	0

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	19.7 +- 3.0	10
2 - 5	20.2 +- 1.4	7
> 5	18.7 +- 1.2	11
Upwind Control	18.1 +- 0.0	2

NRC TLD DOSES FOR WNP-2 AREA

WATERFORD

TLD Direct Radiation Environmental Monitoring

For the period 970908-980310 184 Days

Field Time: 130 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)	Gross Exposure (mR) +-Rdm; Tot.	Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.	Hist. Range Net Exp Rate +-1 Std Dev
1	101 0.4	24.0 +- 0.7; 3.6	14.1 +- 0.6; 3.8	15.8 +- 1.2
2	116 1.1	21.0 +- 0.6; 3.2	12.1 +- 0.5; 3.6	14.8 +- 1.9
3	132 1.3	29.9 +- 0.9; 4.5	18.2 +- 0.7; 4.2	18.0 +- 1.3
4	160 1.8	23.0 +- 0.7; 3.4	13.4 +- 0.6; 3.7	15.6 +- 1.3
5	183 1.4	27.1 +- 0.8; 4.1	16.2 +- 0.6; 4.0	15.8 +- 1.3
6	202 1.2	23.2 +- 0.7; 3.5	13.6 +- 0.6; 3.7	15.8 +- 1.5
7	226 1.2	26.0 +- 0.8; 3.9	15.5 +- 0.6; 3.9	15.4 +- 1.0
8	248 1.3	26.8 +- 0.8; 4.0	16.1 +- 0.6; 4.0	17.2 +- 1.1
9	265 1.9	23.8 +- 0.7; 3.6	14.0 +- 0.6; 3.7	14.2 +- 1.9
10	186 4.2	26.3 +- 0.8; 3.9	15.7 +- 0.6; 3.9	17.3 +- 0.9
11	315 4.4	Missing Dosimeter	No Net Data	16.0 +- 1.4
12	328 4.1	27.8 +- 0.8; 4.2	16.7 +- 0.6; 4.0	17.3 +- 1.0
13	309 0.8	26.1 +- 0.8; 3.9	15.6 +- 0.6; 3.9	15.3 +- 0.9
14	273 0.9	27.7 +- 0.8; 4.2	16.7 +- 0.6; 4.0	17.1 +- 2.1
15	292 0.8	21.1 +- 0.6; 3.2	12.1 +- 0.5; 3.6	13.3 +- 1.3
16	335 0.5	22.7 +- 0.7; 3.4	13.2 +- 0.6; 3.7	13.8 +- 0.9
17	120 4.3	23.8 +- 0.7; 3.6	14.0 +- 0.6; 3.7	14.2 +- 1.1
18	145 3.5	24.6 +- 0.7; 3.7	14.5 +- 0.6; 3.8	14.8 +- 1.4
19	153 8.1	24.0 +- 0.7; 3.6	14.1 +- 0.6; 3.8	16.1 +- 1.1
20	133 8.1	26.1 +- 0.8; 3.9	15.6 +- 0.6; 3.9	16.0 +- 1.1
21	116 6.7	25.2 +- 0.8; 3.8	15.0 +- 0.6; 3.8	15.5 +- 1.3
22	95 4.3	25.6 +- 0.8; 3.8	15.2 +- 0.6; 3.9	15.4 +- 1.0
23	86 2.6	27.7 +- 0.8; 4.2	16.7 +- 0.6; 4.0	15.6 +- 1.1
24	66 4.2	29.3 +- 0.9; 4.4	17.8 +- 0.7; 4.1	18.4 +- 1.2
25	37 3.5	27.6 +- 0.8; 4.1	16.6 +- 0.6; 4.0	16.9 +- 1.1
26	23 3.8	24.4 +- 0.7; 3.7	14.4 +- 0.6; 3.8	14.6 +- 1.0
27	350 4.9	25.3 +- 0.8; 3.8	15.0 +- 0.6; 3.8	15.6 +- 0.9
28	335 5.0	26.2 +- 0.8; 3.9	15.6 +- 0.6; 3.9	15.8 +- 1.1
29	6 2.8	22.8 +- 0.7; 3.4	13.3 +- 0.6; 3.7	14.2 +- 1.0
30	356 1.1	27.8 +- 0.8; 4.2	16.7 +- 0.6; 4.0	16.2 +- 1.9
31	15 0.8	26.2 +- 0.8; 3.9	15.6 +- 0.6; 3.9	15.8 +- 1.7
32	40 0.8	21.5 +- 0.6; 3.2	12.4 +- 0.5; 3.6	13.8 +- 1.4
33	69 1.1	23.6 +- 0.7; 3.5	13.9 +- 0.6; 3.7	15.4 +- 2.7
34	292 15.0	25.2 +- 0.8; 3.8	15.0 +- 0.6; 3.8	15.6 +- 1.6
35	282 27.0	26.7 +- 0.8; 4.0	16.0 +- 0.6; 4.0	17.8 +- 1.5
36	268 21.0	21.0 +- 0.6; 3.2	12.1 +- 0.5; 3.6	14.5 +- 1.6

Transit Dose = 3.6 +- 0.4; 4.1

WATERFORD

For the period 970908-980310

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	15.0 +- 1.7	3
11.26 - 33.75 NNE	15.0 +- 0.9	2
33.76 - 56.25 NE	14.5 +- 3.0	2
56.26 - 78.75 ENE	15.8 +- 2.8	2
78.76 - 101.25 E	15.3 +- 1.3	3
101.26 - 123.75 ESE	13.7 +- 1.5	3
123.76 - 146.25 SE	16.1 +- 1.9	3
146.26 - 168.75 SSE	13.8 +- 0.5	2
168.76 - 191.25 S	16.0 +- 0.4	2
191.26 - 213.75 SSW	13.6 +- 0.0	1
213.76 - 236.25 SW	15.5 +- 0.0	1
236.26 - 258.75 WSW	16.1 +- 0.0	1
258.76 - 281.25 W	15.3 +- 1.9	2
281.26 - 303.75 WNW	12.1 +- 0.0	1
303.76 - 326.25 NW	15.6 +- 0.0	1
326.26 - 348.75 NNW	15.2 +- 1.8	3

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	14.7 +- 1.8	17
2 - 5	15.5 +- 1.3	12
> 5	14.9 +- 0.7	3
Upwind Control	14.3 +- 2.1	3

NRC TLD DOSES FOR WATERFORD AREA

Miles

Legend

Water
Highways

Railroads
Roads

Plant..site

WATTS BAR

TLD Direct Radiation Environmental Monitoring

For the period 970910-980126 139 Days

Field Time: 99 Days

NRC Sta	Location		Gross		Net Exposure Rate		Hist. Range	
	Azimuth/Dist (Deg)/(Mi)		Exposure (mR) +-Rdm; Tot.		(mR/Std. Qtr.) +-Rdm; Tot.		Net Exp Rate +-1 Std Dev	
1	337	0.9	21.6 +- 0.6; 3.2		19.0 +- 0.6; 4.0		17.3 +- 2.1	
2	314	2.1	22.3 +- 0.7; 3.3		19.6 +- 0.7; 4.0		17.4 +- 2.1	
3	297	1.9	23.4 +- 0.7; 3.5		20.6 +- 0.7; 4.2		17.3 +- 2.2	
4	272	2.0	22.0 +- 0.7; 3.3		19.3 +- 0.6; 4.0		16.9 +- 2.2	
5	251	1.9	23.5 +- 0.7; 3.5		20.7 +- 0.7; 4.2		19.1 +- 2.2	
6	235	1.8	24.3 +- 0.7; 3.7		21.5 +- 0.7; 4.3		20.3 +- 2.4	
7	230	3.8	24.3 +- 0.7; 3.6		21.4 +- 0.7; 4.3		19.6 +- 2.3	
8	208	3.6	21.0 +- 0.6; 3.2		18.5 +- 0.6; 3.9		18.0 +- 2.2	
9	249	4.2	24.8 +- 0.7; 3.7		21.9 +- 0.7; 4.3		16.5 +- 3.1	
10	266	3.1	22.1 +- 0.7; 3.3		19.4 +- 0.6; 4.0		16.9 +- 2.2	
11	289	3.3	18.7 +- 0.6; 2.8		16.4 +- 0.6; 3.7		14.4 +- 1.9	
12	310	4.7	18.9 +- 0.6; 2.8		16.5 +- 0.6; 3.7		14.6 +- 2.1	
13	337	3.6	23.0 +- 0.7; 3.5		20.3 +- 0.7; 4.1		15.9 +- 2.8	
14	330	7.0	18.7 +- 0.6; 2.8		16.3 +- 0.6; 3.7		15.4 +- 2.1	
15	350	4.7	23.0 +- 0.7; 3.4		20.2 +- 0.7; 4.1		18.7 +- 2.3	
16	7	1.1	25.6 +- 0.8; 3.8		22.6 +- 0.7; 4.4		20.5 +- 2.5	
17	23	1.6	18.1 +- 0.5; 2.7		15.8 +- 0.5; 3.6		13.4 +- 2.3	
18	41	2.3	22.2 +- 0.7; 3.3		19.5 +- 0.7; 4.0		16.2 +- 2.2	
19	69	1.3	24.1 +- 0.7; 3.6		21.3 +- 0.7; 4.2		18.9 +- 2.0	
20	89	1.2	22.8 +- 0.7; 3.4		20.1 +- 0.7; 4.1		19.4 +- 2.2	
21	114	1.1	21.1 +- 0.6; 3.2		18.6 +- 0.6; 3.9		16.1 +- 2.2	
22	141	1.0	22.9 +- 0.7; 3.4		20.2 +- 0.7; 4.1		19.0 +- 2.1	
23	163	1.1	28.6 +- 0.9; 4.3		25.3 +- 0.8; 4.7		22.0 +- 2.4	
24	187	1.1	25.1 +- 0.8; 3.8		22.2 +- 0.7; 4.3		18.4 +- 2.8	
25	203	1.2	19.0 +- 0.6; 2.8		16.6 +- 0.6; 3.7		17.1 +- 2.6	
26	184	5.9	23.3 +- 0.7; 3.5		20.6 +- 0.7; 4.2		18.7 +- 3.0	
27	176	4.5	24.1 +- 0.7; 3.6		21.3 +- 0.7; 4.2		17.7 +- 2.4	
28	161	3.5	21.4 +- 0.6; 3.2		18.8 +- 0.6; 4.0		16.6 +- 2.2	
29	144	3.0	22.9 +- 0.7; 3.4		20.2 +- 0.7; 4.1		16.8 +- 2.3	
30	117	3.1	21.1 +- 0.6; 3.2		18.6 +- 0.6; 3.9		16.1 +- 2.5	
31	97	4.0	21.8 +- 0.7; 3.3		19.2 +- 0.6; 4.0		16.5 +- 2.3	
32	76	4.1	18.9 +- 0.6; 2.8		16.6 +- 0.6; 3.7		14.2 +- 2.3	
33	32	4.1	20.8 +- 0.6; 3.1		18.2 +- 0.6; 3.9		17.1 +- 2.1	
34	36	4.7	17.8 +- 0.5; 2.7		15.5 +- 0.5; 3.6		13.8 +- 2.0	
35	38	19.0	22.4 +- 0.7; 3.4		19.7 +- 0.7; 4.1		16.2 +- 2.4	
36	38	19.0	20.8 +- 0.6; 3.1		18.3 +- 0.6; 3.9		17.1 +- 3.1	
37	38	19.0	22.0 +- 0.7; 3.3		19.3 +- 0.6; 4.0		17.4 +- 2.3	

Transit Dose = 0.7 +- 0.3; 2.9

WATTS BAR

For the period 970910-980126

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	21.4 +- 1.7	2
11.26 - 33.75 NNE	17.0 +- 1.7	2
33.76 - 56.25 NE	17.5 +- 2.8	2
56.26 - 78.75 ENE	18.9 +- 3.3	2
78.76 - 101.25 E	19.6 +- 0.6	2
101.26 - 123.75 ESE	18.6 +- 0.0	2
123.76 - 146.25 SE	20.2 +- 0.0	2
146.26 - 168.75 SSE	22.1 +- 4.6	2
168.76 - 191.25 S	21.3 +- 0.8	3
191.26 - 213.75 SSW	17.5 +- 1.3	2
213.76 - 236.25 SW	21.5 +- 0.0	2
236.26 - 258.75 WSW	21.3 +- 0.8	2
258.76 - 281.25 W	19.4 +- 0.1	2
281.26 - 303.75 WNW	18.5 +- 3.0	2
303.76 - 326.25 NW	18.0 +- 2.2	2
326.26 - 348.75 NNW	18.5 +- 2.0	3

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	20.3 +- 2.4	14
2 - 5	19.0 +- 1.8	18
> 5	18.4 +- 3.0	2
Upwind Control	19.1 +- 0.7	3

NRC TLD DOSES FOR WATTS BAR AREA

WOLF CREEK

TLD Direct Radiation Environmental Monitoring

For the period 970908-980209 155 Days

Field Time: 99 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)	Gross Exposure (mR) +-Rdm; Tot.	Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.	Hist. Range Net Exp Rate +-1 Std Dev
1	316 2.9	29.3 +- 0.9; 4.4	20.0 +- 0.9; 5.1	19.3 +- 1.4
2	330 1.8	27.6 +- 0.8; 4.1	18.5 +- 0.9; 4.9	18.4 +- 1.1
3	360 2.8	28.0 +- 0.8; 4.2	18.9 +- 0.9; 5.0	18.5 +- 1.2
4	355 1.6	26.7 +- 0.8; 4.0	17.7 +- 0.8; 4.8	19.2 +- 1.2
5	31 1.8	28.1 +- 0.8; 4.2	18.9 +- 0.9; 5.0	19.4 +- 1.2
6	47 2.0	23.3 +- 0.7; 3.5	14.6 +- 0.8; 4.5	16.6 +- 1.4
7	70 1.6	25.7 +- 0.8; 3.8	16.8 +- 0.8; 4.7	17.6 +- 1.0
8	90 1.7	30.5 +- 0.9; 4.6	21.1 +- 0.9; 5.2	19.9 +- 1.3
9	111 2.4	29.0 +- 0.9; 4.3	19.7 +- 0.9; 5.1	19.2 +- 1.2
10	137 2.5	28.3 +- 0.8; 4.2	19.2 +- 0.9; 5.0	18.8 +- 1.0
11	157 3.4	29.0 +- 0.9; 4.3	19.8 +- 0.9; 5.1	20.3 +- 1.1
12	184 3.3	29.0 +- 0.9; 4.4	19.8 +- 0.9; 5.1	19.8 +- 1.1
13	213 2.9	22.1 +- 0.7; 3.3	13.5 +- 0.7; 4.4	18.5 +- 2.2
14	233 2.4	29.0 +- 0.9; 4.4	19.8 +- 0.9; 5.1	19.5 +- 1.4
15	248 2.2	27.8 +- 0.8; 4.2	18.7 +- 0.9; 4.9	18.9 +- 1.2
16	278 2.1	27.6 +- 0.8; 4.1	18.5 +- 0.9; 4.9	19.3 +- 1.1
17	270 3.4	23.3 +- 0.7; 3.5	14.6 +- 0.8; 4.5	15.6 +- 0.9
18	263 4.2	31.9 +- 1.0; 4.8	22.4 +- 1.0; 5.4	21.1 +- 1.5
19	257 5.0	27.2 +- 0.8; 4.1	18.2 +- 0.9; 4.9	19.3 +- 1.0
20	280 3.9	25.9 +- 0.8; 3.9	17.0 +- 0.8; 4.8	18.1 +- 1.3
21	298 3.9	28.1 +- 0.8; 4.2	18.9 +- 0.9; 5.0	19.4 +- 1.0
22	319 4.8	25.7 +- 0.8; 3.9	16.8 +- 0.8; 4.7	17.5 +- 1.2
23	332 5.0	27.7 +- 0.8; 4.2	18.6 +- 0.9; 4.9	19.0 +- 1.5
24	19 3.9	26.3 +- 0.8; 4.0	17.4 +- 0.8; 4.8	19.2 +- 1.0
25	35 4.4	Missing Dosimeter	No Net Data	16.6 +- 1.0
26	67 4.3	26.1 +- 0.8; 3.9	17.2 +- 0.8; 4.8	17.6 +- 1.2
27	88 4.1	29.0 +- 0.9; 4.3	19.8 +- 0.9; 5.1	18.9 +- 1.9
28	110 4.5	27.5 +- 0.8; 4.1	18.4 +- 0.9; 4.9	19.5 +- 0.9
29	128 4.4	28.0 +- 0.8; 4.2	18.9 +- 0.9; 5.0	19.5 +- 1.6
30	112 16.0	22.1 +- 0.7; 3.3	13.5 +- 0.7; 4.4	16.5 +- 1.5
31	127 9.4	24.5 +- 0.7; 3.7	15.7 +- 0.8; 4.6	16.6 +- 0.8
32	62 11.0	24.2 +- 0.7; 3.6	15.4 +- 0.8; 4.6	16.9 +- 1.4
33	153 5.2	25.2 +- 0.8; 3.8	16.3 +- 0.8; 4.7	18.2 +- 1.6
34	174 4.7	Missing Dosimeter	No Net Data	19.8 +- 1.5
35	197 5.2	30.7 +- 0.9; 4.6	21.3 +- 0.9; 5.3	20.5 +- 1.5
36	224 4.8	26.9 +- 0.8; 4.0	17.9 +- 0.8; 4.9	18.2 +- 0.8
37	220 13.8	24.2 +- 0.7; 3.6	15.5 +- 0.8; 4.6	15.5 +- 0.8
38	253 6.5	30.2 +- 0.9; 4.5	20.9 +- 0.9; 5.2	20.2 +- 1.3
39	278 10.0	26.2 +- 0.8; 3.9	17.2 +- 0.8; 4.8	18.6 +- 1.3
40	285 15.0	25.2 +- 0.8; 3.8	16.4 +- 0.8; 4.7	16.4 +- 0.9
41	292 6.7	25.2 +- 0.8; 3.8	16.4 +- 0.8; 4.7	17.8 +- 1.4
42	345 13.0	29.5 +- 0.9; 4.4	20.2 +- 0.9; 5.1	20.0 +- 1.3
43	5 7.5	25.9 +- 0.8; 3.9	16.9 +- 0.8; 4.7	19.0 +- 1.2
44	20 8.3	28.5 +- 0.9; 4.3	19.4 +- 0.9; 5.0	19.6 +- 1.0
45	315 7.5	29.5 +- 0.9; 4.4	20.3 +- 0.9; 5.1	20.6 +- 1.3
46	341 7.7	29.2 +- 0.9; 4.4	20.0 +- 0.9; 5.1	19.9 +- 1.1
47	355 1.0	27.1 +- 0.8; 4.1	18.1 +- 0.9; 4.9	18.1 +- 1.2

Transit Dose = 7.2 +- 0.5; 3.5

WOLF CREEK

For the period 970908-980209

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	17.9 +- 0.8	4
11.26 - 33.75 NNE	18.6 +- 1.0	3
33.76 - 56.25 NE	14.6 +- 0.0	1
56.26 - 78.75 ENE	16.4 +- 0.9	3
78.76 - 101.25 E	20.4 +- 1.0	2
101.26 - 123.75 ESE	17.2 +- 3.3	3
123.76 - 146.25 SE	17.9 +- 2.0	3
146.26 - 168.75 SSE	18.0 +- 2.4	2
168.76 - 191.25 S	19.8 +- 0.0	1
191.26 - 213.75 SSW	17.4 +- 5.5	2
213.76 - 236.25 SW	17.7 +- 2.2	3
236.26 - 258.75 WSW	19.2 +- 1.5	3
258.76 - 281.25 W	17.9 +- 2.9	5
281.26 - 303.75 WNW	17.2 +- 1.5	3
303.76 - 326.25 NW	19.0 +- 1.9	3
326.26 - 348.75 NNW	19.3 +- 0.9	4

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	17.9 +- 2.0	7
2 - 5	18.4 +- 1.9	23
> 5	17.7 +- 2.4	15
Upwind Control	No Data +- No Data	0

NRC TLD DOSES FOR WOLF CREEK AREA

Miles

0 2 4

Legend

Water

Highways

--- Railroads

--- Roads

Plant..site

YANKEE ROWE

TLD Direct Radiation Environmental Monitoring

For the period 970910-980211 155 Days

Field Time: 106 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)	Gross Exposure (mR) +-Rdm; Tot.	Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.	Hist. Range Net Exp Rate +-1 Std Dev
1	0 0.8	22.7 +- 0.7; 3.4	12.5 +- 0.7; 4.3	18.1 +- 1.9
2	265 14.0	23.1 +- 0.7; 3.5	12.8 +- 0.7; 4.3	15.9 +- 1.2
3	137 12.0	23.3 +- 0.7; 3.5	13.1 +- 0.7; 4.4	16.1 +- 1.5
5	85 2.2	21.5 +- 0.6; 3.2	11.5 +- 0.7; 4.2	15.7 +- 1.8
6	118 2.6	21.8 +- 0.7; 3.3	11.8 +- 0.7; 4.2	15.6 +- 1.5
7	137 2.1	23.0 +- 0.7; 3.5	12.8 +- 0.7; 4.3	17.4 +- 1.7
8	153 1.7	23.5 +- 0.7; 3.5	13.2 +- 0.7; 4.4	16.1 +- 1.1
9	176 1.1	22.2 +- 0.7; 3.3	12.1 +- 0.7; 4.3	16.0 +- 1.3
10	203 0.5	24.5 +- 0.7; 3.7	14.0 +- 0.8; 4.5	17.0 +- 2.0
11	219 0.6	24.1 +- 0.7; 3.6	13.7 +- 0.7; 4.4	16.9 +- 1.3
12	239 1.1	22.5 +- 0.7; 3.4	12.4 +- 0.7; 4.3	18.8 +- 2.5
13	272 1.8	22.9 +- 0.7; 3.4	12.7 +- 0.7; 4.3	17.6 +- 2.2
14	292 1.3	24.4 +- 0.7; 3.7	14.0 +- 0.8; 4.5	18.1 +- 2.0
15	315 1.6	23.7 +- 0.7; 3.6	13.4 +- 0.7; 4.4	18.4 +- 2.0
16	348 1.4	24.2 +- 0.7; 3.6	13.8 +- 0.7; 4.4	18.0 +- 1.7
17	358 2.8	22.6 +- 0.7; 3.4	12.5 +- 0.7; 4.3	16.8 +- 1.8
18	21 2.8	20.4 +- 0.6; 3.1	10.5 +- 0.7; 4.1	15.2 +- 1.7
19	43 5.8	21.8 +- 0.7; 3.3	11.7 +- 0.7; 4.2	16.8 +- 1.3
20	75 6.0	25.8 +- 0.8; 3.9	15.2 +- 0.8; 4.6	18.0 +- 2.0
21	98 6.0	21.7 +- 0.6; 3.2	11.6 +- 0.7; 4.2	14.9 +- 1.4
22	104 5.2	21.1 +- 0.6; 3.2	11.2 +- 0.7; 4.2	13.7 +- 1.3
23	133 5.7	22.9 +- 0.7; 3.4	12.7 +- 0.7; 4.3	14.1 +- 1.8
24	157 7.5	21.4 +- 0.6; 3.2	11.4 +- 0.7; 4.2	14.4 +- 1.7
25	184 6.3	24.4 +- 0.7; 3.7	13.9 +- 0.8; 4.5	16.4 +- 1.9
27	225 5.9	24.0 +- 0.7; 3.6	13.7 +- 0.7; 4.4	17.3 +- 1.6
29	269 3.5	23.7 +- 0.7; 3.6	13.4 +- 0.7; 4.4	17.5 +- 1.9
32	342 3.3	24.5 +- 0.7; 3.7	14.1 +- 0.8; 4.5	17.2 +- 1.6
34	48 7.3	24.8 +- 0.7; 3.7	14.3 +- 0.8; 4.5	17.4 +- 1.6
35	39 2.3	20.0 +- 0.6; 3.0	10.2 +- 0.7; 4.1	14.0 +- 1.6
47	260 9.6	26.4 +- 0.8; 4.0	15.7 +- 0.8; 4.6	16.7 +- 1.3
48	261 9.0	28.5 +- 0.9; 4.3	17.4 +- 0.8; 4.8	18.7 +- 1.6

Transit Dose = 8.0 +- 0.5; 3.8

YANKEE ROWE

For the period 970910-980211

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	12.5 +- 0.1	2
11.26 - 33.75 NNE	10.5 +- 0.0	1
33.76 - 56.25 NE	12.1 +- 2.1	3
56.26 - 78.75 ENE	15.2 +- 0.0	1
78.76 - 101.25 E	11.6 +- 0.1	2
101.26 - 123.75 ESE	11.5 +- 0.4	2
123.76 - 146.25 SE	12.8 +- 0.2	3
146.26 - 168.75 SSE	12.3 +- 1.2	2
168.76 - 191.25 S	13.0 +- 1.3	2
191.26 - 213.75 SSW	14.0 +- 0.0	1
213.76 - 236.25 SW	13.7 +- 0.0	2
236.26 - 258.75 WSW	12.4 +- 0.0	1
258.76 - 281.25 W	13.0 +- 0.4	3
281.26 - 303.75 WNW	14.0 +- 0.0	1
303.76 - 326.25 NW	13.4 +- 0.0	1
326.26 - 348.75 NNW	13.9 +- 0.2	2

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	13.2 +- 0.7	10
2 - 5	12.1 +- 1.3	8
> 5	12.9 +- 1.3	11
Upwind Control	16.5 +- 1.2	2

NRC TLD DOSES FOR YANKEE ROWE AREA

ZION

TLD Direct Radiation Environmental Monitoring

For the period 970908-980210 156 Days

Field Time: 98 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)	Gross Exposure (mR) +-Rdm; Tot.	Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.	Hist. Range Net Exp Rate +-1 Std Dev
1	310 0.8	21.3 +- 0.6; 3.2	15.7 +- 0.7; 4.1	15.4 +- 1.5
2	192 1.0	19.2 +- 0.6; 2.9	13.8 +- 0.6; 3.9	13.1 +- 1.1
3	187 1.9	19.9 +- 0.6; 3.0	14.5 +- 0.6; 4.0	14.6 +- 1.4
4	219 2.4	23.6 +- 0.7; 3.5	17.8 +- 0.7; 4.4	17.4 +- 1.3
5	257 1.8	23.0 +- 0.7; 3.5	17.3 +- 0.7; 4.3	16.9 +- 1.5
6	250 1.2	22.7 +- 0.7; 3.4	17.0 +- 0.7; 4.3	16.2 +- 1.3
7	293 1.6	22.7 +- 0.7; 3.4	17.0 +- 0.7; 4.3	17.0 +- 1.1
8	310 1.8	Missing Dosimeter	No Net Data	14.9 +- 1.4
9	343 2.6	21.7 +- 0.7; 3.3	16.1 +- 0.7; 4.2	15.4 +- 1.4
10	356 4.5	20.9 +- 0.6; 3.1	15.4 +- 0.7; 4.1	14.6 +- 1.1
11	337 4.5	Missing Dosimeter	No Net Data	16.9 +- 1.1
12	310 4.0	26.6 +- 0.8; 4.0	20.6 +- 0.8; 4.7	18.9 +- 1.6
13	293 3.5	26.3 +- 0.8; 3.9	20.3 +- 0.8; 4.7	19.8 +- 1.4
14	280 4.5	25.2 +- 0.8; 3.8	19.3 +- 0.8; 4.5	18.8 +- 1.3
15	232 3.2	24.4 +- 0.7; 3.7	18.5 +- 0.8; 4.4	18.0 +- 1.4
16	220 3.5	24.9 +- 0.7; 3.7	19.1 +- 0.8; 4.5	18.3 +- 1.2
17	198 4.5	22.8 +- 0.7; 3.4	17.1 +- 0.7; 4.3	16.4 +- 1.5
18	206 2.8	22.3 +- 0.7; 3.3	16.6 +- 0.7; 4.2	15.5 +- 1.4
19	327 1.7	23.2 +- 0.7; 3.5	17.4 +- 0.7; 4.3	15.5 +- 1.5
20	197 15.0	26.8 +- 0.8; 4.0	20.8 +- 0.8; 4.7	19.2 +- 1.3
21	352 7.9	23.0 +- 0.7; 3.4	17.3 +- 0.7; 4.3	15.1 +- 1.2
22	348 9.3	24.1 +- 0.7; 3.6	18.3 +- 0.7; 4.4	15.3 +- 1.5
23	336 8.5	21.6 +- 0.6; 3.2	16.0 +- 0.7; 4.2	17.6 +- 1.9
24	314 5.8	Damaged Dosimeter	No Net Data	17.7 +- 1.3
25	220 6.3	22.4 +- 0.7; 3.4	16.7 +- 0.7; 4.3	16.7 +- 1.1
26	195 8.0	22.2 +- 0.7; 3.3	16.5 +- 0.7; 4.2	15.6 +- 1.2
28	197 15.0	26.5 +- 0.8; 4.0	20.5 +- 0.8; 4.7	18.8 +- 1.1
30	320 9.8	27.4 +- 0.8; 4.1	21.3 +- 0.8; 4.8	18.7 +- 1.6
31	229 8.0	23.8 +- 0.7; 3.6	18.0 +- 0.7; 4.4	16.7 +- 1.1
32	193 15.0	26.4 +- 0.8; 4.0	20.5 +- 0.8; 4.7	18.6 +- 1.7

Transit Dose = 4.2 +- 0.4; 3.2

ZION

For the period 970908-980210

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	16.3 +- 1.4	2
11.26 - 33.75 NNE	No Data +- No Data	0
33.76 - 56.25 NE	No Data +- No Data	0
56.26 - 78.75 ENE	No Data +- No Data	0
78.76 - 101.25 E	No Data +- No Data	0
101.26 - 123.75 ESE	No Data +- No Data	0
123.76 - 146.25 SE	No Data +- No Data	0
146.26 - 168.75 SSE	No Data +- No Data	0
168.76 - 191.25 S	14.5 +- 0.0	1
191.26 - 213.75 SSW	16.0 +- 1.5	4
213.76 - 236.25 SW	18.0 +- 0.9	5
236.26 - 258.75 WSW	17.2 +- 0.2	2
258.76 - 281.25 W	19.3 +- 0.0	1
281.26 - 303.75 WNW	18.7 +- 2.3	2
303.76 - 326.25 NW	19.2 +- 3.0	3
326.26 - 348.75 NNW	17.0 +- 1.1	4

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	16.1 +- 1.5	7
2 - 5	18.1 +- 1.8	10
> 5	17.7 +- 1.8	7
Upwind Control	20.6 +- 0.2	3

NRC TLD DOSES FOR ZION AREA

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11. ABSTRACT (200 words or less)

This report provides the status and results of the NRC Thermoluminescent Dosimeter (TLD) Direct Radiation Monitoring Network. It presents the radiation levels measured in the vicinity of NRC licensed facilities throughout the country for the fourth quarter of 1997.

12. KEY WORDS/DESCRIPTORS (List words or phrases that will assist researchers in locating the report.)

Thermoluminescent Dosimeter (TLD) Direct Radiation Monitoring
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ambient radiation levels

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