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NRC TLD Direct Radiation Monitoring Network

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Progress Report
April – June 1997

U.S. Nuclear Regulatory Commission

NRC Region I

R. Struckmeyer

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NRC TLD Direct Radiation Monitoring Network

Progress Report April – June 1997

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**Region I
U.S. Nuclear Regulatory Commission
King Of Prussia, PA 19406**

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Preface

The U. S. Nuclear Regulatory Commission (NRC) Direct Radiation Monitoring Network is 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 is 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 second 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. 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.

This report is one of a continuing series of technical reports covering the results and experiences of the operation of the NRC TLD Direct Radiation Monitoring Network. Suggestions on methods to improve the presentation or analysis of the data contained in this NUREG are appreciated and should be submitted to NRC Region I, 475 Allendale Road, King of Prussia, Pennsylvania 19406, ATTN: Radiation Dosimetry Specialist.

Data Analysis

The analysis of the data for the second quarter indicated that at some of the monitored sites, the results for a few TLDs were outside the range that is normally expected for those locations. A net result is considered to be within the expected range if it is within plus or minus three times the standard deviation of the historical mean. The "historical range" column on the first page of data for each site shows the mean and one standard deviation of previous net results for each TLD location. The net result for any particular location may be within, above, or below this range. Some of the atypical results readily lend themselves to explanation, while others do not. A footnote is provided on the first data page for those sites for which one or more TLDs were found to be outside the expected range. The affected sites were Cooper, Grand Gulf, Haddam Neck, Maine Yankee, Millstone, River Bend, and Summer. There is no indication that any of the atypical results are related to facility operations.

For two of the affected sites, an explanation for the atypical result was readily determined. The TLDs at Cooper location 1 and Summer location 26 were placed at the beginning of the first quarter and could not be retrieved until the end of the second quarter. The results for these locations were therefore well outside the expected range. At other sites, all of the atypical results were less than 1 mR above, and no more than 1.5 mR below the expected range.

The TLD at Grand Gulf location 11 was about 3.2 standard deviations below its historical mean, and the TLD at River Bend location 18 was about 3.8 standard deviations below its historical mean. In each case, the transit doses appeared to be within the expected range. Lower-than-expected results such as these may be due to damaged TLDs. Damage can occur as a result, for example, of leakage of the protective plastic bag in which the TLD is deployed, allowing moisture to enter and be absorbed by the thermoluminescent material.

Five TLDs at Haddam Neck (locations 13, 15, 20, 24, and 38), one at Millstone (location 5), and one at Maine Yankee (location 14) were between 3.1 and 3.9 standard deviations above their respective historical means. It was noted that the transit doses for these sites were slightly lower than normal. In such cases, some of the net results that otherwise would have been near the limit of the normal range could fall slightly outside this range. The contractors who exchange the TLDs at these sites indicated that they were not aware of any exposure sources (such as pipeline radiography) that could have caused these slightly elevated readings.

These examples serve to illustrate some of the many possible explanations for atypical results that have no relation to the monitored facility. Unfortunately, it is often difficult to obtain such information.

Weather is another example of a causal agent that could influence TLD results. The amount of naturally occurring radon and its daughter products in the lower atmosphere is a complex function of the wind, the amount of precipitation, and the resultant saturation of the ground with rain water (or coverage by ice or packed snow). The higher concentrations of radon that sometimes occur as a result of a combination of weather-related circumstances can give rise to TLD results that are somewhat higher than normal. Some of these could fall slightly outside the expected range.

Systematic uncertainties, most notably the calibration uncertainty, could influence the data by introducing a bias in the overall results. Some of the net results that otherwise would have been near the limit of the normal range could therefore fall slightly outside this range.

The data also were reviewed from the perspective of each TLD's proximity to the site, and whether any pattern of higher than expected exposures could be discerned. No such patterns were detected.

The NRC TLD Direct Radiation Monitoring Network is intended to aid in the assessment of the radiological impact of an unusual condition, such as abnormally large releases of airborne radioactive material, but it will not be the primary indicator that releases have occurred. Such indication is provided by other sensitive radiation monitoring instruments at the point of release or at other on-site and off-site locations.

Sites Monitored During the Second Quarter 1997

The list is provided on page 223 of this report.

ARKANSAS

TLD Direct Radiation Environmental Monitoring

For the period 970307-970723 139 Days

Field Time: 94 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	4	0.4	23.6 +- 0.7; 3.5		17.0 +- 0.8; 4.6		17.2 +- 1.2	
2	353	4.1	24.0 +- 0.7; 3.6		17.4 +- 0.8; 4.6		17.4 +- 1.1	
3	32	1.3	25.1 +- 0.8; 3.8		18.5 +- 0.8; 4.7		18.1 +- 1.0	
4	13	3.3	22.0 +- 0.7; 3.3		15.5 +- 0.7; 4.4		16.8 +- 1.2	
5	53	1.5	22.3 +- 0.7; 3.3		15.8 +- 0.8; 4.4		17.4 +- 1.2	
6	37	3.6	22.3 +- 0.7; 3.3		15.7 +- 0.7; 4.4		16.6 +- 1.1	
7	78	2.5	25.0 +- 0.8; 3.8		18.3 +- 0.8; 4.7		18.9 +- 1.3	
8	60	3.2	25.1 +- 0.8; 3.8		18.5 +- 0.8; 4.7		20.1 +- 2.3	
9	92	0.5	25.8 +- 0.8; 3.9		19.1 +- 0.8; 4.8		19.1 +- 1.5	
10	83	5.5	22.6 +- 0.7; 3.4		16.1 +- 0.8; 4.5		17.5 +- 1.1	
11	122	2.1	22.3 +- 0.7; 3.4		15.8 +- 0.8; 4.5		16.4 +- 1.2	
12	109	6.8	24.4 +- 0.7; 3.7		17.7 +- 0.8; 4.7		18.1 +- 1.1	
13	138	2.6	21.2 +- 0.6; 3.2		14.7 +- 0.7; 4.3		15.2 +- 1.2	
14	130	4.9	22.7 +- 0.7; 3.4		16.2 +- 0.8; 4.5		16.1 +- 1.2	
16	167	4.4	22.0 +- 0.7; 3.3		15.4 +- 0.7; 4.4		17.4 +- 1.0	
17	171	0.4	22.9 +- 0.7; 3.4		16.3 +- 0.8; 4.5		17.1 +- 1.3	
18	189	3.2	21.8 +- 0.7; 3.3		15.3 +- 0.7; 4.4		17.5 +- 1.2	
19	205	2.9	22.1 +- 0.7; 3.3		15.6 +- 0.7; 4.4		16.9 +- 1.3	
20	195	5.8	21.6 +- 0.6; 3.2		15.0 +- 0.7; 4.4		16.0 +- 1.6	
21	235	0.5	25.7 +- 0.8; 3.9		19.0 +- 0.8; 4.8		19.5 +- 1.4	
22	230	3.6	19.8 +- 0.6; 3.0		13.4 +- 0.7; 4.2		14.5 +- 1.2	
23	257	2.8	21.5 +- 0.6; 3.2		15.0 +- 0.7; 4.4		16.0 +- 1.6	
24	243	4.5	22.9 +- 0.7; 3.4		16.4 +- 0.8; 4.5		16.6 +- 1.4	
25	279	1.2	27.3 +- 0.8; 4.1		20.5 +- 0.9; 5.0		20.1 +- 1.3	
26	263	4.3	21.3 +- 0.6; 3.2		14.8 +- 0.7; 4.3		17.4 +- 1.3	
27	298	0.4	24.5 +- 0.7; 3.7		17.8 +- 0.8; 4.7		18.8 +- 1.3	
28	293	5.8	22.2 +- 0.7; 3.3		15.7 +- 0.7; 4.4		17.1 +- 1.2	
29	326	1.9	23.5 +- 0.7; 3.5		16.9 +- 0.8; 4.6		18.0 +- 1.1	
30	308	4.8	24.0 +- 0.7; 3.6		17.4 +- 0.8; 4.6		17.8 +- 1.4	
31	345	1.3	23.8 +- 0.7; 3.6		17.2 +- 0.8; 4.6		18.6 +- 1.3	
32	335	4.2	21.0 +- 0.6; 3.2		14.5 +- 0.7; 4.3		15.8 +- 1.4	
33	110	0.8	24.4 +- 0.7; 3.7		17.8 +- 0.8; 4.7		18.6 +- 1.5	
39	112	6.0	23.2 +- 0.7; 3.5		16.6 +- 0.8; 4.5		18.4 +- 1.4	
40	147	8.0	24.5 +- 0.7; 3.7		17.8 +- 0.8; 4.7		18.3 +- 1.2	
41	106	17.0	23.1 +- 0.7; 3.5		16.5 +- 0.8; 4.5		17.7 +- 1.1	
42	310	17.0	21.7 +- 0.7; 3.3		15.2 +- 0.7; 4.4		16.0 +- 1.3	
43	105	5.2	23.4 +- 0.7; 3.5		16.8 +- 0.8; 4.6		18.2 +- 1.4	
44	315	13.0	23.0 +- 0.7; 3.4		16.4 +- 0.8; 4.5		17.6 +- 1.2	
45	47	8.9	21.1 +- 0.6; 3.2		14.6 +- 0.7; 4.3		15.6 +- 1.6	
46	115	8.3	24.4 +- 0.7; 3.7		17.7 +- 0.8; 4.7		18.4 +- 1.5	
47	208	20.0	23.2 +- 0.7; 3.5		16.6 +- 0.8; 4.5		17.0 +- 1.3	
48	179	19.0	23.2 +- 0.7; 3.5		16.6 +- 0.8; 4.5		17.2 +- 1.3	
49	150	22.0	22.9 +- 0.7; 3.4		16.3 +- 0.8; 4.5		18.2 +- 1.5	

Transit Dose = 5.9 +- 0.4; 3.2

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ARKANSAS

For the period 970307-970723

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 +- 0.3	2
11.26 - 33.75 NNE	17.0 +- 2.1	2
33.76 - 56.25 NE	15.4 +- 0.7	3
56.26 - 78.75 ENE	18.4 +- 0.1	2
78.76 - 101.25 E	17.6 +- 2.1	2
101.26 - 123.75 ESE	17.0 +- 0.8	7
123.76 - 146.25 SE	15.4 +- 1.0	2
146.26 - 168.75 SSE	16.6 +- 1.7	2
168.76 - 191.25 S	15.8 +- 0.7	2
191.26 - 213.75 SSW	15.3 +- 0.4	2
213.76 - 236.25 SW	16.2 +- 4.0	2
236.26 - 258.75 WSW	15.7 +- 1.0	2
258.76 - 281.25 W	17.7 +- 4.1	2
281.26 - 303.75 WNW	16.7 +- 1.5	2
303.76 - 326.25 NW	16.5 +- 0.9	4
326.26 - 348.75 NNW	15.8 +- 1.9	2

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	17.8 +- 1.4	11
2 - 5	15.9 +- 1.4	17
> 5	16.3 +- 1.1	12
Upwind Control	16.5 +- 0.1	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 970312-970723 134 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	340	15.8	24.7 +- 0.7; 3.7		No Net Data		16.7 +- 1.2	
2	3	13.1	23.9 +- 0.7; 3.6		No Net Data		17.1 +- 1.4	
4	29	11.9	25.8 +- 0.8; 3.9		No Net Data		19.2 +- 2.4	
5	53	8.2	25.9 +- 0.8; 3.9		No Net Data		18.3 +- 1.3	
6	58	9.1	26.9 +- 0.8; 4.0		No Net Data		19.2 +- 1.2	
7	97	8.0	27.8 +- 0.8; 4.2		No Net Data		19.5 +- 1.3	
8	110	4.2	26.3 +- 0.8; 3.9		No Net Data		18.6 +- 1.4	
9	111	1.9	28.0 +- 0.8; 4.2		No Net Data		19.9 +- 1.3	
10	92	2.2	27.1 +- 0.8; 4.1		No Net Data		19.3 +- 1.2	
11	64	3.6	26.7 +- 0.8; 4.0		No Net Data		19.3 +- 1.5	
12	148	4.0	Damaged Dosimeter		No Net Data		20.7 +- 1.3	
13	171	4.4	26.3 +- 0.8; 3.9		No Net Data		18.5 +- 1.2	
14	183	4.4	24.8 +- 0.7; 3.7		No Net Data		18.4 +- 1.3	
15	198	3.6	25.0 +- 0.8; 3.8		No Net Data		18.4 +- 1.4	
16	254	5.7	26.0 +- 0.8; 3.9		No Net Data		18.1 +- 1.0	
17	267	6.5	24.7 +- 0.7; 3.7		No Net Data		17.3 +- 1.5	
18	231	2.5	25.9 +- 0.8; 3.9		No Net Data		18.4 +- 1.3	
19	266	2.5	26.9 +- 0.8; 4.0		No Net Data		19.9 +- 1.4	
20	291	3.8	23.5 +- 0.7; 3.5		No Net Data		16.8 +- 1.7	
21	287	1.8	28.1 +- 0.8; 4.2		No Net Data		20.7 +- 1.3	
22	219	1.5	25.3 +- 0.8; 3.8		No Net Data		17.5 +- 1.2	
23	252	2.4	27.5 +- 0.8; 4.1		No Net Data		21.1 +- 1.8	
24	207	2.2	26.3 +- 0.8; 3.9		No Net Data		19.4 +- 1.3	
25	187	2.2	28.6 +- 0.9; 4.3		No Net Data		19.8 +- 1.3	
26	158	2.2	25.5 +- 0.8; 3.8		No Net Data		18.6 +- 1.6	
27	135	1.9	26.8 +- 0.8; 4.0		No Net Data		19.4 +- 1.6	
28	99	1.4	31.7 +- 1.0; 4.8		No Net Data		20.2 +- 1.3	
29	64	1.4	25.8 +- 0.8; 3.9		No Net Data		18.2 +- 1.3	
30	53	1.0	26.3 +- 0.8; 3.9		No Net Data		18.9 +- 1.3	
31	320	1.4	28.3 +- 0.8; 4.2		No Net Data		21.5 +- 1.6	
32	320	3.5	26.2 +- 0.8; 3.9		No Net Data		18.4 +- 1.7	
33	335	2.5	26.0 +- 0.8; 3.9		No Net Data		18.8 +- 1.5	
34	340	5.2	22.0 +- 0.7; 3.3		No Net Data		16.3 +- 2.1	
35	4	3.5	27.9 +- 0.8; 4.2		No Net Data		19.5 +- 1.3	
36	23	3.2	27.9 +- 0.8; 4.2		No Net Data		21.5 +- 1.7	
37	42	2.8	23.3 +- 0.7; 3.5		No Net Data		16.5 +- 1.2	
38	27	1.6	23.5 +- 0.7; 3.5		No Net Data		17.0 +- 1.6	
39	348	1.6	26.4 +- 0.8; 4.0		No Net Data		18.8 +- 1.5	
40	340	15.8	22.6 +- 0.7; 3.4		No Net Data		16.1 +- 1.3	
41	340	15.8	24.0 +- 0.7; 3.6		No Net Data		16.8 +- 1.0	

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

BEAVER VALLEY
For the period 970312-970723

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 +- 1.9	2
11.26 - 33.75 NNE	17.3 +- 1.5	3
33.76 - 56.25 NE	16.9 +- 1.1	3
56.26 - 78.75 ENE	17.8 +- 0.4	3
78.76 - 101.25 E	19.4 +- 1.7	3
101.26 - 123.75 ESE	18.3 +- 0.8	2
123.76 - 146.25 SE	18.0 +- 0.0	1
146.26 - 168.75 SSE	17.1 +- 0.0	1
168.76 - 191.25 S	17.8 +- 1.3	3
191.26 - 213.75 SSW	17.2 +- 0.6	2
213.76 - 236.25 SW	17.2 +- 0.3	2
236.26 - 258.75 WSW	18.0 +- 0.7	2
258.76 - 281.25 W	17.3 +- 1.0	2
281.26 - 303.75 WNW	17.3 +- 2.2	2
303.76 - 326.25 NW	18.3 +- 1.0	2
326.26 - 348.75 NNW	16.6 +- 1.6	3

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	18.2 +- 1.5	10
2 - 5	17.6 +- 1.0	18
> 5	17.0 +- 1.2	8
Upwind Control	16.0 +- 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 970311-970723 135 Days

Field Time: 89 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	208	4.9	20.3	+- 0.6; 3.0	13.6	+- 0.7; 4.4	13.1	+- 0.9
2	220	3.6	19.0	+- 0.6; 2.9	12.4	+- 0.7; 4.3	12.1	+- 0.9
3	204	2.4	18.8	+- 0.6; 2.8	12.1	+- 0.7; 4.3	12.3	+- 0.9
4	176	3.3	18.7	+- 0.6; 2.8	12.0	+- 0.7; 4.3	12.2	+- 1.0
5	161	4.6	18.6	+- 0.6; 2.8	11.9	+- 0.7; 4.3	12.5	+- 0.9
6	133	4.7	20.6	+- 0.6; 3.1	14.0	+- 0.8; 4.5	13.8	+- 1.4
7	116	3.7	22.3	+- 0.7; 3.3	15.6	+- 0.8; 4.7	14.4	+- 1.3
8	111	4.7	21.7	+- 0.7; 3.3	15.1	+- 0.8; 4.6	14.0	+- 1.6
9	98	4.5	18.9	+- 0.6; 2.8	12.3	+- 0.7; 4.3	12.7	+- 0.8
10	88	12.0	18.7	+- 0.6; 2.8	12.1	+- 0.7; 4.3	12.1	+- 0.8
11	83	16.0	16.6	+- 0.5; 2.5	9.9	+- 0.7; 4.1	12.2	+- 1.4
12	83	16.0	17.2	+- 0.5; 2.6	10.5	+- 0.7; 4.1	12.0	+- 1.0
13	83	16.0	17.8	+- 0.5; 2.7	11.2	+- 0.7; 4.2	12.3	+- 1.2
14	77	3.4	18.0	+- 0.5; 2.7	11.3	+- 0.7; 4.2	11.6	+- 0.8
15	96	1.8	20.1	+- 0.6; 3.0	13.5	+- 0.7; 4.4	13.4	+- 0.9
16	118	2.0	19.8	+- 0.6; 3.0	13.2	+- 0.7; 4.4	13.2	+- 1.1
17	134	2.0	20.0	+- 0.6; 3.0	13.3	+- 0.7; 4.4	13.1	+- 1.1
18	222	1.9	17.8	+- 0.5; 2.7	11.1	+- 0.7; 4.2	11.8	+- 1.5
19	194	1.4	21.0	+- 0.6; 3.2	14.4	+- 0.8; 4.5	14.4	+- 1.4
20	179	1.5	19.5	+- 0.6; 2.9	12.8	+- 0.7; 4.4	12.7	+- 0.9
21	153	1.1	17.6	+- 0.5; 2.6	10.9	+- 0.7; 4.2	12.5	+- 1.0

Transit Dose = 6.8 +- 0.4; 3.2

BIG ROCK
For the period 970311-970723

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	11.3 +- 0.0	1
78.76 - 101.25 E	12.6 +- 0.8	3
101.26 - 123.75 ESE	14.6 +- 1.3	3
123.76 - 146.25 SE	13.7 +- 0.5	2
146.26 - 168.75 SSE	11.4 +- 0.7	2
168.76 - 191.25 S	12.4 +- 0.6	2
191.26 - 213.75 SSW	13.4 +- 1.2	3
213.76 - 236.25 SW	11.7 +- 0.9	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	12.7 +- 1.3	7
2 - 5	13.0 +- 1.5	10
> 5	12.1 +- 0.0	1
Upwind Control	10.5 +- 0.6	3

NRC TLD DOSES FOR BIG ROCK POINT AREA

Miles

0 2 4

Legend

Water
Highways

Railroads
Roads

Plant..site

BRAIDWOOD

TLD Direct Radiation Environmental Monitoring

For the period 970310-970716 129 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	28	0.8	18.3	+- 0.6; 2.8	10.7	+- 0.7; 4.2	13.7	+- 3.1
2	29	1.3	22.3	+- 0.7; 3.3	14.6	+- 0.8; 4.6	14.7	+- 1.7
3	53	2.0	17.1	+- 0.5; 2.6	9.5	+- 0.7; 4.1	12.2	+- 2.8
4	72	2.1	22.2	+- 0.7; 3.3	14.5	+- 0.8; 4.6	14.9	+- 1.6
5	87	2.0	20.8	+- 0.6; 3.1	13.1	+- 0.8; 4.5	14.4	+- 2.0
6	119	2.5	16.8	+- 0.5; 2.5	9.2	+- 0.7; 4.1	13.6	+- 3.0
7	133	3.3	21.9	+- 0.7; 3.3	14.2	+- 0.8; 4.6	14.8	+- 1.6
8	151	3.3	19.6	+- 0.6; 2.9	11.9	+- 0.7; 4.4	14.0	+- 1.5
9	172	3.9	22.6	+- 0.7; 3.4	14.9	+- 0.8; 4.7	17.9	+- 3.7
10	197	2.8	22.0	+- 0.7; 3.3	14.3	+- 0.8; 4.6	14.8	+- 1.8
11	212	1.4	17.6	+- 0.5; 2.6	9.9	+- 0.7; 4.2	13.8	+- 2.0
12	232	1.0	17.4	+- 0.5; 2.6	9.8	+- 0.7; 4.2	13.4	+- 2.0
13	255	1.0	20.9	+- 0.6; 3.1	13.3	+- 0.8; 4.5	13.8	+- 1.4
14	278	1.2	17.1	+- 0.5; 2.6	9.4	+- 0.7; 4.1	14.2	+- 2.2
15	310	1.3	16.7	+- 0.5; 2.5	9.1	+- 0.7; 4.1	14.1	+- 2.2
16	342	1.3	Missing Dosimeter		No Net Data		12.2	+- 2.6
17	8	1.5	21.3	+- 0.6; 3.2	13.7	+- 0.8; 4.5	14.3	+- 1.8
18	18	3.5	20.5	+- 0.6; 3.1	12.8	+- 0.8; 4.5	17.2	+- 3.1
19	42	6.3	18.3	+- 0.5; 2.7	10.6	+- 0.7; 4.2	13.2	+- 2.2
20	69	5.7	20.5	+- 0.6; 3.1	12.9	+- 0.8; 4.5	15.5	+- 2.3
21	86	7.0	20.2	+- 0.6; 3.0	12.5	+- 0.7; 4.4	16.4	+- 2.2
22	103	11.4	20.5	+- 0.6; 3.1	12.8	+- 0.8; 4.5	15.6	+- 3.2
23	45	4.9	18.1	+- 0.5; 2.7	10.5	+- 0.7; 4.2	15.0	+- 2.1
24	70	4.2	21.1	+- 0.6; 3.2	13.4	+- 0.8; 4.5	14.4	+- 2.0
25	86	4.1	17.2	+- 0.5; 2.6	9.5	+- 0.7; 4.1	12.3	+- 2.6
26	125	5.0	18.0	+- 0.5; 2.7	10.4	+- 0.7; 4.2	13.0	+- 3.0
27	142	7.2	19.1	+- 0.6; 2.9	11.5	+- 0.7; 4.3	16.3	+- 2.9
28	161	6.1	21.7	+- 0.7; 3.3	14.0	+- 0.8; 4.6	14.4	+- 1.9
29	180	5.9	23.5	+- 0.7; 3.5	15.8	+- 0.8; 4.8	18.7	+- 2.9
30	187	5.8	25.5	+- 0.8; 3.8	17.8	+- 0.9; 5.0	19.6	+- 2.2
31	225	5.4	23.9	+- 0.7; 3.6	16.2	+- 0.8; 4.8	17.1	+- 1.8
32	253	4.0	23.0	+- 0.7; 3.4	15.3	+- 0.8; 4.7	14.8	+- 1.9
33	289	4.1	19.2	+- 0.6; 2.9	11.5	+- 0.7; 4.3	16.2	+- 2.5
34	315	4.0	23.2	+- 0.7; 3.5	15.5	+- 0.8; 4.7	15.9	+- 2.0
35	333	4.0	20.0	+- 0.6; 3.0	12.3	+- 0.7; 4.4	15.1	+- 2.6
36	0	5.5	20.9	+- 0.6; 3.1	13.2	+- 0.8; 4.5	14.4	+- 2.2
37	21	5.0	16.5	+- 0.5; 2.5	8.9	+- 0.7; 4.1	12.0	+- 2.9
38	224	14.7	Missing Dosimeter		No Net Data		13.9	+- 2.5
39	224	14.7	Missing Dosimeter		No Net Data		13.7	+- 2.0
40	187	10.3	Missing Dosimeter		No Net Data		18.0	+- 2.4

Transit Dose = 7.5 +- 0.5; 3.3

BRAIDWOOD

For the period 970310-970716

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	13.4 +- 0.3	2
11.26 - 33.75 NNE	11.8 +- 2.5	4
33.76 - 56.25 NE	10.2 +- 0.6	3
56.26 - 78.75 ENE	13.6 +- 0.8	3
78.76 - 101.25 E	11.7 +- 1.9	3
101.26 - 123.75 ESE	11.0 +- 2.6	2
123.76 - 146.25 SE	12.0 +- 2.0	3
146.26 - 168.75 SSE	13.0 +- 1.5	2
168.76 - 191.25 S	16.2 +- 1.5	3
191.26 - 213.75 SSW	12.1 +- 3.1	2
213.76 - 236.25 SW	13.0 +- 4.6	2
236.26 - 258.75 WSW	14.3 +- 1.4	2
258.76 - 281.25 W	9.4 +- 0.0	1
281.26 - 303.75 WNW	11.5 +- 0.0	1
303.76 - 326.25 NW	12.3 +- 4.5	2
326.26 - 348.75 NNW	12.3 +- 0.0	1

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	11.3 +- 2.1	10
2 - 5	12.4 +- 2.2	16
> 5	13.7 +- 2.2	10
Upwind Control	No Data +- No Data	0

NRC TLD DOSES FOR BRAIDWOOD AREA

Miles

Legend

Water
Highways

Railroads
Roads

Plant site

BROWNS FERRY

TLD Direct Radiation Environmental Monitoring

For the period 970311-970729 141 Days

Field Time: 88 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	19.5	+- 0.6; 2.9	16.8	+- 0.7; 4.1	14.3	+- 1.8
2	135	5.4	17.6	+- 0.5; 2.6	14.9	+- 0.6; 3.9	15.7	+- 2.0
3	153	4.3	20.2	+- 0.6; 3.0	17.6	+- 0.7; 4.2	16.4	+- 1.1
4	212	5.9	21.8	+- 0.7; 3.3	19.2	+- 0.7; 4.4	18.1	+- 2.3
5	222	6.2	19.8	+- 0.6; 3.0	17.2	+- 0.7; 4.2	15.3	+- 1.9
6	247	4.5	20.7	+- 0.6; 3.1	18.1	+- 0.7; 4.3	18.6	+- 2.1
7	269	4.7	19.0	+- 0.6; 2.8	16.3	+- 0.7; 4.1	16.4	+- 2.0
8	257	11.1	19.6	+- 0.6; 2.9	17.0	+- 0.7; 4.2	15.8	+- 1.9
9	296	7.0	20.6	+- 0.6; 3.1	17.9	+- 0.7; 4.3	16.4	+- 2.2
10	292	4.5	20.0	+- 0.6; 3.0	17.4	+- 0.7; 4.2	16.6	+- 1.9
11	270	1.9	21.3	+- 0.6; 3.2	18.6	+- 0.7; 4.3	17.0	+- 1.9
12	241	2.7	18.9	+- 0.6; 2.8	16.2	+- 0.7; 4.1	15.7	+- 2.0
13	220	1.7	20.1	+- 0.6; 3.0	17.5	+- 0.7; 4.2	18.9	+- 2.5
14	268	17.0	20.7	+- 0.6; 3.1	18.1	+- 0.7; 4.3	17.1	+- 2.0
15	205	4.0	21.1	+- 0.6; 3.2	18.5	+- 0.7; 4.3	17.3	+- 2.0
16	183	2.8	18.6	+- 0.6; 2.8	16.0	+- 0.7; 4.0	15.4	+- 2.3
17	51	9.5	21.2	+- 0.6; 3.2	18.5	+- 0.7; 4.3	17.7	+- 1.9
18	51	3.4	21.3	+- 0.6; 3.2	18.7	+- 0.7; 4.3	16.1	+- 1.7
19	61	3.0	20.4	+- 0.6; 3.1	17.8	+- 0.7; 4.2	16.5	+- 2.0
20	84	2.7	21.2	+- 0.6; 3.2	18.5	+- 0.7; 4.3	18.9	+- 1.9
21	114	2.9	21.8	+- 0.7; 3.3	19.2	+- 0.7; 4.4	19.4	+- 2.0
22	58	0.9	24.5	+- 0.7; 3.7	21.9	+- 0.8; 4.7	20.1	+- 2.0
23	90	25.0	19.7	+- 0.6; 2.9	17.0	+- 0.7; 4.2	16.4	+- 2.2
24	110	0.6	21.5	+- 0.6; 3.2	18.9	+- 0.7; 4.4	18.1	+- 1.8
25	42	2.1	22.3	+- 0.7; 3.3	19.7	+- 0.8; 4.5	18.0	+- 2.2
26	23	1.7	23.2	+- 0.7; 3.5	20.7	+- 0.8; 4.6	20.1	+- 2.1
27	330	1.9	20.1	+- 0.6; 3.0	17.5	+- 0.7; 4.2	16.5	+- 1.9
28	330	1.0	21.1	+- 0.6; 3.2	18.5	+- 0.7; 4.3	18.5	+- 2.3
29	26	3.7	20.2	+- 0.6; 3.0	17.5	+- 0.7; 4.2	17.8	+- 2.0
30	358	4.0	20.3	+- 0.6; 3.0	17.7	+- 0.7; 4.2	15.5	+- 2.0
31	334	5.6	21.0	+- 0.6; 3.1	18.4	+- 0.7; 4.3	18.6	+- 2.0
32	312	12.0	20.0	+- 0.6; 3.0	17.4	+- 0.7; 4.2	18.0	+- 2.1
33	356	1.5	23.4	+- 0.7; 3.5	20.9	+- 0.8; 4.6	19.6	+- 2.0
34	52	6.5	18.9	+- 0.6; 2.8	16.2	+- 0.7; 4.1	16.4	+- 2.3
35	96	5.2	20.9	+- 0.6; 3.1	18.3	+- 0.7; 4.3	17.3	+- 2.0
36	68	5.5	23.5	+- 0.7; 3.5	21.0	+- 0.8; 4.6	18.2	+- 2.2
37	150	9.5	21.4	+- 0.6; 3.2	18.8	+- 0.7; 4.4	16.9	+- 2.0
38	166	7.0	16.8	+- 0.5; 2.5	14.1	+- 0.6; 3.9	14.2	+- 2.0

Transit Dose = 3.0 +- 0.3; 2.8

BROWNS FERRY

For the period 970311-970729

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 +- 2.2	2
11.26 - 33.75 NNE	19.1 +- 2.2	2
33.76 - 56.25 NE	18.3 +- 1.5	4
56.26 - 78.75 ENE	20.2 +- 2.2	3
78.76 - 101.25 E	18.0 +- 0.8	3
101.26 - 123.75 ESE	19.1 +- 0.2	2
123.76 - 146.25 SE	15.9 +- 1.3	2
146.26 - 168.75 SSE	16.8 +- 2.4	3
168.76 - 191.25 S	16.0 +- 0.0	1
191.26 - 213.75 SSW	18.8 +- 0.5	2
213.76 - 236.25 SW	17.3 +- 0.2	2
236.26 - 258.75 WSW	17.1 +- 1.3	2
258.76 - 281.25 W	17.5 +- 1.7	2
281.26 - 303.75 WNW	17.7 +- 0.4	2
303.76 - 326.25 NW	17.4 +- 0.0	1
326.26 - 348.75 NNW	18.1 +- 0.6	3

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	19.3 +- 1.6	8
2 - 5	17.8 +- 1.1	14
> 5	17.6 +- 1.7	14
Upwind Control	17.6 +- 0.8	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 970311-970722 134 Days

Field Time: 84 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	260	2.2	13.8 +- 0.4; 2.1		8.3 +- 0.6; 3.9		10.1 +- 1.5	
2	245	3.4	13.3 +- 0.4; 2.0		7.7 +- 0.6; 3.8		9.7 +- 1.6	
3	231	3.8	11.7 +- 0.4; 1.8		6.0 +- 0.6; 3.7		9.4 +- 1.8	
4	210	4.9	15.6 +- 0.5; 2.3		10.2 +- 0.7; 4.0		12.1 +- 1.7	
5	186	4.3	15.3 +- 0.5; 2.3		9.9 +- 0.6; 4.0		12.0 +- 1.8	
6	270	4.5	15.0 +- 0.4; 2.2		9.6 +- 0.6; 4.0		10.2 +- 1.3	
7	272	4.4	14.0 +- 0.4; 2.1		8.5 +- 0.6; 3.9		10.6 +- 1.7	
8	73	1.3	13.9 +- 0.4; 2.1		8.4 +- 0.6; 3.9		11.8 +- 1.7	
9	97	1.0	13.7 +- 0.4; 2.1		8.2 +- 0.6; 3.9		11.7 +- 1.8	
10	120	1.5	15.5 +- 0.5; 2.3		10.1 +- 0.6; 4.0		12.2 +- 1.4	
11	131	0.9	14.6 +- 0.4; 2.2		9.2 +- 0.6; 3.9		11.5 +- 1.7	
12	156	1.1	15.2 +- 0.5; 2.3		9.8 +- 0.6; 4.0		12.1 +- 1.6	
13	180	1.1	14.3 +- 0.4; 2.1		8.8 +- 0.6; 3.9		11.3 +- 1.5	
14	194	2.4	12.9 +- 0.4; 1.9		7.3 +- 0.6; 3.8		11.1 +- 1.8	
15	201	2.0	14.1 +- 0.4; 2.1		8.6 +- 0.6; 3.9		10.4 +- 1.5	
16	218	1.2	12.8 +- 0.4; 1.9		7.3 +- 0.6; 3.8		11.2 +- 2.3	
17	252	1.1	14.2 +- 0.4; 2.1		8.8 +- 0.6; 3.9		11.6 +- 1.6	
18	272	1.2	14.0 +- 0.4; 2.1		8.6 +- 0.6; 3.9		11.0 +- 2.0	
19	19	1.1	13.7 +- 0.4; 2.1		8.2 +- 0.6; 3.9		10.6 +- 1.5	
20	2	1.1	12.9 +- 0.4; 1.9		7.4 +- 0.6; 3.8		10.3 +- 1.7	
21	288	1.3	13.9 +- 0.4; 2.1		8.4 +- 0.6; 3.9		9.9 +- 1.9	
22	307	1.5	14.2 +- 0.4; 2.1		8.7 +- 0.6; 3.9		10.5 +- 1.4	
23	338	2.1	14.6 +- 0.4; 2.2		9.2 +- 0.6; 3.9		11.2 +- 1.5	
24	325	4.9	13.4 +- 0.4; 2.0		7.9 +- 0.6; 3.8		10.1 +- 1.5	
25	338	3.8	15.3 +- 0.5; 2.3		9.9 +- 0.6; 4.0		11.3 +- 1.5	
26	356	5.2	13.5 +- 0.4; 2.0		8.0 +- 0.6; 3.8		10.4 +- 1.6	
27	30	6.4	13.4 +- 0.4; 2.0		7.9 +- 0.6; 3.8		10.5 +- 1.5	
28	43	9.0	13.2 +- 0.4; 2.0		7.6 +- 0.6; 3.8		11.5 +- 2.2	
29	50	8.5	14.0 +- 0.4; 2.1		8.6 +- 0.6; 3.9		11.0 +- 1.9	
30	59	7.2	14.5 +- 0.4; 2.2		9.1 +- 0.6; 3.9		11.2 +- 1.8	
31	65	6.5	15.2 +- 0.5; 2.3		9.8 +- 0.6; 4.0		11.1 +- 1.6	
32	74	5.8	15.4 +- 0.5; 2.3		10.0 +- 0.6; 4.0		11.7 +- 2.0	
33	88	4.1	12.5 +- 0.4; 1.9		6.9 +- 0.6; 3.8		10.4 +- 1.9	
34	12	17.0	15.4 +- 0.5; 2.3		10.1 +- 0.6; 4.0		11.7 +- 1.6	
35	16	18.0	14.0 +- 0.4; 2.1		8.5 +- 0.6; 3.9		10.4 +- 1.5	
36	284	15.0	13.8 +- 0.4; 2.1		8.3 +- 0.6; 3.9		11.6 +- 2.2	
37	284	16.0	13.6 +- 0.4; 2.0		8.1 +- 0.6; 3.8		11.8 +- 2.5	
38	284	15.0	Damaged Dosimeter		No Net Data		11.3 +- 1.8	
39	287	4.6	14.7 +- 0.4; 2.2		9.3 +- 0.6; 4.0		10.7 +- 1.4	
40	271	0.7	16.1 +- 0.5; 2.4		10.8 +- 0.7; 4.1		12.7 +- 1.6	

Transit Dose = 6.0 +- 0.4; 3.0

BRUNSWICK

For the period 970311-970722

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	7.7 +- 0.4	2
11.26 - 33.75 NNE	8.7 +- 1.0	4
33.76 - 56.25 NE	8.1 +- 0.7	2
56.26 - 78.75 ENE	9.4 +- 0.7	4
78.76 - 101.25 E	7.6 +- 0.9	2
101.26 - 123.75 ESE	10.1 +- 0.0	1
123.76 - 146.25 SE	9.2 +- 0.0	1
146.26 - 168.75 SSE	9.8 +- 0.0	1
168.76 - 191.25 S	9.4 +- 0.7	2
191.26 - 213.75 SSW	8.7 +- 1.4	3
213.76 - 236.25 SW	6.7 +- 0.9	2
236.26 - 258.75 WSW	8.3 +- 0.7	2
258.76 - 281.25 W	9.1 +- 1.1	5
281.26 - 303.75 WNW	8.9 +- 0.6	2
303.76 - 326.25 NW	8.3 +- 0.6	2
326.26 - 348.75 NNW	9.5 +- 0.5	2

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	8.8 +- 0.9	15
2 - 5	8.5 +- 1.3	13
> 5	8.9 +- 0.9	9
Upwind Control	8.2 +- 0.2	2

NRC TLD DOSES FOR BRUNSWICK AREA

Miles

0 2 4

Legend

Water

— Highways

--- Railroads

--- Roads

Plant..site

BYRON

TLD Direct Radiation Environmental Monitoring

For the period 970310-970716 129 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	10	1.1	23.1	+- 0.7; 3.5	18.9	+- 0.8; 4.5	19.0	+- 1.9
2	27	1.0	23.0	+- 0.7; 3.5	18.8	+- 0.8; 4.5	18.6	+- 1.7
3	53	1.6	22.1	+- 0.7; 3.3	18.0	+- 0.7; 4.4	17.5	+- 1.6
4	68	1.6	20.9	+- 0.6; 3.1	16.7	+- 0.7; 4.2	20.1	+- 2.1
5	97	1.4	27.3	+- 0.8; 4.1	23.0	+- 0.9; 4.9	20.9	+- 2.0
6	120	1.3	24.5	+- 0.7; 3.7	20.2	+- 0.8; 4.6	19.1	+- 1.7
7	146	1.4	22.5	+- 0.7; 3.4	18.3	+- 0.7; 4.4	20.0	+- 2.3
8	175	2.2	22.8	+- 0.7; 3.4	18.6	+- 0.7; 4.4	18.6	+- 1.5
9	177	0.6	20.5	+- 0.6; 3.1	16.4	+- 0.7; 4.2	16.2	+- 1.5
10	183	0.5	Missing Dosimeter		No Net Data		18.7	+- 2.2
11	193	0.6	22.7	+- 0.7; 3.4	18.5	+- 0.7; 4.4	17.8	+- 2.1
12	220	0.9	22.1	+- 0.7; 3.3	17.9	+- 0.7; 4.4	18.4	+- 1.5
13	239	0.8	22.1	+- 0.7; 3.3	17.9	+- 0.7; 4.4	17.6	+- 1.4
14	262	0.7	23.9	+- 0.7; 3.6	19.7	+- 0.8; 4.6	19.3	+- 1.8
15	283	0.8	23.2	+- 0.7; 3.5	19.0	+- 0.8; 4.5	18.3	+- 2.0
16	303	1.0	20.4	+- 0.6; 3.1	16.3	+- 0.7; 4.2	17.0	+- 1.5
17	326	1.6	18.6	+- 0.6; 2.8	14.5	+- 0.6; 4.0	16.4	+- 1.8
18	23	4.0	19.5	+- 0.6; 2.9	15.3	+- 0.7; 4.1	15.7	+- 1.3
19	17	4.1	20.6	+- 0.6; 3.1	16.5	+- 0.7; 4.2	14.6	+- 1.4
20	5	4.3	22.3	+- 0.7; 3.3	18.1	+- 0.7; 4.4	17.3	+- 1.3
21	340	4.2	21.2	+- 0.6; 3.2	17.0	+- 0.7; 4.3	18.3	+- 2.0
22	322	4.9	Missing Dosimeter		No Net Data		18.9	+- 2.4
23	298	6.9	19.9	+- 0.6; 3.0	15.8	+- 0.7; 4.1	16.0	+- 1.2
24	262	4.8	19.4	+- 0.6; 2.9	15.3	+- 0.7; 4.1	15.7	+- 1.3
25	244	4.6	19.9	+- 0.6; 3.0	15.8	+- 0.7; 4.1	16.0	+- 1.4
26	224	4.8	18.2	+- 0.5; 2.7	14.1	+- 0.6; 3.9	16.2	+- 1.7
27	208	5.2	17.8	+- 0.5; 2.7	13.7	+- 0.6; 3.9	14.9	+- 1.2
28	209	14.0	18.8	+- 0.6; 2.8	14.7	+- 0.6; 4.0	14.5	+- 1.2
29	215	13.0	20.8	+- 0.6; 3.1	16.7	+- 0.7; 4.2	17.5	+- 1.5
30	215	13.0	21.9	+- 0.7; 3.3	17.7	+- 0.7; 4.3	18.3	+- 1.6
31	204	4.6	17.2	+- 0.5; 2.6	13.1	+- 0.6; 3.9	13.6	+- 1.2
32	178	4.4	19.5	+- 0.6; 2.9	15.4	+- 0.7; 4.1	15.9	+- 1.2
33	155	3.9	23.0	+- 0.7; 3.5	18.8	+- 0.8; 4.5	17.6	+- 1.6
34	138	4.6	20.9	+- 0.6; 3.1	16.8	+- 0.7; 4.2	17.9	+- 1.5
35	118	4.4	22.4	+- 0.7; 3.4	18.3	+- 0.7; 4.4	18.6	+- 1.9
36	81	3.8	21.6	+- 0.6; 3.2	17.4	+- 0.7; 4.3	17.1	+- 1.7
37	70	5.5	21.3	+- 0.6; 3.2	17.1	+- 0.7; 4.3	16.5	+- 2.1
38	45	4.0	17.9	+- 0.5; 2.7	13.9	+- 0.6; 3.9	15.2	+- 1.4
39	40	6.8	22.6	+- 0.7; 3.4	18.4	+- 0.7; 4.4	18.2	+- 1.3
40	45	15.0	18.7	+- 0.6; 2.8	14.6	+- 0.6; 4.0	14.5	+- 1.3
41	220	3.0	24.6	+- 0.7; 3.7	20.4	+- 0.8; 4.6	19.6	+- 2.1

Transit Dose = 3.8 +- 0.3; 3.0

BYRON

For the period 970310-970716

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	18.5 +- 0.6	2
11.26 - 33.75 NNE	16.9 +- 1.8	3
33.76 - 56.25 NE	16.2 +- 2.3	4
56.26 - 78.75 ENE	16.9 +- 0.3	2
78.76 - 101.25 E	20.2 +- 3.9	2
101.26 - 123.75 ESE	19.3 +- 1.4	2
123.76 - 146.25 SE	17.5 +- 1.1	2
146.26 - 168.75 SSE	18.8 +- 0.0	1
168.76 - 191.25 S	16.8 +- 1.6	3
191.26 - 213.75 SSW	15.1 +- 3.0	3
213.76 - 236.25 SW	17.5 +- 3.2	3
236.26 - 258.75 WSW	16.8 +- 1.5	2
258.76 - 281.25 W	17.5 +- 3.1	2
281.26 - 303.75 WNW	17.0 +- 1.7	3
303.76 - 326.25 NW	14.5 +- 0.0	1
326.26 - 348.75 NNW	17.0 +- 0.0	1

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	18.3 +- 2.0	15
2 - 5	16.5 +- 2.0	16
> 5	15.9 +- 1.9	5
Upwind Control	16.4 +- 1.5	3

NRC TLD DOSES FOR BYRON AREA

Miles

0 2 4

Legend

Water
Highways

Railroads
Roads

Plant site

CALLAWAY

TLD Direct Radiation Environmental Monitoring

For the period 970311-970730 142 Days

Field Time: 111 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	247	2.1	29.7 +- 0.9; 4.5		21.5 +- 0.8; 4.6		20.9 +- 2.5	
2	259	1.4	28.5 +- 0.9; 4.3		20.5 +- 0.8; 4.5		19.7 +- 1.7	
3	282	1.3	26.4 +- 0.8; 4.0		18.8 +- 0.7; 4.3		19.5 +- 1.6	
4	304	1.3	28.1 +- 0.8; 4.2		20.1 +- 0.7; 4.4		20.4 +- 2.4	
5	330	1.7	23.1 +- 0.7; 3.5		16.1 +- 0.6; 4.0		17.9 +- 1.9	
6	1	1.7	23.3 +- 0.7; 3.5		16.3 +- 0.6; 4.0		17.1 +- 0.8	
7	23	2.0	24.2 +- 0.7; 3.6		17.0 +- 0.7; 4.1		17.0 +- 0.9	
8	77	0.7	25.4 +- 0.8; 3.8		18.0 +- 0.7; 4.2		17.8 +- 0.7	
9	85	1.4	24.5 +- 0.7; 3.7		17.2 +- 0.7; 4.1		18.7 +- 1.0	
10	98	1.5	23.5 +- 0.7; 3.5		16.5 +- 0.6; 4.0		17.3 +- 0.9	
11	121	2.0	28.0 +- 0.8; 4.2		20.1 +- 0.7; 4.4		18.7 +- 2.5	
12	140	2.0	Missing Dosimeter		No Net Data		18.5 +- 1.8	
13	158	2.5	22.9 +- 0.7; 3.4		15.9 +- 0.6; 4.0		17.7 +- 1.0	
14	183	3.7	21.9 +- 0.7; 3.3		15.1 +- 0.6; 3.9		18.5 +- 2.0	
15	188	1.7	25.8 +- 0.8; 3.9		18.3 +- 0.7; 4.2		18.6 +- 1.1	
16	202	0.7	23.6 +- 0.7; 3.5		16.6 +- 0.6; 4.0		17.5 +- 1.1	
17	237	0.7	27.5 +- 0.8; 4.1		19.7 +- 0.7; 4.4		19.3 +- 1.5	
18	312	11.0	28.5 +- 0.9; 4.3		20.5 +- 0.8; 4.5		17.9 +- 1.8	
19	292	10.0	24.6 +- 0.7; 3.7		17.3 +- 0.7; 4.1		17.6 +- 1.0	
20	268	9.0	23.3 +- 0.7; 3.5		16.3 +- 0.6; 4.0		17.9 +- 1.0	
21	247	8.0	29.0 +- 0.9; 4.3		20.9 +- 0.8; 4.5		20.2 +- 2.0	
22	225	8.0	23.8 +- 0.7; 3.6		16.7 +- 0.7; 4.0		17.7 +- 0.9	
23	220	8.0	24.7 +- 0.7; 3.7		17.4 +- 0.7; 4.1		19.0 +- 1.9	
24	205	5.5	22.7 +- 0.7; 3.4		15.8 +- 0.6; 3.9		16.3 +- 2.1	
25	157	4.0	30.2 +- 0.9; 4.5		21.8 +- 0.8; 4.6		20.5 +- 2.2	
26	134	5.0	20.3 +- 0.6; 3.0		13.9 +- 0.6; 3.7		16.1 +- 1.1	
27	115	4.2	31.5 +- 0.9; 4.7		22.9 +- 0.8; 4.8		21.0 +- 2.1	
28	95	3.5	25.6 +- 0.8; 3.8		18.1 +- 0.7; 4.2		20.7 +- 2.0	
29	67	3.4	24.4 +- 0.7; 3.7		17.2 +- 0.7; 4.1		19.5 +- 1.0	
30	48	4.5	22.5 +- 0.7; 3.4		15.6 +- 0.6; 3.9		16.7 +- 0.8	
31	14	6.5	26.0 +- 0.8; 3.9		18.5 +- 0.7; 4.2		18.8 +- 0.9	
32	2	5.1	24.5 +- 0.7; 3.7		17.3 +- 0.7; 4.1		18.7 +- 1.0	
33	335	3.6	21.5 +- 0.6; 3.2		14.9 +- 0.6; 3.8		16.2 +- 1.1	
34	288	4.3	25.8 +- 0.8; 3.9		18.3 +- 0.7; 4.2		18.8 +- 0.9	
35	310	5.2	25.8 +- 0.8; 3.9		18.3 +- 0.7; 4.2		18.9 +- 0.9	
36	264	3.2	19.5 +- 0.6; 2.9		13.2 +- 0.6; 3.7		14.3 +- 1.3	
37	237	3.0	27.0 +- 0.8; 4.0		19.3 +- 0.7; 4.3		20.0 +- 1.5	
38	270	15.0	26.5 +- 0.8; 4.0		18.9 +- 0.7; 4.3		16.9 +- 1.8	
39	270	15.0	27.7 +- 0.8; 4.2		19.8 +- 0.7; 4.4		17.3 +- 2.7	
40	203	20.0	24.7 +- 0.7; 3.7		17.5 +- 0.7; 4.1		18.5 +- 0.8	

Transit Dose = 3.2 +- 0.4; 3.5

CALLAWAY

For the period 970311-970730

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 +- 0.7	2
11.26 - 33.75 NNE	17.8 +- 1.0	2
33.76 - 56.25 NE	15.6 +- 0.0	1
56.26 - 78.75 ENE	17.6 +- 0.6	2
78.76 - 101.25 E	17.3 +- 0.8	3
101.26 - 123.75 ESE	21.5 +- 2.0	2
123.76 - 146.25 SE	13.9 +- 0.0	1
146.26 - 168.75 SSE	18.9 +- 4.2	2
168.76 - 191.25 S	16.7 +- 2.2	2
191.26 - 213.75 SSW	16.2 +- 0.5	2
213.76 - 236.25 SW	17.0 +- 0.5	2
236.26 - 258.75 WSW	20.3 +- 1.0	4
258.76 - 281.25 W	16.7 +- 3.7	3
281.26 - 303.75 WNW	18.2 +- 0.8	3
303.76 - 326.25 NW	19.6 +- 1.2	3
326.26 - 348.75 NNW	15.5 +- 0.9	2

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	18.1 +- 1.6	13
2 - 5	17.5 +- 3.1	13
> 5	17.9 +- 1.7	10
Upwind Control	18.7 +- 1.2	3

NRC TLD DOSES FOR CALLAWAY AREA

Miles

Legend

Water
Highways

Railroads
Roads

Plant..site

CALVERT CLIFFS

TLD Direct Radiation Environmental Monitoring

For the period 970312-970722 133 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	275 1.5	15.8 +- 0.5; 2.4	12.8 +- 0.5; 3.3	13.7 +- 2.0
3	284 1.7	19.1 +- 0.6; 2.9	15.7 +- 0.5; 3.6	13.6 +- 1.8
4	323 2.4	17.1 +- 0.5; 2.6	13.9 +- 0.5; 3.4	13.5 +- 1.2
5	297 3.1	19.1 +- 0.6; 2.9	15.6 +- 0.5; 3.6	14.2 +- 1.8
6	324 4.7	19.3 +- 0.6; 2.9	15.8 +- 0.5; 3.6	14.3 +- 1.9
7	324 5.5	Missing Dosimeter	No Net Data	13.1 +- 1.5
8	256 6.1	17.7 +- 0.5; 2.6	14.4 +- 0.5; 3.5	12.5 +- 2.0
9	273 4.1	16.0 +- 0.5; 2.4	13.0 +- 0.5; 3.4	13.1 +- 1.4
10	253 3.7	20.5 +- 0.6; 3.1	16.8 +- 0.6; 3.7	14.8 +- 1.7
11	230 4.0	19.4 +- 0.6; 2.9	15.9 +- 0.5; 3.6	14.8 +- 1.2
12	243 1.3	17.8 +- 0.5; 2.7	14.5 +- 0.5; 3.5	14.3 +- 1.2
13	222 1.5	21.4 +- 0.6; 3.2	17.6 +- 0.6; 3.8	15.4 +- 1.9
14	208 1.8	15.7 +- 0.5; 2.3	12.7 +- 0.5; 3.3	12.3 +- 1.3
15	176 2.4	22.5 +- 0.7; 3.4	18.5 +- 0.6; 3.9	17.0 +- 1.9
16	160 1.5	20.8 +- 0.6; 3.1	17.1 +- 0.6; 3.8	16.1 +- 1.4
19	159 3.8	18.3 +- 0.6; 2.8	15.0 +- 0.5; 3.5	14.2 +- 1.3
20	139 4.7	17.6 +- 0.5; 2.6	14.3 +- 0.5; 3.5	12.9 +- 1.9
21	201 4.0	17.2 +- 0.5; 2.6	14.0 +- 0.5; 3.5	13.8 +- 1.3
22	187 4.7	16.7 +- 0.5; 2.5	13.6 +- 0.5; 3.4	13.1 +- 1.0
23	201 8.7	18.9 +- 0.6; 2.8	15.5 +- 0.5; 3.6	14.2 +- 1.3
24	190 7.8	15.8 +- 0.5; 2.4	12.8 +- 0.5; 3.3	12.4 +- 1.1
25	325 6.7	17.4 +- 0.5; 2.6	14.2 +- 0.5; 3.5	13.6 +- 1.2
26	314 11.0	16.7 +- 0.5; 2.5	13.6 +- 0.5; 3.4	13.0 +- 1.2
27	314 11.0	16.9 +- 0.5; 2.5	13.8 +- 0.5; 3.4	12.9 +- 1.1
28	315 10.0	21.1 +- 0.6; 3.2	17.4 +- 0.6; 3.8	15.2 +- 1.7
29	186 12.0	22.1 +- 0.7; 3.3	18.2 +- 0.6; 3.9	15.7 +- 1.4

Transit Dose = 0.7 +- 0.3; 3.1

CALVERT CLIFFS
For the period 970312-970722

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	14.3 +- 0.0	1
146.26 - 168.75 SSE	16.0 +- 1.5	2
168.76 - 191.25 S	15.8 +- 3.0	4
191.26 - 213.75 SSW	14.1 +- 1.4	3
213.76 - 236.25 SW	16.7 +- 1.2	2
236.26 - 258.75 WSW	15.2 +- 1.4	3
258.76 - 281.25 W	12.9 +- 0.2	2
281.26 - 303.75 WNW	15.7 +- 0.0	2
303.76 - 326.25 NW	14.6 +- 1.0	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	15.1 +- 2.1	6
2 - 5	15.1 +- 1.6	11
> 5	15.0 +- 2.0	5
Upwind Control	14.9 +- 2.1	3

NRC TLD DOSES FOR CALVERT CLIFFS AREA

Miles

0 2 4

Legend

Water
Highways

Railroads
Roads

Plant..site

CATAWBA

TLD Direct Radiation Environmental Monitoring

For the period 970311-970715 127 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	134	0.1	25.7	+- 0.8; 3.8	18.7	+- 0.9; 4.9	19.3	+- 1.8
2	162	0.4	21.1	+- 0.6; 3.2	14.2	+- 0.7; 4.4	15.9	+- 2.2
3	132	0.8	25.0	+- 0.7; 3.7	18.1	+- 0.8; 4.8	18.6	+- 1.8
4	111	1.3	23.7	+- 0.7; 3.6	16.8	+- 0.8; 4.7	16.1	+- 1.6
5	45	0.7	20.6	+- 0.6; 3.1	13.7	+- 0.7; 4.4	15.8	+- 1.8
6	298	1.3	23.9	+- 0.7; 3.6	16.9	+- 0.8; 4.7	17.7	+- 1.9
7	4	0.6	21.3	+- 0.6; 3.2	14.5	+- 0.8; 4.4	15.4	+- 2.0
8	332	1.5	25.0	+- 0.7; 3.7	18.0	+- 0.8; 4.8	19.1	+- 2.0
9	318	1.6	17.8	+- 0.5; 2.7	11.0	+- 0.7; 4.1	12.6	+- 2.2
10	176	1.8	21.9	+- 0.7; 3.3	15.0	+- 0.8; 4.5	16.5	+- 2.4
11	203	1.5	23.2	+- 0.7; 3.5	16.3	+- 0.8; 4.6	16.7	+- 1.8
12	225	1.5	20.2	+- 0.6; 3.0	13.4	+- 0.7; 4.3	16.8	+- 2.6
13	250	1.9	20.3	+- 0.6; 3.0	13.5	+- 0.7; 4.3	14.6	+- 2.3
14	270	1.4	17.4	+- 0.5; 2.6	10.6	+- 0.7; 4.1	12.5	+- 2.0
15	331	3.0	19.2	+- 0.6; 2.9	12.4	+- 0.7; 4.2	14.3	+- 1.9
16	311	3.9	19.9	+- 0.6; 3.0	13.1	+- 0.7; 4.3	13.4	+- 2.1
17	296	9.5	23.1	+- 0.7; 3.5	16.2	+- 0.8; 4.6	18.0	+- 2.1
18	324	4.8	19.0	+- 0.6; 2.9	12.2	+- 0.7; 4.2	15.1	+- 2.6
19	352	4.8	18.9	+- 0.6; 2.8	12.1	+- 0.7; 4.2	13.2	+- 2.0
20	22	4.0	21.7	+- 0.6; 3.2	14.8	+- 0.8; 4.5	16.8	+- 2.0
21	290	3.9	21.8	+- 0.7; 3.3	14.9	+- 0.8; 4.5	15.1	+- 1.6
22	266	4.0	20.8	+- 0.6; 3.1	13.9	+- 0.7; 4.4	16.1	+- 2.1
23	251	4.0	18.8	+- 0.6; 2.8	12.0	+- 0.7; 4.2	11.7	+- 2.1
24	229	3.9	19.2	+- 0.6; 2.9	12.4	+- 0.7; 4.2	12.4	+- 2.0
25	202	4.4	22.9	+- 0.7; 3.4	16.0	+- 0.8; 4.6	17.2	+- 1.5
26	51	4.3	24.1	+- 0.7; 3.6	17.1	+- 0.8; 4.7	18.3	+- 1.4
27	64	7.9	19.0	+- 0.6; 2.8	12.2	+- 0.7; 4.2	12.2	+- 1.7
28	61	4.9	22.3	+- 0.7; 3.3	15.4	+- 0.8; 4.5	15.6	+- 1.9
29	49	1.9	19.4	+- 0.6; 2.9	12.6	+- 0.7; 4.3	14.8	+- 2.7
30	64	1.8	21.3	+- 0.6; 3.2	14.4	+- 0.7; 4.4	15.0	+- 1.6
31	87	1.6	19.7	+- 0.6; 3.0	12.9	+- 0.7; 4.3	14.5	+- 1.8
32	121	2.6	21.6	+- 0.6; 3.2	14.8	+- 0.8; 4.5	15.5	+- 1.7
33	114	7.6	19.0	+- 0.6; 2.9	12.2	+- 0.7; 4.2	14.2	+- 2.4
34	93	4.5	24.1	+- 0.7; 3.6	17.2	+- 0.8; 4.7	17.4	+- 2.3
35	132	4.3	25.6	+- 0.8; 3.8	18.7	+- 0.9; 4.9	20.7	+- 1.5
36	163	8.9	20.6	+- 0.6; 3.1	13.8	+- 0.7; 4.4	12.6	+- 1.7
37	173	4.9	19.5	+- 0.6; 2.9	12.7	+- 0.7; 4.3	13.9	+- 1.2
38	157	4.6	24.6	+- 0.7; 3.7	17.7	+- 0.8; 4.8	18.3	+- 0.9
39	248	10.0	24.2	+- 0.7; 3.6	17.3	+- 0.8; 4.8	16.2	+- 2.7
40	229	12.0	21.9	+- 0.7; 3.3	15.0	+- 0.8; 4.5	15.3	+- 1.2
41	218	13.0	17.3	+- 0.5; 2.6	10.5	+- 0.7; 4.1	12.7	+- 2.8
42	213	16.0	19.4	+- 0.6; 2.9	12.6	+- 0.7; 4.3	15.4	+- 1.3

Transit Dose = 6.5 +- 0.4; 3.2

CATAWBA

For the period 970311-970715

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	13.3 +- 1.7	2
11.26 - 33.75 NNE	14.8 +- 0.0	1
33.76 - 56.25 NE	14.5 +- 2.4	3
56.26 - 78.75 ENE	14.0 +- 1.7	3
78.76 - 101.25 E	15.1 +- 3.1	2
101.26 - 123.75 ESE	14.6 +- 2.3	3
123.76 - 146.25 SE	18.5 +- 0.4	3
146.26 - 168.75 SSE	15.2 +- 2.2	3
168.76 - 191.25 S	13.9 +- 1.6	2
191.26 - 213.75 SSW	16.1 +- 0.2	2
213.76 - 236.25 SW	12.9 +- 0.7	2
236.26 - 258.75 WSW	14.3 +- 2.7	3
258.76 - 281.25 W	12.3 +- 2.3	2
281.26 - 303.75 WNW	16.0 +- 1.0	3
303.76 - 326.25 NW	12.1 +- 1.1	3
326.26 - 348.75 NNW	15.2 +- 4.0	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	14.6 +- 2.2	17
> 5	14.4 +- 2.3	5
Upwind Control	12.7 +- 2.2	3

NRC TLD DOSES FOR CATAWBA AREA

Miles

Legend

Water
Highways

Railroads
Roads

Plant..site

CLINTON

TLD Direct Radiation Environmental Monitoring

For the period 970310-970716 129 Days

Field Time: 110 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	22.3	+- 0.7; 3.4	17.2	+- 0.6; 3.9	18.9	+- 2.3
2	40	0.7	23.9	+- 0.7; 3.6	18.5	+- 0.6; 4.0	18.8	+- 1.2
3	35	0.8	28.5	+- 0.9; 4.3	22.2	+- 0.7; 4.4	21.4	+- 1.7
4	163	0.5	24.2	+- 0.7; 3.6	18.7	+- 0.6; 4.0	19.1	+- 1.5
5	210	0.5	24.1	+- 0.7; 3.6	18.6	+- 0.6; 4.0	19.4	+- 1.5
6	223	0.6	24.1	+- 0.7; 3.6	18.6	+- 0.6; 4.0	19.4	+- 1.4
7	235	0.8	Missing Dosimeter		No Net Data		18.9	+- 1.3
8	62	1.9	Missing Dosimeter		No Net Data		18.4	+- 1.4
9	78	1.8	22.8	+- 0.7; 3.4	17.6	+- 0.6; 3.9	18.3	+- 1.3
10	79	2.6	24.3	+- 0.7; 3.6	18.8	+- 0.6; 4.0	18.5	+- 1.8
11	100	2.3	23.8	+- 0.7; 3.6	18.4	+- 0.6; 4.0	18.7	+- 1.3
12	115	3.0	23.2	+- 0.7; 3.5	17.9	+- 0.6; 3.9	16.9	+- 2.1
13	127	3.2	Missing Dosimeter		No Net Data		18.6	+- 1.4
14	155	2.1	23.3	+- 0.7; 3.5	18.0	+- 0.6; 3.9	19.0	+- 1.3
15	185	3.0	20.5	+- 0.6; 3.1	15.7	+- 0.6; 3.7	18.6	+- 1.9
16	203	3.2	19.3	+- 0.6; 2.9	14.7	+- 0.5; 3.6	17.7	+- 1.4
17	230	3.7	24.2	+- 0.7; 3.6	18.7	+- 0.6; 4.0	18.5	+- 1.6
18	255	2.8	22.8	+- 0.7; 3.4	17.5	+- 0.6; 3.9	19.2	+- 1.3
19	275	2.3	Missing Dosimeter		No Net Data		18.6	+- 1.2
20	302	0.9	23.1	+- 0.7; 3.5	17.8	+- 0.6; 3.9	18.2	+- 1.3
21	336	0.8	22.8	+- 0.7; 3.4	17.5	+- 0.6; 3.9	18.0	+- 1.4
22	0	0.6	20.3	+- 0.6; 3.1	15.5	+- 0.6; 3.7	18.4	+- 1.4
23	358	4.6	Missing Dosimeter		No Net Data		19.2	+- 1.5
24	20	3.9	Missing Dosimeter		No Net Data		18.3	+- 1.3
25	46	5.0	24.4	+- 0.7; 3.7	18.9	+- 0.7; 4.0	19.0	+- 1.2
26	62	5.5	21.1	+- 0.6; 3.2	16.2	+- 0.6; 3.7	16.9	+- 1.2
27	90	4.8	Missing Dosimeter		No Net Data		17.8	+- 1.5
28	115	5.2	21.6	+- 0.6; 3.2	16.6	+- 0.6; 3.8	17.5	+- 1.2
29	128	5.1	22.8	+- 0.7; 3.4	17.6	+- 0.6; 3.9	18.1	+- 1.3
30	153	5.8	23.9	+- 0.7; 3.6	18.5	+- 0.6; 4.0	18.6	+- 1.5
31	173	5.2	Missing Dosimeter		No Net Data		18.0	+- 1.3
32	205	4.7	23.3	+- 0.7; 3.5	18.0	+- 0.6; 3.9	18.2	+- 1.4
33	238	6.1	Missing Dosimeter		No Net Data		18.3	+- 1.4
34	252	5.8	21.7	+- 0.7; 3.3	16.6	+- 0.6; 3.8	17.5	+- 2.1
35	260	6.6	18.3	+- 0.5; 2.7	13.9	+- 0.5; 3.5	14.9	+- 1.4
36	272	4.8	22.4	+- 0.7; 3.4	17.2	+- 0.6; 3.9	18.6	+- 1.4
37	288	4.8	22.6	+- 0.7; 3.4	17.4	+- 0.6; 3.9	17.5	+- 1.4
38	297	7.6	21.2	+- 0.6; 3.2	16.2	+- 0.6; 3.8	16.2	+- 1.3
39	315	5.1	23.2	+- 0.7; 3.5	17.8	+- 0.6; 3.9	18.4	+- 1.7
40	342	4.8	Missing Dosimeter		No Net Data		18.3	+- 1.3
41	65	12.0	19.8	+- 0.6; 3.0	15.1	+- 0.5; 3.6	17.7	+- 1.8
42	148	12.0	27.5	+- 0.8; 4.1	21.4	+- 0.7; 4.3	18.9	+- 2.5
43	148	12.0	27.8	+- 0.8; 4.2	21.7	+- 0.7; 4.4	19.4	+- 2.2
44	206	14.0	20.7	+- 0.6; 3.1	15.8	+- 0.6; 3.7	15.8	+- 1.3

Transit Dose = 1.3 +- 0.3; 3.3

CLINTON

For the period 970310-970716

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	16.4 +- 1.2	2
11.26 - 33.75 NNE	No Data +- No Data	0
33.76 - 56.25 NE	19.9 +- 2.1	3
56.26 - 78.75 ENE	16.3 +- 1.2	3
78.76 - 101.25 E	18.6 +- 0.3	2
101.26 - 123.75 ESE	17.2 +- 0.9	2
123.76 - 146.25 SE	17.5 +- 0.0	1
146.26 - 168.75 SSE	18.4 +- 0.4	3
168.76 - 191.25 S	15.7 +- 0.0	1
191.26 - 213.75 SSW	17.1 +- 2.1	3
213.76 - 236.25 SW	18.6 +- 0.0	2
236.26 - 258.75 WSW	17.1 +- 0.6	2
258.76 - 281.25 W	15.6 +- 2.4	2
281.26 - 303.75 WNW	17.1 +- 0.8	3
303.76 - 326.25 NW	17.8 +- 0.0	1
326.26 - 348.75 NNW	17.5 +- 0.0	1

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	18.2 +- 1.7	10
2 - 5	17.6 +- 1.3	12
> 5	16.5 +- 1.4	9
Upwind Control	19.6 +- 3.3	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 970310-970805 149 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	306	1.4	20.6 +- 0.6; 3.1		14.7 +- 0.6; 3.9		15.4 +- 1.1	
2	285	1.5	22.4 +- 0.7; 3.4		16.3 +- 0.7; 4.0		16.1 +- 1.1	
3	268	1.1	19.3 +- 0.6; 2.9		13.6 +- 0.6; 3.8		14.0 +- 0.8	
4	253	0.9	20.5 +- 0.6; 3.1		14.7 +- 0.6; 3.9		15.4 +- 1.0	
5	218	1.0	20.5 +- 0.6; 3.1		14.7 +- 0.6; 3.9		15.5 +- 0.9	
6	200	1.0	19.5 +- 0.6; 2.9		13.8 +- 0.6; 3.8		13.8 +- 1.2	
7	180	1.4	20.4 +- 0.6; 3.1		14.5 +- 0.6; 3.9		14.0 +- 1.0	
8	163	1.6	20.8 +- 0.6; 3.1		14.9 +- 0.6; 3.9		16.0 +- 1.6	
9	140	1.3	22.2 +- 0.7; 3.3		16.1 +- 0.7; 4.0		15.7 +- 0.8	
10	118	1.5	20.2 +- 0.6; 3.0		14.4 +- 0.6; 3.8		14.1 +- 1.2	
11	93	1.9	25.0 +- 0.7; 3.7		18.5 +- 0.7; 4.3		15.5 +- 2.6	
12	73	2.4	23.7 +- 0.7; 3.5		17.4 +- 0.7; 4.2		17.3 +- 1.0	
13	245	1.7	20.9 +- 0.6; 3.1		15.0 +- 0.6; 3.9		14.3 +- 1.0	
14	156	4.3	20.7 +- 0.6; 3.1		14.8 +- 0.6; 3.9		13.9 +- 1.1	
15	186	7.0	20.1 +- 0.6; 3.0		14.3 +- 0.6; 3.8		15.1 +- 1.3	
16	183	4.1	20.7 +- 0.6; 3.1		14.8 +- 0.6; 3.9		15.5 +- 1.3	
17	205	4.3	21.6 +- 0.6; 3.2		15.6 +- 0.6; 4.0		15.5 +- 0.8	
18	225	3.4	19.6 +- 0.6; 2.9		13.9 +- 0.6; 3.8		13.0 +- 1.1	
19	245	5.2	21.5 +- 0.6; 3.2		15.6 +- 0.6; 4.0		15.5 +- 0.8	
20	264	5.8	20.5 +- 0.6; 3.1		14.6 +- 0.6; 3.9		14.0 +- 0.9	
21	258	3.2	20.2 +- 0.6; 3.0		14.4 +- 0.6; 3.9		14.0 +- 1.0	
22	284	5.1	19.3 +- 0.6; 2.9		13.7 +- 0.6; 3.8		13.6 +- 1.0	
23	313	5.8	21.9 +- 0.7; 3.3		15.8 +- 0.6; 4.0		15.2 +- 1.0	
24	332	4.9	20.5 +- 0.6; 3.1		14.7 +- 0.6; 3.9		14.4 +- 0.9	
25	9	4.6	20.7 +- 0.6; 3.1		14.8 +- 0.6; 3.9		15.0 +- 1.0	
26	26	4.5	21.2 +- 0.6; 3.2		15.3 +- 0.6; 3.9		14.7 +- 1.1	
27	47	4.1	21.1 +- 0.6; 3.2		15.2 +- 0.6; 3.9		14.5 +- 1.1	
28	6	1.8	21.0 +- 0.6; 3.1		15.1 +- 0.6; 3.9		15.1 +- 1.1	
29	16	1.9	18.8 +- 0.6; 2.8		13.2 +- 0.6; 3.7		14.7 +- 1.0	
30	102	3.0	21.4 +- 0.6; 3.2		15.5 +- 0.6; 4.0		15.8 +- 1.3	
31	108	3.9	20.5 +- 0.6; 3.1		14.7 +- 0.6; 3.9		14.9 +- 1.0	
32	135	4.6	20.8 +- 0.6; 3.1		14.9 +- 0.6; 3.9		15.6 +- 1.1	
33	152	6.3	20.3 +- 0.6; 3.0		14.5 +- 0.6; 3.9		13.9 +- 1.1	
34	47	2.9	18.1 +- 0.5; 2.7		12.6 +- 0.6; 3.7		13.7 +- 1.3	
35	85	4.8	20.4 +- 0.6; 3.1		14.6 +- 0.6; 3.9		15.1 +- 1.1	
36	115	7.5	21.0 +- 0.6; 3.2		15.1 +- 0.6; 3.9		15.3 +- 1.2	
37	355	9.4	21.3 +- 0.6; 3.2		15.4 +- 0.6; 3.9		14.4 +- 1.1	
38	337	9.2	20.6 +- 0.6; 3.1		14.7 +- 0.6; 3.9		14.3 +- 1.1	
39	310	9.9	18.2 +- 0.5; 2.7		12.7 +- 0.6; 3.7		14.3 +- 1.2	
40	302	8.1	20.4 +- 0.6; 3.1		14.6 +- 0.6; 3.9		13.8 +- 1.2	
41	248	7.9	23.0 +- 0.7; 3.5		16.8 +- 0.7; 4.1		15.9 +- 1.0	
42	90	0.5	20.7 +- 0.6; 3.1		14.8 +- 0.6; 3.9		14.5 +- 1.6	
43	18	9.8	20.6 +- 0.6; 3.1		14.7 +- 0.6; 3.9		14.9 +- 1.0	
44	263	1.7	18.3 +- 0.5; 2.7		12.8 +- 0.6; 3.7		13.9 +- 1.8	
45	218	12.0	21.0 +- 0.6; 3.1		15.1 +- 0.6; 3.9		14.9 +- 0.9	
46	140	12.0	Missing Dosimeter		No Net Data		14.9 +- 1.0	
47	301	21.0	20.7 +- 0.6; 3.1		14.8 +- 0.6; 3.9		14.6 +- 0.9	

Transit Dose = 3.4 +- 0.4; 3.3

COMANCHE PEAK
For the period 970310-970805

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 +- 0.3	3
11.26 - 33.75 NNE	14.4 +- 1.1	3
33.76 - 56.25 NE	13.9 +- 1.8	2
56.26 - 78.75 ENE	17.4 +- 0.0	1
78.76 - 101.25 E	16.0 +- 2.2	3
101.26 - 123.75 ESE	14.9 +- 0.5	4
123.76 - 146.25 SE	15.5 +- 0.9	2
146.26 - 168.75 SSE	14.7 +- 0.2	3
168.76 - 191.25 S	14.6 +- 0.3	3
191.26 - 213.75 SSW	14.7 +- 1.3	2
213.76 - 236.25 SW	14.5 +- 0.6	3
236.26 - 258.75 WSW	15.3 +- 0.9	5
258.76 - 281.25 W	13.7 +- 0.9	3
281.26 - 303.75 WNW	14.8 +- 1.1	4
303.76 - 326.25 NW	14.4 +- 1.6	3
326.26 - 348.75 NNW	14.7 +- 0.0	2

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	14.8 +- 1.3	16
2 - 5	14.9 +- 1.0	15
> 5	14.8 +- 0.9	15
Upwind Control	No Data +- No Data	0

NRC TLD DOSES FOR COMANCHE PEAK AREA

Miles

0 2 4

Legend

Water
Highways

Railroads
Roads

Plant site

COOPER

TLD Direct Radiation Environmental Monitoring

For the period 970307-970805 152 Days

Field Time: 93 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 *	350	2.3	41.5 +- 1.2; 6.2		32.6 +- 1.3; 6.9		18.2 +- 1.6	
2	6	3.5	28.2 +- 0.8; 4.2		19.7 +- 0.9; 5.2		19.0 +- 1.2	
3	18	2.7	28.8 +- 0.9; 4.3		20.3 +- 0.9; 5.3		19.6 +- 1.5	
4	16	3.2	29.4 +- 0.9; 4.4		20.9 +- 1.0; 5.4		19.8 +- 1.5	
5	47	1.9	28.2 +- 0.8; 4.2		19.7 +- 0.9; 5.3		19.5 +- 1.4	
6	40	3.6	28.4 +- 0.9; 4.3		19.9 +- 0.9; 5.3		18.8 +- 1.7	
7	75	2.7	28.7 +- 0.9; 4.3		20.2 +- 0.9; 5.3		18.8 +- 1.9	
8	55	2.8	27.7 +- 0.8; 4.2		19.2 +- 0.9; 5.2		18.8 +- 1.9	
9	80	2.1	28.7 +- 0.9; 4.3		20.2 +- 0.9; 5.3		20.4 +- 1.7	
10	98	3.7	27.3 +- 0.8; 4.1		18.8 +- 0.9; 5.1		18.6 +- 1.4	
11	118	2.3	29.0 +- 0.9; 4.4		20.5 +- 1.0; 5.3		20.2 +- 1.6	
12	109	4.6	27.3 +- 0.8; 4.1		18.8 +- 0.9; 5.1		19.8 +- 1.3	
13	141	3.2	Missing Dosimeter		No Net Data		19.5 +- 1.3	
14	126	5.6	28.7 +- 0.9; 4.3		20.1 +- 0.9; 5.3		18.4 +- 1.8	
15	159	2.7	26.2 +- 0.8; 3.9		17.8 +- 0.9; 5.0		18.8 +- 1.4	
16	167	4.9	24.0 +- 0.7; 3.6		15.6 +- 0.8; 4.8		19.1 +- 2.5	
17	205	0.3	30.6 +- 0.9; 4.6		22.0 +- 1.0; 5.5		19.5 +- 1.9	
18	186	4.7	28.9 +- 0.9; 4.3		20.4 +- 1.0; 5.3		20.4 +- 1.6	
19	213	3.0	27.1 +- 0.8; 4.1		18.6 +- 0.9; 5.1		19.4 +- 1.4	
20	195	4.9	29.6 +- 0.9; 4.4		21.0 +- 1.0; 5.4		20.5 +- 1.7	
21	222	2.0	27.6 +- 0.8; 4.1		19.1 +- 0.9; 5.2		18.5 +- 1.4	
22	215	5.7	30.0 +- 0.9; 4.5		21.4 +- 1.0; 5.5		20.4 +- 1.7	
23	256	1.5	29.6 +- 0.9; 4.4		21.0 +- 1.0; 5.4		20.1 +- 1.7	
24	238	5.2	30.3 +- 0.9; 4.5		21.7 +- 1.0; 5.5		20.1 +- 1.6	
25	276	2.2	28.6 +- 0.9; 4.3		20.1 +- 0.9; 5.3		20.5 +- 1.4	
26	260	3.8	29.3 +- 0.9; 4.4		20.8 +- 1.0; 5.4		20.7 +- 1.4	
27	301	1.8	29.9 +- 0.9; 4.5		21.4 +- 1.0; 5.4		20.2 +- 1.5	
28	286	4.3	28.0 +- 0.8; 4.2		19.5 +- 0.9; 5.2		20.0 +- 1.8	
29	324	2.8	28.8 +- 0.9; 4.3		20.2 +- 0.9; 5.3		19.3 +- 2.2	
30	333	3.7	28.9 +- 0.9; 4.3		20.4 +- 1.0; 5.3		19.9 +- 1.5	
31	343	2.6	29.6 +- 0.9; 4.4		21.0 +- 1.0; 5.4		20.4 +- 1.8	
32	333	3.7	28.5 +- 0.9; 4.3		20.0 +- 0.9; 5.3		19.9 +- 2.0	
33	215	1.0	29.5 +- 0.9; 4.4		20.9 +- 1.0; 5.4		20.2 +- 2.2	
34	175	18.0	31.6 +- 0.9; 4.7		23.0 +- 1.0; 5.6		20.5 +- 2.1	
35	333	23.0	28.3 +- 0.8; 4.2		19.8 +- 0.9; 5.3		18.9 +- 1.8	
36	210	19.0	30.1 +- 0.9; 4.5		21.5 +- 1.0; 5.5		20.0 +- 2.4	
37	64	7.0	31.5 +- 0.9; 4.7		22.8 +- 1.0; 5.6		23.1 +- 3.2	
38	329	9.0	31.7 +- 1.0; 4.8		23.1 +- 1.0; 5.7		21.6 +- 2.8	
39	273	10.0	28.3 +- 0.8; 4.2		19.8 +- 0.9; 5.3		19.3 +- 1.9	
40	300	2.5	30.6 +- 0.9; 4.6		22.0 +- 1.0; 5.5		22.3 +- 2.2	
42	93	3.5	27.6 +- 0.8; 4.1		19.1 +- 0.9; 5.2		19.2 +- 1.6	
43	270	2.2	29.7 +- 0.9; 4.5		21.1 +- 1.0; 5.4		19.9 +- 1.7	

Transit Dose = 7.9 +- 0.5; 3.4

* The result for this location was outside the expected range because it was in place for two quarters. Refer to the preface of this report for more information.

COOPER

For the period 970307-970805

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	26.1 +- 9.1	2
11.26 - 33.75 NNE	20.6 +- 0.4	2
33.76 - 56.25 NE	19.6 +- 0.3	3
56.26 - 78.75 ENE	21.5 +- 1.9	2
78.76 - 101.25 E	19.4 +- 0.7	3
101.26 - 123.75 ESE	19.6 +- 1.2	2
123.76 - 146.25 SE	20.1 +- 0.0	1
146.26 - 168.75 SSE	16.7 +- 1.5	2
168.76 - 191.25 S	20.4 +- 0.0	1
191.26 - 213.75 SSW	20.5 +- 1.7	3
213.76 - 236.25 SW	20.5 +- 1.2	3
236.26 - 258.75 WSW	21.4 +- 0.5	2
258.76 - 281.25 W	20.4 +- 0.6	4
281.26 - 303.75 WNW	21.0 +- 1.3	3
303.76 - 326.25 NW	20.2 +- 0.0	1
326.26 - 348.75 NNW	21.1 +- 1.4	4

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	20.7 +- 1.1	6
2 - 5	20.3 +- 2.8	26
> 5	21.5 +- 1.4	6
Upwind Control	21.4 +- 1.6	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 970311-970723 135 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	
6	61	4.2	17.5 +- 0.5; 2.6		11.5 +- 0.6; 4.0		11.8 +- 2.3	
7	50	3.8	16.7 +- 0.5; 2.5		10.7 +- 0.6; 3.9		12.0 +- 2.5	
8	20	5.2	18.5 +- 0.6; 2.8		12.5 +- 0.7; 4.1		12.5 +- 2.3	
9	6	5.4	19.5 +- 0.6; 2.9		13.4 +- 0.7; 4.2		14.4 +- 2.3	
10	348	5.0	19.9 +- 0.6; 3.0		13.8 +- 0.7; 4.2		13.7 +- 2.2	
11	334	4.8	17.2 +- 0.5; 2.6		11.2 +- 0.6; 4.0		13.0 +- 2.4	
12	318	4.8	18.2 +- 0.5; 2.7		12.2 +- 0.7; 4.1		12.7 +- 2.6	
13	79	3.8	17.8 +- 0.5; 2.7		11.8 +- 0.7; 4.0		13.1 +- 2.4	
14	95	4.1	17.4 +- 0.5; 2.6		11.4 +- 0.6; 4.0		12.5 +- 2.6	
15	89	1.8	20.7 +- 0.6; 3.1		14.7 +- 0.7; 4.3		15.1 +- 2.4	
16	113	5.0	18.1 +- 0.5; 2.7		12.1 +- 0.7; 4.1		11.9 +- 1.5	
17	133	5.5	17.7 +- 0.5; 2.7		11.7 +- 0.6; 4.0		13.6 +- 2.8	
18	74	8.1	18.1 +- 0.5; 2.7		12.1 +- 0.7; 4.1		12.3 +- 2.5	
19	127	7.6	18.2 +- 0.5; 2.7		12.2 +- 0.7; 4.1		12.7 +- 2.3	
20	150	12.0	17.3 +- 0.5; 2.6		11.3 +- 0.6; 4.0		11.7 +- 2.4	
21	159	13.0	18.3 +- 0.5; 2.7		12.2 +- 0.7; 4.1		12.8 +- 2.6	
22	150	13.0	18.3 +- 0.5; 2.7		12.3 +- 0.7; 4.1		12.7 +- 2.6	
23	150	21.0	17.0 +- 0.5; 2.5		11.0 +- 0.6; 4.0		13.7 +- 3.5	
24	150	21.0	17.2 +- 0.5; 2.6		11.2 +- 0.6; 4.0		11.7 +- 2.4	
25	56	6.1	18.2 +- 0.5; 2.7		12.2 +- 0.7; 4.1		14.2 +- 3.4	
26	357	5.2	18.4 +- 0.6; 2.8		12.4 +- 0.7; 4.1		13.2 +- 2.4	
27	90	13.0	18.2 +- 0.5; 2.7		12.1 +- 0.7; 4.1		12.9 +- 2.4	
28	140	4.8	17.9 +- 0.5; 2.7		11.9 +- 0.7; 4.1		13.2 +- 2.3	

Transit Dose = 5.8 +- 0.4; 3.2

CRYSTAL RIVER
For the period 970311-970723

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	12.9 +- 0.7	2
11.26 - 33.75 NNE	12.5 +- 0.0	1
33.76 - 56.25 NE	11.4 +- 1.1	2
56.26 - 78.75 ENE	11.8 +- 0.4	2
78.76 - 101.25 E	12.5 +- 1.5	4
101.26 - 123.75 ESE	12.1 +- 0.0	1
123.76 - 146.25 SE	11.9 +- 0.2	3
146.26 - 168.75 SSE	11.8 +- 0.6	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	12.2 +- 0.0	1
326.26 - 348.75 NNW	12.5 +- 1.8	2

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	14.7 +- 0.0	1
2 - 5	11.8 +- 0.9	9
> 5	12.2 +- 0.5	10
Upwind Control	11.5 +- 0.7	3

NRC TLD DOSES FOR CRYSTAL RIVER AREA

Miles

Legend

Water

Highways

Railroads

Roads

Plant..site

DAVIS BESSE

TLD Direct Radiation Environmental Monitoring

For the period 970311-970708 120 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	50	0.6	13.8 +- 0.4; 2.1	11.3 +- 0.5; 3.4	12.4 +- 1.3
2	86	0.9	15.4 +- 0.5; 2.3	12.9 +- 0.5; 3.5	13.8 +- 1.2
3	116	1.4	15.0 +- 0.5; 2.3	12.5 +- 0.5; 3.5	13.1 +- 1.2
4	172	0.8	16.3 +- 0.5; 2.4	13.7 +- 0.5; 3.6	15.8 +- 1.8
5	200	1.5	21.5 +- 0.6; 3.2	18.7 +- 0.7; 4.1	19.5 +- 1.8
6	226	1.0	18.1 +- 0.5; 2.7	15.4 +- 0.6; 3.8	16.3 +- 1.3
7	249	1.5	19.6 +- 0.6; 2.9	16.9 +- 0.6; 3.9	17.1 +- 1.3
8	267	1.8	20.4 +- 0.6; 3.1	17.7 +- 0.6; 4.0	17.1 +- 1.5
9	285	1.8	18.9 +- 0.6; 2.8	16.2 +- 0.6; 3.9	17.5 +- 1.5
10	306	1.5	16.7 +- 0.5; 2.5	14.1 +- 0.6; 3.7	14.9 +- 1.5
11	344	0.9	16.7 +- 0.5; 2.5	14.1 +- 0.6; 3.7	14.5 +- 1.1
12	142	4.5	Missing Dosimeter	No Net Data	18.3 +- 1.7
13	158	4.0	21.5 +- 0.6; 3.2	18.7 +- 0.7; 4.1	19.4 +- 1.6
14	180	3.8	20.1 +- 0.6; 3.0	17.4 +- 0.6; 4.0	16.4 +- 1.5
15	207	4.8	19.8 +- 0.6; 3.0	17.1 +- 0.6; 4.0	17.5 +- 2.0
16	225	4.5	19.6 +- 0.6; 2.9	16.9 +- 0.6; 3.9	17.5 +- 1.6
17	254	2.7	22.9 +- 0.7; 3.4	20.0 +- 0.7; 4.3	20.9 +- 1.7
18	269	3.0	19.5 +- 0.6; 2.9	16.8 +- 0.6; 3.9	17.9 +- 1.6
19	295	5.3	22.0 +- 0.7; 3.3	19.2 +- 0.7; 4.2	19.8 +- 1.7
20	25	0.5	13.7 +- 0.4; 2.0	11.2 +- 0.5; 3.4	12.6 +- 1.7
21	132	9.7	18.4 +- 0.6; 2.8	15.7 +- 0.6; 3.8	16.9 +- 1.3
22	210	6.5	18.6 +- 0.6; 2.8	15.9 +- 0.6; 3.8	17.5 +- 3.2

Transit Dose = 2.0 +- 0.3; 2.9

DAVIS BESSE

For the period 970311-970708

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	11.2 +- 0.0	1
33.76 - 56.25 NE	11.3 +- 0.0	1
56.26 - 78.75 ENE	No Data +- No Data	0
78.76 - 101.25 E	12.9 +- 0.0	1
101.26 - 123.75 ESE	12.5 +- 0.0	1
123.76 - 146.25 SE	No Data +- No Data	0
146.26 - 168.75 SSE	18.7 +- 0.0	1
168.76 - 191.25 S	15.5 +- 2.6	2
191.26 - 213.75 SSW	17.9 +- 1.1	2
213.76 - 236.25 SW	16.1 +- 1.0	2
236.26 - 258.75 WSW	18.4 +- 2.2	2
258.76 - 281.25 W	17.2 +- 0.6	2
281.26 - 303.75 WNW	17.7 +- 2.1	2
303.76 - 326.25 NW	14.1 +- 0.0	1
326.26 - 348.75 NNW	14.1 +- 0.0	1

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	14.5 +- 2.4	12
2 - 5	17.8 +- 1.3	6
> 5	19.2 +- 0.0	1
Upwind Control	15.8 +- 0.1	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 970311-970723 135 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	54 1.7	17.5 +- 0.5; 2.6	12.8 +- 0.6; 3.9	13.6 +- 0.8
2	67 1.3	22.6 +- 0.7; 3.4	17.7 +- 0.7; 4.4	16.1 +- 2.2
3	89 1.1	16.3 +- 0.5; 2.4	11.7 +- 0.6; 3.8	12.5 +- 0.9
4	58 0.7	16.6 +- 0.5; 2.5	11.9 +- 0.6; 3.8	12.5 +- 0.7
5	19 2.3	18.2 +- 0.5; 2.7	13.5 +- 0.6; 4.0	13.5 +- 0.7
6	111 1.6	Missing Dosimeter	No Net Data	13.5 +- 0.9
7	135 1.5	17.4 +- 0.5; 2.6	12.7 +- 0.6; 3.9	12.9 +- 0.9
8	158 1.4	21.3 +- 0.6; 3.2	16.5 +- 0.7; 4.3	15.4 +- 2.4
9	171 1.9	18.6 +- 0.6; 2.8	13.9 +- 0.6; 4.0	12.8 +- 0.8
10	199 1.5	18.9 +- 0.6; 2.8	14.1 +- 0.6; 4.0	13.0 +- 0.7
11	195 3.9	Missing Dosimeter	No Net Data	13.0 +- 0.8
12	200 6.6	18.4 +- 0.6; 2.8	13.7 +- 0.6; 4.0	13.5 +- 1.1
13	179 3.9	21.5 +- 0.6; 3.2	16.6 +- 0.7; 4.3	16.0 +- 1.2
14	151 4.4	20.6 +- 0.6; 3.1	15.8 +- 0.7; 4.2	17.0 +- 1.1
15	130 4.6	23.2 +- 0.7; 3.5	18.3 +- 0.8; 4.5	17.3 +- 1.0
16	110 3.7	20.1 +- 0.6; 3.0	15.3 +- 0.7; 4.1	15.0 +- 1.1
17	88 3.6	Missing Dosimeter	No Net Data	14.0 +- 0.8
18	67 3.8	18.6 +- 0.6; 2.8	13.9 +- 0.6; 4.0	14.2 +- 1.6
19	24 3.8	Missing Dosimeter	No Net Data	12.8 +- 1.1
20	43 3.3	19.8 +- 0.6; 3.0	15.1 +- 0.7; 4.1	15.6 +- 2.4
21	26 9.9	22.4 +- 0.7; 3.4	17.6 +- 0.7; 4.4	17.2 +- 3.2
22	121 18.0	19.0 +- 0.6; 2.8	14.2 +- 0.7; 4.0	14.0 +- 0.9
23	121 18.0	19.3 +- 0.6; 2.9	14.6 +- 0.7; 4.1	14.3 +- 1.0
24	121 18.0	18.5 +- 0.6; 2.8	13.8 +- 0.6; 4.0	15.5 +- 2.0

Transit Dose = 4.3 +- 0.4; 3.0

DC COOK

For the period 970311-970723

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	15.5 +- 2.9	2
33.76 - 56.25 NE	13.9 +- 1.6	2
56.26 - 78.75 ENE	14.5 +- 3.0	3
78.76 - 101.25 E	11.7 +- 0.0	1
101.26 - 123.75 ESE	15.3 +- 0.0	1
123.76 - 146.25 SE	15.5 +- 4.0	2
146.26 - 168.75 SSE	16.2 +- 0.5	2
168.76 - 191.25 S	15.3 +- 1.9	2
191.26 - 213.75 SSW	13.9 +- 0.3	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	13.9 +- 2.2	8
2 - 5	15.5 +- 1.6	7
> 5	15.6 +- 2.7	2
Upwind Control	14.2 +- 0.4	3

NRC TLD DOSES FOR D.C. COOK AREA

Miles

0 2 4

Legend

Water

Highways

Railroads

Roads

Plant site

DIABLO CANYON

TLD Direct Radiation Environmental Monitoring

For the period 970401-970729 120 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	132 0.9	Missing Dosimeter	No Net Data	23.2 +- 1.2
2	119 3.9	25.4 +- 0.8; 3.8	21.0 +- 0.8; 4.6	21.1 +- 1.1
3	107 7.2	24.3 +- 0.7; 3.6	19.9 +- 0.7; 4.4	19.4 +- 1.3
4	111 10.3	22.9 +- 0.7; 3.4	18.6 +- 0.7; 4.3	18.5 +- 1.0
5	115 13.9	Missing Dosimeter	No Net Data	19.6 +- 1.5
6	68 9.4	22.5 +- 0.7; 3.4	18.3 +- 0.7; 4.3	18.8 +- 0.0
7	359 11.1	20.2 +- 0.6; 3.0	16.1 +- 0.6; 4.0	16.2 +- 2.0
8	359 6.6	17.6 +- 0.5; 2.6	13.7 +- 0.6; 3.8	14.3 +- 1.4
9	339 4.8	17.0 +- 0.5; 2.6	13.1 +- 0.6; 3.7	13.4 +- 0.9
10	327 3.6	17.5 +- 0.5; 2.6	13.6 +- 0.6; 3.8	13.6 +- 1.2
11	325 1.2	18.7 +- 0.6; 2.8	14.7 +- 0.6; 3.9	14.3 +- 1.3
12	36 20.7	25.3 +- 0.8; 3.8	20.9 +- 0.8; 4.5	21.2 +- 1.2
13	36 20.7	26.5 +- 0.8; 4.0	22.0 +- 0.8; 4.7	20.8 +- 1.5
14	36 20.7	25.7 +- 0.8; 3.9	21.3 +- 0.8; 4.6	21.5 +- 1.4

Transit Dose = 3.0 +- 0.3; 3.0

DIABLO CANYON

For the period 970401-970729

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 +- 1.7	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	18.3 +- 0.0	1
78.76 - 101.25 E	No Data +- No Data	0
101.26 - 123.75 ESE	19.9 +- 1.2	3
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	14.7 +- 0.0	1
326.26 - 348.75 NNW	13.4 +- 0.3	2

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	14.7 +- 0.0	1
2 - 5	15.9 +- 4.4	3
> 5	17.3 +- 2.5	5
Upwind Control	21.4 +- 0.6	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 970310-970716 129 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	70	4.2	21.2	+- 0.6; 3.2	16.0	+- 0.7; 4.3	17.2	+- 1.7
2	76	3.9	18.7	+- 0.6; 2.8	13.5	+- 0.7; 4.1	16.0	+- 2.5
3	108	3.2	20.7	+- 0.6; 3.1	15.5	+- 0.7; 4.3	17.1	+- 1.5
4	142	1.3	18.4	+- 0.6; 2.8	13.2	+- 0.7; 4.0	14.6	+- 1.6
5	115	1.5	19.8	+- 0.6; 3.0	14.6	+- 0.7; 4.2	14.3	+- 1.6
6	180	1.9	20.6	+- 0.6; 3.1	15.4	+- 0.7; 4.3	17.3	+- 2.0
7	179	0.5	21.5	+- 0.6; 3.2	16.3	+- 0.7; 4.4	16.5	+- 1.5
8	180	0.7	18.6	+- 0.6; 2.8	13.4	+- 0.7; 4.1	14.4	+- 1.4
9	253	0.5	22.1	+- 0.7; 3.3	16.8	+- 0.7; 4.4	18.0	+- 1.5
10	254	1.3	26.2	+- 0.8; 3.9	20.9	+- 0.9; 4.9	24.4	+- 3.6
11	250	1.5	19.1	+- 0.6; 2.9	13.9	+- 0.7; 4.1	15.0	+- 2.2
12	263	2.1	21.9	+- 0.7; 3.3	16.7	+- 0.7; 4.4	17.9	+- 1.3
13	180	4.0	17.9	+- 0.5; 2.7	12.8	+- 0.6; 4.0	13.8	+- 1.4
14	158	4.8	19.6	+- 0.6; 2.9	14.4	+- 0.7; 4.2	15.0	+- 1.5
15	137	4.2	17.1	+- 0.5; 2.6	12.0	+- 0.6; 3.9	14.9	+- 2.1
16	134	8.4	18.1	+- 0.5; 2.7	12.9	+- 0.6; 4.0	14.6	+- 1.1
17	189	7.4	21.9	+- 0.7; 3.3	16.7	+- 0.7; 4.4	15.7	+- 1.6
18	203	4.1	16.0	+- 0.5; 2.4	10.9	+- 0.6; 3.8	13.3	+- 2.5
19	231	4.0	21.3	+- 0.6; 3.2	16.1	+- 0.7; 4.3	18.2	+- 2.4
20	244	6.4	Missing Dosimeter		No Net Data		16.1	+- 1.8
21	258	8.6	20.6	+- 0.6; 3.1	15.4	+- 0.7; 4.3	16.9	+- 1.6
22	269	4.4	16.6	+- 0.5; 2.5	11.4	+- 0.6; 3.9	14.6	+- 1.4
23	295	3.3	20.7	+- 0.6; 3.1	15.5	+- 0.7; 4.3	15.4	+- 1.4
24	311	3.9	22.4	+- 0.7; 3.4	17.1	+- 0.8; 4.5	16.4	+- 1.7
25	340	4.7	24.2	+- 0.7; 3.6	18.9	+- 0.8; 4.6	18.9	+- 2.1
26	7	4.4	18.8	+- 0.6; 2.8	13.6	+- 0.7; 4.1	15.7	+- 1.7
27	355	2.0	Missing Dosimeter		No Net Data		20.3	+- 1.7
28	327	1.7	25.8	+- 0.8; 3.9	20.4	+- 0.8; 4.8	20.9	+- 1.7
29	318	1.4	21.9	+- 0.7; 3.3	16.7	+- 0.7; 4.4	18.0	+- 2.0
30	295	2.0	18.4	+- 0.6; 2.8	13.2	+- 0.7; 4.0	15.0	+- 2.5
31	30	1.5	23.8	+- 0.7; 3.6	18.5	+- 0.8; 4.6	19.5	+- 2.1
32	48	1.9	26.6	+- 0.8; 4.0	21.2	+- 0.9; 4.9	20.7	+- 2.0
33	76	1.4	23.2	+- 0.7; 3.5	18.0	+- 0.8; 4.5	19.0	+- 2.2
34	90	1.4	20.5	+- 0.6; 3.1	15.3	+- 0.7; 4.2	17.7	+- 2.4
35	26	4.5	22.5	+- 0.7; 3.4	17.2	+- 0.8; 4.5	17.4	+- 1.9
36	42	3.6	20.7	+- 0.6; 3.1	15.5	+- 0.7; 4.3	16.0	+- 2.1
37	52	11.5	22.0	+- 0.7; 3.3	16.7	+- 0.7; 4.4	16.7	+- 2.5
38	274	21.5	21.9	+- 0.7; 3.3	16.7	+- 0.7; 4.4	17.8	+- 2.5
39	274	21.5	22.8	+- 0.7; 3.4	17.5	+- 0.8; 4.5	17.7	+- 2.0
40	275	21.5	22.8	+- 0.7; 3.4	17.6	+- 0.8; 4.5	19.0	+- 2.7

Transit Dose = 4.9 +- 0.4; 3.1

DRESDEN

For the period 970310-970716

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	17.9 +- 0.9	2
33.76 - 56.25 NE	17.8 +- 3.0	3
56.26 - 78.75 ENE	15.8 +- 2.2	3
78.76 - 101.25 E	15.3 +- 0.0	1
101.26 - 123.75 ESE	15.0 +- 0.6	2
123.76 - 146.25 SE	12.7 +- 0.7	3
146.26 - 168.75 SSE	14.4 +- 0.0	1
168.76 - 191.25 S	14.9 +- 1.7	5
191.26 - 213.75 SSW	10.9 +- 0.0	1
213.76 - 236.25 SW	16.1 +- 0.0	1
236.26 - 258.75 WSW	16.7 +- 3.0	4
258.76 - 281.25 W	14.1 +- 3.7	2
281.26 - 303.75 WNW	14.4 +- 1.6	2
303.76 - 326.25 NW	16.9 +- 0.3	2
326.26 - 348.75 NNW	19.6 +- 1.1	2

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	16.5 +- 2.8	15
2 - 5	14.8 +- 2.3	16
> 5	15.4 +- 1.8	4
Upwind Control	17.3 +- 0.5	3

NRC TLD DOSES FOR DRESDEN AREA

Miles

0 2 4

Legend

Water

Railroads

Plant site

Highways

Roads

DUANE ARNOLD

TLD Direct Radiation Environmental Monitoring

For the period 970310-970708 121 Days

Field Time: 84 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	17.4	+- 0.5; 2.6	17.9	+- 0.6; 3.9	16.4	+- 1.5
2	170	6.2	18.1	+- 0.5; 2.7	18.7	+- 0.6; 4.0	18.5	+- 1.4
3	180	3.5	15.6	+- 0.5; 2.3	16.0	+- 0.6; 3.7	15.4	+- 1.1
4	216	2.9	19.9	+- 0.6; 3.0	20.6	+- 0.7; 4.2	18.9	+- 1.5
5	201	2.5	15.7	+- 0.5; 2.3	16.1	+- 0.6; 3.7	15.4	+- 1.3
6	213	1.0	18.1	+- 0.5; 2.7	18.6	+- 0.6; 3.9	17.2	+- 1.5
7	248	1.0	19.9	+- 0.6; 3.0	20.6	+- 0.7; 4.2	19.0	+- 1.5
8	279	1.0	19.9	+- 0.6; 3.0	20.6	+- 0.7; 4.2	18.7	+- 1.5
9	298	1.0	20.6	+- 0.6; 3.1	21.3	+- 0.7; 4.3	19.7	+- 1.7
10	320	1.5	19.5	+- 0.6; 2.9	20.2	+- 0.7; 4.1	18.9	+- 1.7
11	343	1.0	20.0	+- 0.6; 3.0	20.7	+- 0.7; 4.2	19.5	+- 1.7
12	359	1.2	19.1	+- 0.6; 2.9	19.8	+- 0.7; 4.1	18.1	+- 1.5
13	237	0.5	19.0	+- 0.6; 2.8	19.6	+- 0.7; 4.1	17.5	+- 1.6
14	259	3.9	19.4	+- 0.6; 2.9	20.1	+- 0.7; 4.1	18.0	+- 1.8
15	272	5.0	15.2	+- 0.5; 2.3	15.5	+- 0.5; 3.6	15.1	+- 1.2
16	285	5.0	16.0	+- 0.5; 2.4	16.4	+- 0.6; 3.7	16.7	+- 1.3
17	308	4.5	18.0	+- 0.5; 2.7	18.6	+- 0.6; 3.9	18.7	+- 1.7
18	340	4.5	14.4	+- 0.4; 2.2	14.8	+- 0.5; 3.5	15.4	+- 1.6
19	291	15.0	17.2	+- 0.5; 2.6	17.7	+- 0.6; 3.9	17.3	+- 1.4
20	291	15.0	17.7	+- 0.5; 2.6	18.2	+- 0.6; 3.9	17.9	+- 1.6
21	291	15.0	18.0	+- 0.5; 2.7	18.6	+- 0.6; 3.9	16.8	+- 1.4
22	358	6.1	17.1	+- 0.5; 2.6	17.6	+- 0.6; 3.8	16.1	+- 1.3
23	7	2.9	16.2	+- 0.5; 2.4	16.7	+- 0.6; 3.7	15.5	+- 1.3
24	28	3.0	20.0	+- 0.6; 3.0	20.7	+- 0.7; 4.2	19.0	+- 1.7
25	39	3.5	18.4	+- 0.6; 2.8	19.0	+- 0.6; 4.0	17.5	+- 1.3
26	64	3.8	18.9	+- 0.6; 2.8	19.6	+- 0.7; 4.1	17.9	+- 1.3
27	50	1.9	16.3	+- 0.5; 2.4	16.7	+- 0.6; 3.7	15.8	+- 1.3
28	72	2.3	Damaged Dosimeter		No Net Data		17.5	+- 1.3
29	91	3.0	Missing Dosimeter		No Net Data		15.9	+- 1.2
30	93	1.8	19.8	+- 0.6; 3.0	20.5	+- 0.7; 4.2	19.3	+- 1.3
31	113	2.0	19.6	+- 0.6; 2.9	20.3	+- 0.7; 4.1	19.3	+- 1.5
32	141	1.6	16.2	+- 0.5; 2.4	16.7	+- 0.6; 3.7	15.5	+- 1.4
33	153	1.5	19.6	+- 0.6; 2.9	20.3	+- 0.7; 4.1	18.1	+- 1.6
34	177	1.2	14.5	+- 0.4; 2.2	14.8	+- 0.5; 3.5	15.4	+- 1.7
35	153	4.2	16.5	+- 0.5; 2.5	17.0	+- 0.6; 3.8	15.2	+- 1.5
36	135	4.1	17.1	+- 0.5; 2.6	17.6	+- 0.6; 3.8	16.5	+- 1.3
37	111	4.6	19.9	+- 0.6; 3.0	20.7	+- 0.7; 4.2	18.8	+- 1.5
38	123	5.1	18.5	+- 0.6; 2.8	19.1	+- 0.6; 4.0	18.8	+- 1.3
39	132	7.0	17.2	+- 0.5; 2.6	17.8	+- 0.6; 3.9	16.0	+- 1.3
40	139	7.6	Missing Dosimeter		No Net Data		17.0	+- 1.2

Transit Dose = 0.7 +- 0.2; 2.5

DUANE ARNOLD
For the period 970310-970708

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	18.0 +- 1.6	3
11.26 - 33.75 NNE	20.7 +- 0.0	1
33.76 - 56.25 NE	17.8 +- 1.6	2
56.26 - 78.75 ENE	19.6 +- 0.0	1
78.76 - 101.25 E	20.5 +- 0.0	1
101.26 - 123.75 ESE	20.0 +- 0.8	3
123.76 - 146.25 SE	17.3 +- 0.6	3
146.26 - 168.75 SSE	18.4 +- 1.7	3
168.76 - 191.25 S	16.5 +- 2.0	3
191.26 - 213.75 SSW	17.3 +- 1.8	2
213.76 - 236.25 SW	20.6 +- 0.0	1
236.26 - 258.75 WSW	20.1 +- 0.7	2
258.76 - 281.25 W	18.7 +- 2.8	3
281.26 - 303.75 WNW	18.9 +- 3.5	2
303.76 - 326.25 NW	19.4 +- 1.1	2
326.26 - 348.75 NNW	17.7 +- 4.2	2

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	19.3 +- 1.9	14
2 - 5	17.9 +- 2.1	15
> 5	18.2 +- 0.7	5
Upwind Control	18.2 +- 0.4	3

NRC TLD DOSES FOR DUANE ARNOLD AREA

Miles

Legend

Water
Highways

Railroads
Roads

Plant site

FARLEY

TLD Direct Radiation Environmental Monitoring

For the period 970311-970729 141 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	268	15.0	16.5	+- 0.5; 2.5	13.9	+- 0.6; 3.9	13.8	+- 2.5
2	252	7.8	17.6	+- 0.5; 2.6	15.0	+- 0.6; 4.0	14.0	+- 2.3
3	217	6.1	19.3	+- 0.6; 2.9	16.9	+- 0.7; 4.2	15.5	+- 2.1
4	155	5.7	23.2	+- 0.7; 3.5	21.0	+- 0.8; 4.7	18.9	+- 2.1
5	170	5.1	18.4	+- 0.6; 2.8	15.9	+- 0.7; 4.1	15.5	+- 2.1
6	197	4.5	18.3	+- 0.5; 2.7	15.8	+- 0.7; 4.1	14.4	+- 2.1
7	191	2.4	20.5	+- 0.6; 3.1	18.2	+- 0.7; 4.4	17.6	+- 2.5
8	200	1.8	19.3	+- 0.6; 2.9	16.8	+- 0.7; 4.2	15.6	+- 2.1
9	220	1.2	17.8	+- 0.5; 2.7	15.3	+- 0.7; 4.1	13.9	+- 2.2
10	235	0.9	20.3	+- 0.6; 3.0	17.9	+- 0.7; 4.3	16.3	+- 2.1
11	300	0.9	21.0	+- 0.6; 3.2	18.6	+- 0.7; 4.4	16.4	+- 2.1
12	319	1.1	18.4	+- 0.6; 2.8	15.9	+- 0.7; 4.1	16.2	+- 2.3
13	338	1.3	18.9	+- 0.6; 2.8	16.4	+- 0.7; 4.2	14.5	+- 2.0
14	6	1.2	17.8	+- 0.5; 2.7	15.3	+- 0.7; 4.1	14.8	+- 2.2
15	16	1.3	22.3	+- 0.7; 3.3	20.0	+- 0.8; 4.6	20.1	+- 2.4
16	264	1.6	18.4	+- 0.6; 2.8	15.9	+- 0.7; 4.1	14.9	+- 2.1
17	253	3.5	21.7	+- 0.7; 3.3	19.3	+- 0.8; 4.5	17.0	+- 2.2
18	233	3.2	19.1	+- 0.6; 2.9	16.6	+- 0.7; 4.2	15.1	+- 2.1
19	267	4.5	19.5	+- 0.6; 2.9	17.0	+- 0.7; 4.2	16.3	+- 2.2
20	295	3.8	19.4	+- 0.6; 2.9	16.9	+- 0.7; 4.2	15.6	+- 2.2
21	315	4.6	17.6	+- 0.5; 2.6	15.1	+- 0.7; 4.0	14.5	+- 2.2
22	332	4.3	17.1	+- 0.5; 2.6	14.5	+- 0.6; 4.0	14.5	+- 2.1
23	251	4.8	17.8	+- 0.5; 2.7	15.2	+- 0.7; 4.0	14.0	+- 2.2
24	32	5.3	18.8	+- 0.6; 2.8	16.3	+- 0.7; 4.2	16.5	+- 2.0
25	54	6.2	17.4	+- 0.5; 2.6	14.8	+- 0.6; 4.0	14.3	+- 2.2
26	64	5.5	20.0	+- 0.6; 3.0	17.6	+- 0.7; 4.3	16.1	+- 2.1
27	88	4.7	18.8	+- 0.6; 2.8	16.3	+- 0.7; 4.2	15.6	+- 2.0
28	124	5.1	20.1	+- 0.6; 3.0	17.7	+- 0.7; 4.3	16.4	+- 2.0
29	153	4.1	19.6	+- 0.6; 2.9	17.1	+- 0.7; 4.3	15.6	+- 2.0
30	142	3.6	17.8	+- 0.5; 2.7	15.3	+- 0.7; 4.1	14.3	+- 2.1
31	130	3.0	16.6	+- 0.5; 2.5	14.0	+- 0.6; 3.9	13.3	+- 2.3
32	110	2.8	17.9	+- 0.5; 2.7	15.4	+- 0.7; 4.1	14.3	+- 2.3
33	78	2.6	18.5	+- 0.6; 2.8	16.0	+- 0.7; 4.1	14.1	+- 2.3
34	58	2.2	17.3	+- 0.5; 2.6	14.7	+- 0.6; 4.0	13.0	+- 2.0
35	34	2.4	22.9	+- 0.7; 3.4	20.6	+- 0.8; 4.7	19.3	+- 2.1
36	19	2.7	20.6	+- 0.6; 3.1	18.2	+- 0.7; 4.4	16.7	+- 2.1
37	284	10.0	19.2	+- 0.6; 2.9	16.7	+- 0.7; 4.2	15.5	+- 2.1
38	289	15.0	21.3	+- 0.6; 3.2	18.9	+- 0.8; 4.5	14.9	+- 3.0
39	293	15.0	20.7	+- 0.6; 3.1	18.3	+- 0.7; 4.4	16.5	+- 2.0

Transit Dose = 3.4 +- 0.3; 2.7

FARLEY

For the period 970311-970729

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	15.3 +- 0.0	1
11.26 - 33.75 NNE	18.1 +- 1.8	3
33.76 - 56.25 NE	17.7 +- 4.1	2
56.26 - 78.75 ENE	16.1 +- 1.5	3
78.76 - 101.25 E	16.3 +- 0.0	1
101.26 - 123.75 ESE	15.4 +- 0.0	1
123.76 - 146.25 SE	15.6 +- 1.9	3
146.26 - 168.75 SSE	19.1 +- 2.7	2
168.76 - 191.25 S	17.0 +- 1.6	2
191.26 - 213.75 SSW	16.3 +- 0.7	2
213.76 - 236.25 SW	16.6 +- 1.1	4
236.26 - 258.75 WSW	16.5 +- 2.4	3
258.76 - 281.25 W	15.6 +- 1.6	3
281.26 - 303.75 WNW	17.8 +- 1.2	2
303.76 - 326.25 NW	15.5 +- 0.6	2
326.26 - 348.75 NNW	15.5 +- 1.3	2

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	16.9 +- 1.6	9
2 - 5	16.4 +- 1.8	18
> 5	16.6 +- 2.1	9
Upwind Control	18.0 +- 1.2	3

NRC TLD DOSES FOR FARLEY AREA

Miles

Legend

— Highways

--- Railroads

--- Roads

★ Plant..site

FERMI

TLD Direct Radiation Environmental Monitoring

For the period 970311-970723 135 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	38	2.1	18.3	+- 0.5; 2.7	11.2	+- 0.7; 4.2	12.0	+- 2.0
2	22	2.3	18.3	+- 0.5; 2.7	11.2	+- 0.7; 4.2	14.1	+- 1.2
3	350	1.8	27.1	+- 0.8; 4.1	19.7	+- 0.9; 5.1	19.7	+- 1.6
4	345	1.9	21.0	+- 0.6; 3.1	13.8	+- 0.7; 4.4	15.5	+- 1.5
5	346	1.4	22.4	+- 0.7; 3.4	15.2	+- 0.8; 4.6	16.2	+- 1.4
6	310	1.3	23.2	+- 0.7; 3.5	16.0	+- 0.8; 4.7	16.5	+- 1.7
7	298	1.4	23.1	+- 0.7; 3.5	15.8	+- 0.8; 4.7	16.3	+- 1.5
8	277	1.6	24.5	+- 0.7; 3.7	17.2	+- 0.8; 4.8	16.5	+- 0.9
9	238	1.0	20.4	+- 0.6; 3.1	13.2	+- 0.7; 4.4	14.3	+- 1.8
10	225	1.5	21.3	+- 0.6; 3.2	14.1	+- 0.8; 4.5	13.7	+- 1.0
11	193	0.8	21.3	+- 0.6; 3.2	14.1	+- 0.8; 4.5	15.9	+- 1.0
12	183	0.9	23.7	+- 0.7; 3.5	16.4	+- 0.8; 4.7	16.1	+- 1.0
13	175	0.8	22.5	+- 0.7; 3.4	15.3	+- 0.8; 4.6	15.8	+- 0.8
14	260	1.7	25.1	+- 0.8; 3.8	17.8	+- 0.8; 4.9	18.2	+- 1.3
15	245	2.5	21.0	+- 0.6; 3.1	13.8	+- 0.7; 4.4	14.8	+- 1.0
16	236	5.0	24.7	+- 0.7; 3.7	17.5	+- 0.8; 4.8	18.4	+- 1.0
17	225	6.8	19.8	+- 0.6; 3.0	12.6	+- 0.7; 4.3	13.0	+- 1.2
18	250	7.8	20.7	+- 0.6; 3.1	13.6	+- 0.7; 4.4	12.9	+- 1.2
19	277	6.0	19.5	+- 0.6; 2.9	12.4	+- 0.7; 4.3	13.3	+- 1.1
20	297	6.0	21.7	+- 0.7; 3.3	14.5	+- 0.8; 4.5	15.1	+- 1.3
21	320	3.8	19.9	+- 0.6; 3.0	12.8	+- 0.7; 4.3	15.6	+- 1.2
22	340	4.7	24.6	+- 0.7; 3.7	17.3	+- 0.8; 4.8	17.0	+- 1.0
23	358	4.3	23.6	+- 0.7; 3.5	16.3	+- 0.8; 4.7	17.5	+- 1.5
24	23	5.0	25.4	+- 0.8; 3.8	18.1	+- 0.9; 4.9	18.5	+- 1.1
25	25	7.0	Missing Dosimeter		No Net Data		13.3	+- 1.0
26	0	7.0	20.4	+- 0.6; 3.1	13.2	+- 0.7; 4.4	13.9	+- 1.1
27	342	8.0	22.4	+- 0.7; 3.4	15.2	+- 0.8; 4.6	15.6	+- 1.0
28	320	9.5	20.3	+- 0.6; 3.0	13.2	+- 0.7; 4.4	14.3	+- 0.8
29	290	11.0	22.6	+- 0.7; 3.4	15.4	+- 0.8; 4.6	16.5	+- 1.5
30	270	11.0	25.5	+- 0.8; 3.8	18.2	+- 0.9; 4.9	17.7	+- 1.7
31	245	10.0	22.3	+- 0.7; 3.3	15.1	+- 0.8; 4.6	14.7	+- 1.3
32	220	11.0	20.8	+- 0.6; 3.1	13.6	+- 0.7; 4.4	15.4	+- 1.1
33	270	15.0	21.1	+- 0.6; 3.2	13.9	+- 0.8; 4.4	14.1	+- 1.1
34	270	15.0	20.9	+- 0.6; 3.1	13.7	+- 0.7; 4.4	14.3	+- 1.0
35	290	16.0	21.6	+- 0.6; 3.2	14.4	+- 0.8; 4.5	15.5	+- 0.9
36	350	0.8	18.8	+- 0.6; 2.8	11.6	+- 0.7; 4.2	13.8	+- 2.3
37	330	0.7	21.7	+- 0.7; 3.3	14.5	+- 0.8; 4.5	15.0	+- 0.9
38	310	0.7	21.2	+- 0.6; 3.2	14.0	+- 0.8; 4.5	15.1	+- 1.9
39	23	10.0	20.5	+- 0.6; 3.1	13.3	+- 0.7; 4.4	16.3	+- 2.1
40	0	9.0	25.1	+- 0.8; 3.8	17.8	+- 0.9; 4.9	17.6	+- 1.5
41	348	9.0	22.2	+- 0.7; 3.3	15.0	+- 0.8; 4.6	13.6	+- 0.8

Transit Dose = 6.9 +- 0.4; 3.3

FERMI

For the period 970311-970723

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 +- 3.3	5
11.26 - 33.75 NNE	14.2 +- 3.6	3
33.76 - 56.25 NE	11.2 +- 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	15.9 +- 0.8	2
191.26 - 213.75 SSW	14.1 +- 0.0	1
213.76 - 236.25 SW	14.5 +- 2.1	4
236.26 - 258.75 WSW	13.9 +- 0.8	4
258.76 - 281.25 W	16.4 +- 2.7	4
281.26 - 303.75 WNW	15.2 +- 0.7	3
303.76 - 326.25 NW	14.0 +- 1.4	4
326.26 - 348.75 NNW	15.2 +- 1.2	6

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	15.3 +- 2.0	15
2 - 5	14.8 +- 2.9	8
> 5	14.5 +- 1.8	14
Upwind Control	14.0 +- 0.4	3

NRC TLD DOSES FOR FERMI AREA

Miles

Legend

Water

Railroads

Plant..site

Highways

Roads

FITZPATRICK/ NINE MI

TLD Direct Radiation Environmental Monitoring

For the period 970313-970715 125 Days

Field Time: 85 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	230	6.9	17.0 +- 0.5; 2.5		13.9 +- 0.6; 4.0		14.4 +- 1.1	
2	184	14.0	18.6 +- 0.6; 2.8		15.6 +- 0.7; 4.2		15.5 +- 1.1	
3	122	8.4	16.6 +- 0.5; 2.5		13.5 +- 0.6; 3.9		14.0 +- 1.3	
4	76	11.0	16.6 +- 0.5; 2.5		13.5 +- 0.6; 4.0		14.8 +- 1.2	
5	91	6.8	17.3 +- 0.5; 2.6		14.3 +- 0.6; 4.0		15.1 +- 1.0	
6	112	4.3	16.5 +- 0.5; 2.5		13.4 +- 0.6; 3.9		14.8 +- 1.1	
7	138	4.3	17.6 +- 0.5; 2.6		14.6 +- 0.7; 4.1		14.7 +- 1.1	
8	152	3.6	16.0 +- 0.5; 2.4		12.9 +- 0.6; 3.9		14.6 +- 1.5	
9	183	3.9	16.2 +- 0.5; 2.4		13.1 +- 0.6; 3.9		15.1 +- 1.0	
10	205	4.5	16.3 +- 0.5; 2.4		13.2 +- 0.6; 3.9		13.9 +- 1.2	
11	220	4.4	17.7 +- 0.5; 2.7		14.7 +- 0.7; 4.1		15.2 +- 1.1	
12	230	6.1	17.7 +- 0.5; 2.7		14.6 +- 0.7; 4.1		15.2 +- 1.0	
13	245	1.8	18.4 +- 0.6; 2.8		15.4 +- 0.7; 4.1		14.9 +- 1.1	
14	223	1.8	16.3 +- 0.5; 2.4		13.2 +- 0.6; 3.9		14.4 +- 1.2	
15	204	2.0	15.7 +- 0.5; 2.3		12.5 +- 0.6; 3.9		14.2 +- 1.1	
16	181	1.8	17.2 +- 0.5; 2.6		14.1 +- 0.6; 4.0		14.5 +- 0.9	
17	157	1.9	16.7 +- 0.5; 2.5		13.6 +- 0.6; 4.0		14.6 +- 1.3	
18	137	1.6	17.1 +- 0.5; 2.6		14.0 +- 0.6; 4.0		14.4 +- 1.0	
19	115	1.2	16.9 +- 0.5; 2.5		13.8 +- 0.6; 4.0		14.4 +- 1.3	
20	92	1.1	17.2 +- 0.5; 2.6		14.2 +- 0.6; 4.0		15.1 +- 1.4	
21	229	20.0	16.5 +- 0.5; 2.5		13.4 +- 0.6; 3.9		14.6 +- 1.2	
22	229	20.0	17.0 +- 0.5; 2.5		13.9 +- 0.6; 4.0		14.3 +- 1.0	
23	229	20.0	17.2 +- 0.5; 2.6		14.2 +- 0.6; 4.0		14.5 +- 1.0	
24	196	8.0	17.9 +- 0.5; 2.7		14.9 +- 0.7; 4.1		14.2 +- 1.6	
25	168	7.2	16.6 +- 0.5; 2.5		13.5 +- 0.6; 3.9		14.1 +- 1.1	
26	152	0.6	18.3 +- 0.5; 2.7		15.3 +- 0.7; 4.1		15.7 +- 1.0	

Transit Dose = 3.9 +- 0.3; 2.8

FITZPATRICK/ NINE MI
For the period 970313-970715

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	13.5 +- 0.0	1
78.76 - 101.25 E	14.2 +- 0.1	2
101.26 - 123.75 ESE	13.6 +- 0.2	3
123.76 - 146.25 SE	14.3 +- 0.4	2
146.26 - 168.75 SSE	13.8 +- 1.0	4
168.76 - 191.25 S	14.3 +- 1.3	3
191.26 - 213.75 SSW	13.5 +- 1.2	3
213.76 - 236.25 SW	14.1 +- 0.7	4
236.26 - 258.75 WSW	15.4 +- 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	14.0 +- 0.9	9
2 - 5	13.6 +- 0.8	6
> 5	14.2 +- 0.8	8
Upwind Control	13.8 +- 0.4	3

NRC TLD DOSES FOR FITZPATRICK & NINE MILE PT AREA

Miles

Legend

Water

Highways

Railroads

Roads

Plant..site

FORT CALHOUN

TLD Direct Radiation Environmental Monitoring

For the period 970307-970805 152 Days

Field Time: 93 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	27.5 +- 0.8; 4.1		20.4 +- 0.9; 5.1		18.7 +- 1.4	
2	351	4.6	27.7 +- 0.8; 4.2		20.6 +- 0.9; 5.1		19.3 +- 1.5	
3	30	2.5	28.0 +- 0.8; 4.2		20.9 +- 0.9; 5.1		19.2 +- 1.7	
4	27	4.6	29.0 +- 0.9; 4.3		21.8 +- 0.9; 5.2		19.8 +- 1.6	
5	53	1.9	27.9 +- 0.8; 4.2		20.8 +- 0.9; 5.1		18.9 +- 1.7	
6	37	3.9	28.5 +- 0.9; 4.3		21.4 +- 0.9; 5.2		19.7 +- 1.6	
7	76	2.3	29.5 +- 0.9; 4.4		22.3 +- 0.9; 5.3		20.2 +- 1.7	
8	59	5.2	26.6 +- 0.8; 4.0		19.5 +- 0.9; 5.0		18.9 +- 1.7	
9	100	2.3	26.3 +- 0.8; 4.0		19.3 +- 0.9; 4.9		17.6 +- 1.7	
10	88	5.6	28.6 +- 0.9; 4.3		21.5 +- 0.9; 5.2		19.9 +- 1.6	
11	122	2.3	28.1 +- 0.8; 4.2		21.0 +- 0.9; 5.1		19.8 +- 1.8	
12	105	5.7	29.1 +- 0.9; 4.4		22.0 +- 0.9; 5.3		19.2 +- 1.8	
13	145	1.9	28.7 +- 0.9; 4.3		21.6 +- 0.9; 5.2		20.1 +- 1.6	
14	128	5.5	28.0 +- 0.8; 4.2		20.9 +- 0.9; 5.1		19.6 +- 1.5	
15	157	1.9	30.0 +- 0.9; 4.5		22.8 +- 1.0; 5.4		20.7 +- 1.5	
16	150	4.9	28.3 +- 0.8; 4.2		21.2 +- 0.9; 5.2		20.1 +- 1.4	
17	173	0.5	28.0 +- 0.8; 4.2		20.9 +- 0.9; 5.1		19.4 +- 1.8	
18	173	5.3	29.2 +- 0.9; 4.4		22.1 +- 0.9; 5.3		20.6 +- 1.5	
19	212	2.5	Missing Dosimeter		No Net Data		22.7 +- 1.7	
20	204	5.3	28.3 +- 0.8; 4.2		21.2 +- 0.9; 5.2		21.1 +- 1.5	
21	233	2.0	28.7 +- 0.9; 4.3		21.6 +- 0.9; 5.2		21.1 +- 1.8	
22	224	4.6	29.3 +- 0.9; 4.4		22.2 +- 0.9; 5.3		21.5 +- 1.6	
23	239	0.6	29.6 +- 0.9; 4.4		22.5 +- 1.0; 5.3		20.1 +- 1.9	
24	243	6.9	28.7 +- 0.9; 4.3		21.5 +- 0.9; 5.2		18.1 +- 1.5	
25	269	3.3	30.8 +- 0.9; 4.6		23.6 +- 1.0; 5.5		21.7 +- 1.7	
26	262	5.9	31.6 +- 0.9; 4.7		24.4 +- 1.0; 5.6		22.0 +- 1.5	
27	350	3.0	27.2 +- 0.8; 4.1		20.1 +- 0.9; 5.0		18.0 +- 1.9	
28	292	5.0	29.4 +- 0.9; 4.4		22.2 +- 0.9; 5.3		20.2 +- 1.6	
29	311	2.4	28.7 +- 0.9; 4.3		21.6 +- 0.9; 5.2		20.4 +- 1.7	
30	310	5.5	30.1 +- 0.9; 4.5		22.9 +- 1.0; 5.4		20.8 +- 1.4	
31	340	2.3	27.5 +- 0.8; 4.1		20.4 +- 0.9; 5.1		19.2 +- 1.5	
32	338	5.3	28.4 +- 0.9; 4.3		21.3 +- 0.9; 5.2		20.1 +- 1.7	
33	182	0.5	29.8 +- 0.9; 4.5		22.6 +- 1.0; 5.3		20.3 +- 2.0	
35	127	2.2	26.9 +- 0.8; 4.0		19.8 +- 0.9; 5.0		18.7 +- 1.5	
39	150	5.0	27.9 +- 0.8; 4.2		20.8 +- 0.9; 5.1		18.8 +- 1.7	
40	73	9.5	29.4 +- 0.9; 4.4		22.3 +- 0.9; 5.3		20.2 +- 1.8	
43	29	8.0	27.7 +- 0.8; 4.2		20.6 +- 0.9; 5.1		18.5 +- 1.4	
44	65	3.5	24.8 +- 0.7; 3.7		17.8 +- 0.8; 4.8		17.7 +- 1.5	
45	182	4.2	29.6 +- 0.9; 4.4		22.4 +- 1.0; 5.3		20.5 +- 1.5	
47	298	4.5	27.4 +- 0.8; 4.1		20.3 +- 0.9; 5.1		19.3 +- 1.4	
48	13	14.0	27.4 +- 0.8; 4.1		20.3 +- 0.9; 5.1		19.6 +- 1.4	
49	207	18.0	30.0 +- 0.9; 4.5		22.9 +- 1.0; 5.4		20.7 +- 1.8	

Transit Dose = 6.4 +- 0.4; 3.2

FORT CALHOUN
For the period 970307-970805

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 +- 0.3	3
11.26 - 33.75 NNE	21.1 +- 0.7	3
33.76 - 56.25 NE	21.1 +- 0.4	2
56.26 - 78.75 ENE	20.5 +- 2.2	4
78.76 - 101.25 E	20.4 +- 1.6	2
101.26 - 123.75 ESE	21.5 +- 0.7	2
123.76 - 146.25 SE	20.8 +- 0.9	3
146.26 - 168.75 SSE	21.6 +- 1.1	3
168.76 - 191.25 S	22.0 +- 0.8	4
191.26 - 213.75 SSW	21.2 +- 0.0	1
213.76 - 236.25 SW	21.9 +- 0.4	2
236.26 - 258.75 WSW	22.0 +- 0.6	2
258.76 - 281.25 W	24.0 +- 0.6	2
281.26 - 303.75 WNW	21.2 +- 1.4	2
303.76 - 326.25 NW	22.2 +- 0.9	2
326.26 - 348.75 NNW	20.9 +- 0.6	2

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	21.6 +- 0.9	8
2 - 5	21.0 +- 1.3	19
> 5	21.7 +- 1.2	12
Upwind Control	21.6 +- 1.8	2

NRC TLD DOSES FOR FORT CALHOUN AREA

Miles

0 2 4

Legend

Water
Highways

Railroads
Roads

Plant site

FORT ST. VRAIN
 TLD Direct Radiation Environmental Monitoring
 For the period 970307-970715 131 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	8 0.8	38.2 +- 1.1; 5.7	No Net Data	30.2 +- 2.1
2	2 3.3	36.9 +- 1.1; 5.5	No Net Data	29.7 +- 2.2
3	29 2.6	38.6 +- 1.2; 5.8	No Net Data	29.9 +- 2.0
4	17 5.4	36.5 +- 1.1; 5.5	No Net Data	29.8 +- 1.6
5	54 2.1	38.8 +- 1.2; 5.8	No Net Data	29.3 +- 2.2
6	48 4.8	38.3 +- 1.1; 5.7	No Net Data	30.9 +- 1.8
7	76 2.6	40.4 +- 1.2; 6.1	No Net Data	31.8 +- 2.0
8	58 4.2	38.2 +- 1.1; 5.7	No Net Data	30.5 +- 1.8
9	100 1.5	37.8 +- 1.1; 5.7	No Net Data	30.7 +- 1.7
10	87 4.5	36.5 +- 1.1; 5.5	No Net Data	29.3 +- 1.9
11	118 1.6	40.1 +- 1.2; 6.0	No Net Data	32.9 +- 1.8
12	104 3.0	39.2 +- 1.2; 5.9	No Net Data	32.4 +- 1.8
13	143 1.6	40.1 +- 1.2; 6.0	No Net Data	31.4 +- 2.0
14	128 4.5	39.4 +- 1.2; 5.9	No Net Data	30.6 +- 1.8
15	168 2.3	36.9 +- 1.1; 5.5	No Net Data	28.7 +- 2.0
16	148 4.6	37.0 +- 1.1; 5.5	No Net Data	28.7 +- 1.9
17	182 0.8	38.2 +- 1.1; 5.7	No Net Data	30.4 +- 2.2
18	175 4.8	38.6 +- 1.2; 5.8	No Net Data	30.7 +- 2.0
19	210 0.9	39.3 +- 1.2; 5.9	No Net Data	31.1 +- 1.6
20	200 2.9	37.9 +- 1.1; 5.7	No Net Data	30.7 +- 2.3
21	234 1.3	37.8 +- 1.1; 5.7	No Net Data	31.5 +- 2.0
22	216 3.3	37.4 +- 1.1; 5.6	No Net Data	29.2 +- 1.9
23	254 2.5	37.2 +- 1.1; 5.6	No Net Data	29.4 +- 2.0
24	244 3.8	37.0 +- 1.1; 5.5	No Net Data	29.6 +- 2.1
25	278 1.5	36.5 +- 1.1; 5.5	No Net Data	28.7 +- 1.9
26	263 5.4	Missing Dosimeter	No Net Data	30.2 +- 2.4
27	297 1.7	37.0 +- 1.1; 5.5	No Net Data	28.5 +- 1.9
28	284 5.6	36.1 +- 1.1; 5.4	No Net Data	29.6 +- 1.8
29	317 0.9	35.9 +- 1.1; 5.4	No Net Data	28.8 +- 2.0
30	305 4.2	33.6 +- 1.0; 5.0	No Net Data	26.9 +- 1.9
31	338 1.4	38.2 +- 1.1; 5.7	No Net Data	29.0 +- 2.1
32	330 5.0	32.9 +- 1.0; 4.9	No Net Data	26.5 +- 2.1
33	267 6.5	34.5 +- 1.0; 5.2	No Net Data	28.4 +- 2.6
34	130 3.7	35.6 +- 1.1; 5.3	No Net Data	28.8 +- 2.0
35	270 0.1	36.4 +- 1.1; 5.5	No Net Data	28.5 +- 2.0
38	345 6.7	38.7 +- 1.2; 5.8	No Net Data	30.8 +- 1.9
39	10 6.0	34.9 +- 1.0; 5.2	No Net Data	28.3 +- 2.1
40	63 6.0	35.6 +- 1.1; 5.3	No Net Data	28.4 +- 2.1
41	165 12.0	39.2 +- 1.2; 5.9	No Net Data	31.9 +- 1.7
42	248 13.0	40.9 +- 1.2; 6.1	No Net Data	33.1 +- 2.5
45	198 11.0	37.9 +- 1.1; 5.7	No Net Data	30.4 +- 2.0
46	39 16.0	36.9 +- 1.1; 5.5	No Net Data	27.6 +- 1.9
47	357 17.0	33.5 +- 1.0; 5.0	No Net Data	26.8 +- 1.8
48	171 18.0	39.3 +- 1.2; 5.9	No Net Data	30.8 +- 2.1
49	360 0.5	40.2 +- 1.2; 6.0	No Net Data	32.2 +- 2.0

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

FORT ST. VRAIN
For the period 970307-970715

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	25.2 +- 1.1	3
11.26 - 33.75 NNE	25.8 +- 1.1	2
33.76 - 56.25 NE	26.1 +- 0.7	3
56.26 - 78.75 ENE	26.2 +- 1.6	3
78.76 - 101.25 E	25.5 +- 0.7	2
101.26 - 123.75 ESE	27.2 +- 0.5	2
123.76 - 146.25 SE	26.3 +- 1.7	3
146.26 - 168.75 SSE	25.9 +- 0.9	3
168.76 - 191.25 S	26.4 +- 0.2	2
191.26 - 213.75 SSW	26.4 +- 0.6	3
213.76 - 236.25 SW	25.8 +- 0.2	2
236.26 - 258.75 WSW	26.4 +- 1.5	3
258.76 - 281.25 W	24.6 +- 0.8	3
281.26 - 303.75 WNW	25.1 +- 0.4	2
303.76 - 326.25 NW	23.9 +- 1.1	2
326.26 - 348.75 NNW	25.1 +- 2.2	3

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	26.1 +- 1.0	12
2 - 5	25.7 +- 1.3	19
> 5	25.5 +- 1.4	10
Upwind Control	25.9 +- 2.5	3

NRC TLD DOSES FOR FORT ST. VRAIN AREA

Miles

Legend

Water

Highways

Railroads

Roads

Plant..site

TLD..data

GINNA

TLD Direct Radiation Environmental Monitoring

For the period 970313-970715 125 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	95	1.7	Missing Dosimeter	No Net Data	14.7 +- 0.9
2	108	1.1	17.0 +- 0.5; 2.6	13.9 +- 0.6; 4.0	14.2 +- 1.1
3	142	1.7	17.2 +- 0.5; 2.6	14.0 +- 0.6; 4.0	14.1 +- 1.0
4	154	1.5	16.1 +- 0.5; 2.4	12.9 +- 0.6; 3.9	14.7 +- 1.1
5	174	1.4	17.5 +- 0.5; 2.6	14.4 +- 0.7; 4.1	15.1 +- 1.3
6	212	1.6	16.2 +- 0.5; 2.4	13.0 +- 0.6; 3.9	13.8 +- 1.1
7	244	0.9	16.4 +- 0.5; 2.5	13.2 +- 0.6; 3.9	13.8 +- 1.0
8	230	0.6	17.5 +- 0.5; 2.6	14.4 +- 0.7; 4.1	14.7 +- 1.7
10	266	1.5	17.5 +- 0.5; 2.6	14.4 +- 0.7; 4.1	14.4 +- 1.2
11	264	4.6	18.1 +- 0.5; 2.7	15.0 +- 0.7; 4.1	15.7 +- 1.1
12	245	3.8	16.4 +- 0.5; 2.5	13.2 +- 0.6; 3.9	14.2 +- 1.2
13	235	4.2	15.7 +- 0.5; 2.4	12.5 +- 0.6; 3.9	13.6 +- 1.2
14	200	3.8	14.8 +- 0.4; 2.2	11.5 +- 0.6; 3.8	13.3 +- 1.3
15	178	3.4	17.8 +- 0.5; 2.7	14.7 +- 0.7; 4.1	14.8 +- 1.4
16	160	3.7	16.5 +- 0.5; 2.5	13.3 +- 0.6; 3.9	13.3 +- 1.4
17	134	3.8	15.3 +- 0.5; 2.3	12.0 +- 0.6; 3.8	13.3 +- 1.5
18	115	4.3	17.4 +- 0.5; 2.6	14.2 +- 0.7; 4.0	14.3 +- 1.5
19	88	4.0	16.1 +- 0.5; 2.4	12.9 +- 0.6; 3.9	13.2 +- 1.4
20	90	6.2	16.5 +- 0.5; 2.5	13.3 +- 0.6; 3.9	13.0 +- 1.1
21	123	7.6	15.7 +- 0.5; 2.3	12.4 +- 0.6; 3.9	12.9 +- 1.4
22	151	11.0	16.7 +- 0.5; 2.5	13.5 +- 0.6; 4.0	13.4 +- 1.1
23	105	12.0	16.0 +- 0.5; 2.4	12.8 +- 0.6; 3.9	14.0 +- 1.2
24	212	14.0	20.9 +- 0.6; 3.1	17.9 +- 0.7; 4.4	18.1 +- 1.0
25	223	13.0	15.5 +- 0.5; 2.3	12.3 +- 0.6; 3.8	13.7 +- 1.4
26	242	16.0	18.7 +- 0.6; 2.8	15.6 +- 0.7; 4.2	15.7 +- 1.0
27	254	14.0	19.4 +- 0.6; 2.9	16.4 +- 0.7; 4.3	15.3 +- 1.3
28	234	6.9	16.7 +- 0.5; 2.5	13.5 +- 0.6; 4.0	14.1 +- 0.9
29	185	0.3	17.9 +- 0.5; 2.7	14.8 +- 0.7; 4.1	15.5 +- 1.0
30	264	15.0	16.8 +- 0.5; 2.5	13.6 +- 0.6; 4.0	13.5 +- 1.3

Transit Dose = 3.9 +- 0.3; 2.8

GINNA

For the period 970313-970715

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	13.1 +- 0.3	2
101.26 - 123.75 ESE	13.3 +- 0.9	4
123.76 - 146.25 SE	13.0 +- 1.4	2
146.26 - 168.75 SSE	13.2 +- 0.3	3
168.76 - 191.25 S	14.6 +- 0.2	3
191.26 - 213.75 SSW	14.1 +- 3.4	3
213.76 - 236.25 SW	13.1 +- 1.0	4
236.26 - 258.75 WSW	13.2 +- 0.0	2
258.76 - 281.25 W	14.7 +- 0.4	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	13.9 +- 0.7	9
2 - 5	13.2 +- 1.2	9
> 5	13.7 +- 2.0	7
Upwind Control	15.2 +- 1.5	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 970311-970710 122 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	Missing Dosimeter	No Net Data	15.9 +- 1.9
2	351	1.6	16.8 +- 0.5; 2.5	13.8 +- 0.6; 3.7	15.2 +- 1.0
3	20	1.5	18.4 +- 0.6; 2.8	15.4 +- 0.6; 3.9	17.6 +- 1.3
4	51	2.3	19.5 +- 0.6; 2.9	16.4 +- 0.6; 4.0	17.0 +- 1.2
5	68	2.7	20.2 +- 0.6; 3.0	17.1 +- 0.7; 4.1	17.8 +- 1.4
6	47	4.1	17.7 +- 0.5; 2.7	14.7 +- 0.6; 3.8	16.0 +- 1.3
7	68	4.9	21.6 +- 0.6; 3.2	18.5 +- 0.7; 4.2	19.1 +- 1.2
8	91	3.2	21.6 +- 0.6; 3.2	18.5 +- 0.7; 4.2	19.1 +- 1.2
9	81	1.0	20.2 +- 0.6; 3.0	17.2 +- 0.7; 4.1	17.8 +- 1.0
10	109	0.6	20.9 +- 0.6; 3.1	17.8 +- 0.7; 4.2	19.1 +- 1.1
11*	139	0.8	18.4 +- 0.6; 2.8	15.4 +- 0.6; 3.9	19.2 +- 1.2
12	185	1.6	20.7 +- 0.6; 3.1	17.6 +- 0.7; 4.1	18.2 +- 0.9
13	207	1.9	22.6 +- 0.7; 3.4	19.5 +- 0.7; 4.4	19.2 +- 0.8
14	247	1.5	Missing Dosimeter	No Net Data	17.2 +- 2.5
15	130	4.2	20.7 +- 0.6; 3.1	17.7 +- 0.7; 4.1	18.5 +- 1.0
16	122	4.8	Damaged Dosimeter	No Net Data	18.3 +- 1.2
17	135	5.3	18.9 +- 0.6; 2.8	15.9 +- 0.6; 4.0	17.2 +- 0.9
18	147	4.3	18.3 +- 0.5; 2.7	15.3 +- 0.6; 3.9	15.5 +- 0.9
19	224	6.8	19.2 +- 0.6; 2.9	16.2 +- 0.6; 4.0	18.6 +- 1.0
20	172	3.6	18.5 +- 0.6; 2.8	15.5 +- 0.6; 3.9	16.7 +- 0.8
21	291	12.0	19.8 +- 0.6; 3.0	16.8 +- 0.7; 4.1	17.1 +- 0.9
22	332	8.0	Damaged Dosimeter	No Net Data	19.4 +- 1.1
23	310	7.9	24.2 +- 0.7; 3.6	21.0 +- 0.8; 4.5	15.3 +- 2.7
24	281	7.0	18.4 +- 0.6; 2.8	15.4 +- 0.6; 3.9	16.6 +- 1.0
25	291	4.8	20.0 +- 0.6; 3.0	16.9 +- 0.7; 4.1	18.2 +- 1.0
26	248	9.5	18.6 +- 0.6; 2.8	15.6 +- 0.6; 3.9	16.9 +- 1.0
27	239	13.0	17.4 +- 0.5; 2.6	14.4 +- 0.6; 3.8	16.3 +- 1.1
29	90	0.9	19.8 +- 0.6; 3.0	16.7 +- 0.7; 4.0	17.8 +- 0.9
30	67	51.0	15.4 +- 0.5; 2.3	12.5 +- 0.5; 3.6	13.9 +- 1.4
31	67	51.0	16.2 +- 0.5; 2.4	13.2 +- 0.6; 3.7	14.6 +- 1.3
32	67	51.0	15.7 +- 0.5; 2.4	12.7 +- 0.6; 3.6	14.0 +- 1.4
33	206	4.8	20.3 +- 0.6; 3.0	17.3 +- 0.7; 4.1	18.4 +- 1.0

Transit Dose = 2.7 +- 0.3; 2.9

* The result for this location was outside (below) the expected range. Refer to the preface of this report for more information.

GRAND GULF

For the period 970311-970710

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	15.4 +- 0.0	1
33.76 - 56.25 NE	15.6 +- 1.2	2
56.26 - 78.75 ENE	17.8 +- 1.0	2
78.76 - 101.25 E	17.5 +- 0.9	3
101.26 - 123.75 ESE	17.8 +- 0.0	1
123.76 - 146.25 SE	16.3 +- 1.2	3
146.26 - 168.75 SSE	15.3 +- 0.0	1
168.76 - 191.25 S	16.6 +- 1.5	2
191.26 - 213.75 SSW	18.4 +- 1.6	2
213.76 - 236.25 SW	16.2 +- 0.0	1
236.26 - 258.75 WSW	15.0 +- 0.9	2
258.76 - 281.25 W	15.4 +- 0.0	1
281.26 - 303.75 WNW	16.8 +- 0.1	2
303.76 - 326.25 NW	21.0 +- 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	16.7 +- 1.8	8
2 - 5	16.8 +- 1.3	10
> 5	16.5 +- 2.1	7
Upwind Control	12.8 +- 0.4	3

NRC TLD DOSES FOR GRAND GULF AREA

Miles

Legend

Water
Highways

Railroads
Roads

Plant..site

HADDAM NECK

TLD Direct Radiation Environmental Monitoring

For the period 970312-970722 133 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
2	17	2.6	22.6	+- 0.7; 3.4	21.8	+- 0.8; 4.5	19.0 +- 1.3
3	45	1.9	23.5	+- 0.7; 3.5	22.7	+- 0.8; 4.6	19.3 +- 1.3
4	67	2.3	22.4	+- 0.7; 3.4	21.6	+- 0.8; 4.5	18.1 +- 1.3
5	93	1.6	20.6	+- 0.6; 3.1	19.7	+- 0.7; 4.3	16.4 +- 1.1
6	115	2.3	19.5	+- 0.6; 2.9	18.6	+- 0.7; 4.1	16.0 +- 1.1
7	143	1.9	21.9	+- 0.7; 3.3	21.0	+- 0.7; 4.4	18.0 +- 1.2
8	165	0.9	20.4	+- 0.6; 3.1	19.5	+- 0.7; 4.2	16.7 +- 1.1
9	174	1.3	23.3	+- 0.7; 3.5	22.5	+- 0.8; 4.6	18.7 +- 1.3
10	195	0.7	20.2	+- 0.6; 3.0	19.3	+- 0.7; 4.2	16.5 +- 1.2
12	241	0.8	22.0	+- 0.7; 3.3	21.1	+- 0.7; 4.4	17.4 +- 1.2
13*	263	0.8	20.9	+- 0.6; 3.1	20.0	+- 0.7; 4.3	16.4 +- 1.2
14	290	1.9	22.0	+- 0.7; 3.3	21.2	+- 0.7; 4.4	18.2 +- 1.2
15*	311	1.5	20.6	+- 0.6; 3.1	19.7	+- 0.7; 4.2	15.8 +- 1.0
16	341	1.3	20.3	+- 0.6; 3.1	19.4	+- 0.7; 4.2	16.8 +- 1.1
17	360	2.3	20.8	+- 0.6; 3.1	19.9	+- 0.7; 4.3	19.4 +- 1.4
18	222	2.5	19.4	+- 0.6; 2.9	18.5	+- 0.7; 4.1	16.4 +- 1.1
19	269	3.0	18.7	+- 0.6; 2.8	17.7	+- 0.7; 4.0	16.0 +- 1.3
20*	66	3.2	21.4	+- 0.6; 3.2	20.5	+- 0.7; 4.3	16.8 +- 1.1
21	91	2.8	21.0	+- 0.6; 3.1	20.1	+- 0.7; 4.3	18.3 +- 1.2
22	112	3.2	21.3	+- 0.6; 3.2	20.4	+- 0.7; 4.3	17.4 +- 1.4
23	137	2.9	20.8	+- 0.6; 3.1	19.9	+- 0.7; 4.3	17.1 +- 1.3
24*	155	7.1	20.8	+- 0.6; 3.1	19.9	+- 0.7; 4.3	16.0 +- 1.1
25	175	5.7	Missing Dosimeter		No Net Data		16.5 +- 1.2
26	196	2.5	19.9	+- 0.6; 3.0	18.9	+- 0.7; 4.2	15.7 +- 1.1
27	225	1.1	21.2	+- 0.6; 3.2	20.4	+- 0.7; 4.3	17.6 +- 1.2
28	250	3.5	20.1	+- 0.6; 3.0	19.2	+- 0.7; 4.2	17.7 +- 2.0
29	340	20.0	20.7	+- 0.6; 3.1	19.8	+- 0.7; 4.3	19.0 +- 2.4
30	286	3.2	19.4	+- 0.6; 2.9	18.5	+- 0.7; 4.1	16.4 +- 1.1
31	322	2.7	21.4	+- 0.6; 3.2	20.5	+- 0.7; 4.4	17.4 +- 1.3
32	327	2.9	22.4	+- 0.7; 3.4	21.6	+- 0.8; 4.5	19.4 +- 1.0
33	359	6.4	20.5	+- 0.6; 3.1	19.6	+- 0.7; 4.2	16.3 +- 1.2
35	54	10.0	20.9	+- 0.6; 3.1	20.0	+- 0.7; 4.3	17.2 +- 1.4
36	72	8.8	23.0	+- 0.7; 3.4	22.1	+- 0.8; 4.5	19.2 +- 1.4
37	149	6.8	19.0	+- 0.6; 2.9	18.0	+- 0.7; 4.1	15.7 +- 1.0
38*	158	5.9	20.6	+- 0.6; 3.1	19.7	+- 0.7; 4.3	15.3 +- 1.2
39	267	8.8	20.2	+- 0.6; 3.0	19.3	+- 0.7; 4.2	16.6 +- 1.2
40	303	9.1	21.6	+- 0.6; 3.2	20.7	+- 0.7; 4.4	18.1 +- 1.1
41	313	9.6	20.2	+- 0.6; 3.0	19.3	+- 0.7; 4.2	16.7 +- 1.2
42	320	13.0	22.0	+- 0.7; 3.3	21.2	+- 0.7; 4.4	18.4 +- 1.3
43	324	18.0	Missing Dosimeter		No Net Data		16.1 +- 1.1
44	328	15.0	21.9	+- 0.7; 3.3	21.1	+- 0.7; 4.4	18.0 +- 1.6
45	343	18.0	23.1	+- 0.7; 3.5	22.3	+- 0.8; 4.6	18.7 +- 1.4
46	144	5.0	22.9	+- 0.7; 3.4	22.1	+- 0.8; 4.5	18.2 +- 1.3
49	340	20.0	22.4	+- 0.7; 3.4	21.6	+- 0.8; 4.5	18.3 +- 1.3

Transit Dose = 1.8 +- 0.3; 2.6

* The result for these locations were outside (above) the expected range. Refer to the preface of this report for more information.

HADDAM NECK

For the period 970312-970722

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	19.8 +- 0.2	2
11.26 - 33.75 NNE	21.8 +- 0.0	1
33.76 - 56.25 NE	21.4 +- 1.9	2
56.26 - 78.75 ENE	21.4 +- 0.8	3
78.76 - 101.25 E	19.9 +- 0.2	2
101.26 - 123.75 ESE	19.5 +- 1.3	2
123.76 - 146.25 SE	21.0 +- 1.1	3
146.26 - 168.75 SSE	19.3 +- 0.8	4
168.76 - 191.25 S	22.5 +- 0.0	1
191.26 - 213.75 SSW	19.1 +- 0.3	2
213.76 - 236.25 SW	19.4 +- 1.3	2
236.26 - 258.75 WSW	20.2 +- 1.4	2
258.76 - 281.25 W	19.0 +- 1.2	3
281.26 - 303.75 WNW	20.1 +- 1.4	3
303.76 - 326.25 NW	20.2 +- 0.9	4
326.26 - 348.75 NNW	20.8 +- 1.2	5

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	20.5 +- 1.2	12
2 - 5	20.0 +- 1.3	16
> 5	20.2 +- 1.2	13
Upwind Control	21.6 +- 0.0	1

NRC TLD DOSES FOR HADDAM NECK AREA

Miles

Legend

Water
Highways

Railroads
Roads

Plant site

HARRIS

TLD Direct Radiation Environmental Monitoring

For the period 970311-970723 135 Days

Field Time: 83 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	36	2.6	19.6 +- 0.6; 2.9		16.2 +- 0.7; 4.4		16.3 +- 2.0	
2	25	3.2	16.5 +- 0.5; 2.5		12.8 +- 0.7; 4.0		14.6 +- 1.6	
3	5	2.5	19.2 +- 0.6; 2.9		15.8 +- 0.7; 4.4		16.3 +- 1.7	
4	27	1.5	17.8 +- 0.5; 2.7		14.3 +- 0.7; 4.2		16.7 +- 2.4	
5	36	0.9	16.8 +- 0.5; 2.5		13.2 +- 0.7; 4.1		13.8 +- 1.6	
6	68	0.8	15.1 +- 0.5; 2.3		11.3 +- 0.6; 3.9		12.6 +- 1.5	
7	98	0.7	17.4 +- 0.5; 2.6		13.8 +- 0.7; 4.1		15.0 +- 1.5	
8	232	0.7	15.8 +- 0.5; 2.4		12.1 +- 0.6; 4.0		13.7 +- 1.5	
9	190	0.8	15.1 +- 0.5; 2.3		11.3 +- 0.6; 3.9		12.4 +- 1.4	
10	158	0.7	15.3 +- 0.5; 2.3		11.5 +- 0.6; 3.9		13.4 +- 1.8	
11	42	4.7	20.4 +- 0.6; 3.1		17.1 +- 0.8; 4.5		18.7 +- 2.3	
12	40	8.6	19.0 +- 0.6; 2.8		15.5 +- 0.7; 4.3		16.2 +- 1.6	
13	298	13.0	19.6 +- 0.6; 2.9		16.2 +- 0.7; 4.4		14.3 +- 2.1	
14	298	12.0	15.8 +- 0.5; 2.4		12.1 +- 0.6; 4.0		14.0 +- 1.7	
15	298	11.0	15.4 +- 0.5; 2.3		11.6 +- 0.6; 3.9		12.7 +- 1.6	
16	332	4.8	17.9 +- 0.5; 2.7		14.4 +- 0.7; 4.2		14.2 +- 2.1	
17	291	4.5	14.7 +- 0.4; 2.2		10.8 +- 0.6; 3.9		11.6 +- 2.2	
18	270	5.1	15.0 +- 0.4; 2.2		11.2 +- 0.6; 3.9		13.6 +- 2.1	
19	240	5.1	18.5 +- 0.6; 2.8		15.0 +- 0.7; 4.3		16.4 +- 2.0	
20	227	4.8	15.2 +- 0.5; 2.3		11.4 +- 0.6; 3.9		12.5 +- 1.4	
21	208	4.8	15.1 +- 0.5; 2.3		11.3 +- 0.6; 3.9		12.2 +- 1.5	
22	190	4.6	16.2 +- 0.5; 2.4		12.5 +- 0.6; 4.0		13.9 +- 1.6	
23	151	4.8	18.3 +- 0.6; 2.8		14.8 +- 0.7; 4.3		13.7 +- 2.1	
24	132	4.7	Missing Dosimeter		No Net Data		13.3 +- 1.8	
25	112	5.0	18.2 +- 0.5; 2.7		14.7 +- 0.7; 4.2		15.4 +- 2.0	
26	92	4.6	15.5 +- 0.5; 2.3		11.7 +- 0.6; 3.9		12.4 +- 1.6	
27	115	2.8	Damaged Dosimeter		No Net Data		13.6 +- 1.8	
28	135	2.3	13.1 +- 0.4; 2.0		9.2 +- 0.6; 3.7		11.3 +- 1.7	
29	164	2.2	15.6 +- 0.5; 2.3		11.8 +- 0.6; 3.9		14.3 +- 2.2	
30	49	2.2	15.6 +- 0.5; 2.3		11.9 +- 0.6; 4.0		13.7 +- 1.7	
31	276	1.8	15.4 +- 0.5; 2.3		11.7 +- 0.6; 3.9		13.6 +- 1.8	
32	292	1.7	16.4 +- 0.5; 2.5		12.7 +- 0.7; 4.0		16.9 +- 1.9	
33	314	1.4	16.5 +- 0.5; 2.5		12.8 +- 0.7; 4.0		15.8 +- 1.8	
34	329	1.3	Missing Dosimeter		No Net Data		16.1 +- 2.1	
35	350	4.5	18.2 +- 0.5; 2.7		14.7 +- 0.7; 4.2		15.5 +- 1.7	
36	338	4.4	16.5 +- 0.5; 2.5		12.9 +- 0.7; 4.1		15.6 +- 3.4	
37	16	4.9	16.0 +- 0.5; 2.4		12.3 +- 0.6; 4.0		14.6 +- 2.9	
38	68	4.8	15.1 +- 0.5; 2.3		11.3 +- 0.6; 3.9		12.0 +- 1.5	
39	80	6.9	17.0 +- 0.5; 2.6		13.4 +- 0.7; 4.1		14.4 +- 1.2	
40	80	6.9	16.3 +- 0.5; 2.5		12.7 +- 0.7; 4.0		13.4 +- 2.0	
41	118	9.7	20.5 +- 0.6; 3.1		17.2 +- 0.8; 4.5		18.8 +- 1.7	
42	260	1.1	15.7 +- 0.5; 2.4		12.0 +- 0.6; 4.0		13.6 +- 1.7	
43	333	1.7	16.8 +- 0.5; 2.5		13.1 +- 0.7; 4.1		15.5 +- 2.4	
44	50	24.0	21.4 +- 0.6; 3.2		18.1 +- 0.8; 4.6		19.9 +- 2.1	

Transit Dose = 4.7 +- 0.3; 2.8

HARRIS

For the period 970311-970723

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	15.2 +- 0.7	2
11.26 - 33.75 NNE	13.1 +- 1.0	3
33.76 - 56.25 NE	15.4 +- 2.4	6
56.26 - 78.75 ENE	11.3 +- 0.0	2
78.76 - 101.25 E	12.9 +- 0.9	4
101.26 - 123.75 ESE	15.9 +- 1.8	2
123.76 - 146.25 SE	9.2 +- 0.0	1
146.26 - 168.75 SSE	12.7 +- 1.8	3
168.76 - 191.25 S	11.9 +- 0.9	2
191.26 - 213.75 SSW	11.3 +- 0.0	1
213.76 - 236.25 SW	11.8 +- 0.5	2
236.26 - 258.75 WSW	15.0 +- 0.0	1
258.76 - 281.25 W	11.6 +- 0.4	3
281.26 - 303.75 WNW	11.8 +- 1.3	2
303.76 - 326.25 NW	12.8 +- 0.0	1
326.26 - 348.75 NNW	13.5 +- 0.8	3

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	12.5 +- 1.0	12
2 - 5	13.0 +- 2.1	19
> 5	14.7 +- 2.5	7
Upwind Control	13.3 +- 2.5	3

NRC TLD DOSES FOR HARRIS AREA

Miles

Legend

Water

Highways

Railroads

Roads

Plant..site

HATCH

TLD Direct Radiation Environmental Monitoring

For the period 970311-970819 162 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	342	23.0	22.2 +- 0.7; 3.3	15.1 +- 0.7; 4.3	16.4 +- 1.8
2	359	7.7	Missing Dosimeter	No Net Data	14.3 +- 1.8
3	354	4.5	21.6 +- 0.6; 3.2	14.5 +- 0.7; 4.2	14.5 +- 1.9
4	336	2.9	19.7 +- 0.6; 3.0	12.8 +- 0.7; 4.1	13.1 +- 1.9
5	309	4.6	20.0 +- 0.6; 3.0	13.1 +- 0.7; 4.1	13.6 +- 1.9
6	297	5.6	23.0 +- 0.7; 3.5	15.8 +- 0.7; 4.4	15.8 +- 1.9
7	24	2.8	21.3 +- 0.6; 3.2	14.3 +- 0.7; 4.2	14.1 +- 2.1
8	49	2.0	21.4 +- 0.6; 3.2	14.4 +- 0.7; 4.2	14.1 +- 1.8
9	49	10.0	20.6 +- 0.6; 3.1	13.6 +- 0.7; 4.1	13.6 +- 1.8
10	28	4.8	20.6 +- 0.6; 3.1	13.6 +- 0.7; 4.1	14.1 +- 1.7
11	67	5.0	20.6 +- 0.6; 3.1	13.7 +- 0.7; 4.1	14.3 +- 1.7
12	50	5.1	24.7 +- 0.7; 3.7	17.3 +- 0.8; 4.5	18.2 +- 2.0
13	353	2.0	19.4 +- 0.6; 2.9	12.5 +- 0.6; 4.0	12.6 +- 1.6
14	341	1.6	20.7 +- 0.6; 3.1	13.7 +- 0.7; 4.1	14.7 +- 1.9
15	147	10.0	18.4 +- 0.6; 2.8	11.6 +- 0.6; 3.9	13.0 +- 1.7
16	232	0.9	19.5 +- 0.6; 2.9	12.6 +- 0.7; 4.0	13.2 +- 1.7
17	205	1.6	21.0 +- 0.6; 3.1	14.0 +- 0.7; 4.2	14.5 +- 1.8
18	192	4.2	19.1 +- 0.6; 2.9	12.2 +- 0.6; 4.0	11.5 +- 1.6
19	184	4.2	17.0 +- 0.5; 2.6	10.4 +- 0.6; 3.8	11.5 +- 1.9
20	165	4.6	18.8 +- 0.6; 2.8	12.0 +- 0.6; 4.0	12.3 +- 1.8
21	135	4.4	19.7 +- 0.6; 3.0	12.8 +- 0.7; 4.1	12.7 +- 1.6
22	120	4.1	18.8 +- 0.6; 2.8	12.0 +- 0.6; 4.0	13.8 +- 1.8
23	107	3.7	17.2 +- 0.5; 2.6	10.6 +- 0.6; 3.8	13.2 +- 1.9
24	123	14.0	18.3 +- 0.5; 2.7	11.6 +- 0.6; 3.9	12.3 +- 1.7
25	114	12.0	20.2 +- 0.6; 3.0	13.3 +- 0.7; 4.1	13.5 +- 1.6
26	142	1.8	20.6 +- 0.6; 3.1	13.6 +- 0.7; 4.1	14.3 +- 1.7
27	157	2.2	19.5 +- 0.6; 2.9	12.7 +- 0.7; 4.0	13.2 +- 1.7
28	171	0.9	19.7 +- 0.6; 3.0	12.8 +- 0.7; 4.1	14.5 +- 1.7
29	253	1.0	20.2 +- 0.6; 3.0	13.3 +- 0.7; 4.1	13.4 +- 1.7
30	270	1.0	20.7 +- 0.6; 3.1	13.7 +- 0.7; 4.1	15.2 +- 2.5
31	292	1.1	19.8 +- 0.6; 3.0	12.9 +- 0.7; 4.1	13.6 +- 1.9
32	268	4.2	20.2 +- 0.6; 3.0	13.2 +- 0.7; 4.1	13.6 +- 1.5
33	248	4.3	18.6 +- 0.6; 2.8	11.8 +- 0.6; 4.0	12.2 +- 1.8
34	216	4.1	17.8 +- 0.5; 2.7	11.1 +- 0.6; 3.9	11.7 +- 1.9
35	234	12.0	22.0 +- 0.7; 3.3	14.9 +- 0.7; 4.3	14.2 +- 2.2
36	182	10.0	Missing Dosimeter	No Net Data	12.6 +- 2.7
37	177	10.0	18.8 +- 0.6; 2.8	12.0 +- 0.6; 4.0	12.6 +- 1.7
38	323	12.0	21.6 +- 0.6; 3.2	14.6 +- 0.7; 4.2	15.0 +- 1.7
39	321	13.0	21.6 +- 0.6; 3.2	14.6 +- 0.7; 4.2	15.3 +- 1.9
40	323	12.0	21.8 +- 0.7; 3.3	14.7 +- 0.7; 4.2	15.2 +- 2.0

Transit Dose = 5.6 +- 0.4; 3.3

HATCH

For the period 970311-970819

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	13.5 +- 1.4	2
11.26 - 33.75 NNE	14.0 +- 0.5	2
33.76 - 56.25 NE	15.1 +- 2.0	3
56.26 - 78.75 ENE	13.7 +- 0.0	1
78.76 - 101.25 E	No Data +- No Data	0
101.26 - 123.75 ESE	11.8 +- 1.1	4
123.76 - 146.25 SE	13.2 +- 0.6	2
146.26 - 168.75 SSE	12.1 +- 0.5	3
168.76 - 191.25 S	11.7 +- 1.2	3
191.26 - 213.75 SSW	13.1 +- 1.2	2
213.76 - 236.25 SW	12.9 +- 1.9	3
236.26 - 258.75 WSW	12.5 +- 1.1	2
258.76 - 281.25 W	13.5 +- 0.3	2
281.26 - 303.75 WNW	14.3 +- 2.1	2
303.76 - 326.25 NW	13.1 +- 0.0	1
326.26 - 348.75 NNW	13.8 +- 1.1	3

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	13.3 +- 0.6	10
2 - 5	12.5 +- 1.2	16
> 5	13.9 +- 2.0	9
Upwind Control	14.6 +- 0.1	3

NRC TLD DOSES FOR HATCH AREA

Miles

0 2 4

Legend

Water
Highways

Railroads
Roads

Plant..site

INDIAN POINT

TLD Direct Radiation Environmental Monitoring

For the period 970313-970715 125 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	52	1.4	15.3 +- 0.5; 2.3		12.1 +- 0.5; 3.5			12.3 +- 1.2	
2	53	1.0	17.6 +- 0.5; 2.6		14.2 +- 0.6; 3.7			14.1 +- 1.2	
3	61	1.5	18.9 +- 0.6; 2.8		15.4 +- 0.6; 3.8			15.0 +- 1.0	
4	89	1.2	18.8 +- 0.6; 2.8		15.4 +- 0.6; 3.8			15.3 +- 1.2	
5	107	0.9	19.0 +- 0.6; 2.8		15.5 +- 0.6; 3.8			15.2 +- 1.1	
6	90	0.5	18.2 +- 0.5; 2.7		14.8 +- 0.6; 3.7			15.4 +- 1.2	
7	133	0.8	17.6 +- 0.5; 2.6		14.3 +- 0.6; 3.7			14.6 +- 1.2	
8	158	0.8	19.0 +- 0.6; 2.8		15.5 +- 0.6; 3.8			15.9 +- 1.1	
9	188	1.2	18.9 +- 0.6; 2.8		15.5 +- 0.6; 3.8			16.1 +- 1.2	
10	206	0.9	17.2 +- 0.5; 2.6		13.8 +- 0.5; 3.6			14.8 +- 1.4	
11	170	1.1	Damaged Dosimeter		No Net Data			13.5 +- 1.0	
12	155	2.3	18.7 +- 0.6; 2.8		15.3 +- 0.6; 3.8			14.6 +- 1.1	
13	136	3.2	19.5 +- 0.6; 2.9		16.0 +- 0.6; 3.9			15.0 +- 1.1	
14	107	3.1	17.6 +- 0.5; 2.6		14.2 +- 0.6; 3.7			13.7 +- 1.1	
15	94	3.8	17.6 +- 0.5; 2.6		14.3 +- 0.6; 3.7			14.4 +- 1.0	
16	142	5.7	18.8 +- 0.6; 2.8		15.3 +- 0.6; 3.8			15.9 +- 1.1	
18	147	9.1	19.8 +- 0.6; 3.0		16.3 +- 0.6; 3.9			16.2 +- 1.0	
19	137	12.0	18.2 +- 0.5; 2.7		14.8 +- 0.6; 3.7			14.1 +- 1.4	
20	129	12.0	18.3 +- 0.6; 2.8		14.9 +- 0.6; 3.7			14.5 +- 1.2	
22	74	7.5	Missing Dosimeter		No Net Data			15.2 +- 1.1	
23	5	100.0	20.2 +- 0.6; 3.0		16.6 +- 0.6; 3.9			16.8 +- 1.3	
24	5	100.0	19.6 +- 0.6; 2.9		16.1 +- 0.6; 3.9			16.6 +- 1.3	
25	65	4.1	16.8 +- 0.5; 2.5		13.5 +- 0.5; 3.6			14.3 +- 1.2	
26	40	4.0	21.2 +- 0.6; 3.2		17.5 +- 0.6; 4.0			17.7 +- 1.2	
27	25	5.3	21.0 +- 0.6; 3.1		17.4 +- 0.6; 4.0			16.5 +- 1.1	
28	24	2.9	17.8 +- 0.5; 2.7		14.4 +- 0.6; 3.7			15.3 +- 1.2	
29	22	2.1	18.5 +- 0.6; 2.8		15.0 +- 0.6; 3.8			15.4 +- 1.2	
30	8	1.9	22.3 +- 0.7; 3.3		18.6 +- 0.7; 4.1			16.6 +- 1.3	
31	356	5.0	18.2 +- 0.5; 2.7		14.8 +- 0.6; 3.7			15.3 +- 1.2	
32	330	3.7	17.3 +- 0.5; 2.6		13.9 +- 0.6; 3.6			16.0 +- 1.8	
33	338	4.7	20.3 +- 0.6; 3.0		16.7 +- 0.6; 3.9			16.9 +- 1.5	
34	354	7.0	22.4 +- 0.7; 3.4		18.6 +- 0.7; 4.1			18.9 +- 3.0	
35	297	4.4	19.3 +- 0.6; 2.9		15.8 +- 0.6; 3.8			15.9 +- 1.3	
36	309	3.6	23.7 +- 0.7; 3.5		19.8 +- 0.7; 4.3			21.8 +- 5.4	
37	350	1.1	19.5 +- 0.6; 2.9		16.0 +- 0.6; 3.9			16.5 +- 1.1	
38	337	0.9	20.6 +- 0.6; 3.1		17.0 +- 0.6; 4.0			16.4 +- 1.6	
39	315	1.0	17.2 +- 0.5; 2.6		13.9 +- 0.6; 3.6			15.0 +- 1.2	
40	294	1.1	20.6 +- 0.6; 3.1		17.0 +- 0.6; 4.0			16.5 +- 1.3	
41	274	1.1	20.1 +- 0.6; 3.0		16.5 +- 0.6; 3.9			18.6 +- 2.0	
42	248	1.5	19.3 +- 0.6; 2.9		15.8 +- 0.6; 3.8			17.0 +- 2.0	
44	5	100.0	20.8 +- 0.6; 3.1		17.2 +- 0.6; 4.0			16.7 +- 1.5	
45	227	2.4	19.6 +- 0.6; 2.9		16.1 +- 0.6; 3.9			15.9 +- 1.9	
46	209	3.2	16.6 +- 0.5; 2.5		13.3 +- 0.5; 3.6			14.4 +- 1.8	
47	218	5.3	17.8 +- 0.5; 2.7		14.4 +- 0.6; 3.7			15.0 +- 1.8	
48	201	4.6	19.1 +- 0.6; 2.9		15.6 +- 0.6; 3.8			16.0 +- 1.4	
49	187	5.2	16.6 +- 0.5; 2.5		13.3 +- 0.5; 3.6			13.6 +- 1.6	
50	171	7.1	17.2 +- 0.5; 2.6		13.8 +- 0.5; 3.6			14.3 +- 1.3	

Transit Dose = 2.1 +- 0.3; 3.0

INDIAN POINT
For the period 970313-970715

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 +- 1.9	4
11.26 - 33.75 NNE	15.6 +- 1.5	3
33.76 - 56.25 NE	14.6 +- 2.7	3
56.26 - 78.75 ENE	14.5 +- 1.3	2
78.76 - 101.25 E	14.8 +- 0.6	3
101.26 - 123.75 ESE	14.9 +- 0.9	2
123.76 - 146.25 SE	15.1 +- 0.6	5
146.26 - 168.75 SSE	15.7 +- 0.5	3
168.76 - 191.25 S	14.2 +- 1.1	3
191.26 - 213.75 SSW	14.3 +- 1.2	3
213.76 - 236.25 SW	15.2 +- 1.2	2
236.26 - 258.75 WSW	15.8 +- 0.0	1
258.76 - 281.25 W	16.5 +- 0.0	1
281.26 - 303.75 WNW	16.4 +- 0.9	2
303.76 - 326.25 NW	16.8 +- 4.2	2
326.26 - 348.75 NNW	15.9 +- 1.7	3

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	15.4 +- 1.5	17
2 - 5	15.4 +- 1.7	16
> 5	15.4 +- 1.7	9
Upwind Control	16.6 +- 0.5	3

NRC TLD DOSES FOR INDIAN POINT AREA

Miles

Legend

Water
Highways

Railroads
Roads

Plant..site

KEWAUNEE/PT. BEACH

TLD Direct Radiation Environmental Monitoring

For the period 970311-970708 120 Days

Field Time: 79 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	17.0 +- 0.5; 2.5	12.8 +- 0.7; 4.3	12.6 +- 1.3
2	195	7.0	19.3 +- 0.6; 2.9	15.4 +- 0.8; 4.6	17.2 +- 2.2
3	163	4.9	16.7 +- 0.5; 2.5	12.5 +- 0.7; 4.3	12.9 +- 1.3
4	183	3.3	20.2 +- 0.6; 3.0	16.5 +- 0.8; 4.7	16.4 +- 1.7
5	210	3.2	16.7 +- 0.5; 2.5	12.5 +- 0.7; 4.3	12.1 +- 1.6
6	223	3.7	20.0 +- 0.6; 3.0	16.3 +- 0.8; 4.7	16.3 +- 2.0
7	242	5.7	17.2 +- 0.5; 2.6	13.1 +- 0.7; 4.3	13.9 +- 1.1
8	202	1.8	20.9 +- 0.6; 3.1	17.3 +- 0.8; 4.8	17.0 +- 1.5
9	180	1.8	19.9 +- 0.6; 3.0	16.1 +- 0.8; 4.6	15.6 +- 1.6
10	158	1.9	17.0 +- 0.5; 2.5	12.8 +- 0.7; 4.3	12.7 +- 1.4
11	235	1.2	20.8 +- 0.6; 3.1	17.1 +- 0.8; 4.8	16.8 +- 1.7
12	258	1.4	19.2 +- 0.6; 2.9	15.4 +- 0.8; 4.6	15.3 +- 1.6
13	273	1.4	19.7 +- 0.6; 3.0	16.0 +- 0.8; 4.6	15.6 +- 1.8
14	290	0.9	Damaged Dosimeter	No Net Data	16.4 +- 1.5
15	333	0.8	16.9 +- 0.5; 2.5	12.8 +- 0.7; 4.3	15.1 +- 1.7
16	342	1.9	19.5 +- 0.6; 2.9	15.7 +- 0.8; 4.6	15.2 +- 1.6
17	317	2.0	17.2 +- 0.5; 2.6	13.1 +- 0.7; 4.3	13.4 +- 2.0
18	310	3.4	18.7 +- 0.6; 2.8	14.8 +- 0.8; 4.5	17.5 +- 1.5
19	293	4.0	21.2 +- 0.6; 3.2	17.6 +- 0.8; 4.8	14.2 +- 1.6
20	273	4.0	17.9 +- 0.5; 2.7	13.9 +- 0.7; 4.4	14.5 +- 2.1
21	300	5.6	19.6 +- 0.6; 2.9	15.8 +- 0.8; 4.6	14.5 +- 1.4
22	316	5.9	19.9 +- 0.6; 3.0	16.2 +- 0.8; 4.6	15.4 +- 1.6
23	345	2.7	18.6 +- 0.6; 2.8	14.7 +- 0.8; 4.5	16.5 +- 1.6
24	219	1.3	Damaged Dosimeter	No Net Data	14.7 +- 1.7
25	247	1.4	21.0 +- 0.6; 3.1	17.4 +- 0.8; 4.8	16.6 +- 1.6
26	263	1.3	20.3 +- 0.6; 3.0	16.6 +- 0.8; 4.7	16.2 +- 1.6
27	290	1.4	Damaged Dosimeter	No Net Data	16.7 +- 1.6
28	320	1.3	21.0 +- 0.6; 3.1	17.4 +- 0.8; 4.8	16.9 +- 2.1
29	342	1.1	18.2 +- 0.5; 2.7	14.2 +- 0.7; 4.4	15.4 +- 2.2
30	329	0.6	20.5 +- 0.6; 3.1	16.9 +- 0.8; 4.7	16.4 +- 1.7
31	13	1.0	19.5 +- 0.6; 2.9	15.8 +- 0.8; 4.6	14.9 +- 1.6
32	353	2.1	19.9 +- 0.6; 3.0	16.2 +- 0.8; 4.7	15.9 +- 1.7
33	301	3.9	18.0 +- 0.5; 2.7	14.0 +- 0.7; 4.4	14.6 +- 1.6
34	299	8.4	20.5 +- 0.6; 3.1	16.9 +- 0.8; 4.7	15.6 +- 1.4
35	323	3.8	17.0 +- 0.5; 2.6	12.9 +- 0.7; 4.3	13.9 +- 1.9
36	336	3.3	21.2 +- 0.6; 3.2	17.7 +- 0.8; 4.8	16.8 +- 2.0
37	6	3.1	19.2 +- 0.6; 2.9	15.4 +- 0.8; 4.6	14.3 +- 1.4
38	14	3.7	19.7 +- 0.6; 3.0	16.0 +- 0.8; 4.6	15.3 +- 1.7
39	13	7.6	17.9 +- 0.5; 2.7	13.9 +- 0.7; 4.4	13.3 +- 1.7
40	247	4.3	22.7 +- 0.7; 3.4	19.4 +- 0.9; 5.0	18.5 +- 1.6
41	8	23.0	17.0 +- 0.5; 2.6	12.9 +- 0.7; 4.3	12.9 +- 1.9
42	8	23.0	17.5 +- 0.5; 2.6	13.4 +- 0.7; 4.4	13.4 +- 1.5
43	8	23.0	15.9 +- 0.5; 2.4	11.6 +- 0.7; 4.2	12.7 +- 1.6

Transit Dose = 5.7 +- 0.4; 2.8

KEWAUNEE/PT. BEACH
For the period 970311-970708

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 +- 0.6	2
11.26 - 33.75 NNE	15.2 +- 1.1	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	12.7 +- 0.2	2
168.76 - 191.25 S	15.2 +- 2.0	3
191.26 - 213.75 SSW	15.1 +- 2.4	3
213.76 - 236.25 SW	16.7 +- 0.6	2
236.26 - 258.75 WSW	16.3 +- 2.7	4
258.76 - 281.25 W	15.5 +- 1.4	3
281.26 - 303.75 WNW	16.1 +- 1.6	4
303.76 - 326.25 NW	14.9 +- 2.0	5
326.26 - 348.75 NNW	15.3 +- 1.8	6

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	15.6 +- 1.7	15
2 - 5	15.4 +- 2.0	15
> 5	14.9 +- 1.6	7
Upwind Control	12.6 +- 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 970311-970716 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	5	20.0	19.1 +- 0.6; 2.9		14.3 +- 0.7; 4.1		14.8 +- 1.6	
2	5	20.0	19.8 +- 0.6; 3.0		14.9 +- 0.7; 4.2		15.3 +- 1.3	
3	3	20.0	20.6 +- 0.6; 3.1		15.7 +- 0.7; 4.2		15.8 +- 1.0	
4	343	3.8	18.9 +- 0.6; 2.8		14.1 +- 0.7; 4.1		14.7 +- 1.2	
5	313	3.8	21.9 +- 0.7; 3.3		17.0 +- 0.7; 4.4		16.2 +- 0.9	
6	291	3.0	19.6 +- 0.6; 2.9		14.8 +- 0.7; 4.1		15.7 +- 1.1	
7	261	4.8	22.2 +- 0.7; 3.3		17.3 +- 0.7; 4.4		17.6 +- 1.5	
8	249	3.2	20.4 +- 0.6; 3.1		15.5 +- 0.7; 4.2		17.0 +- 1.7	
9	214	5.0	20.2 +- 0.6; 3.0		15.3 +- 0.7; 4.2		15.8 +- 1.5	
10	171	9.8	19.3 +- 0.6; 2.9		14.4 +- 0.7; 4.1		14.5 +- 1.2	
11	176	5.1	19.7 +- 0.6; 3.0		14.8 +- 0.7; 4.1		15.0 +- 1.0	
12	165	4.9	21.2 +- 0.6; 3.2		16.3 +- 0.7; 4.3		16.2 +- 1.0	
13	138	3.5	22.4 +- 0.7; 3.4		17.5 +- 0.7; 4.4		16.9 +- 1.1	
14	114	4.2	20.9 +- 0.6; 3.1		16.0 +- 0.7; 4.3		15.7 +- 1.1	
15	97	3.9	20.1 +- 0.6; 3.0		15.2 +- 0.7; 4.2		14.7 +- 0.9	
16	94	3.0	21.6 +- 0.6; 3.2		16.7 +- 0.7; 4.3		16.6 +- 1.2	
17	105	2.0	18.0 +- 0.5; 2.7		13.2 +- 0.6; 4.0		16.0 +- 2.2	
18	52	1.5	18.9 +- 0.6; 2.8		14.1 +- 0.7; 4.1		14.3 +- 1.1	
19	16	1.5	19.9 +- 0.6; 3.0		15.0 +- 0.7; 4.2		14.5 +- 1.0	
20	1	1.0	16.8 +- 0.5; 2.5		12.0 +- 0.6; 3.9		13.4 +- 0.9	
21	358	0.5	21.1 +- 0.6; 3.2		16.2 +- 0.7; 4.3		17.0 +- 1.1	
22	180	0.6	20.1 +- 0.6; 3.0		15.3 +- 0.7; 4.2		16.2 +- 0.9	
23	134	1.7	18.8 +- 0.6; 2.8		14.0 +- 0.7; 4.1		16.1 +- 1.5	
24	58	0.6	22.6 +- 0.7; 3.4		17.7 +- 0.8; 4.5		17.5 +- 1.5	
25	59	3.1	20.8 +- 0.6; 3.1		15.9 +- 0.7; 4.3		17.1 +- 1.5	
26	16	1.5	20.9 +- 0.6; 3.1		16.0 +- 0.7; 4.3		16.5 +- 1.3	
27	26	5.1	20.1 +- 0.6; 3.0		15.2 +- 0.7; 4.2		15.3 +- 1.1	
28	25	7.0	20.6 +- 0.6; 3.1		15.7 +- 0.7; 4.2		14.3 +- 1.5	
29	4	4.8	20.3 +- 0.6; 3.1		15.5 +- 0.7; 4.2		16.0 +- 1.2	

Transit Dose = 4.5 +- 0.4; 3.0

LACROSSE

For the period 970311-970716

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	14.6 +- 2.3	3
11.26 - 33.75 NNE	15.5 +- 0.4	4
33.76 - 56.25 NE	14.1 +- 0.0	1
56.26 - 78.75 ENE	16.8 +- 1.3	2
78.76 - 101.25 E	16.0 +- 1.0	2
101.26 - 123.75 ESE	14.6 +- 2.0	2
123.76 - 146.25 SE	15.8 +- 2.5	2
146.26 - 168.75 SSE	16.3 +- 0.0	1
168.76 - 191.25 S	14.8 +- 0.4	3
191.26 - 213.75 SSW	No Data +- No Data	0
213.76 - 236.25 SW	15.3 +- 0.0	1
236.26 - 258.75 WSW	15.5 +- 0.0	1
258.76 - 281.25 W	17.3 +- 0.0	1
281.26 - 303.75 WNW	14.8 +- 0.0	1
303.76 - 326.25 NW	17.0 +- 0.0	1
326.26 - 348.75 NNW	14.1 +- 0.0	1

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	14.8 +- 1.7	9
2 - 5	15.9 +- 1.0	13
> 5	15.1 +- 0.6	4
Upwind Control	15.0 +- 0.7	3

NRC TLD DOSES FOR LACROSSE AREA

Miles

Legend

Water
Highways

Railroads
Roads

Plant site

LASALLE

TLD Direct Radiation Environmental Monitoring

For the period 970310-970716 129 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	302	10.0	20.2	+- 0.6; 3.0	16.3	+- 0.6; 3.9	17.5	+- 1.2
2	335	5.3	24.6	+- 0.7; 3.7	20.3	+- 0.7; 4.4	19.7	+- 1.5
3	343	5.8	19.6	+- 0.6; 2.9	15.7	+- 0.6; 3.9	15.8	+- 1.0
4	38	5.5	21.7	+- 0.7; 3.3	17.6	+- 0.7; 4.1	19.1	+- 2.2
5	39	4.3	17.7	+- 0.5; 2.7	13.9	+- 0.6; 3.7	14.8	+- 1.2
6	27	3.8	20.4	+- 0.6; 3.1	16.4	+- 0.6; 4.0	17.3	+- 1.3
7	2	4.1	24.2	+- 0.7; 3.6	19.9	+- 0.7; 4.3	19.6	+- 1.3
8	304	4.6	23.5	+- 0.7; 3.5	19.3	+- 0.7; 4.3	19.2	+- 1.3
9	292	3.9	22.0	+- 0.7; 3.3	17.9	+- 0.7; 4.1	19.9	+- 2.6
10	281	3.7	24.8	+- 0.7; 3.7	20.5	+- 0.7; 4.4	19.3	+- 1.8
11	248	4.0	22.3	+- 0.7; 3.3	18.2	+- 0.7; 4.2	18.5	+- 1.2
12	222	12.0	21.5	+- 0.6; 3.2	17.4	+- 0.7; 4.1	17.9	+- 1.1
13	212	18.0	22.6	+- 0.7; 3.4	18.5	+- 0.7; 4.2	18.4	+- 1.1
14	212	18.0	22.0	+- 0.7; 3.3	17.9	+- 0.7; 4.1	19.0	+- 1.3
15	212	18.0	21.8	+- 0.7; 3.3	17.7	+- 0.7; 4.1	18.8	+- 1.3
16	215	4.4	25.7	+- 0.8; 3.9	21.3	+- 0.8; 4.5	19.8	+- 1.1
17	204	4.0	23.2	+- 0.7; 3.5	19.0	+- 0.7; 4.2	19.2	+- 1.1
18	173	4.6	Missing Dosimeter		No Net Data		19.7	+- 1.2
19	174	6.4	Missing Dosimeter		No Net Data		17.3	+- 1.0
20	158	3.6	22.7	+- 0.7; 3.4	18.5	+- 0.7; 4.2	18.7	+- 1.3
21	124	4.2	22.8	+- 0.7; 3.4	18.7	+- 0.7; 4.2	19.3	+- 1.7
22	114	3.8	22.7	+- 0.7; 3.4	18.5	+- 0.7; 4.2	18.9	+- 1.2
23	97	4.5	23.7	+- 0.7; 3.6	19.4	+- 0.7; 4.3	18.3	+- 1.4
24	72	4.7	25.8	+- 0.8; 3.9	21.4	+- 0.8; 4.5	20.0	+- 1.4
25	41	2.0	22.6	+- 0.7; 3.4	18.4	+- 0.7; 4.2	19.0	+- 1.2
26	11	1.6	22.2	+- 0.7; 3.3	18.1	+- 0.7; 4.1	18.7	+- 1.3
27	358	1.5	22.4	+- 0.7; 3.4	18.3	+- 0.7; 4.2	19.4	+- 1.2
28	336	1.6	22.1	+- 0.7; 3.3	18.0	+- 0.7; 4.1	18.5	+- 1.3
29	310	2.3	20.8	+- 0.6; 3.1	16.8	+- 0.6; 4.0	17.8	+- 1.5
30	301	2.0	25.6	+- 0.8; 3.8	21.2	+- 0.8; 4.5	21.2	+- 1.2
31	271	1.7	23.3	+- 0.7; 3.5	19.0	+- 0.7; 4.3	18.6	+- 1.2
32	256	1.8	25.6	+- 0.8; 3.8	21.2	+- 0.8; 4.5	19.6	+- 1.7
33	227	2.4	25.1	+- 0.8; 3.8	20.8	+- 0.8; 4.4	20.6	+- 1.3
34	204	1.7	Missing Dosimeter		No Net Data		18.9	+- 1.0
35	165	1.6	24.5	+- 0.7; 3.7	20.2	+- 0.7; 4.4	19.8	+- 1.9
36	149	1.8	24.6	+- 0.7; 3.7	20.3	+- 0.7; 4.4	19.8	+- 1.3
37	139	2.1	21.8	+- 0.7; 3.3	17.7	+- 0.7; 4.1	19.0	+- 1.2
38	111	1.5	21.7	+- 0.7; 3.3	17.6	+- 0.7; 4.1	17.1	+- 1.2
39	265	0.6	24.5	+- 0.7; 3.7	20.2	+- 0.7; 4.4	20.1	+- 1.5

Transit Dose = 2.5 +- 0.3; 3.0

LASALLE

For the period 970310-970716

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 +- 1.0	3
11.26 - 33.75 NNE	16.4 +- 0.0	1
33.76 - 56.25 NE	16.7 +- 2.4	3
56.26 - 78.75 ENE	21.4 +- 0.0	1
78.76 - 101.25 E	19.4 +- 0.0	1
101.26 - 123.75 ESE	18.1 +- 0.7	2
123.76 - 146.25 SE	18.2 +- 0.7	2
146.26 - 168.75 SSE	19.7 +- 1.0	3
168.76 - 191.25 S	No Data +- No Data	0
191.26 - 213.75 SSW	19.0 +- 0.0	1
213.76 - 236.25 SW	19.8 +- 2.1	3
236.26 - 258.75 WSW	19.7 +- 2.2	2
258.76 - 281.25 W	19.9 +- 0.8	3
281.26 - 303.75 WNW	18.4 +- 2.5	3
303.76 - 326.25 NW	18.0 +- 1.7	2
326.26 - 348.75 NNW	18.0 +- 2.3	3

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	19.3 +- 1.3	11
2 - 5	18.7 +- 1.9	17
> 5	17.5 +- 1.8	5
Upwind Control	18.0 +- 0.4	3

NRC TLD DOSES FOR LASALLE AREA

Miles

0 2 4

Legend

Water
Highways

Railroads
Roads

Plant..site

LIMERICK

TLD Direct Radiation Environmental Monitoring

For the period 970312-970708 119 Days

Field Time: 93 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	115	8.5	26.9 +- 0.8; 4.0		23.2 +- 0.8; 4.8		22.7 +- 1.5	
3	85	3.7	23.1 +- 0.7; 3.5		19.6 +- 0.7; 4.4		18.9 +- 1.3	
4	46	3.3	22.0 +- 0.7; 3.3		18.5 +- 0.7; 4.3		19.5 +- 1.3	
5	20	3.7	21.5 +- 0.6; 3.2		18.0 +- 0.7; 4.2		19.3 +- 1.3	
6	7	4.6	22.1 +- 0.7; 3.3		18.6 +- 0.7; 4.3		20.0 +- 1.3	
7	340	7.2	21.0 +- 0.6; 3.1		17.5 +- 0.7; 4.2		17.8 +- 1.4	
8	332	4.0	22.3 +- 0.7; 3.3		18.8 +- 0.7; 4.3		19.1 +- 1.2	
9	313	3.4	21.8 +- 0.7; 3.3		18.3 +- 0.7; 4.3		19.1 +- 1.3	
10	291	4.9	24.2 +- 0.7; 3.6		20.6 +- 0.8; 4.5		20.9 +- 1.5	
11	304	3.0	27.8 +- 0.8; 4.2		24.1 +- 0.9; 4.9		24.4 +- 1.7	
12	316	1.9	21.6 +- 0.6; 3.2		18.1 +- 0.7; 4.2		18.2 +- 1.2	
13	347	1.9	23.7 +- 0.7; 3.6		20.2 +- 0.8; 4.5		20.4 +- 1.3	
14	339	1.5	19.8 +- 0.6; 3.0		16.4 +- 0.7; 4.0		17.3 +- 1.1	
15	41	1.7	24.2 +- 0.7; 3.6		20.7 +- 0.8; 4.5		18.2 +- 1.4	
16	66	2.6	20.1 +- 0.6; 3.0		16.7 +- 0.7; 4.1		19.0 +- 1.5	
17	5	0.6	19.7 +- 0.6; 3.0		16.3 +- 0.6; 4.0		18.4 +- 1.7	
18	300	0.7	23.3 +- 0.7; 3.5		19.8 +- 0.7; 4.4		18.8 +- 1.5	
19	291	0.7	20.5 +- 0.6; 3.1		17.1 +- 0.7; 4.1		18.5 +- 1.5	
20	260	0.7	20.6 +- 0.6; 3.1		17.1 +- 0.7; 4.1		18.2 +- 1.3	
21	234	0.9	21.6 +- 0.6; 3.2		18.2 +- 0.7; 4.2		18.3 +- 1.3	
22	210	1.1	21.4 +- 0.6; 3.2		17.9 +- 0.7; 4.2		19.0 +- 1.1	
23	174	1.7	20.6 +- 0.6; 3.1		17.1 +- 0.7; 4.1		17.1 +- 1.2	
24	149	1.5	21.7 +- 0.7; 3.3		18.2 +- 0.7; 4.2		17.6 +- 1.3	
25	124	1.0	22.5 +- 0.7; 3.4		19.0 +- 0.7; 4.3		19.6 +- 1.2	
26	114	1.1	23.0 +- 0.7; 3.5		19.5 +- 0.7; 4.4		19.8 +- 1.3	
27	160	1.0	21.6 +- 0.6; 3.2		18.1 +- 0.7; 4.2		18.9 +- 1.1	
28	81	1.0	20.9 +- 0.6; 3.1		17.5 +- 0.7; 4.2		18.4 +- 1.2	
29	51	0.7	23.0 +- 0.7; 3.4		19.4 +- 0.7; 4.4		19.0 +- 1.3	
30	144	3.2	25.5 +- 0.8; 3.8		21.9 +- 0.8; 4.7		22.3 +- 1.6	
31	158	2.6	21.6 +- 0.6; 3.2		18.1 +- 0.7; 4.2		18.9 +- 1.8	
32	153	7.3	20.8 +- 0.6; 3.1		17.4 +- 0.7; 4.1		17.7 +- 1.3	
33	186	4.2	20.6 +- 0.6; 3.1		17.1 +- 0.7; 4.1		17.2 +- 1.3	
34	194	3.8	Missing Dosimeter		No Net Data		16.6 +- 1.3	
35	229	5.1	22.4 +- 0.7; 3.4		18.9 +- 0.7; 4.3		18.8 +- 1.2	
36	251	4.1	24.8 +- 0.7; 3.7		21.2 +- 0.8; 4.6		20.0 +- 2.1	
37	270	3.0	18.6 +- 0.6; 2.8		15.2 +- 0.6; 3.9		15.8 +- 1.1	
38	293	11.9	23.2 +- 0.7; 3.5		19.7 +- 0.7; 4.4		20.3 +- 1.5	
39	293	11.9	24.9 +- 0.7; 3.7		21.3 +- 0.8; 4.6		20.4 +- 1.5	
40	293	11.9	24.2 +- 0.7; 3.6		20.6 +- 0.8; 4.5		20.7 +- 1.6	
41	126	2.9	20.0 +- 0.6; 3.0		16.5 +- 0.7; 4.1		15.9 +- 1.0	
42	111	4.3	22.5 +- 0.7; 3.4		19.0 +- 0.7; 4.3		19.3 +- 1.5	

Transit Dose = 2.9 +- 0.3; 2.9

LIMERICK

For the period 970312-970708

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 +- 1.6	2
11.26 - 33.75 NNE	18.0 +- 0.0	1
33.76 - 56.25 NE	19.5 +- 1.1	3
56.26 - 78.75 ENE	16.7 +- 0.0	1
78.76 - 101.25 E	18.5 +- 1.5	2
101.26 - 123.75 ESE	20.6 +- 2.3	3
123.76 - 146.25 SE	19.2 +- 2.7	3
146.26 - 168.75 SSE	17.9 +- 0.4	4
168.76 - 191.25 S	17.1 +- 0.0	2
191.26 - 213.75 SSW	17.9 +- 0.0	1
213.76 - 236.25 SW	18.5 +- 0.5	2
236.26 - 258.75 WSW	21.2 +- 0.0	1
258.76 - 281.25 W	16.2 +- 1.4	2
281.26 - 303.75 WNW	19.2 +- 1.9	3
303.76 - 326.25 NW	20.2 +- 3.4	3
326.26 - 348.75 NNW	18.2 +- 1.6	4

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	18.3 +- 1.3	17
2 - 5	18.9 +- 2.2	16
> 5	19.2 +- 2.7	4
Upwind Control	20.5 +- 0.8	3

NRC TLD DOSES FOR LIMERICK AREA

Miles

0 2 4

Legend

Water

Highways

Railroads

Roads

Plant site

MAINE YANKEE

TLD Direct Radiation Environmental Monitoring

For the period 970312-970715 126 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	340	1.0	23.6	+- 0.7; 3.5	21.3	+- 0.7; 4.4	18.7	+- 1.6
2	6	1.4	22.1	+- 0.7; 3.3	19.8	+- 0.7; 4.3	17.6	+- 1.6
3	23	1.5	21.5	+- 0.6; 3.2	19.2	+- 0.7; 4.2	17.4	+- 1.9
4	44	1.8	21.1	+- 0.6; 3.2	18.8	+- 0.7; 4.1	17.2	+- 1.8
5	116	0.5	21.2	+- 0.6; 3.2	19.0	+- 0.7; 4.2	17.1	+- 1.7
6	168	1.0	22.4	+- 0.7; 3.4	20.1	+- 0.7; 4.3	18.2	+- 1.7
7	185	1.6	19.1	+- 0.6; 2.9	16.9	+- 0.6; 3.9	16.7	+- 1.5
8	195	2.3	21.1	+- 0.6; 3.2	18.8	+- 0.7; 4.1	17.7	+- 1.6
9	209	3.8	21.5	+- 0.6; 3.2	19.3	+- 0.7; 4.2	17.2	+- 1.6
10	310	1.7	21.0	+- 0.6; 3.2	18.8	+- 0.7; 4.1	17.2	+- 1.7
11	290	1.8	26.3	+- 0.8; 3.9	24.0	+- 0.8; 4.7	20.0	+- 2.2
12	275	1.7	23.6	+- 0.7; 3.5	21.3	+- 0.7; 4.4	19.0	+- 1.8
13	256	1.9	21.7	+- 0.6; 3.2	19.4	+- 0.7; 4.2	17.7	+- 1.9
14 *	232	2.5	26.9	+- 0.8; 4.0	24.5	+- 0.8; 4.8	18.7	+- 1.6
15	227	5.3	23.8	+- 0.7; 3.6	21.5	+- 0.8; 4.4	18.5	+- 2.0
16	246	4.4	23.8	+- 0.7; 3.6	21.4	+- 0.8; 4.4	19.5	+- 2.1
17	250	6.6	29.4	+- 0.9; 4.4	26.9	+- 0.9; 5.1	23.9	+- 1.6
18	268	4.7	22.7	+- 0.7; 3.4	20.4	+- 0.7; 4.3	18.5	+- 1.7
19	283	4.4	23.3	+- 0.7; 3.5	21.0	+- 0.7; 4.4	18.4	+- 1.6
20	305	4.7	22.7	+- 0.7; 3.4	20.4	+- 0.7; 4.3	17.7	+- 1.7
21	300	2.9	23.0	+- 0.7; 3.5	20.7	+- 0.7; 4.4	18.3	+- 1.9
22	332	2.7	Missing Dosimeter		No Net Data		18.6	+- 2.0
23	20	3.9	24.9	+- 0.7; 3.7	22.5	+- 0.8; 4.6	18.7	+- 2.0
24	23	3.0	23.8	+- 0.7; 3.6	21.5	+- 0.8; 4.4	19.2	+- 1.9
25	42	4.7	23.9	+- 0.7; 3.6	21.5	+- 0.8; 4.5	18.9	+- 1.9
26	60	15.0	20.2	+- 0.6; 3.0	17.9	+- 0.7; 4.0	17.1	+- 1.9
27	62	16.0	Missing Dosimeter		No Net Data		16.2	+- 1.6
28	63	16.0	22.3	+- 0.7; 3.4	20.1	+- 0.7; 4.3	17.4	+- 1.4
29	64	2.1	25.0	+- 0.8; 3.8	22.7	+- 0.8; 4.6	20.0	+- 1.8
30	84	1.5	20.6	+- 0.6; 3.1	18.4	+- 0.7; 4.1	16.8	+- 1.8
31	115	1.6	19.8	+- 0.6; 3.0	17.6	+- 0.6; 4.0	16.9	+- 1.5
32	135	2.0	20.5	+- 0.6; 3.1	18.3	+- 0.7; 4.1	16.4	+- 1.8
33	66	3.5	20.9	+- 0.6; 3.1	18.7	+- 0.7; 4.1	17.8	+- 1.7
34	97	4.9	23.8	+- 0.7; 3.6	21.5	+- 0.8; 4.4	19.0	+- 1.7
35	123	4.8	23.7	+- 0.7; 3.6	21.4	+- 0.7; 4.4	18.9	+- 1.8
36	140	4.9	20.2	+- 0.6; 3.0	18.0	+- 0.7; 4.0	17.1	+- 2.0
37	151	6.0	25.2	+- 0.8; 3.8	22.9	+- 0.8; 4.6	18.7	+- 2.1
38	152	4.2	24.9	+- 0.7; 3.7	22.5	+- 0.8; 4.6	19.6	+- 1.7
39	172	4.9	23.1	+- 0.7; 3.5	20.8	+- 0.7; 4.4	17.6	+- 1.6
40	156	7.4	21.5	+- 0.6; 3.2	19.3	+- 0.7; 4.2	18.0	+- 1.4

Transit Dose = 1.8 +- 0.3; 2.8

* The result for this location was outside (above) the expected range. Refer to the preface of this report for more information.

MAINE YANKEE

For the period 970312-970715

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	19.8 +- 0.0	1
11.26 - 33.75 NNE	21.1 +- 1.7	3
33.76 - 56.25 NE	20.2 +- 1.9	2
56.26 - 78.75 ENE	20.7 +- 2.8	2
78.76 - 101.25 E	19.9 +- 2.2	2
101.26 - 123.75 ESE	19.3 +- 1.9	3
123.76 - 146.25 SE	18.1 +- 0.2	2
146.26 - 168.75 SSE	21.2 +- 1.8	4
168.76 - 191.25 S	18.9 +- 2.7	2
191.26 - 213.75 SSW	19.0 +- 0.3	2
213.76 - 236.25 SW	23.0 +- 2.1	2
236.26 - 258.75 WSW	22.6 +- 3.9	3
258.76 - 281.25 W	20.9 +- 0.6	2
281.26 - 303.75 WNW	21.9 +- 1.8	3
303.76 - 326.25 NW	19.6 +- 1.2	2
326.26 - 348.75 NNW	21.3 +- 0.0	1

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	19.5 +- 1.8	14
2 - 5	21.0 +- 1.6	18
> 5	22.6 +- 3.2	4
Upwind Control	19.0 +- 1.5	2

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 970311-970723 135 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	97	0.5	18.7 +- 0.6; 2.8		11.9 +- 0.6; 4.0		13.1 +- 2.5	
2	323	1.6	22.8 +- 0.7; 3.4		15.7 +- 0.7; 4.3		16.1 +- 1.7	
3	336	1.7	22.8 +- 0.7; 3.4		15.7 +- 0.7; 4.3		17.0 +- 2.3	
4	303	2.9	20.1 +- 0.6; 3.0		13.3 +- 0.7; 4.1		15.3 +- 3.1	
5	321	3.9	Missing Dosimeter		No Net Data		15.7 +- 1.7	
6	334	3.7	19.7 +- 0.6; 3.0		12.9 +- 0.7; 4.1		15.1 +- 2.1	
7	352	3.5	Missing Dosimeter		No Net Data		13.7 +- 2.2	
8	287	2.0	25.7 +- 0.8; 3.8		18.3 +- 0.8; 4.6		17.7 +- 2.7	
9	273	1.9	18.0 +- 0.5; 2.7		11.3 +- 0.6; 3.9		15.0 +- 2.9	
10	244	1.7	19.0 +- 0.6; 2.9		12.3 +- 0.6; 4.0		13.9 +- 2.3	
11	225	2.1	18.8 +- 0.6; 2.8		12.1 +- 0.6; 4.0		13.4 +- 2.3	
12	212	3.6	20.4 +- 0.6; 3.1		13.5 +- 0.7; 4.1		15.3 +- 2.1	
13	232	4.4	26.8 +- 0.8; 4.0		19.3 +- 0.8; 4.7		21.1 +- 1.9	
14	253	3.7	23.8 +- 0.7; 3.6		16.6 +- 0.7; 4.4		17.9 +- 2.4	
15	261	4.2	19.5 +- 0.6; 2.9		12.7 +- 0.7; 4.0		14.3 +- 1.8	
16	288	4.3	25.4 +- 0.8; 3.8		18.0 +- 0.8; 4.6		21.1 +- 2.3	
17	288	17.0	29.6 +- 0.9; 4.4		21.9 +- 0.9; 5.0		22.1 +- 1.9	
18	287	2.0	24.1 +- 0.7; 3.6		16.9 +- 0.8; 4.5		19.7 +- 2.7	
19	286	17.0	25.6 +- 0.8; 3.8		18.3 +- 0.8; 4.6		20.8 +- 3.3	
20	233	18.0	28.7 +- 0.9; 4.3		21.1 +- 0.9; 4.9		20.8 +- 2.1	
21	204	10.0	21.0 +- 0.6; 3.1		14.0 +- 0.7; 4.2		14.9 +- 2.3	
22	239	9.5	23.1 +- 0.7; 3.5		16.0 +- 0.7; 4.4		16.4 +- 2.2	
23	115	4.9	15.6 +- 0.5; 2.3		9.2 +- 0.6; 3.7		12.0 +- 2.6	
24	132	4.9	16.6 +- 0.5; 2.5		10.1 +- 0.6; 3.8		12.8 +- 1.9	
25	156	4.0	Missing Dosimeter		No Net Data		10.5 +- 2.3	
26	175	3.7	18.3 +- 0.6; 2.8		11.7 +- 0.6; 3.9		13.1 +- 1.8	
27	198	4.3	24.8 +- 0.7; 3.7		17.5 +- 0.8; 4.5		18.4 +- 2.9	
28	169	13.0	Missing Dosimeter		No Net Data		13.2 +- 2.5	
29	155	13.0	18.0 +- 0.5; 2.7		11.3 +- 0.6; 3.9		13.3 +- 2.1	
30	146	14.0	18.7 +- 0.6; 2.8		12.0 +- 0.6; 4.0		12.6 +- 2.1	
31	143	1.9	15.5 +- 0.5; 2.3		9.1 +- 0.6; 3.7		12.5 +- 3.5	
32	155	1.3	17.8 +- 0.5; 2.7		11.1 +- 0.6; 3.9		13.7 +- 2.3	
33	178	1.6	Missing Dosimeter		No Net Data		12.1 +- 2.3	
34	108	2.0	20.0 +- 0.6; 3.0		13.2 +- 0.7; 4.1		14.0 +- 2.1	
35	93	2.2	17.7 +- 0.5; 2.6		11.0 +- 0.6; 3.9		13.1 +- 2.9	
36	68	2.5	19.1 +- 0.6; 2.9		12.3 +- 0.6; 4.0		13.7 +- 2.2	
37	82	4.7	18.1 +- 0.5; 2.7		11.4 +- 0.6; 3.9		13.4 +- 2.3	
38	64	4.9	19.0 +- 0.6; 2.9		12.3 +- 0.6; 4.0		13.7 +- 2.5	
39	42	5.0	17.0 +- 0.5; 2.6		10.4 +- 0.6; 3.8		16.6 +- 3.2	
40	26	4.3	18.5 +- 0.6; 2.8		11.8 +- 0.6; 3.9		14.2 +- 2.3	
41	42	2.0	17.3 +- 0.5; 2.6		10.7 +- 0.6; 3.8		12.0 +- 2.1	
42	21	1.6	19.4 +- 0.6; 2.9		12.7 +- 0.6; 4.0		16.1 +- 2.4	
43	8	2.6	22.3 +- 0.7; 3.3		15.2 +- 0.7; 4.3		17.0 +- 2.1	
44	37	13.0	24.8 +- 0.7; 3.7		17.5 +- 0.8; 4.5		20.1 +- 2.9	
45	78	19.0	27.4 +- 0.8; 4.1		19.9 +- 0.8; 4.8		22.4 +- 2.6	
46	94	19.0	25.1 +- 0.8; 3.8		17.8 +- 0.8; 4.6		16.9 +- 2.3	

Transit Dose = 5.5 +- 0.4; 3.3

MCGUIRE

For the period 970311-970723

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	15.2 +- 0.0	1
11.26 - 33.75 NNE	12.2 +- 0.6	2
33.76 - 56.25 NE	12.9 +- 4.0	3
56.26 - 78.75 ENE	14.8 +- 4.4	3
78.76 - 101.25 E	13.0 +- 3.2	4
101.26 - 123.75 ESE	11.2 +- 2.8	2
123.76 - 146.25 SE	10.4 +- 1.5	3
146.26 - 168.75 SSE	11.2 +- 0.1	2
168.76 - 191.25 S	11.7 +- 0.0	1
191.26 - 213.75 SSW	15.0 +- 2.2	3
213.76 - 236.25 SW	17.5 +- 4.7	3
236.26 - 258.75 WSW	15.0 +- 2.3	3
258.76 - 281.25 W	12.0 +- 1.0	2
281.26 - 303.75 WNW	16.5 +- 2.8	3
303.76 - 326.25 NW	15.7 +- 0.0	1
326.26 - 348.75 NNW	14.3 +- 1.9	2

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	12.9 +- 2.7	11
2 - 5	13.2 +- 2.8	19
> 5	16.2 +- 3.5	8
Upwind Control	19.0 +- 2.6	3

NRC TLD DOSES FOR McGUIRE AREA

Miles

Legend

Water
Highways

Railroads
Roads

Plant site

MILLSTONE

TLD Direct Radiation Environmental Monitoring

For the period 970312-970722 133 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	0	1.0	24.0 +- 0.7; 3.6		22.6 +- 0.8; 4.5		20.1 +- 1.2	
2	24	1.3	17.0 +- 0.5; 2.6		15.8 +- 0.6; 3.7		15.0 +- 1.0	
3	47	1.5	23.7 +- 0.7; 3.5		22.3 +- 0.7; 4.4		19.8 +- 1.1	
4	60	1.7	22.1 +- 0.7; 3.3		20.8 +- 0.7; 4.2		18.2 +- 1.4	
5*	85	1.3	23.6 +- 0.7; 3.5		22.3 +- 0.7; 4.4		19.2 +- 1.0	
6	110	1.8	22.5 +- 0.7; 3.4		21.2 +- 0.7; 4.3		18.7 +- 1.1	
7	67	5.3	22.1 +- 0.7; 3.3		20.8 +- 0.7; 4.3		19.9 +- 1.9	
8	49	5.3	19.3 +- 0.6; 2.9		18.0 +- 0.6; 3.9		20.1 +- 1.4	
9	84	5.2	21.3 +- 0.6; 3.2		20.0 +- 0.7; 4.2		18.1 +- 1.0	
11	232	2.5	22.5 +- 0.7; 3.4		21.1 +- 0.7; 4.3		17.9 +- 1.1	
12	256	2.4	24.1 +- 0.7; 3.6		22.7 +- 0.8; 4.5		20.1 +- 1.1	
13	274	2.2	24.4 +- 0.7; 3.7		23.0 +- 0.8; 4.5		20.0 +- 1.3	
14	295	1.9	25.7 +- 0.8; 3.9		24.4 +- 0.8; 4.7		21.2 +- 1.4	
15	315	1.5	20.0 +- 0.6; 3.0		18.7 +- 0.6; 4.0		15.8 +- 1.0	
16	339	1.2	23.6 +- 0.7; 3.5		22.3 +- 0.7; 4.4		19.9 +- 1.1	
17	353	3.5	23.3 +- 0.7; 3.5		21.9 +- 0.7; 4.4		19.0 +- 1.4	
18	24	3.5	24.2 +- 0.7; 3.6		22.9 +- 0.8; 4.5		19.7 +- 1.3	
19	33	3.0	25.8 +- 0.8; 3.9		24.4 +- 0.8; 4.7		21.2 +- 2.0	
20	82	4.0	21.9 +- 0.7; 3.3		20.6 +- 0.7; 4.2		18.0 +- 1.0	
22	59	3.7	22.0 +- 0.7; 3.3		20.7 +- 0.7; 4.2		20.3 +- 1.3	
28	257	5.8	24.1 +- 0.7; 3.6		22.8 +- 0.8; 4.5		22.2 +- 2.5	
29	272	3.7	26.4 +- 0.8; 4.0		25.0 +- 0.8; 4.8		21.8 +- 1.7	
30	295	3.5	25.3 +- 0.8; 3.8		23.9 +- 0.8; 4.6		21.2 +- 1.4	
31	317	3.6	22.3 +- 0.7; 3.3		20.9 +- 0.7; 4.3		18.4 +- 1.2	
32	327	4.3	25.7 +- 0.8; 3.9		24.3 +- 0.8; 4.7		21.8 +- 1.6	
33	41	4.7	23.8 +- 0.7; 3.6		22.5 +- 0.8; 4.5		19.8 +- 1.1	
34	54	5.5	23.2 +- 0.7; 3.5		21.9 +- 0.7; 4.4		21.0 +- 1.4	
37	354	6.8	23.3 +- 0.7; 3.5		22.0 +- 0.7; 4.4		19.3 +- 1.2	
39	1	5.7	22.5 +- 0.7; 3.4		21.2 +- 0.7; 4.3		18.9 +- 1.1	
40	278	8.7	21.6 +- 0.6; 3.2		20.3 +- 0.7; 4.2		17.0 +- 1.1	
41	34	11.0	27.1 +- 0.8; 4.1		25.7 +- 0.8; 4.8		23.8 +- 1.6	
42	84	8.0	23.1 +- 0.7; 3.5		21.7 +- 0.7; 4.4		19.3 +- 1.4	
46	41	0.6	23.3 +- 0.7; 3.5		22.0 +- 0.7; 4.4		18.8 +- 1.3	
48	4	40.0	30.5 +- 0.9; 4.6		29.1 +- 0.9; 5.3		24.4 +- 2.1	
49	4	40.0	29.3 +- 0.9; 4.4		27.9 +- 0.9; 5.1		24.4 +- 2.1	

Transit Dose = 1.1 +- 0.3; 2.7

* The result for this location was outside (above) the expected range. Refer to the preface of this report for more information.

MILLSTONE

For the period 970312-970722

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	21.9 +- 0.6	4
11.26 - 33.75 NNE	21.0 +- 4.6	3
33.76 - 56.25 NE	22.1 +- 2.4	6
56.26 - 78.75 ENE	20.8 +- 0.1	3
78.76 - 101.25 E	21.2 +- 1.0	4
101.26 - 123.75 ESE	21.2 +- 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	21.1 +- 0.0	1
236.26 - 258.75 WSW	22.7 +- 0.0	2
258.76 - 281.25 W	22.8 +- 2.4	3
281.26 - 303.75 WNW	24.2 +- 0.3	2
303.76 - 326.25 NW	19.8 +- 1.6	2
326.26 - 348.75 NNW	23.3 +- 1.5	2

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	21.2 +- 2.4	10
2 - 5	22.6 +- 1.5	13
> 5	21.4 +- 2.0	10
Upwind Control	28.5 +- 0.8	2

NRC TLD DOSES FOR MILLSTONE AREA

Miles

Legend

Water

--- Railroads

Plant..site

— Highways

--- Roads

MONTICELLO

TLD Direct Radiation Environmental Monitoring

For the period 970310-970710 123 Days

Field Time: 93 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	19.5 +- 0.6; 2.9		17.0 +- 0.6; 4.0		16.6 +- 1.3	
2	163	4.6	20.9 +- 0.6; 3.1		18.4 +- 0.7; 4.1		17.4 +- 1.3	
3	183	4.1	22.0 +- 0.7; 3.3		19.4 +- 0.7; 4.2		17.8 +- 1.3	
4	206	4.3	21.1 +- 0.6; 3.2		18.6 +- 0.7; 4.1		17.5 +- 1.3	
5	230	4.2	23.5 +- 0.7; 3.5		20.9 +- 0.7; 4.4		18.9 +- 1.9	
6	253	4.6	21.9 +- 0.7; 3.3		19.3 +- 0.7; 4.2		17.7 +- 1.5	
7	269	4.4	20.5 +- 0.6; 3.1		18.0 +- 0.7; 4.1		17.0 +- 1.4	
8	286	4.0	21.4 +- 0.6; 3.2		18.9 +- 0.7; 4.2		18.0 +- 1.4	
9	274	1.9	20.1 +- 0.6; 3.0		17.6 +- 0.6; 4.0		17.0 +- 1.2	
10	244	1.3	19.0 +- 0.6; 2.9		16.6 +- 0.6; 3.9		15.4 +- 1.2	
11	226	0.9	20.0 +- 0.6; 3.0		17.5 +- 0.6; 4.0		16.8 +- 1.3	
12	181	1.8	19.9 +- 0.6; 3.0		17.4 +- 0.6; 4.0		17.0 +- 1.4	
13	137	1.7	20.0 +- 0.6; 3.0		17.5 +- 0.6; 4.0		16.8 +- 1.3	
14	155	1.0	20.5 +- 0.6; 3.1		18.0 +- 0.7; 4.1		17.1 +- 1.1	
15	208	0.6	20.6 +- 0.6; 3.1		18.1 +- 0.7; 4.1		16.5 +- 1.2	
16	284	2.0	19.8 +- 0.6; 3.0		17.3 +- 0.6; 4.0		16.5 +- 1.0	
17	113	1.6	21.3 +- 0.6; 3.2		18.8 +- 0.7; 4.1		17.1 +- 1.3	
18	85	1.1	20.3 +- 0.6; 3.0		17.8 +- 0.7; 4.0		16.5 +- 1.2	
19	63	1.2	20.3 +- 0.6; 3.0		17.8 +- 0.7; 4.0		16.9 +- 1.4	
20	37	1.7	20.0 +- 0.6; 3.0		17.5 +- 0.6; 4.0		16.9 +- 1.0	
21	23	0.8	20.5 +- 0.6; 3.1		17.9 +- 0.7; 4.1		16.8 +- 1.3	
22	354	0.7	20.9 +- 0.6; 3.1		18.3 +- 0.7; 4.1		17.2 +- 1.2	
23	338	0.8	21.8 +- 0.7; 3.3		19.3 +- 0.7; 4.2		17.1 +- 1.4	
24	307	1.8	20.6 +- 0.6; 3.1		18.1 +- 0.7; 4.1		16.9 +- 1.2	
25	339	4.1	21.0 +- 0.6; 3.2		18.5 +- 0.7; 4.1		16.5 +- 1.2	
26	320	6.0	20.2 +- 0.6; 3.0		17.7 +- 0.6; 4.0		16.7 +- 1.2	
27	354	4.5	21.0 +- 0.6; 3.1		18.5 +- 0.7; 4.1		16.8 +- 1.6	
28	17	3.7	21.0 +- 0.6; 3.1		18.5 +- 0.7; 4.1		15.8 +- 1.4	
29	50	4.0	18.6 +- 0.6; 2.8		16.1 +- 0.6; 3.9		15.7 +- 1.4	
30	77	3.6	21.5 +- 0.6; 3.2		18.9 +- 0.7; 4.2		16.8 +- 1.3	
31	115	3.3	21.0 +- 0.6; 3.1		18.4 +- 0.7; 4.1		16.6 +- 1.2	
32	90	4.6	18.5 +- 0.6; 2.8		16.0 +- 0.6; 3.9		15.6 +- 1.7	
33	323	16.0	20.2 +- 0.6; 3.0		17.7 +- 0.6; 4.0		16.5 +- 1.4	
34	323	16.0	20.6 +- 0.6; 3.1		18.1 +- 0.7; 4.1		16.4 +- 1.2	
35	323	16.0	20.3 +- 0.6; 3.0		17.8 +- 0.7; 4.0		17.2 +- 1.3	

Transit Dose = 1.9 +- 0.3; 2.9

MONTICELLO

For the period 970310-970710

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	18.4 +- 0.1	2
11.26 - 33.75 NNE	18.2 +- 0.4	2
33.76 - 56.25 NE	16.8 +- 1.0	2
56.26 - 78.75 ENE	18.3 +- 0.8	2
78.76 - 101.25 E	16.9 +- 1.3	2
101.26 - 123.75 ESE	18.6 +- 0.2	2
123.76 - 146.25 SE	17.2 +- 0.3	2
146.26 - 168.75 SSE	18.2 +- 0.3	2
168.76 - 191.25 S	18.4 +- 1.4	2
191.26 - 213.75 SSW	18.3 +- 0.4	2
213.76 - 236.25 SW	19.2 +- 2.5	2
236.26 - 258.75 WSW	17.9 +- 1.9	2
258.76 - 281.25 W	17.8 +- 0.3	2
281.26 - 303.75 WNW	18.1 +- 1.1	2
303.76 - 326.25 NW	17.9 +- 0.3	2
326.26 - 348.75 NNW	18.9 +- 0.6	2

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	17.8 +- 0.6	16
2 - 5	18.4 +- 1.2	15
> 5	17.7 +- 0.0	1
Upwind Control	17.8 +- 0.2	3

NRC TLD DOSES FOR MONTICELLO AREA

Miles

0 2 4

Legend

Water

Highways

Railroads

Roads

Plant..site

NORTH ANNA

TLD Direct Radiation Environmental Monitoring

For the period 970311-970722 134 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	243	1.8	25.3 +- 0.8; 3.8		20.9 +- 0.8; 4.7		21.1 +- 1.4	
2	263	1.6	22.6 +- 0.7; 3.4		18.2 +- 0.7; 4.4		17.7 +- 1.1	
3	296	1.0	21.7 +- 0.7; 3.3		17.4 +- 0.7; 4.3		17.7 +- 1.2	
4	311	1.3	27.2 +- 0.8; 4.1		22.7 +- 0.9; 4.9		22.3 +- 1.3	
5	329	1.3	23.2 +- 0.7; 3.5		18.9 +- 0.8; 4.5		18.9 +- 1.1	
6	231	3.9	24.5 +- 0.7; 3.7		20.1 +- 0.8; 4.6		20.6 +- 1.2	
7	224	1.7	24.5 +- 0.7; 3.7		20.1 +- 0.8; 4.6		20.0 +- 1.2	
8	210	1.6	22.5 +- 0.7; 3.4		18.2 +- 0.7; 4.4		18.2 +- 1.2	
9	181	1.4	19.7 +- 0.6; 3.0		15.4 +- 0.7; 4.1		16.0 +- 1.0	
10	155	1.0	29.2 +- 0.9; 4.4		24.7 +- 0.9; 5.2		23.7 +- 1.4	
11	136	1.6	23.6 +- 0.7; 3.5		19.3 +- 0.8; 4.5		18.2 +- 1.4	
12	163	3.5	23.2 +- 0.7; 3.5		18.9 +- 0.8; 4.5		19.2 +- 1.1	
13	190	3.3	24.0 +- 0.7; 3.6		19.6 +- 0.8; 4.6		17.6 +- 1.1	
14	205	4.9	22.0 +- 0.7; 3.3		17.7 +- 0.7; 4.4		16.7 +- 1.2	
15	140	4.2	24.1 +- 0.7; 3.6		19.7 +- 0.8; 4.6		19.1 +- 1.1	
16	113	4.9	27.0 +- 0.8; 4.1		22.6 +- 0.9; 4.9		22.8 +- 1.4	
17	93	3.3	19.8 +- 0.6; 3.0		15.5 +- 0.7; 4.1		16.1 +- 1.0	
18	64	4.1	23.9 +- 0.7; 3.6		19.5 +- 0.8; 4.6		19.3 +- 1.2	
19	78	2.7	34.3 +- 1.0; 5.1		29.7 +- 1.1; 5.8		28.9 +- 1.2	
20	97	1.9	26.1 +- 0.8; 3.9		21.6 +- 0.8; 4.8		20.6 +- 1.7	
21	105	1.7	20.1 +- 0.6; 3.0		15.8 +- 0.7; 4.2		16.7 +- 1.0	
22	60	2.4	20.7 +- 0.6; 3.1		16.4 +- 0.7; 4.2		17.2 +- 1.1	
23	37	1.4	23.0 +- 0.7; 3.5		18.6 +- 0.8; 4.5		18.8 +- 1.3	
24	16	1.6	29.2 +- 0.9; 4.4		24.7 +- 0.9; 5.2		24.0 +- 1.2	
25	48	3.5	19.7 +- 0.6; 3.0		15.4 +- 0.7; 4.1		15.9 +- 1.8	
26	17	3.7	24.6 +- 0.7; 3.7		20.2 +- 0.8; 4.7		19.3 +- 1.2	
27	3	4.8	21.4 +- 0.6; 3.2		17.1 +- 0.7; 4.3		17.3 +- 1.2	
28	348	4.0	22.5 +- 0.7; 3.4		18.2 +- 0.7; 4.4		17.3 +- 1.1	
29	2	1.9	20.4 +- 0.6; 3.1		16.1 +- 0.7; 4.2		16.8 +- 1.0	
30	284	5.0	19.6 +- 0.6; 2.9		15.3 +- 0.7; 4.1		17.0 +- 1.4	
31	310	4.7	24.6 +- 0.7; 3.7		20.2 +- 0.8; 4.6		20.1 +- 1.3	
32	273	4.9	20.1 +- 0.6; 3.0		15.8 +- 0.7; 4.2		14.6 +- 1.7	
33	257	5.1	21.9 +- 0.7; 3.3		17.5 +- 0.7; 4.3		18.4 +- 1.5	
34	242	7.1	23.4 +- 0.7; 3.5		19.0 +- 0.8; 4.5		19.1 +- 1.4	
35	255	11.0	22.0 +- 0.7; 3.3		17.7 +- 0.7; 4.4		18.2 +- 1.6	
36	248	15.0	24.0 +- 0.7; 3.6		19.6 +- 0.8; 4.6		18.4 +- 1.2	
37	247	17.0	20.8 +- 0.6; 3.1		16.5 +- 0.7; 4.2		17.7 +- 1.1	
38	244	19.0	20.6 +- 0.6; 3.1		16.3 +- 0.7; 4.2		16.9 +- 1.5	

Transit Dose = 3.9 +- 0.3; 3.0

NORTH ANNA

For the period 970311-970722

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 +- 0.7	2
11.26 - 33.75 NNE	22.5 +- 3.2	2
33.76 - 56.25 NE	17.0 +- 2.3	2
56.26 - 78.75 ENE	21.9 +- 7.0	3
78.76 - 101.25 E	18.6 +- 4.3	2
101.26 - 123.75 ESE	19.2 +- 4.8	2
123.76 - 146.25 SE	19.5 +- 0.3	2
146.26 - 168.75 SSE	21.8 +- 4.1	2
168.76 - 191.25 S	17.5 +- 3.0	2
191.26 - 213.75 SSW	17.9 +- 0.3	2
213.76 - 236.25 SW	20.1 +- 0.0	2
236.26 - 258.75 WSW	18.8 +- 1.6	4
258.76 - 281.25 W	17.0 +- 1.7	2
281.26 - 303.75 WNW	16.4 +- 1.4	2
303.76 - 326.25 NW	21.5 +- 1.8	2
326.26 - 348.75 NNW	18.5 +- 0.5	2

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	19.5 +- 3.0	15
2 - 5	18.9 +- 3.5	17
> 5	18.1 +- 0.8	3
Upwind Control	17.5 +- 1.8	3

NRC TLD DOSES FOR NORTH ANNA AREA

Miles

Legend

Water
Highways

Railroads
Roads

Plant..site

OCONEE

TLD Direct Radiation Environmental Monitoring

For the period 970311-970715 127 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	158 7.5	24.9 +- 0.7; 3.7	22.2 +- 0.9; 4.9	22.2 +- 1.9
2	133 4.9	29.2 +- 0.9; 4.4	26.7 +- 1.0; 5.5	25.0 +- 1.7
3	119 4.3	27.5 +- 0.8; 4.1	24.9 +- 0.9; 5.3	24.5 +- 1.5
4	84 4.7	27.1 +- 0.8; 4.1	24.6 +- 0.9; 5.2	24.5 +- 1.2
5	65 4.0	25.8 +- 0.8; 3.9	23.2 +- 0.9; 5.1	23.5 +- 1.5
6	52 1.8	26.7 +- 0.8; 4.0	24.1 +- 0.9; 5.2	24.4 +- 1.7
7	22 3.5	27.5 +- 0.8; 4.1	24.9 +- 0.9; 5.3	24.8 +- 1.5
8	33 1.4	26.9 +- 0.8; 4.0	24.3 +- 0.9; 5.2	24.7 +- 1.5
9	52 1.8	22.4 +- 0.7; 3.4	19.5 +- 0.8; 4.6	19.4 +- 1.3
10	67 1.1	21.6 +- 0.6; 3.2	18.7 +- 0.8; 4.5	17.7 +- 2.2
11	107 1.9	22.9 +- 0.7; 3.4	20.1 +- 0.8; 4.7	18.9 +- 1.2
12	87 1.0	24.7 +- 0.7; 3.7	22.0 +- 0.9; 4.9	21.7 +- 1.4
13	142 0.7	25.2 +- 0.8; 3.8	22.5 +- 0.9; 5.0	22.5 +- 1.3
14	166 0.7	20.1 +- 0.6; 3.0	17.1 +- 0.7; 4.3	18.8 +- 2.3
15	226 1.7	24.5 +- 0.7; 3.7	21.8 +- 0.9; 4.9	21.5 +- 1.3
16	207 1.4	24.2 +- 0.7; 3.6	21.5 +- 0.8; 4.8	21.2 +- 1.2
17	182 2.2	21.5 +- 0.6; 3.2	18.6 +- 0.8; 4.5	18.0 +- 1.5
18	186 3.8	22.5 +- 0.7; 3.4	19.6 +- 0.8; 4.6	19.2 +- 1.2
19	155 4.1	27.2 +- 0.8; 4.1	24.6 +- 0.9; 5.2	23.5 +- 1.2
20	203 8.4	21.0 +- 0.6; 3.1	18.0 +- 0.8; 4.5	17.9 +- 1.8
21	210 4.6	22.5 +- 0.7; 3.4	19.7 +- 0.8; 4.6	18.8 +- 1.2
22	227 4.8	23.6 +- 0.7; 3.5	20.8 +- 0.8; 4.8	21.5 +- 2.6
23	240 3.6	20.8 +- 0.6; 3.1	17.9 +- 0.7; 4.4	19.5 +- 2.0
24	268 3.6	27.4 +- 0.8; 4.1	24.8 +- 0.9; 5.3	23.6 +- 1.3
25	257 1.9	20.4 +- 0.6; 3.1	17.4 +- 0.7; 4.4	18.5 +- 1.4
26	293 3.6	25.4 +- 0.8; 3.8	22.8 +- 0.9; 5.0	21.0 +- 1.6
27	311 3.5	20.7 +- 0.6; 3.1	17.8 +- 0.7; 4.4	17.7 +- 0.9
28	288 2.0	22.5 +- 0.7; 3.4	19.7 +- 0.8; 4.6	19.8 +- 1.3
29	275 1.8	20.2 +- 0.6; 3.0	17.2 +- 0.7; 4.4	18.8 +- 1.1
30	321 1.8	25.2 +- 0.8; 3.8	22.5 +- 0.9; 5.0	21.6 +- 1.2
31	344 2.0	20.3 +- 0.6; 3.0	17.3 +- 0.7; 4.4	16.9 +- 1.3
32	336 3.7	29.7 +- 0.9; 4.5	27.3 +- 1.0; 5.6	25.7 +- 1.7
33	358 4.5	Missing Dosimeter	No Net Data	21.1 +- 1.8
34	256 9.4	27.4 +- 0.8; 4.1	24.9 +- 0.9; 5.3	27.3 +- 1.6
35	149 21.0	24.6 +- 0.7; 3.7	21.9 +- 0.9; 4.9	22.6 +- 1.5
36	126 8.2	26.2 +- 0.8; 3.9	23.6 +- 0.9; 5.1	24.2 +- 1.5
37	96 9.7	27.5 +- 0.8; 4.1	25.0 +- 0.9; 5.3	24.1 +- 1.2
38	32 16.0	32.8 +- 1.0; 4.9	30.5 +- 1.1; 6.0	30.2 +- 1.9
39	31 16.0	26.8 +- 0.8; 4.0	24.2 +- 0.9; 5.2	25.0 +- 1.8
40	29 16.0	29.4 +- 0.9; 4.4	27.0 +- 1.0; 5.5	26.8 +- 1.6

Transit Dose = 3.9 +- 0.3; 2.8

OCONEE

For the period 970311-970715

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	24.6 +- 0.4	2
33.76 - 56.25 NE	21.8 +- 3.2	2
56.26 - 78.75 ENE	21.0 +- 3.2	2
78.76 - 101.25 E	23.9 +- 1.6	3
101.26 - 123.75 ESE	22.5 +- 3.4	2
123.76 - 146.25 SE	24.3 +- 2.2	3
146.26 - 168.75 SSE	21.5 +- 3.2	4
168.76 - 191.25 S	19.1 +- 0.7	2
191.26 - 213.75 SSW	19.7 +- 1.7	3
213.76 - 236.25 SW	21.3 +- 0.7	2
236.26 - 258.75 WSW	20.1 +- 4.2	3
258.76 - 281.25 W	21.0 +- 5.4	2
281.26 - 303.75 WNW	21.2 +- 2.2	2
303.76 - 326.25 NW	20.1 +- 3.4	2
326.26 - 348.75 NNW	22.3 +- 7.1	2

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	20.4 +- 2.5	15
2 - 5	22.5 +- 3.2	15
> 5	22.6 +- 2.6	6
Upwind Control	27.2 +- 3.2	3

NRC TLD DOSES FOR OCONEE AREA

Miles

Legend

Water
Highways

Railroads
Roads

Plant site

OYSTER CREEK

TLD Direct Radiation Environmental Monitoring

For the period 970312-970722 133 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	141	0.5	15.9	+- 0.5; 2.4	10.9	+- 0.6; 3.8	11.3	+- 1.2
2	120	0.9	17.0	+- 0.5; 2.5	11.9	+- 0.6; 3.9	11.1	+- 1.0
3	105	1.5	16.6	+- 0.5; 2.5	11.5	+- 0.6; 3.9	12.2	+- 0.8
4	127	1.5	16.0	+- 0.5; 2.4	11.0	+- 0.6; 3.8	11.1	+- 0.7
5	137	1.3	16.8	+- 0.5; 2.5	11.7	+- 0.6; 3.9	11.8	+- 1.1
6	158	1.2	16.9	+- 0.5; 2.5	11.8	+- 0.6; 3.9	11.4	+- 0.7
7	176	2.2	17.1	+- 0.5; 2.6	12.0	+- 0.6; 3.9	12.1	+- 0.9
8	179	1.6	17.7	+- 0.5; 2.7	12.6	+- 0.6; 4.0	11.8	+- 0.8
9	159	2.8	15.7	+- 0.5; 2.4	10.6	+- 0.6; 3.8	10.6	+- 0.7
10	187	8.4	15.7	+- 0.5; 2.4	10.7	+- 0.6; 3.8	11.7	+- 1.0
11	173	4.4	15.3	+- 0.5; 2.3	10.3	+- 0.6; 3.8	11.6	+- 0.8
12	196	4.2	16.5	+- 0.5; 2.5	11.4	+- 0.6; 3.9	11.7	+- 0.8
13	198	8.6	15.1	+- 0.5; 2.3	10.1	+- 0.6; 3.7	10.9	+- 0.6
14	185	10.0	17.6	+- 0.5; 2.6	12.5	+- 0.6; 4.0	13.2	+- 0.9
15	171	11.0	16.0	+- 0.5; 2.4	10.9	+- 0.6; 3.8	11.5	+- 0.9
16	154	8.2	17.5	+- 0.5; 2.6	12.4	+- 0.6; 4.0	11.9	+- 0.7
17	126	6.3	16.3	+- 0.5; 2.5	11.3	+- 0.6; 3.8	12.5	+- 0.9
18	220	4.6	16.2	+- 0.5; 2.4	11.1	+- 0.6; 3.8	11.3	+- 1.0
19	231	2.3	16.7	+- 0.5; 2.5	11.6	+- 0.6; 3.9	11.4	+- 0.8
20	211	1.6	16.0	+- 0.5; 2.4	10.9	+- 0.6; 3.8	10.9	+- 0.6
22	258	1.5	17.0	+- 0.5; 2.6	11.9	+- 0.6; 3.9	11.4	+- 0.8
23	271	1.2	15.2	+- 0.5; 2.3	10.1	+- 0.6; 3.7	10.8	+- 0.8
24	297	1.3	15.7	+- 0.5; 2.4	10.6	+- 0.6; 3.8	11.6	+- 1.0
25	318	1.5	14.7	+- 0.4; 2.2	9.6	+- 0.6; 3.7	10.6	+- 0.7
26	341	3.2	18.5	+- 0.6; 2.8	13.4	+- 0.7; 4.0	13.0	+- 1.1
27	330	4.6	16.6	+- 0.5; 2.5	11.5	+- 0.6; 3.9	11.9	+- 0.9
28	358	3.2	15.6	+- 0.5; 2.3	10.5	+- 0.6; 3.8	11.0	+- 0.6
29	4	1.8	16.2	+- 0.5; 2.4	11.1	+- 0.6; 3.8	11.5	+- 0.7
30	19	0.8	16.4	+- 0.5; 2.5	11.3	+- 0.6; 3.9	11.4	+- 0.7
31	69	1.4	19.0	+- 0.6; 2.9	13.9	+- 0.7; 4.1	12.4	+- 1.4
32	78	2.5	Missing Dosimeter		No Net Data		10.8	+- 0.8
33	85	2.2	14.7	+- 0.4; 2.2	9.6	+- 0.6; 3.7	10.7	+- 1.0
34	38	1.7	15.4	+- 0.5; 2.3	10.3	+- 0.6; 3.8	11.3	+- 0.5
35	24	1.9	16.4	+- 0.5; 2.5	11.3	+- 0.6; 3.8	12.1	+- 1.0
36	50	3.0	15.8	+- 0.5; 2.4	10.7	+- 0.6; 3.8	11.9	+- 1.3
37	46	4.8	14.8	+- 0.4; 2.2	9.7	+- 0.6; 3.7	10.8	+- 1.1
38	27	4.0	18.3	+- 0.5; 2.7	13.2	+- 0.7; 4.0	12.5	+- 0.6
39	12	8.9	16.5	+- 0.5; 2.5	11.4	+- 0.6; 3.9	12.1	+- 0.8
40	10	8.7	15.4	+- 0.5; 2.3	10.3	+- 0.6; 3.8	11.0	+- 0.6
41	3	9.9	17.4	+- 0.5; 2.6	12.3	+- 0.6; 3.9	11.9	+- 0.8
42	38	10.0	16.6	+- 0.5; 2.5	11.5	+- 0.6; 3.9	12.1	+- 0.9
43	46	9.1	16.9	+- 0.5; 2.5	11.8	+- 0.6; 3.9	14.1	+- 0.8
44	73	6.5	15.7	+- 0.5; 2.4	10.7	+- 0.6; 3.8	10.8	+- 0.6
45	79	6.0	16.5	+- 0.5; 2.5	11.4	+- 0.6; 3.9	12.2	+- 0.6
46	278	20.0	16.4	+- 0.5; 2.5	11.3	+- 0.6; 3.8	12.4	+- 0.6
47	278	20.0	17.1	+- 0.5; 2.6	12.0	+- 0.6; 3.9	12.5	+- 0.5

Transit Dose = 4.8 +- 0.4; 3.1

OYSTER CREEK
For the period 970312-970722

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	11.1 +- 0.9	4
11.26 - 33.75 NNE	11.8 +- 0.9	4
33.76 - 56.25 NE	10.8 +- 0.9	5
56.26 - 78.75 ENE	12.3 +- 2.3	2
78.76 - 101.25 E	10.5 +- 1.3	2
101.26 - 123.75 ESE	11.7 +- 0.2	2
123.76 - 146.25 SE	11.2 +- 0.4	4
146.26 - 168.75 SSE	11.6 +- 0.9	3
168.76 - 191.25 S	11.5 +- 1.0	6
191.26 - 213.75 SSW	10.8 +- 0.7	3
213.76 - 236.25 SW	11.4 +- 0.3	2
236.26 - 258.75 WSW	11.9 +- 0.0	1
258.76 - 281.25 W	10.1 +- 0.0	1
281.26 - 303.75 WNW	10.6 +- 0.0	1
303.76 - 326.25 NW	9.6 +- 0.0	1
326.26 - 348.75 NNW	12.4 +- 1.3	2

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	11.3 +- 1.0	17
2 - 5	11.2 +- 1.2	13
> 5	11.3 +- 0.8	13
Upwind Control	11.6 +- 0.5	2

NRC TLD DOSES FOR OYSTER CREEK AREA

Miles

0 2 4

Legend

Water

Highways

Railroads

Roads

Plant..site

PALISADES

TLD Direct Radiation Environmental Monitoring

For the period 970311-970723 135 Days

Field Time: 95 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	19.5 +- 0.6; 2.9	12.8 +- 0.7; 4.2	12.8 +- 0.9
2	173 4.6	18.5 +- 0.6; 2.8	11.8 +- 0.7; 4.1	13.2 +- 0.9
3	156 3.9	19.9 +- 0.6; 3.0	13.2 +- 0.7; 4.2	14.4 +- 1.1
4	132 4.6	19.8 +- 0.6; 3.0	13.0 +- 0.7; 4.2	13.6 +- 1.2
5	118 3.3	21.2 +- 0.6; 3.2	14.3 +- 0.7; 4.3	14.4 +- 1.1
6	152 1.8	18.0 +- 0.5; 2.7	11.3 +- 0.6; 4.0	13.1 +- 1.1
7	196 2.2	Missing Dosimeter	No Net Data	12.8 +- 0.9
8	178 1.6	18.9 +- 0.6; 2.8	12.2 +- 0.7; 4.1	13.6 +- 1.4
9	200 0.9	16.9 +- 0.5; 2.5	10.3 +- 0.6; 3.9	13.2 +- 1.1
10	124 1.8	18.1 +- 0.5; 2.7	11.4 +- 0.6; 4.0	13.4 +- 1.7
11	107 1.6	20.9 +- 0.6; 3.1	14.1 +- 0.7; 4.3	14.1 +- 1.3
12	90 1.5	18.0 +- 0.5; 2.7	11.4 +- 0.6; 4.0	12.8 +- 1.1
13	65 1.7	20.2 +- 0.6; 3.0	13.5 +- 0.7; 4.2	13.5 +- 1.3
14	51 1.9	17.1 +- 0.5; 2.6	10.5 +- 0.6; 3.9	13.3 +- 1.0
15	74 3.7	18.7 +- 0.6; 2.8	12.0 +- 0.7; 4.1	12.4 +- 1.2
16	90 3.6	18.4 +- 0.6; 2.8	11.7 +- 0.7; 4.0	12.3 +- 1.4
17	98 10.0	20.5 +- 0.6; 3.1	13.7 +- 0.7; 4.2	14.5 +- 1.1
18	47 4.5	21.3 +- 0.6; 3.2	14.4 +- 0.7; 4.3	15.2 +- 0.9
19	23 1.5	18.4 +- 0.6; 2.8	11.7 +- 0.7; 4.0	12.5 +- 1.3
20	32 4.8	22.3 +- 0.7; 3.3	15.4 +- 0.7; 4.4	15.1 +- 1.3
21	29 7.0	19.3 +- 0.6; 2.9	12.6 +- 0.7; 4.1	14.1 +- 0.9
22	99 15.0	20.3 +- 0.6; 3.0	13.5 +- 0.7; 4.2	14.5 +- 0.9
23	98 18.0	20.8 +- 0.6; 3.1	14.0 +- 0.7; 4.3	14.6 +- 1.0
24	98 18.0	20.6 +- 0.6; 3.1	13.8 +- 0.7; 4.3	14.3 +- 1.0

Transit Dose = 6.0 +- 0.4; 3.3

PALISADES

For the period 970311-970723

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	13.2 +- 1.9	3
33.76 - 56.25 NE	12.4 +- 2.8	2
56.26 - 78.75 ENE	12.7 +- 1.0	2
78.76 - 101.25 E	12.2 +- 1.3	3
101.26 - 123.75 ESE	14.2 +- 0.2	2
123.76 - 146.25 SE	12.2 +- 1.1	2
146.26 - 168.75 SSE	12.2 +- 1.3	2
168.76 - 191.25 S	12.0 +- 0.3	2
191.26 - 213.75 SSW	11.5 +- 1.7	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	11.8 +- 1.3	9
2 - 5	13.2 +- 1.3	9
> 5	13.1 +- 0.8	2
Upwind Control	13.8 +- 0.3	3

NRC TLD DOSES FOR PALISADES AREA

Miles

Legend

Water

Highways

Railroads

Roads

Plant..site

PALO VERDE

TLD Direct Radiation Environmental Monitoring

For the period 970307-970710 126 Days

Field Time: 92 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	74	23.0	25.0 +- 0.8; 3.8		21.9 +- 0.8; 4.6		20.1 +- 1.2	
2	92	21.0	23.3 +- 0.7; 3.5		20.2 +- 0.7; 4.4		20.7 +- 1.4	
3	89	15.0	24.6 +- 0.7; 3.7		21.5 +- 0.8; 4.6		20.2 +- 1.4	
4	103	11.0	24.7 +- 0.7; 3.7		21.5 +- 0.8; 4.6		20.2 +- 1.2	
5	140	7.4	25.2 +- 0.8; 3.8		22.0 +- 0.8; 4.6		21.7 +- 1.4	
6	142	3.1	24.0 +- 0.7; 3.6		20.9 +- 0.8; 4.5		20.7 +- 1.4	
7	162	2.6	24.2 +- 0.7; 3.6		21.1 +- 0.8; 4.5		20.6 +- 1.3	
8	168	2.6	24.7 +- 0.7; 3.7		21.6 +- 0.8; 4.6		21.1 +- 1.4	
9	193	2.6	26.0 +- 0.8; 3.9		22.8 +- 0.8; 4.7		22.1 +- 1.1	
10	215	3.1	25.9 +- 0.8; 3.9		22.7 +- 0.8; 4.7		22.3 +- 1.4	
11	200	1.7	26.6 +- 0.8; 4.0		23.4 +- 0.8; 4.8		22.4 +- 1.3	
12	214	1.0	26.3 +- 0.8; 3.9		23.1 +- 0.8; 4.8		21.7 +- 1.4	
13	242	0.7	27.6 +- 0.8; 4.1		24.5 +- 0.9; 4.9		23.6 +- 1.4	
14	263	0.6	25.1 +- 0.8; 3.8		21.9 +- 0.8; 4.6		21.9 +- 1.5	
15	295	0.6	24.8 +- 0.7; 3.7		21.6 +- 0.8; 4.6		21.6 +- 1.4	
16	325	1.0	24.9 +- 0.7; 3.7		21.8 +- 0.8; 4.6		21.5 +- 1.3	
17	347	1.8	29.1 +- 0.9; 4.4		25.9 +- 0.9; 5.1		22.7 +- 1.7	
18	0	2.4	27.0 +- 0.8; 4.1		23.8 +- 0.8; 4.9		22.6 +- 1.2	
19	18	1.5	27.4 +- 0.8; 4.1		24.2 +- 0.9; 4.9		20.7 +- 1.7	
20	37	2.0	25.5 +- 0.8; 3.8		22.4 +- 0.8; 4.7		21.5 +- 1.0	
21	58	2.3	25.8 +- 0.8; 3.9		22.7 +- 0.8; 4.7		22.1 +- 1.3	
22	75	2.8	26.2 +- 0.8; 3.9		23.1 +- 0.8; 4.8		22.9 +- 1.1	
23	93	4.4	25.1 +- 0.8; 3.8		22.0 +- 0.8; 4.6		22.2 +- 1.4	
24	101	3.3	23.7 +- 0.7; 3.6		20.6 +- 0.8; 4.5		21.9 +- 2.0	
25	346	2.9	25.7 +- 0.8; 3.9		22.6 +- 0.8; 4.7		21.9 +- 1.4	
26	334	4.3	27.1 +- 0.8; 4.1		24.0 +- 0.9; 4.9		24.4 +- 1.4	
27	333	7.9	30.8 +- 0.9; 4.6		27.6 +- 1.0; 5.3		25.5 +- 2.3	
28	0	7.0	26.3 +- 0.8; 3.9		23.2 +- 0.8; 4.8		22.7 +- 1.4	
29	9	4.2	27.7 +- 0.8; 4.2		24.5 +- 0.9; 4.9		23.6 +- 1.5	
30	27	3.6	26.0 +- 0.8; 3.9		22.9 +- 0.8; 4.7		22.9 +- 1.5	
31	49	3.5	Missing Dosimeter		No Net Data		23.4 +- 1.3	
32	120	3.3	Missing Dosimeter		No Net Data		24.0 +- 1.3	

Transit Dose = 2.6 +- 0.3; 2.9

PALO VERDE
For the period 970307-970710

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	23.8 +- 0.7	3
11.26 - 33.75 NNE	23.5 +- 1.0	2
33.76 - 56.25 NE	22.4 +- 0.0	1
56.26 - 78.75 ENE	22.9 +- 0.3	2
78.76 - 101.25 E	21.3 +- 0.9	2
101.26 - 123.75 ESE	21.5 +- 0.0	1
123.76 - 146.25 SE	21.5 +- 0.8	2
146.26 - 168.75 SSE	21.3 +- 0.4	2
168.76 - 191.25 S	No Data +- No Data	0
191.26 - 213.75 SSW	23.1 +- 0.4	2
213.76 - 236.25 SW	22.9 +- 0.3	2
236.26 - 258.75 WSW	24.5 +- 0.0	1
258.76 - 281.25 W	21.9 +- 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	25.0 +- 2.2	4

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	23.2 +- 1.4	9
2 - 5	22.5 +- 1.2	14
> 5	23.6 +- 2.8	4
Upwind Control	21.2 +- 0.9	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 970312-970708 119 Days

Field Time: 93 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	330	10.3	21.6 +- 0.6; 3.2		18.9 +- 0.7; 4.2		16.8 +- 1.7	
2	33	10.5	19.4 +- 0.6; 2.9		16.8 +- 0.6; 4.0		17.1 +- 0.9	
3	21	4.8	20.3 +- 0.6; 3.0		17.7 +- 0.7; 4.0		17.8 +- 1.4	
4	3	5.0	20.1 +- 0.6; 3.0		17.5 +- 0.6; 4.0		16.9 +- 1.0	
5	344	4.1	20.8 +- 0.6; 3.1		18.1 +- 0.7; 4.1		17.3 +- 1.0	
6	1	2.2	22.4 +- 0.7; 3.4		19.7 +- 0.7; 4.3		19.1 +- 1.0	
7	26	2.4	20.8 +- 0.6; 3.1		18.1 +- 0.7; 4.1		18.0 +- 0.9	
8	55	2.8	21.2 +- 0.6; 3.2		18.5 +- 0.7; 4.1		18.5 +- 1.0	
9	42	2.0	20.9 +- 0.6; 3.1		18.2 +- 0.7; 4.1		17.2 +- 0.9	
10	62	1.7	22.0 +- 0.7; 3.3		19.3 +- 0.7; 4.2		18.9 +- 1.9	
11	96	1.9	22.2 +- 0.7; 3.3		19.4 +- 0.7; 4.2		19.1 +- 1.1	
12	105	2.3	15.8 +- 0.5; 2.4		13.3 +- 0.5; 3.6		14.2 +- 0.9	
13	72	5.0	20.2 +- 0.6; 3.0		17.6 +- 0.7; 4.0		17.1 +- 0.8	
14	85	4.6	21.9 +- 0.7; 3.3		19.2 +- 0.7; 4.2		18.7 +- 1.0	
15	109	4.3	23.0 +- 0.7; 3.5		20.3 +- 0.7; 4.3		19.1 +- 1.0	
16	130	4.6	16.1 +- 0.5; 2.4		13.6 +- 0.5; 3.6		13.6 +- 0.8	
17	157	8.9	17.2 +- 0.5; 2.6		14.7 +- 0.6; 3.7		15.2 +- 1.0	
18	163	4.6	20.2 +- 0.6; 3.0		17.5 +- 0.7; 4.0		16.5 +- 0.8	
19	183	3.9	23.3 +- 0.7; 3.5		20.5 +- 0.7; 4.4		19.0 +- 1.1	
20	201	4.8	22.2 +- 0.7; 3.3		19.5 +- 0.7; 4.3		18.8 +- 1.4	
21	196	2.3	22.7 +- 0.7; 3.4		20.0 +- 0.7; 4.3		19.3 +- 0.8	
22	182	1.7	22.9 +- 0.7; 3.4		20.1 +- 0.7; 4.3		18.8 +- 0.9	
23	157	1.8	25.2 +- 0.8; 3.8		22.4 +- 0.8; 4.6		21.6 +- 1.3	
24	219	1.8	24.5 +- 0.7; 3.7		21.7 +- 0.8; 4.5		20.9 +- 1.1	
25	249	1.7	24.4 +- 0.7; 3.7		21.6 +- 0.8; 4.5		20.1 +- 1.2	
26	269	1.8	25.7 +- 0.8; 3.9		22.9 +- 0.8; 4.6		20.6 +- 1.2	
27	286	1.9	21.1 +- 0.6; 3.2		18.4 +- 0.7; 4.1		17.7 +- 0.9	
28	323	1.8	18.8 +- 0.6; 2.8		16.2 +- 0.6; 3.9		15.9 +- 0.8	
29	286	3.6	25.3 +- 0.8; 3.8		22.5 +- 0.8; 4.6		21.2 +- 0.9	
30	262	4.0	24.0 +- 0.7; 3.6		21.2 +- 0.8; 4.4		21.3 +- 1.2	
31	261	9.9	25.3 +- 0.8; 3.8		22.5 +- 0.8; 4.6		21.2 +- 1.0	
32	247	3.2	22.6 +- 0.7; 3.4		19.9 +- 0.7; 4.3		18.4 +- 0.9	
33	235	3.6	16.1 +- 0.5; 2.4		13.6 +- 0.5; 3.6		14.0 +- 1.2	
34	319	4.9	23.1 +- 0.7; 3.5		20.4 +- 0.7; 4.4		19.6 +- 1.1	
35	149	0.7	20.4 +- 0.6; 3.1		17.7 +- 0.7; 4.1		17.5 +- 1.2	
36	147	17.9	16.1 +- 0.5; 2.4		13.6 +- 0.5; 3.6		14.2 +- 0.8	
37	147	17.9	17.1 +- 0.5; 2.6		14.5 +- 0.6; 3.7		14.5 +- 0.9	
38	147	17.9	16.3 +- 0.5; 2.4		13.8 +- 0.6; 3.6		14.4 +- 0.7	

Transit Dose = 2.1 +- 0.3; 2.9

PEACH BOTTOM

For the period 970312-970708

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	18.6 +- 1.6	2
11.26 - 33.75 NNE	17.5 +- 0.7	3
33.76 - 56.25 NE	18.4 +- 0.2	2
56.26 - 78.75 ENE	18.4 +- 1.2	2
78.76 - 101.25 E	19.3 +- 0.2	2
101.26 - 123.75 ESE	16.8 +- 5.0	2
123.76 - 146.25 SE	13.6 +- 0.0	1
146.26 - 168.75 SSE	18.1 +- 3.2	4
168.76 - 191.25 S	20.3 +- 0.3	2
191.26 - 213.75 SSW	19.7 +- 0.4	2
213.76 - 236.25 SW	17.7 +- 5.8	2
236.26 - 258.75 WSW	20.8 +- 1.2	2
258.76 - 281.25 W	22.2 +- 0.9	3
281.26 - 303.75 WNW	20.4 +- 2.9	2
303.76 - 326.25 NW	18.3 +- 2.9	2
326.26 - 348.75 NNW	18.5 +- 0.6	2

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	19.8 +- 2.1	11
2 - 5	18.4 +- 2.5	20
> 5	18.2 +- 3.3	4
Upwind Control	14.0 +- 0.5	3

NRC TLD DOSES FOR PEACH BOTTOM AREA

Miles

Legend

Water

Highways

Railroads

Roads

Plant site

PERRY

TLD Direct Radiation Environmental Monitoring

For the period 970311-970715 127 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	72	5.0	18.2	+- 0.5; 2.7	14.0	+- 0.7; 4.2			16.1	+- 1.6
3	88	5.5	19.9	+- 0.6; 3.0	15.9	+- 0.7; 4.3			16.2	+- 1.8
4	112	6.0	18.9	+- 0.6; 2.8	14.8	+- 0.7; 4.2			17.0	+- 1.8
5	130	4.0	20.7	+- 0.6; 3.1	16.6	+- 0.7; 4.4			16.6	+- 1.9
6	155	5.0	23.5	+- 0.7; 3.5	19.6	+- 0.8; 4.8			19.8	+- 1.4
7	178	5.2	21.0	+- 0.6; 3.1	17.0	+- 0.8; 4.5			17.7	+- 1.4
8	205	4.6	21.8	+- 0.7; 3.3	17.8	+- 0.8; 4.6			17.2	+- 3.0
9	220	5.2	19.5	+- 0.6; 2.9	15.5	+- 0.7; 4.3			16.2	+- 1.4
10	225	7.4	19.1	+- 0.6; 2.9	15.0	+- 0.7; 4.3			17.2	+- 1.6
11	240	5.8	21.6	+- 0.6; 3.2	17.6	+- 0.8; 4.5			19.0	+- 1.6
12	225	19.0	20.4	+- 0.6; 3.1	16.4	+- 0.7; 4.4			16.6	+- 2.1
13	225	19.0	19.3	+- 0.6; 2.9	15.2	+- 0.7; 4.3			15.8	+- 1.6
14	212	12.0	24.6	+- 0.7; 3.7	20.8	+- 0.9; 4.9			22.2	+- 1.9
15	248	1.4	18.9	+- 0.6; 2.8	14.8	+- 0.7; 4.2			15.8	+- 1.5
16	225	0.8	17.7	+- 0.5; 2.7	13.6	+- 0.7; 4.1			15.6	+- 1.9
17	205	0.7	18.1	+- 0.5; 2.7	14.0	+- 0.7; 4.1			14.2	+- 1.6
18	180	0.8	17.9	+- 0.5; 2.7	13.8	+- 0.7; 4.1			15.5	+- 1.7
19	152	1.8	18.4	+- 0.6; 2.8	14.2	+- 0.7; 4.2			16.0	+- 1.2
20	123	1.6	18.5	+- 0.6; 2.8	14.4	+- 0.7; 4.2			14.2	+- 1.4
21	105	1.4	19.4	+- 0.6; 2.9	15.4	+- 0.7; 4.3			15.5	+- 2.1
22	85	1.2	18.2	+- 0.5; 2.7	14.1	+- 0.7; 4.2			16.1	+- 2.2
23	65	1.4	19.0	+- 0.6; 2.8	14.9	+- 0.7; 4.2			16.2	+- 1.5
24	40	0.6	20.0	+- 0.6; 3.0	16.0	+- 0.7; 4.4			15.6	+- 1.6
25	40	0.6	22.8	+- 0.7; 3.4	18.9	+- 0.8; 4.7			18.0	+- 3.5
26	182	2.8	18.8	+- 0.6; 2.8	14.7	+- 0.7; 4.2			16.3	+- 2.2
27	175	2.8	19.3	+- 0.6; 2.9	15.2	+- 0.7; 4.3			17.2	+- 3.1

Transit Dose = 4.8 +- 0.4; 2.9

PERRY

For the period 970311-970715

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	17.4 +- 2.1	2
56.26 - 78.75 ENE	14.5 +- 0.6	2
78.76 - 101.25 E	15.0 +- 1.3	2
101.26 - 123.75 ESE	14.8 +- 0.5	3
123.76 - 146.25 SE	16.6 +- 0.0	1
146.26 - 168.75 SSE	16.9 +- 3.8	2
168.76 - 191.25 S	15.2 +- 1.4	4
191.26 - 213.75 SSW	15.9 +- 2.7	2
213.76 - 236.25 SW	14.7 +- 1.0	3
236.26 - 258.75 WSW	16.2 +- 2.0	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	14.9 +- 1.5	11
2 - 5	16.3 +- 2.1	6
> 5	15.9 +- 1.1	6
Upwind Control	17.5 +- 2.9	3

NRC TLD DOSES FOR PERRY AREA

Miles

Legend

Water
Highways

Railroads
Roads

Plant site

PILGRIM

TLD Direct Radiation Environmental Monitoring

For the period 970312-970722 133 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	117.5 +- 3.5; 17.6		108.8 +- 3.6; 18.0		58.6 +- 40.4	
2	310	0.2	28.5 +- 0.9; 4.3		19.8 +- 1.0; 5.5		16.5 +- 2.4	
5	289	0.7	28.3 +- 0.8; 4.2		19.6 +- 1.0; 5.4		15.9 +- 1.8	
6	261	1.7	26.1 +- 0.8; 3.9		17.3 +- 0.9; 5.2		14.3 +- 1.5	
7	270	0.5	29.9 +- 0.9; 4.5		21.2 +- 1.0; 5.6		17.9 +- 1.6	
8	247	0.3	28.3 +- 0.8; 4.2		19.6 +- 1.0; 5.4		16.6 +- 1.4	
9	224	0.3	28.0 +- 0.8; 4.2		19.3 +- 1.0; 5.4		15.2 +- 2.2	
10	205	0.3	28.7 +- 0.9; 4.3		19.9 +- 1.0; 5.5		16.5 +- 3.3	
11	184	0.3	31.3 +- 0.9; 4.7		22.6 +- 1.1; 5.8		17.7 +- 2.8	
12	159	0.4	26.5 +- 0.8; 4.0		17.8 +- 0.9; 5.2		15.4 +- 1.6	
13	146	0.7	23.3 +- 0.7; 3.5		14.6 +- 0.8; 4.9		13.1 +- 1.7	
14	155	1.0	27.2 +- 0.8; 4.1		18.4 +- 0.9; 5.3		14.3 +- 1.7	
16	136	1.3	23.6 +- 0.7; 3.5		14.8 +- 0.9; 4.9		13.3 +- 1.4	
18	212	0.8	23.6 +- 0.7; 3.5		14.9 +- 0.9; 4.9		12.7 +- 1.6	
19	232	1.0	24.5 +- 0.7; 3.7		15.8 +- 0.9; 5.0		13.6 +- 1.6	
21	256	1.6	24.8 +- 0.7; 3.7		16.0 +- 0.9; 5.0		12.5 +- 1.9	
22	130	2.5	22.4 +- 0.7; 3.4		13.6 +- 0.8; 4.8		13.3 +- 1.9	
23	146	3.4	25.8 +- 0.8; 3.9		17.1 +- 0.9; 5.1		12.9 +- 1.8	
25	168	1.5	25.1 +- 0.8; 3.8		16.4 +- 0.9; 5.1		14.0 +- 1.5	
26	180	1.3	23.5 +- 0.7; 3.5		14.8 +- 0.9; 4.9		11.8 +- 1.6	
27	231	1.8	23.5 +- 0.7; 3.5		14.8 +- 0.9; 4.9		13.1 +- 1.8	
30	153	2.2	27.3 +- 0.8; 4.1		18.5 +- 1.0; 5.3		15.9 +- 1.4	
31	179	2.5	23.3 +- 0.7; 3.5		14.5 +- 0.8; 4.9		12.5 +- 1.6	
32	217	2.6	22.6 +- 0.7; 3.4		13.9 +- 0.8; 4.8		11.9 +- 1.7	
33	234	2.5	22.8 +- 0.7; 3.4		14.1 +- 0.8; 4.8		13.1 +- 2.3	
34	320	7.5	24.9 +- 0.7; 3.7		16.2 +- 0.9; 5.1		12.9 +- 1.4	
35	318	7.0	22.6 +- 0.7; 3.4		13.8 +- 0.8; 4.8		10.6 +- 1.3	
37	264	4.2	25.3 +- 0.8; 3.8		16.5 +- 0.9; 5.1		14.1 +- 1.6	
38	152	3.5	22.3 +- 0.7; 3.3		13.6 +- 0.8; 4.8		12.4 +- 1.9	
39	155	5.3	21.8 +- 0.7; 3.3		13.1 +- 0.8; 4.7		11.3 +- 1.1	
40	272	4.6	26.0 +- 0.8; 3.9		17.3 +- 0.9; 5.2		14.9 +- 1.7	
42	281	4.6	25.4 +- 0.8; 3.8		16.7 +- 0.9; 5.1		13.0 +- 1.7	
43	291	5.8	28.2 +- 0.8; 4.2		19.5 +- 1.0; 5.4		15.6 +- 1.8	
45	197	6.0	23.8 +- 0.7; 3.6		15.0 +- 0.9; 4.9		11.8 +- 1.3	
47	301	26.0	29.1 +- 0.9; 4.4		20.3 +- 1.0; 5.5		15.2 +- 1.8	
48	301	26.0	27.6 +- 0.8; 4.1		18.9 +- 1.0; 5.4		15.9 +- 2.1	
49	301	26.0	26.0 +- 0.8; 3.9		17.3 +- 0.9; 5.2		14.4 +- 1.7	

Transit Dose = 8.7 +- 0.5; 3.4

PILGRIM

For the period 970312-970722

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	15.0 +- 1.5	4
146.26 - 168.75 SSE	16.3 +- 2.4	6
168.76 - 191.25 S	17.3 +- 4.6	3
191.26 - 213.75 SSW	16.6 +- 2.9	3
213.76 - 236.25 SW	15.6 +- 2.2	5
236.26 - 258.75 WSW	17.8 +- 2.5	2
258.76 - 281.25 W	17.8 +- 1.9	5
281.26 - 303.75 WNW	49.3 +- 51.6	3
303.76 - 326.25 NW	16.6 +- 3.0	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	22.4 +- 21.1	19
2 - 5	15.6 +- 1.8	10
> 5	15.5 +- 2.5	5
Upwind Control	18.8 +- 1.5	3

NRC TLD DOSES FOR PILGRIM AREA

Miles

0 1 2

Legend

Water
Highways

Railroads
Roads

Plant site

PRAIRIE ISLAND

TLD Direct Radiation Environmental Monitoring

For the period 970310-970710 123 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	312	16.5	18.8	+- 0.6; 2.8	16.2	+- 0.6; 3.9	16.9	+- 2.1
2	310	15.0	18.9	+- 0.6; 2.8	16.3	+- 0.6; 3.9	16.5	+- 1.7
3	310	15.0	18.7	+- 0.6; 2.8	16.1	+- 0.6; 3.9	16.5	+- 1.9
4	308	5.5	21.3	+- 0.6; 3.2	18.5	+- 0.7; 4.2	17.3	+- 1.7
5	297	4.1	19.5	+- 0.6; 2.9	16.8	+- 0.6; 4.0	16.0	+- 1.6
6	287	1.3	19.0	+- 0.6; 2.9	16.3	+- 0.6; 3.9	16.2	+- 2.0
7	313	0.8	18.5	+- 0.6; 2.8	15.8	+- 0.6; 3.9	14.9	+- 1.6
8	244	0.5	18.8	+- 0.6; 2.8	16.2	+- 0.6; 3.9	16.2	+- 1.5
9	194	0.6	18.8	+- 0.6; 2.8	16.2	+- 0.6; 3.9	16.6	+- 1.4
10	155	0.5	20.8	+- 0.6; 3.1	18.1	+- 0.7; 4.1	17.4	+- 1.6
11	129	1.6	19.1	+- 0.6; 2.9	16.4	+- 0.6; 3.9	15.5	+- 1.6
12	153	1.4	19.2	+- 0.6; 2.9	16.6	+- 0.6; 3.9	16.2	+- 1.4
13	217	0.6	20.6	+- 0.6; 3.1	17.9	+- 0.7; 4.1	16.7	+- 1.6
14	178	0.8	19.8	+- 0.6; 3.0	17.1	+- 0.6; 4.0	16.6	+- 1.5
15	272	1.9	18.2	+- 0.5; 2.7	15.6	+- 0.6; 3.8	15.6	+- 1.6
16	262	4.6	20.5	+- 0.6; 3.1	17.8	+- 0.7; 4.1	17.7	+- 2.3
17	250	4.3	22.4	+- 0.7; 3.4	19.7	+- 0.7; 4.3	17.4	+- 1.8
18	225	4.1	23.1	+- 0.7; 3.5	20.3	+- 0.7; 4.3	17.8	+- 3.1
19	233	6.7	18.2	+- 0.5; 2.7	15.6	+- 0.6; 3.8	15.2	+- 1.7
20	200	4.9	22.3	+- 0.7; 3.3	19.5	+- 0.7; 4.3	18.8	+- 1.9
21	187	4.7	23.1	+- 0.7; 3.5	20.3	+- 0.7; 4.4	19.4	+- 2.0
22	160	4.4	20.3	+- 0.6; 3.0	17.6	+- 0.7; 4.0	17.4	+- 2.0
23	140	4.7	22.1	+- 0.7; 3.3	19.3	+- 0.7; 4.2	18.0	+- 1.9
24	131	6.6	21.5	+- 0.6; 3.2	18.7	+- 0.7; 4.2	17.6	+- 1.8
25	117	4.9	19.2	+- 0.6; 2.9	16.5	+- 0.6; 3.9	16.3	+- 1.5
26	88	1.9	20.4	+- 0.6; 3.1	17.7	+- 0.7; 4.1	16.6	+- 1.7
27	69	1.8	19.8	+- 0.6; 3.0	17.1	+- 0.6; 4.0	16.5	+- 2.0
28	47	1.6	21.1	+- 0.6; 3.2	18.4	+- 0.7; 4.1	16.9	+- 2.0
29	19	1.5	19.5	+- 0.6; 2.9	16.8	+- 0.6; 4.0	15.8	+- 1.8
30	356	1.9	19.2	+- 0.6; 2.9	16.5	+- 0.6; 3.9	16.0	+- 2.0
31	346	2.4	21.7	+- 0.7; 3.3	18.9	+- 0.7; 4.2	18.5	+- 1.7
32	340	3.8	23.0	+- 0.7; 3.5	20.2	+- 0.7; 4.3	18.8	+- 2.2
33	8	4.6	23.4	+- 0.7; 3.5	20.6	+- 0.7; 4.4	19.3	+- 1.9
34	17	4.7	21.4	+- 0.6; 3.2	18.7	+- 0.7; 4.2	18.9	+- 1.9
35	45	11.0	20.9	+- 0.6; 3.1	18.2	+- 0.7; 4.1	16.8	+- 1.6
36	48	4.7	23.5	+- 0.7; 3.5	20.7	+- 0.7; 4.4	18.8	+- 2.0
37	61	4.2	22.9	+- 0.7; 3.4	20.1	+- 0.7; 4.3	19.0	+- 1.8
38	86	4.9	22.0	+- 0.7; 3.3	19.2	+- 0.7; 4.2	18.5	+- 2.0
39	107	9.1	19.9	+- 0.6; 3.0	17.2	+- 0.6; 4.0	16.3	+- 1.5
40	111	3.7	17.5	+- 0.5; 2.6	14.9	+- 0.6; 3.8	16.2	+- 1.7
46	0	0.0	20.1	+- 0.6; 3.0	17.4	+- 0.6; 4.0	15.6	+- 1.3
47	0	0.0	19.3	+- 0.6; 2.9	16.7	+- 0.6; 3.9	15.7	+- 0.8

Transit Dose = 2.1 +- 0.3; 2.9

PRAIRIE ISLAND
For the period 970310-970710

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	17.8 +- 1.9	4
11.26 - 33.75 NNE	17.7 +- 1.4	2
33.76 - 56.25 NE	19.1 +- 1.4	3
56.26 - 78.75 ENE	18.6 +- 2.1	2
78.76 - 101.25 E	18.4 +- 1.1	2
101.26 - 123.75 ESE	16.2 +- 1.2	3
123.76 - 146.25 SE	18.1 +- 1.5	3
146.26 - 168.75 SSE	17.4 +- 0.8	3
168.76 - 191.25 S	18.7 +- 2.2	2
191.26 - 213.75 SSW	17.8 +- 2.3	2
213.76 - 236.25 SW	17.9 +- 2.4	3
236.26 - 258.75 WSW	17.9 +- 2.5	2
258.76 - 281.25 W	16.7 +- 1.5	2
281.26 - 303.75 WNW	16.6 +- 0.4	2
303.76 - 326.25 NW	17.2 +- 1.9	2
326.26 - 348.75 NNW	19.6 +- 0.9	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	18.9 +- 1.7	17
> 5	17.6 +- 1.3	5
Upwind Control	16.2 +- 0.1	3

NRC TLD DOSES FOR PRAIRIE ISLAND AREA

Miles

0 2 4

Legend

Water
Highways

Railroads
Roads

Plant site

QUAD CITIES

TLD Direct Radiation Environmental Monitoring

For the period 970310-970716 129 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	3	0.7	17.7	+- 0.5; 2.7	14.5	+- 0.6; 3.9	14.8	+- 1.4
2	16	1.2	21.5	+- 0.6; 3.2	18.3	+- 0.7; 4.3	17.5	+- 2.0
3	35	1.7	18.2	+- 0.5; 2.7	15.0	+- 0.6; 3.9	15.1	+- 1.2
4	45	1.1	19.0	+- 0.6; 2.8	15.8	+- 0.6; 4.0	15.6	+- 1.1
5	90	0.8	19.1	+- 0.6; 2.9	15.9	+- 0.6; 4.0	15.5	+- 1.3
6	138	1.1	19.6	+- 0.6; 2.9	16.5	+- 0.7; 4.1	16.2	+- 1.4
7	175	1.8	18.7	+- 0.6; 2.8	15.5	+- 0.6; 4.0	16.2	+- 1.5
8	165	2.0	20.3	+- 0.6; 3.0	17.1	+- 0.7; 4.1	16.4	+- 1.4
9	186	3.1	18.8	+- 0.6; 2.8	15.6	+- 0.6; 4.0	15.8	+- 1.1
10	188	7.7	15.1	+- 0.5; 2.3	11.9	+- 0.5; 3.6	14.9	+- 4.6
11	156	4.2	20.1	+- 0.6; 3.0	16.9	+- 0.7; 4.1	16.6	+- 1.4
12	142	4.8	20.5	+- 0.6; 3.1	17.3	+- 0.7; 4.2	16.5	+- 1.6
13	123	3.3	20.5	+- 0.6; 3.1	17.3	+- 0.7; 4.2	16.3	+- 1.3
14	122	2.0	17.5	+- 0.5; 2.6	14.3	+- 0.6; 3.9	14.8	+- 1.5
15	86	2.8	20.4	+- 0.6; 3.1	17.2	+- 0.7; 4.2	17.1	+- 1.4
16	57	4.4	Missing Dosimeter		No Net Data		18.9	+- 1.5
17	48	6.1	18.0	+- 0.5; 2.7	14.8	+- 0.6; 3.9	16.3	+- 1.2
18	39	9.4	20.4	+- 0.6; 3.1	17.3	+- 0.7; 4.2	15.8	+- 1.2
19	34	4.7	18.0	+- 0.5; 2.7	14.8	+- 0.6; 3.9	15.4	+- 1.2
20	16	4.3	20.0	+- 0.6; 3.0	16.8	+- 0.7; 4.1	16.7	+- 1.3
21	352	4.2	20.7	+- 0.6; 3.1	17.5	+- 0.7; 4.2	18.4	+- 2.8
22	328	4.1	21.9	+- 0.7; 3.3	18.7	+- 0.7; 4.3	18.4	+- 1.3
23	337	5.7	20.8	+- 0.6; 3.1	17.6	+- 0.7; 4.2	16.9	+- 1.3
24	310	4.4	21.2	+- 0.6; 3.2	18.0	+- 0.7; 4.2	18.2	+- 1.6
25	295	4.1	19.3	+- 0.6; 2.9	16.1	+- 0.7; 4.0	16.2	+- 1.3
26	278	6.9	17.0	+- 0.5; 2.5	13.8	+- 0.6; 3.8	14.2	+- 1.2
27	260	4.3	19.7	+- 0.6; 3.0	16.5	+- 0.7; 4.1	16.2	+- 1.6
28	253	4.0	19.5	+- 0.6; 2.9	16.4	+- 0.7; 4.1	16.6	+- 1.4
29	352	2.8	21.1	+- 0.6; 3.2	17.9	+- 0.7; 4.2	17.4	+- 1.3
30	335	1.9	17.5	+- 0.5; 2.6	14.3	+- 0.6; 3.9	17.1	+- 1.4
31	305	2.6	19.0	+- 0.6; 2.8	15.8	+- 0.6; 4.0	16.9	+- 1.7
32	285	2.5	17.5	+- 0.5; 2.6	14.3	+- 0.6; 3.9	15.0	+- 1.7
33	257	2.0	18.0	+- 0.5; 2.7	14.8	+- 0.6; 3.9	16.4	+- 1.6
34	248	2.2	20.0	+- 0.6; 3.0	16.8	+- 0.7; 4.1	16.6	+- 1.1
35	229	2.6	18.4	+- 0.6; 2.8	15.3	+- 0.6; 4.0	15.9	+- 1.3
36	204	3.4	19.8	+- 0.6; 3.0	16.6	+- 0.7; 4.1	16.0	+- 2.0
37	194	9.3	19.1	+- 0.6; 2.9	15.9	+- 0.6; 4.0	16.1	+- 1.2
38	224	4.9	22.5	+- 0.7; 3.4	19.3	+- 0.7; 4.4	17.3	+- 1.3
39	301	14.0	18.5	+- 0.6; 2.8	15.3	+- 0.6; 4.0	15.7	+- 1.2
40	301	14.0	18.1	+- 0.5; 2.7	14.9	+- 0.6; 3.9	15.2	+- 1.2
41	301	14.0	17.2	+- 0.5; 2.6	14.0	+- 0.6; 3.8	14.7	+- 1.3

Transit Dose = 3.0 +- 0.3; 2.9

QUAD CITIES

For the period 970310-970716

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 +- 1.9	3
11.26 - 33.75 NNE	17.6 +- 1.1	2
33.76 - 56.25 NE	15.5 +- 1.0	5
56.26 - 78.75 ENE	No Data +- No Data	0
78.76 - 101.25 E	16.6 +- 0.9	2
101.26 - 123.75 ESE	15.8 +- 2.1	2
123.76 - 146.25 SE	16.9 +- 0.6	2
146.26 - 168.75 SSE	17.0 +- 0.2	2
168.76 - 191.25 S	14.3 +- 2.1	3
191.26 - 213.75 SSW	16.2 +- 0.5	2
213.76 - 236.25 SW	17.3 +- 2.9	2
236.26 - 258.75 WSW	16.0 +- 1.0	3
258.76 - 281.25 W	15.2 +- 1.9	2
281.26 - 303.75 WNW	15.2 +- 1.3	2
303.76 - 326.25 NW	16.9 +- 1.6	2
326.26 - 348.75 NNW	16.9 +- 2.3	3

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	15.6 +- 1.3	11
2 - 5	16.8 +- 1.3	20
> 5	15.2 +- 2.2	6
Upwind Control	14.7 +- 0.7	3

NRC TLD DOSES FOR QUAD CITIES AREA

Miles

Legend

Water

Highways

Railroads

Roads

Plant..site

RANCHO SECO

TLD Direct Radiation Environmental Monitoring

For the period 970401-970729 120 Days

Field Time: 84 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	288	16.0	19.5 +- 0.6; 2.9		16.2 +- 0.7; 4.3		16.0 +- 2.6	
2	239	12.0	19.7 +- 0.6; 3.0		16.5 +- 0.7; 4.4		17.3 +- 1.6	
3	213	16.0	23.7 +- 0.7; 3.6		20.7 +- 0.8; 4.8		18.8 +- 1.4	
4	149	9.9	19.2 +- 0.6; 2.9		15.9 +- 0.7; 4.3		16.1 +- 1.2	
5	108	8.2	26.0 +- 0.8; 3.9		23.1 +- 0.9; 5.1		22.5 +- 1.7	
6	86	10.0	17.8 +- 0.5; 2.7		14.4 +- 0.7; 4.1		14.2 +- 1.2	
7	83	9.7	16.4 +- 0.5; 2.5		12.9 +- 0.6; 4.0		14.4 +- 1.1	
8	37	7.1	17.2 +- 0.5; 2.6		13.8 +- 0.7; 4.1		14.7 +- 1.1	
9	65	0.8	19.1 +- 0.6; 2.9		15.8 +- 0.7; 4.3		15.9 +- 1.3	
10	43	0.7	20.1 +- 0.6; 3.0		16.8 +- 0.7; 4.4		16.7 +- 1.8	
11	92	0.2	18.0 +- 0.5; 2.7		14.7 +- 0.7; 4.2		14.9 +- 1.4	
12	131	1.6	17.1 +- 0.5; 2.6		13.7 +- 0.7; 4.1		14.2 +- 1.1	
13	358	0.6	21.9 +- 0.7; 3.3		18.8 +- 0.8; 4.6		17.7 +- 0.9	
14	323	0.7	19.8 +- 0.6; 3.0		16.5 +- 0.7; 4.4		16.1 +- 1.2	
15	151	0.7	19.9 +- 0.6; 3.0		16.7 +- 0.7; 4.4		15.2 +- 1.4	
16	219	0.9	18.8 +- 0.6; 2.8		15.5 +- 0.7; 4.3		16.2 +- 1.4	
17	245	1.5	20.1 +- 0.6; 3.0		16.9 +- 0.7; 4.4		15.7 +- 1.3	
18	254	2.3	17.6 +- 0.5; 2.6		14.2 +- 0.7; 4.1		14.9 +- 0.9	
19	323	7.0	19.5 +- 0.6; 2.9		16.3 +- 0.7; 4.3		16.4 +- 1.2	
20	309	6.3	19.9 +- 0.6; 3.0		16.7 +- 0.7; 4.4		17.1 +- 1.5	
21	279	5.7	19.2 +- 0.6; 2.9		15.9 +- 0.7; 4.3		15.8 +- 1.3	
22	244	6.4	19.6 +- 0.6; 2.9		16.4 +- 0.7; 4.4		17.1 +- 1.2	
23	217	4.6	19.2 +- 0.6; 2.9		15.9 +- 0.7; 4.3		16.0 +- 1.2	
24	350	11.0	18.7 +- 0.6; 2.8		15.4 +- 0.7; 4.2		16.2 +- 0.9	
25	318	17.0	19.1 +- 0.6; 2.9		15.8 +- 0.7; 4.3		16.5 +- 1.2	
26	311	22.0	19.7 +- 0.6; 3.0		16.4 +- 0.7; 4.4		16.4 +- 1.3	
27	306	27.0	18.5 +- 0.6; 2.8		15.2 +- 0.7; 4.2		15.3 +- 1.0	
28	306	27.0	18.4 +- 0.6; 2.8		15.1 +- 0.7; 4.2		15.6 +- 0.9	
29	306	27.0	19.2 +- 0.6; 2.9		15.9 +- 0.7; 4.3		15.4 +- 1.6	
30	306	27.0	19.3 +- 0.6; 2.9		16.1 +- 0.7; 4.3		15.4 +- 1.8	

Transit Dose = 4.4 +- 0.3; 2.8

RANCHO SECO
For the period 970401-970729

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	2
11.26 - 33.75 NNE	No Data +- No Data	0
33.76 - 56.25 NE	15.3 +- 2.2	2
56.26 - 78.75 ENE	15.8 +- 0.0	1
78.76 - 101.25 E	14.0 +- 0.9	3
101.26 - 123.75 ESE	23.1 +- 0.0	1
123.76 - 146.25 SE	13.7 +- 0.0	1
146.26 - 168.75 SSE	16.3 +- 0.6	2
168.76 - 191.25 S	No Data +- No Data	0
191.26 - 213.75 SSW	20.7 +- 0.0	1
213.76 - 236.25 SW	15.7 +- 0.3	2
236.26 - 258.75 WSW	16.0 +- 1.2	4
258.76 - 281.25 W	15.9 +- 0.0	1
281.26 - 303.75 WNW	16.2 +- 0.0	1
303.76 - 326.25 NW	16.2 +- 0.4	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	16.2 +- 1.5	9
2 - 5	15.0 +- 1.1	2
> 5	16.4 +- 2.4	16
Upwind Control	15.6 +- 0.7	3

NRC TLD DOSES FOR RANCHO SECO AREA

Miles

0 2 4

Legend

Water
Highways

Railroads
Roads

Plant..site

RIVER BEND

TLD Direct Radiation Environmental Monitoring

For the period 970310-970723 136 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	348	1.3	17.8 +- 0.5; 2.7		13.1 +- 0.6; 4.0		16.5 +- 1.7	
2	42	1.1	22.4 +- 0.7; 3.4		17.7 +- 0.8; 4.5		17.6 +- 1.3	
3	61	1.1	22.2 +- 0.7; 3.3		17.5 +- 0.8; 4.5		18.4 +- 1.4	
4	90	0.8	22.5 +- 0.7; 3.4		17.8 +- 0.8; 4.5		17.5 +- 1.3	
5	107	0.6	24.7 +- 0.7; 3.7		20.1 +- 0.8; 4.8		18.2 +- 1.3	
6	136	0.8	25.1 +- 0.8; 3.8		20.4 +- 0.8; 4.8		18.6 +- 1.5	
7	166	1.0	22.2 +- 0.7; 3.3		17.5 +- 0.8; 4.5		15.5 +- 1.0	
8	182	0.9	19.5 +- 0.6; 2.9		14.8 +- 0.7; 4.2		16.4 +- 1.1	
9	195	0.6	21.0 +- 0.6; 3.1		16.3 +- 0.7; 4.3		16.4 +- 1.2	
10	225	0.7	20.8 +- 0.6; 3.1		16.1 +- 0.7; 4.3		17.0 +- 1.2	
11	254	0.4	18.3 +- 0.5; 2.7		13.6 +- 0.7; 4.1		16.5 +- 1.4	
12	276	0.6	23.2 +- 0.7; 3.5		18.5 +- 0.8; 4.6		18.1 +- 1.2	
13	295	0.6	22.8 +- 0.7; 3.4		18.1 +- 0.8; 4.5		18.6 +- 1.2	
14	320	0.9	19.7 +- 0.6; 3.0		15.1 +- 0.7; 4.2		17.2 +- 1.4	
15	332	2.1	23.7 +- 0.7; 3.6		19.1 +- 0.8; 4.7		18.3 +- 1.4	
16	312	2.7	22.1 +- 0.7; 3.3		17.4 +- 0.8; 4.5		17.2 +- 1.9	
17	302	3.1	20.2 +- 0.6; 3.0		15.5 +- 0.7; 4.3		15.5 +- 1.2	
18*	278	3.8	13.6 +- 0.4; 2.0		8.9 +- 0.5; 3.6		15.0 +- 1.6	
19	242	2.8	22.2 +- 0.7; 3.3		17.5 +- 0.8; 4.5		19.0 +- 1.4	
20	195	5.4	19.7 +- 0.6; 3.0		15.0 +- 0.7; 4.2		17.2 +- 1.5	
21	215	3.0	21.4 +- 0.6; 3.2		16.7 +- 0.7; 4.4		17.7 +- 1.2	
22	233	7.1	18.0 +- 0.5; 2.7		13.3 +- 0.6; 4.0		14.6 +- 1.7	
23	246	9.7	21.4 +- 0.6; 3.2		16.7 +- 0.7; 4.4		17.3 +- 1.3	
24	234	7.3	18.9 +- 0.6; 2.8		14.2 +- 0.7; 4.1		15.4 +- 1.8	
25	185	7.6	21.2 +- 0.6; 3.2		16.5 +- 0.7; 4.4		17.7 +- 1.2	
26	322	7.7	20.1 +- 0.6; 3.0		15.4 +- 0.7; 4.2		16.3 +- 1.5	
27	328	10.0	22.9 +- 0.7; 3.4		18.3 +- 0.8; 4.6		18.4 +- 1.4	
28	340	7.2	22.3 +- 0.7; 3.4		17.7 +- 0.8; 4.5		17.9 +- 1.1	
29	354	9.5	21.0 +- 0.6; 3.1		16.3 +- 0.7; 4.3		16.8 +- 1.2	
30	360	5.1	22.2 +- 0.7; 3.3		17.5 +- 0.8; 4.5		18.3 +- 1.3	
31	221	6.9	22.1 +- 0.7; 3.3		17.4 +- 0.8; 4.5		18.1 +- 1.3	
32	40	4.9	21.1 +- 0.6; 3.2		16.4 +- 0.7; 4.4		17.3 +- 1.2	
33	52	8.7	16.2 +- 0.5; 2.4		11.5 +- 0.6; 3.9		14.4 +- 1.3	
34	65	8.4	20.8 +- 0.6; 3.1		16.1 +- 0.7; 4.3		16.6 +- 1.2	
35	87	6.6	19.3 +- 0.6; 2.9		14.7 +- 0.7; 4.2		15.2 +- 1.0	
36	326	5.8	21.8 +- 0.7; 3.3		17.1 +- 0.7; 4.4		17.7 +- 1.4	
37	329	22.0	20.4 +- 0.6; 3.1		15.7 +- 0.7; 4.3		17.0 +- 1.1	
38	111	3.8	19.9 +- 0.6; 3.0		15.3 +- 0.7; 4.2		16.2 +- 1.3	
39	131	5.6	21.2 +- 0.6; 3.2		16.6 +- 0.7; 4.4		17.3 +- 1.1	
40	155	6.2	21.0 +- 0.6; 3.1		16.3 +- 0.7; 4.3		17.9 +- 1.2	
41	120	9.0	21.4 +- 0.6; 3.2		16.7 +- 0.7; 4.4		16.5 +- 1.5	
42	121	11.0	19.5 +- 0.6; 2.9		14.9 +- 0.7; 4.2		14.8 +- 0.9	
43	180	1.1	22.5 +- 0.7; 3.4		17.9 +- 0.8; 4.5		18.9 +- 1.2	
44	150	28.0	17.8 +- 0.5; 2.7		13.2 +- 0.6; 4.0		14.4 +- 1.2	

Transit Dose = 4.7 +- 0.4; 3.0

* The result for this location was outside (below) the expected range. Refer to the preface of this report for more information.

RIVER BEND

For the period 970310-970723

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 +- 0.9	2
11.26 - 33.75 NNE	No Data +- No Data	0
33.76 - 56.25 NE	15.2 +- 3.3	3
56.26 - 78.75 ENE	16.8 +- 1.0	2
78.76 - 101.25 E	16.2 +- 2.2	2
101.26 - 123.75 ESE	16.7 +- 2.4	4
123.76 - 146.25 SE	18.5 +- 2.7	2
146.26 - 168.75 SSE	16.9 +- 0.8	2
168.76 - 191.25 S	16.4 +- 1.5	3
191.26 - 213.75 SSW	15.7 +- 0.9	2
213.76 - 236.25 SW	15.6 +- 1.7	5
236.26 - 258.75 WSW	15.9 +- 2.1	3
258.76 - 281.25 W	13.7 +- 6.8	2
281.26 - 303.75 WNW	16.8 +- 1.8	2
303.76 - 326.25 NW	16.2 +- 1.2	4
326.26 - 348.75 NNW	16.8 +- 2.4	5

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	17.0 +- 2.1	15
2 - 5	15.9 +- 3.1	8
> 5	15.9 +- 1.6	20
Upwind Control	13.2 +- 0.0	1

NRC TLD DOSES FOR RIVER BEND AREA

Miles

Legend

Water
 Highways

Railroads
 Roads

Plant..site

ROBINSON

TLD Direct Radiation Environmental Monitoring

For the period 970311-970715 127 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	191	0.2	17.7	+- 0.5; 2.7	13.9	+- 0.6; 3.9	14.2	+- 1.2
2	151	1.9	25.2	+- 0.8; 3.8	21.3	+- 0.8; 4.7	22.1	+- 1.7
3	134	2.0	20.5	+- 0.6; 3.1	16.6	+- 0.7; 4.2	17.7	+- 1.2
4	119	1.9	17.6	+- 0.5; 2.6	13.8	+- 0.6; 3.9	14.2	+- 0.9
5	89	2.1	19.7	+- 0.6; 3.0	15.8	+- 0.7; 4.1	17.5	+- 1.4
6	65	1.0	19.3	+- 0.6; 2.9	15.4	+- 0.7; 4.1	15.9	+- 1.0
7	46	1.8	20.3	+- 0.6; 3.0	16.5	+- 0.7; 4.2	16.7	+- 1.6
8	27	1.9	20.5	+- 0.6; 3.1	16.6	+- 0.7; 4.2	16.8	+- 1.2
9	22	3.5	19.4	+- 0.6; 2.9	15.5	+- 0.7; 4.1	16.3	+- 1.6
10	0	5.0	20.9	+- 0.6; 3.1	17.1	+- 0.7; 4.2	17.9	+- 1.1
11	51	4.8	21.2	+- 0.6; 3.2	17.3	+- 0.7; 4.3	19.2	+- 1.0
12	67	4.1	18.4	+- 0.6; 2.8	14.6	+- 0.6; 4.0	14.4	+- 1.5
13	87	4.5	19.8	+- 0.6; 3.0	16.0	+- 0.7; 4.1	15.6	+- 1.0
14	109	5.0	21.7	+- 0.7; 3.3	17.8	+- 0.7; 4.3	16.1	+- 1.1
15	118	4.8	19.8	+- 0.6; 3.0	16.0	+- 0.7; 4.1	16.2	+- 1.9
16	138	5.3	Missing Dosimeter		No Net Data		16.8	+- 1.2
17	115	17.1	19.9	+- 0.6; 3.0	16.0	+- 0.7; 4.1	15.3	+- 1.7
18	199	12.6	20.0	+- 0.6; 3.0	16.2	+- 0.7; 4.2	16.3	+- 0.9
19	208	4.8	Missing Dosimeter		No Net Data		21.9	+- 2.3
20	225	4.0	22.6	+- 0.7; 3.4	18.7	+- 0.7; 4.4	19.3	+- 1.3
21	178	4.6	18.6	+- 0.6; 2.8	14.8	+- 0.6; 4.0	12.7	+- 1.1
22	167	3.7	19.7	+- 0.6; 3.0	15.9	+- 0.7; 4.1	16.0	+- 1.0
23	181	2.3	19.3	+- 0.6; 2.9	15.5	+- 0.7; 4.1	15.3	+- 0.9
24	194	2.0	22.4	+- 0.7; 3.4	18.6	+- 0.7; 4.4	18.9	+- 1.2
25	228	2.1	Missing Dosimeter		No Net Data		18.2	+- 0.9
26	245	1.5	18.3	+- 0.6; 2.8	14.5	+- 0.6; 4.0	14.2	+- 1.2
27	273	1.8	17.1	+- 0.5; 2.6	13.3	+- 0.6; 3.9	13.5	+- 1.0
28	287	2.0	17.0	+- 0.5; 2.6	13.2	+- 0.6; 3.8	13.3	+- 1.0
29	311	1.6	22.0	+- 0.7; 3.3	18.1	+- 0.7; 4.4	17.4	+- 0.9
30	334	1.9	19.4	+- 0.6; 2.9	15.5	+- 0.7; 4.1	16.2	+- 1.7
31	351	2.1	17.7	+- 0.5; 2.6	13.9	+- 0.6; 3.9	15.1	+- 1.8
32	333	4.0	19.8	+- 0.6; 3.0	16.0	+- 0.7; 4.1	16.2	+- 1.1
33	318	4.7	21.7	+- 0.7; 3.3	17.8	+- 0.7; 4.3	17.7	+- 1.1
34	310	6.9	18.9	+- 0.6; 2.8	15.0	+- 0.7; 4.0	15.5	+- 1.8
35	295	4.0	24.9	+- 0.7; 3.7	21.0	+- 0.8; 4.7	20.8	+- 1.2
36	269	4.8	23.0	+- 0.7; 3.5	19.2	+- 0.8; 4.5	18.2	+- 1.7
37	252	4.6	21.4	+- 0.6; 3.2	17.6	+- 0.7; 4.3	17.2	+- 1.3
38	274	10.7	20.0	+- 0.6; 3.0	16.1	+- 0.7; 4.1	18.7	+- 3.3
39	286	15.3	17.1	+- 0.5; 2.6	13.3	+- 0.6; 3.9	14.7	+- 1.2
40	289	16.5	18.8	+- 0.6; 2.8	15.0	+- 0.6; 4.0	14.1	+- 0.9
41	291	17.5	Missing Dosimeter		No Net Data		15.0	+- 1.4

Transit Dose = 3.7 +- 0.3; 2.9

ROBINSON

For the period 970311-970715

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	15.5 +- 2.3	2
11.26 - 33.75 NNE	16.1 +- 0.8	2
33.76 - 56.25 NE	16.9 +- 0.6	2
56.26 - 78.75 ENE	15.0 +- 0.6	2
78.76 - 101.25 E	15.9 +- 0.1	2
101.26 - 123.75 ESE	15.9 +- 1.7	4
123.76 - 146.25 SE	16.6 +- 0.0	1
146.26 - 168.75 SSE	18.6 +- 3.8	2
168.76 - 191.25 S	14.7 +- 0.8	3
191.26 - 213.75 SSW	17.4 +- 1.7	2
213.76 - 236.25 SW	18.7 +- 0.0	1
236.26 - 258.75 WSW	16.0 +- 2.2	2
258.76 - 281.25 W	16.2 +- 2.9	3
281.26 - 303.75 WNW	17.1 +- 5.5	2
303.76 - 326.25 NW	17.0 +- 1.7	3
326.26 - 348.75 NNW	15.8 +- 0.3	2

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	16.0 +- 2.4	13
2 - 5	16.7 +- 1.8	18
> 5	15.8 +- 0.6	4
Upwind Control	14.2 +- 1.2	2

NRC TLD DOSES FOR ROBINSON AREA

Miles

Legend

Water
 Highways

Railroads
 Roads

Plant..site

SALEM (DE)

TLD Direct Radiation Environmental Monitoring

For the period 970312-970722 133 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
17	331 4.2	18.4 +- 0.6; 2.8	16.2 +- 0.6; 3.9	16.7 +- 1.8
18	320 3.8	15.7 +- 0.5; 2.4	13.6 +- 0.5; 3.6	13.7 +- 1.0
19	299 3.4	18.1 +- 0.5; 2.7	15.9 +- 0.6; 3.8	15.9 +- 1.2
20	330 9.5	22.7 +- 0.7; 3.4	20.4 +- 0.7; 4.3	19.2 +- 1.2
21	276 3.6	20.8 +- 0.6; 3.1	18.6 +- 0.7; 4.1	18.0 +- 1.2
22	266 4.7	20.0 +- 0.6; 3.0	17.8 +- 0.6; 4.0	17.6 +- 0.7
23	257 4.4	20.9 +- 0.6; 3.1	18.7 +- 0.7; 4.1	17.2 +- 1.1
24	240 4.4	20.8 +- 0.6; 3.1	18.5 +- 0.7; 4.1	17.9 +- 1.0
25	217 4.9	20.2 +- 0.6; 3.0	18.0 +- 0.7; 4.0	17.5 +- 1.3
26	204 3.9	19.6 +- 0.6; 2.9	17.3 +- 0.6; 4.0	16.3 +- 1.1
27	188 4.2	22.3 +- 0.7; 3.3	20.0 +- 0.7; 4.3	18.8 +- 2.3
28	319 18.1	23.3 +- 0.7; 3.5	21.0 +- 0.7; 4.4	19.5 +- 1.7
29	265 6.7	17.3 +- 0.5; 2.6	15.1 +- 0.6; 3.7	14.8 +- 0.9
30	340 12.2	16.4 +- 0.5; 2.5	14.2 +- 0.6; 3.7	14.2 +- 1.1
31	0 18.2	20.5 +- 0.6; 3.1	18.3 +- 0.7; 4.1	17.0 +- 1.0
32	338 8.1	17.5 +- 0.5; 2.6	15.4 +- 0.6; 3.8	15.1 +- 1.1
33	265 9.8	18.7 +- 0.6; 2.8	16.5 +- 0.6; 3.9	17.2 +- 1.2
34	207 11.6	18.8 +- 0.6; 2.8	16.6 +- 0.6; 3.9	16.5 +- 1.1

Transit Dose = 1.8 +- 0.3; 2.8

SALEM (DE)

For the period 970312-970722

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	20.0 +- 0.0	1
191.26 - 213.75 SSW	17.0 +- 0.5	2
213.76 - 236.25 SW	18.0 +- 0.0	1
236.26 - 258.75 WSW	18.6 +- 0.1	2
258.76 - 281.25 W	17.0 +- 1.5	4
281.26 - 303.75 WNW	15.9 +- 0.0	1
303.76 - 326.25 NW	13.6 +- 0.0	1
326.26 - 348.75 NNW	17.3 +- 2.7	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	17.5 +- 1.8	10
> 5	16.8 +- 2.1	5
Upwind Control	17.8 +- 3.4	3

NRC TLD DOSES FOR SALEM - HOPE CREEK AREA

Miles

Legend

Water
Highways

Railroads
Roads

Plant..site

SALEM (NJ)

TLD Direct Radiation Environmental Monitoring

For the period 970312-970722 133 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	87	3.3	19.3 +- 0.6; 2.9	14.0 +- 0.7; 4.1	13.9 +- 0.7
2	79	3.4	17.6 +- 0.5; 2.6	12.3 +- 0.6; 4.0	14.1 +- 1.1
3	72	3.6	20.9 +- 0.6; 3.1	15.6 +- 0.7; 4.3	16.8 +- 2.2
4	58	4.2	21.5 +- 0.6; 3.2	16.1 +- 0.7; 4.4	15.3 +- 1.3
5	54	4.9	17.5 +- 0.5; 2.6	12.3 +- 0.6; 4.0	13.1 +- 0.9
6	68	8.6	16.9 +- 0.5; 2.5	11.6 +- 0.6; 3.9	11.8 +- 0.9
7	40	5.7	19.2 +- 0.6; 2.9	13.9 +- 0.7; 4.1	13.9 +- 1.0
8	116	12.0	19.0 +- 0.6; 2.9	13.7 +- 0.7; 4.1	13.5 +- 0.7
10	8	5.8	18.8 +- 0.6; 2.8	13.5 +- 0.7; 4.1	13.8 +- 0.9
11	15	8.1	18.7 +- 0.6; 2.8	13.4 +- 0.7; 4.1	13.0 +- 0.8
12	24	8.6	19.2 +- 0.6; 2.9	13.9 +- 0.7; 4.1	13.2 +- 0.7
13	49	8.6	17.6 +- 0.5; 2.6	12.3 +- 0.6; 4.0	12.6 +- 0.7
14	90	6.7	19.1 +- 0.6; 2.9	13.8 +- 0.7; 4.1	12.0 +- 0.9
15	105	6.4	17.0 +- 0.5; 2.5	11.7 +- 0.6; 3.9	12.2 +- 0.7

Transit Dose = 5.0 +- 0.4; 3.1

SALEM (NJ)

For the period 970312-970722

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	13.5 +- 0.0	1
11.26 - 33.75 NNE	13.6 +- 0.3	2
33.76 - 56.25 NE	12.8 +- 0.9	3
56.26 - 78.75 ENE	14.4 +- 2.5	3
78.76 - 101.25 E	13.4 +- 0.9	3
101.26 - 123.75 ESE	12.7 +- 1.4	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	14.1 +- 1.8	5
> 5	13.1 +- 1.0	9
Upwind Control	No Data +- No Data	0

NRC TLD DOSES FOR SALEM — HOPE CREEK AREA

Miles

0 2 4

Legend

Water

Highways

Railroads

Roads

Plant site

SAN ONOFRE

TLD Direct Radiation Environmental Monitoring

For the period 970401-970729 120 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	346	35.0	29.1 +- 0.9; 4.4		24.3 +- 0.9; 5.2		23.4 +- 1.4	
2	346	35.0	28.2 +- 0.8; 4.2		23.3 +- 0.9; 5.1		22.9 +- 1.4	
3	346	35.0	27.4 +- 0.8; 4.1		22.6 +- 0.9; 5.0		23.1 +- 1.6	
4	327	11.0	22.8 +- 0.7; 3.4		18.1 +- 0.8; 4.5		16.5 +- 1.7	
5	308	14.0	24.7 +- 0.7; 3.7		19.9 +- 0.8; 4.7		19.4 +- 1.4	
6	307	10.0	21.0 +- 0.6; 3.2		16.3 +- 0.7; 4.3		16.9 +- 1.4	
7	318	6.3	23.3 +- 0.7; 3.5		18.6 +- 0.8; 4.5		17.4 +- 1.4	
8	322	5.1	23.4 +- 0.7; 3.5		18.6 +- 0.8; 4.5		19.2 +- 1.4	
9	311	3.3	Missing Dosimeter		No Net Data		17.4 +- 1.6	
10	331	3.3	24.6 +- 0.7; 3.7		19.8 +- 0.8; 4.7		19.4 +- 2.6	
11	300	2.6	Missing Dosimeter		No Net Data		19.1 +- 1.5	
12	285	0.5	23.0 +- 0.7; 3.5		18.3 +- 0.8; 4.5		19.9 +- 3.1	
13	320	2.4	22.7 +- 0.7; 3.4		17.9 +- 0.8; 4.5		17.7 +- 1.8	
14	320	1.7	22.7 +- 0.7; 3.4		18.0 +- 0.8; 4.5		17.6 +- 1.5	
15	333	1.2	23.0 +- 0.7; 3.4		18.2 +- 0.8; 4.5		18.0 +- 1.4	
16	30	1.9	25.5 +- 0.8; 3.8		20.7 +- 0.8; 4.8		20.6 +- 1.8	
17	8	1.3	19.3 +- 0.6; 2.9		14.6 +- 0.7; 4.1		15.5 +- 1.3	
18	39	2.0	26.9 +- 0.8; 4.0		22.1 +- 0.9; 4.9		21.4 +- 1.3	
19	55	2.9	22.5 +- 0.7; 3.4		17.8 +- 0.7; 4.4		18.1 +- 1.5	
20	77	4.1	26.5 +- 0.8; 4.0		21.7 +- 0.9; 4.9		20.1 +- 1.5	
21	87	4.7	26.4 +- 0.8; 4.0		21.6 +- 0.9; 4.9		20.3 +- 1.4	
22	25	3.4	26.5 +- 0.8; 4.0		21.7 +- 0.9; 4.9		21.8 +- 1.8	
23	357	3.5	25.2 +- 0.8; 3.8		20.4 +- 0.8; 4.7		20.3 +- 1.9	
24	25	0.4	22.2 +- 0.7; 3.3		17.5 +- 0.7; 4.4		17.9 +- 1.5	
25	81	0.4	22.4 +- 0.7; 3.4		17.7 +- 0.7; 4.4		17.7 +- 2.3	
26	126	2.1	20.0 +- 0.6; 3.0		15.3 +- 0.7; 4.2		14.9 +- 1.4	
27	130	8.6	18.8 +- 0.6; 2.8		14.2 +- 0.7; 4.0		15.1 +- 1.8	
28	99	8.9	19.6 +- 0.6; 2.9		14.9 +- 0.7; 4.1		15.3 +- 1.9	
29	135	11.0	20.3 +- 0.6; 3.0		15.6 +- 0.7; 4.2		15.9 +- 1.8	
30	126	2.0	16.8 +- 0.5; 2.5		12.2 +- 0.6; 3.9		12.3 +- 1.7	
31	128	3.7	19.7 +- 0.6; 3.0		15.0 +- 0.7; 4.1		14.6 +- 1.5	
32	140	22.0	Missing Dosimeter		No Net Data		18.7 +- 2.1	
33	120	26.0	19.7 +- 0.6; 3.0		15.0 +- 0.7; 4.1		15.1 +- 1.6	

Transit Dose = 4.3 +- 0.4; 3.0

SAN ONOFRE
For the period 970401-970729

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	17.5 +- 4.1	2
11.26 - 33.75 NNE	20.0 +- 2.2	3
33.76 - 56.25 NE	19.9 +- 3.0	2
56.26 - 78.75 ENE	21.7 +- 0.0	1
78.76 - 101.25 E	18.1 +- 3.4	3
101.26 - 123.75 ESE	15.0 +- 0.0	1
123.76 - 146.25 SE	14.5 +- 1.4	5
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	18.3 +- 0.0	1
303.76 - 326.25 NW	18.2 +- 1.2	6
326.26 - 348.75 NNW	18.7 +- 1.0	3

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	17.7 +- 2.9	9
2 - 5	19.0 +- 2.6	9
> 5	16.8 +- 2.0	9
Upwind Control	23.4 +- 0.8	3

NRC TLD DOSES FOR SAN ONOFRE AREA

Miles

Legend

Water
Highways

Railroads
Roads

Plant..site

SEABROOK

TLD Direct Radiation Environmental Monitoring

For the period 970312-970710 121 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	154	0.6	20.1	+- 0.6; 3.0	18.0	+- 0.6; 3.8	17.2	+- 2.4
2	178	0.7	20.0	+- 0.6; 3.0	17.9	+- 0.6; 3.8	16.8	+- 2.3
3	207	0.7	20.0	+- 0.6; 3.0	18.0	+- 0.6; 3.8	16.4	+- 2.6
4	224	0.9	20.6	+- 0.6; 3.1	18.5	+- 0.6; 3.9	17.6	+- 2.7
5	243	1.2	20.7	+- 0.6; 3.1	18.6	+- 0.6; 3.9	16.2	+- 2.8
6	294	1.0	20.9	+- 0.6; 3.1	18.8	+- 0.6; 3.9	17.2	+- 2.4
7	267	0.7	19.4	+- 0.6; 2.9	17.4	+- 0.6; 3.8	16.8	+- 2.4
8	320	1.1	21.2	+- 0.6; 3.2	19.0	+- 0.6; 3.9	17.7	+- 2.8
9	329	1.6	23.0	+- 0.7; 3.4	20.7	+- 0.7; 4.1	19.3	+- 2.7
10	357	1.9	20.3	+- 0.6; 3.0	18.2	+- 0.6; 3.9	16.8	+- 2.6
11	18	2.5	19.7	+- 0.6; 3.0	17.7	+- 0.6; 3.8	17.0	+- 2.5
12	46	1.9	19.5	+- 0.6; 2.9	17.5	+- 0.6; 3.8	16.4	+- 2.2
13	83	1.7	19.9	+- 0.6; 3.0	17.9	+- 0.6; 3.8	17.2	+- 2.5
14	43	4.1	21.8	+- 0.7; 3.3	19.6	+- 0.6; 4.0	18.1	+- 2.6
15	358	4.2	21.2	+- 0.6; 3.2	19.1	+- 0.6; 4.0	17.9	+- 2.6
16	18	11.8	21.0	+- 0.6; 3.1	18.8	+- 0.6; 3.9	18.1	+- 2.6
17	321	7.4	22.4	+- 0.7; 3.4	20.1	+- 0.7; 4.1	19.1	+- 3.0
18	291	3.9	20.9	+- 0.6; 3.1	18.8	+- 0.6; 3.9	17.9	+- 2.3
19	267	3.7	20.7	+- 0.6; 3.1	18.6	+- 0.6; 3.9	17.1	+- 2.4
20	251	4.2	22.0	+- 0.7; 3.3	19.8	+- 0.7; 4.0	19.1	+- 3.0
21	228	4.7	19.0	+- 0.6; 2.8	17.0	+- 0.6; 3.7	16.7	+- 2.6
22	209	6.2	22.2	+- 0.7; 3.3	20.0	+- 0.7; 4.1	19.4	+- 2.6
23	187	6.5	23.1	+- 0.7; 3.5	20.8	+- 0.7; 4.2	19.2	+- 2.7
24	163	7.1	19.6	+- 0.6; 2.9	17.5	+- 0.6; 3.8	15.8	+- 2.5
25	174	4.0	18.5	+- 0.6; 2.8	16.6	+- 0.6; 3.7	15.8	+- 2.8
26	157	4.0	19.5	+- 0.6; 2.9	17.5	+- 0.6; 3.8	16.6	+- 2.7
27	136	2.4	20.7	+- 0.6; 3.1	18.6	+- 0.6; 3.9	17.0	+- 2.7
28	118	1.6	21.3	+- 0.6; 3.2	19.1	+- 0.6; 4.0	16.4	+- 2.4
30	67	2.1	22.5	+- 0.7; 3.4	20.3	+- 0.7; 4.1	18.6	+- 2.7
31	335	5.5	21.7	+- 0.7; 3.3	19.5	+- 0.6; 4.0	18.1	+- 2.6
32	318	3.2	22.1	+- 0.7; 3.3	19.9	+- 0.7; 4.0	18.8	+- 2.9
33	230	19.3	19.9	+- 0.6; 3.0	17.8	+- 0.6; 3.8	17.3	+- 3.4
34	230	19.3	22.0	+- 0.7; 3.3	19.8	+- 0.7; 4.0	18.1	+- 3.1
35	230	19.3	21.6	+- 0.6; 3.2	19.4	+- 0.6; 4.0	19.2	+- 3.5

Transit Dose = 0.5 +- 0.3; 2.9

SEABROOK

For the period 970312-970710

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	18.6 +- 0.6	2
11.26 - 33.75 NNE	18.2 +- 0.8	2
33.76 - 56.25 NE	18.5 +- 1.5	2
56.26 - 78.75 ENE	20.3 +- 0.0	1
78.76 - 101.25 E	17.9 +- 0.0	1
101.26 - 123.75 ESE	19.1 +- 0.0	1
123.76 - 146.25 SE	18.6 +- 0.0	1
146.26 - 168.75 SSE	17.7 +- 0.3	3
168.76 - 191.25 S	18.5 +- 2.2	3
191.26 - 213.75 SSW	19.0 +- 1.4	2
213.76 - 236.25 SW	18.3 +- 1.2	3
236.26 - 258.75 WSW	19.2 +- 0.9	2
258.76 - 281.25 W	18.0 +- 0.9	2
281.26 - 303.75 WNW	18.8 +- 0.0	2
303.76 - 326.25 NW	19.6 +- 0.8	2
326.26 - 348.75 NNW	20.1 +- 0.8	2

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	18.4 +- 0.9	13
2 - 5	18.5 +- 1.2	11
> 5	19.5 +- 1.1	7
Upwind Control	19.2 +- 1.2	3

NRC TLD DOSES FOR SEABROOK AREA

Miles

Legend

Water
Highways

Railroads
Roads

Plant..site

SEQUOYAH

TLD Direct Radiation Environmental Monitoring

For the period 970311-970710 122 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	218	12.0	17.5 +- 0.5; 2.6		16.9 +- 0.6; 3.8		16.9 +- 1.6	
2	206	13.0	15.3 +- 0.5; 2.3		14.6 +- 0.5; 3.5		14.6 +- 1.3	
3	203	3.9	21.7 +- 0.7; 3.3		21.0 +- 0.7; 4.2		20.3 +- 1.5	
4	199	2.0	19.6 +- 0.6; 2.9		18.9 +- 0.6; 4.0		17.2 +- 1.5	
5	181	1.4	20.8 +- 0.6; 3.1		20.1 +- 0.7; 4.1		21.1 +- 1.3	
6	153	1.5	18.3 +- 0.5; 2.7		17.6 +- 0.6; 3.8		15.8 +- 1.2	
7	139	1.9	15.7 +- 0.5; 2.4		15.1 +- 0.5; 3.6		14.9 +- 1.2	
8	115	1.8	16.7 +- 0.5; 2.5		16.1 +- 0.6; 3.7		16.1 +- 1.8	
9	84	1.6	15.4 +- 0.5; 2.3		14.7 +- 0.5; 3.5		13.9 +- 1.4	
10	66	1.3	17.4 +- 0.5; 2.6		16.7 +- 0.6; 3.7		15.6 +- 1.3	
11	45	1.5	18.3 +- 0.5; 2.7		17.6 +- 0.6; 3.8		16.8 +- 1.5	
12	14	2.0	19.6 +- 0.6; 2.9		18.9 +- 0.6; 4.0		18.9 +- 1.1	
13	2	2.1	19.9 +- 0.6; 3.0		19.3 +- 0.6; 4.0		19.2 +- 1.6	
14	19	3.9	16.4 +- 0.5; 2.5		15.7 +- 0.5; 3.6		16.1 +- 1.3	
15	48	4.0	15.3 +- 0.5; 2.3		14.6 +- 0.5; 3.5		13.7 +- 1.2	
16	65	4.9	17.2 +- 0.5; 2.6		16.5 +- 0.6; 3.7		15.9 +- 1.1	
17	90	3.9	16.6 +- 0.5; 2.5		15.9 +- 0.6; 3.7		17.1 +- 1.8	
18	111	3.4	16.8 +- 0.5; 2.5		16.1 +- 0.6; 3.7		16.2 +- 1.5	
19	135	3.4	16.8 +- 0.5; 2.5		16.1 +- 0.6; 3.7		16.4 +- 1.1	
20	158	3.4	14.4 +- 0.4; 2.2		13.7 +- 0.5; 3.4		14.7 +- 1.8	
21	184	4.6	21.1 +- 0.6; 3.2		20.5 +- 0.7; 4.2		18.7 +- 2.4	
22	233	11.0	15.8 +- 0.5; 2.4		15.1 +- 0.5; 3.6		14.8 +- 1.2	
23	219	4.9	19.0 +- 0.6; 2.9		18.3 +- 0.6; 3.9		18.3 +- 1.2	
24	241	4.3	16.1 +- 0.5; 2.4		15.4 +- 0.5; 3.6		15.7 +- 1.3	
25	235	2.0	14.6 +- 0.4; 2.2		13.9 +- 0.5; 3.5		13.4 +- 1.1	
26	248	1.5	16.8 +- 0.5; 2.5		16.1 +- 0.6; 3.7		15.6 +- 1.9	
27	266	1.2	16.4 +- 0.5; 2.5		15.7 +- 0.5; 3.6		15.0 +- 1.3	
28	291	1.2	16.0 +- 0.5; 2.4		15.4 +- 0.5; 3.6		15.9 +- 1.5	
29	309	1.2	17.2 +- 0.5; 2.6		16.5 +- 0.6; 3.7		16.2 +- 1.5	
30	330	0.5	18.6 +- 0.6; 2.8		17.9 +- 0.6; 3.9		17.1 +- 1.5	
31	339	1.8	18.1 +- 0.5; 2.7		17.4 +- 0.6; 3.8		17.1 +- 1.4	
32	355	4.9	15.4 +- 0.5; 2.3		14.7 +- 0.5; 3.5		15.1 +- 1.1	
33	334	3.6	15.9 +- 0.5; 2.4		15.2 +- 0.5; 3.6		15.1 +- 1.2	
34	317	4.4	Missing Dosimeter		No Net Data		16.0 +- 1.6	
35	277	5.6	17.9 +- 0.5; 2.7		17.2 +- 0.6; 3.8		16.5 +- 1.4	
36	283	3.6	15.5 +- 0.5; 2.3		14.8 +- 0.5; 3.5		14.5 +- 1.1	
37	273	4.4	17.6 +- 0.5; 2.6		16.9 +- 0.6; 3.8		15.6 +- 1.4	
38	302	19.0	17.1 +- 0.5; 2.6		16.4 +- 0.6; 3.7		15.6 +- 1.4	
39	290	18.0	17.3 +- 0.5; 2.6		16.6 +- 0.6; 3.7		16.5 +- 1.2	
40	289	18.0	Missing Dosimeter		No Net Data		14.9 +- 1.4	
41	318	6.1	17.0 +- 0.5; 2.6		16.4 +- 0.6; 3.7		16.1 +- 1.2	

Transit Dose = 0.7 +- 0.2; 2.7

SEQUOYAH

For the period 970311-970710

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 +- 3.2	2
11.26 - 33.75 NNE	17.3 +- 2.2	2
33.76 - 56.25 NE	16.1 +- 2.1	2
56.26 - 78.75 ENE	16.6 +- 0.2	2
78.76 - 101.25 E	15.3 +- 0.9	2
101.26 - 123.75 ESE	16.1 +- 0.0	2
123.76 - 146.25 SE	15.6 +- 0.8	2
146.26 - 168.75 SSE	15.7 +- 2.8	2
168.76 - 191.25 S	20.3 +- 0.3	2
191.26 - 213.75 SSW	18.2 +- 3.2	3
213.76 - 236.25 SW	16.0 +- 1.9	4
236.26 - 258.75 WSW	15.8 +- 0.5	2
258.76 - 281.25 W	16.6 +- 0.8	3
281.26 - 303.75 WNW	15.1 +- 0.4	2
303.76 - 326.25 NW	16.4 +- 0.1	2
326.26 - 348.75 NNW	16.8 +- 1.4	3

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	16.8 +- 1.7	16
2 - 5	16.5 +- 2.1	16
> 5	16.0 +- 1.1	5
Upwind Control	16.5 +- 0.1	2

NRC TLD DOSES FOR SEQUOYAH AREA

Miles

Legend

Water

Highways

Railroads

Roads

Plant..site

SOUTH TEXAS

TLD Direct Radiation Environmental Monitoring

For the period 970310-970805 149 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	90	1.0	22.1 +- 0.7; 3.3	16.1 +- 0.7; 4.3	16.1 +- 1.8
2	63	1.0	22.9 +- 0.7; 3.4	16.8 +- 0.7; 4.4	16.9 +- 1.4
3	40	1.0	23.4 +- 0.7; 3.5	17.3 +- 0.8; 4.4	17.2 +- 1.3
4	19	1.0	Missing Dosimeter	No Net Data	16.3 +- 1.4
5	4	0.9	23.1 +- 0.7; 3.5	17.0 +- 0.7; 4.4	16.4 +- 1.3
6	339	0.9	22.7 +- 0.7; 3.4	16.7 +- 0.7; 4.4	16.7 +- 1.3
7	318	1.0	21.8 +- 0.7; 3.3	15.8 +- 0.7; 4.3	15.9 +- 1.1
8	294	1.1	24.7 +- 0.7; 3.7	18.5 +- 0.8; 4.6	18.9 +- 1.5
9	267	1.3	24.9 +- 0.7; 3.7	18.7 +- 0.8; 4.6	19.1 +- 1.4
10	126	0.3	20.8 +- 0.6; 3.1	14.9 +- 0.7; 4.2	15.0 +- 1.2
11	180	0.1	23.0 +- 0.7; 3.5	16.9 +- 0.7; 4.4	15.8 +- 1.8
12	257	0.5	20.3 +- 0.6; 3.0	14.4 +- 0.7; 4.1	14.4 +- 1.4
13	262	0.9	19.7 +- 0.6; 3.0	13.8 +- 0.7; 4.1	14.5 +- 1.3
14	250	1.3	20.7 +- 0.6; 3.1	14.7 +- 0.7; 4.2	15.0 +- 1.4
15	227	2.4	19.6 +- 0.6; 2.9	13.7 +- 0.7; 4.1	14.0 +- 1.3
16	210	3.7	19.3 +- 0.6; 2.9	13.5 +- 0.7; 4.0	13.6 +- 1.4
17	175	3.6	19.0 +- 0.6; 2.8	13.1 +- 0.6; 4.0	13.7 +- 1.2
18	158	3.7	19.3 +- 0.6; 2.9	13.5 +- 0.7; 4.0	14.0 +- 1.4
19	143	3.3	18.8 +- 0.6; 2.8	13.0 +- 0.6; 4.0	13.5 +- 1.2
20	122	2.3	20.7 +- 0.6; 3.1	14.7 +- 0.7; 4.2	14.9 +- 1.3
21	121	1.1	19.9 +- 0.6; 3.0	14.0 +- 0.7; 4.1	14.9 +- 1.3
22	257	2.5	23.3 +- 0.7; 3.5	17.2 +- 0.7; 4.4	16.4 +- 1.5
23	262	4.5	25.8 +- 0.8; 3.9	19.5 +- 0.8; 4.7	18.5 +- 1.6
24	282	4.7	22.6 +- 0.7; 3.4	16.5 +- 0.7; 4.4	16.4 +- 1.4
25	304	5.8	21.1 +- 0.6; 3.2	15.2 +- 0.7; 4.2	15.0 +- 1.6
26	242	5.4	22.2 +- 0.7; 3.3	16.2 +- 0.7; 4.3	16.2 +- 1.4
27	223	5.0	22.8 +- 0.7; 3.4	16.8 +- 0.7; 4.4	16.1 +- 1.4
28	236	9.6	20.4 +- 0.6; 3.1	14.5 +- 0.7; 4.1	14.3 +- 1.3
29	259	10.0	21.8 +- 0.7; 3.3	15.8 +- 0.7; 4.3	15.5 +- 1.5
30	291	6.2	22.8 +- 0.7; 3.4	16.7 +- 0.7; 4.4	16.3 +- 1.4
31	323	7.8	22.6 +- 0.7; 3.4	16.5 +- 0.7; 4.4	17.5 +- 3.5
32	335	7.4	26.0 +- 0.8; 3.9	19.7 +- 0.8; 4.7	20.6 +- 1.7
33	351	5.5	21.3 +- 0.6; 3.2	15.3 +- 0.7; 4.2	14.7 +- 1.4
34	88	4.4	19.7 +- 0.6; 3.0	13.8 +- 0.7; 4.1	14.7 +- 1.4
35	89	6.7	21.0 +- 0.6; 3.2	15.1 +- 0.7; 4.2	14.1 +- 1.3
36	121	3.9	19.4 +- 0.6; 2.9	13.6 +- 0.7; 4.1	14.6 +- 1.4
37	145	8.8	19.8 +- 0.6; 3.0	13.9 +- 0.7; 4.1	14.5 +- 1.6
38	297	12.0	19.8 +- 0.6; 3.0	13.9 +- 0.7; 4.1	14.5 +- 1.5
39	321	9.3	23.7 +- 0.7; 3.6	17.6 +- 0.8; 4.5	17.1 +- 1.3
40	353	12.0	19.6 +- 0.6; 2.9	13.7 +- 0.7; 4.1	14.4 +- 1.3
41	13	18.0	22.4 +- 0.7; 3.4	16.4 +- 0.7; 4.3	15.8 +- 1.4
42	21	5.7	23.4 +- 0.7; 3.5	17.3 +- 0.8; 4.4	16.4 +- 1.9
43	39	5.8	23.4 +- 0.7; 3.5	17.3 +- 0.8; 4.4	16.8 +- 1.4
44	53	5.1	21.8 +- 0.7; 3.3	15.8 +- 0.7; 4.3	17.1 +- 2.0
45	69	7.3	18.9 +- 0.6; 2.8	13.0 +- 0.6; 4.0	14.3 +- 1.3
46	66	17.0	25.7 +- 0.8; 3.9	19.5 +- 0.8; 4.7	19.1 +- 1.5

Transit Dose = 5.0 +- 0.4; 3.2

SOUTH TEXAS

For the period 970310-970805

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	16.1 +- 1.2	2
11.26 - 33.75 NNE	17.3 +- 0.0	1
33.76 - 56.25 NE	16.8 +- 0.8	3
56.26 - 78.75 ENE	16.4 +- 3.2	3
78.76 - 101.25 E	15.0 +- 1.1	3
101.26 - 123.75 ESE	14.1 +- 0.6	3
123.76 - 146.25 SE	13.9 +- 0.9	3
146.26 - 168.75 SSE	13.5 +- 0.0	1
168.76 - 191.25 S	15.0 +- 2.7	2
191.26 - 213.75 SSW	13.5 +- 0.0	1
213.76 - 236.25 SW	15.0 +- 1.6	3
236.26 - 258.75 WSW	15.6 +- 1.3	4
258.76 - 281.25 W	17.0 +- 2.6	4
281.26 - 303.75 WNW	17.3 +- 1.1	3
303.76 - 326.25 NW	16.3 +- 1.0	4
326.26 - 348.75 NNW	18.2 +- 2.1	2

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	16.1 +- 1.6	14
2 - 5	14.9 +- 2.1	12
> 5	16.2 +- 1.8	16
Upwind Control	14.7 +- 1.5	3

NRC TLD DOSES FOR SOUTH TEXAS AREA

Miles

0 2 4

Legend

Water

--- Railroads

Plant..site

— Highways

--- Roads

ST. LUCIE

TLD Direct Radiation Environmental Monitoring

For the period 970311-970723 135 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	18.0 +- 0.5; 2.7	13.4 +- 0.6; 4.0	13.6 +- 2.2
2	45	0.2	19.5 +- 0.6; 2.9	14.8 +- 0.7; 4.1	14.1 +- 2.3
3	67	0.2	19.0 +- 0.6; 2.8	14.3 +- 0.7; 4.1	15.3 +- 3.0
4	92	0.3	18.0 +- 0.5; 2.7	13.4 +- 0.6; 4.0	13.2 +- 2.3
5	115	0.4	18.3 +- 0.5; 2.7	13.7 +- 0.6; 4.0	12.6 +- 2.2
6	143	1.1	17.0 +- 0.5; 2.6	12.4 +- 0.6; 3.9	11.7 +- 2.1
7	150	2.0	16.6 +- 0.5; 2.5	12.0 +- 0.6; 3.9	11.6 +- 2.0
8	154	4.7	16.9 +- 0.5; 2.5	12.3 +- 0.6; 3.9	12.2 +- 2.4
9	152	23.0	18.3 +- 0.5; 2.7	13.7 +- 0.6; 4.0	12.7 +- 2.3
10	152	23.0	18.7 +- 0.6; 2.8	14.1 +- 0.7; 4.1	13.0 +- 2.0
11	152	23.0	18.9 +- 0.6; 2.8	14.3 +- 0.7; 4.1	13.8 +- 2.4
12	168	14.0	18.2 +- 0.5; 2.7	13.5 +- 0.6; 4.0	12.7 +- 2.1
13	185	10.0	18.6 +- 0.6; 2.8	13.9 +- 0.7; 4.1	12.6 +- 2.3
14	183	11.0	17.7 +- 0.5; 2.6	13.0 +- 0.6; 4.0	14.3 +- 2.4
15	170	8.0	Missing Dosimeter	No Net Data	12.3 +- 2.2
16	196	7.0	18.0 +- 0.5; 2.7	13.3 +- 0.6; 4.0	12.7 +- 2.2
17	229	7.9	19.1 +- 0.6; 2.9	14.5 +- 0.7; 4.1	15.5 +- 2.8
18	250	6.6	17.5 +- 0.5; 2.6	12.8 +- 0.6; 3.9	11.7 +- 2.3
19	247	4.8	17.0 +- 0.5; 2.5	12.4 +- 0.6; 3.9	12.2 +- 2.3
20	229	5.0	17.8 +- 0.5; 2.7	13.2 +- 0.6; 4.0	12.7 +- 2.1
21	208	3.8	17.8 +- 0.5; 2.7	13.2 +- 0.6; 4.0	12.2 +- 2.3
22	187	3.8	16.7 +- 0.5; 2.5	12.1 +- 0.6; 3.9	12.4 +- 2.3
23	203	2.6	18.1 +- 0.5; 2.7	13.5 +- 0.6; 4.0	12.8 +- 2.3
24	245	1.9	18.1 +- 0.5; 2.7	13.5 +- 0.6; 4.0	12.4 +- 2.4
25	280	2.2	16.9 +- 0.5; 2.5	12.3 +- 0.6; 3.9	12.9 +- 2.3
26	299	3.1	17.9 +- 0.5; 2.7	13.3 +- 0.6; 4.0	13.1 +- 2.2
27	305	3.8	17.4 +- 0.5; 2.6	12.8 +- 0.6; 3.9	12.6 +- 2.3
28	276	4.0	16.1 +- 0.5; 2.4	11.5 +- 0.6; 3.8	12.1 +- 2.1
29	293	5.8	17.6 +- 0.5; 2.6	12.9 +- 0.6; 4.0	12.5 +- 2.2
30	316	7.7	17.8 +- 0.5; 2.7	13.2 +- 0.6; 4.0	12.5 +- 2.3
32	300	11.0	Missing Dosimeter	No Net Data	13.2 +- 2.3
33	322	8.7	18.4 +- 0.6; 2.8	13.8 +- 0.7; 4.0	13.9 +- 2.2
34	339	8.8	18.6 +- 0.6; 2.8	13.9 +- 0.7; 4.1	12.9 +- 2.1
35	342	2.9	17.5 +- 0.5; 2.6	12.9 +- 0.6; 3.9	12.1 +- 2.0
36	346	1.9	18.3 +- 0.5; 2.7	13.6 +- 0.6; 4.0	13.5 +- 2.3
37	353	1.0	17.3 +- 0.5; 2.6	12.6 +- 0.6; 3.9	12.5 +- 2.5
38	226	2.0	16.6 +- 0.5; 2.5	12.0 +- 0.6; 3.9	12.7 +- 2.3

Transit Dose =

4.5 +- 0.4; 3.0

ST. LUCIE
For the period 970311-970723

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	12.6 +- 0.0	1
11.26 - 33.75 NNE	13.4 +- 0.0	1
33.76 - 56.25 NE	14.8 +- 0.0	1
56.26 - 78.75 ENE	14.3 +- 0.0	1
78.76 - 101.25 E	13.4 +- 0.0	1
101.26 - 123.75 ESE	13.7 +- 0.0	1
123.76 - 146.25 SE	12.4 +- 0.0	1
146.26 - 168.75 SSE	12.6 +- 0.8	3
168.76 - 191.25 S	13.0 +- 0.9	3
191.26 - 213.75 SSW	13.3 +- 0.1	3
213.76 - 236.25 SW	13.2 +- 1.2	3
236.26 - 258.75 WSW	12.9 +- 0.6	3
258.76 - 281.25 W	11.9 +- 0.5	2
281.26 - 303.75 WNW	13.1 +- 0.3	2
303.76 - 326.25 NW	13.2 +- 0.5	3
326.26 - 348.75 NNW	13.5 +- 0.5	3

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	13.2 +- 0.9	11
2 - 5	12.7 +- 0.6	11
> 5	13.5 +- 0.5	10
Upwind Control	14.0 +- 0.3	3

NRC TLD DOSES FOR ST. LUCIE AREA

Miles

Legend

Water
Highways

Railroads
Roads

Plant site

SUMMER

TLD Direct Radiation Environmental Monitoring

For the period 970311-970715 127 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	199	3.7	24.4	+- 0.7; 3.7	18.6	+- 0.8; 4.5	20.6	+- 2.1
2	111	1.0	23.2	+- 0.7; 3.5	17.5	+- 0.7; 4.4	19.3	+- 2.1
3	340	4.1	25.9	+- 0.8; 3.9	20.0	+- 0.8; 4.7	21.9	+- 2.4
4	192	9.3	27.4	+- 0.8; 4.1	21.3	+- 0.8; 4.8	20.8	+- 1.2
5	72	1.8	25.5	+- 0.8; 3.8	19.6	+- 0.8; 4.6	21.9	+- 2.2
6	54	1.5	27.6	+- 0.8; 4.1	21.5	+- 0.8; 4.8	21.7	+- 1.4
7	46	3.0	33.8	+- 1.0; 5.1	27.3	+- 1.0; 5.6	26.4	+- 2.5
8	31	3.0	32.7	+- 1.0; 4.9	26.2	+- 1.0; 5.4	27.7	+- 2.3
9	13	3.9	32.8	+- 1.0; 4.9	26.4	+- 1.0; 5.4	26.5	+- 1.7
10	7	4.0	31.3	+- 0.9; 4.7	24.9	+- 0.9; 5.3	25.7	+- 1.4
11	349	4.3	27.4	+- 0.8; 4.1	21.3	+- 0.8; 4.8	22.7	+- 2.9
12	323	5.0	26.8	+- 0.8; 4.0	20.7	+- 0.8; 4.7	23.5	+- 2.5
13	333	3.0	30.0	+- 0.9; 4.5	23.7	+- 0.9; 5.1	24.5	+- 1.5
14	255	2.8	22.6	+- 0.7; 3.4	16.9	+- 0.7; 4.3	19.3	+- 2.5
15	308	5.6	29.3	+- 0.9; 4.4	23.1	+- 0.9; 5.0	25.2	+- 1.6
16	64	3.5	34.8	+- 1.0; 5.2	28.2	+- 1.0; 5.7	27.0	+- 2.7
17	98	3.1	29.6	+- 0.9; 4.4	23.3	+- 0.9; 5.1	22.7	+- 1.5
18	114	3.5	24.1	+- 0.7; 3.6	18.3	+- 0.8; 4.5	22.5	+- 1.6
19	132	2.0	26.1	+- 0.8; 3.9	20.1	+- 0.8; 4.7	20.5	+- 1.3
20	152	4.5	17.4	+- 0.5; 2.6	12.0	+- 0.6; 3.8	13.8	+- 2.3
21	133	4.1	20.7	+- 0.6; 3.1	15.1	+- 0.7; 4.1	15.6	+- 1.0
22	157	2.4	24.4	+- 0.7; 3.7	18.5	+- 0.8; 4.5	17.7	+- 1.4
23	173	2.4	22.1	+- 0.7; 3.3	16.4	+- 0.7; 4.3	19.7	+- 1.6
24	185	3.9	26.1	+- 0.8; 3.9	20.1	+- 0.8; 4.7	18.9	+- 1.5
25	210	3.3	24.6	+- 0.7; 3.7	18.7	+- 0.8; 4.5	18.8	+- 1.0
26*	217	3.3	41.0	+- 1.2; 6.1	33.9	+- 1.2; 6.4	17.2	+- 1.3
27	231	3.1	19.1	+- 0.6; 2.9	13.6	+- 0.6; 4.0	14.6	+- 1.5
28	267	2.7	28.6	+- 0.9; 4.3	22.4	+- 0.9; 4.9	21.8	+- 1.4
29	276	3.4	29.1	+- 0.9; 4.4	22.9	+- 0.9; 5.0	23.4	+- 1.2
30	293	3.8	28.6	+- 0.9; 4.3	22.4	+- 0.9; 5.0	24.7	+- 3.8
31	244	3.6	22.5	+- 0.7; 3.4	16.8	+- 0.7; 4.3	20.0	+- 3.3
32	247	6.2	27.2	+- 0.8; 4.1	21.1	+- 0.8; 4.8	23.3	+- 1.8
33	218	9.0	27.3	+- 0.8; 4.1	21.3	+- 0.8; 4.8	20.0	+- 1.2
34	192	9.3	25.9	+- 0.8; 3.9	19.9	+- 0.8; 4.7	20.4	+- 1.2
35	184	14.1	21.4	+- 0.6; 3.2	15.7	+- 0.7; 4.2	16.0	+- 1.0
36	183	14.6	17.5	+- 0.5; 2.6	12.1	+- 0.6; 3.8	14.1	+- 2.3
37	182	14.8	16.3	+- 0.5; 2.4	11.0	+- 0.6; 3.7	13.1	+- 2.4
38	148	20.8	25.5	+- 0.8; 3.8	19.6	+- 0.8; 4.6	20.7	+- 1.7
39	140	25.0	26.5	+- 0.8; 4.0	20.5	+- 0.8; 4.7	22.7	+- 2.2
40	135	23.1	23.8	+- 0.7; 3.6	18.0	+- 0.7; 4.4	19.2	+- 2.9

Transit Dose = 4.4 +- 0.4; 3.2

* The result for this location was outside the expected range because it was in place for two quarters. Refer to the preface of this report for more information.

SUMMER

For the period 970311-970715

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 +- 2.5	2
11.26 - 33.75 NNE	26.3 +- 0.1	2
33.76 - 56.25 NE	24.4 +- 4.1	2
56.26 - 78.75 ENE	23.9 +- 6.1	2
78.76 - 101.25 E	23.3 +- 0.0	1
101.26 - 123.75 ESE	17.9 +- 0.6	2
123.76 - 146.25 SE	18.4 +- 2.5	4
146.26 - 168.75 SSE	16.7 +- 4.1	3
168.76 - 191.25 S	18.2 +- 2.6	2
191.26 - 213.75 SSW	19.6 +- 1.3	4
213.76 - 236.25 SW	22.9 +- 10.3	3
236.26 - 258.75 WSW	18.3 +- 2.5	3
258.76 - 281.25 W	22.7 +- 0.4	2
281.26 - 303.75 WNW	22.4 +- 0.0	1
303.76 - 326.25 NW	21.9 +- 1.7	2
326.26 - 348.75 NNW	21.8 +- 2.6	2

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	19.7 +- 1.7	4
2 - 5	21.1 +- 5.0	25
> 5	20.6 +- 1.5	8
Upwind Control	12.9 +- 2.5	3

NRC TLD DOSES FOR SUMMER AREA

Miles

Legend

Water
Highways

Railroads
Roads

Plant..site

SURRY

TLD Direct Radiation Environmental Monitoring

For the period 970311-970722 134 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	18	19.0	20.2 +- 0.6; 3.0		16.0 +- 0.6; 3.9		15.5 +- 0.9	
2	129	17.0	20.7 +- 0.6; 3.1		16.4 +- 0.6; 4.0		16.6 +- 1.3	
3	162	17.0	19.5 +- 0.6; 2.9		15.3 +- 0.6; 3.9		16.0 +- 1.4	
4	162	17.0	18.7 +- 0.6; 2.8		14.5 +- 0.6; 3.8		13.6 +- 1.1	
5	156	5.1	22.1 +- 0.7; 3.3		17.7 +- 0.7; 4.1		17.8 +- 1.1	
6	189	4.1	19.4 +- 0.6; 2.9		15.3 +- 0.6; 3.9		14.7 +- 1.0	
7	202	2.2	20.3 +- 0.6; 3.1		16.1 +- 0.6; 3.9		15.1 +- 1.2	
8	183	1.6	22.9 +- 0.7; 3.4		18.4 +- 0.7; 4.2		17.5 +- 1.0	
9	243	0.2	25.8 +- 0.8; 3.9		21.0 +- 0.8; 4.5		20.3 +- 0.9	
10	269	0.1	26.6 +- 0.8; 4.0		21.8 +- 0.8; 4.6		22.3 +- 1.5	
11	304	0.1	24.6 +- 0.7; 3.7		20.0 +- 0.7; 4.4		22.0 +- 2.7	
12	334	0.2	26.8 +- 0.8; 4.0		21.9 +- 0.8; 4.6		22.7 +- 1.7	
13	10	1.2	20.9 +- 0.6; 3.1		16.6 +- 0.6; 4.0		16.2 +- 1.1	
14	21	2.0	21.7 +- 0.7; 3.3		17.3 +- 0.7; 4.1		16.7 +- 1.1	
15	203	4.5	20.0 +- 0.6; 3.0		15.8 +- 0.6; 3.9		15.4 +- 1.0	
16	224	3.7	18.5 +- 0.6; 2.8		14.4 +- 0.6; 3.8		14.3 +- 0.8	
17	212	2.0	21.7 +- 0.7; 3.3		17.3 +- 0.7; 4.1		17.2 +- 1.0	
18	248	5.1	20.1 +- 0.6; 3.0		15.9 +- 0.6; 3.9		14.8 +- 1.1	
19	259	8.1	19.9 +- 0.6; 3.0		15.7 +- 0.6; 3.9		15.5 +- 1.9	
20	285	5.0	16.0 +- 0.5; 2.4		12.1 +- 0.5; 3.6		10.7 +- 1.4	
21	270	4.1	22.7 +- 0.7; 3.4		18.3 +- 0.7; 4.2		18.5 +- 1.2	
22	123	12.0	23.1 +- 0.7; 3.5		18.6 +- 0.7; 4.2		20.4 +- 2.4	
23	102	11.0	25.3 +- 0.8; 3.8		20.6 +- 0.7; 4.4		22.2 +- 1.9	
24	106	4.9	21.8 +- 0.7; 3.3		17.4 +- 0.7; 4.1		17.6 +- 1.0	
25	90	5.2	22.2 +- 0.7; 3.3		17.8 +- 0.7; 4.1		16.9 +- 1.0	
26	69	5.1	26.1 +- 0.8; 3.9		21.3 +- 0.8; 4.5		21.2 +- 1.2	
27	23	5.3	23.2 +- 0.7; 3.5		18.6 +- 0.7; 4.2		18.4 +- 1.1	
28	49	5.0	21.4 +- 0.6; 3.2		17.1 +- 0.7; 4.1		18.4 +- 1.1	
29	7	6.8	Missing Dosimeter		No Net Data		17.4 +- 1.4	
30	359	6.5	20.5 +- 0.6; 3.1		16.2 +- 0.6; 4.0		15.6 +- 1.0	
31	1	4.6	17.1 +- 0.5; 2.6		13.2 +- 0.6; 3.6		13.4 +- 2.0	
32	332	3.8	20.2 +- 0.6; 3.0		15.9 +- 0.6; 3.9		16.5 +- 1.2	
33	314	5.4	21.6 +- 0.6; 3.2		17.2 +- 0.7; 4.1		17.4 +- 1.1	
34	308	6.4	19.3 +- 0.6; 2.9		15.1 +- 0.6; 3.8		16.1 +- 1.6	
35	348	5.3	19.3 +- 0.6; 2.9		15.2 +- 0.6; 3.8		15.4 +- 1.0	
36	343	15.0	19.1 +- 0.6; 2.9		15.0 +- 0.6; 3.8		16.6 +- 1.1	
37	340	15.0	17.8 +- 0.5; 2.7		13.8 +- 0.6; 3.7		14.3 +- 1.0	
38	339	16.0	20.3 +- 0.6; 3.0		16.0 +- 0.6; 3.9		16.7 +- 2.1	
39	153	1.9	24.9 +- 0.7; 3.7		20.2 +- 0.7; 4.4		18.6 +- 1.1	
40	144	2.1	27.8 +- 0.8; 4.2		22.9 +- 0.8; 4.7		17.1 +- 2.8	

Transit Dose = 2.7 +- 0.3; 3.1

SURRY

For the period 970311-970722

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	15.3 +- 1.9	3
11.26 - 33.75 NNE	17.3 +- 1.3	3
33.76 - 56.25 NE	17.1 +- 0.0	1
56.26 - 78.75 ENE	21.3 +- 0.0	1
78.76 - 101.25 E	17.8 +- 0.0	1
101.26 - 123.75 ESE	18.8 +- 1.6	3
123.76 - 146.25 SE	19.7 +- 4.6	2
146.26 - 168.75 SSE	16.9 +- 2.5	4
168.76 - 191.25 S	16.8 +- 2.2	2
191.26 - 213.75 SSW	16.4 +- 0.8	3
213.76 - 236.25 SW	14.4 +- 0.0	1
236.26 - 258.75 WSW	18.4 +- 3.6	2
258.76 - 281.25 W	18.6 +- 3.1	3
281.26 - 303.75 WNW	12.1 +- 0.0	1
303.76 - 326.25 NW	17.4 +- 2.4	3
326.26 - 348.75 NNW	17.7 +- 3.7	3

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	19.4 +- 2.0	9
2 - 5	16.2 +- 2.9	11
> 5	17.0 +- 2.0	16
Upwind Control	14.9 +- 1.1	3

NRC TLD DOSES FOR SURRY AREA

Miles

Legend

Water
Highways

Railroads
Roads

Plant site

SUSQUEHANNA

TLD Direct Radiation Environmental Monitoring

For the period 970312-970708 119 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	19	1.4	22.0	+- 0.7; 3.3	19.7	+- 0.7; 4.2	18.8	+- 1.1
2	358	1.4	22.2	+- 0.7; 3.3	19.9	+- 0.7; 4.2	19.2	+- 1.0
3	332	1.6	20.8	+- 0.6; 3.1	18.6	+- 0.7; 4.1	17.7	+- 1.1
4	315	1.8	20.8	+- 0.6; 3.1	18.6	+- 0.7; 4.1	17.5	+- 1.1
5	287	1.7	22.7	+- 0.7; 3.4	20.4	+- 0.7; 4.3	19.1	+- 1.4
6	270	1.3	21.4	+- 0.6; 3.2	19.1	+- 0.7; 4.1	18.6	+- 1.1
7	239	1.8	20.8	+- 0.6; 3.1	18.6	+- 0.7; 4.1	17.9	+- 1.3
8	217	2.0	24.5	+- 0.7; 3.7	22.1	+- 0.8; 4.5	21.2	+- 1.4
9	201	1.5	21.6	+- 0.6; 3.2	19.3	+- 0.7; 4.2	19.0	+- 1.4
10	185	1.3	Missing Dosimeter		No Net Data		17.3	+- 1.3
11	243	5.1	21.6	+- 0.6; 3.2	19.3	+- 0.7; 4.2	19.1	+- 1.0
12	252	4.6	21.3	+- 0.6; 3.2	19.0	+- 0.7; 4.1	18.2	+- 1.0
13	274	3.4	24.9	+- 0.7; 3.7	22.5	+- 0.8; 4.5	21.2	+- 1.3
14	286	3.6	22.4	+- 0.7; 3.4	20.1	+- 0.7; 4.3	19.6	+- 1.1
15	1	3.9	24.9	+- 0.7; 3.7	22.5	+- 0.8; 4.5	20.4	+- 1.5
16	334	4.1	22.3	+- 0.7; 3.3	20.0	+- 0.7; 4.2	19.5	+- 1.2
17	312	4.4	23.1	+- 0.7; 3.5	20.8	+- 0.7; 4.3	18.9	+- 1.3
18	33	5.0	22.4	+- 0.7; 3.4	20.1	+- 0.7; 4.3	19.4	+- 1.3
19	45	9.9	22.2	+- 0.7; 3.3	19.9	+- 0.7; 4.2	19.8	+- 1.1
20	65	4.7	24.2	+- 0.7; 3.6	21.8	+- 0.8; 4.5	20.9	+- 1.3
21	43	3.3	21.9	+- 0.7; 3.3	19.6	+- 0.7; 4.2	21.0	+- 1.5
22	33	0.9	23.6	+- 0.7; 3.5	21.3	+- 0.7; 4.4	18.8	+- 1.9
23	57	1.2	Damaged Dosimeter		No Net Data		17.7	+- 1.2
24	87	1.4	22.9	+- 0.7; 3.4	20.5	+- 0.7; 4.3	19.2	+- 1.1
25	111	1.4	22.5	+- 0.7; 3.4	20.2	+- 0.7; 4.3	18.8	+- 1.2
26	137	1.5	22.1	+- 0.7; 3.3	19.8	+- 0.7; 4.2	18.8	+- 1.1
27	152	1.5	22.6	+- 0.7; 3.4	20.3	+- 0.7; 4.3	19.8	+- 1.0
28	107	3.6	24.6	+- 0.7; 3.7	22.2	+- 0.8; 4.5	20.7	+- 1.3
29	99	4.3	23.7	+- 0.7; 3.6	21.4	+- 0.7; 4.4	20.3	+- 1.0
30	138	3.6	23.3	+- 0.7; 3.5	21.0	+- 0.7; 4.4	20.4	+- 1.1
31	162	3.4	25.3	+- 0.8; 3.8	22.9	+- 0.8; 4.6	22.0	+- 1.3
32	176	3.5	25.3	+- 0.8; 3.8	22.9	+- 0.8; 4.6	20.6	+- 1.4
33	192	3.2	24.4	+- 0.7; 3.7	22.0	+- 0.8; 4.5	21.1	+- 1.2
34	231	4.4	22.7	+- 0.7; 3.4	20.4	+- 0.7; 4.3	19.7	+- 1.1
35	134	12.3	23.4	+- 0.7; 3.5	21.0	+- 0.7; 4.4	19.7	+- 1.6
36	114	13.5	24.6	+- 0.7; 3.7	22.2	+- 0.8; 4.5	22.0	+- 1.5
37	150	15.6	21.4	+- 0.6; 3.2	19.1	+- 0.7; 4.1	19.0	+- 1.5

Transit Dose = 1.6 +- 0.3; 2.8

SUSQUEHANNA

For the period 970312-970708

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	21.2 +- 1.8	2
11.26 - 33.75 NNE	20.4 +- 0.8	3
33.76 - 56.25 NE	19.8 +- 0.2	2
56.26 - 78.75 ENE	21.8 +- 0.0	1
78.76 - 101.25 E	20.9 +- 0.6	2
101.26 - 123.75 ESE	21.2 +- 1.4	2
123.76 - 146.25 SE	20.4 +- 0.8	2
146.26 - 168.75 SSE	21.6 +- 1.9	2
168.76 - 191.25 S	22.9 +- 0.0	1
191.26 - 213.75 SSW	20.7 +- 1.9	2
213.76 - 236.25 SW	21.2 +- 1.2	2
236.26 - 258.75 WSW	19.0 +- 0.4	3
258.76 - 281.25 W	20.8 +- 2.4	2
281.26 - 303.75 WNW	20.3 +- 0.2	2
303.76 - 326.25 NW	19.7 +- 1.6	2
326.26 - 348.75 NNW	19.3 +- 1.0	2

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	19.9 +- 1.0	14
2 - 5	21.2 +- 1.2	16
> 5	19.6 +- 0.4	2
Upwind Control	20.8 +- 1.6	3

NRC TLD DOSES FOR SUSQUEHANNA AREA

Miles

0 2 4

Legend

Water

Highways

Railroads

Roads

Plant..site

THREE MILE ISLAND

TLD Direct Radiation Environmental Monitoring

For the period 970312-970722 133 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	95	5.9	22.9 +- 0.7; 3.4		17.4 +- 0.7; 4.2		16.1 +- 1.4	
2	102	3.9	24.4 +- 0.7; 3.7		18.7 +- 0.7; 4.4		18.2 +- 1.9	
3	110	2.7	18.6 +- 0.6; 2.8		13.5 +- 0.6; 3.8		13.5 +- 2.5	
4	162	1.8	21.6 +- 0.6; 3.2		16.2 +- 0.7; 4.1		15.6 +- 1.6	
5	161	2.3	21.1 +- 0.6; 3.2		15.8 +- 0.7; 4.0		15.3 +- 1.7	
6	152	1.1	22.3 +- 0.7; 3.3		16.8 +- 0.7; 4.2		16.1 +- 1.6	
7	123	0.5	21.1 +- 0.6; 3.2		15.8 +- 0.7; 4.0		14.1 +- 1.6	
8	87	0.4	22.9 +- 0.7; 3.4		17.4 +- 0.7; 4.2		16.2 +- 1.9	
9	61	0.5	20.0 +- 0.6; 3.0		14.8 +- 0.6; 3.9		14.9 +- 1.5	
10	1	1.7	21.2 +- 0.6; 3.2		15.8 +- 0.7; 4.1		15.2 +- 1.8	
11	27	0.8	21.0 +- 0.6; 3.2		15.7 +- 0.7; 4.0		15.1 +- 1.6	
12	48	1.0	21.4 +- 0.6; 3.2		16.0 +- 0.7; 4.1		15.6 +- 1.6	
13	19	2.0	21.5 +- 0.6; 3.2		16.1 +- 0.7; 4.1		15.7 +- 1.8	
14	358	2.4	20.6 +- 0.6; 3.1		15.3 +- 0.6; 4.0		14.4 +- 1.8	
15	132	9.0	24.9 +- 0.7; 3.7		19.2 +- 0.7; 4.4		18.2 +- 1.9	
16	0	3.0	19.4 +- 0.6; 2.9		14.3 +- 0.6; 3.9		14.3 +- 1.7	
18	347	3.5	25.6 +- 0.8; 3.8		19.8 +- 0.8; 4.5		18.4 +- 1.8	
19	343	3.1	23.3 +- 0.7; 3.5		17.7 +- 0.7; 4.3		16.7 +- 1.7	
20	318	5.0	22.3 +- 0.7; 3.4		16.9 +- 0.7; 4.2		15.6 +- 1.8	
21	348	2.7	17.9 +- 0.5; 2.7		12.8 +- 0.6; 3.7		12.5 +- 1.7	
22	17	3.1	22.4 +- 0.7; 3.4		16.9 +- 0.7; 4.2		15.9 +- 1.7	
23	64	3.7	18.8 +- 0.6; 2.8		13.7 +- 0.6; 3.8		12.9 +- 1.6	
24	44	3.6	23.5 +- 0.7; 3.5		17.9 +- 0.7; 4.3		16.7 +- 1.8	
25	327	0.4	15.0 +- 0.5; 2.3		10.3 +- 0.5; 3.5		13.0 +- 3.0	
27	7	7.1	27.1 +- 0.8; 4.1		21.2 +- 0.8; 4.7		20.3 +- 1.8	
29	293	0.4	19.5 +- 0.6; 2.9		14.3 +- 0.6; 3.9		15.9 +- 3.4	
30	314	1.1	22.3 +- 0.7; 3.3		16.8 +- 0.7; 4.2		17.1 +- 3.3	
31	303	8.6	19.7 +- 0.6; 3.0		14.5 +- 0.6; 3.9		13.6 +- 1.6	
32	297	7.6	23.1 +- 0.7; 3.5		17.5 +- 0.7; 4.2		16.9 +- 1.7	
33	302	5.8	18.2 +- 0.5; 2.7		13.1 +- 0.6; 3.8		13.3 +- 1.7	
34	296	2.3	23.1 +- 0.7; 3.5		17.6 +- 0.7; 4.2		16.4 +- 1.6	
35	308	1.8	22.3 +- 0.7; 3.3		16.8 +- 0.7; 4.2		16.5 +- 1.4	
36	265	1.2	20.8 +- 0.6; 3.1		15.5 +- 0.6; 4.0		13.3 +- 1.9	
37	256	1.4	20.2 +- 0.6; 3.0		15.0 +- 0.6; 4.0		13.8 +- 1.6	
38	225	1.9	21.1 +- 0.6; 3.2		15.7 +- 0.7; 4.0		16.3 +- 1.5	
39	204	2.0	19.2 +- 0.6; 2.9		14.1 +- 0.6; 3.9		13.1 +- 1.5	
40	202	2.5	20.4 +- 0.6; 3.1		15.2 +- 0.6; 4.0		14.6 +- 1.5	
41	184	12.6	23.1 +- 0.7; 3.5		17.5 +- 0.7; 4.2		16.6 +- 1.7	
42	259	7.4	22.0 +- 0.7; 3.3		16.6 +- 0.7; 4.1		15.9 +- 1.7	
43	268	6.2	22.5 +- 0.7; 3.4		17.0 +- 0.7; 4.2		16.3 +- 2.0	
44	249	4.3	21.6 +- 0.6; 3.2		16.2 +- 0.7; 4.1		15.1 +- 1.7	
45	221	0.5	18.7 +- 0.6; 2.8		13.6 +- 0.6; 3.8		13.1 +- 2.4	
46	171	3.0	22.8 +- 0.7; 3.4		17.2 +- 0.7; 4.2		15.6 +- 1.8	
47	177	5.7	20.2 +- 0.6; 3.0		15.0 +- 0.6; 4.0		15.1 +- 1.8	
48	181	9.1	26.9 +- 0.8; 4.0		21.0 +- 0.8; 4.6		21.3 +- 2.1	
49	199	1.0	18.8 +- 0.6; 2.8		13.7 +- 0.6; 3.8		14.9 +- 2.6	
50	145	4.9	23.5 +- 0.7; 3.5		17.9 +- 0.7; 4.3		16.8 +- 2.3	

Transit Dose = 3.6 +- 0.4; 3.2

THREE MILE ISLAND
For the period 970312-970722

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 +- 3.1	4
11.26 - 33.75 NNE	16.2 +- 0.6	3
33.76 - 56.25 NE	17.0 +- 1.3	2
56.26 - 78.75 ENE	14.2 +- 0.8	2
78.76 - 101.25 E	17.4 +- 0.0	2
101.26 - 123.75 ESE	16.0 +- 2.6	3
123.76 - 146.25 SE	18.5 +- 0.9	2
146.26 - 168.75 SSE	16.3 +- 0.5	3
168.76 - 191.25 S	17.7 +- 2.5	4
191.26 - 213.75 SSW	14.3 +- 0.8	3
213.76 - 236.25 SW	14.7 +- 1.5	2
236.26 - 258.75 WSW	16.2 +- 0.0	1
258.76 - 281.25 W	16.8 +- 0.3	2
281.26 - 303.75 WNW	15.4 +- 2.0	5
303.76 - 326.25 NW	16.8 +- 0.0	2
326.26 - 348.75 NNW	15.1 +- 4.4	4

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	15.2 +- 1.7	16
2 - 5	16.3 +- 2.0	17
> 5	17.3 +- 2.5	11
Upwind Control	15.8 +- 1.0	3

NRC TLD DOSES FOR THREE MILE ISLAND AREA

Miles

Legend

Water
Highways

Railroads
Roads

Plant..site

TROJAN

TLD Direct Radiation Environmental Monitoring

For the period 970307-970716 132 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	340	0.6	17.7 +- 0.5; 2.7	13.6 +- 0.6; 3.9	12.6 +- 1.1
2	334	1.5	15.8 +- 0.5; 2.4	11.7 +- 0.6; 3.7	14.6 +- 1.0
3	340	1.7	18.2 +- 0.5; 2.7	14.1 +- 0.6; 4.0	11.8 +- 0.9
4	328	3.9	14.3 +- 0.4; 2.1	10.3 +- 0.5; 3.6	12.4 +- 1.1
5	308	4.6	17.3 +- 0.5; 2.6	13.2 +- 0.6; 3.9	14.4 +- 1.1
6	312	4.5	17.2 +- 0.5; 2.6	13.1 +- 0.6; 3.9	15.0 +- 1.0
7	267	4.6	19.3 +- 0.6; 2.9	15.2 +- 0.7; 4.1	14.8 +- 0.8
8	274	3.8	19.3 +- 0.6; 2.9	15.1 +- 0.7; 4.1	15.3 +- 0.9
9	279	1.7	18.0 +- 0.5; 2.7	13.9 +- 0.6; 3.9	14.9 +- 0.9
10	263	2.0	19.1 +- 0.6; 2.9	14.9 +- 0.7; 4.0	15.4 +- 0.8
11	245	1.6	Damaged Dosimeter	No Net Data	15.9 +- 0.9
12	223	1.2	20.2 +- 0.6; 3.0	16.1 +- 0.7; 4.2	16.4 +- 1.2
13	196	1.1	19.4 +- 0.6; 2.9	15.3 +- 0.7; 4.1	15.5 +- 0.8
14	180	1.2	16.2 +- 0.5; 2.4	12.1 +- 0.6; 3.8	14.1 +- 1.0
15	165	1.7	16.3 +- 0.5; 2.5	12.2 +- 0.6; 3.8	13.0 +- 1.0
16	212	3.9	21.2 +- 0.6; 3.2	17.1 +- 0.7; 4.3	16.1 +- 1.9
17	230	3.5	18.8 +- 0.6; 2.8	14.6 +- 0.6; 4.0	15.6 +- 1.1
18	162	9.3	19.0 +- 0.6; 2.9	14.9 +- 0.7; 4.0	15.7 +- 0.9
19	172	5.0	18.9 +- 0.6; 2.8	14.7 +- 0.6; 4.0	15.6 +- 1.0
20	334	5.8	17.1 +- 0.5; 2.6	13.0 +- 0.6; 3.8	12.9 +- 0.9
21	345	5.5	Missing Dosimeter	No Net Data	13.3 +- 0.7
22	356	5.5	16.3 +- 0.5; 2.5	12.3 +- 0.6; 3.8	12.2 +- 0.7
23	8	3.9	14.9 +- 0.4; 2.2	10.9 +- 0.6; 3.6	11.8 +- 0.7
24	15	3.7	17.7 +- 0.5; 2.7	13.6 +- 0.6; 3.9	13.2 +- 0.8
25	27	1.9	16.0 +- 0.5; 2.4	11.9 +- 0.6; 3.7	12.1 +- 0.9
26	37	2.1	18.1 +- 0.5; 2.7	14.0 +- 0.6; 3.9	14.7 +- 0.9
27	60	2.9	19.0 +- 0.6; 2.8	14.8 +- 0.6; 4.0	14.9 +- 0.8
28	55	4.5	17.4 +- 0.5; 2.6	13.3 +- 0.6; 3.9	13.7 +- 0.8
29	69	1.6	Missing Dosimeter	No Net Data	12.3 +- 1.2
30	83	3.9	16.1 +- 0.5; 2.4	12.1 +- 0.6; 3.8	12.7 +- 0.7
31	93	2.7	19.0 +- 0.6; 2.9	14.9 +- 0.7; 4.0	15.4 +- 0.9
32	119	2.2	18.7 +- 0.6; 2.8	14.6 +- 0.6; 4.0	15.4 +- 0.9
33	106	5.3	Missing Dosimeter	No Net Data	15.0 +- 2.7
34	134	2.5	17.4 +- 0.5; 2.6	13.3 +- 0.6; 3.9	12.5 +- 0.9
35	145	4.7	17.2 +- 0.5; 2.6	13.1 +- 0.6; 3.9	13.0 +- 0.8
36	270	17.0	18.7 +- 0.6; 2.8	14.6 +- 0.6; 4.0	15.0 +- 1.6
37	270	17.0	18.5 +- 0.6; 2.8	14.4 +- 0.6; 4.0	16.3 +- 1.9
38	270	17.0	20.0 +- 0.6; 3.0	15.8 +- 0.7; 4.1	16.1 +- 1.0

Transit Dose = 3.8 +- 0.3; 3.0

TROJAN

For the period 970307-970716

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 +- 1.0	2
11.26 - 33.75 NNE	12.7 +- 1.2	2
33.76 - 56.25 NE	13.6 +- 0.5	2
56.26 - 78.75 ENE	14.8 +- 0.0	1
78.76 - 101.25 E	13.5 +- 2.0	2
101.26 - 123.75 ESE	14.6 +- 0.0	1
123.76 - 146.25 SE	13.2 +- 0.1	2
146.26 - 168.75 SSE	13.6 +- 1.9	2
168.76 - 191.25 S	13.4 +- 1.9	2
191.26 - 213.75 SSW	16.2 +- 1.2	2
213.76 - 236.25 SW	15.3 +- 1.0	2
236.26 - 258.75 WSW	No Data +- No Data	0
258.76 - 281.25 W	14.8 +- 0.6	4
281.26 - 303.75 WNW	No Data +- No Data	0
303.76 - 326.25 NW	13.1 +- 0.1	2
326.26 - 348.75 NNW	12.5 +- 1.5	5

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	13.6 +- 1.6	10
2 - 5	13.8 +- 1.6	18
> 5	13.4 +- 1.3	3
Upwind Control	14.9 +- 0.8	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 970311-970723 135 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	310	1.3	17.1	+-	0.5; 2.6	10.4	+-	0.7; 4.1	11.6	+- 2.0
2	292	2.4	16.0	+-	0.5; 2.4	9.3	+-	0.6; 4.0	11.5	+- 2.1
3	340	1.9	18.1	+-	0.5; 2.7	11.4	+-	0.7; 4.2	11.9	+- 1.9
4	354	2.0	18.1	+-	0.5; 2.7	11.4	+-	0.7; 4.2	12.7	+- 2.3
5	314	3.8	17.5	+-	0.5; 2.6	10.8	+-	0.7; 4.2	11.5	+- 1.9
6	331	4.2	16.4	+-	0.5; 2.5	9.7	+-	0.7; 4.1	11.0	+- 2.0
7	291	5.4	18.4	+-	0.6; 2.8	11.8	+-	0.7; 4.3	12.1	+- 2.4
8	263	5.1	16.6	+-	0.5; 2.5	9.9	+-	0.7; 4.1	10.8	+- 2.0
9	242	5.7	18.2	+-	0.5; 2.7	11.5	+-	0.7; 4.2	11.6	+- 2.4
10	234	6.2	19.1	+-	0.6; 2.9	12.4	+-	0.7; 4.3	12.2	+- 1.4
11	220	6.2	18.3	+-	0.5; 2.7	11.6	+-	0.7; 4.2	11.4	+- 2.2
12	213	6.9	16.9	+-	0.5; 2.5	10.2	+-	0.7; 4.1	11.2	+- 2.0
13	199	10.0	16.7	+-	0.5; 2.5	10.0	+-	0.7; 4.1	11.8	+- 1.9
14	90	10.0	18.1	+-	0.5; 2.7	11.4	+-	0.7; 4.2	11.2	+- 2.5
15	180	10.0	19.4	+-	0.6; 2.9	12.7	+-	0.7; 4.4	13.2	+- 2.0
16	171	10.0	19.3	+-	0.6; 2.9	12.6	+-	0.7; 4.3	13.4	+- 2.0
17	165	9.0	19.7	+-	0.6; 3.0	13.1	+-	0.7; 4.4	12.9	+- 2.0
18	203	16.0	18.0	+-	0.5; 2.7	11.4	+-	0.7; 4.2	12.4	+- 1.7
19	203	16.0	17.6	+-	0.5; 2.6	10.9	+-	0.7; 4.2	12.1	+- 2.1
20	203	16.0	19.6	+-	0.6; 2.9	12.9	+-	0.7; 4.4	13.6	+- 1.9
21	268	8.7	17.0	+-	0.5; 2.6	10.3	+-	0.7; 4.1	10.5	+- 2.0
22	256	8.0	17.5	+-	0.5; 2.6	10.8	+-	0.7; 4.2	11.8	+- 1.9
23	275	9.0	17.2	+-	0.5; 2.6	10.5	+-	0.7; 4.1	11.3	+- 2.2
24	285	9.0	18.8	+-	0.6; 2.8	12.1	+-	0.7; 4.3	13.5	+- 2.1
25	293	8.7	19.9	+-	0.6; 3.0	13.3	+-	0.7; 4.4	14.0	+- 2.1
26	301	8.4	19.9	+-	0.6; 3.0	13.2	+-	0.7; 4.4	13.5	+- 1.9
27	311	8.3	18.4	+-	0.6; 2.8	11.7	+-	0.7; 4.2	12.0	+- 1.8
28	327	8.2	19.8	+-	0.6; 3.0	13.2	+-	0.7; 4.4	13.5	+- 1.9
29	339	9.3	18.4	+-	0.6; 2.8	11.7	+-	0.7; 4.3	13.0	+- 1.8
30	350	8.7	19.4	+-	0.6; 2.9	12.7	+-	0.7; 4.3	12.5	+- 2.3
31	359	9.9	18.3	+-	0.5; 2.7	11.6	+-	0.7; 4.2	12.5	+- 1.8
32	2	18.0	19.6	+-	0.6; 2.9	12.9	+-	0.7; 4.4	12.6	+- 1.4
33	2	22.0	18.3	+-	0.6; 2.8	11.7	+-	0.7; 4.2	12.8	+- 1.8
34	18	24.0	Missing Dosimeter			No Net Data			12.7	+- 2.0
35	28	22.0	18.4	+-	0.6; 2.8	11.8	+-	0.7; 4.3	12.2	+- 2.7
36	15	0.3	17.4	+-	0.5; 2.6	10.7	+-	0.7; 4.2	11.2	+- 1.9
37	228	0.5	19.7	+-	0.6; 3.0	13.1	+-	0.7; 4.4	12.9	+- 1.9

Transit Dose = 6.8 +- 0.4; 3.2

TURKEY POINT
For the period 970311-970723

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	12.1 +- 0.7	5
11.26 - 33.75 NNE	11.2 +- 0.8	2
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	11.4 +- 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	13.1 +- 0.0	1
168.76 - 191.25 S	12.7 +- 0.1	2
191.26 - 213.75 SSW	10.1 +- 0.2	2
213.76 - 236.25 SW	12.4 +- 0.7	3
236.26 - 258.75 WSW	11.2 +- 0.5	2
258.76 - 281.25 W	10.3 +- 0.3	3
281.26 - 303.75 WNW	11.9 +- 1.6	5
303.76 - 326.25 NW	11.0 +- 0.6	3
326.26 - 348.75 NNW	11.5 +- 1.4	4

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	11.4 +- 1.0	5
2 - 5	9.9 +- 0.8	3
> 5	11.8 +- 1.0	25
Upwind Control	11.7 +- 1.1	3

NRC TLD DOSES FOR TURKEY POINT AREA

Miles

Legend

Water
Highways

Railroads
Roads

Plant site

VERMONT YANKEE

TLD Direct Radiation Environmental Monitoring

For the period 970312-970729 140 Days

Field Time: 102 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	23.0 +- 0.7; 3.4		17.2 +- 0.7; 4.2		15.6 +- 1.4	
2	158	1.0	22.3 +- 0.7; 3.4		16.7 +- 0.7; 4.1		16.6 +- 1.0	
3	184	1.3	22.0 +- 0.7; 3.3		16.3 +- 0.7; 4.1		15.9 +- 1.1	
4	201	1.4	23.2 +- 0.7; 3.5		17.4 +- 0.7; 4.2		16.5 +- 1.5	
5	220	1.6	25.0 +- 0.8; 3.8		19.0 +- 0.7; 4.4		16.6 +- 1.6	
6	157	3.4	27.0 +- 0.8; 4.1		20.8 +- 0.8; 4.6		16.7 +- 2.3	
7	189	4.9	22.3 +- 0.7; 3.3		16.6 +- 0.7; 4.1		16.3 +- 1.3	
8	201	13.0	21.6 +- 0.6; 3.2		16.0 +- 0.7; 4.0		15.9 +- 1.1	
9	208	5.8	22.3 +- 0.7; 3.3		16.6 +- 0.7; 4.1		16.0 +- 1.3	
10	232	3.7	25.2 +- 0.8; 3.8		19.2 +- 0.7; 4.4		18.4 +- 1.6	
11	277	2.9	24.2 +- 0.7; 3.6		18.3 +- 0.7; 4.3		17.2 +- 1.7	
12	292	1.4	22.9 +- 0.7; 3.4		17.2 +- 0.7; 4.2		16.9 +- 1.7	
13	314	1.4	24.1 +- 0.7; 3.6		18.2 +- 0.7; 4.3		16.2 +- 1.5	
14	310	4.2	22.1 +- 0.7; 3.3		16.5 +- 0.7; 4.1		16.1 +- 1.0	
15	299	4.3	22.5 +- 0.7; 3.4		16.8 +- 0.7; 4.1		16.1 +- 1.1	
16	270	4.5	20.2 +- 0.6; 3.0		14.8 +- 0.6; 3.9		14.3 +- 1.2	
17	331	5.0	22.2 +- 0.7; 3.3		16.5 +- 0.7; 4.1		16.9 +- 1.0	
18	290	19.0	25.6 +- 0.8; 3.8		19.5 +- 0.7; 4.4		18.4 +- 1.7	
19	290	19.0	21.6 +- 0.6; 3.2		16.0 +- 0.7; 4.0		17.5 +- 1.8	
20	290	19.0	24.5 +- 0.7; 3.7		18.6 +- 0.7; 4.3		17.7 +- 1.9	
21	359	3.2	22.4 +- 0.7; 3.4		16.7 +- 0.7; 4.1		16.7 +- 1.4	
23	334	2.2	Missing Dosimeter		No Net Data		15.9 +- 1.5	
24	4	0.9	23.0 +- 0.7; 3.4		17.2 +- 0.7; 4.2		16.9 +- 1.2	
25	30	1.0	21.3 +- 0.6; 3.2		15.8 +- 0.6; 4.0		15.5 +- 1.4	
26	72	1.5	23.8 +- 0.7; 3.6		18.0 +- 0.7; 4.3		17.2 +- 1.0	
27	44	0.7	22.7 +- 0.7; 3.4		17.0 +- 0.7; 4.1		16.3 +- 1.3	
28	39	2.8	24.7 +- 0.7; 3.7		18.7 +- 0.7; 4.3		17.6 +- 1.8	
29	25	3.8	25.6 +- 0.8; 3.8		19.5 +- 0.7; 4.4		19.2 +- 1.7	
30	72	2.7	24.1 +- 0.7; 3.6		18.2 +- 0.7; 4.3		18.5 +- 1.9	
31	85	2.0	23.3 +- 0.7; 3.5		17.5 +- 0.7; 4.2		16.6 +- 1.3	
32	111	1.8	22.9 +- 0.7; 3.4		17.2 +- 0.7; 4.2		16.5 +- 1.2	
33	134	4.0	22.5 +- 0.7; 3.4		16.8 +- 0.7; 4.1		16.2 +- 1.1	
34	151	6.0	21.1 +- 0.6; 3.2		15.6 +- 0.6; 4.0		14.7 +- 1.2	
35	111	4.3	24.2 +- 0.7; 3.6		18.3 +- 0.7; 4.3		18.4 +- 1.3	
36	92	4.7	26.2 +- 0.8; 3.9		20.1 +- 0.8; 4.5		18.9 +- 1.5	
37	50	15.0	28.8 +- 0.9; 4.3		22.3 +- 0.8; 4.8		21.0 +- 1.4	
39	222	0.3	24.3 +- 0.7; 3.7		18.4 +- 0.7; 4.3		17.9 +- 1.3	
40	250	3.0	23.8 +- 0.7; 3.6		18.0 +- 0.7; 4.3		16.8 +- 1.4	

Transit Dose = 3.5 +- 0.4; 3.2

VERMONT YANKEE

For the period 970312-970729

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 +- 0.4	2
11.26 - 33.75 NNE	17.6 +- 2.7	2
33.76 - 56.25 NE	19.3 +- 2.7	3
56.26 - 78.75 ENE	18.1 +- 0.1	2
78.76 - 101.25 E	18.8 +- 1.9	2
101.26 - 123.75 ESE	17.7 +- 0.8	2
123.76 - 146.25 SE	17.0 +- 0.3	2
146.26 - 168.75 SSE	17.7 +- 2.7	3
168.76 - 191.25 S	16.5 +- 0.2	2
191.26 - 213.75 SSW	16.7 +- 0.7	3
213.76 - 236.25 SW	18.9 +- 0.4	3
236.26 - 258.75 WSW	18.0 +- 0.0	1
258.76 - 281.25 W	16.6 +- 2.5	2
281.26 - 303.75 WNW	17.0 +- 0.3	2
303.76 - 326.25 NW	17.3 +- 1.2	2
326.26 - 348.75 NNW	16.5 +- 0.0	1

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	17.4 +- 0.8	14
2 - 5	17.8 +- 1.6	16
> 5	17.6 +- 3.2	4
Upwind Control	18.0 +- 1.8	3

VOGTLE (GA)

TLD Direct Radiation Environmental Monitoring

For the period 970311-970819 162 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	298 1.6	21.2 +- 0.6; 3.2	12.1 +- 0.7; 4.3	14.3 +- 1.7
2	309 1.6	20.5 +- 0.6; 3.1	11.5 +- 0.7; 4.3	14.3 +- 1.9
3	336 1.4	21.1 +- 0.6; 3.2	12.0 +- 0.7; 4.3	14.2 +- 2.4
4	270 1.3	19.7 +- 0.6; 3.0	10.8 +- 0.7; 4.2	14.1 +- 2.1
5	247 1.2	20.9 +- 0.6; 3.1	11.8 +- 0.7; 4.3	15.0 +- 1.9
6	215 1.2	25.0 +- 0.7; 3.7	15.5 +- 0.8; 4.7	18.2 +- 1.9
7	205 1.2	26.6 +- 0.8; 4.0	17.0 +- 0.8; 4.9	17.4 +- 1.9
8	180 1.1	27.3 +- 0.8; 4.1	17.6 +- 0.9; 4.9	17.2 +- 1.9
9	153 1.2	22.8 +- 0.7; 3.4	13.5 +- 0.8; 4.5	16.0 +- 2.1
10	134 3.2	23.9 +- 0.7; 3.6	14.6 +- 0.8; 4.6	17.2 +- 1.8
11	103 1.1	18.7 +- 0.6; 2.8	9.8 +- 0.7; 4.1	12.7 +- 2.5
12	134 3.3	21.7 +- 0.7; 3.3	12.6 +- 0.7; 4.4	14.8 +- 1.8
13	123 4.2	22.4 +- 0.7; 3.4	13.2 +- 0.8; 4.4	15.2 +- 1.8
14	141 4.6	19.4 +- 0.6; 2.9	10.4 +- 0.7; 4.2	14.4 +- 3.4
15	153 5.3	20.7 +- 0.6; 3.1	11.7 +- 0.7; 4.3	13.4 +- 1.9
16	162 6.3	21.9 +- 0.7; 3.3	12.8 +- 0.7; 4.4	15.3 +- 2.0
17	157 7.3	20.6 +- 0.6; 3.1	11.6 +- 0.7; 4.3	17.1 +- 2.8
18	191 4.8	20.1 +- 0.6; 3.0	11.1 +- 0.7; 4.2	13.7 +- 1.8
19	208 4.7	19.8 +- 0.6; 3.0	10.8 +- 0.7; 4.2	13.2 +- 2.1
20	232 4.9	20.4 +- 0.6; 3.1	11.4 +- 0.7; 4.3	13.6 +- 2.0
21	250 5.6	22.5 +- 0.7; 3.4	13.2 +- 0.8; 4.5	14.8 +- 2.0
22	264 4.3	20.9 +- 0.6; 3.1	11.8 +- 0.7; 4.3	14.4 +- 2.1
23	301 4.2	19.0 +- 0.6; 2.9	10.1 +- 0.7; 4.1	14.4 +- 2.1
24	308 4.6	19.1 +- 0.6; 2.9	10.2 +- 0.7; 4.2	14.4 +- 2.6
25	329 6.7	22.5 +- 0.7; 3.4	13.3 +- 0.8; 4.5	15.9 +- 2.8
26	258 15.0	24.5 +- 0.7; 3.7	15.1 +- 0.8; 4.7	17.4 +- 2.1
27	300 13.0	Missing Dosimeter	No Net Data	17.0 +- 1.7
28	330 30.0	21.5 +- 0.6; 3.2	12.4 +- 0.7; 4.4	14.3 +- 1.9

Transit Dose = 7.9 +- 0.5; 3.6

VOGTLE (GA)

For the period 970311-970819

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	11.5 +- 2.4	2
123.76 - 146.25 SE	12.5 +- 2.1	3
146.26 - 168.75 SSE	12.4 +- 0.9	4
168.76 - 191.25 S	14.4 +- 4.6	2
191.26 - 213.75 SSW	13.9 +- 4.4	2
213.76 - 236.25 SW	13.4 +- 3.0	2
236.26 - 258.75 WSW	12.5 +- 1.0	2
258.76 - 281.25 W	11.3 +- 0.8	2
281.26 - 303.75 WNW	11.1 +- 1.4	2
303.76 - 326.25 NW	10.8 +- 1.0	2
326.26 - 348.75 NNW	12.6 +- 0.9	2

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	13.2 +- 2.7	10
2 - 5	11.6 +- 1.4	10
> 5	12.5 +- 0.8	5
Upwind Control	13.7 +- 1.9	2

NRC TLD DOSES FOR VOGTLE AREA

Miles

Legend

Water

Railroads

Roads

Plant..site

VOGTLE (SC)

TLD Direct Radiation Environmental Monitoring

For the period 970311-970716 128 Days

Field Time: 87 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	19.2 +- 0.6; 2.9	15.2 +- 0.7; 4.2	18.0 +- 3.8
32	26	4.9	17.6 +- 0.5; 2.6	13.6 +- 0.7; 4.0	12.7 +- 2.6
33	17	3.2	17.8 +- 0.5; 2.7	13.8 +- 0.7; 4.1	13.0 +- 2.4
34	36	3.9	18.5 +- 0.6; 2.8	14.5 +- 0.7; 4.1	14.2 +- 2.4
35	48	2.4	23.5 +- 0.7; 3.5	19.7 +- 0.8; 4.7	19.0 +- 2.8
36	69	2.8	19.5 +- 0.6; 2.9	15.6 +- 0.7; 4.3	14.7 +- 2.6
37	74	4.4	18.8 +- 0.6; 2.8	14.8 +- 0.7; 4.2	14.3 +- 3.9
38	94	4.5	18.6 +- 0.6; 2.8	14.6 +- 0.7; 4.2	14.0 +- 2.6

Transit Dose = 4.5 +- 0.3; 2.9

VOGTLE (SC)
For the period 970311-970716

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	15.2 +- 0.0	1
11.26 - 33.75 NNE	13.7 +- 0.1	2
33.76 - 56.25 NE	17.1 +- 3.7	2
56.26 - 78.75 ENE	15.2 +- 0.5	2
78.76 - 101.25 E	14.6 +- 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	15.2 +- 2.1	7
> 5	15.2 +- 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 970307-970708 124 Days

Field Time: 93 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	174	12.0	21.6 +- 0.6; 3.2		17.4 +- 0.7; 4.3		18.0 +- 0.9	
2	163	11.0	22.3 +- 0.7; 3.3		18.0 +- 0.7; 4.3		17.7 +- 0.9	
3	161	9.0	21.6 +- 0.6; 3.2		17.3 +- 0.7; 4.3		17.4 +- 0.8	
4	152	5.0	23.5 +- 0.7; 3.5		19.1 +- 0.8; 4.5		19.0 +- 0.9	
5	195	2.0	22.2 +- 0.7; 3.3		17.9 +- 0.7; 4.3		18.0 +- 0.7	
6	220	1.5	22.8 +- 0.7; 3.4		18.5 +- 0.7; 4.4		18.4 +- 1.2	
7	92	3.0	23.6 +- 0.7; 3.5		19.2 +- 0.8; 4.5		19.4 +- 1.1	
8	155	1.0	23.4 +- 0.7; 3.5		19.1 +- 0.8; 4.5		17.5 +- 1.0	
9	130	0.5	22.7 +- 0.7; 3.4		18.3 +- 0.7; 4.4		18.5 +- 1.0	
10	70	0.5	22.5 +- 0.7; 3.4		18.2 +- 0.7; 4.4		18.8 +- 1.0	
11	25	0.8	23.9 +- 0.7; 3.6		19.6 +- 0.8; 4.5		18.7 +- 0.9	
12	315	0.5	23.3 +- 0.7; 3.5		19.0 +- 0.8; 4.5		18.9 +- 1.0	
13	290	0.5	24.6 +- 0.7; 3.7		20.3 +- 0.8; 4.6		23.4 +- 2.4	
14	270	0.5	22.5 +- 0.7; 3.4		18.2 +- 0.7; 4.4		18.8 +- 1.0	
15	245	1.8	22.6 +- 0.7; 3.4		18.3 +- 0.7; 4.4		18.7 +- 0.8	
16	285	3.0	23.1 +- 0.7; 3.5		18.8 +- 0.7; 4.4		19.2 +- 0.8	
17	240	4.0	21.3 +- 0.6; 3.2		17.0 +- 0.7; 4.2		17.5 +- 0.9	
18	198	7.0	21.0 +- 0.6; 3.1		16.7 +- 0.7; 4.2		17.4 +- 1.1	
19	173	8.5	22.4 +- 0.7; 3.4		18.1 +- 0.7; 4.4		18.5 +- 0.9	
20	150	20.0	21.9 +- 0.7; 3.3		17.6 +- 0.7; 4.3		18.5 +- 0.8	
21	114	7.0	22.1 +- 0.7; 3.3		17.8 +- 0.7; 4.3		18.7 +- 1.1	
22	120	8.0	23.0 +- 0.7; 3.4		18.6 +- 0.7; 4.4		18.1 +- 0.9	
23	134	6.0	25.7 +- 0.8; 3.9		21.3 +- 0.8; 4.7		20.5 +- 1.1	
24	110	4.0	27.6 +- 0.8; 4.1		23.1 +- 0.9; 4.9		22.3 +- 1.2	
25	85	5.0	23.6 +- 0.7; 3.5		19.3 +- 0.8; 4.5		19.1 +- 0.8	
26	65	5.0	25.3 +- 0.8; 3.8		20.9 +- 0.8; 4.7		20.8 +- 1.0	
27	53	4.0	23.0 +- 0.7; 3.5		18.7 +- 0.7; 4.4		18.4 +- 1.2	
28	44	8.0	24.0 +- 0.7; 3.6		19.6 +- 0.8; 4.5		20.2 +- 1.0	
29	33	10.0	23.6 +- 0.7; 3.5		19.3 +- 0.8; 4.5		19.1 +- 1.5	
30	8	9.5	24.9 +- 0.7; 3.7		20.5 +- 0.8; 4.6		20.1 +- 0.9	
31	215	15.0	22.1 +- 0.7; 3.3		17.8 +- 0.7; 4.3		17.6 +- 0.7	

Transit Dose = 3.7 +- 0.3; 3.0

WASHINGTON NUCLEAR 2
For the period 970307-970708

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	20.5 +- 0.0	1
11.26 - 33.75 NNE	19.4 +- 0.2	2
33.76 - 56.25 NE	19.2 +- 0.7	2
56.26 - 78.75 ENE	19.6 +- 1.9	2
78.76 - 101.25 E	19.2 +- 0.0	2
101.26 - 123.75 ESE	19.8 +- 2.8	3
123.76 - 146.25 SE	19.8 +- 2.1	2
146.26 - 168.75 SSE	18.2 +- 0.8	5
168.76 - 191.25 S	18.1 +- 0.0	1
191.26 - 213.75 SSW	17.3 +- 0.9	2
213.76 - 236.25 SW	18.5 +- 0.0	1
236.26 - 258.75 WSW	17.7 +- 0.9	2
258.76 - 281.25 W	18.2 +- 0.0	1
281.26 - 303.75 WNW	19.5 +- 1.1	2
303.76 - 326.25 NW	19.0 +- 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	18.7 +- 0.7	10
2 - 5	19.5 +- 1.8	8
> 5	18.6 +- 1.4	11
Upwind Control	17.6 +- 0.3	2

NRC TLD DOSES FOR WNP-2 AREA

Miles

Legend

Water
Highways

Railroads
Roads

Plant..site

WATERFORD

TLD Direct Radiation Environmental Monitoring

For the period 970310-970723 136 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	101	0.4	18.4	+- 0.6; 2.8	15.1	+- 0.6; 4.0	15.8	+- 1.2
2	116	1.1	16.3	+- 0.5; 2.4	13.0	+- 0.6; 3.7	14.8	+- 1.9
3	132	1.3	22.5	+- 0.7; 3.4	19.2	+- 0.7; 4.4	18.0	+- 1.3
4	160	1.8	18.1	+- 0.5; 2.7	14.8	+- 0.6; 3.9	15.6	+- 1.3
5	183	1.4	20.2	+- 0.6; 3.0	16.8	+- 0.7; 4.1	15.7	+- 1.3
6	202	1.2	Missing Dosimeter		No Net Data		15.8	+- 1.5
7	226	1.2	19.8	+- 0.6; 3.0	16.5	+- 0.7; 4.1	15.4	+- 1.0
8	248	1.3	20.5	+- 0.6; 3.1	17.1	+- 0.7; 4.2	17.3	+- 1.1
9	265	1.9	17.9	+- 0.5; 2.7	14.6	+- 0.6; 3.9	14.2	+- 1.9
10	186	4.2	19.9	+- 0.6; 3.0	16.6	+- 0.7; 4.1	17.3	+- 0.9
11	315	4.4	18.7	+- 0.6; 2.8	15.3	+- 0.6; 4.0	16.1	+- 1.3
12	328	4.1	21.2	+- 0.6; 3.2	17.9	+- 0.7; 4.3	17.3	+- 1.1
13	309	0.8	19.5	+- 0.6; 2.9	16.2	+- 0.7; 4.1	15.3	+- 0.9
14	273	0.9	20.6	+- 0.6; 3.1	17.3	+- 0.7; 4.2	17.0	+- 2.1
15	292	0.8	15.8	+- 0.5; 2.4	12.5	+- 0.6; 3.7	13.3	+- 1.3
16	335	0.5	17.2	+- 0.5; 2.6	13.8	+- 0.6; 3.8	13.8	+- 1.0
17	120	4.3	18.3	+- 0.5; 2.7	15.0	+- 0.6; 3.9	14.2	+- 1.1
18	145	3.5	19.3	+- 0.6; 2.9	16.0	+- 0.7; 4.1	14.7	+- 1.3
19	153	8.1	18.8	+- 0.6; 2.8	15.4	+- 0.6; 4.0	16.1	+- 1.2
20	133	8.1	20.0	+- 0.6; 3.0	16.7	+- 0.7; 4.1	16.0	+- 1.1
21	116	6.7	19.9	+- 0.6; 3.0	16.5	+- 0.7; 4.1	15.4	+- 1.3
22	95	4.3	19.5	+- 0.6; 2.9	16.1	+- 0.7; 4.1	15.4	+- 1.0
23	86	2.6	21.8	+- 0.7; 3.3	18.4	+- 0.7; 4.3	15.5	+- 1.0
24	66	4.2	22.0	+- 0.7; 3.3	18.7	+- 0.7; 4.3	18.4	+- 1.2
25	37	3.5	20.3	+- 0.6; 3.1	17.0	+- 0.7; 4.2	16.9	+- 1.1
26	23	3.8	17.7	+- 0.5; 2.7	14.4	+- 0.6; 3.9	14.6	+- 1.0
27	350	4.9	18.9	+- 0.6; 2.8	15.6	+- 0.6; 4.0	15.6	+- 0.9
28	335	5.0	19.2	+- 0.6; 2.9	15.9	+- 0.7; 4.0	15.8	+- 1.1
29	6	2.8	17.6	+- 0.5; 2.6	14.3	+- 0.6; 3.9	14.1	+- 1.0
30	356	1.1	20.3	+- 0.6; 3.0	16.9	+- 0.7; 4.2	16.2	+- 1.9
31	15	0.8	18.8	+- 0.6; 2.8	15.5	+- 0.6; 4.0	15.8	+- 1.7
32	40	0.8	15.9	+- 0.5; 2.4	12.6	+- 0.6; 3.7	13.8	+- 1.5
33	69	1.1	16.3	+- 0.5; 2.4	13.0	+- 0.6; 3.7	15.5	+- 2.7
34	292	15.0	18.2	+- 0.5; 2.7	14.9	+- 0.6; 3.9	15.6	+- 1.6
35	282	27.0	19.2	+- 0.6; 2.9	15.9	+- 0.7; 4.0	17.8	+- 1.5
36	268	21.0	16.3	+- 0.5; 2.4	13.0	+- 0.6; 3.7	14.5	+- 1.6

Transit Dose = 3.2 +- 0.3; 2.9

WATERFORD

For the period 970310-970723

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 +- 1.3	3
11.26 - 33.75 NNE	14.9 +- 0.8	2
33.76 - 56.25 NE	14.8 +- 3.1	2
56.26 - 78.75 ENE	15.9 +- 4.0	2
78.76 - 101.25 E	16.6 +- 1.7	3
101.26 - 123.75 ESE	14.8 +- 1.8	3
123.76 - 146.25 SE	17.3 +- 1.7	3
146.26 - 168.75 SSE	15.1 +- 0.4	2
168.76 - 191.25 S	16.7 +- 0.2	2
191.26 - 213.75 SSW	No Data +- No Data	0
213.76 - 236.25 SW	16.5 +- 0.0	1
236.26 - 258.75 WSW	17.1 +- 0.0	1
258.76 - 281.25 W	15.9 +- 1.9	2
281.26 - 303.75 WNW	12.5 +- 0.0	1
303.76 - 326.25 NW	15.8 +- 0.6	2
326.26 - 348.75 NNW	15.9 +- 2.0	3

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	15.3 +- 2.0	16
2 - 5	16.2 +- 1.4	13
> 5	16.2 +- 0.7	3
Upwind Control	14.6 +- 1.5	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 970311-970710 122 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	337	0.9	18.4 +- 0.6; 2.8		17.9 +- 0.6; 3.8		17.3 +- 2.2	
2	314	2.1	17.9 +- 0.5; 2.7		17.4 +- 0.6; 3.8		17.4 +- 2.1	
3	297	1.9	19.3 +- 0.6; 2.9		18.7 +- 0.6; 3.9		17.3 +- 2.2	
4	272	2.0	20.5 +- 0.6; 3.1		19.9 +- 0.7; 4.0		16.8 +- 2.2	
5	251	1.9	20.0 +- 0.6; 3.0		19.4 +- 0.6; 4.0		19.1 +- 2.3	
6	235	1.8	19.5 +- 0.6; 2.9		18.9 +- 0.6; 3.9		20.3 +- 2.4	
7	230	3.8	21.3 +- 0.6; 3.2		20.8 +- 0.7; 4.1		19.6 +- 2.3	
8	208	3.6	19.1 +- 0.6; 2.9		18.5 +- 0.6; 3.9		18.0 +- 2.3	
9	249	4.2	21.2 +- 0.6; 3.2		20.6 +- 0.7; 4.1		16.3 +- 3.0	
10	266	3.1	18.5 +- 0.6; 2.8		18.0 +- 0.6; 3.8		16.8 +- 2.2	
11	289	3.3	16.2 +- 0.5; 2.4		15.6 +- 0.5; 3.6		14.4 +- 2.0	
12	310	4.7	17.3 +- 0.5; 2.6		16.8 +- 0.6; 3.7		14.5 +- 2.1	
13	337	3.6	19.6 +- 0.6; 2.9		19.0 +- 0.6; 3.9		15.8 +- 2.8	
14	330	7.0	17.1 +- 0.5; 2.6		16.5 +- 0.6; 3.7		15.3 +- 2.1	
15	350	4.7	19.2 +- 0.6; 2.9		18.7 +- 0.6; 3.9		18.7 +- 2.4	
16	7	1.1	23.1 +- 0.7; 3.5		22.5 +- 0.7; 4.3		20.4 +- 2.5	
17	23	1.6	17.0 +- 0.5; 2.5		16.4 +- 0.6; 3.7		13.4 +- 2.3	
18	41	2.3	18.0 +- 0.5; 2.7		17.5 +- 0.6; 3.8		16.2 +- 2.2	
19	69	1.3	20.8 +- 0.6; 3.1		20.2 +- 0.7; 4.1		18.8 +- 2.1	
20	89	1.2	Damaged Dosimeter		No Net Data		19.4 +- 2.2	
21	114	1.1	18.4 +- 0.6; 2.8		17.8 +- 0.6; 3.8		16.1 +- 2.2	
22	141	1.0	19.8 +- 0.6; 3.0		19.2 +- 0.6; 4.0		18.9 +- 2.1	
23	163	1.1	24.1 +- 0.7; 3.6		23.5 +- 0.8; 4.4		21.9 +- 2.4	
24	187	1.1	21.0 +- 0.6; 3.2		20.5 +- 0.7; 4.1		18.3 +- 2.8	
25	203	1.2	15.6 +- 0.5; 2.3		15.1 +- 0.5; 3.5		17.2 +- 2.7	
26	184	5.9	21.7 +- 0.7; 3.3		21.2 +- 0.7; 4.2		18.5 +- 3.0	
27	176	4.5	20.9 +- 0.6; 3.1		20.4 +- 0.7; 4.1		17.6 +- 2.4	
28	161	3.5	17.8 +- 0.5; 2.7		17.3 +- 0.6; 3.7		16.5 +- 2.2	
29	144	3.0	19.8 +- 0.6; 3.0		19.2 +- 0.6; 4.0		16.7 +- 2.3	
30	117	3.1	17.7 +- 0.5; 2.7		17.2 +- 0.6; 3.7		16.0 +- 2.5	
31	97	4.0	18.8 +- 0.6; 2.8		18.2 +- 0.6; 3.8		16.4 +- 2.3	
32	76	4.1	16.4 +- 0.5; 2.5		15.9 +- 0.5; 3.6		14.1 +- 2.4	
33	32	4.1	18.4 +- 0.6; 2.8		17.9 +- 0.6; 3.8		17.0 +- 2.1	
34	36	4.7	15.8 +- 0.5; 2.4		15.3 +- 0.5; 3.5		13.8 +- 2.0	
35	38	19.0	18.9 +- 0.6; 2.8		18.3 +- 0.6; 3.9		16.2 +- 2.4	
36	38	19.0	17.6 +- 0.5; 2.6		17.0 +- 0.6; 3.7		17.1 +- 3.2	
37	38	19.0	19.0 +- 0.6; 2.9		18.5 +- 0.6; 3.9		17.3 +- 2.3	

Transit Dose = 0.3 +- 0.2; 2.7

WATTS BAR

For the period 970311-970710

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 +- 2.7	2
11.26 - 33.75 NNE	17.2 +- 1.0	2
33.76 - 56.25 NE	16.4 +- 1.5	2
56.26 - 78.75 ENE	18.1 +- 3.1	2
78.76 - 101.25 E	18.2 +- 0.0	1
101.26 - 123.75 ESE	17.5 +- 0.5	2
123.76 - 146.25 SE	19.2 +- 0.0	2
146.26 - 168.75 SSE	20.4 +- 4.4	2
168.76 - 191.25 S	20.7 +- 0.4	3
191.26 - 213.75 SSW	16.8 +- 2.4	2
213.76 - 236.25 SW	19.8 +- 1.3	2
236.26 - 258.75 WSW	20.0 +- 0.9	2
258.76 - 281.25 W	18.9 +- 1.4	2
281.26 - 303.75 WNW	17.2 +- 2.2	2
303.76 - 326.25 NW	17.1 +- 0.4	2
326.26 - 348.75 NNW	17.8 +- 1.3	3

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	19.2 +- 2.2	13
2 - 5	18.0 +- 1.6	18
> 5	18.9 +- 3.3	2
Upwind Control	18.0 +- 0.8	3

NRC TLD DOSES FOR WATTS BAR AREA

Miles

Legend

Water
Highways

Railroads
Roads

Plant site

WOLF CREEK

TLD Direct Radiation Environmental Monitoring

For the period 970310-970723 136 Days

Field Time: 96 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	316	2.9	25.7 +- 0.8; 3.8		19.6 +- 0.8; 4.7		19.4 +- 1.4	
2	330	1.8	24.4 +- 0.7; 3.7		18.5 +- 0.8; 4.5		18.4 +- 1.2	
3	360	2.8	24.4 +- 0.7; 3.7		18.5 +- 0.8; 4.5		18.5 +- 1.2	
4	355	1.6	24.2 +- 0.7; 3.6		18.3 +- 0.8; 4.5		19.2 +- 1.2	
5	31	1.8	24.9 +- 0.7; 3.7		18.9 +- 0.8; 4.6		19.4 +- 1.2	
6	47	2.0	20.8 +- 0.6; 3.1		15.1 +- 0.7; 4.2		16.6 +- 1.4	
7	70	1.6	22.5 +- 0.7; 3.4		16.7 +- 0.7; 4.3		17.6 +- 1.1	
8	90	1.7	27.2 +- 0.8; 4.1		21.1 +- 0.8; 4.8		20.0 +- 1.3	
9	111	2.4	26.2 +- 0.8; 3.9		20.1 +- 0.8; 4.7		19.2 +- 1.2	
10	137	2.5	25.6 +- 0.8; 3.8		19.6 +- 0.8; 4.7		18.8 +- 1.0	
11	157	3.4	25.8 +- 0.8; 3.9		19.8 +- 0.8; 4.7		20.4 +- 1.1	
12	184	3.3	26.2 +- 0.8; 3.9		20.1 +- 0.8; 4.7		19.8 +- 1.1	
13	213	2.9	20.2 +- 0.6; 3.0		14.5 +- 0.7; 4.1		18.7 +- 2.1	
14	233	2.4	26.2 +- 0.8; 3.9		20.1 +- 0.8; 4.7		19.5 +- 1.4	
15	248	2.2	25.7 +- 0.8; 3.9		19.7 +- 0.8; 4.7		18.9 +- 1.2	
16	278	2.1	25.0 +- 0.7; 3.7		19.0 +- 0.8; 4.6		19.4 +- 1.1	
17	270	3.4	22.2 +- 0.7; 3.3		16.4 +- 0.7; 4.3		15.6 +- 0.9	
18	263	4.2	28.2 +- 0.8; 4.2		22.1 +- 0.9; 5.0		21.1 +- 1.5	
19	257	5.0	25.1 +- 0.8; 3.8		19.1 +- 0.8; 4.6		19.3 +- 1.0	
20	280	3.9	22.7 +- 0.7; 3.4		16.8 +- 0.7; 4.4		18.1 +- 1.3	
21	298	3.9	25.3 +- 0.8; 3.8		19.3 +- 0.8; 4.6		19.4 +- 1.0	
22	319	4.8	23.0 +- 0.7; 3.5		17.2 +- 0.7; 4.4		17.5 +- 1.2	
23	332	5.0	25.0 +- 0.8; 3.8		19.1 +- 0.8; 4.6		19.0 +- 1.5	
24	19	3.9	24.4 +- 0.7; 3.7		18.5 +- 0.8; 4.5		19.2 +- 1.0	
25	35	4.4	21.3 +- 0.6; 3.2		15.6 +- 0.7; 4.2		16.6 +- 1.0	
26	67	4.3	22.6 +- 0.7; 3.4		16.8 +- 0.7; 4.4		17.7 +- 1.2	
27	88	4.1	26.4 +- 0.8; 4.0		20.4 +- 0.8; 4.8		18.9 +- 1.9	
28	110	4.5	25.5 +- 0.8; 3.8		19.5 +- 0.8; 4.7		19.5 +- 1.0	
29	128	4.4	26.0 +- 0.8; 3.9		20.0 +- 0.8; 4.7		19.6 +- 1.6	
30	112	16.0	20.5 +- 0.6; 3.1		14.8 +- 0.7; 4.1		16.5 +- 1.4	
31	127	9.4	22.4 +- 0.7; 3.4		16.6 +- 0.7; 4.3		16.6 +- 0.8	
32	62	11.0	21.3 +- 0.6; 3.2		15.6 +- 0.7; 4.2		16.9 +- 1.4	
33	153	5.2	22.9 +- 0.7; 3.4		17.0 +- 0.7; 4.4		18.3 +- 1.6	
34	174	4.7	25.2 +- 0.8; 3.8		19.2 +- 0.8; 4.6		19.9 +- 1.5	
35	197	5.2	27.2 +- 0.8; 4.1		21.1 +- 0.8; 4.8		20.5 +- 1.5	
36	224	4.8	25.7 +- 0.8; 3.9		19.7 +- 0.8; 4.7		18.1 +- 0.8	
37	220	13.8	21.9 +- 0.7; 3.3		16.1 +- 0.7; 4.3		15.5 +- 0.8	
38	253	6.5	26.6 +- 0.8; 4.0		20.5 +- 0.8; 4.8		20.2 +- 1.3	
39	278	10.0	23.5 +- 0.7; 3.5		17.6 +- 0.8; 4.4		18.6 +- 1.3	
40	285	15.0	22.5 +- 0.7; 3.4		16.7 +- 0.7; 4.3		16.5 +- 0.9	
41	292	6.7	21.9 +- 0.7; 3.3		16.1 +- 0.7; 4.3		17.9 +- 1.4	
42	345	13.0	26.6 +- 0.8; 4.0		20.6 +- 0.8; 4.8		20.0 +- 1.3	
43	5	7.5	23.6 +- 0.7; 3.5		17.7 +- 0.8; 4.5		19.1 +- 1.3	
44	20	8.3	26.0 +- 0.8; 3.9		19.9 +- 0.8; 4.7		19.7 +- 1.0	
45	315	7.5	27.1 +- 0.8; 4.1		21.0 +- 0.8; 4.8		20.6 +- 1.3	
46	341	7.7	25.5 +- 0.8; 3.8		19.5 +- 0.8; 4.7		19.9 +- 1.1	
47	355	1.0	23.2 +- 0.7; 3.5		17.4 +- 0.7; 4.4		18.2 +- 1.2	

Transit Dose = 4.7 +- 0.4; 3.2

WOLF CREEK

For the period 970310-970723

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	18.0 +- 0.5	4
11.26 - 33.75 NNE	19.1 +- 0.7	3
33.76 - 56.25 NE	15.4 +- 0.3	2
56.26 - 78.75 ENE	16.4 +- 0.7	3
78.76 - 101.25 E	20.7 +- 0.5	2
101.26 - 123.75 ESE	18.1 +- 2.9	3
123.76 - 146.25 SE	18.7 +- 1.9	3
146.26 - 168.75 SSE	18.4 +- 2.0	2
168.76 - 191.25 S	19.7 +- 0.6	2
191.26 - 213.75 SSW	17.8 +- 4.7	2
213.76 - 236.25 SW	18.6 +- 2.2	3
236.26 - 258.75 WSW	19.8 +- 0.7	3
258.76 - 281.25 W	18.4 +- 2.3	5
281.26 - 303.75 WNW	17.3 +- 1.7	3
303.76 - 326.25 NW	19.3 +- 1.9	3
326.26 - 348.75 NNW	19.4 +- 0.9	4

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	18.0 +- 1.9	7
2 - 5	18.8 +- 1.7	25
> 5	18.1 +- 2.2	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 970312-970715 126 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	0	0.8	22.0 +- 0.7; 3.3		18.0 +- 0.7; 4.3		18.1 +- 2.0	
2	265	14.0	19.5 +- 0.6; 2.9		15.5 +- 0.7; 4.1		15.9 +- 1.2	
3	137	12.0	19.0 +- 0.6; 2.8		15.0 +- 0.6; 4.0		16.1 +- 1.5	
5	85	2.2	20.5 +- 0.6; 3.1		16.5 +- 0.7; 4.2		15.6 +- 1.8	
6	118	2.6	20.3 +- 0.6; 3.0		16.3 +- 0.7; 4.2		15.5 +- 1.5	
7	137	2.1	21.8 +- 0.7; 3.3		17.8 +- 0.7; 4.3		17.4 +- 1.8	
8	153	1.7	21.4 +- 0.6; 3.2		17.4 +- 0.7; 4.3		16.0 +- 1.1	
9	176	1.1	19.7 +- 0.6; 3.0		15.7 +- 0.7; 4.1		16.0 +- 1.3	
10	203	0.5	21.8 +- 0.7; 3.3		17.7 +- 0.7; 4.3		17.0 +- 2.0	
11	219	0.6	20.6 +- 0.6; 3.1		16.6 +- 0.7; 4.2		16.8 +- 1.3	
12	239	1.1	20.1 +- 0.6; 3.0		16.0 +- 0.7; 4.1		18.9 +- 2.5	
13	272	1.8	21.7 +- 0.7; 3.3		17.7 +- 0.7; 4.3		17.5 +- 2.2	
14	292	1.3	23.5 +- 0.7; 3.5		19.4 +- 0.8; 4.5		18.0 +- 2.0	
15	315	1.6	23.1 +- 0.7; 3.5		19.0 +- 0.8; 4.5		18.4 +- 2.0	
16	348	1.4	22.8 +- 0.7; 3.4		18.7 +- 0.7; 4.4		17.9 +- 1.7	
17	358	2.8	22.5 +- 0.7; 3.4		18.4 +- 0.7; 4.4		16.8 +- 1.8	
18	21	2.8	17.3 +- 0.5; 2.6		13.3 +- 0.6; 3.9		15.2 +- 1.7	
19	43	5.8	20.2 +- 0.6; 3.0		16.2 +- 0.7; 4.1		16.7 +- 1.3	
20	75	6.0	22.8 +- 0.7; 3.4		18.7 +- 0.7; 4.4		18.0 +- 2.0	
21	98	6.0	19.4 +- 0.6; 2.9		15.3 +- 0.7; 4.1		14.9 +- 1.4	
22	104	5.2	18.9 +- 0.6; 2.8		14.9 +- 0.6; 4.0		13.7 +- 1.3	
23	133	5.7	19.6 +- 0.6; 2.9		15.5 +- 0.7; 4.1		14.0 +- 1.7	
24	157	7.5	19.0 +- 0.6; 2.9		15.0 +- 0.6; 4.0		14.4 +- 1.7	
25	184	6.3	21.4 +- 0.6; 3.2		17.3 +- 0.7; 4.3		16.3 +- 1.9	
27	225	5.9	21.8 +- 0.7; 3.3		17.8 +- 0.7; 4.3		17.3 +- 1.6	
29	269	3.5	23.0 +- 0.7; 3.5		19.0 +- 0.8; 4.5		17.4 +- 1.9	
32	342	3.3	20.9 +- 0.6; 3.1		16.9 +- 0.7; 4.2		17.2 +- 1.6	
34	48	7.3	21.7 +- 0.7; 3.3		17.7 +- 0.7; 4.3		17.4 +- 1.6	
35	39	2.3	16.9 +- 0.5; 2.5		13.0 +- 0.6; 3.8		14.0 +- 1.6	
47	260	9.6	21.5 +- 0.6; 3.2		17.4 +- 0.7; 4.3		16.7 +- 1.3	
48	261	9.0	23.1 +- 0.7; 3.5		19.0 +- 0.8; 4.5		18.7 +- 1.7	

Transit Dose = 3.7 +- 0.3; 3.0

YANKEE ROWE

For the period 970312-970715

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	18.2 +- 0.3	2
11.26 - 33.75 NNE	13.3 +- 0.0	1
33.76 - 56.25 NE	15.6 +- 2.4	3
56.26 - 78.75 ENE	18.7 +- 0.0	1
78.76 - 101.25 E	15.9 +- 0.8	2
101.26 - 123.75 ESE	15.6 +- 1.0	2
123.76 - 146.25 SE	16.1 +- 1.5	3
146.26 - 168.75 SSE	16.2 +- 1.7	2
168.76 - 191.25 S	16.5 +- 1.1	2
191.26 - 213.75 SSW	17.7 +- 0.0	1
213.76 - 236.25 SW	17.2 +- 0.9	2
236.26 - 258.75 WSW	16.0 +- 0.0	1
258.76 - 281.25 W	17.4 +- 1.7	3
281.26 - 303.75 WNW	19.4 +- 0.0	1
303.76 - 326.25 NW	19.0 +- 0.0	1
326.26 - 348.75 NNW	17.8 +- 1.3	2

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	17.6 +- 1.2	10
2 - 5	16.4 +- 2.2	8
> 5	16.3 +- 1.4	11
Upwind Control	18.2 +- 1.1	2

NRC TLD DOSES FOR YANKEE ROWE AREA

Miles

Legend

Water
Highways

Railroads
Roads

Plant site

ZION

TLD Direct Radiation Environmental Monitoring

For the period 970310-970716 129 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	310 0.8	18.7 +- 0.6; 2.8	13.8 +- 0.7; 4.0	15.5 +- 1.5
2	192 1.0	15.9 +- 0.5; 2.4	11.1 +- 0.6; 3.8	13.1 +- 1.1
3	187 1.9	17.2 +- 0.5; 2.6	12.4 +- 0.6; 3.9	14.6 +- 1.4
4	219 2.4	20.6 +- 0.6; 3.1	15.7 +- 0.7; 4.2	17.4 +- 1.3
5	257 1.8	Missing Dosimeter	No Net Data	16.9 +- 1.5
6	250 1.2	Missing Dosimeter	No Net Data	16.2 +- 1.4
7	293 1.6	20.0 +- 0.6; 3.0	15.1 +- 0.7; 4.2	17.1 +- 1.0
8	310 1.8	17.5 +- 0.5; 2.6	12.6 +- 0.6; 3.9	14.9 +- 1.4
9	343 2.6	17.9 +- 0.5; 2.7	13.0 +- 0.6; 4.0	15.4 +- 1.3
10	356 4.5	18.0 +- 0.5; 2.7	13.2 +- 0.6; 4.0	14.7 +- 1.1
11	337 4.5	20.2 +- 0.6; 3.0	15.3 +- 0.7; 4.2	16.9 +- 1.1
12	310 4.0	23.1 +- 0.7; 3.5	18.1 +- 0.8; 4.5	18.9 +- 1.6
13	293 3.5	23.5 +- 0.7; 3.5	18.6 +- 0.8; 4.6	19.9 +- 1.5
14	280 4.5	22.1 +- 0.7; 3.3	17.2 +- 0.7; 4.4	18.8 +- 1.3
15	232 3.2	21.4 +- 0.6; 3.2	16.4 +- 0.7; 4.3	18.0 +- 1.4
16	220 3.5	21.6 +- 0.6; 3.2	16.7 +- 0.7; 4.4	18.3 +- 1.2
17	198 4.5	19.3 +- 0.6; 2.9	14.4 +- 0.7; 4.1	16.4 +- 1.5
18	206 2.8	18.4 +- 0.6; 2.8	13.5 +- 0.6; 4.0	15.6 +- 1.4
19	327 1.7	20.8 +- 0.6; 3.1	15.8 +- 0.7; 4.3	15.5 +- 1.5
20	197 15.0	23.3 +- 0.7; 3.5	18.3 +- 0.8; 4.5	19.2 +- 1.4
21	352 7.9	19.0 +- 0.6; 2.8	14.1 +- 0.7; 4.1	15.1 +- 1.2
22	348 9.3	19.5 +- 0.6; 2.9	14.6 +- 0.7; 4.1	15.3 +- 1.6
23	336 8.5	19.3 +- 0.6; 2.9	14.4 +- 0.7; 4.1	17.8 +- 1.8
24	314 5.8	22.8 +- 0.7; 3.4	17.8 +- 0.8; 4.5	17.6 +- 1.3
25	220 6.3	21.8 +- 0.7; 3.3	16.8 +- 0.7; 4.4	16.6 +- 1.2
26	195 8.0	Missing Dosimeter	No Net Data	15.6 +- 1.2
28	197 15.0	23.2 +- 0.7; 3.5	18.2 +- 0.8; 4.5	18.9 +- 1.2
30	320 9.8	23.1 +- 0.7; 3.5	18.1 +- 0.8; 4.5	18.6 +- 1.6
31	229 8.0	19.9 +- 0.6; 3.0	15.0 +- 0.7; 4.2	16.7 +- 1.1
32	193 15.0	23.1 +- 0.7; 3.5	18.2 +- 0.8; 4.5	18.7 +- 1.7

Transit Dose = 4.6 +- 0.4; 3.0

ZION

For the period 970310-970716

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 +- 0.6	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	12.4 +- 0.0	1
191.26 - 213.75 SSW	13.0 +- 1.7	3
213.76 - 236.25 SW	16.1 +- 0.8	5
236.26 - 258.75 WSW	No Data +- No Data	0
258.76 - 281.25 W	17.2 +- 0.0	1
281.26 - 303.75 WNW	16.8 +- 2.4	2
303.76 - 326.25 NW	16.1 +- 2.7	5
326.26 - 348.75 NNW	14.6 +- 1.1	5

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	13.5 +- 1.8	6
2 - 5	15.6 +- 1.9	11
> 5	15.8 +- 1.7	7
Upwind Control	18.2 +- 0.1	3

NRC TLD DOSES FOR ZION AREA

Miles

0 2 4

Legend

Water
Highways

Railroads
Roads

Plant site

Sites Monitored During the Second 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	

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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 second quarter of 1997.

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Thermoluminescent Dosimeter (TLD) Direct Radiation Monitoring
Network

ambient radiation levels

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