

SURRY SITE DIRECT P DOSE RATES (mR/hr) FROM VARIOUS SOURCES DUE TO

A LOCA (TID-14844 SOURCE TERMS) AT REACTOR UNIT # 1

SITE	Control Room					S A S					C A S					Technical Support Center					Office Bldg				
	Cont. Dome Shine	Cont. R.S. headers	Cont. Shine thru main stm line penetr.	Aux. Bldg sources	Total	Cont. Dome Shine	Cont. R.S. headers	Cont. Shine thru main stm line penetr.	Aux. Bldg sources	Total	Cont. Dome Shine	Cont. R.S. headers	Cont. Shine thru main stm line penetr.	Aux. Bldg sources	Total	Cont. Dome Shine	Cont. R.S. headers	Cont. Shine thru main stm line penetr.	Aux. Bldg sources	Total	Cont. Dome Shine	Cont. R.S. headers	Cont. Shine thru main stm line penetr.	Aux. Bldg sources	Total
0	1.3 <sup>+2</sup>	2.2 <sup>-2</sup>	- <sup>(2)</sup>	-	1.3 <sup>+2</sup>	1.0 <sup>+4</sup>	2.9 <sup>+0</sup>	-	-	1.0 <sup>+4</sup>	8.6 <sup>+3</sup>	3.1 <sup>+0</sup>	-	-	8.6 <sup>+3</sup>	1.3 <sup>+4</sup>	2.2 <sup>+0</sup>	-	-	1.3 <sup>+4</sup>	1.1 <sup>+4</sup>	2.6 <sup>+0</sup>	-	-	1.1 <sup>+4</sup>
1	1.9 <sup>+1</sup>	1.5 <sup>-1</sup>	-	-	1.9 <sup>+1</sup>	1.6 <sup>+3</sup>	1.8 <sup>+1</sup>	-	-	1.6 <sup>+3</sup>	1.3 <sup>+3</sup>	2.0 <sup>+1</sup>	-	-	1.3 <sup>+3</sup>	1.9 <sup>+3</sup>	1.5 <sup>+1</sup>	-	-	1.9 <sup>+3</sup>	1.7 <sup>+3</sup>	1.7 <sup>+1</sup>	-	-	1.7 <sup>+3</sup>
2	1.4 <sup>+1</sup>	8.8 <sup>-2</sup>	-	-	1.4 <sup>+1</sup>	1.2 <sup>+3</sup>	1.2 <sup>+1</sup>	-	-	1.2 <sup>+3</sup>	9.7 <sup>+2</sup>	1.2 <sup>+1</sup>	-	-	9.8 <sup>+2</sup>	1.4 <sup>+3</sup>	8.8 <sup>+0</sup>	-	-	1.4 <sup>+3</sup>	1.2 <sup>+3</sup>	1.1 <sup>+1</sup>	-	-	1.2 <sup>+3</sup>
8	2.9 <sup>+0</sup>	-	-	-	2.9 <sup>+0</sup>	2.4 <sup>+2</sup>	2.9 <sup>+0</sup>	-	-	2.4 <sup>+2</sup>	2.0 <sup>+2</sup>	3.1 <sup>+0</sup>	-	-	2.0 <sup>+2</sup>	2.9 <sup>+2</sup>	2.1 <sup>+0</sup>	-	-	2.9 <sup>+2</sup>	2.6 <sup>+2</sup>	2.6 <sup>+0</sup>	-	-	2.6 <sup>+2</sup>
24	2.1 <sup>-1</sup>	-	-	-	2.1 <sup>-1</sup>	1.8 <sup>+1</sup>	6.2 <sup>-1</sup>	-	-	1.8 <sup>+1</sup>	1.5 <sup>+1</sup>	7.2 <sup>-1</sup>	-	-	1.5 <sup>+1</sup>	2.1 <sup>+1</sup>	4.5 <sup>-1</sup>	-	-	2.1 <sup>+1</sup>	2.0 <sup>+1</sup>	5.5 <sup>-1</sup>	-	-	2.1 <sup>+1</sup>
96	-	-	-	-	-	8.5 <sup>-1</sup>	-	-	-	8.5 <sup>-1</sup>	7.2 <sup>-1</sup>	-	-	-	7.2 <sup>-1</sup>	9.7 <sup>-1</sup>	-	-	-	9.7 <sup>-1</sup>	9.2 <sup>-1</sup>	-	-	-	9.2 <sup>-1</sup>

(1) 1.3<sup>+2</sup> reads 1.3 x 10<sup>-2</sup>

(2) - means dose rate is small (< 1 mR/hr) and thus negligible.

SITE	Health physics & Labs					Machine Shops					Heating Boiler Room					Emerg. Swgr & Relay Rms					Operational Support Center				
	Cont. Dome Shine	Cont. R.S. headers	Cont. Shine thru main stm line penetr.	Aux. Bldg sources	Total	Cont. Dome shine	Cont. R.S. headers	Cont. Shine thru main stm line penetr.	S I LINES AREA	Total	Cont. Dome Shine	Cont. R.S. headers	Cont. Shine thru main stm line penetr.	Aux. Bldg sources	Total	Cont. Dome Shine	Cont. R.S. headers	Cont. Shine thru main stm line penetr.	Aux. Bldg sources	Total	Cont. Dome Shine	Cont. R.S. headers	Cont. Shine thru main stm line penetr.	Aux. Bldg sources	Total
0	9.4 <sup>+3</sup>	3.0 <sup>+0</sup>	-	-	9.4 <sup>+3</sup>	8.5 <sup>+3</sup>	5.7 <sup>-1</sup>	5.7 <sup>+1</sup>	8.9 <sup>+3</sup> 1.8 <sup>+2</sup>	1.7 <sup>+2</sup> 1.8 <sup>+2</sup>	7.2 <sup>+3</sup>	2.9 <sup>+0</sup>	-	-	7.2 <sup>+3</sup>	2.9 <sup>+1</sup>	-	-	9.1 <sup>+0</sup>	3.2 <sup>+1</sup>	1.9 <sup>+3</sup>	7.0 <sup>-1</sup>	-	-	1.8 <sup>+3</sup>
1	1.5 <sup>+3</sup>	1.9 <sup>+1</sup>	-	-	1.5 <sup>+3</sup>	1.3 <sup>+3</sup>	8.8 <sup>+0</sup>	7.2 <sup>+0</sup>	5.4 <sup>+3</sup> 1.1 <sup>+2</sup>	6.7 <sup>+3</sup> 1.1 <sup>+2</sup>	1.0 <sup>+3</sup>	1.8 <sup>+1</sup>	-	-	1.0 <sup>+3</sup>	3.5 <sup>+0</sup>	-	-	5.2 <sup>+0</sup>	8.7 <sup>+0</sup>	2.8 <sup>+2</sup>	4.4 <sup>+0</sup>	-	-	2.8 <sup>+2</sup>
2	1.1 <sup>+3</sup>	1.2 <sup>+1</sup>	-	-	1.1 <sup>+3</sup>	9.7 <sup>+2</sup>	4.8 <sup>+0</sup>	5.3 <sup>+0</sup>	3.9 <sup>+3</sup> 5.2 <sup>+1</sup>	4.7 <sup>+3</sup> 5.2 <sup>+1</sup>	7.3 <sup>+2</sup>	1.1 <sup>+1</sup>	-	-	7.4 <sup>+2</sup>	2.6 <sup>+0</sup>	-	-	3.6 <sup>+0</sup>	6.2 <sup>+0</sup>	2.1 <sup>+2</sup>	2.7 <sup>+0</sup>	-	-	2.1 <sup>+2</sup>
8	2.2 <sup>+2</sup>	3.0 <sup>+0</sup>	-	-	2.2 <sup>+2</sup>	1.8 <sup>+2</sup>	5.7 <sup>-1</sup>	1.0 <sup>+0</sup>	1.6 <sup>+3</sup> 1.7 <sup>+1</sup>	1.8 <sup>+3</sup> 1.7 <sup>+1</sup>	1.4 <sup>+2</sup>	2.9 <sup>+0</sup>	-	-	1.4 <sup>+2</sup>	5.2 <sup>-1</sup>	-	-	1.4 <sup>+0</sup>	1.9 <sup>+0</sup>	4.2 <sup>+1</sup>	7.1 <sup>-1</sup>	-	-	4.3 <sup>+1</sup>
24	1.7 <sup>+1</sup>	6.6 <sup>-1</sup>	-	-	1.8 <sup>+1</sup>	1.3 <sup>+1</sup>	-	6.3 <sup>-2</sup>	7.1 <sup>+2</sup> 7.5 <sup>+0</sup>	7.2 <sup>+2</sup> 7.5	1.1 <sup>+1</sup>	7.0 <sup>-1</sup>	-	-	1.2 <sup>+1</sup>	-	-	-	6.0 <sup>-1</sup>	6.0 <sup>-1</sup>	3.2 <sup>+0</sup>	-	-	-	2.2 <sup>+0</sup>
96	7.8 <sup>-1</sup>	-	-	-	7.8 <sup>-1</sup>	5.4 <sup>-1</sup>	-	-	2.6 <sup>+2</sup>	2.6 <sup>+2</sup>	5.2 <sup>-1</sup>	-	-	-	5.2 <sup>-1</sup>	-	-	-	-	-	1.5 <sup>-1</sup>	-	-	-	1.5 <sup>-1</sup>

(3) Values under the diagonal are for 192 hrs, 360 hrs, 720 hrs, 2160 hrs, 4320 hrs. (4) All dose rates are evaluated at 3 feet above the ground floor. (5) Aux bldg sources do not include waste drain tanks.

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SURRY SITE DIRECT P DOSE RATES (mR/hr) FROM VARIOUS SOURCES DUE TO

A LOCA (TID-14844 SOURCE TERMS) AT REACTOR UNIT # 2

SITE	Control Room					S A S					C A S					Technical Support Center					Office Bldg				
	Cont. Dome Shine	Cont. R.S. headers	Cont. Shine thru main stm line penetr.	Aux Bldg sources	Total	cont. dome shine	Cont. R.S. headers	Cont. Shine thru main stm line penetr.	Aux. Bldg Sources	Total	Cont. Dome Shine	Cont. R.S. headers	Cont. Shine thru main stm line penetr.	Aux. Bldg Sources	Total	Cont. Dome Shine	Cont. R.S. headers	Cont. Shine thru main stm line penetr.	Aux Bldg Sources	Total	Cont. Dome Shine	Cont. R.S. headers	Cont. Shine thru main stm line penetr.	Aux. Bldg Sources	Total
0	1.1 <sup>+2</sup>	2.6 <sup>-2</sup>	- <sup>(2)</sup>	-	1.1 <sup>+2</sup>	6.2 <sup>+3</sup>	1.9 <sup>+0</sup>	-	-	6.2 <sup>+3</sup>	6.8 <sup>+3</sup>	1.8 <sup>+0</sup>	-	-	6.8 <sup>+3</sup>	7.2 <sup>+3</sup>	2.9 <sup>+0</sup>	-	-	7.2 <sup>+3</sup>	7.2 <sup>+3</sup>	2.9 <sup>+0</sup>	-	-	7.2 <sup>+3</sup>
1	1.7 <sup>+1</sup>	1.7 <sup>-1</sup>	-	-	1.7 <sup>+1</sup>	6.1 <sup>+2</sup>	1.2 <sup>+1</sup>	-	-	6.2 <sup>+2</sup>	8.5 <sup>+2</sup>	1.1 <sup>+1</sup>	-	-	8.6 <sup>+2</sup>	1.0 <sup>+3</sup>	1.8 <sup>+1</sup>	-	-	1.0 <sup>+3</sup>	1.0 <sup>+3</sup>	1.8 <sup>+1</sup>	-	-	1.0 <sup>+3</sup>
2	1.2 <sup>+1</sup>	1.1 <sup>-1</sup>	-	-	1.2 <sup>+1</sup>	4.5 <sup>+2</sup>	7.9 <sup>+0</sup>	-	-	4.6 <sup>+2</sup>	6.2 <sup>+2</sup>	7.7 <sup>+0</sup>	-	-	6.3 <sup>+2</sup>	7.3 <sup>+2</sup>	1.1 <sup>+1</sup>	-	-	7.4 <sup>+2</sup>	7.3 <sup>+2</sup>	1.1 <sup>+1</sup>	-	-	7.4 <sup>+2</sup>
8	2.6 <sup>+0</sup>	-	-	-	2.6 <sup>+0</sup>	1.0 <sup>+2</sup>	1.9 <sup>+0</sup>	-	-	1.0 <sup>+2</sup>	1.2 <sup>+2</sup>	1.8 <sup>+0</sup>	-	-	1.2 <sup>+2</sup>	1.4 <sup>+2</sup>	2.9 <sup>+0</sup>	-	-	1.4 <sup>+2</sup>	1.4 <sup>+2</sup>	2.9 <sup>+0</sup>	-	-	1.4 <sup>+2</sup>
24	2.0 <sup>-1</sup>	-	-	-	2.0 <sup>-1</sup>	7.7 <sup>+0</sup>	4.4 <sup>-1</sup>	-	-	8.1 <sup>+0</sup>	1.0 <sup>+1</sup>	4.2 <sup>-1</sup>	-	-	1.0 <sup>+1</sup>	1.1 <sup>+1</sup>	7.0 <sup>-1</sup>	-	-	1.2 <sup>+1</sup>	1.1 <sup>+1</sup>	7.0 <sup>-1</sup>	-	-	1.2 <sup>+1</sup>
96	-	-	-	-	-	3.0 <sup>-1</sup>	-	-	-	3.0 <sup>-1</sup>	4.1 <sup>-1</sup>	-	-	-	4.1 <sup>-1</sup>	5.2 <sup>-1</sup>	-	-	-	5.2 <sup>-1</sup>	5.2 <sup>-1</sup>	-	-	-	5.2 <sup>-1</sup>

(1) 1.1<sup>+2</sup> = read 1.1 x 10<sup>-2</sup>

(2) - mean dose rate is small and thus negligible (< 1 mR/hr)

SITE	Health physics & Labs					Machine shops					Heating Boiler Room					Emerg. Swgr & Relay Rms					Operational Support Center				
	Cont. Dome shine	Cont. R.S. headers	Cont. Shine thru main stm line penetr.	S I Lines in yard area	Total	Cont. Dome shine	Cont. R.S. headers	Cont. Shine thru main stm line penetr.	Aux Bldg Sources	Total	Cont. Dome Shine	Cont. R.S. headers	Cont. Shine thru main stm line penetr.	Aux Bldg Sources	Total	Cont. Dome Shine	Cont. R.S. headers	Cont. Shine thru main stm line penetr.	Aux. Bldg Sources	Total	Cont. Dome Shine	Cont. R.S. headers	Cont. Shine thru main stm line penetr.	Aux. Bldg Sources	Total
0	2.5 <sup>+3</sup>	5.7 <sup>-1</sup>	5.1 <sup>+1</sup>	8.9 <sup>+3</sup> 1.8 <sup>+2</sup>	1.7 <sup>+4</sup> 1.8 <sup>+2</sup>	1.0 <sup>+4</sup>	2.9 <sup>+0</sup>	-	-	1.0 <sup>+4</sup>	1.3 <sup>+4</sup>	2.2 <sup>+0</sup>	-	-	1.3 <sup>+4</sup>	1.0 <sup>+1</sup>	-	-	9.0 <sup>+0</sup>	2.9 <sup>+1</sup>	1.5 <sup>+3</sup>	5.7 <sup>-1</sup>	-	-	1.5 <sup>+3</sup>
1	1.3 <sup>+3</sup>	8.8 <sup>+0</sup>	1.2 <sup>+0</sup>	5.4 <sup>+3</sup> 1.1 <sup>+2</sup>	6.7 <sup>+3</sup> 1.8 <sup>+2</sup>	1.6 <sup>+3</sup>	1.8 <sup>+1</sup>	-	-	1.6 <sup>+3</sup>	1.9 <sup>+3</sup>	1.5 <sup>+1</sup>	-	-	1.9 <sup>+3</sup>	3.0 <sup>+0</sup>	-	-	5.2 <sup>+0</sup>	8.2 <sup>+0</sup>	4.3 <sup>+2</sup>	8.8 <sup>+0</sup>	-	-	2.4 <sup>+2</sup>
2	1.1 <sup>+2</sup>	4.8 <sup>+0</sup>	5.3 <sup>+0</sup>	3.8 <sup>+3</sup> 5.2 <sup>+1</sup>	4.7 <sup>+3</sup> 6.2 <sup>+1</sup>	1.2 <sup>+3</sup>	1.2 <sup>+1</sup>	-	-	1.2 <sup>+3</sup>	1.4 <sup>+3</sup>	8.8 <sup>+0</sup>	-	-	1.4 <sup>+3</sup>	2.1 <sup>+0</sup>	-	-	3.6 <sup>+0</sup>	5.7 <sup>+0</sup>	1.7 <sup>+2</sup>	4.8 <sup>+0</sup>	-	-	1.7 <sup>+2</sup>
8	1.2 <sup>+1</sup>	5.7 <sup>-1</sup>	1.0 <sup>+0</sup>	1.6 <sup>+3</sup> 1.7 <sup>+1</sup>	1.8 <sup>+3</sup> 1.9 <sup>+1</sup>	2.4 <sup>+2</sup>	2.9 <sup>+0</sup>	-	-	2.4 <sup>+2</sup>	2.9 <sup>+2</sup>	2.1 <sup>+0</sup>	-	-	2.9 <sup>+2</sup>	4.6 <sup>-1</sup>	-	-	1.4 <sup>+0</sup>	1.9 <sup>+0</sup>	3.4 <sup>+1</sup>	5.7 <sup>-1</sup>	-	-	3.5 <sup>+1</sup>
24	1.3 <sup>+1</sup>	-	6.3 <sup>-2</sup>	7.1 <sup>+2</sup> 7.5 <sup>+1</sup>	7.2 <sup>+2</sup> 7.5 <sup>+1</sup>	1.8 <sup>+1</sup>	6.2 <sup>-1</sup>	-	-	1.9 <sup>+1</sup>	2.1 <sup>+1</sup>	4.5 <sup>-1</sup>	-	-	2.1 <sup>+1</sup>	-	-	-	6.0 <sup>-1</sup>	6.0 <sup>-1</sup>	2.6 <sup>+0</sup>	-	-	-	2.6 <sup>+0</sup>
96	5.4 <sup>-1</sup>	-	-	2.6 <sup>+2</sup>	2.6 <sup>+2</sup>	8.5 <sup>-1</sup>	-	-	-	8.5 <sup>-1</sup>	9.7 <sup>-1</sup>	-	-	-	9.7 <sup>-1</sup>	-	-	-	-	-	1.2 <sup>-1</sup>	-	-	-	1.2 <sup>-1</sup>

(1) Values under the diagonal are for 192 hrs, 360 hrs, 720 hrs, 2160 hrs, 4320 hrs.

(2) AUX Bldg sources DO NOT include waste drain tanks.

(3) All measurements are estimated at 3 feet above the ground floor.

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PRELIMINARY

# PRELIMINARY

SURRY AUXILIARY BLDG RADIATION ZONE AREA A @ EL. 2'

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $mR/hr$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 1 CONTAINMENT

— MITIGATION PHASE - NO LETDOWN —

SOURCE TIME (HR)	SI/CH LINES IN PEN AREA el. 2' FP-10K	CHARGING PUMP CUB. el. 2' & 13' FP-10C	AUX. BLDG SOMP el. 3' FB-9A	DRAIN LINES IN SWAMP AREA el. 2' & 13' FP-19N	DRAIN LINES IN P4E TUN. el. 2' FP-14C, 7A	SAFEGUARDS SUMP DRAIN LINE IN PEN AREA el. 2' FP-7A	SAFEGUARDS SUMP DRAIN LINE IN P4E TUN. el. 2' FP-19C	DRAIN LINE INSIDE WASTE TANK CUB. el. 2' & 13' FP-19C	(2)		REACTOR COOLANT SAMPLING LINES el. 2' 13' & 27.5'	CONTAIN. LEAKAGE MONIT FOR LINES el. 2' & 13'	HYDROGEN ANALYZER DRAW TRAP el. 13'	CONTAIN. ATMOSP. THRU PIPE PENETRATION el. 2'	CONTAIN. SHINE THRU DOME	CONTAIN. SHINE THRU PERSONAL HATCH	CONTAIN. DOME R.S. HEADERS	(1) SUB- TOTAL	TOTAL
									LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK el. 2' & 13'	WASTE DRAIN TANK el. 2' & 13'									
0	6.5 <sup>+4</sup>	1.9 <sup>+1</sup>	3.9 <sup>+1</sup>	1.1 <sup>+2</sup>	1.7 <sup>+4</sup>	4.4 <sup>+3</sup>	3.7 <sup>+3</sup>	5.9 <sup>+2</sup>	5.7 <sup>+2</sup>	4.6 <sup>+3</sup>	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	9.0 <sup>+4</sup>	9.5 <sup>+4</sup>	
1	3.9 <sup>+4</sup>	1.1 <sup>+1</sup>	1.5 <sup>+1</sup>	6.2 <sup>+1</sup>	9.4 <sup>+3</sup>	2.6 <sup>+3</sup>	2.1 <sup>+3</sup>	3.5 <sup>+2</sup>	3.1 <sup>+2</sup>	1.9 <sup>+3</sup>							5.3 <sup>+4</sup>	5.5 <sup>+4</sup>	
2	2.7 <sup>+4</sup>	7.7 <sup>+0</sup>	9.4 <sup>+0</sup>	4.3 <sup>+1</sup>	6.4 <sup>+3</sup>	1.9 <sup>+3</sup>	1.4 <sup>+3</sup>	2.4 <sup>+2</sup>	2.1 <sup>+2</sup>	1.3 <sup>+3</sup>							3.7 <sup>+4</sup>	3.9 <sup>+4</sup>	
8	1.1 <sup>+4</sup>	3.1 <sup>+0</sup>	3.1 <sup>+0</sup>	1.7 <sup>+1</sup>	2.4 <sup>+3</sup>	7.9 <sup>+2</sup>	5.3 <sup>+2</sup>	9.7 <sup>+1</sup>	8.0 <sup>+1</sup>	5.1 <sup>+2</sup>							1.5 <sup>+4</sup>	1.6 <sup>+4</sup>	
24	4.6 <sup>+3</sup>	1.3 <sup>+0</sup>	7.6 <sup>-1</sup>	5.5 <sup>+0</sup>	8.0 <sup>+2</sup>	3.5 <sup>+2</sup>	1.9 <sup>+2</sup>	4.1 <sup>+1</sup>	2.7 <sup>+1</sup>	2.0 <sup>+2</sup>							5.9 <sup>+3</sup>	6.2 <sup>+3</sup>	
96	1.6 <sup>+3</sup>	4.4 <sup>-1</sup>	NEG.	1.5 <sup>+0</sup>	2.2 <sup>+2</sup>	1.3 <sup>+2</sup>	4.8 <sup>+1</sup>	1.4 <sup>+1</sup>	7.3 <sup>+0</sup>	7.7 <sup>+1</sup>							2.1 <sup>+3</sup>	2.2 <sup>+3</sup>	
192	1.1 <sup>+3</sup>	NEG.		1.1 <sup>+0</sup>	1.5 <sup>+2</sup>	8.8 <sup>+1</sup>	3.3 <sup>+1</sup>	9.5 <sup>+0</sup>	5.1 <sup>+0</sup>	4.8 <sup>+1</sup>							1.4 <sup>+3</sup>	1.5 <sup>+3</sup>	
360	6.9 <sup>+2</sup>	↓		7.0 <sup>-1</sup>	1.0 <sup>+2</sup>	5.5 <sup>+1</sup>	2.2 <sup>+1</sup>	5.9 <sup>+0</sup>	3.4 <sup>+0</sup>	2.6 <sup>+1</sup>							8.8 <sup>+2</sup>	9.1 <sup>+2</sup>	
720	3.3 <sup>+2</sup>			NEG.	5.3 <sup>+1</sup>	2.5 <sup>+1</sup>	1.2 <sup>+1</sup>	3.0 <sup>+0</sup>	1.7 <sup>+0</sup>	1.2 <sup>+1</sup>							4.2 <sup>+2</sup>	4.4 <sup>+2</sup>	
2160	1.1 <sup>+2</sup>			↓	1.8 <sup>+1</sup>	8.4 <sup>+0</sup>	4.0 <sup>+0</sup>	9.7 <sup>-1</sup>	5.9 <sup>-1</sup>	4.6 <sup>+0</sup>							1.4 <sup>+2</sup>	1.5 <sup>+2</sup>	
4320	4.8 <sup>+1</sup>				7.5 <sup>+0</sup>	3.6 <sup>+0</sup>	1.7 <sup>+0</sup>	NEG.	NEG.	1.6 <sup>+0</sup>							5.9 <sup>+1</sup>	6.2 <sup>+1</sup>	

(1) Subtotal excludes contribution from Drain Lines inside waste tank cubicle, LLWDT or HLWDT, and reactor <sup>coolant</sup> sampling lines not in penetration area.

(2) Dose rates are from either a full LLWDT or a full HLWDT.

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PRELIMINARY

SURRY AUXILIARY BLDG RADIATION ZONE AREA B @ EL. 2'

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $mR/hr$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 1 CONTAINMENT

———— MITIGATION PHASE - NO LETDOWN ————

(2)

SOURCE TIME (HR)	SI/CH LINES IN PEN AREA el. 2' FP-10K	CHARGING PUMP CUB. el. 2' & 13' FP-10C	AUX. BLDG SUMP el. 2' FB-9A	DRAIN LINES IN SUMP AREA el. 2' & 13' FP-19N	DRAIN LINES IN P4E RM. el. 2' FP-14.7A	SAFEGUARDS SUMP DRAIN LINES IN PEN AREA el. 2' FP-7A	SAFEGUARDS SUMP DRAIN LINES IN P4E TUN. el. 2' FP-19C	DRAIN LINES INSIDE WASTE TANKS CUB. el. 2' & 13' FP-19C	LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK el. 2' & 13'	REACTOR COOLANT SAMPLING LINES el. 2' & 13' 19.275'	CONTAIN. LEAKAGE MONITOR LINES el. 2' & 13'	HYDROGEN ANALYZER MAIN TRAP el. 13'	CONTAIN. ATMOSP. THRU PIPE PENETRATION el. 2'	CONTAIN. SHINE THRU DOME	CONTAIN. SHINE THRU PRESSURE HATCH	CONTAIN. DOME R.S. HEADERS	SUB-TOTAL	TOTAL
0	2.0+3	6.2+2	NEG.	1.1+2	6.9+3	1.4+2	1.5+3	9.0+0	2.0+1	2.5+3	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	1.1+4	1.4+4
1	1.2+3	3.6+2		6.2+1	3.7+3	8.3+1	8.1+2	5.3+0	1.1+1	1.0+3							6.1+3	7.2+3
2	8.4+2	2.4+2		4.3+1	2.5+3	5.8+1	5.5+2	3.6+0	7.2+0	7.3+2							4.3+3	5.0+3
8	3.5+2	1.0+2		1.7+1	9.8+2	2.5+1	2.2+2	1.5+0	2.8+0	2.8+2							1.7+3	2.0+3
24	1.4+2	4.1+1		5.5+0	3.2+2	1.1+1	7.0+1	6.2-1	9.2-1	1.1+2							5.9+2	7.0+2
96	5.0+1	1.4+1		1.5+0	8.7+1	4.1+0	1.9+1	NEG.	NEG.	4.2+1							2.2+3	2.2+1
192	3.4+1	9.7+0		1.1+0	6.1+1	2.8+0	1.3+1			2.6+1							1.2+2	1.5+2
360	2.2+1	6.2+0		7.0-1	4.0+1	1.7+0	8.8+0			1.4+1							7.9+1	9.3+1
720	1.0+1	3.0+0		NEG.	2.1+1	NEG.	4.6+0			6.4+0							3.9+1	4.5+1
2160	3.4+0	1.0+0		↓	7.1+0	↓	1.6+0			2.5+0							1.3+0	1.6+1
4320	1.5+0	4.1-1	↓		3.0+0		6.6-1	↓	↓	8.5-1	↓	↓	↓	↓	↓	↓	5.6	6.4

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NGTD FEB 14 1980

PRELIMINARY

SURRY AUXILIARY BLDG RADIATION ZONE AREA C @ EL. 2'

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $\mu R/hr$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 1 CONTAINMENT

———— MITIGATION PHASE - NO LETDOWN ————

SOURCE TIME (HR)	SI/CH LINES IN PEN AREA	CHARGING PUMP CUB.	AUX. BLDG SUMP	DRAIN LINES IN SUMP AREA	DRAIN LINES IN PVE TUN.	SAFEGUARDS SUMP DRAIN LINES IN PEN AREA EL. 2'	SAFEGUARDS SUMP DRAIN LINES IN PVE TUN. EL. 2'	DRAIN LINES INSIDE WASTE TANKS LUB.	LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK EL. 2' & 13'	REACTOR COOLANT SAMPLING LINES EL. 2' & 13'	CONTAIN. LEAKAGE MONIT FOR LINES EL. 2' & 13'	HYDROGEN ANALYZER DRAW TRAY EL. 13'	CONTAIN. ATMOSP. THRU PIPE PENETRATION EL. 2'	CONTAIN. SHINE THRU DOME	CONTAIN. SHINE THRU PERSONNEL HATCH	CONTAIN. DOME R.S. HEADERS	SUBTOTAL <sup>(1)</sup>	TOTAL
	el. 2'	el. 2' & 13'	el. 2'	el. 2' & 13'	el. 2'	el. 2'	el. 2' & 13'	el. 2' & 13'	el. 2' & 13'	el. 2' & 13'	el. 2' & 13'	el. 2'	el. 2'					
0	2.0 <sup>+5</sup>	1.6 <sup>+6</sup>	5.0 <sup>+5</sup>	6.4 <sup>+5</sup>	1.3 <sup>+7</sup>	3.0 <sup>+4</sup>	2.9 <sup>+6</sup>	1.5 <sup>+4</sup>	6.6 <sup>+5</sup>	4.9 <sup>+6</sup>	9.6 <sup>+2</sup>	3.0 <sup>+3</sup>	NEG.	NEG.	NEG.	NEG.	2.3 <sup>+7</sup>	2.4 <sup>+7</sup>
1	1.2 <sup>+5</sup>	9.6 <sup>+2</sup>	2.2 <sup>+5</sup>	3.9 <sup>+5</sup>	7.8 <sup>+6</sup>	1.9 <sup>+4</sup>	1.7 <sup>+6</sup>	9.0 <sup>+3</sup>	4.0 <sup>+5</sup>	2.0 <sup>+6</sup>	2.3 <sup>+2</sup>	4.9 <sup>+2</sup>					1.4 <sup>+7</sup>	1.4 <sup>+7</sup>
2	8.2 <sup>+4</sup>	6.5 <sup>+5</sup>	1.5 <sup>+5</sup>	2.7 <sup>+5</sup>	5.5 <sup>+6</sup>	1.3 <sup>+4</sup>	1.2 <sup>+6</sup>	6.1 <sup>+3</sup>	2.7 <sup>+5</sup>	1.4 <sup>+6</sup>	1.7 <sup>+2</sup>	3.6 <sup>+2</sup>					9.2 <sup>+6</sup>	9.4 <sup>+6</sup>
8	3.4 <sup>+4</sup>	2.6 <sup>+5</sup>	5.2 <sup>+4</sup>	1.2 <sup>+5</sup>	2.3 <sup>+6</sup>	5.5 <sup>+3</sup>	5.1 <sup>+5</sup>	2.5 <sup>+3</sup>	1.1 <sup>+5</sup>	5.4 <sup>+5</sup>	6.2 <sup>+1</sup>	1.5 <sup>+2</sup>					3.7 <sup>+6</sup>	3.8 <sup>+6</sup>
24	1.4 <sup>+4</sup>	1.1 <sup>+5</sup>	1.4 <sup>+4</sup>	5.2 <sup>+4</sup>	1.0 <sup>+6</sup>	2.4 <sup>+3</sup>	2.2 <sup>+5</sup>	1.0 <sup>+3</sup>	4.6 <sup>+4</sup>	2.1 <sup>+5</sup>	2.3 <sup>+1</sup>	3.9 <sup>+1</sup>					1.6 <sup>+6</sup>	1.6 <sup>+6</sup>
96	4.7 <sup>+3</sup>	3.7 <sup>+4</sup>	3.6 <sup>+3</sup>	1.9 <sup>+4</sup>	3.8 <sup>+5</sup>	8.9 <sup>+2</sup>	8.4 <sup>+4</sup>	3.6 <sup>+2</sup>	1.5 <sup>+4</sup>	8.2 <sup>+4</sup>	8.7 <sup>+0</sup>	4.2 <sup>+0</sup>					6.0 <sup>+5</sup>	6.2 <sup>+5</sup>
192	3.2 <sup>+3</sup>	2.6 <sup>+4</sup>	2.6 <sup>+3</sup>	1.3 <sup>+4</sup>	2.6 <sup>+5</sup>	6.2 <sup>+2</sup>	5.7 <sup>+4</sup>	2.4 <sup>+2</sup>	1.1 <sup>+4</sup>	5.1 <sup>+4</sup>	5.0 <sup>+0</sup>	1.9 <sup>+0</sup>					4.1 <sup>+5</sup>	4.2 <sup>+5</sup>
360	2.1 <sup>+3</sup>	1.6 <sup>+4</sup>	1.8 <sup>+3</sup>	8.2 <sup>+3</sup>	1.6 <sup>+5</sup>	3.9 <sup>+2</sup>	3.5 <sup>+4</sup>	1.5 <sup>+2</sup>	6.6 <sup>+3</sup>	2.8 <sup>+4</sup>	2.3 <sup>+0</sup>	8.8 <sup>-1</sup>					2.4 <sup>+5</sup>	2.4 <sup>+5</sup>
720	9.9 <sup>+2</sup>	7.7 <sup>+3</sup>	9.0 <sup>+2</sup>	3.8 <sup>+3</sup>	7.6 <sup>+4</sup>	1.8 <sup>+2</sup>	1.7 <sup>+4</sup>	7.6 <sup>+1</sup>	3.2 <sup>+3</sup>	1.2 <sup>+4</sup>	4.7 <sup>-1</sup>	NEG					1.2 <sup>+5</sup>	1.2 <sup>+5</sup>
2160	3.4 <sup>+2</sup>	2.2 <sup>+3</sup>	2.5 <sup>+2</sup>	1.2 <sup>+3</sup>	2.5 <sup>+4</sup>	5.8 <sup>+1</sup>	5.5 <sup>+3</sup>	2.5 <sup>+1</sup>	1.1 <sup>+3</sup>	4.9 <sup>+3</sup>	NEG						4.0 <sup>+4</sup>	4.0 <sup>+4</sup>
4320	1.4 <sup>+2</sup>	1.1 <sup>+3</sup>	9.9 <sup>+1</sup>	5.4 <sup>+2</sup>	1.1 <sup>+4</sup>	2.5 <sup>+1</sup>	2.4 <sup>+3</sup>	1.0 <sup>+1</sup>	4.6 <sup>+2</sup>	1.7 <sup>+3</sup>	↓	↓	↓	↓	↓	↓	1.8 <sup>+4</sup>	1.8 <sup>+4</sup>

REGULATORY DIVISION FILE COPY

NOTED FEB 14 1980

PRELIMINARY

SURRY AUXILIARY BLDG RADIATION ZONE AREA D @ EL. 2'

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $\mu R/hr$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 1 CONTAINMENT

MITIGATION PHASE - NO LETDOWN

SOURCE TIME (HR)	SI/CH LINES IN PER AREA el. 2' FP-10K	CHARGING PUMP CUB. el. 2' & 13' FP-10C	AUX. BLDG SUMP el. 2' FB-9A	DRAIN LINES IN SUMP AREA el. 2' & 13' FP-19N	DRAIN LINES IN PYE TUN. el. 2' FP-19L, 7A	SAFEQUANDS SUMP DRAIN LINES IN PER AREA el. 2' FP-7A	SAFEQUANDS SUMP DRAIN LINES IN PYE TUN. el. 2' FP-19C	DRAIN LINES INSIDE WARE TANKS CUB. el. 2' & 13' FP-19C	LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK el. 2' & 13'	REACTOR COOLANT SAMPLING LINES el. 2' & 13'	CONTAIN. LEAKAGE MONITOR LINES el. 2' & 13'	HYDROGEN ANALYZER DRAIN TRAY el. 13'	CONTAIN. ATMOSP. THRU PIPE PENETRATION el. 2'	CONTAIN. SHINE THRU DOME	CONTAIN. SHINE THRU PERSONNEL HATCH	CONTAIN. DOME R.S. HEADERS	SUB-TOTAL	TOTAL
0	4.2 <sup>+6</sup>	1.1 <sup>+4</sup>	NEG.	1.1 <sup>+2</sup>	1.6 <sup>+4</sup>	2.1 <sup>+5</sup>	3.5 <sup>+3</sup>	3.5 <sup>+6</sup>	4.2 <sup>+7</sup>	4.1 <sup>+4</sup>	2.0 <sup>+2</sup>	9.7 <sup>+1</sup>	3.1 <sup>+3</sup>	NEG.	NEG.	NEG.	4.5 <sup>+6</sup>	5.0 <sup>+7</sup>
1	2.0 <sup>+6</sup>	6.6 <sup>+3</sup>		6.2 <sup>+1</sup>	9.1 <sup>+3</sup>	9.9 <sup>+4</sup>	2.0 <sup>+3</sup>	2.1 <sup>+6</sup>	2.5 <sup>+7</sup>	1.8 <sup>+4</sup>	4.9 <sup>+1</sup>	1.6 <sup>+1</sup>	7.6 <sup>+2</sup>				2.0 <sup>+6</sup>	2.9 <sup>+7</sup>
2	1.3 <sup>+6</sup>	4.4 <sup>+3</sup>		4.3 <sup>+1</sup>	6.2 <sup>+3</sup>	6.3 <sup>+4</sup>	1.4 <sup>+3</sup>	1.4 <sup>+6</sup>	1.8 <sup>+7</sup>	1.3 <sup>+4</sup>	3.6 <sup>+1</sup>	1.2 <sup>+1</sup>	5.8 <sup>+2</sup>				2.0 <sup>+6</sup>	2.1 <sup>+7</sup>
8	6.2 <sup>+5</sup>	1.8 <sup>+3</sup>		1.7 <sup>+1</sup>	2.4 <sup>+3</sup>	2.3 <sup>+4</sup>	5.3 <sup>+2</sup>	5.8 <sup>+5</sup>	6.9 <sup>+6</sup>	4.8 <sup>+3</sup>	1.3 <sup>+1</sup>	4.8 <sup>+0</sup>	2.2 <sup>+2</sup>				6.2 <sup>+5</sup>	8.1 <sup>+6</sup>
24	1.3 <sup>+5</sup>	7.5 <sup>+2</sup>		5.5 <sup>+0</sup>	8.1 <sup>+2</sup>	6.3 <sup>+3</sup>	1.8 <sup>+2</sup>	2.4 <sup>+5</sup>	3.0 <sup>+6</sup>	1.9 <sup>+3</sup>	4.9 <sup>+0</sup>	1.2 <sup>+0</sup>	8.6 <sup>+1</sup>				1.3 <sup>+5</sup>	3.4 <sup>+6</sup>
96	3.2 <sup>+4</sup>	2.6 <sup>+2</sup>		1.5 <sup>+0</sup>	2.2 <sup>+2</sup>	1.6 <sup>+3</sup>	4.8 <sup>+1</sup>	8.3 <sup>+4</sup>	9.9 <sup>+5</sup>	7.4 <sup>+2</sup>	1.8 <sup>+0</sup>	NEG.	3.2 <sup>+1</sup>				3.0 <sup>+4</sup>	1.1 <sup>+6</sup>
192	2.3 <sup>+4</sup>	1.8 <sup>+2</sup>		1.1 <sup>+0</sup>	1.6 <sup>+2</sup>	1.2 <sup>+3</sup>	3.5 <sup>+1</sup>	5.6 <sup>+4</sup>	6.7 <sup>+5</sup>	4.6 <sup>+2</sup>	1.0 <sup>+0</sup>		1.8 <sup>+1</sup>				2.5 <sup>+4</sup>	7.5 <sup>+5</sup>
360	1.6 <sup>+4</sup>	1.1 <sup>+2</sup>		7.0 <sup>-1</sup>	1.0 <sup>+2</sup>	1.7 <sup>+2</sup>	2.2 <sup>+1</sup>	3.5 <sup>+4</sup>	4.2 <sup>+5</sup>	2.5 <sup>+2</sup>	4.7 <sup>-1</sup>		8.6 <sup>+0</sup>				1.7 <sup>+4</sup>	4.7 <sup>+5</sup>
720	8.0 <sup>+3</sup>	5.4 <sup>+1</sup>		NEG.	5.4 <sup>+1</sup>	3.9 <sup>+2</sup>	1.2 <sup>+1</sup>	1.8 <sup>+4</sup>	2.1 <sup>+5</sup>	1.1 <sup>+2</sup>	NEG.		1.8 <sup>+0</sup>				8.5 <sup>+3</sup>	2.1 <sup>+5</sup>
2160	2.3 <sup>+3</sup>	1.8 <sup>+1</sup>		↓	1.8 <sup>+1</sup>	1.1 <sup>+2</sup>	4.0 <sup>+0</sup>	5.8 <sup>+3</sup>	6.9 <sup>+4</sup>	4.4 <sup>+1</sup>	↓		7.7 <sup>-3</sup>				2.4 <sup>+3</sup>	7.7 <sup>+4</sup>
4320	8.9 <sup>+2</sup>	7.5 <sup>+0</sup>	↓	↓	7.9 <sup>+0</sup>	4.2 <sup>+1</sup>	1.7 <sup>+0</sup>	2.4 <sup>+3</sup>	3.0 <sup>+4</sup>	1.5 <sup>+1</sup>	↓	↓	NEG.	↓	↓	↓	9.5 <sup>+2</sup>	3.3 <sup>+4</sup>

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NOTED FEB 14 1980

PRELIMINARY

SURRY AUXILIARY BLDG RADIATION ZONE AREA E @ EL. 2'

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $\mu R/hr$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 1 CONTAINMENT

———— MITIGATION PHASE - NO LETDOWN ————

SOURCE TIME (HR)	SI/CH LINES IN PEN AREA	CHARGING PUMP CUB.	AUX. BLDG SUMP	DRAIN LINES IN SUMP AREA	DRAIN LINES IN PVE TUN.	SAFEGUARDS SUMP DRAIN LINES IN PEN AREA EL 2'	SAFEGUARDS SUMP DRAIN LINES IN PVE TUN. EL 2'	DRAIN LINES INSIDE WASTE TANKS CUB.	LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK EL 2' & 13'	REACTOR COOLANT SAMPLING LINES EL 2' 19.27.5'	CONTAIN. LEAKAGE MONITOR LINES EL 2' & 13'	HYDROGEN ANALYZER DRAIN TRAY EL 14.8'	CONTAIN. ATMOSP. THRU PIPE PENETRATION EL 2'	CONTAIN. SHINE THRU DOME	CONTAIN. SHINE THRU PRESSURE HATCH	CONTAIN. DOME R.S. HEADERS	SUB- TOTAL	TOTAL
	el. 2' FP-10K	el. 2' & 13' FP-10C	el. 2' FB-9A	el. 2' & 13' FP-19N	el. 2' FP-ML.7A	el. 2' FP-7A	el. 2' FP-19C	el. 2' & 13' FP-19C	el. 2' & 13'	el. 2' 19.27.5'	el. 2' & 13'	el. 14.8'	el. 2'					
0	1.43 <sup>+8</sup>	1.11 <sup>5</sup>	3.9 <sup>11</sup>	1.1 <sup>+2</sup>	1.3 <sup>+7</sup>	1.4 <sup>+6</sup>	2.9 <sup>+6</sup>	7.5 <sup>+4</sup>	1.4 <sup>+5</sup>	4.9 <sup>+6</sup>	5.9 <sup>+3</sup>	1.2 <sup>+4</sup>	5.7 <sup>+6</sup>	NEG.	NEG.	NEG.	1.7 <sup>+8</sup>	1.7 <sup>+8</sup>
1	9.0 <sup>+7</sup>	6.6 <sup>+4</sup>	1.5 <sup>+1</sup>	6.2 <sup>+1</sup>	7.8 <sup>16</sup>	8.8 <sup>+5</sup>	1.7 <sup>+6</sup>	4.4 <sup>+6</sup>	8.4 <sup>+4</sup>	2.0 <sup>+6</sup>	1.5 <sup>+3</sup>	3.1 <sup>+3</sup>	1.4 <sup>+6</sup>				1.0 <sup>+8</sup>	1.1 <sup>+8</sup>
2	6.3 <sup>+7</sup>	4.4 <sup>14</sup>	9.4 <sup>+0</sup>	4.3 <sup>+1</sup>	5.5 <sup>16</sup>	6.2 <sup>+5</sup>	1.2 <sup>+6</sup>	3.0 <sup>+4</sup>	5.7 <sup>+4</sup>	1.4 <sup>+6</sup>	1.1 <sup>+3</sup>	2.3 <sup>+3</sup>	9.9 <sup>+5</sup>				7.3 <sup>+7</sup>	7.3 <sup>+7</sup>
8	2.6 <sup>+7</sup>	1.8 <sup>+4</sup>	3.1 <sup>+0</sup>	1.7 <sup>+1</sup>	2.3 <sup>+6</sup>	2.6 <sup>+5</sup>	5.1 <sup>+5</sup>	1.2 <sup>+4</sup>	2.3 <sup>+4</sup>	5.4 <sup>+5</sup>	3.8 <sup>+2</sup>	1.0 <sup>+3</sup>	3.8 <sup>+5</sup>				3.0 <sup>+7</sup>	3.0 <sup>+7</sup>
24	1.2 <sup>+7</sup>	7.5 <sup>+3</sup>	NEG.	5.5 <sup>+0</sup>	1.0 <sup>16</sup>	1.2 <sup>+5</sup>	2.2 <sup>+5</sup>	5.1 <sup>+3</sup>	9.5 <sup>+3</sup>	2.1 <sup>+5</sup>	1.6 <sup>+2</sup>	4.5 <sup>+2</sup>	1.4 <sup>+5</sup>				1.4 <sup>+7</sup>	1.4 <sup>+7</sup>
96	4.5 <sup>16</sup>	2.6 <sup>+3</sup>		1.5 <sup>+0</sup>	3.8 <sup>+5</sup>	4.3 <sup>+4</sup>	8.4 <sup>+4</sup>	1.8 <sup>+3</sup>	3.3 <sup>+3</sup>	8.2 <sup>+4</sup>	5.4 <sup>+1</sup>	1.4 <sup>+2</sup>	4.9 <sup>+4</sup>				5.1 <sup>+6</sup>	5.1 <sup>+6</sup>
192	3.1 <sup>+6</sup>	1.8 <sup>+3</sup>		1.1 <sup>+0</sup>	2.6 <sup>+5</sup>	3.0 <sup>+4</sup>	5.7 <sup>+4</sup>	1.2 <sup>+3</sup>	2.2 <sup>+3</sup>	5.1 <sup>+4</sup>	3.1 <sup>+1</sup>	8.5 <sup>+1</sup>	3.0 <sup>+4</sup>				3.5 <sup>+6</sup>	3.5 <sup>+6</sup>
360	1.4 <sup>+6</sup>	1.1 <sup>13</sup>		7.0 <sup>-1</sup>	1.6 <sup>+5</sup>	1.9 <sup>+4</sup>	3.5 <sup>+4</sup>	7.5 <sup>+2</sup>	1.4 <sup>+5</sup>	2.8 <sup>+4</sup>	1.4 <sup>+1</sup>	4.5 <sup>+1</sup>	1.3 <sup>+4</sup>				2.2 <sup>+6</sup>	2.2 <sup>+6</sup>
720	8.9 <sup>15</sup>	5.4 <sup>+2</sup>		NEG.	7.6 <sup>+4</sup>	8.6 <sup>+3</sup>	1.7 <sup>+4</sup>	3.7 <sup>+2</sup>	6.6 <sup>+2</sup>	1.2 <sup>+4</sup>	2.9 <sup>+0</sup>	1.2 <sup>+1</sup>	3.0 <sup>+3</sup>				1.0 <sup>+6</sup>	1.0 <sup>+6</sup>
2160	2.9 <sup>+5</sup>	1.8 <sup>+2</sup>		↓	2.5 <sup>+4</sup>	2.9 <sup>+3</sup>	5.5 <sup>+3</sup>	1.2 <sup>+2</sup>	2.3 <sup>+2</sup>	4.9 <sup>+3</sup>	1.2 <sup>-2</sup>	NEG.	1.1 <sup>+1</sup>				3.3 <sup>+5</sup>	3.3 <sup>+5</sup>
4320	1.2 <sup>+5</sup>	7.5 <sup>+1</sup>	↓		1.1 <sup>+4</sup>	1.2 <sup>+3</sup>	2.4 <sup>+3</sup>	5.1 <sup>+1</sup>	9.5 <sup>+1</sup>	1.7 <sup>+3</sup>	NEG.	↓	1.1 <sup>-1</sup>	↓	↓	↓	1.4 <sup>+5</sup>	1.4 <sup>+5</sup>

ILLUSTRATION NUMBER 11111111

NOTED FEB 14 1980

SURRY AUXILIARY BLDG RADIATION ZONE AREA F @ EL. 2'

PRELIMINARY

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $\mu R/hr$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 1 CONTAINMENT

———— MITIGATION PHASE - NO LETDOWN ————

SOURCE TIME (HR)	SE/CH LINES IN PEN. AREA el. 2' FP-10K	CHARGING PUMP CUB. el. 2' & 13' FP-10C	AUX. BLDG SUMP el. 2' FB-9A	DRAIN LINES IN SUMP AREA el. 2' & 13' FP-19N	DRAIN LINES IN PPE TUN. el. 2' FP-14C, 7A	SAFEGUARDS SUMP DRAIN LINES IN PEN AREA el. 2' FP-7A	SAFEGUARDS SUMP DRAIN LINES IN PPE TUN. el. 2' FP-19C	DRAIN LINES INSIDE WHTO TANKS CUB. el. 2' & 13' FP-19C	(2)		CONTAIN. LEAKAGE MONS FOR LINES el. 2' & 13'	HYDROGEN ANALYZER MAN TRAP el. 13'	CONTAIN. ATMOSP. THRU PIPE PENETRATION el. 2'	CONTAIN. SHINE TRAIL DOME	CONTAIN. SHINE TRAIL PERSONAL MATCH	CONTAIN. DOME R.S. HEADERS	(1)	
									LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK el. 2' & 13'	REACTOR COOLANT SAMPLING LINES el. 2' & 13'							SUB - TOTAL	TOTAL
0	4.1 <sup>+5</sup>	1.4 <sup>+8</sup>	5.2 <sup>+4</sup>	1.4 <sup>+4</sup>	4.1 <sup>+5</sup>	1.3 <sup>+4</sup>	9.0 <sup>+4</sup>	NEG.	6.1 <sup>+0</sup>	6.0 <sup>+4</sup>	2.8 <sup>+1</sup>	1.5 <sup>+4</sup>	9.6 <sup>+2</sup>	NEG.	NEG.	NEG.	1.4 <sup>+0</sup>	1.4 <sup>+0</sup>
1	2.1 <sup>+5</sup>	9.0 <sup>+7</sup>	1.7 <sup>+4</sup>	8.0 <sup>+3</sup>	2.4 <sup>+5</sup>	6.9 <sup>+3</sup>	5.3 <sup>+4</sup>		3.7 <sup>+0</sup>	2.5 <sup>+4</sup>	6.8 <sup>+0</sup>	4.1 <sup>+3</sup>	2.4 <sup>+2</sup>				9.0 <sup>+7</sup>	9.0 <sup>+7</sup>
2	1.4 <sup>+5</sup>	6.5 <sup>+7</sup>	1.2 <sup>+4</sup>	5.4 <sup>+3</sup>	1.7 <sup>+5</sup>	4.8 <sup>+3</sup>	3.7 <sup>+4</sup>		2.5 <sup>+0</sup>	1.7 <sup>+4</sup>	5.0 <sup>+0</sup>	3.0 <sup>+3</sup>	1.8 <sup>+2</sup>				6.5 <sup>+7</sup>	6.5 <sup>+7</sup>
8	5.4 <sup>+4</sup>	2.6 <sup>+7</sup>	3.3 <sup>+3</sup>	2.1 <sup>+3</sup>	7.2 <sup>+4</sup>	1.9 <sup>+3</sup>	1.6 <sup>+4</sup>		1.0 <sup>+0</sup>	6.6 <sup>+3</sup>	1.8 <sup>+0</sup>	1.3 <sup>+3</sup>	6.8 <sup>+1</sup>				2.6 <sup>+7</sup>	2.6 <sup>+7</sup>
24	1.7 <sup>+4</sup>	1.2 <sup>+7</sup>	7.2 <sup>+2</sup>	7.0 <sup>+2</sup>	3.1 <sup>+4</sup>	6.2 <sup>+2</sup>	6.8 <sup>+3</sup>		NEG.	2.5 <sup>+3</sup>	6.8 <sup>-1</sup>	5.6 <sup>+2</sup>	2.7 <sup>+1</sup>				1.2 <sup>+7</sup>	1.2 <sup>+7</sup>
96	4.4 <sup>+3</sup>	4.5 <sup>+6</sup>	1.8 <sup>+2</sup>	1.9 <sup>+2</sup>	1.2 <sup>+4</sup>	1.7 <sup>+2</sup>	2.6 <sup>+3</sup>			1.0 <sup>+3</sup>	NEG.	1.8 <sup>+2</sup>	9.8 <sup>+0</sup>				4.5 <sup>+6</sup>	4.5 <sup>+6</sup>
192	3.1 <sup>+3</sup>	3.1 <sup>+6</sup>	1.3 <sup>+2</sup>	1.3 <sup>+2</sup>	8.1 <sup>+3</sup>	1.2 <sup>+2</sup>	1.8 <sup>+3</sup>			6.3 <sup>+2</sup>		1.1 <sup>+2</sup>	5.6 <sup>+0</sup>				3.1 <sup>+6</sup>	3.1 <sup>+6</sup>
360	2.1 <sup>+3</sup>	1.9 <sup>+6</sup>	7.1 <sup>+1</sup>	8.8 <sup>+1</sup>	5.0 <sup>+3</sup>	7.9 <sup>+1</sup>	1.1 <sup>+3</sup>			3.4 <sup>+2</sup>		5.8 <sup>+1</sup>	2.7 <sup>+0</sup>				1.9 <sup>+6</sup>	1.9 <sup>+6</sup>
720	1.1 <sup>+3</sup>	8.9 <sup>+5</sup>	4.3 <sup>+1</sup>	4.6 <sup>+1</sup>	2.4 <sup>+3</sup>	7.1 <sup>+1</sup>	5.3 <sup>+2</sup>			1.5 <sup>+2</sup>		1.6 <sup>+1</sup>	5.6 <sup>-1</sup>				8.9 <sup>+5</sup>	8.9 <sup>+5</sup>
2160	3.5 <sup>+2</sup>	2.9 <sup>+5</sup>	7.8 <sup>+0</sup>	1.6 <sup>+1</sup>	7.8 <sup>+2</sup>	1.4 <sup>+1</sup>	1.7 <sup>+2</sup>			6.0 <sup>+1</sup>		NEG.	NEG.				2.9 <sup>+5</sup>	2.9 <sup>+5</sup>
4320	1.5 <sup>+2</sup>	1.2 <sup>+5</sup>	2.1 <sup>+0</sup>	6.6 <sup>+0</sup>	3.4 <sup>+2</sup>	NEG.	7.5 <sup>+1</sup>			2.0 <sup>+1</sup>							1.2 <sup>+5</sup>	1.2 <sup>+5</sup>

REGULATORY DOCKET FILE COPY

NOTED FEB 14 1980



PRELIMINARY

SURRY AUXILIARY BLDG RADIATION ZONE AREA G @ EL. 2'

ESTIMATED HIGHEST DIRECT P DOSE RATES (mR/hr) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 1 CONTAINMENT

———— MITIGATION PHASE - NO LETDOWN ————

TIME (HR)	SI/CH LINES IN PEN. AREA el. 2' FP-10K	CHARGING PUMP CUB. el. 2' & 13' FP-10C	AUX. BLDG SUMP el. 2' FB-9A	DRAIN LINES IN SUMP AREA el. 2' & 13' FP-19N	DRAIN LINES IN PHE TUN. el. 2' FP-14.7A	SAFEGUARDS SUMP DRAIN LINES IN PEN AREA el. 2' FP-7A	SAFEGUARDS SUMP DRAIN LINES IN PHE TUN. el. 2' FP-19C	DRAIN LINES INSIDE WASTE TANKS CUB. el. 2' & 13' FP-19C	LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK el. 2' & 13'	REACTOR COOLANT SAMPLING LINES el. 2' & 13' 19.27.5'	CONTAIN. LEAKAGE MONITOR LINES el. 2' & 13'	HYDROGEN ANALYZER MAIN TRAY el. 13'	CONTAIN. ATMOSP. THRU PIPE PENETRATION el. 2'	CONTAIN. SHINE TRAY DOME	CONTAIN. SHINE TRAY PERSONAL MATCH	CONTAIN. DOME R.S. HEADERS	SUB-TOTAL	TOTAL
0	1.28+2	1.6+4	3.2+4	1.4+4	5.6+4	2.8+0	1.2+4	6.2-1	3.0+0	1.4+4	NEG.	3.9+0	NEG.	NEG.	NEG.	NEG.	1.3+5	1.4+5
1	3.8+1	9.6+3	9.9+3	8.0+3	3.1+4	NEG.	6.8+3	NEG.	2.3+0	5.9+3		1.0+0					6.5+4	7.1+4
2	2.3+1	6.5+3	6.2+3	5.4+3	2.1+4		4.6+3		1.6+0	4.2+3		2.6-1					4.4+4	5.0+4
8	6.8+0	2.6+3	1.0+0	2.1+3	8.3+3		1.8+3		6.5-1	1.6+3		NEG.					1.7+4	1.8+4
24	1.4+0	1.1+3	3.9+2	7.0+2	2.8+3		6.2+2		NEG.	6.1+2							5.6+3	6.2+3
96	3.5-1	3.7+2	9.9+1	1.9+2	7.7+2		1.7+2			2.4+2							1.6+3	1.8+3
192	NEG.	2.6+2	7.3+1	1.3+2	5.4+2		1.2+2			1.5+2							1.2+3	1.3+3
360		1.6+2	5.0+1	8.8+1	3.5+2		7.7+1			0.2+1							7.3+2	8.1+2
720		7.7+1	2.3+1	4.6+1	1.9+2		4.2+1			3.6+1							3.8+2	4.1+2
2160		2.2+1	4.0+0	1.6+1	6.3+1		1.4+1			1.4+1							1.2+2	1.3+2
4320		1.1+1	9.7-1	6.6+0	2.7+1		5.9+0			4.0+0							5.1+1	5.6+1

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SURRY AUXILIARY BLDG RADIATION ZONE AREA H @ EL. 2'

PRELIMINARY

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $\mu\text{R}/\text{hr}$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 1 CONTAINMENT

———— MITIGATION PHASE - NO LETDOWN ————

SOURCE TIME (HR)	SI/CH LINES IN PEN AREA el. 2'	CHARGING PUMP CUB. el. 2' & 13'	AUX. BLDG SUMP el. 2'	DRAIN LINES IN SUMP AREA el. 2' & 13'	DRAIN LINES IN PHE TUN. el. 2'	SAFEGUARDS SUMP DRAIN LINE IN PEN AREA el. 2'	SAFEGUARDS SUMP DRAIN LINE IN PHE TUN. el. 2'	DRAIN LINE INSIDE WRT TANKS LUB. el. 2' & 13'	LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK el. 2' & 13'	REACTOR COOLANT SAMPLING LINES el. 2' & 13'	CONTAIN. LEAKAGE MONI FOR LINES el. 2' & 13'	HYDROGEN ANALYZER DRAIN TRAY el. 13'	CONTAIN. ATMOSP. THRU PIPE PENETRATION el. 2'	CONTAIN. SHINE TRAY DOME	CONTAIN. SHINE TRAY PERSONNEL MATCH	CONTAIN. DOME R.S. HEADERS	(1) SUB- TOTAL	TOTAL
	FP-10R	FP-10C	FB-9A	FP-19N	FP-19C, 7A	FP-7A	FP-19C	FP-19C										
0	4.1 <sup>+3</sup>	1.6 <sup>+6</sup>	3.6 <sup>+7</sup>	1.4 <sup>+6</sup>	4.1 <sup>+5</sup>	9.0 <sup>+1</sup>	9.0 <sup>+4</sup>	NEG.	3.8 <sup>+0</sup>	4.7 <sup>+6</sup>	NEG.	1.3 <sup>+2</sup>	NEG.	NEG.	NEG.	NEG.	3.9 <sup>+7</sup>	4.4 <sup>+7</sup>
1	1.2 <sup>+3</sup>	9.6 <sup>+5</sup>	2.1 <sup>+7</sup>	8.7 <sup>+5</sup>	2.4 <sup>+5</sup>	2.8 <sup>+1</sup>	5.3 <sup>+4</sup>		2.3 <sup>+0</sup>	1.9 <sup>+6</sup>		3.2 <sup>+1</sup>					2.3 <sup>+7</sup>	2.5 <sup>+7</sup>
2	7.5 <sup>+2</sup>	6.5 <sup>+5</sup>	1.5 <sup>+7</sup>	6.1 <sup>+5</sup>	1.7 <sup>+5</sup>	1.8 <sup>+1</sup>	3.7 <sup>+4</sup>		1.6 <sup>+0</sup>	1.4 <sup>+6</sup>		2.3 <sup>+1</sup>					1.7 <sup>+7</sup>	1.8 <sup>+7</sup>
8	2.2 <sup>+2</sup>	2.6 <sup>+5</sup>	5.9 <sup>+6</sup>	2.6 <sup>+5</sup>	7.2 <sup>+4</sup>	5.1 <sup>+0</sup>	1.6 <sup>+4</sup>		NEG.	5.1 <sup>+5</sup>		1.1 <sup>+1</sup>					6.5 <sup>+6</sup>	7.0 <sup>+6</sup>
24	4.4 <sup>+1</sup>	1.1 <sup>+5</sup>	2.3 <sup>+6</sup>	1.2 <sup>+5</sup>	3.1 <sup>+4</sup>	1.1 <sup>+0</sup>	6.8 <sup>+3</sup>			2.0 <sup>+5</sup>		4.5 <sup>+0</sup>					2.6 <sup>+6</sup>	2.8 <sup>+6</sup>
96	1.1 <sup>+1</sup>	3.7 <sup>+4</sup>	7.9 <sup>+5</sup>	4.3 <sup>+4</sup>	1.2 <sup>+4</sup>	NEG.	3.1 <sup>+3</sup>			7.8 <sup>+4</sup>		1.4 <sup>+0</sup>					8.8 <sup>+5</sup>	9.6 <sup>+5</sup>
192	8.6 <sup>+0</sup>	2.6 <sup>+6</sup>	5.3 <sup>+5</sup>	2.9 <sup>+4</sup>	8.1 <sup>+3</sup>		1.8 <sup>+3</sup>			4.9 <sup>+4</sup>		NEG.					3.2 <sup>+6</sup>	3.2 <sup>+6</sup>
360	5.8 <sup>+0</sup>	1.6 <sup>+4</sup>	3.4 <sup>+5</sup>	1.8 <sup>+4</sup>	5.0 <sup>+3</sup>		1.1 <sup>+3</sup>			2.7 <sup>+4</sup>							3.8 <sup>+5</sup>	4.1 <sup>+5</sup>
720	2.6 <sup>+0</sup>	7.7 <sup>+3</sup>	1.7 <sup>+5</sup>	8.5 <sup>+3</sup>	2.4 <sup>+3</sup>		5.3 <sup>+2</sup>			1.2 <sup>+6</sup>							1.9 <sup>+5</sup>	2.5 <sup>+5</sup>
2160	4.2 <sup>-1</sup>	2.2 <sup>+3</sup>	5.7 <sup>+4</sup>	2.8 <sup>+3</sup>	7.8 <sup>+2</sup>		1.7 <sup>+2</sup>			4.7 <sup>+3</sup>							6.3 <sup>+4</sup>	6.8 <sup>+4</sup>
4320	NEG.	1.1 <sup>+3</sup>	2.5 <sup>+4</sup>	1.2 <sup>+3</sup>	3.4 <sup>+2</sup>		7.5 <sup>+1</sup>			1.6 <sup>+3</sup>							2.8 <sup>+4</sup>	2.7 <sup>+4</sup>

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NOTED FEB 14 1980

SURRY AUXILIARY BLDG RADIATION ZONE AREA I @ EL. 2'

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $\mu\text{R/hr}$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14944 SOURCE TERMS) INSIDE UNIT # 1 CONTAINMENT

———— MITIGATION PHASE - NO LETDOWN ————

PRELIMINARY

SOURCE TIME (HR)	SI/CH LINES	CHARGING	AUX. BLDG	DRAIN LINES	DRAIN LINES	SAFEGUARDS	SAFEGUARDS	DRAIN LINE	LOW LEVEL	REACTOR	CONTAIN.	HYDROGEN	CONTAIN.	CONTAIN.	CONTAIN.	CONTAIN.	SUB-TOTAL	TOTAL
	IN PER. AREA el. 2' FP-10R	PUMP CUB. el. 2' & 13' FP-10C	SUMP el. 2' FB-9A	IN SUMP AREA el. 2' & 13' FP-19N	IN PIPE TUN. el. 2' FP-ML, 7A	SUMP DRAIN LINE IN PER. AREA el. 2' FP-7A	SUMP DRAIN LINE IN PIPE TUN. el. 2' FP-19C	INSIDE WASTE TANK LUB. el. 2' & 13' FP-19C	ARMEN LEVEL WASTE DRAIN TANK el. 2' & 13'	COOLANT SAMPLING LINES el. 2' & 13'	LEAKAGE MONITOR LINES el. 2' & 13'	ANALYZER DRAW TRAP el. 13'	ATMOSP. THRU PIPE PENETRATION el. 2'	SHINE MA. DOME	SHINE MA. PERSONAL HATCH	DOME R.S.		
0	6.8 <sup>+6</sup>	1.1 <sup>+3</sup>	3.7 <sup>+1</sup>	4.3 <sup>+2</sup>	9.5 <sup>+3</sup>	9.5 <sup>+4</sup>	2.1 <sup>+3</sup>	1.8 <sup>+3</sup>	6.4 <sup>+3</sup>	2.8 <sup>+4</sup>	7.7 <sup>+2</sup>	5.7 <sup>+3</sup>	NEG.	NEG.	NEG.	NEG.	6.9 <sup>+6</sup>	6.9 <sup>+6</sup>
1	4.2 <sup>+6</sup>	6.6 <sup>+2</sup>	1.5 <sup>+1</sup>	4.1 <sup>+2</sup>	5.2 <sup>+3</sup>	5.7 <sup>+4</sup>	1.1 <sup>+3</sup>	1.0 <sup>+3</sup>	3.9 <sup>+3</sup>	1.1 <sup>+4</sup>	1.9 <sup>+3</sup>	NEG.					4.3 <sup>+6</sup>	4.3 <sup>+6</sup>
2	3.0 <sup>+6</sup>	4.4 <sup>+2</sup>	7.4 <sup>+0</sup>	2.7 <sup>+2</sup>	3.6 <sup>+3</sup>	4.1 <sup>+4</sup>	7.9 <sup>+2</sup>	7.1 <sup>+2</sup>	2.7 <sup>+3</sup>	8.0 <sup>+2</sup>	1.4 <sup>+2</sup>						3.0 <sup>+6</sup>	3.0 <sup>+6</sup>
8	1.2 <sup>+6</sup>	1.9 <sup>+2</sup>	3.1 <sup>+0</sup>	1.0 <sup>+2</sup>	1.4 <sup>+3</sup>	1.8 <sup>+4</sup>	3.1 <sup>+2</sup>	2.9 <sup>+2</sup>	1.1 <sup>+3</sup>	3.0 <sup>+3</sup>	5.0 <sup>+1</sup>						1.2 <sup>+6</sup>	1.2 <sup>+6</sup>
24	5.5 <sup>+5</sup>	7.5 <sup>+1</sup>	7.6 <sup>-1</sup>	3.1 <sup>+1</sup>	4.5 <sup>+2</sup>	7.6 <sup>+3</sup>	9.9 <sup>+1</sup>	1.2 <sup>+2</sup>	4.5 <sup>+2</sup>	1.2 <sup>+3</sup>	1.9 <sup>+1</sup>						5.6 <sup>+5</sup>	5.6 <sup>+5</sup>
96	2.0 <sup>+5</sup>	2.6 <sup>+1</sup>	NEG.	8.2 <sup>+0</sup>	1.2 <sup>+2</sup>	2.9 <sup>+3</sup>	2.6 <sup>+1</sup>	4.2 <sup>+1</sup>	1.5 <sup>+2</sup>	4.6 <sup>+2</sup>	7.0 <sup>+0</sup>						2.0 <sup>+5</sup>	2.0 <sup>+5</sup>
192	1.4 <sup>+5</sup>	1.4 <sup>+1</sup>		5.8 <sup>+0</sup>	8.6 <sup>+1</sup>	2.0 <sup>+3</sup>	1.9 <sup>+1</sup>	2.8 <sup>+1</sup>	1.0 <sup>+2</sup>	2.9 <sup>+2</sup>	4.0 <sup>+0</sup>						1.4 <sup>+5</sup>	1.4 <sup>+5</sup>
360	8.6 <sup>+4</sup>	1.1 <sup>+1</sup>		3.9 <sup>+0</sup>	5.7 <sup>+1</sup>	1.2 <sup>+3</sup>	1.3 <sup>+1</sup>	1.8 <sup>+1</sup>	6.4 <sup>+1</sup>	1.6 <sup>+2</sup>	1.8 <sup>+0</sup>						8.7 <sup>+4</sup>	8.7 <sup>+4</sup>
720	4.0 <sup>+4</sup>	5.4 <sup>+0</sup>		2.0 <sup>+0</sup>	3.0 <sup>+1</sup>	5.6 <sup>+2</sup>	6.6 <sup>+0</sup>	8.8 <sup>+0</sup>	3.1 <sup>+1</sup>	6.9 <sup>+1</sup>	3.8 <sup>-1</sup>						4.1 <sup>+4</sup>	4.1 <sup>+4</sup>
2160	1.3 <sup>+4</sup>	1.8 <sup>+0</sup>		6.2 <sup>-1</sup>	1.0 <sup>+1</sup>	1.9 <sup>+2</sup>	2.2 <sup>+0</sup>	2.9 <sup>+0</sup>	1.1 <sup>+1</sup>	2.8 <sup>+1</sup>	NEG.						1.3 <sup>+4</sup>	1.3 <sup>+4</sup>
4320	5.8 <sup>+3</sup>	7.5 <sup>-1</sup>	√	Neg.	4.3 <sup>+0</sup>	8.0 <sup>+1</sup>	9.5 <sup>-1</sup>	1.2 <sup>+0</sup>	4.5 <sup>+0</sup>	9.3 <sup>+0</sup>	↓	↓	↓	↓	↓	↓	5.9 <sup>+3</sup>	5.9 <sup>+3</sup>

REVISIONS NUMBER 1112 WP1

NOTED FEB. 14 1980

SURRY AUXILIARY BLDG RADIATION ZONE AREA J @ EL. 2'

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $mR/hr$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 1 CONTAINMENT

PRELIMINARY

MITIGATION PHASE - NO LETDOWN

(2)

SOURCE TIME (HR)	SI/CH LINES IN PEN. AREA el. 2' FP-10R	CHARGING PUMP COB. el. 2' & 13' FP-10C	AUX. BLDG SUMP el. 2' FB-9A	DRAIN LINES IN SWAMP AREA el. 2' & 13' FP-19N	DRAIN LINES IN PYE TUN. el. 2' FP-11C, 7A	SAFEGUARDS SUMP DRAIN LINE IN PEN. AREA el. 2' FP-7A	SAFEGUARDS SUMP DRAIN LINE IN PYE TUN. el. 2' FP-19C	DRAIN LINE INSIDE WASTE TANKS LUB. el. 2' & 13' FP-19C	LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK el. 2' & 13'	REACTOR COOLANT SAMPLING LINES el. 2' 13' 27.5'	CONTAIN. LEAKAGE MONI FOR LINES el. 2' & 13'	HYDROGEN ANALYZER MAIN TRAP el. 13'	CONTAIN. ATMOSP. THRU PIPE PENETRATIONS el. 2'	CONTAIN. SHINE THRU DOME	CONTAIN. SHINE THRU PERSONNEL HATCH	CONTAIN. DOME R.S. HEADERS	SUB-TOTAL	TOTAL
0	4.1 <sup>+3</sup>	1.6 <sup>+6</sup>	2.9 <sup>+4</sup>	3.3 <sup>+3</sup>	NEG.	9.0 <sup>11</sup>	NEG.	NEG.	NEG.	2.9 <sup>+6</sup>	NEG.	3.9 <sup>+0</sup>	NEG.	NEG.	NEG.	NEG.	1.6 <sup>+6</sup>	4.5 <sup>+6</sup>
1	1.2 <sup>+3</sup>	9.6 <sup>+5</sup>	1.1 <sup>+4</sup>	1.6 <sup>+3</sup>		2.8 <sup>+1</sup>				1.2 <sup>+6</sup>		1.0 <sup>+0</sup>					9.8 <sup>+6</sup>	1.1 <sup>+7</sup>
2	7.5 <sup>+2</sup>	6.5 <sup>+5</sup>	6.9 <sup>+3</sup>	1.1 <sup>+3</sup>		1.8 <sup>+1</sup>				8.4 <sup>+5</sup>		2.6 <sup>-1</sup>					6.6 <sup>+5</sup>	1.5 <sup>+6</sup>
8	2.2 <sup>+2</sup>	2.6 <sup>+5</sup>	2.2 <sup>+3</sup>	4.1 <sup>+2</sup>		5.1 <sup>+0</sup>				3.2 <sup>+5</sup>		NEG.					2.6 <sup>+5</sup>	5.8 <sup>+5</sup>
24	4.4 <sup>+1</sup>	1.1 <sup>+5</sup>	5.3 <sup>+2</sup>	1.2 <sup>+2</sup>		4.1 <sup>+0</sup>				1.2 <sup>+5</sup>							1.1 <sup>+5</sup>	2.3 <sup>+5</sup>
96	1.1 <sup>+1</sup>	3.7 <sup>+4</sup>	1.3 <sup>+2</sup>	3.3 <sup>+1</sup>		NEG.				4.8 <sup>+4</sup>							3.7 <sup>+4</sup>	8.5 <sup>+4</sup>
192	8.6 <sup>+0</sup>	2.6 <sup>+4</sup>	9.6 <sup>+1</sup>	2.3 <sup>+1</sup>						3.0 <sup>+4</sup>							2.6 <sup>+4</sup>	5.6 <sup>+4</sup>
360	5.8 <sup>+0</sup>	1.6 <sup>+4</sup>	6.6 <sup>+1</sup>	1.6 <sup>+1</sup>						1.7 <sup>+4</sup>							1.6 <sup>+4</sup>	3.3 <sup>+4</sup>
720	2.6 <sup>+0</sup>	7.7 <sup>+3</sup>	3.2 <sup>+1</sup>	7.9 <sup>+0</sup>						7.3 <sup>+3</sup>							7.7 <sup>+3</sup>	1.5 <sup>+4</sup>
2160	4.2 <sup>-1</sup>	2.2 <sup>+3</sup>	6.7 <sup>+0</sup>	2.5 <sup>+0</sup>						2.9 <sup>+3</sup>							2.2 <sup>+3</sup>	5.1 <sup>+3</sup>
4320	NEG.	1.1 <sup>+3</sup>	2.2 <sup>+0</sup>	1.0 <sup>+0</sup>						9.8 <sup>+2</sup>							1.1 <sup>+3</sup>	2.1 <sup>+3</sup>

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NOTED FEB 14 1980

PRELIMINARY

SURRY AUXILIARY BLDG RADIATION ZONE AREA K @ EL. 15'

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $\mu R/hr$ ) FROM VARIOUS SOURCES DUE TO  
 LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 1 CONTAINMENT  
 ——— MITIGATION PHASE - NO LETDOWN ———

SOURCE TIME (HR)	SI/CH LINES	CHARGING	AUX. BLDG	DRAIN LINES	DRAIN LINES	SAFEGUARDS	SAFEGUARDS	DRAIN LINES	LOW LEVEL	REACTOR	CONTAIN.	HYDROGEN	CONTAIN.	CONTAIN.	CONTAIN.	CONTAIN.	(1)	TOTAL
	IN PEN. AREA	PUMP CUB.	SUMP	IN SUMP AREA	IN PYE TUN.	SUMP DRAIN	SUMP DRAIN	INSIDE WASTE	OR HIGH LEVEL	COOLANT	LEAKAGE	ANALYZER	ATMOSP.	SHINE THRU	SHINE THRU	DOME R.S.	SUB-	
	el. 2'	el. 2' & 13'	el. 3'	el. 2' & 13'	el. 2'	LINES IN PEN	LINES IN PYE	TANKS LUB.	WASTE DRAIN	SAMPLING	MONITOR	MAN TRAY	THRU PIPE	SHADE	PERSONAL	HEADERS	TOTAL	
	FP-10K	FP-10C	FB-9A	FP-19N	FP-14, 7A	AREA el. 2'	TUN. el. 2'	el. 2' & 13'	TANK el. 2' & 13'	LINES el. 2' & 13'	LINES el. 2' & 13'	el. 13'	el. 2'				NEG.	
0	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	1.8 <sup>+1</sup>	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	1.8 <sup>+1</sup>
1									9.6 <sup>+0</sup>									9.6 <sup>+0</sup>
2									6.6 <sup>+0</sup>									6.6 <sup>+0</sup>
8									2.5 <sup>+0</sup>									2.5 <sup>+0</sup>
24									NEG.									NEG.
96																		
192																		
360																		
720																		
2160																		
4320	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓

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NOTED FEB 14 1990

SURRY AUXILIARY BLDG RADIATION ZONE AREA L @ EL. 13'

ESTIMATED HIGHEST DIRECT T DOSE RATES ( $\mu R/hr$ ) FROM VARIOUS SOURCES DUE TO

LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 1 CONTAINMENT

———— MITIGATION PHASE - NO LETDOWN ————

PRELIMINARY

SOURCE TIME (HR)	SI/CH LINES IN PEN. AREA EL. 2' FP-10K	CHARGING PUMP CUB. EL. 2' & 13' FP-10C	AUX. BLDG SUMP EL. 2' FB-9A	DRAIN LINES IN SUMP AREA EL. 2' & 13' FP-19N	DRAW LINES IN PHE TUN. EL. 2' FP-14L, 7A	SAFEGUARDS SUMP DRAIN LINES IN PEN AREA EL. 2' FP-7A	SAFEGUARDS SUMP DRAIN LINES IN PHE TUN. EL. 2' FP-19C	DRAIN LINES INSIDE WASTE TANKS CUB. EL. 2' & 13' FP-19C	LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK EL. 2' & 13'	REACTOR COOLANT SAMPLING LINES EL. 2' & 13'	CONTAIN. LEAKAGE MONITOR LINES EL. 2' & 13'	HYDROGEN ANALYZER DRAIN TRAY EL. 13'	CONTAIN. ATMOSP. THRU PIPE PENETRATION EL. 2'	CONTAIN. SHINE THRU DOME	CONTAIN. SHINE THRU PERSONAL MATCH	CONTAIN. DOME R.S. HEADERS	(1) SUB- TOTAL	TOTAL
0	NEG.	NEG.	NEG.	3.4+2	NEG.	NEG.	NEG.	4.2 <sup>+0</sup>	2.0 <sup>+1</sup>	NEG.	NEG.	5.1 <sup>+2</sup>	NEG.	NEG.	NEG.	NEG.	8.5+2	8.7+2
1				1.9+2				2.5 <sup>+0</sup>	1.1 <sup>+1</sup>			1.3 <sup>+2</sup>					3.2+2	3.3+2
2				1.3+2				1.7 <sup>+0</sup>	7.2 <sup>+0</sup>			9.9 <sup>+1</sup>					2.3+2	2.4+2
8				5.0 <sup>+1</sup>				6.8 <sup>-1</sup>	2.8 <sup>+0</sup>			4.3 <sup>+1</sup>					9.3+1	9.6+1
24				1.7 <sup>+1</sup>				NEG.	9.2 <sup>-1</sup>			1.9 <sup>+1</sup>					3.6+1	3.7+1
96				4.6 <sup>+0</sup>					NEG.			6.1 <sup>+0</sup>					1.1+1	1.1+1
192				3.2 <sup>+0</sup>								3.7 <sup>+0</sup>					6.9+0	6.9+0
360				2.1 <sup>+0</sup>								1.9 <sup>+0</sup>					4.0+0	4.0+0
720				1.1 <sup>+0</sup>								5.2 <sup>-1</sup>					1.6+0	1.6+0
2160				3.8 <sup>-1</sup>								NEG.					3.8-1	3.8-1
4320	↓	↓	↓	NEG.	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	NEG.	NEG.

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NOTED FEB 14 1980

SURRY AUXILIARY BLDG RADIATION ZONE AREA M @ EL. 13'

PRELIMINARY

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $\mu\text{R/hr}$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 1 CONTAINMENT

MITIGATION PHASE - NO LETDOWN

(2)

SOURCE TIME (HR)	ST/CH LINES IN PEN AREA el. 2' FP-10K	CHARGING PUMP CUB. el. 2' & 13' FP-10C	AUX. BLDG SUMP el. 2' FB-9A	DRAIN LINES IN SUMP AREA el. 2' & 13' FP-19N	DRAIN LINES IN PYE TUN. el. 2' FP-14C, 7A	SAFEGUARDS SUMP DRAIN LINES IN PEN AREA el. 2' FP-7A	SAFEGUARDS SUMP DRAIN LINES IN PYE TUN. el. 2' FP-19C	DRAIN LINES INSIDE WASTE TANKS LUB. el. 2' & 13' FP-19C	LOW LEVEL WASTE DRAIN TANK el. 2' & 13'	REACTOR COOLANT SAMPLING LINES el. 2' & 13' 19, 27.5'	CONTAIN. LEAKAGE MONITOR LINES el. 2' & 13'	HYDROGEN ANALYZER MAN TRAY el. 13'	CONTAIN. ATMOSP. THRU PIPE PENETRATION el. 2'	CONTAIN. SHINE TRAY DOME	CONTAIN. SHINE TRAY PRESSURE HATCH	CONTAIN. DOME R.S. HEADERS	(1) SUB-TOTAL	TOTAL
0	1.1 <sup>12</sup>	5.2 <sup>13</sup>	4.1 <sup>13</sup>	1.9 <sup>16</sup>	2.1 <sup>14</sup>	3.3 <sup>10</sup>	4.6 <sup>13</sup>	1.4 <sup>14</sup>	6.6 <sup>15</sup>	5.2 <sup>13</sup>	6.2 <sup>12</sup>	5.4 <sup>15</sup>	NEG.	NEG.	NEG.	NEG.	2.4+6	3.1+6
1	2.5 <sup>11</sup>	3.1 <sup>13</sup>	1.3 <sup>13</sup>	1.2 <sup>16</sup>	1.1 <sup>14</sup>	NEG.	2.4 <sup>13</sup>	8.3 <sup>13</sup>	4.0 <sup>15</sup>	2.1 <sup>11</sup>	1.5 <sup>12</sup>	1.4 <sup>15</sup>					1.4+6	1.8+6
2	1.5 <sup>11</sup>	2.1 <sup>13</sup>	8.2 <sup>12</sup>	8.3 <sup>15</sup>	7.2 <sup>13</sup>		1.6 <sup>13</sup>	5.7 <sup>13</sup>	2.7 <sup>15</sup>	1.5 <sup>13</sup>	1.1 <sup>12</sup>	1.0 <sup>15</sup>					9.3+5	1.2+6
8	3.4 <sup>10</sup>	8.5 <sup>12</sup>	2.5 <sup>12</sup>	3.5 <sup>15</sup>	2.7 <sup>13</sup>		5.9 <sup>12</sup>	2.3 <sup>13</sup>	1.7 <sup>15</sup>	5.7 <sup>12</sup>	4.0 <sup>11</sup>	4.6 <sup>14</sup>					3.9+5	5+5
24	5.0 <sup>11</sup>	3.6 <sup>12</sup>	5.4 <sup>11</sup>	1.6 <sup>15</sup>	8.2 <sup>12</sup>		1.8 <sup>12</sup>	9.6 <sup>12</sup>	4.6 <sup>14</sup>	2.2 <sup>12</sup>	1.5 <sup>11</sup>	2.0 <sup>14</sup>					1.2+5	1.7+5
96	NEG.	1.2 <sup>12</sup>	1.4 <sup>11</sup>	5.8 <sup>14</sup>	2.1 <sup>12</sup>		4.6 <sup>11</sup>	3.3 <sup>12</sup>	1.5 <sup>14</sup>	8.7 <sup>11</sup>	5.6 <sup>10</sup>	6.4 <sup>13</sup>					6.5+4	8.0+4
192		8.3 <sup>11</sup>	1.0 <sup>11</sup>	4.0 <sup>14</sup>	1.5 <sup>12</sup>		3.3 <sup>11</sup>	2.2 <sup>12</sup>	1.1 <sup>14</sup>	5.5 <sup>11</sup>	3.2 <sup>10</sup>	3.9 <sup>13</sup>					4.4+4	5.5+4
360		5.2 <sup>11</sup>	6.9 <sup>10</sup>	2.5 <sup>14</sup>	1.0 <sup>12</sup>		2.2 <sup>11</sup>	1.4 <sup>12</sup>	6.6 <sup>13</sup>	3.0 <sup>11</sup>	1.5 <sup>10</sup>	2.1 <sup>13</sup>					2.7+4	3.4+4
720		2.5 <sup>11</sup>	3.3 <sup>10</sup>	1.2 <sup>14</sup>	5.2 <sup>11</sup>		1.1 <sup>11</sup>	7.0 <sup>11</sup>	3.2 <sup>13</sup>	1.3 <sup>11</sup>	3.0 <sup>11</sup>	5.5 <sup>12</sup>					1.3+4	1.6+4
2160		7.0 <sup>10</sup>	NEG.	3.8 <sup>13</sup>	1.7 <sup>11</sup>		3.7 <sup>10</sup>	2.3 <sup>11</sup>	1.1 <sup>13</sup>	5.2 <sup>10</sup>	NEG.	3.2 <sup>10</sup>					3.9+3	5+3
4320		3.6 <sup>10</sup>		1.7 <sup>13</sup>	6.9 <sup>10</sup>		1.5 <sup>10</sup>	9.6 <sup>10</sup>	4.6 <sup>12</sup>	1.8 <sup>10</sup>		NEG.					1.7+3	2.2+3

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SURRY AUXILIARY BLDG RADIATION ZONE AREA N @ EL. 13'

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $mR/hr$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 1 CONTAINMENT

———— MITIGATION PHASE - NO LETDOWN ————

PRELIMINARY

(2)

SOURCE TIME (HR)	SI/CH LINES IN PEN AREA el. 2' FP-10K	CHARGING PUMP CUB. el. 2' & 13' FP-10C	AUX. BLDG SUMP el. 2' FB-9A	DRAIN LINES IN SUMP AREA el. 2' & 13' FP-19N	DRAIN LINES IN PYE TUN. el. 2' FP-14.7A	SAFEGUARDS SUMP DRAIN LINES IN PEN AREA el. 2' FP-7A	SAFEGUARDS SUMP DRAIN LINES IN PYE TUN. el. 2' FP-19C	DRAIN LINES INSIDE WASTE TANKS LUB. el. 2' & 13' FP-19C	LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK el. 2' & 13'	REACTOR COOLANT SAMPLING LINES el. 2' 13' & 27.5'	CONTAIN. LEAKAGE MONITOR LINES el. 2' & 13'	HYDROGEN ANALYZER MAN TRAP el. 13'	CONTAIN. ATMOSP. THRU PIPE PENETRATION el. 2'	CONTAIN. SHINE THRU DOME	CONTAIN. SHINE THRU PERSONAL HATCH	CONTAIN. DOME R.S. HEADERS	(1) SUB-TOTAL	TOTAL
0	NEG.	1.9 <sup>+1</sup>	NEG.	3.4 <sup>+2</sup>	NEG.	NEG.	NEG.	1.5 <sup>+2</sup>	5.7 <sup>+2</sup>	4.4 <sup>+0</sup>	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	3.6 <sup>+2</sup>	1.1 <sup>+3</sup>
1		1.1 <sup>+1</sup>		1.9 <sup>+2</sup>				8.3 <sup>+1</sup>	3.0 <sup>+2</sup>	1.8 <sup>+0</sup>							2.0 <sup>+2</sup>	5.9 <sup>+2</sup>
2		7.7 <sup>+0</sup>		1.3 <sup>+2</sup>				6.1 <sup>+1</sup>	2.1 <sup>+2</sup>	1.3 <sup>+0</sup>							1.4 <sup>+2</sup>	4.1 <sup>+2</sup>
8		3.1 <sup>+0</sup>		5.0 <sup>+1</sup>				2.4 <sup>+1</sup>	7.8 <sup>+1</sup>	4.8 <sup>-1</sup>							5.3 <sup>+1</sup>	1.6 <sup>+2</sup>
24		1.3 <sup>+0</sup>		1.7 <sup>+1</sup>				1.0 <sup>+1</sup>	2.6 <sup>+1</sup>	NEG.							1.8 <sup>+1</sup>	5.4 <sup>+1</sup>
96		4.4 <sup>-1</sup>		4.6 <sup>+0</sup>				3.5 <sup>+0</sup>	7.1 <sup>+0</sup>								5 <sup>+0</sup>	1.6 <sup>+1</sup>
192		NEG.		3.2 <sup>+0</sup>				2.4 <sup>+0</sup>	5.0 <sup>+0</sup>								3.2 <sup>+0</sup>	1.1 <sup>+1</sup>
360				2.1 <sup>+0</sup>				1.5 <sup>+0</sup>	3.3 <sup>+0</sup>								2.1 <sup>+0</sup>	6.9 <sup>+0</sup>
720				1.1 <sup>+0</sup>				NEG.	1.7 <sup>+0</sup>								1.1 <sup>+0</sup>	2.8 <sup>+0</sup>
2160				3.8 <sup>-1</sup>					NEG.								3.8 <sup>-1</sup>	3.8 <sup>-1</sup>
4320	↓	↓	↓	NEG.	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	NEG.	NEG.

NOTED FEB 14 1980

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SURRY AUXILIARY BLDG RADIATION ZONE AREA 0 @ EL. 13'

ESTIMATED HIGHEST DIRECT T DOSE RATES ( $mR/hr$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 1 CONTAINMENT

———— MITIGATION PHASE - NO LETDOWN ————

PRELIMINARY

SOURCE TIME (HR)	SI/CH LINES	CHARGING	AUX. BLDG	DRAIN LINES	DRAIN LINES	SAFEGUARDS	SAFEGUARDS	DRAIN LINES	LOW LEVEL	REACTOR	CONTAIN.	HYDROGEN	CONTAIN.	CONTAIN.	CONTAIN.	CONTAIN.	SUB	TOTAL
	IN PEN AREA EL. 2' FP-10X	PUMP CUB. EL. 2' & 13' FP-10C	SUMP EL. 2' FB-9A	IN SUMP AREA EL. 2' & 13' FP-19N	IN PHE TUN. EL. 2' FP-14.7A	SUMP DRAIN LINE IN PEN AREA EL. 2' FP-7A	SUMP DRAIN LINE IN PHE TUN. EL. 2' FP-19C	INSIDE WASTE TANKS L. 2' FP-19C	OR HIGH LEVEL WASTE DRAIN TANK EL. 2' & 13'	COOLANT SAMPLING LINES EL. 2' & 13'	LEAKAGE MONITOR LINES EL. 2' & 13'	ANALYZER MAIN TRAY EL. 13'	ATMOSP. THRU PIPE PENETRATION EL. 2'	SHINE THRU DOME	SHINE THRU PERSONAL MATCH	DOME R.S. HEADERS	TOTAL	TOTAL
0	1.1 <sup>+6</sup>	1.1 <sup>+5</sup>	NEG.	3.4 <sup>+2</sup>	3.7 <sup>+4</sup>	3.0 <sup>+4</sup>	8.1 <sup>+3</sup>	4.8 <sup>+2</sup>	1.9 <sup>+4</sup>	1.1 <sup>+8</sup>	2.4 <sup>+4</sup>	1.1 <sup>+8</sup>	NEG.	NEG.	NEG.	NEG.	1.1 <sup>+8</sup>	1.1 <sup>+8</sup>
1	5.2 <sup>+5</sup>	6.6 <sup>+4</sup>		1.9 <sup>+2</sup>	1.9 <sup>+4</sup>	1.5 <sup>+4</sup>	4.2 <sup>+3</sup>	2.9 <sup>+2</sup>	1.2 <sup>+4</sup>	4.4 <sup>+3</sup>	5.9 <sup>+3</sup>	2.9 <sup>+1</sup>					3.0 <sup>+7</sup>	3.0 <sup>+7</sup>
2	3.5 <sup>+5</sup>	4.4 <sup>+4</sup>		1.3 <sup>+2</sup>	1.3 <sup>+4</sup>	1.0 <sup>+4</sup>	2.9 <sup>+3</sup>	2.0 <sup>+2</sup>	8.1 <sup>+3</sup>	3.1 <sup>+3</sup>	4.4 <sup>+3</sup>	2.1 <sup>+7</sup>					2.1 <sup>+7</sup>	2.1 <sup>+7</sup>
8	1.3 <sup>+5</sup>	1.8 <sup>+4</sup>		5.0 <sup>+1</sup>	4.8 <sup>+3</sup>	4.0 <sup>+3</sup>	1.1 <sup>+3</sup>	7.7 <sup>+1</sup>	3.3 <sup>+3</sup>	1.2 <sup>+3</sup>	1.6 <sup>+3</sup>	2.4 <sup>+6</sup>					9.6 <sup>+6</sup>	9.6 <sup>+6</sup>
24	3.8 <sup>+4</sup>	7.5 <sup>+3</sup>		1.7 <sup>+1</sup>	1.5 <sup>+3</sup>	1.2 <sup>+3</sup>	3.3 <sup>+2</sup>	3.3 <sup>+1</sup>	1.4 <sup>+3</sup>	4.5 <sup>+2</sup>	5.9 <sup>+2</sup>	4.0 <sup>+6</sup>					4.5 <sup>+6</sup>	4.5 <sup>+6</sup>
96	9.6 <sup>+3</sup>	2.6 <sup>+3</sup>		4.6 <sup>+0</sup>	3.9 <sup>+2</sup>	3.2 <sup>+2</sup>	8.4 <sup>+1</sup>	1.1 <sup>+1</sup>	4.7 <sup>+2</sup>	1.8 <sup>+2</sup>	2.2 <sup>+2</sup>	1.3 <sup>+6</sup>					1.3 <sup>+6</sup>	1.3 <sup>+6</sup>
192	6.8 <sup>+3</sup>	1.8 <sup>+3</sup>		3.2 <sup>+0</sup>	2.9 <sup>+2</sup>	2.2 <sup>+2</sup>	6.2 <sup>+1</sup>	7.7 <sup>+0</sup>	3.1 <sup>+2</sup>	1.1 <sup>+2</sup>	1.3 <sup>+2</sup>	7.9 <sup>+5</sup>					8.0 <sup>+5</sup>	8.0 <sup>+5</sup>
360	4.6 <sup>+3</sup>	1.1 <sup>+3</sup>		2.1 <sup>+0</sup>	1.8 <sup>+2</sup>	1.5 <sup>+2</sup>	4.0 <sup>+1</sup>	4.8 <sup>+0</sup>	1.9 <sup>+2</sup>	6.1 <sup>+1</sup>	5.7 <sup>+1</sup>	4.2 <sup>+5</sup>					4.3 <sup>+5</sup>	4.3 <sup>+5</sup>
720	2.4 <sup>+3</sup>	5.4 <sup>+2</sup>		1.1 <sup>+0</sup>	9.3 <sup>+1</sup>	7.5 <sup>+1</sup>	2.0 <sup>+1</sup>	2.4 <sup>+0</sup>	9.3 <sup>+1</sup>	2.7 <sup>+1</sup>	1.2 <sup>+1</sup>	1.1 <sup>+5</sup>					1.1 <sup>+5</sup>	1.1 <sup>+5</sup>
2160	7.2 <sup>+2</sup>	1.8 <sup>+2</sup>		3.8 <sup>+1</sup>	3.0 <sup>+1</sup>	2.4 <sup>+1</sup>	6.6 <sup>+0</sup>	7.9 <sup>+1</sup>	3.3 <sup>+1</sup>	1.1 <sup>+1</sup>	5.1 <sup>+2</sup>	6.6 <sup>+2</sup>					1.7 <sup>+3</sup>	1.7 <sup>+3</sup>
4320	2.9 <sup>+2</sup>	7.5 <sup>+1</sup>		NEG.	1.2 <sup>+1</sup>	9.9 <sup>+0</sup>	2.6 <sup>+0</sup>	NEG.	1.4 <sup>+1</sup>	3.6 <sup>+0</sup>	NEG.	3.0 <sup>+1</sup>					3.8 <sup>+2</sup>	4.0 <sup>+2</sup>

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NOTED FEB 14 1980

SURRY AUXILIARY BLDG RADIATION ZONE AREA P @ EL. 13'

ESTIMATED HIGHEST DIRECT T DOSE RATES ( $\mu\text{R/hr}$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 1 CONTAINMENT

———— MITIGATION PHASE - NO LETDOWN ————

PRELIMINARY

(2)

SOURCE TIME (HR)	SI/CH LINES IN PEN AREA EL. 2' FP-10R	CHARGING PUMP CUB. EL. 2' & 13' FP-10C	AUX. BLDG SUMP EL. 2' FB-9A	DRAIN LINES IN SWAMP EL. 2' & 13' FP-19N	DRAIN LINES IN PPE TUN. EL. 2' FP-14L, 7A	SAFEGUARDS SUMP DRAIN LINES IN PEN AREA EL. 2' FP-7A	SAFEGUARDS SUMP DRAIN LINES IN PPE TUN. EL. 2' FP-19C	DRAIN LINES INSIDE WASTE TANKS CUB. EL. 2' & 13' FP-19C	LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK EL. 2' & 13'	REACTOR COOLANT SAMPLING LINES EL. 2' & 13'	CONTAIN. LEAKAGE MONITOR LINES EL. 2' & 13'	HYDROGEN ANALYZER DRAIN TRAY EL. 13'	CONTAIN. ATMOSP. THRU PIPE PENETRATION EL. 2'	CONTAIN. SHINE TRAY DOME	CONTAIN. SHINE TRAY PERSONNEL HATCH	CONTAIN. DOME R.S. HEADERS	(1) SUB- TOTAL	TOTAL
0	4.1 <sup>+5</sup>	1.1 <sup>+3</sup>	NEG	7.9 <sup>+1</sup>	NEG.	1.3 <sup>+0</sup>	NEG.	NEG.	1.1 <sup>+3</sup>	9.2 <sup>+2</sup>	8.0 <sup>+2</sup>	1.3 <sup>+5</sup>	NEG.	NEG.	NEG.	NEG.	5.4 <sup>+5</sup>	5.4 <sup>+5</sup>
1	2.0 <sup>+5</sup>	6.6 <sup>+2</sup>		3.9 <sup>+1</sup>		NEG.			6.7 <sup>+2</sup>	3.8 <sup>+2</sup>	1.0 <sup>+2</sup>	3.2 <sup>+4</sup>					2.3 <sup>+5</sup>	2.3 <sup>+5</sup>
2	1.4 <sup>+5</sup>	4.4 <sup>+2</sup>		2.6 <sup>+1</sup>					4.5 <sup>+2</sup>	2.7 <sup>+2</sup>	7.6 <sup>+1</sup>	2.3 <sup>+4</sup>					1.6 <sup>+5</sup>	1.6 <sup>+5</sup>
8	5.0 <sup>+4</sup>	1.8 <sup>+2</sup>		9.6 <sup>+0</sup>					1.9 <sup>+2</sup>	1.0 <sup>+2</sup>	2.7 <sup>+1</sup>	1.1 <sup>+4</sup>					6.1 <sup>+4</sup>	6.1 <sup>+4</sup>
24	1.5 <sup>+4</sup>	7.5 <sup>+1</sup>		2.9 <sup>+0</sup>					7.6 <sup>+1</sup>	3.9 <sup>+1</sup>	1.0 <sup>+1</sup>	4.5 <sup>+3</sup>					2.0 <sup>+4</sup>	2.0 <sup>+4</sup>
96	3.8 <sup>+3</sup>	2.6 <sup>+1</sup>		7.8 <sup>-1</sup>					2.6 <sup>+1</sup>	1.5 <sup>+1</sup>	3.8 <sup>+0</sup>	1.4 <sup>+3</sup>					6.2 <sup>+3</sup>	5.3 <sup>+3</sup>
192	2.7 <sup>+3</sup>	1.8 <sup>+1</sup>		NEG.					1.8 <sup>+1</sup>	9.7 <sup>+0</sup>	2.2 <sup>+0</sup>	8.7 <sup>+2</sup>					3.6 <sup>+3</sup>	3.6 <sup>+3</sup>
360	1.8 <sup>+3</sup>	1.1 <sup>+1</sup>							1.1 <sup>+1</sup>	5.3 <sup>+0</sup>	9.9 <sup>-1</sup>	4.7 <sup>+2</sup>					2.3 <sup>+3</sup>	2.3 <sup>+3</sup>
720	9.4 <sup>+2</sup>	5.4 <sup>+0</sup>							5.2 <sup>+0</sup>	2.3 <sup>+0</sup>	NEG.	1.3 <sup>+2</sup>					1.1 <sup>+3</sup>	1.1 <sup>+3</sup>
2160	2.8 <sup>+2</sup>	1.8 <sup>+0</sup>							1.9 <sup>+0</sup>	9.2 <sup>-1</sup>		7.3 <sup>-1</sup>					2.8 <sup>+2</sup>	2.8 <sup>+2</sup>
4320	1.2 <sup>+2</sup>	7.5 <sup>-1</sup>							7.6 <sup>-1</sup>	NEG.		NEG.					1.2 <sup>+2</sup>	1.2 <sup>+2</sup>

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SURRY AUXILIARY BLDG RADIATION ZONE AREA Q @ EL. 13'

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $\mu\text{R/hr}$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 1 CONTAINMENT

———— MITIGATION PHASE - NO LETDOWN ————

PRELIMINARY

TIME (HR)	SI/CH LINES IN PEN AREA el. 2' FP-10K	CHARGING PUMP CUB. el. 2' & 13' FP-10C	AUX. BLDG SUMP el. 2' FB-9A	DRAIN LINES IN SUMP AREA el. 2' & 13' FP-19N	DRAIN LINES IN PVE TUN. el. 2' FP-19C, 7A	SAFEGUARDS SUMP DRAIN LINES IN PEN AREA el. 2' FP-7A	SAFEGUARDS SUMP DRAIN LINES IN PVE TUN. el. 2' FP-19C	DRAIN LINES INSIDE WASTE TANKS LUB. el. 2' & 13' FP-19C	LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK el. 2' & 13'	REACTOR COOLANT SAMPLING LINES el. 2' & 13' 13:27.5'	CONTAIN. LEAKAGE MONI FOR LINES el. 2' & 13'	HYDROGEN ANALYZER MAIN TRAY el. 143'	CONTAIN. ATMOSP. THRU PIPE PENETRANT el. 2'	CONTAIN. SHINE THRU DOME	CONTAIN. SHINE THRU PERSONNEL HATCH	CONTAIN. DOME R.S. HEADERS	(1) SUB-TOTAL	TOTAL
0	4.4 <sup>+4</sup>	NEG.	NEG.	3.4 <sup>+2</sup>	1.7 <sup>+4</sup>	2.0 <sup>+4</sup>	3.7 <sup>+3</sup>	5.7 <sup>+6</sup>	4.2 <sup>+7</sup>	1.9 <sup>+4</sup>	4.6 <sup>+1</sup>	6.0 <sup>+3</sup>	NEG.	NEG.	NEG.	NEG.	1.1 <sup>+5</sup>	4.8 <sup>+7</sup>
1	1.7 <sup>+4</sup>			1.9 <sup>+2</sup>	6.6 <sup>+3</sup>	9.3 <sup>+3</sup>	1.5 <sup>+3</sup>	3.4 <sup>+6</sup>	2.5 <sup>+7</sup>	7.9 <sup>+3</sup>	1.1 <sup>+1</sup>	1.5 <sup>+3</sup>					4.4 <sup>+4</sup>	2.8 <sup>+7</sup>
2	1.1 <sup>+4</sup>			1.3 <sup>+2</sup>	4.7 <sup>+3</sup>	6.1 <sup>+3</sup>	1.0 <sup>+3</sup>	2.3 <sup>+6</sup>	1.8 <sup>+7</sup>	5.6 <sup>+3</sup>	8.4 <sup>+0</sup>	1.1 <sup>+3</sup>					3.0 <sup>+4</sup>	2.0 <sup>+7</sup>
8	3.8 <sup>+3</sup>			5.0 <sup>+1</sup>	1.6 <sup>+3</sup>	2.2 <sup>+3</sup>	3.5 <sup>+2</sup>	9.4 <sup>+5</sup>	6.9 <sup>+6</sup>	2.1 <sup>+3</sup>	3.0 <sup>+0</sup>	2.1 <sup>+2</sup>					1.0 <sup>+4</sup>	7.9 <sup>+6</sup>
24	9.6 <sup>+2</sup>			1.7 <sup>+1</sup>	4.3 <sup>+2</sup>	6.3 <sup>+2</sup>	9.3 <sup>+1</sup>	3.9 <sup>+5</sup>	3.0 <sup>+6</sup>	8.2 <sup>+2</sup>	1.1 <sup>+0</sup>	6.9 <sup>+1</sup>					3.0 <sup>+3</sup>	3.4 <sup>+6</sup>
96	2.4 <sup>+2</sup>			4.6 <sup>+0</sup>	1.0 <sup>+2</sup>	1.5 <sup>+2</sup>	2.2 <sup>+1</sup>	1.4 <sup>+5</sup>	9.9 <sup>+5</sup>	3.2 <sup>+2</sup>	4.2 <sup>-1</sup>	4.2 <sup>+1</sup>					8.8 <sup>+2</sup>	1.1 <sup>+6</sup>
192	1.7 <sup>+2</sup>			3.2 <sup>+0</sup>	7.6 <sup>+1</sup>	1.1 <sup>+2</sup>	1.7 <sup>+1</sup>	9.1 <sup>+1</sup>	6.7 <sup>+5</sup>	2.0 <sup>+2</sup>	NEG.	2.2 <sup>+1</sup>					6.0 <sup>+2</sup>	7.6 <sup>+5</sup>
360	1.2 <sup>+2</sup>			2.1 <sup>+0</sup>	5.2 <sup>+1</sup>	7.5 <sup>+1</sup>	1.1 <sup>+1</sup>	5.7 <sup>+4</sup>	4.2 <sup>+5</sup>	1.1 <sup>+2</sup>		6.0 <sup>+0</sup>					3.8 <sup>+2</sup>	4.8 <sup>+5</sup>
720	5.8 <sup>+1</sup>			1.1 <sup>+0</sup>	2.6 <sup>+1</sup>	3.8 <sup>+1</sup>	5.7 <sup>+0</sup>	2.7 <sup>+4</sup>	2.1 <sup>+5</sup>	4.9 <sup>+1</sup>		NEG.					1.8 <sup>+2</sup>	2.4 <sup>+5</sup>
2160	1.4 <sup>+1</sup>			3.8 <sup>-1</sup>	6.6 <sup>+0</sup>	1.1 <sup>+1</sup>	1.5 <sup>+0</sup>	9.4 <sup>+3</sup>	6.9 <sup>+4</sup>	1.9 <sup>+1</sup>							5.2 <sup>+1</sup>	7.8 <sup>+4</sup>
4320	5.0 <sup>+0</sup>	Y	Y	NEG.	2.5 <sup>+0</sup>	4.4 <sup>+0</sup>	5.5 <sup>-1</sup>	3.7 <sup>+3</sup>	3.0 <sup>+4</sup>	6.5 <sup>+0</sup>	Y	Y	Y	Y	Y	Y	1.9 <sup>+1</sup>	3.4 <sup>+4</sup>

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SURRY AUXILIARY BLDG RADIATION ZONE AREA R @ EL. 15'

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $\mu\text{R/hr}$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 1 CONTAINMENT

MITIGATION PHASE - NO LETDOWN

PRELIMINARY

(2)

SOURCE TIME (HR)	SI/CH LINES IN PEN AREA el. 2' FP-10K	CHARGING PUMP CUB. el. 2' & 13' FP-10C	AUX. BLDG SUMP el. 2' FB-9A	DRAIN LINES IN SWAMP AREA el. 2' & 13' FP-19N	DRAIN LINES IN PPE TUN. el. 2' FP-11L, 7A	SAFEGUARDS SUMP DRAIN LINES IN PEN AREA el. 2' FP-7A	SAFEGUARDS SUMP DRAIN LINES IN PPE TUN. el. 2' FP-19C	DRAIN LINES INSIDE WASTE TANKS LUB. el. 2' & 13' FP-19C	LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK el. 2' & 13'	REACTOR COOLANT SAMPLING LINES el. 2' & 13' 13:27.5'	CONTAIN. LEAKAGE MONITOR LINES el. 2' & 13'	HYDROGEN ANALYZER MAIN TRAP el. 13'	CONTAIN. ATMOSP. THRU PIPE PENETRATION el. 2'	CONTAIN. SHINE THRU DOME	CONTAIN. SHINE THRU PERSONNEL HATCH	CONTAIN. DOME R.S. HEADERS	(1) SUB-TOTAL	TOTAL
0	4.6 <sup>+5</sup>	1.1 <sup>+3</sup>	NEG.	NEG.	1.7 <sup>+4</sup>	1.2 <sup>+4</sup>	3.7 <sup>+3</sup>	1.5 <sup>+3</sup>	1.4 <sup>+5</sup>	3.4 <sup>+4</sup>	1.2 <sup>+3</sup>	1.7 <sup>+4</sup>	NEG.	NEG.	NEG.	NEG.	5.4 <sup>+5</sup>	6.8 <sup>+5</sup>
1	2.1 <sup>+5</sup>	6.5 <sup>+2</sup>			6.6 <sup>+3</sup>	5.7 <sup>+3</sup>	1.5 <sup>+3</sup>	9.1 <sup>+2</sup>	8.4 <sup>+4</sup>	1.4 <sup>+6</sup>	3.0 <sup>+2</sup>	4.4 <sup>+3</sup>					2.5 <sup>+5</sup>	3.3 <sup>+5</sup>
2	1.4 <sup>+5</sup>	4.4 <sup>+2</sup>			4.7 <sup>+3</sup>	4.0 <sup>+3</sup>	1.0 <sup>+3</sup>	6.2 <sup>+2</sup>	5.7 <sup>+4</sup>	9.8 <sup>+3</sup>	2.2 <sup>+2</sup>	3.3 <sup>+3</sup>					1.6 <sup>+5</sup>	2.2 <sup>+5</sup>
8	5.2 <sup>+4</sup>	1.8 <sup>+2</sup>			1.6 <sup>+3</sup>	1.4 <sup>+3</sup>	3.5 <sup>+2</sup>	2.5 <sup>+2</sup>	2.3 <sup>+4</sup>	3.7 <sup>+3</sup>	7.8 <sup>+1</sup>	1.4 <sup>+3</sup>					5.2 <sup>+4</sup>	7.5 <sup>+4</sup>
24	1.5 <sup>+4</sup>	7.5 <sup>+1</sup>			4.3 <sup>+2</sup>	4.2 <sup>+2</sup>	9.5 <sup>+1</sup>	1.1 <sup>+2</sup>	9.5 <sup>+3</sup>	1.4 <sup>+3</sup>	3.0 <sup>+1</sup>	6.1 <sup>+2</sup>					1.6 <sup>+4</sup>	2.6 <sup>+4</sup>
96	3.8 <sup>+3</sup>	2.6 <sup>+1</sup>			1.0 <sup>+2</sup>	1.0 <sup>+2</sup>	2.2 <sup>+1</sup>	3.6 <sup>+1</sup>	3.3 <sup>+3</sup>	5.6 <sup>+2</sup>	1.1 <sup>+1</sup>	2.0 <sup>+2</sup>					4.8 <sup>+3</sup>	8.1 <sup>+3</sup>
192	2.7 <sup>+3</sup>	1.8 <sup>+1</sup>			7.6 <sup>+1</sup>	7.5 <sup>+1</sup>	1.7 <sup>+1</sup>	2.5 <sup>+1</sup>	2.2 <sup>+3</sup>	3.5 <sup>+2</sup>	6.3 <sup>+0</sup>	1.2 <sup>+2</sup>					3.2 <sup>+3</sup>	5.4 <sup>+3</sup>
360	1.8 <sup>+3</sup>	1.1 <sup>+1</sup>			5.2 <sup>+1</sup>	5.0 <sup>+1</sup>	1.1 <sup>+1</sup>	1.5 <sup>+1</sup>	1.4 <sup>+3</sup>	1.9 <sup>+2</sup>	2.9 <sup>+0</sup>	6.4 <sup>+1</sup>					1.8 <sup>+3</sup>	3.2 <sup>+3</sup>
720	9.2 <sup>+2</sup>	5.4 <sup>+0</sup>			2.6 <sup>+1</sup>	2.6 <sup>+1</sup>	5.7 <sup>+0</sup>	7.7 <sup>+0</sup>	6.6 <sup>+2</sup>	8.5 <sup>+1</sup>	5.9 <sup>+1</sup>	1.7 <sup>+2</sup>					1.2 <sup>+2</sup>	1.9 <sup>+3</sup>
2160	2.7 <sup>+2</sup>	1.8 <sup>+0</sup>			6.6 <sup>+0</sup>	7.7 <sup>+0</sup>	1.5 <sup>+0</sup>	2.5 <sup>+0</sup>	2.3 <sup>+2</sup>	3.4 <sup>+1</sup>	NEG.	1.0 <sup>+1</sup>					3.0 <sup>+2</sup>	5.3 <sup>+2</sup>
4320	1.1 <sup>+2</sup>	7.5 <sup>+1</sup>			2.5 <sup>+0</sup>	3.2 <sup>+0</sup>	5.5 <sup>+1</sup>	1.1 <sup>+0</sup>	9.5 <sup>+1</sup>	1.1 <sup>+1</sup>	↓	NEG.	↓	↓	↓	↓	1.2 <sup>+2</sup>	2.2 <sup>+2</sup>

(1) Subtotal excludes contribution from drain lines, waste tank, LLWDT or HLWDT, and reactor sump. It is not a point source.

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SURRY AUXILIARY BLDG RADIATION ZONE AREA S @ EL. 13'

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $\mu\text{R/hr}$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 1 CONTAINMENT

MITIGATION PHASE - NO LETDOWN

PRELIMINARY

(2)

SOURCE TIME (HR)	SI/CH LINES IN PEN. AREA el. 2' FP-10K	CHARGING PUMP CUB. el. 2' & 13' FP-10C	AUX. BLDG SUMP el. 2' FB-9A	DRAIN LINES IN SUMP AREA el. 2' & 13' FP-19N	DRAIN LINES IN PYE TUN. el. 2' FP-14C, 7A	SAFEGUARDS SUMP DRAIN LINES IN PEN. AREA el. 2' FP-7A	SAFEGUARDS SUMP DRAIN LINES IN PYE TUN. el. 2' FP-19C	DRAIN LINES INSIDE WARD TANKS LUB. el. 2' & 13' FP-19C	LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK el. 2' & 13'	REACTOR COOLANT SAMPLING LINES el. 2' 13', 27.5'	CONTAIN. LEAKAGE MONIT FOR LINES el. 2' & 13'	HYDROGEN ANALYZER DRAIN TRAP el. 13'	CONTAIN. ATMOSP. THRU PIPE PENETRATION el. 2'	CONTAIN. SHINE TR. DOME	CONTAIN. SHINE TR. PERSONNEL HATCH	CONTAIN. DOME R.S. HEADERS	(1) SUB-TOTAL	TOTAL
0	1.3 <sup>+2</sup>	1.0 <sup>+4</sup>	3.5 <sup>+0</sup>	4.4 <sup>+4</sup>	1.0 <sup>+3</sup>	2.8 <sup>+1</sup>	2.2 <sup>+2</sup>	NEG.	3.8 <sup>+0</sup>	1.2 <sup>+4</sup>	NEG.	3.9 <sup>+0</sup>	NEG.	NEG.	NEG.	NEG.	5.5 <sup>+4</sup>	6.7 <sup>+4</sup>
1	3.8 <sup>+1</sup>	6.2 <sup>+3</sup>	6.2 <sup>-1</sup>	2.4 <sup>+4</sup>	5.7 <sup>+2</sup>	8.6 <sup>+0</sup>	1.3 <sup>+2</sup>		2.3 <sup>+0</sup>	4.8 <sup>+3</sup>		1.0 <sup>+0</sup>					3.1 <sup>+4</sup>	3.6 <sup>+4</sup>
2	2.3 <sup>+1</sup>	4.2 <sup>+3</sup>	NEG.	1.7 <sup>+4</sup>	3.9 <sup>+2</sup>	5.5 <sup>+0</sup>	8.6 <sup>+1</sup>		1.6 <sup>+0</sup>	3.4 <sup>+3</sup>		2.6 <sup>-1</sup>					2.2 <sup>+4</sup>	2.5 <sup>+4</sup>
8	6.8 <sup>+0</sup>	1.7 <sup>+3</sup>		6.4 <sup>+3</sup>	1.5 <sup>+2</sup>	1.6 <sup>+0</sup>	3.3 <sup>+1</sup>		6.5 <sup>-1</sup>	1.3 <sup>+3</sup>		NEG.					8.3 <sup>+3</sup>	9.6 <sup>+3</sup>
24	1.4 <sup>+0</sup>	7.2 <sup>+2</sup>		2.1 <sup>+3</sup>	5.1 <sup>+1</sup>	NEG.	1.1 <sup>+1</sup>		NEG.	5.0 <sup>+2</sup>							2.9 <sup>+3</sup>	3.4 <sup>+3</sup>
96	3.5 <sup>-1</sup>	2.4 <sup>+2</sup>		5.8 <sup>+2</sup>	1.4 <sup>+1</sup>		3.1 <sup>+0</sup>			2.0 <sup>+2</sup>							8.3 <sup>+2</sup>	1.0 <sup>+3</sup>
192	NEG.	1.7 <sup>+2</sup>		4.0 <sup>+2</sup>	9.9 <sup>+0</sup>		2.2 <sup>+0</sup>			1.2 <sup>+2</sup>							5.8 <sup>+2</sup>	7.0 <sup>+2</sup>
360		1.0 <sup>+2</sup>		2.7 <sup>+2</sup>	6.4 <sup>+0</sup>		1.4 <sup>+0</sup>			6.7 <sup>+1</sup>							3.8 <sup>+2</sup>	4.4 <sup>+2</sup>
720		5.0 <sup>+1</sup>		1.4 <sup>+2</sup>	3.4 <sup>+0</sup>		7.5 <sup>-1</sup>			3.0 <sup>+1</sup>							1.9 <sup>+2</sup>	2.2 <sup>+2</sup>
2160		1.4 <sup>+1</sup>		4.7 <sup>+1</sup>	1.2 <sup>+0</sup>		NEG.			1.2 <sup>+1</sup>							6.2 <sup>+1</sup>	7.4 <sup>+1</sup>
4320	↓	7.2 <sup>+0</sup>	↓	2.0 <sup>+0</sup>	4.9 <sup>-1</sup>	↓	↓	↓	↓	4.0 <sup>+0</sup>	↓	↓	↓	↓	↓	↓	9.7 <sup>+0</sup>	1.4 <sup>+1</sup>

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SURRY AUXILIARY BLDG RADIATION ZONE AREA T @ EL. 13'

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $\mu\text{R}/\text{hr}$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 1 CONTAINMENT

MITIGATION PHASE - NO LETDOWN

PRELIMINARY

SOURCE TIME (HR)	ST/CH LINES IN PEN. AREA el. 2' FP-10R	CHARGING PUMP CUB. el. 2' & 13' FP-10C	AUX. BLDG SUMP el. 2' FB-9A	DRAIN LINES IN SUMP AREA el. 2' & 13' FP-19N	DRAIN LINES IN PIPE TUN. el. 2' FP-11C, 7A	SAFEGUARDS SUMP DRAIN LINES IN PEN AREA el. 2' FP-7A	SAFEGUARDS SUMP DRAIN LINES IN PIPE TUN. el. 2' FP-19C	DRAIN LINES INSIDE WASTE TANKS CUB. el. 2' & 13' FP-19C	LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK el. 2' & 13'	REACTOR COOLANT SAMPLING LINES el. 2' & 13'	CONTAIN. LEAKAGE MONITOR LINES el. 2' & 13'	HYDROGEN ANALYZER MAIN TRAY el. 13'	CONTAIN. ATMOSP. THRU PIPE PENETRATION el. 2'	CONTAIN. SHINE THRU DOME	CONTAIN. SHINE THRU PRESSURE HATCH	CONTAIN. DOME R.S. HEADERS	(1)	TOTAL
																	SUB-TOTAL	
0	4.1 <sup>+5</sup>	9.6 <sup>+6</sup>	3.5 <sup>+0</sup>	4.4 <sup>+4</sup>	7.2 <sup>+4</sup>	1.3 <sup>+4</sup>	1.6 <sup>+4</sup>	NEG.	6.1 <sup>+0</sup>	1.2 <sup>+4</sup>	2.1 <sup>+1</sup>	1.7 <sup>+4</sup>	NEG.	NEG.	NEG.	NEG.	1.0 <sup>+7</sup>	1.0 <sup>+7</sup>
1	2.1 <sup>+5</sup>	6.8 <sup>+6</sup>	6.2 <sup>-1</sup>	2.4 <sup>+4</sup>	4.4 <sup>+4</sup>	6.9 <sup>+3</sup>	4.7 <sup>+3</sup>		3.7 <sup>+0</sup>	6.0 <sup>+3</sup>	5.1 <sup>+0</sup>	4.4 <sup>+3</sup>					6.1 <sup>+6</sup>	6.1 <sup>+6</sup>
2	1.4 <sup>+5</sup>	4.0 <sup>+6</sup>	NEG.	1.7 <sup>+4</sup>	3.1 <sup>+4</sup>	4.8 <sup>+3</sup>	6.8 <sup>+3</sup>		2.5 <sup>+0</sup>	3.5 <sup>+3</sup>	3.8 <sup>+0</sup>	3.3 <sup>+3</sup>					4.2 <sup>+6</sup>	4.2 <sup>+6</sup>
8	5.4 <sup>+4</sup>	1.6 <sup>+6</sup>		6.4 <sup>+3</sup>	1.3 <sup>+4</sup>	1.9 <sup>+3</sup>	2.9 <sup>+3</sup>		1.0 <sup>+0</sup>	1.3 <sup>+3</sup>	1.3 <sup>+0</sup>	1.4 <sup>+3</sup>					1.7 <sup>+6</sup>	1.7 <sup>+6</sup>
24	1.7 <sup>+4</sup>	6.8 <sup>+5</sup>		2.1 <sup>+3</sup>	5.9 <sup>+3</sup>	6.2 <sup>+2</sup>	1.3 <sup>+3</sup>		4.2 <sup>-1</sup>	5.2 <sup>+2</sup>	5.1 <sup>-1</sup>	6.1 <sup>+2</sup>					7.1 <sup>+5</sup>	7.1 <sup>+5</sup>
96	4.4 <sup>+3</sup>	2.2 <sup>+5</sup>		5.8 <sup>+2</sup>	2.2 <sup>+3</sup>	1.7 <sup>+2</sup>	4.8 <sup>+2</sup>		NEG.	2.0 <sup>+2</sup>	NEG.	2.0 <sup>+2</sup>					2.3 <sup>+5</sup>	2.3 <sup>+5</sup>
192	3.1 <sup>+3</sup>	1.5 <sup>+5</sup>		4.0 <sup>+2</sup>	1.5 <sup>+3</sup>	1.2 <sup>+2</sup>	3.3 <sup>+2</sup>			1.3 <sup>+2</sup>		1.2 <sup>+2</sup>					1.5 <sup>+5</sup>	1.5 <sup>+5</sup>
360	2.1 <sup>+3</sup>	9.6 <sup>+4</sup>		2.7 <sup>+2</sup>	9.3 <sup>+2</sup>	7.9 <sup>+1</sup>	2.0 <sup>+2</sup>			7.0 <sup>+1</sup>		6.4 <sup>+1</sup>					1.0 <sup>+5</sup>	1.0 <sup>+5</sup>
720	1.1 <sup>+3</sup>	4.8 <sup>+4</sup>		1.4 <sup>+2</sup>	4.3 <sup>+2</sup>	4.1 <sup>+1</sup>	9.5 <sup>+2</sup>			3.1 <sup>+2</sup>		1.7 <sup>+2</sup>					5.1 <sup>+4</sup>	5.1 <sup>+4</sup>
2160	3.5 <sup>+2</sup>	1.3 <sup>+4</sup>		4.7 <sup>+1</sup>	1.4 <sup>+2</sup>	1.4 <sup>+1</sup>	3.1 <sup>+2</sup>			1.2 <sup>+1</sup>		1.0 <sup>-1</sup>					1.4 <sup>+4</sup>	1.4 <sup>+4</sup>
4320	1.5 <sup>+2</sup>	6.8 <sup>+3</sup>		2.0 <sup>+0</sup>	6.2 <sup>+1</sup>	NEG.	1.4 <sup>+1</sup>			4.1 <sup>+0</sup>		NEG.					7.0 <sup>+3</sup>	7.0 <sup>+3</sup>

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SURRY AUXILIARY BLDG RADIATION ZONE AREA U @ EL. 13'

ESTIMATED HIGHEST DIRECT T DOSE RATES ( $\mu R/hr$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 1 CONTAINMENT

———— MITIGATION PHASE - NO LETDOWN ————

PRELIMINARY

(2)

SOURCE TIME (HR)	SI/CH LINES IN PEN AREA el. 2' FP-10K	CHARGING PUMP CUB. el. 2' & 13' FP-10C	AUX. BLDG SUMP el. 2' FB-9A	DRAIN LINES IN SUMP AREA el. 2' & 13' FP-19N	DRAIN LINES IN PYE TUN. el. 2' FP-19L, 7A	SAFEGUARDS SUMP DRAIN LINE IN PEN AREA el. 2' FP-7A	SAFEGUARDS SUMP DRAIN LINE IN PIPE TUN. el. 2' FP-19C	DRAIN LINE INSIDE WHTD TANKS CUB. el. 2' & 13' FP-19C	LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK el. 2' & 13'	REACTOR COOLANT SAMPLING LINES el. 2' & 13'	CONTAIN. LEAKAGE MONI FOR LINES el. 2' & 13'	HYDROGEN ANALYZER DRAIN TRAY el. 13'	CONTAIN. ATMOSP. THRU PIPE PENETRATION el. 2'	CONTAIN. SHINE THRU DOME	CONTAIN. SHINE THRU PERSONAL HATCH	CONTAIN. DOME R.S. HEADERS	(1) SUB- TOTAL	TOTAL
0	1.3 <sup>+2</sup>	1.0 <sup>+4</sup>	1.9 <sup>+5</sup>	4.4 <sup>+6</sup>	2.3 <sup>+3</sup>	2.8 <sup>+0</sup>	6.1 <sup>+2</sup>	NEG.	3.8 <sup>+0</sup>	5.3 <sup>+4</sup>	NEG.	1.3 <sup>+2</sup>	NEG.	NEG.	NEG.	NEG.	4.6 <sup>+6</sup>	4.7 <sup>+6</sup>
1	3.9 <sup>+1</sup>	6.2 <sup>+3</sup>	8.2 <sup>+4</sup>	2.7 <sup>+6</sup>	1.4 <sup>+3</sup>	NEG.	3.1 <sup>+2</sup>		2.8 <sup>+0</sup>	2.2 <sup>+4</sup>		3.2 <sup>+1</sup>					2.9 <sup>+6</sup>	2.8 <sup>+6</sup>
2	2.3 <sup>+1</sup>	4.2 <sup>+3</sup>	5.4 <sup>+4</sup>	1.9 <sup>+6</sup>	1.0 <sup>+3</sup>		2.2 <sup>+2</sup>		1.6 <sup>+0</sup>	1.5 <sup>+4</sup>		2.3 <sup>+1</sup>					2.0 <sup>+6</sup>	2.0 <sup>+6</sup>
8	6.8 <sup>+0</sup>	1.7 <sup>+3</sup>	1.9 <sup>+4</sup>	8.0 <sup>+5</sup>	4.2 <sup>+2</sup>		9.2 <sup>+1</sup>		6.5 <sup>-1</sup>	5.8 <sup>+3</sup>		1.1 <sup>+1</sup>					8.2 <sup>+5</sup>	8.3 <sup>+5</sup>
24	1.4 <sup>+0</sup>	7.2 <sup>+2</sup>	4.8 <sup>+3</sup>	3.5 <sup>+5</sup>	1.9 <sup>+2</sup>		4.2 <sup>+1</sup>		NEG.	2.2 <sup>+3</sup>		4.5 <sup>+0</sup>					3.5 <sup>+5</sup>	3.6 <sup>+5</sup>
96	35 <sup>-1</sup>	2.4 <sup>+2</sup>	1.2 <sup>+3</sup>	1.3 <sup>+5</sup>	7.0 <sup>+1</sup>		1.5 <sup>+1</sup>			8.0 <sup>+2</sup>		1.4 <sup>+0</sup>					1.3 <sup>+5</sup>	1.3 <sup>+5</sup>
192	NEG.	1.7 <sup>+2</sup>	8.5 <sup>+2</sup>	8.9 <sup>+4</sup>	4.8 <sup>+1</sup>		1.1 <sup>+1</sup>			5.5 <sup>+2</sup>		8.7 <sup>-1</sup>					9.0 <sup>+4</sup>	9.1 <sup>+4</sup>
360		1.0 <sup>+2</sup>	5.9 <sup>+2</sup>	5.6 <sup>+4</sup>	2.98 <sup>+1</sup>		6.6 <sup>+0</sup>			3.0 <sup>+2</sup>							5.7 <sup>+4</sup>	5.7 <sup>+4</sup>
720		5.0 <sup>+1</sup>	3.0 <sup>+2</sup>	2.6 <sup>+4</sup>	1.4 <sup>+1</sup>		3.1 <sup>+0</sup>			1.3 <sup>+2</sup>							2.6 <sup>+4</sup>	2.6 <sup>+4</sup>
2160		1.4 <sup>+1</sup>	7.4 <sup>+1</sup>	8.5 <sup>+3</sup>	4.5 <sup>+0</sup>		9.9 <sup>-1</sup>			5.2 <sup>+1</sup>							8.6 <sup>+3</sup>	8.6 <sup>+3</sup>
4320		7.2 <sup>+0</sup>	2.7 <sup>+1</sup>	3.7 <sup>+3</sup>	2.0 <sup>+0</sup>		NEG.			1.8 <sup>+1</sup>							3.7 <sup>+3</sup>	3.7 <sup>+3</sup>

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SURRY AUXILIARY BLDG RADIATION ZONE AREA V @ EL. 13'

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $mR/hr$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 1 CONTAINMENT

———— MITIGATION PHASE - NO LETDOWN ————

PRELIMINARY

(2)

SOURCE TIME (HR)	SI/CN LINES IN PEN AREA	CHARGING PUMP CUB.	AUX. BLDG SUMP	DRAIN LINES IN SUMP AREA	DRAIN LINES IN PYE TUN.	SAFEGUARDS SUMP DRAIN LINE IN PEN AREA EL 2'	SAFEGUARDS SUMP DRAIN LINE IN PYE TUN. EL 2'	DRAIN LINE INSIDE WASTE TANKS LUB. EL 2' & 13'	LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK EL 2' & 13'	REACTOR COOLANT SAMPLING LINES EL 2' & 13'	CONTAIN. LEAKAGE MONI FOR LINES EL 2' & 13'	HYDROGEN ANALYZER DRAIN TRAY EL 143'	CONTAIN. ATMOSP. THRU PIPE PENETRATION EL 2'	CONTAIN. SHINE THRU DOME	CONTAIN. SHINE THRU PERSONNEL HATCH	CONTAIN. DOME R.S. HEADERS	(1) SUB- TOTAL	TOTAL
	el. 2' FP-10K	el. 2' & 13' FP-10C	el. 2' FB-9A	el. 2' & 13' FP-19N	el. 2' FP-MC, 7A	el. 2' FP-7A	el. 2' FP-19C	el. 2' & 13' FP-19C										
0	41 <sup>+3</sup>	3.2 <sup>+5</sup>	1.1 <sup>+2</sup>	1.0 <sup>+4</sup>	NEG.	9.0 <sup>+1</sup>	NEG.	NEG.	NEG.	3.3 <sup>+6</sup>	NEG.	3.9 <sup>+0</sup>	NEG.	NEG.	NEG.	NEG.	3.3 <sup>+5</sup>	3.6 <sup>+6</sup>
1	1.2 <sup>+3</sup>	1.9 <sup>+5</sup>	2.1 <sup>+1</sup>	5.0 <sup>+3</sup>		2.8 <sup>+1</sup>				1.4 <sup>+6</sup>		1.0 <sup>+0</sup>					2.0 <sup>+5</sup>	1.6 <sup>+6</sup>
2	7.5 <sup>+2</sup>	1.3 <sup>+5</sup>	1.2 <sup>+1</sup>	3.3 <sup>+3</sup>		1.8 <sup>+1</sup>				9.7 <sup>+5</sup>		2.6 <sup>-1</sup>					1.3 <sup>+5</sup>	1.1 <sup>+6</sup>
8	2.2 <sup>+2</sup>	5.3 <sup>+4</sup>	2.6 <sup>+0</sup>	1.2 <sup>+3</sup>		5.1 <sup>+0</sup>				3.7 <sup>+5</sup>		NEG.					5.4 <sup>+4</sup>	4.2 <sup>+5</sup>
24	4.4 <sup>+1</sup>	2.2 <sup>+4</sup>	2.7 <sup>-1</sup>	3.8 <sup>+2</sup>		1.1 <sup>+0</sup>				1.4 <sup>+5</sup>							2.2 <sup>+4</sup>	1.6 <sup>+5</sup>
96	1.1 <sup>+1</sup>	7.4 <sup>+3</sup>	NEG.	1.0 <sup>+2</sup>		NEG.				5.6 <sup>+4</sup>							7.5 <sup>+3</sup>	6.4 <sup>+4</sup>
192	8.6 <sup>+0</sup>	5.1 <sup>+3</sup>		7.1 <sup>+1</sup>						3.5 <sup>+4</sup>							5.2 <sup>+3</sup>	4.0 <sup>+4</sup>
360	5.8 <sup>+0</sup>	3.2 <sup>+3</sup>		4.7 <sup>+1</sup>						1.9 <sup>+4</sup>							3.3 <sup>+3</sup>	2.2 <sup>+4</sup>
720	2.6 <sup>+0</sup>	1.5 <sup>+3</sup>		2.4 <sup>+1</sup>						8.4 <sup>+3</sup>							1.5 <sup>+3</sup>	9.9 <sup>+3</sup>
2160	4.2 <sup>-1</sup>	4.3 <sup>+2</sup>		7.5 <sup>+0</sup>						3.3 <sup>+3</sup>							4.4 <sup>+2</sup>	3.7 <sup>+3</sup>
4320	NEG.	2.2 <sup>+2</sup>		3.1 <sup>+0</sup>						1.1 <sup>+2</sup>							2.2 <sup>+2</sup>	1.3 <sup>+3</sup>

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PRELIMINARY

SURRY AUXILIARY BLDG RADIATION ZONE AREA W @ EL. 27'-6"

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $\mu R/hr$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 1 CONTAINMENT

———— MITIGATION PHASE - NO LETDOWN ————

(2)

SOURCE TIME (HR)	SI/CH LINES IN PEN AREA el. 2' FP-10R	CHARGING PUMP CUB. el. 2' & 13' FP-10C	AUX. BLDG SUMP el. 2' FB-9A	DRAIN LINES IN SUMP AREA el. 2' & 13' FP-19N	DRAIN LINES IN PVE TUN. el. 2' FP-19L, 7A	SAFEGUARDS SUMP DRAIN LINE IN PEN AREA el. 2' FP-7A	SAFEGUARDS SUMP DRAIN LINE IN PVE TUN. el. 2' FP-19C	DRAIN LINES INSIDE UNIT TANKS CUB. el. 2' & 13' FP-19C	LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK el. 2' & 13'	REACTOR COOLANT SAMPLING LINES el. 2' & 13' 27.5'	CONTAIN. LEAKAGE MONITOR LINES el. 2' & 13'	HYDROGEN ANALYZER MAIN TRAY el. 13'	CONTAIN. ATMOSP. THRU PIPE PENETRATION el. 2'	CONTAIN. SHINE THRU DOME	CONTAIN. SHINE THRU PERSONNEL HATCH	CONTAIN. DOME R.S. HEADERS	SUB-TOTAL	TOTAL
0	2.5 <sup>+2</sup>	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	1.5 <sup>+1</sup>	NEG.	2.1 <sup>+2</sup>	4.0 <sup>+2</sup>	4.3 <sup>-1</sup>	2.8 <sup>+3</sup>	2.8 <sup>+3</sup>
1	6.1 <sup>+1</sup>											NEG.		5.5 <sup>+2</sup>	1.1 <sup>+2</sup>	2.0 <sup>+0</sup>	5.2 <sup>+2</sup>	5.2 <sup>+2</sup>
2	3.6 <sup>+1</sup>													2.6 <sup>+2</sup>	8.0 <sup>+1</sup>	1.0 <sup>+0</sup>	3.8 <sup>+2</sup>	3.8 <sup>+2</sup>
8	9.2 <sup>+0</sup>													5.2 <sup>+1</sup>	3.0 <sup>+1</sup>	4.3 <sup>-1</sup>	9.2 <sup>+1</sup>	9.2 <sup>+1</sup>
24	1.4 <sup>+0</sup>													3.6 <sup>+0</sup>	1.6 <sup>+1</sup>	NEG.	2.1 <sup>+1</sup>	2.1 <sup>+1</sup>
96	4.1 <sup>-1</sup>													1.7 <sup>-1</sup>	6.0 <sup>+0</sup>		6.6 <sup>+0</sup>	6.6 <sup>+0</sup>
192	NEG.													NEG.	4.0 <sup>+0</sup>		4.0 <sup>+0</sup>	4.0 <sup>+0</sup>
360															2.0 <sup>+0</sup>		2.0 <sup>+0</sup>	2.0 <sup>+0</sup>
720															6.0 <sup>-1</sup>		6.0 <sup>-1</sup>	6.0 <sup>-1</sup>
2160															NEG.		NEG.	NEG.
4320																		

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SURRY AUXILIARY BLDG. RADIATION ZONE AREA X @ EL. 27'-6"

PRELIMINARY

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $\mu R/hr$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 1 CONTAINMENT

———— MITIGATION PHASE - NO LETDOWN ————

(2)

TIME (HR)	SI/CH LINES IN PEN AREA el. 2' FP-10R	CHARGING PUMP CUB. el. 2' & 13' FP-10C	AUX. BLDG SUMP el. 2' FB-9A	DRAIN LINES IN SWAMP AREA el. 2' & 13' FP-19N	DRAIN LINES IN PPE TUN. el. 2' FP-19C, 7A	SAFEGUARDS SUMP DRAIN LINES IN PEN AREA el. 2' FP-7A	SAFEGUARDS SUMP DRAIN LINES IN PPE TUN. el. 2' FP-19C	DRAIN LINES INSIDE WASTE TANKS CUB. el. 2' & 13' FP-19C	LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK el. 2' & 13'	REACTOR COOLANT SAMPLING LINES el. 2' & 13' 13:27.5'	CONTAIN. LEAKAGE MONIT. LINES el. 2' & 13'	HYDROGEN ANALYZER MAIN TRAY el. 13'	CONTAIN. ATMOSP. THRU PIPE PENETRATIONS el. 2'	CONTAIN. SHINE THRU DOME	CONTAIN. SHINE THRU PERSONAL HATCH	CONTAIN. DOME R.S. HEADERS	(1) SUB-TOTAL	TOTAL
0	NEG.	4.7 <sup>+4</sup>	5.5 <sup>+2</sup>	2.2 <sup>+3</sup>	NEG.	NEG.	NEG.	NEG.	NEG.	6.1 <sup>+2</sup>	NEG.	2.4 <sup>+0</sup>	NEG.	1.1 <sup>+0</sup>	NEG.	4.3 <sup>-5</sup>	5.0 <sup>+4</sup>	5.0 <sup>+4</sup>
1		1.7 <sup>+4</sup>	2.3 <sup>+2</sup>	9.4 <sup>+2</sup>						2.5 <sup>+2</sup>		NEG.		1.9 <sup>-1</sup>		1.0 <sup>-3</sup>	1.8 <sup>+4</sup>	1.8 <sup>+4</sup>
2		1.2 <sup>+4</sup>	1.5 <sup>+2</sup>	6.2 <sup>+2</sup>						1.8 <sup>+2</sup>				NEG.		NEG.	1.3 <sup>+4</sup>	1.3 <sup>+4</sup>
8		4.7 <sup>+3</sup>	5.3 <sup>+1</sup>	2.2 <sup>+2</sup>						6.6 <sup>+1</sup>							5.0 <sup>+3</sup>	5.0 <sup>+3</sup>
24		2.0 <sup>+3</sup>	1.4 <sup>+1</sup>	5.7 <sup>+1</sup>						2.6 <sup>+1</sup>							2.1 <sup>+3</sup>	2.1 <sup>+3</sup>
96		6.7 <sup>+2</sup>	3.4 <sup>+0</sup>	1.4 <sup>+1</sup>						1.0 <sup>+1</sup>							6.9 <sup>+2</sup>	7.0 <sup>+2</sup>
192		4.5 <sup>+2</sup>	2.4 <sup>+0</sup>	1.0 <sup>+1</sup>						6.4 <sup>+0</sup>							4.6 <sup>+2</sup>	4.7 <sup>+2</sup>
360		2.9 <sup>+2</sup>	1.7 <sup>+0</sup>	6.9 <sup>+0</sup>						3.5 <sup>+0</sup>							2.9 <sup>+2</sup>	2.9 <sup>+2</sup>
720		1.4 <sup>+2</sup>	NEG.	3.4 <sup>+0</sup>						1.5 <sup>+0</sup>							1.4 <sup>+2</sup>	1.4 <sup>+2</sup>
2160		4.7 <sup>+1</sup>		88 <sup>-1</sup>						6.1 <sup>-1</sup>							4.8 <sup>+1</sup>	4.8 <sup>+1</sup>
4320	↓	2.0 <sup>+1</sup>	↓	NEG.	↓	↓	↓	↓	↓	NEG.	↓	↓	↓	↓	↓	↓	2.0 <sup>+1</sup>	2.0 <sup>+1</sup>

(1) includes release contribution from drain lines inside Waste Tanks enclosure, LLWDT or HLWDT, and reactor sampling lines not in protection area.

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SURRY AUXILIARY BLDG RADIATION ZONE AREA Y @ EL. 27'-6"

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $mR/hr$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 1 CONTAINMENT

———— MITIGATION PHASE - NO LETDOWN ————

PRELIMINARY

SOURCE TIME (HR)	SI/CH LINES IN PEN AREA	CHARGING PUMP CUB.	AUX. BLDG SUMP	DRAIN LINES IN SUMP AREA	DRAIN LINES IN PVE TUN.	SAFEGUARDS SUMP DRAIN LINES IN PEN AREA EL. 2'	SAFEGUARDS SUMP DRAIN LINES IN PVE TUN. EL. 2'	DRAIN LINES INSIDE WASTE TANKS CUB.	LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK EL. 2' & 13'	REACTOR COOLANT SAMPLING LINES EL. 2' & 13'	CONTAIN. LEAKAGE MONITOR LINES EL. 1' & 13'	HYDROGEN ANALYZER DEAN TRAY EL. 13'	CONTAIN. ATMOSP. THRU PIPE PENETRATOR EL. 2'	CONTAIN. SHINE THRU DOME	CONTAIN. SHINE THRU PERSONAL MATCH	CONTAIN. BOMB R.S. HEADERS	(1) SUB- TOTAL	TOTAL
	el. 2' FP-10K	el. 2' & 13' FP-10C	el. 2' EB-9A	el. 2' & 13' FP-19N	el. 2' FP-14L, 7A	el. 2' FP-7A	el. 2' FP-19C	el. 2' & 13' FP-19C										
0	NEG.	4.7 <sup>+4</sup>	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	1.3 <sup>+7</sup>	NEG.	2.4 <sup>+0</sup>	NEG.	1.4 <sup>+0</sup>	NEG.	4.3 <sup>-5</sup>	4.7 <sup>+4</sup>	1.3 <sup>+7</sup>
1		1.7 <sup>+4</sup>								5.3 <sup>+6</sup>				1.9 <sup>-1</sup>		1.0 <sup>-3</sup>	1.7 <sup>+4</sup>	5.3 <sup>+6</sup>
2		1.2 <sup>+4</sup>								3.7 <sup>+6</sup>			NEG.			NEG.	1.2 <sup>+4</sup>	3.7 <sup>+6</sup>
8		4.7 <sup>+3</sup>								1.4 <sup>+6</sup>							4.7 <sup>+3</sup>	1.4 <sup>+6</sup>
24		2.0 <sup>+3</sup>								5.4 <sup>+5</sup>							2.0 <sup>+3</sup>	5.4 <sup>+5</sup>
96		6.7 <sup>+2</sup>								2.1 <sup>+5</sup>							6.7 <sup>+2</sup>	2.1 <sup>+5</sup>
192		4.5 <sup>+2</sup>								1.3 <sup>+5</sup>							4.5 <sup>+2</sup>	1.3 <sup>+5</sup>
360		2.8 <sup>+2</sup>								7.3 <sup>+4</sup>							2.8 <sup>+2</sup>	7.3 <sup>+4</sup>
720		1.4 <sup>+2</sup>								3.2 <sup>+4</sup>							1.4 <sup>+2</sup>	3.2 <sup>+4</sup>
2160		4.7 <sup>+1</sup>								1.3 <sup>+4</sup>							4.7 <sup>+1</sup>	1.3 <sup>+4</sup>
4320	↓	2.0 <sup>+1</sup>	↓	↓	↓	↓	↓	↓	↓	4.3 <sup>+3</sup>	↓	↓	↓	↓	↓	↓	2.0 <sup>+1</sup>	4.3 <sup>+3</sup>

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SURRY AUXILIARY BLDG RADIATION ZONE AREA Z @ EL. 27'-6"

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $mR/hr$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 1 CONTAINMENT

———— MITIGATION PHASE - NO LETDOWN ————

SOURCE TIME (HR)	SI/CH LINES	CHARGING	AUX. BLDG	DRAIN LINES	DRAIN LINES	SAFEGUARDS	SAFEGUARDS	DRAIN LINES	LOW LEVEL	REACTOR	CONTAIN.	HYDROGEN	CONTAIN.	CONTAIN.	CONTAIN.	CONTAIN.	(1)	TOTAL
	IN PEN. AREA el. 2'	PUMP CUB. el. 2' & 13'	SUMP el. 2'	IN SUMP AREA el. 2' & 13'	IN PHE TUN. el. 2'	SUMP DRAIN LINES IN PEN AREA el. 2'	SUMP DRAIN LINES IN PHE TUN. el. 2'	INSIDE WASTE TANKS CUB. el. 2' & 13'	OR HIGH LEVEL WASTE DRAIN TANK el. 2' & 13'	COOLANT SAMPLING LINES el. 2' & 13'	LEAKAGE MONI FOR LINES el. 2' & 13'	ANALYZER MAN TRAP el. 13'	ATMOSP. THRU PIPE PENETRATION el. 2'	SHINE THRU DOME	SHINE THRU PERSONAL HATCH	DOME P.S. HEADERS	SUB- TOTAL	
0	NEG.	3.6 <sup>+1</sup>	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	3.3 <sup>+3</sup>	NEG.	NEG.	NEG.	1.1 <sup>+3</sup>	4.2 <sup>+2</sup>	3.2 <sup>-2</sup>	1.6 <sup>+3</sup>	4.9 <sup>+3</sup>
1		2.1 <sup>+1</sup>								1.4 <sup>+3</sup>				1.4 <sup>+2</sup>	1.1 <sup>+2</sup>	7.5 <sup>-1</sup>	2.7 <sup>+2</sup>	1.7 <sup>+3</sup>
2		1.4 <sup>+1</sup>								9.7 <sup>+2</sup>				1.0 <sup>+2</sup>	8.0 <sup>+8</sup>	NEG.	1.9 <sup>+2</sup>	1.2 <sup>+3</sup>
8		5.8 <sup>+0</sup>								3.7 <sup>+2</sup>				2.1 <sup>+1</sup>	3.0 <sup>+1</sup>		5.7 <sup>+1</sup>	4.3 <sup>+2</sup>
24		2.5 <sup>+0</sup>								1.4 <sup>+2</sup>				1.5 <sup>+0</sup>	1.6 <sup>+1</sup>		2.0 <sup>+1</sup>	1.6 <sup>+2</sup>
96		8.2 <sup>-1</sup>								5.6 <sup>+1</sup>				6.0 <sup>-2</sup>	6.0 <sup>+0</sup>		6.8 <sup>+0</sup>	6.3 <sup>+1</sup>
192		NEG.								3.5 <sup>+1</sup>				NEG.	4.0 <sup>+0</sup>		4.0 <sup>+0</sup>	3.9 <sup>+1</sup>
360										1.9 <sup>+1</sup>					2.0 <sup>+0</sup>		2.0 <sup>+0</sup>	2.1 <sup>+1</sup>
720										8.4 <sup>+0</sup>					6.0 <sup>-1</sup>		6.0 <sup>-1</sup>	9.0 <sup>+0</sup>
2160										3.3 <sup>+0</sup>					NEG.		NEG.	3.3 <sup>+0</sup>
4320										1.1 <sup>+0</sup>							NEG.	1.1 <sup>+0</sup>

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SURRY AUXILIARY BLDG RADIATION ZONE AREA AA @ EL. 27'-6"

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $\mu R/hr$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 1 CONTAINMENT

———— MITIGATION PHASE - NO LETDOWN ————

PRELIMINARY

SOURCE TIME (HR)	SI/CH LINES	CHARGING	AUX. BLDG	DRAIN LINES	DRAIN LINES	SAFEGUARDS	SAFEGUARDS	DRAIN LINE	LOW LEVEL	REACTOR	CONTAIN.	HYDROGEN	CONTAIN.	CONTAIN.	CONTAIN.	CONTAIN.	SUB- TOTAL	TOTAL
	IN PER AREA el. 2' FP-10K	PUMP CUB. el. 2' & 13' FP-10C	SUMP el. 2' FB-9A	IN SUMP AREA el. 2' & 13' FP-19N	IN PPE TUN. el. 2' FP-14L, 7A	SUMP DRAIN LINE IN PER AREA el. 2' FP-7A	SUMP DRAIN LINE IN PPE TUN. el. 2' FP-19C	INSIDE WARE TANKS CUB. el. 2' & 13' FP-19C	OR HIGH LEVEL WASTE DRAIN TANK el. 2' & 13'	COOLANT SAMPLING LINES el. 2' & 13' 13:27.5'	LEAKAGE MONITOR LINES el. 2' & 13'	ANALYZER DRAIN TRAP el. 13'	ATMOSP. THRU PIPE PENETRATION el. 2'	SHINE THRU DOME	SHINE THRU PERSONAL MATCH	DOME R.S. HEADERS		
0	7.7 <sup>+2</sup>	4.7 <sup>+4</sup>	NEG.	NEG.	4.4 <sup>+1</sup>	2.2 <sup>+1</sup>	9.7 <sup>+0</sup>	NEG.	NEG.	2.6 <sup>+3</sup>	1.3 <sup>+2</sup>	1.7 <sup>+4</sup>	NEG.	4.0 <sup>+2</sup>	4.0 <sup>+2</sup>	8.6 <sup>-4</sup>	6.6 <sup>+4</sup>	6.8 <sup>+4</sup>
1	1.9 <sup>+2</sup>	1.7 <sup>+4</sup>			1.2 <sup>+1</sup>	5.9 <sup>+0</sup>	2.6 <sup>+0</sup>			1.1 <sup>+3</sup>	3.2 <sup>+1</sup>	2.1 <sup>+3</sup>		5.2 <sup>+1</sup>	1.1 <sup>+2</sup>	9.1 <sup>-1</sup>	3.0 <sup>+4</sup>	3.1 <sup>+4</sup>
2	1.1 <sup>+2</sup>	1.2 <sup>+4</sup>			7.6 <sup>+0</sup>	3.6 <sup>+0</sup>	1.7 <sup>+0</sup>			7.6 <sup>+2</sup>	2.4 <sup>+1</sup>	1.5 <sup>+3</sup>		3.8 <sup>+1</sup>	8.0 <sup>+1</sup>	NEG.	1.2 <sup>+4</sup>	1.3 <sup>+4</sup>
8	3.0 <sup>+1</sup>	4.7 <sup>+3</sup>			2.2 <sup>+0</sup>	NEG.	4.8 <sup>-1</sup>			2.9 <sup>+2</sup>	8.5 <sup>+0</sup>	6.4 <sup>+2</sup>		7.2 <sup>+0</sup>	3.0 <sup>+1</sup>		5.4 <sup>+3</sup>	5.7 <sup>+3</sup>
24	5.2 <sup>+0</sup>	2.0 <sup>+3</sup>			4.2 <sup>-1</sup>		NEG.			1.1 <sup>+2</sup>	3.2 <sup>+0</sup>	1.5 <sup>+2</sup>		4.3 <sup>-1</sup>	1.6 <sup>+1</sup>		2.2 <sup>+3</sup>	2.3 <sup>+3</sup>
96	1.3 <sup>+0</sup>	6.7 <sup>+2</sup>			NEG.					4.4 <sup>+1</sup>	1.2 <sup>+0</sup>	1.2 <sup>+1</sup>		NEG.	6.0 <sup>+0</sup>		6.9 <sup>+2</sup>	7.3 <sup>+2</sup>
192	1.1 <sup>+0</sup>	4.5 <sup>+2</sup>								2.8 <sup>+1</sup>	6.8 <sup>-1</sup>	4.9 <sup>+0</sup>			4.0 <sup>+0</sup>		4.5 <sup>+2</sup>	4.9 <sup>+2</sup>
360	7.0 <sup>-1</sup>	2.8 <sup>+2</sup>								1.5 <sup>+1</sup>	NEG.	2.1 <sup>+0</sup>			2.0 <sup>+0</sup>		2.9 <sup>+2</sup>	3.0 <sup>+2</sup>
720	NEG.	1.4 <sup>+2</sup>								6.6 <sup>+0</sup>		NEG.			6.0 <sup>-1</sup>		1.4 <sup>+2</sup>	1.5 <sup>+2</sup>
2160		4.7 <sup>+1</sup>								2.6 <sup>+0</sup>					NEG.		4.7 <sup>+1</sup>	5.0 <sup>+1</sup>
4320		2.0 <sup>+1</sup>								8.9 <sup>-1</sup>							2.0 <sup>+1</sup>	2.1 <sup>+1</sup>

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SURRY AUXILIARY BLDG RADIATION ZONE AREA BB @ EL. 27'-6"

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $\mu R/hr$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 1 CONTAINMENT

———— MITIGATION PHASE - NO LETDOWN ————

PRELIMINARY

SOURCE TIME (HR)	(2)													SUB-TOTAL	TOTAL			
	SI/CN LINES IN PEN. AREA el. 2' FP-10K	CHARGING PUMP CUB. el. 2' & 13' FP-10C	AUX. BLDG SUMP el. 2' FB-9A	DRAIN LINES IN SUMP AREA el. 2' & 13' FP-19N	DRAIN LINES IN PVE TUN. el. 2' FP-19C.7A	SAFEGUARDS SUMP DRAIN LINE IN PEN AREA el. 2' FP-7A	SAFEGUARDS SUMP DRAIN LINE IN PVE TUN. el. 2' FP-19C	DRAIN LINES INSIDE WARE TANKS CUB. el. 2' & 13' FP-19C	LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK el. 2' & 13'	REACTOR COOLANT SAMPLING LINES el. 2' 13' & 27.5'	CONTAIN. LEAKAGE MONIT. FOR LINES el. 2' & 13'	HYDROGEN ANALYZER MAN TRAP el. 13'	CONTAIN. ATMOSP. THRU PIPE PENETRATION el. 2'			CONTAIN. SHINE THRU DOME	CONTAIN. SHINE THRU PERSONAL HATCH	CONTAIN. DOME P.S. HEADERS
0	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	2.1 <sup>+3</sup>	4.0 <sup>+2</sup>	4.3 <sup>-1</sup>	2.5 <sup>+3</sup>	2.5 <sup>+3</sup>
1														3.5 <sup>+2</sup>	1.1 <sup>+2</sup>	2.8 <sup>+0</sup>	4.6 <sup>+2</sup>	4.6 <sup>+2</sup>
2														2.6 <sup>+2</sup>	8.0 <sup>+1</sup>	1.8 <sup>+0</sup>	3.4 <sup>+2</sup>	3.4 <sup>+2</sup>
8														5.2 <sup>+1</sup>	3.0 <sup>+1</sup>	4.3 <sup>-1</sup>	8.2 <sup>+1</sup>	8.2 <sup>+1</sup>
24														3.6 <sup>+0</sup>	1.6 <sup>+1</sup>	NEG.	2.0 <sup>+1</sup>	2.0 <sup>+1</sup>
96														1.7 <sup>-1</sup>	6.0 <sup>+0</sup>		6.2 <sup>+0</sup>	6.2 <sup>+0</sup>
192														NEG.	4.0 <sup>+0</sup>		4.0 <sup>+0</sup>	4.0 <sup>+0</sup>
360															2.0 <sup>+0</sup>		2.0 <sup>+0</sup>	2.0 <sup>+0</sup>
720															6.0 <sup>-1</sup>		6.0 <sup>-1</sup>	6.0 <sup>-1</sup>
2160															NEG.		NEG.	NEG.
4320																		

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SURRY AUXILIARY BLDG RADIATION ZONE AREA CC @ EL. 27'-6"

ESTIMATED HIGHEST DIRECT T DOSE RATES ( $\mu\text{R/hr}$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 1 CONTAINMENT

———— MITIGATION PHASE - NO LETDOWN ————

PRELIMINARY

SOURCE TIME (HR)	SI/CH LINES IN PEN. AREA el. 2' FP-10R	CHARGING PUMP CUB. el. 2' & 13' FP-10C	AUX. BLDG SUMP el. 2' FB-9A	DRAIN LINES IN SUMP AREA el. 2' & 13' FP-19N	DRAW LINES IN PHE TUN. el. 2' FP-14C, 7A	SAFEGUARDS SUMP DRAIN LINES IN PEN AREA el. 2' FP-7A	SAFEGUARDS SUMP DRAIN LINES IN PIPE TUN. el. 2' FP-19C	DRAIN LINES INSIDE WASTE TANKS CUB. el. 2' & 13' FP-19C	LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK el. 2' & 13'	REACTOR COOLANT SAMPLING LINES el. 2' 13', 27.5'	CONTAIN. LEAKAGE MONI FOR LINES el. 2' & 13'	HYDROGEN ANALYZER DRAIN TRAY el. 13'	CONTAIN. ATMOSP. THRU PIPE PENETRATION el. 2'	CONTAIN. SHINE THRU DOME	CONTAIN. SHINE THRU PERSONNEL HATCH	CONTAIN. DOME P.S. HEADERS	(1) SUB- TOTAL	TOTAL
0	2.3 <sup>+3</sup>	3.5 <sup>+3</sup>	NEG.	NEG.	4.5 <sup>+2</sup>	5.7 <sup>+1</sup>	9.9 <sup>+1</sup>	4.0 <sup>+3</sup>	3.9 <sup>+3</sup>	NEG.	2.3 <sup>+2</sup>	1.7 <sup>+4</sup>	NEG.	1.1 <sup>+3</sup>	4.0 <sup>+2</sup>	3.2 <sup>-2</sup>	2.4 <sup>+4</sup>	3.2 <sup>+4</sup>
1	5.8 <sup>+2</sup>	2.1 <sup>+3</sup>			1.3 <sup>+2</sup>	1.5 <sup>+1</sup>	2.9 <sup>+1</sup>	2.3 <sup>+3</sup>	1.0 <sup>+3</sup>		5.7 <sup>+1</sup>	2.1 <sup>+3</sup>		1.4 <sup>+2</sup>	1.1 <sup>+2</sup>	7.5 <sup>-1</sup>	5.3 <sup>+3</sup>	8.6 <sup>+3</sup>
2	3.5 <sup>+2</sup>	1.4 <sup>+3</sup>			7.9 <sup>+1</sup>	9.3 <sup>+0</sup>	1.7 <sup>+1</sup>	1.6 <sup>+3</sup>	6.2 <sup>+2</sup>		4.2 <sup>+1</sup>	1.5 <sup>+3</sup>		1.0 <sup>+2</sup>	8.0 <sup>+1</sup>	NEG.	3.6 <sup>+3</sup>	5.8 <sup>+3</sup>
8	4.2 <sup>+1</sup>	5.8 <sup>+2</sup>			2.2 <sup>+1</sup>	2.6 <sup>+0</sup>	4.8 <sup>+0</sup>	6.5 <sup>+2</sup>	1.7 <sup>+2</sup>		1.5 <sup>+1</sup>	6.4 <sup>+2</sup>		2.1 <sup>+1</sup>	3.0 <sup>+1</sup>		1.4 <sup>+3</sup>	2.2 <sup>+3</sup>
24	1.6 <sup>+1</sup>	2.4 <sup>+2</sup>			4.4 <sup>+0</sup>	NEG.	9.6 <sup>-1</sup>	2.7 <sup>+2</sup>	3.1 <sup>+1</sup>		5.7 <sup>+0</sup>	1.5 <sup>+2</sup>		1.5 <sup>+0</sup>	1.6 <sup>+1</sup>		4.3 <sup>+2</sup>	7.3 <sup>+2</sup>
96	4.3 <sup>+0</sup>	8.4 <sup>+1</sup>			1.1 <sup>+0</sup>		NEG.	9.4 <sup>+1</sup>	7.9 <sup>+0</sup>		2.1 <sup>+0</sup>	1.2 <sup>+1</sup>		6.0 <sup>-2</sup>	6.0 <sup>+0</sup>		1.1 <sup>+2</sup>	2.1 <sup>+2</sup>
192	3.3 <sup>+0</sup>	5.8 <sup>+1</sup>			8.5 <sup>-1</sup>			6.3 <sup>+1</sup>	6.1 <sup>+0</sup>		1.2 <sup>+0</sup>	4.9 <sup>+0</sup>		NEG.	4.0 <sup>+0</sup>		7.4 <sup>+1</sup>	1.4 <sup>+2</sup>
360	2.2 <sup>+0</sup>	3.5 <sup>+1</sup>			NEG.			4.0 <sup>+1</sup>	4.1 <sup>+0</sup>		5.5 <sup>-1</sup>	2.1 <sup>+0</sup>			2.0 <sup>+0</sup>		4.2 <sup>+1</sup>	8.6 <sup>+1</sup>
720	9.9 <sup>-1</sup>	1.7 <sup>+1</sup>						2.0 <sup>+1</sup>	1.8 <sup>+0</sup>		NEG.	NEG.			6.0 <sup>-1</sup>		1.9 <sup>+1</sup>	4.1 <sup>+1</sup>
2160	NEG.	5.8 <sup>+0</sup>						6.5 <sup>+0</sup>	2.9 <sup>-1</sup>						NEG.		5.8 <sup>+0</sup>	1.3 <sup>+1</sup>
4320	↓	2.4 <sup>+0</sup>	↓	↓	↓	↓	↓	2.7 <sup>+0</sup>	NEG.	↓	↓	↓	↓	↓	↓	↓	2.4 <sup>+0</sup>	5.1 <sup>+0</sup>

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SURRY AUXILIARY BLDG RADIATION ZONE AREA DD @ EL. 27'-6"

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $mR/hr$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 1 CONTAINMENT

MITIGATION PHASE - NO LETDOWN

PRELIMINARY

TIME (HR)	SOURCE	SI/CH LINES IN PER. AREA el. 2' FP-10K	CHARGING PUMP CUB. el. 2' & 13' FP-10C	AUX. BLDG SUMP el. 2' FB-9A	DRAIN LINES IN SUMP AREA el. 2' & 13' FP-19N	DRAW LINES IN PPE TUN. el. 2' FP-14C, 7A	SAFEGUARDS SUMP DRAIN LINES IN PER. AREA el. 2' FP-7A	SAFEGUARDS SUMP DRAIN LINES IN PPE TUN. el. 2' FP-19C	DRAIN LINES INSIDE WASTE TANKS CUB. el. 2' & 13' FP-19C	LOW LEVEL WASTE DRAIN TANK el. 2' & 13'	REACTOR COOLANT SAMPLING LINES el. 2' & 13' 13' 27.5'	CONTAIN. LEAKAGE MONIT. FOR LINES el. 2' & 13'	HYDROGEN ANALYZER DRAW TRAY el. 13'	CONTAIN. ATMOSP. THRU PIPE PENETRATION el. 2'	CONTAIN. SHINE THRU DOME	CONTAIN. SHINE THRU PRESSURE HATCH	CONTAIN. DOME R.S. HEADERS	(1) SUB-TOTAL	TOTAL
0	NEG.		1.8 <sup>+2</sup>	NEG.	2.2 <sup>+3</sup>	4.4 <sup>+1</sup>	NEG.	9.7 <sup>+0</sup>	NEG.	3.9 <sup>+3</sup>	NEG.	7.7 <sup>+1</sup>	1.7 <sup>+4</sup>	NEG.	2.1 <sup>+3</sup>	4.0 <sup>+2</sup>	4.3 <sup>-1</sup>	2.2 <sup>+4</sup>	2.6 <sup>+4</sup>
1			1.1 <sup>+2</sup>		9.4 <sup>+2</sup>	1.2 <sup>+1</sup>		2.6 <sup>+0</sup>		1.0 <sup>+3</sup>		1.9 <sup>+1</sup>	2.1 <sup>+3</sup>		3.5 <sup>+2</sup>	1.1 <sup>+2</sup>	2.8 <sup>+0</sup>	3.6 <sup>+3</sup>	4.6 <sup>+3</sup>
2			7.2 <sup>+1</sup>		6.2 <sup>+2</sup>	7.6 <sup>+0</sup>		1.7 <sup>+0</sup>		6.2 <sup>+2</sup>		1.4 <sup>+1</sup>	1.5 <sup>+3</sup>		2.6 <sup>+2</sup>	8.0 <sup>+1</sup>	1.8 <sup>+0</sup>	2.6 <sup>+3</sup>	3.2 <sup>+3</sup>
8			2.9 <sup>+1</sup>		2.2 <sup>+2</sup>	2.2 <sup>+0</sup>		4.8 <sup>-1</sup>		1.7 <sup>+2</sup>		5.0 <sup>+0</sup>	6.4 <sup>+2</sup>		5.2 <sup>+1</sup>	3.0 <sup>+1</sup>	4.3 <sup>-1</sup>	9.5 <sup>+2</sup>	1.1 <sup>+3</sup>
24			1.2 <sup>+1</sup>		5.7 <sup>+1</sup>	4.2 <sup>-1</sup>		NEG.		3.1 <sup>+1</sup>		1.9 <sup>+0</sup>	1.5 <sup>+2</sup>		3.6 <sup>+0</sup>	1.6 <sup>+1</sup>	NEG.	2.4 <sup>+2</sup>	5.5 <sup>+2</sup>
96			4.1 <sup>+0</sup>		1.4 <sup>+1</sup>	NEG.				7.7 <sup>+0</sup>		7.0 <sup>-1</sup>	1.2 <sup>+1</sup>		1.7 <sup>-1</sup>	6.0 <sup>+0</sup>		3.6 <sup>+1</sup>	4.4 <sup>+1</sup>
192			2.9 <sup>+0</sup>		1.0 <sup>+1</sup>					6.1 <sup>+0</sup>		NEG.	4.9 <sup>+0</sup>		NEG.	4.0 <sup>+0</sup>		2.2 <sup>+1</sup>	2.6 <sup>+1</sup>
360			1.8 <sup>+0</sup>		6.9 <sup>+0</sup>					4.1 <sup>+0</sup>			2.1 <sup>+0</sup>			2.0 <sup>+0</sup>		1.3 <sup>+1</sup>	1.7 <sup>+1</sup>
720			8.6 <sup>-1</sup>		3.4 <sup>+0</sup>					1.8 <sup>+0</sup>			NEG.			6.0 <sup>-1</sup>		5.0 <sup>+0</sup>	6.8 <sup>+0</sup>
2160			NEG.		8.8 <sup>-1</sup>					2.9 <sup>-1</sup>						NEG.		NEG.	1.2 <sup>+0</sup>
4320					NEG.					NEG.									NEG.

REGULATORY DOCKET FILE COPY

NOTED FEB 14 1990



SURRY AUXILIARY BLDG RADIATION ZONE AREA EE @ EL. 27'-6"

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $\mu\text{R/hr}$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 1 CONTAINMENT

— MITIGATION PHASE - NO LETDOWN —

PRELIMINARY

SOURCE TIME (HR)	SI/CH LINES IN PEN AREA el. 2' FP-10K	CHARGING PUMP CUB. el. 2' & 13' FP-10C	AUX. BLDG SUMP el. 2' FB-9A	DRAIN LINES IN SUMP AREA el. 2' & 13' FP-19N	DRAIN LINES IN PVE TUN. el. 2' FP-14L, 7A	SAFEGUARDS SUMP DRAIN LINE IN PEN AREA el. 2' FP-7A	SAFEGUARDS SUMP DRAIN LINE IN PVE TUN. el. 2' FP-19C	DRAIN LINES INSIDE WASTE TANKS el. 2' & 13' FP-19C	(2)		REACTOR COOLANT SAMPLING LINES el. 2' & 13' 13:27.5'	CONTAIN. LEAKAGE MONITOR LINES el. 2' & 13'	HYDROGEN ANALYZER DRAIN TRAP el. 13'	CONTAIN. ATMOSP. THRU PIPE PENETRATION el. 2'	CONTAIN. SHINE THRU DOME	CONTAIN. SHINE THRU PERSONAL MATCH	CONTAIN. DOME R.S. HEADERS	(1) SUB- TOTAL	TOTAL
									LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK el. 2' & 13'										
0	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	4.0 <sup>+3</sup>	6.3 <sup>+4</sup>	NEG.	NEG.	1.5 <sup>+1</sup>	NEG.	2.1 <sup>+3</sup>	4.0 <sup>+2</sup>	4.3 <sup>-1</sup>	2.5 <sup>+3</sup>	7.0 <sup>+4</sup>	
1								2.3 <sup>+3</sup>	2.1 <sup>+4</sup>			4.5 <sup>-1</sup>		3.5 <sup>+2</sup>	1.1 <sup>+2</sup>	2.8 <sup>+0</sup>	4.6 <sup>+2</sup>	2.4 <sup>+4</sup>	
2								1.6 <sup>+3</sup>	1.3 <sup>+4</sup>			NEG.		2.6 <sup>+2</sup>	8.0 <sup>+1</sup>	1.8 <sup>+0</sup>	3.4 <sup>+2</sup>	1.5 <sup>+4</sup>	
8								6.5 <sup>+2</sup>	4.2 <sup>+3</sup>					5.2 <sup>+1</sup>	3.0 <sup>+1</sup>	4.3 <sup>-1</sup>	8.2 <sup>+1</sup>	4.9 <sup>+3</sup>	
24								2.7 <sup>+2</sup>	9.5 <sup>+2</sup>					3.6 <sup>+0</sup>	1.6 <sup>+1</sup>	NEG.	2.0 <sup>+1</sup>	1.2 <sup>+3</sup>	
96								9.4 <sup>+1</sup>	2.4 <sup>+2</sup>					1.7 <sup>-1</sup>	6.0 <sup>+0</sup>		6.0 <sup>+0</sup>	3.4 <sup>+2</sup>	
192								6.3 <sup>+1</sup>	1.8 <sup>+2</sup>					NEG.	4.0 <sup>+0</sup>		4.0 <sup>+0</sup>	2.5 <sup>+2</sup>	
360								4.0 <sup>+1</sup>	1.2 <sup>+2</sup>						2.0 <sup>+0</sup>		2.0 <sup>+0</sup>	1.6 <sup>+2</sup>	
720								2.0 <sup>+1</sup>	5.6 <sup>+1</sup>						6.0 <sup>-1</sup>		6.0 <sup>-1</sup>	5.9 <sup>+1</sup>	
2160								6.5 <sup>+0</sup>	1.1 <sup>+1</sup>						NEG.		NEG.	1.75 <sup>+1</sup>	
4320	↓	↓	↓	↓	↓	↓	↓	2.7 <sup>+0</sup>	3.1 <sup>+0</sup>	↓	↓	↓	↓	↓	↓	↓	↓	5.8 <sup>+0</sup>	

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NOTED FEB 14 1980

SURRY AUXILIARY BLDG RADIATION ZONE AREA FF @ EL. 45'-10"

PRELIMINARY

ESTIMATED HIGHEST DIRECT T DOSE RATES ( $mR/hr$ ) FROM VARIOUS SOURCES DUE TO

LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 1 CONTAINMENT

———— MITIGATION PHASE - NO LETDOWN ————

SOURCE TIME (HR)	(2)																(1) SUB- TOTAL	TOTAL
	SI/CH LINES IN PER AREA el. 2' FP-10K	CHARGING PUMP CUB. el. 2' & 13' FP-10C	AUX. BLDG SUMP el. 2' FB-9A	DRAIN LINES IN SUMP AREA el. 2' & 13' FP-19N	DRAIN LINES IN PHE TUN. el. 2' FP-14, 7A	SAFEGUARDS SUMP DRAIN LINES IN PER AREA el. 2' FP-7A	SAFEGUARDS SUMP DRAIN LINES IN PHE TUN. el. 2' FP-19C	DRAIN LINES INSIDE WASTE TANKS LUB. el. 2' & 13' FP-19C	LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK el. 2' & 13'	REACTOR COOLANT SAMPLING LINES el. 2' & 13'	CONTAIN. LEAKAGE MONITOR LINES el. 2' & 13'	HYDROGEN ANALYZER DEAN TRAY el. 2'	CONTAIN. ATMOSP. THRU PIPE PENETRATION el. 2'	CONTAIN. SHINE THRU DOME	CONTAIN. SHINE THRU PERSONAL HATCH	CONTAIN. DOME R.S. HEADERS		
0	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	2.2 <sup>+4</sup>	1.0 <sup>+1</sup>	4.2 <sup>+0</sup>	2.2 <sup>+4</sup>	2.2 <sup>+4</sup>
1														3.5 <sup>+3</sup>	4.0 <sup>+0</sup>	2.8 <sup>+1</sup>	3.5 <sup>+3</sup>	3.5 <sup>+3</sup>
2														2.6 <sup>+3</sup>	2.9 <sup>+0</sup>	1.7 <sup>+1</sup>	2.6 <sup>+3</sup>	2.6 <sup>+3</sup>
8														5.3 <sup>+2</sup>	1.0 <sup>+0</sup>	4.2 <sup>+0</sup>	5.4 <sup>+2</sup>	5.4 <sup>+2</sup>
24														3.7 <sup>+1</sup>	5.0 <sup>-1</sup>	9.9 <sup>-1</sup>	3.85 <sup>+1</sup>	3.85 <sup>+1</sup>
96														1.7 <sup>+0</sup>	NEG.	NEG.	1.7 <sup>+0</sup>	1.7 <sup>+0</sup>
192														6.9 <sup>-1</sup>			6.9 <sup>-1</sup>	6.9 <sup>-1</sup>
360														NEG.			NEG.	NEG.
720																		
2160																		
4320	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓

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NOTED FEB 14 1980

SURRY AUXILIARY BLDG RADIATION ZONE AREA GG @ EL. 45'-10"

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $mR/hr$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 1 CONTAINMENT

———— MITIGATION PHASE - NO LETDOWN ————

PRELIMINARY

(2)

SOURCE TIME (HR)	SI/CH LINES IN PEN AREA el. 2' FP-10K	CHARGING PUMP CUB. el. 2' & 13' FP-10C	AUX. BLDG SUMP el. 2' FB-9A	DRAIN LINES IN SUMP AREA el. 2' & 13' FP-19N	DRAIN LINES IN P4E TUN. el. 2' FP-14.7A	SAFEGUARDS SUMP DRAIN LINES IN PEN AREA el. 2' FP-7A	SAFEGUARDS SUMP DRAIN LINES IN P4E TUN. el. 2' FP-19C	DRAIN LINES INSIDE WASTE TANKS CLB. el. 2' & 13' FP-19C	LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK el. 2' & 13'	REACTOR COOLANT SAMPLING LINES el. 2' 13' & 27.5'	CONTAIN. LEAKAGE MONITOR LINES el. 2' & 13'	HYDROGEN ANALYZER DRAIN TRAY el. 13'	CONTAIN. ATMOSP. THRU PIPE PENETRATION el. 2'	CONTAIN. SHINE THRU DOME	CONTAIN. SHINE THRU PERSONAL HATCH	CONTAIN. DOME R.S. HEADERS	(1) SUB- TOTAL	TOTAL
0	5.5 <sup>+1</sup>	NEG.	NEG.	NEG.	NEG.	1.1 <sup>+0</sup>	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	1.6 <sup>+7</sup>	NEG.	1.6 <sup>+7</sup>	1.6 <sup>+7</sup>
1	1.4 <sup>+1</sup>					NEG.											3.8 <sup>+6</sup>	3.8 <sup>+6</sup>
2	8.5 <sup>+0</sup>																2.8 <sup>+6</sup>	2.8 <sup>+6</sup>
8	2.2 <sup>+0</sup>																9.8 <sup>+5</sup>	9.8 <sup>+5</sup>
24	4.0 <sup>+1</sup>																3.5 <sup>+5</sup>	3.5 <sup>+5</sup>
96	NEG.																1.1 <sup>+5</sup>	1.1 <sup>+5</sup>
192																	6.9 <sup>+4</sup>	6.9 <sup>+4</sup>
360																	3.1 <sup>+4</sup>	3.1 <sup>+4</sup>
720																	6.5 <sup>+3</sup>	6.5 <sup>+3</sup>
2160																	2.9 <sup>+1</sup>	2.9 <sup>+1</sup>
4320	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	2.8 <sup>-2</sup>	2.8 <sup>-2</sup>

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NOTED FEB 14 1980

SURRY AUXILIARY BLDG RADIATION ZONE AREA HH @ EL. 45'-10"

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $\mu R/hr$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 1 CONTAINMENT

———— MITIGATION PHASE - NO LETDOWN ————

FP PRELIMINARY

(2)

SOURCE TIME (HR)	SI/CH LINES IN PEN AREA EL. 2' FP-10K	CHARGING PUMP CUB. EL. 2' & 13' FP-10C	AUX. BLDG SUMP EL. 2' FB-9A	DRAIN LINES IN SUMP AREA EL. 2' & 13' FP-19N	DRAIN LINES IN PVE TUN. EL. 2' FP-19L, 7A	SAFEGUARDS SUMP DRAIN LINES IN PEN AREA EL. 2' FP-7A	SAFEGUARDS SUMP DRAIN LINES IN PVE TUN. EL. 2' FP-19C	DRAIN LINES INSIDE WASTE TANKS CUB. EL. 2' & 13' FP-19C	LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK EL. 2' & 13'	REACTOR COOLANT SAMPLING LINES EL. 2' 13' & 15'	CONTAIN. LEAKAGE MONITOR LINES EL. 2' & 13'	HYDROGEN ANALYZER DRAIN TRAY EL. 13'	CONTAIN. ATMOSP. THRU PIPE PENETRANT EL. 2'	CONTAIN. SHINE THRU DOME	CONTAIN. SHINE THRU PERSONAL HATCH	CONTAIN. DOME R.S. HEADERS	(1) SUB- TOTAL	TOTAL
0	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	5.5 <sup>+4</sup>	NEG.	NEG.	NEG.	2.2 <sup>+4</sup>	4.0 <sup>+0</sup>	4.2 <sup>+0</sup>	2.2 <sup>+4</sup>	7.7 <sup>+4</sup>
1										2.2 <sup>+4</sup>				3.5 <sup>+3</sup>	1.1 <sup>+0</sup>	2.8 <sup>+1</sup>	3.5 <sup>+3</sup>	2.6 <sup>+4</sup>
2										1.6 <sup>+4</sup>				2.6 <sup>+3</sup>	8.0 <sup>-1</sup>	1.7 <sup>+1</sup>	2.6 <sup>+3</sup>	1.9 <sup>+4</sup>
8										6.0 <sup>+3</sup>				5.3 <sup>+2</sup>	NEG.	4.2 <sup>+0</sup>	5.3 <sup>+2</sup>	6.5 <sup>+3</sup>
24										2.3 <sup>+3</sup>				3.7 <sup>+1</sup>		9.9 <sup>-1</sup>	3.8 <sup>+1</sup>	2.3 <sup>+3</sup>
96										9.1 <sup>+2</sup>				1.7 <sup>+0</sup>		NEG.	1.7 <sup>+0</sup>	9.1 <sup>+2</sup>
192										5.7 <sup>+2</sup>				6.9 <sup>-1</sup>			6.9 <sup>-1</sup>	5.7 <sup>+2</sup>
360										3.1 <sup>+2</sup>				NEG.			NEG.	3.1 <sup>+2</sup>
720										1.4 <sup>+2</sup>								1.4 <sup>+2</sup>
2160										5.5 <sup>+1</sup>								5.5 <sup>+1</sup>
4320	↓	↓	↓	↓	↓	↓	↓	↓	↓	1.9 <sup>+1</sup>	↓	↓	↓	↓	↓	↓	↓	1.9 <sup>+1</sup>

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NOTED FEB 14 1980

SURRY AUXILIARY BLDG RADIATION ZONE AREA II @ EL. 45'-10"

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $mR/hr$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 1 CONTAINMENT

— MITIGATION PHASE - NO LETDOWN —

PRELIMINARY

SOURCE TIME (HR)	SI/CH LINES IN PEN AREA el. 2' FP-10R	CHARGING PUMP CUB. el. 2' & 13' FP-10C	AUX. BLDG SUMP el. 2' FB-9A	DRAIN LINES IN SUMP AREA el. 2' & 13' FP-19N	DRAIN LINES IN P4E TUN. el. 2' FP-14C, 7A	SAFEGUARDS SUMP DRAIN LINE IN PEN AREA el. 2' FP-7A	SAFEGUARDS SUMP DRAIN LINE IN P4E TUN. el. 2' FP-19C	DRAIN LINE INSIDE WARD TANKS LUB. el. 2' & 13' FP-19C	LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK el. 2' & 13'	REACTOR COOLANT SAMPLING LINES el. 2' & 13'	CONTAIN. LEAKAGE MONI FOR LINES el. 2' & 13'	HYDROGEN ANALYZER MAN TRAP el. 13'	CONTAIN. ATMOSP. THRU PIPE PENETRATION el. 2'	CONTAIN. SHINE THRU DOME	CONTAIN. SHINE THRU PERSONNEL HATCH	CONTAIN. DOME R.S. HEADERS	(1)	
																	SUB-TOTAL	TOTAL
0	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	8.0 <sup>+4</sup>	NEG.	NEG.	NEG.	1.1 <sup>+4</sup>	2.5 <sup>+2</sup>	1.2 <sup>+0</sup>	1.1 <sup>+4</sup>	9.1 <sup>+4</sup>
1										3.3 <sup>+4</sup>				1.5 <sup>+3</sup>	6.5 <sup>+1</sup>	8.3 <sup>+0</sup>	1.6 <sup>+3</sup>	3.5 <sup>+4</sup>
2										2.3 <sup>+4</sup>				1.1 <sup>+3</sup>	4.7 <sup>+1</sup>	5.0 <sup>+0</sup>	1.2 <sup>+3</sup>	2.4 <sup>+4</sup>
8										8.8 <sup>+3</sup>				2.3 <sup>+2</sup>	1.9 <sup>+1</sup>	1.2 <sup>+0</sup>	2.5 <sup>+2</sup>	9.1 <sup>+3</sup>
24										3.4 <sup>+3</sup>				1.6 <sup>+1</sup>	7.6 <sup>+0</sup>	1.8 <sup>-1</sup>	2.4 <sup>+1</sup>	3.4 <sup>+3</sup>
96										1.3 <sup>+3</sup>				6.2 <sup>-1</sup>	2.8 <sup>+0</sup>	NEG.	3.2 <sup>+0</sup>	1.3 <sup>+3</sup>
192										8.4 <sup>+2</sup>				NEG.	1.6 <sup>+0</sup>		1.6 <sup>+0</sup>	8.4 <sup>+2</sup>
360										4.6 <sup>+2</sup>					7.9 <sup>-1</sup>		7.9 <sup>-1</sup>	4.6 <sup>+2</sup>
720										2.0 <sup>+2</sup>					NEG.		NEG.	2.0 <sup>+2</sup>
2160										8.0 <sup>+1</sup>								8.0 <sup>+1</sup>
4320	↓	↓	↓	↓	↓	↓	↓	↓	↓	2.7 <sup>+1</sup>	↓	↓	↓	↓	↓	↓	↓	2.7 <sup>+1</sup>

REGULATORY BOARD FILE COPY

NOTED FEB 14 1980

SURRY AUXILIARY BLDG RADIATION ZONE AREA JJ @ EL. 45'-10"

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $mR/hr$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 1 CONTAINMENT

— MITIGATION PHASE - NO LETDOWN —

PRELIMINARY

(2)

TIME (HR)	SR/CH LINES IN PEN AREA el. 2' FP-10K	CHARGING PUMP CUB. el. 2' & 13' FP-10C	AUX. BLDG SUMP el. 3' FB-9A	DRAIN LINES IN SWAMP AREA el. 2' & 13' FP-19N	DRAIN LINES IN PVE TUN. el. 2' FP-19L, 7A	SAFEGUARDS SUMP DRAIN LINES IN PEN AREA el. 2' FP-7A	SAFEGUARDS SUMP DRAIN LINES IN PVE TUN. el. 2' FP-19C	DRAIN LINES INSIDE UNIT TRUNKS CUB. el. 2' & 13' FP-19C	LOW LEVEL OR HIGH LEVEL WASTE DEWAST TANK el. 2' & 13'	REACTOR COOLANT SAMPLING LINES el. 2' & 13' 13:27.5'	CONTAIN. LEAKAGE MONITOR LINES el. 2' & 13'	HYDROGEN ANALYZER MAIN TRAY el. 143'	CONTAIN. ATMOSP. THRU PIPE PENETRATION el. 2'	CONTAIN. SHINE THRU DOME	CONTAIN. SHINE THRU PERSONNEL HATCH	CONTAIN. DOME R.S. HEADERS	(1) SUB-TOTAL	TOTAL
0	5.6 <sup>+2</sup>	NEG.	NEG.	NEG.	NEG.	1.3 <sup>+0</sup>	NEG.	NEG.	1.5 <sup>+0</sup>	5.5 <sup>+4</sup>	5.5 <sup>+0</sup>	8.4 <sup>+2</sup>	NEG.	5.3 <sup>+3</sup>	1.8 <sup>+4</sup>	1.8 <sup>+0</sup>	2.4 <sup>+4</sup>	7.9 <sup>+4</sup>
1	1.4 <sup>+2</sup>					NEG.			NEG.	2.2 <sup>+4</sup>	1.4 <sup>+0</sup>	1.0 <sup>+2</sup>		6.9 <sup>+2</sup>	7.2 <sup>+3</sup>	1.2 <sup>+1</sup>	8.0 <sup>+3</sup>	3.0 <sup>+4</sup>
2	8.6 <sup>+1</sup>									1.6 <sup>+4</sup>	1.0 <sup>+0</sup>	7.5 <sup>+1</sup>		5.0 <sup>+2</sup>	5.3 <sup>+3</sup>	7.2 <sup>+0</sup>	6.0 <sup>+3</sup>	2.2 <sup>+4</sup>
8	2.3 <sup>+1</sup>									6.0 <sup>+3</sup>	3.6 <sup>-1</sup>	3.1 <sup>+1</sup>		9.7 <sup>+1</sup>	2.3 <sup>+3</sup>	1.7 <sup>+0</sup>	2.4 <sup>+3</sup>	8.4 <sup>+3</sup>
24	4.1 <sup>+0</sup>									2.3 <sup>+3</sup>	NEG.	7.3 <sup>+0</sup>		5.7 <sup>+0</sup>	8.0 <sup>+2</sup>	7.1 <sup>-1</sup>	8.2 <sup>+2</sup>	3.1 <sup>+3</sup>
96	1.1 <sup>+0</sup>									9.1 <sup>+2</sup>		NEG.		1.9 <sup>-1</sup>	3.0 <sup>+2</sup>	NEG.	3.0 <sup>+2</sup>	1.2 <sup>+3</sup>
192	7.4 <sup>-1</sup>									5.7 <sup>+2</sup>				NEG.	1.6 <sup>+2</sup>		1.6 <sup>+2</sup>	7.3 <sup>+2</sup>
360	NEG.									3.1 <sup>+2</sup>					7.0 <sup>+1</sup>		7.0 <sup>+1</sup>	3.8 <sup>+2</sup>
720										1.4 <sup>+2</sup>					1.6 <sup>+1</sup>		1.6 <sup>+1</sup>	1.6 <sup>+2</sup>
2160										5.5 <sup>+1</sup>					6.0 <sup>-2</sup>		NEG.	5.5 <sup>+1</sup>
4320										1.9 <sup>+1</sup>					NEG.			1.9 <sup>+1</sup>

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NOTED FEB 14 1980

SURRY AUXILIARY BLDG RADIATION ZONE AREA KK @ EL. 45'-10"

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $mR/hr$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 1 CONTAINMENT

———— MITIGATION PHASE - NO LETDOWN ————

PRELIMINARY

SOURCE TIME (HR)	SI/CH LINES IN PEN AREA el. 2'	CHARGING PUMP CUB. el. 2' & 13'	AUX. BLDG SUMP el. 2'	DRAIN LINES IN SUMP AREA el. 2' & 13'	DRAIN LINES IN PYE TUN. el. 2'	SAFEGUARDS SUMP DRAIN LINES IN PEN AREA el. 2'	SAFEGUARDS SUMP DRAIN LINES IN PYE TUN. el. 2'	DRAIN LINES INSIDE WASTE TANKS CUB. el. 2' & 13'	LOW LEVEL WASTE DRAIN TANK el. 2' & 13'	REACTOR COOLANT SAMPLING LINES el. 2' & 13'	CONTAIN. LEAKAGE MONI FOR LINES el. 2' & 13'	HYDROGEN ANALYZER DRAIN TRAP el. 13'	CONTAIN. ATMOSP. THRU PIPE PENETRATION el. 2'	CONTAIN. SHINE THRU DOME	CONTAIN. SHINE THRU PERSONNEL HATCH	CONTAIN. DOME R.S. HEADERS	(1) SUB- TOTAL	TOTAL
	FP-10R	FP-10C	FB-9A	FP-19N	FP-11C, 7A	FP-7A	FP-19C	FP-19C										
0	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	1.6 <sup>+2</sup>	8.4 <sup>+2</sup>	NEG.	NEG.	0.4 <sup>+2</sup>	NEG.	2.2 <sup>+4</sup>	4.0 <sup>+3</sup>	4.2 <sup>+0</sup>	2.6 <sup>+4</sup>	2.7 <sup>+4</sup>
1								9.4 <sup>+1</sup>	2.8 <sup>+2</sup>			1.0 <sup>+2</sup>		3.5 <sup>+3</sup>	1.1 <sup>+3</sup>	2.8 <sup>+1</sup>	4.6 <sup>+3</sup>	5.0 <sup>+3</sup>
2								6.4 <sup>+1</sup>	1.8 <sup>+2</sup>			7.5 <sup>+1</sup>		2.6 <sup>+3</sup>	8.0 <sup>+2</sup>	1.7 <sup>+1</sup>	3.4 <sup>+3</sup>	3.6 <sup>+3</sup>
8								2.6 <sup>+1</sup>	5.6 <sup>+1</sup>			3.1 <sup>+1</sup>		5.3 <sup>+2</sup>	3.0 <sup>+2</sup>	4.2 <sup>+0</sup>	8.3 <sup>+2</sup>	9.1 <sup>+2</sup>
24								1.1 <sup>+1</sup>	1.3 <sup>+1</sup>			7.3 <sup>+0</sup>		3.7 <sup>+1</sup>	1.4 <sup>+2</sup>	9.9 <sup>-1</sup>	1.8 <sup>+2</sup>	2.0 <sup>+2</sup>
96								3.7 <sup>+0</sup>	3.1 <sup>+0</sup>			NEG.		1.7 <sup>+0</sup>	5.0 <sup>+1</sup>	NEG.	5.2 <sup>+1</sup>	5.9 <sup>+1</sup>
192								2.5 <sup>+0</sup>	2.4 <sup>+0</sup>					6.7 <sup>-1</sup>	3.0 <sup>+1</sup>		3.1 <sup>+1</sup>	3.6 <sup>+1</sup>
360								1.6 <sup>+0</sup>	1.6 <sup>+0</sup>					NEG.	1.6 <sup>+1</sup>		1.6 <sup>+1</sup>	1.9 <sup>+1</sup>
720								NEG.	NEG.						4.0 <sup>+0</sup>		4.0 <sup>+0</sup>	4.0 <sup>+0</sup>
2160															1.0 <sup>-2</sup>		1.0 <sup>-2</sup>	1.0 <sup>-2</sup>
4320	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	NEG.	↓	NEG.	NEG.

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SURRY AUXILIARY BLDG RADIATION ZONE AREA LL @ EL. 45'-10"

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $mR/hr$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 1 CONTAINMENT

———— MITIGATION PHASE - NO LETDOWN ————

PRELIMINARY

(2)

SOURCE TIME (HR)	SI/CH LINES IN PEN AREA el. 2' FP-10K	CHARGING PUMP CUB. el. 2' & 13' FP-10C	AUX. BLDG SUMP el. 2' FB-9A	DRAIN LINES IN SWAMP AREA el. 2' & 13' FP-19N	DRAIN LINES IN PPE TUN. el. 2' FP-14L, 7A	SAFEGUARDS SUMP DRAIN LINES IN PEN AREA el. 2' FP-7A	SAFEGUARDS SUMP DRAIN LINES IN PPE TUN. el. 2' FP-19C	DRAIN LINES INSIDE WASTE TANKS CUB. el. 2' & 13' FP-19C	LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK el. 2' & 13'	REACTOR COOLANT SAMPLING LINES el. 2' 19:27.5'	CONTAIN. LEAKAGE MONITORS FOR LINES el. 2' & 13'	HYDROGEN ANALYZER MAIN TRAY el. 143'	CONTAIN. ATMOSP. THRU PIPE PENETRANT el. 2'	CONTAIN. SHINE THRU DOME	CONTAIN. SHINE THRU PRESSURE HATCH	CONTAIN. DOME R.S. HEADERS	(1) SUB- TOTAL	TOTAL
0	5.5 <sup>+1</sup>	NEG.	NEG.	NEG.	NEG.	1.1 <sup>+0</sup>	NEG.	NEG.	NEG.	2.1 <sup>+4</sup>	NEG.	NEG.	NEG.	1.8 <sup>+4</sup>	1.8 <sup>+4</sup>	3.3 <sup>+0</sup>	3.6 <sup>+4</sup>	5.7 <sup>+4</sup>
1	1.4 <sup>+1</sup>					NEG.				8.5 <sup>+3</sup>				2.6 <sup>+3</sup>	7.2 <sup>+3</sup>	2.3 <sup>+1</sup>	9.8 <sup>+3</sup>	1.8 <sup>+4</sup>
2	8.5 <sup>+0</sup>									6.0 <sup>+3</sup>				1.9 <sup>+3</sup>	5.3 <sup>+3</sup>	1.3 <sup>+1</sup>	7.2 <sup>+3</sup>	1.3 <sup>+4</sup>
8	2.2 <sup>+0</sup>									2.3 <sup>+3</sup>				4.1 <sup>+2</sup>	2.3 <sup>+3</sup>	3.3 <sup>+0</sup>	2.7 <sup>+3</sup>	5.0 <sup>+3</sup>
24	4.0 <sup>-1</sup>									8.8 <sup>+2</sup>				3.0 <sup>+1</sup>	8.0 <sup>+2</sup>	7.0 <sup>-1</sup>	8.3 <sup>+2</sup>	1.7 <sup>+3</sup>
96	NEG.									3.4 <sup>+2</sup>				1.2 <sup>+0</sup>	3.0 <sup>+2</sup>	NEG.	3.0 <sup>+2</sup>	6.4 <sup>+2</sup>
192										2.2 <sup>+2</sup>				4.8 <sup>-1</sup>	1.6 <sup>+2</sup>		1.6 <sup>+2</sup>	3.8 <sup>+2</sup>
360										1.2 <sup>+2</sup>				NEG.	7.0 <sup>+1</sup>		7.0 <sup>+1</sup>	1.9 <sup>+2</sup>
720										5.2 <sup>+1</sup>					1.6 <sup>+1</sup>		1.6 <sup>+1</sup>	6.8 <sup>+1</sup>
2160										2.1 <sup>+1</sup>					6.0 <sup>-2</sup>		NEG.	2.1 <sup>+1</sup>
4320										7.0 <sup>+0</sup>					NEG.			7.0 <sup>+0</sup>

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**SURRY AUXILIARY BLDG RADIATION ZONE AREA A @ EL. 2'**

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $\mu\text{R/hr}$ ) FROM VARIOUS SOURCES DUE TO  
 LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 2 CONTAINMENT

———— MITIGATION PHASE - NO LETDOWN ————

SOURCE TIME (HR)	SI/CH LINES IN PEN AREA	CHARGING PUMP CUB. EL. 2' & 13'	AUX. BLDG SUMP EL. 2'	DRAIN LINES IN SUMP AREA EL. 2' & 13'	DRAIN LINES IN PVE TUN. EL. 2'	SAFEGUARDS SUMP DRAIN LINES IN PEN AREA EL. 2'	SAFEGUARDS SUMP DRAIN LINES IN PVE TUN. EL. 2'	DRAIN LINES INSIDE WASTE TANKS CUB. EL. 2' & 13'	LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK EL. 2' & 13'	REACTOR COOLANT SAMPLING LINES EL. 2' & 13'	CONTAIN. LEAKAGE MONITOR LINES EL. 2' & 13'	HYDROGEN ANALYZER DRAIN TRAP EL. 13'	CONTAIN. ATMOSP. THRU PIPE PENETRATION EL. 2'	CONTAIN. SHINE THRU DOME	CONTAIN. SHINE THRU PERSONAL WATCH	CONTAIN. DOME R.S. HEADERS	(1) SUB-TOTAL	TOTAL
	FP-10R	FP-10C	FB-9A	FP-19N	FP-14.7A	FP-7A	FP-19C	FP-19C										
0	1.4 <sup>+8</sup>	1.1 <sup>+5</sup>	3.9 <sup>+1</sup>	1.1 <sup>+2</sup>	1.7 <sup>+4</sup>	1.4 <sup>+6</sup>	2.9 <sup>+0</sup>	5.9 <sup>+2</sup>	5.7 <sup>+2</sup>	4.9 <sup>+0</sup>	5.9 <sup>+3</sup>	1.2 <sup>+4</sup>	5.9 <sup>+6</sup>	NEG.	NEG.	NEG.	1.5 <sup>+8</sup>	1.5 <sup>+8</sup>
1	9.0 <sup>+7</sup>	6.6 <sup>+4</sup>	1.5 <sup>+1</sup>	6.2 <sup>+1</sup>	9.4 <sup>+3</sup>	8.8 <sup>+5</sup>	1.7 <sup>+6</sup>	3.5 <sup>+2</sup>	3.1 <sup>+2</sup>	2.0 <sup>+6</sup>	1.5	3.1 <sup>+3</sup>	1.4 <sup>+6</sup>				9.6 <sup>+7</sup>	9.6 <sup>+7</sup>
2	6.3 <sup>+7</sup>	4.4 <sup>+4</sup>	9.4 <sup>+0</sup>	4.3 <sup>+1</sup>	6.4 <sup>+3</sup>	6.2 <sup>+5</sup>	1.2 <sup>+6</sup>	2.4 <sup>+2</sup>	2.1 <sup>+2</sup>	1.4 <sup>+6</sup>	1.1 <sup>+3</sup>	2.3 <sup>+3</sup>	9.9 <sup>+5</sup>				6.7 <sup>+7</sup>	6.7 <sup>+7</sup>
8	2.6 <sup>+1</sup>	1.8 <sup>+4</sup>	3.1 <sup>+0</sup>	1.7 <sup>+1</sup>	2.4 <sup>+3</sup>	2.6 <sup>+5</sup>	5.1 <sup>+5</sup>	9.7 <sup>+1</sup>	8.0 <sup>+1</sup>	5.4 <sup>+5</sup>	3.8 <sup>+2</sup>	1.0 <sup>+3</sup>	3.8 <sup>+5</sup>				2.8 <sup>+7</sup>	2.8 <sup>+7</sup>
24	1.2 <sup>+7</sup>	7.5 <sup>+3</sup>	NEG.	5.5 <sup>+0</sup>	8.0 <sup>+2</sup>	1.2 <sup>+5</sup>	2.2 <sup>+5</sup>	4.1 <sup>+1</sup>	2.7 <sup>+1</sup>	2.1 <sup>+5</sup>	1.6 <sup>+2</sup>	4.5 <sup>+2</sup>	1.4 <sup>+5</sup>				1.3 <sup>+7</sup>	1.3 <sup>+7</sup>
96	4.5 <sup>+6</sup>	2.6 <sup>+3</sup>		1.5 <sup>+0</sup>	2.2 <sup>+2</sup>	4.3 <sup>+4</sup>	8.7 <sup>+4</sup>	1.4 <sup>+1</sup>	7.3 <sup>+0</sup>	8.2 <sup>+4</sup>	5.4 <sup>+1</sup>	1.4 <sup>+2</sup>	4.9 <sup>+4</sup>				4.8 <sup>+6</sup>	4.8 <sup>+6</sup>
192	3.1 <sup>+6</sup>	1.8 <sup>+3</sup>		1.1 <sup>+0</sup>	1.5 <sup>+2</sup>	3.0 <sup>+4</sup>	5.7 <sup>+4</sup>	9.5 <sup>+0</sup>	5.1 <sup>+0</sup>	5.1 <sup>+4</sup>	3.1 <sup>+1</sup>	8.5 <sup>+1</sup>	3.0 <sup>+4</sup>				3.3 <sup>+6</sup>	3.3 <sup>+6</sup>
360	1.9 <sup>+6</sup>	1.1 <sup>+3</sup>		NEG.	1.0 <sup>+2</sup>	1.9 <sup>+4</sup>	3.5 <sup>+4</sup>	5.7 <sup>+0</sup>	3.4 <sup>+0</sup>	2.8 <sup>+4</sup>	1.4 <sup>+1</sup>	4.5 <sup>+1</sup>	1.3 <sup>+4</sup>				2.0 <sup>+6</sup>	2.0 <sup>+6</sup>
720	8.9 <sup>+5</sup>	5.4 <sup>+2</sup>			5.3 <sup>+1</sup>	8.6 <sup>+3</sup>	1.7 <sup>+4</sup>	3.0 <sup>+0</sup>	1.7 <sup>+0</sup>	1.2 <sup>+4</sup>	2.9 <sup>+0</sup>	1.2 <sup>+1</sup>	3.0 <sup>+3</sup>				9.2 <sup>+5</sup>	9.2 <sup>+5</sup>
2160	2.9 <sup>+5</sup>	1.8 <sup>+2</sup>			1.8 <sup>+1</sup>	2.9 <sup>+3</sup>	5.5 <sup>+3</sup>	NEG.	NEG.	4.9 <sup>+3</sup>	NEG.	NEG.	1.1 <sup>+1</sup>				3.0 <sup>+5</sup>	3.0 <sup>+5</sup>
4320	1.2 <sup>+5</sup>	7.5 <sup>+1</sup>			7.5 <sup>+0</sup>	1.2 <sup>+3</sup>	2.4 <sup>+3</sup>			1.7 <sup>+3</sup>			NEG.				1.3 <sup>+5</sup>	1.3 <sup>+5</sup>

(1) Subtotal excludes contribution from Drain Lines inside waste tank cubicle, LLWDT or HLWDT, and reactor coolant sampling lines not in penetration area.  
 (2) Dose rates are from either a full LLWDT or a full HLWDT.

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SURRY AUXILIARY BLDG RADIATION ZONE AREA B @ EL. 2'

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $mR/hr$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 2 CONTAINMENT

PRELIMINARY

———— MITIGATION PHASE - NO LETDOWN ————

(2)

SOURCE TIME (HR)	SI/CH LINES IN PEN AREA el. 2' FP-10K	CHARGING PUMP CUB. el. 2' & 13' FP-10C	AUX. BLDG SUMP el. 2' FB-9A	DRAIN LINES IN SUMP AREA el. 2' & 13' FP-19N	DRAIN LINES IN PHE TUN. el. 2' FP-MC. 7A	SAFEGUARDS SUMP DRAIN LINES IN PEN AREA el. 2' FP-7A	SAFEGUARDS SUMP DRAIN LINES IN PPE TUN. el. 2' FP-19C	DRAIN LINES INSIDE WASTE TANKS CUB. el. 2' & 13' FP-19C	LOW LEVEL OR HIGH LEVEL WASTE DUMP TANK el. 2' & 13'	REACTOR COOLANT SAMPLING LINES el. 2' & 13'	CONTAIN. LEAKAGE MONITORS FOR LINES el. 2' & 13'	HYDROGEN ANALYZER NEAR TRAY el. 13'	CONTAIN. ATMOSP. THRU PIPE PENETRATION el. 2'	CONTAIN. SHINE THRU DOME	CONTAIN. SHINE THRU PORTS/HATCH	CONTAIN. DOME R.S. HEADERS	(1) SUB- TOTAL	TOTAL
0	4.2 <sup>+6</sup>	1.1 <sup>+6</sup>	NEG.	1.1 <sup>+2</sup>	6.9 <sup>+3</sup>	2.1 <sup>+5</sup>	3.5 <sup>+3</sup>	9.0 <sup>+0</sup>	2.0 <sup>+1</sup>	4.4 <sup>+4</sup>	2.0 <sup>+2</sup>	9.7 <sup>+1</sup>	3.1 <sup>+3</sup>	NEG.	NEG.	NEG.	4.5 <sup>+6</sup>	4.5 <sup>+6</sup>
1	2.0 <sup>+6</sup>	6.6 <sup>+3</sup>		6.2 <sup>+1</sup>	3.7 <sup>+3</sup>	9.9 <sup>+4</sup>	2.0 <sup>+3</sup>	5.3 <sup>+0</sup>	1.1 <sup>+1</sup>	1.8 <sup>+4</sup>	4.9 <sup>+1</sup>	1.6 <sup>+1</sup>	7.6 <sup>+2</sup>				2.1 <sup>+6</sup>	2.1 <sup>+6</sup>
2	1.3 <sup>+6</sup>	4.4 <sup>+3</sup>		4.3 <sup>+1</sup>	2.5 <sup>+3</sup>	6.3 <sup>+4</sup>	1.4 <sup>+3</sup>	3.6 <sup>+0</sup>	7.2 <sup>+0</sup>	1.3 <sup>+6</sup>	3.6 <sup>+1</sup>	1.2 <sup>+1</sup>	5.8 <sup>+2</sup>				1.4 <sup>+6</sup>	1.4 <sup>+6</sup>
8	6.2 <sup>+5</sup>	1.8 <sup>+3</sup>		1.7 <sup>+1</sup>	9.8 <sup>+2</sup>	2.3 <sup>+4</sup>	5.3 <sup>+2</sup>	1.5 <sup>+0</sup>	2.8 <sup>+0</sup>	4.8 <sup>+3</sup>	1.3 <sup>+1</sup>	4.8 <sup>+0</sup>	2.2 <sup>+2</sup>				6.5 <sup>+5</sup>	6.5 <sup>+5</sup>
24	1.3 <sup>+5</sup>	7.5 <sup>+2</sup>		5.5 <sup>+0</sup>	3.2 <sup>+2</sup>	6.3 <sup>+3</sup>	1.8 <sup>+2</sup>	6.2 <sup>-1</sup>	9.2 <sup>-1</sup>	1.9 <sup>+3</sup>	4.9 <sup>+0</sup>	1.2 <sup>+0</sup>	8.6 <sup>+1</sup>				1.4 <sup>+5</sup>	1.4 <sup>+5</sup>
96	3.2 <sup>+4</sup>	2.6 <sup>+2</sup>		1.5 <sup>+0</sup>	8.7 <sup>+1</sup>	1.6 <sup>+3</sup>	4.8 <sup>+1</sup>	NEG.	NEG.	7.4 <sup>+2</sup>	1.8 <sup>+0</sup>	NEG.	3.2 <sup>+1</sup>				3.5 <sup>+4</sup>	3.5 <sup>+4</sup>
192	2.3 <sup>+4</sup>	1.8 <sup>+2</sup>		1.1 <sup>+0</sup>	6.1 <sup>+1</sup>	1.2 <sup>+3</sup>	3.5 <sup>+1</sup>			4.6 <sup>+2</sup>	1.0 <sup>+0</sup>		1.8 <sup>+1</sup>				2.5 <sup>+4</sup>	2.5 <sup>+4</sup>
360	1.6 <sup>+4</sup>	1.1 <sup>+2</sup>		7.0 <sup>-1</sup>	4.0 <sup>+1</sup>	7.7 <sup>+2</sup>	2.2 <sup>+1</sup>			2.5 <sup>+2</sup>	4.7 <sup>-1</sup>		8.6 <sup>+0</sup>				1.7 <sup>+4</sup>	1.7 <sup>+4</sup>
720	8.0 <sup>+3</sup>	5.4 <sup>+1</sup>		NEG.	2.1 <sup>+1</sup>	3.9 <sup>+2</sup>	1.2 <sup>+1</sup>			1.1 <sup>+2</sup>	NEG.		1.8 <sup>+0</sup>				8.6 <sup>+3</sup>	8.6 <sup>+3</sup>
2160	2.3 <sup>+3</sup>	1.8 <sup>+1</sup>			7.1 <sup>+0</sup>	1.1 <sup>+2</sup>	4.0 <sup>+0</sup>			4.4 <sup>+1</sup>			7.7 <sup>-3</sup>				2.5 <sup>+3</sup>	2.5 <sup>+3</sup>
4320	8.9 <sup>+2</sup>	7.5 <sup>+0</sup>	↓	↓	3.0 <sup>+0</sup>	4.2 <sup>+1</sup>	1.7 <sup>+0</sup>	↓	↓	1.5 <sup>+1</sup>	↓	↓	NEG.	↓	↓	↓	9.6 <sup>+2</sup>	9.6 <sup>+2</sup>

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SURRY AUXILIARY BLDG RADIATION ZONE AREA C @ EL. 2'

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $\mu\text{R/hr}$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 2 - CONTAINMENT

———— MITIGATION PHASE - NO LETDOWN ————

PRELIMINARY

(2)

SOURCE TIME (HR)	SI/CN LINES IN PEN AREA el. 2' FP-10R	CHARGING PUMP CUB. el. 2' & 13' FP-10C	AUX. BLDG SUMP el. 2' FB-9A	DRAIN LINES IN SUMP AREA el. 2' & 13' FP-19N	DRAIN LINES IN PHE TUN. el. 2' FP-14C, 7A	SAFEGUARDS SUMP DRAIN LINE IN PEN AREA el. 2' FP-7A	SAFEGUARDS SUMP DRAIN LINE IN PHE TUN. el. 2' FP-19C	DRAIN LINES INSIDE UNIT TANKS CUB. el. 2' & 13' FP-19C	LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK el. 2' & 13'	REACTOR COOLANT SAMPLING LINES el. 2' & 13' 19, 27, 5'	CONTAIN. LEAKAGE MONI FOR LINES el. 2' & 13'	HYDROGEN ANALYZER DRAIN TRAP el. 143'	CONTAIN. ATMOSP. THRU PIPE PENETRATION el. 2'	CONTAIN. SHINE TRAP DOME	CONTAIN. SHINE TRAP PERSONNEL MATCH	CONTAIN. DOME R.S. HEADERS	SUBTOTAL <sup>(1)</sup>	TOTAL
0	2.0 <sup>+5</sup>	1.6 <sup>+6</sup>	5.0 <sup>+5</sup>	6.4 <sup>+5</sup>	1.3 <sup>+7</sup>	3.0 <sup>+4</sup>	2.9 <sup>+6</sup>	1.5 <sup>+4</sup>	6.6 <sup>+5</sup>	4.9 <sup>+6</sup>	9.6 <sup>+2</sup>	3.0 <sup>+3</sup>	NEG.	NEG.	NEG.	NEG.	2.3 <sup>+7</sup>	2.4 <sup>+7</sup>
1	1.2 <sup>+5</sup>	9.6 <sup>+5</sup>	2.2 <sup>+5</sup>	3.9 <sup>+5</sup>	7.8 <sup>+6</sup>	1.9 <sup>+4</sup>	1.7 <sup>+6</sup>	9.0 <sup>+3</sup>	4.0 <sup>+5</sup>	2.0 <sup>+6</sup>	2.3 <sup>+2</sup>	4.9 <sup>+2</sup>					1.4 <sup>+7</sup>	1.4 <sup>+7</sup>
2	8.2 <sup>+4</sup>	6.5 <sup>+5</sup>	1.5 <sup>+5</sup>	2.7 <sup>+5</sup>	5.5 <sup>+6</sup>	1.3 <sup>+4</sup>	1.2 <sup>+6</sup>	6.1 <sup>+5</sup>	2.7 <sup>+5</sup>	1.4 <sup>+6</sup>	1.7 <sup>+2</sup>	3.6 <sup>+2</sup>					9.2 <sup>+6</sup>	9.4 <sup>+6</sup>
8	3.4 <sup>+4</sup>	2.6 <sup>+5</sup>	5.2 <sup>+4</sup>	1.2 <sup>+5</sup>	2.3 <sup>+6</sup>	5.5 <sup>+3</sup>	5.1 <sup>+5</sup>	2.5 <sup>+3</sup>	1.1 <sup>+5</sup>	5.4 <sup>+5</sup>	6.2 <sup>+1</sup>	1.5 <sup>+2</sup>					3.7 <sup>+6</sup>	3.8 <sup>+6</sup>
24	1.4 <sup>+4</sup>	1.1 <sup>+5</sup>	1.4 <sup>+4</sup>	5.2 <sup>+4</sup>	1.0 <sup>+6</sup>	2.4 <sup>+3</sup>	2.2 <sup>+5</sup>	1.0 <sup>+3</sup>	4.6 <sup>+4</sup>	2.1 <sup>+5</sup>	2.3 <sup>+1</sup>	3.9 <sup>+1</sup>					1.6 <sup>+6</sup>	1.6 <sup>+6</sup>
96	4.7 <sup>+3</sup>	3.7 <sup>+4</sup>	3.6 <sup>+3</sup>	1.9 <sup>+4</sup>	3.8 <sup>+5</sup>	8.9 <sup>+2</sup>	8.4 <sup>+4</sup>	3.6 <sup>+2</sup>	1.5 <sup>+4</sup>	8.2 <sup>+4</sup>	8.7 <sup>+0</sup>	4.2 <sup>+0</sup>					6.0 <sup>+5</sup>	6.2 <sup>+5</sup>
192	3.2 <sup>+3</sup>	2.6 <sup>+4</sup>	2.6 <sup>+3</sup>	1.3 <sup>+4</sup>	2.6 <sup>+5</sup>	6.2 <sup>+2</sup>	5.7 <sup>+4</sup>	2.4 <sup>+2</sup>	1.1 <sup>+4</sup>	5.1 <sup>+4</sup>	5.0 <sup>+0</sup>	1.9 <sup>+0</sup>					4.1 <sup>+5</sup>	4.2 <sup>+5</sup>
360	2.1 <sup>+3</sup>	1.6 <sup>+4</sup>	1.8 <sup>+3</sup>	8.2 <sup>+3</sup>	1.6 <sup>+5</sup>	3.9 <sup>+2</sup>	3.5 <sup>+4</sup>	1.5 <sup>+2</sup>	6.6 <sup>+3</sup>	2.8 <sup>+4</sup>	2.9 <sup>+0</sup>	8.8 <sup>+1</sup>					2.4 <sup>+5</sup>	2.4 <sup>+5</sup>
720	9.9 <sup>+2</sup>	7.7 <sup>+3</sup>	9.0 <sup>+2</sup>	3.8 <sup>+3</sup>	7.6 <sup>+4</sup>	1.8 <sup>+2</sup>	1.7 <sup>+4</sup>	7.6 <sup>+1</sup>	3.2 <sup>+3</sup>	1.2 <sup>+4</sup>	4.7 <sup>+1</sup>	NEG.					1.2 <sup>+5</sup>	1.2 <sup>+5</sup>
2160	3.4 <sup>+2</sup>	2.2 <sup>+3</sup>	2.5 <sup>+2</sup>	1.2 <sup>+3</sup>	2.5 <sup>+4</sup>	5.8 <sup>+1</sup>	5.5 <sup>+3</sup>	2.5 <sup>+1</sup>	1.1 <sup>+3</sup>	4.9 <sup>+3</sup>	NEG.						4.0 <sup>+4</sup>	4.0 <sup>+4</sup>
4320	1.4 <sup>+2</sup>	1.1 <sup>+3</sup>	9.9 <sup>+1</sup>	5.4 <sup>+2</sup>	1.1 <sup>+4</sup>	2.5 <sup>+1</sup>	2.4 <sup>+3</sup>	1.0 <sup>+1</sup>	4.6 <sup>+2</sup>	1.7 <sup>+3</sup>	↓	↓	↓	↓	↓	↓	1.8 <sup>+4</sup>	1.8 <sup>+4</sup>

REGULATORY DOCKET FILE COPY

NOTED FEB 14 1990

SURRY AUXILIARY BLDG RADIATION ZONE AREA D @ EL. 2'

PRELIMINARY

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $mR/hr$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 2 CONTAINMENT

———— MITIGATION PHASE - NO LETDOWN ————

(2)

SOURCE TIME (HR)	SI/CH LINES IN PER AREA EL. 2'	CHARGING PUMP CUB. EL. 2' & 13'	AUX. BLDG SUMP EL. 2'	DRAIN LINES IN SUMP AREA EL. 2' & 13'	DRAIN LINES IN PPE TUN. EL. 2'	SAFEGUARDS SUMP DRAIN LINES IN PER AREA EL. 2'	SAFEGUARDS SUMP DRAIN LINES IN PPE TUN. EL. 2'	DRAIN LINES INSIDE WASTE TANKS LUB. EL. 2' & 13'	LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK EL. 2' & 13'	REACTOR COOLANT SAMPLING LINES EL. 2' 13' & 27.5'	CONTAIN. LEAKAGE MONITORING LINES EL. 2' & 13'	HYDROGEN ANALYZER DEATH TRAP EL. 13'	CONTAIN. ATMOSP. THRU PIPE PENETRATION EL. 2'	CONTAIN. SHINE MA DOME	CONTAIN. SHINE MA PERSONNEL MATCH	CONTAIN. DOME R.S. HEADERS	(1) SUB- TOTAL	TOTAL
0	2.0 <sup>+3</sup>	6.2 <sup>+2</sup>	NEG.	1.1 <sup>+2</sup>	1.6 <sup>+4</sup>	1.4 <sup>+2</sup>	1.5 <sup>+3</sup>	3.5 <sup>+6</sup>	4.2 <sup>+7</sup>	2.5 <sup>+3</sup>	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	2.0 <sup>+4</sup>	46 <sup>+7</sup>
1	1.2 <sup>+3</sup>	3.6 <sup>+2</sup>		6.2 <sup>+1</sup>	9.1 <sup>+3</sup>	8.3 <sup>+1</sup>	8.1 <sup>+2</sup>	2.1 <sup>+6</sup>	2.5 <sup>+7</sup>	1.0 <sup>+2</sup>							1.2 <sup>+4</sup>	27 <sup>+7</sup>
2	8.4 <sup>+2</sup>	2.4 <sup>+2</sup>		4.3 <sup>+1</sup>	6.2 <sup>+3</sup>	5.8 <sup>+1</sup>	5.5 <sup>+2</sup>	1.4 <sup>+6</sup>	1.8 <sup>+7</sup>	7.3 <sup>+2</sup>							7.9 <sup>+3</sup>	20 <sup>+7</sup>
8	3.5 <sup>+2</sup>	1.0 <sup>+2</sup>		1.7 <sup>+1</sup>	2.4 <sup>+3</sup>	2.5 <sup>+1</sup>	2.2 <sup>+2</sup>	5.8 <sup>+5</sup>	6.9 <sup>+6</sup>	2.8 <sup>+2</sup>							3.1 <sup>+3</sup>	75 <sup>+6</sup>
24	1.4 <sup>+2</sup>	4.1 <sup>+1</sup>		5.5 <sup>+0</sup>	8.1 <sup>+2</sup>	1.1 <sup>+1</sup>	7.0 <sup>+1</sup>	2.4 <sup>+5</sup>	3.0 <sup>+6</sup>	1.1 <sup>+2</sup>							1.1 <sup>+3</sup>	33 <sup>+6</sup>
96	5.0 <sup>+1</sup>	1.4 <sup>+1</sup>		1.5 <sup>+0</sup>	2.2 <sup>+2</sup>	4.1 <sup>+0</sup>	1.9 <sup>+1</sup>	8.3 <sup>+4</sup>	9.9 <sup>+5</sup>	4.2 <sup>+1</sup>							3.1 <sup>+2</sup>	11 <sup>+6</sup>
192	3.4 <sup>+1</sup>	9.7 <sup>+0</sup>		1.1 <sup>+0</sup>	1.6 <sup>+2</sup>	2.8 <sup>+0</sup>	1.3 <sup>+1</sup>	5.6 <sup>+4</sup>	6.7 <sup>+5</sup>	2.6 <sup>+1</sup>							2.2 <sup>+2</sup>	73 <sup>+5</sup>
360	2.2 <sup>+1</sup>	6.2 <sup>+0</sup>		7.0 <sup>-1</sup>	1.0 <sup>+2</sup>	1.7 <sup>+0</sup>	8.8 <sup>+0</sup>	3.5 <sup>+4</sup>	4.2 <sup>+5</sup>	1.4 <sup>+1</sup>							1.4 <sup>+2</sup>	46 <sup>+5</sup>
720	1.0 <sup>+1</sup>	3.0 <sup>+0</sup>		NEG.	5.4 <sup>+1</sup>	NEG.	4.6 <sup>+0</sup>	1.8 <sup>+4</sup>	2.1 <sup>+5</sup>	6.4 <sup>+0</sup>							7.2 <sup>+1</sup>	23 <sup>+5</sup>
2160	3.4 <sup>+0</sup>	1.0 <sup>+0</sup>		↓	1.8 <sup>+1</sup>	↓	1.6 <sup>+0</sup>	5.8 <sup>+3</sup>	6.9 <sup>+6</sup>	2.5 <sup>+0</sup>							2.4 <sup>+1</sup>	75 <sup>+4</sup>
4320	1.5 <sup>+0</sup>	4.1 <sup>-1</sup>	↓	↓	7.9 <sup>+0</sup>	↓	6.6 <sup>-1</sup>	2.4 <sup>+3</sup>	3.0 <sup>+4</sup>	8.5 <sup>-1</sup>	↓	↓	↓	↓	↓	↓	10 <sup>+1</sup>	33 <sup>+4</sup>

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NOTED FEB 14 1980

SURRY AUXILIARY BLDG RADIATION ZONE AREA E @ EL. 2'

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $\mu R/hr$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 2 CONTAINMENT

———— MITIGATION PHASE - NO LETDOWN ————

PRELIMINARY

SOURCE TIME (HR)	SI/CH LINES IN PEN. AREA		CHARGING PUMP CUB.	AUX. BLDG SUMP	DRAIN LINES IN SUMP AREA	DRAIN LINES IN PPE TUN.	SAFEGUARDS SUMP DRAIN LINE IN PEN AREA EL 2'	SAFEGUARDS SUMP DRAIN LINE IN PPE TUN. EL 2'	DRAIN LINES INSIDE WASTE TANKS CUB.	LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK EL 2' & 13'	REACTOR COOLANT SAMPLING LINES EL 2' & 13'	CONTAIN. LEAKAGE MONITOR LINES EL 2' & 13'	HYDROGEN ANALYZER MAIN TRAY EL 13'	CONTAIN. ATMOSP. THRU PIPE PENETRATION EL 2'	CONTAIN. SHINE TRAY DOME	CONTAIN. SHINE TRAY PERSONNEL MATCH	CONTAIN. DOME R.S. HEADINGS	(1) SUB- TOTAL	TOTAL
	el. 2'	el. 2' & 13'	FP-10K FP-10C	FB-9A	FP-19N	FP-14, 7A	FP-7A	FP-19C	FP-19C										
0	6.5 <sup>+1</sup>	1.9 <sup>+1</sup>	3.9 <sup>+1</sup>	1.1 <sup>+2</sup>	1.3 <sup>+7</sup>	4.4 <sup>+3</sup>	3.7 <sup>+3</sup>	7.5 <sup>+1</sup>	1.4 <sup>+5</sup>	4.6 <sup>+3</sup>	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	1.3 <sup>+7</sup>	1.3 <sup>+7</sup>	
1	3.9 <sup>+4</sup>	1.1 <sup>+1</sup>	1.5 <sup>+1</sup>	6.2 <sup>+1</sup>	7.8 <sup>+6</sup>	2.6 <sup>+3</sup>	2.1 <sup>+3</sup>	4.4 <sup>+4</sup>	8.4 <sup>+4</sup>	1.9 <sup>+3</sup>							7.8 <sup>+6</sup>	7.9 <sup>+6</sup>	
2	2.7 <sup>+4</sup>	7.7 <sup>+0</sup>	9.4 <sup>+0</sup>	4.3 <sup>+1</sup>	5.5 <sup>+6</sup>	1.9 <sup>+3</sup>	1.4 <sup>+3</sup>	3.0 <sup>+4</sup>	5.7 <sup>+4</sup>	1.3 <sup>+3</sup>							5.5 <sup>+6</sup>	5.6 <sup>+6</sup>	
8	1.1 <sup>+4</sup>	3.1 <sup>+0</sup>	3.1 <sup>+0</sup>	1.7 <sup>+1</sup>	2.3 <sup>+6</sup>	7.9 <sup>+2</sup>	5.3 <sup>+2</sup>	1.2 <sup>+4</sup>	2.3 <sup>+4</sup>	5.1 <sup>+2</sup>							2.3 <sup>+6</sup>	2.3 <sup>+6</sup>	
24	4.6 <sup>+3</sup>	1.3 <sup>+0</sup>	NEG.	5.5 <sup>+0</sup>	1.0 <sup>+6</sup>	3.5 <sup>+2</sup>	1.8 <sup>+2</sup>	5.1 <sup>+3</sup>	9.5 <sup>+3</sup>	2.0 <sup>+2</sup>							1.0 <sup>+6</sup>	1.0 <sup>+6</sup>	
96	1.6 <sup>+3</sup>	4.4 <sup>+1</sup>		1.5 <sup>+0</sup>	3.8 <sup>+5</sup>	1.3 <sup>+2</sup>	4.8 <sup>+1</sup>	1.8 <sup>+3</sup>	3.3 <sup>+3</sup>	7.7 <sup>+1</sup>							3.8 <sup>+5</sup>	3.8 <sup>+5</sup>	
192		NEG.		1.1 <sup>+0</sup>	2.6 <sup>+5</sup>	8.8 <sup>+1</sup>	3.3 <sup>+1</sup>	1.2 <sup>+3</sup>	2.2 <sup>+3</sup>	4.8 <sup>+1</sup>							2.6 <sup>+5</sup>	2.6 <sup>+5</sup>	
360				NEG.	1.6 <sup>+5</sup>	5.5 <sup>+1</sup>	2.2 <sup>+1</sup>	7.5 <sup>+2</sup>	1.4 <sup>+3</sup>	2.6 <sup>+1</sup>							1.6 <sup>+5</sup>	1.6 <sup>+5</sup>	
720					7.6 <sup>+4</sup>	2.5 <sup>+1</sup>	1.2 <sup>+1</sup>	3.7 <sup>+2</sup>	6.6 <sup>+2</sup>	1.2 <sup>+1</sup>							7.6 <sup>+4</sup>	7.7 <sup>+4</sup>	
2160					2.5 <sup>+4</sup>	8.4 <sup>+0</sup>	4.0 <sup>+0</sup>	1.2 <sup>+2</sup>	2.3 <sup>+2</sup>	4.6 <sup>+0</sup>							2.5 <sup>+4</sup>	2.5 <sup>+4</sup>	
4320					1.1 <sup>+4</sup>	3.6 <sup>+0</sup>	1.7 <sup>+0</sup>	5.1 <sup>+1</sup>	9.5 <sup>+1</sup>	1.6 <sup>+0</sup>							1.1 <sup>+4</sup>	1.1 <sup>+4</sup>	

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NOTED FEB 14 1980

SURRY AUXILIARY BLDG RADIATION ZONE AREA F @ EL. 2'

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $\mu\text{R/hr}$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 2 CONTAINMENT

PRELIMINARY

———— MITIGATION PHASE - NO LETDOWN ————

(2)

SOURCE TIME (HR)	SI/CH LINES IN PEN. AREA el. 2' FP-10R	CHARGING PUMP CUB. el. 2' & 13' FP-10C	AUX. BLDG SUMP el. 3' FB-9A	DRAIN LINES IN SUMP AREA el. 2' & 13' FP-19N	DRAIN LINES IN PYE TANK el. 2' FP-14L, 7A	SAFEGUARDS SUMP DRAIN LINE IN PEN. AREA el. 2' FP-7A	SAFEGUARDS SUMP DRAIN LINE IN PYE TANK el. 2' FP-19C	DRAIN LINES INSIDE WASTE TANKS CUB. el. 2' & 13' FP-19C	LOW LEVEL WASTE DRAIN TANK el. 2' & 13'	REACTOR COOLANT SAMPLING LINES el. 2' & 13' R-275'	CONTAIN. LEAKAGE MON. FOR LINES el. 2' & 13'	HYDROGEN ANALYZER DRAIN TRAP el. 13'	CONTAIN. ATMOSP. THRU PIPE PENETRATION el. 2'	CONTAIN. SHINE TRAP DOME	CONTAIN. SHINE TRAP PRESSURE HATCH	CONTAIN. DOME R.S. HEADERS	SUB TOTAL	TOTAL
0	1.3 <sup>+2</sup>	1.6 <sup>+4</sup>	5.2 <sup>+4</sup>	1.4 <sup>+4</sup>	4.1 <sup>+5</sup>	2.8 <sup>+0</sup>	1.2 <sup>+4</sup>	NEG.	6.1 <sup>+0</sup>	1.4 <sup>+4</sup>	NEG.	3.9 <sup>+0</sup>	NEG.	NEG.	NEG.	NEG.	5.2 <sup>+5</sup>	5.2 <sup>+5</sup>
1	3.8 <sup>+1</sup>	9.6 <sup>+3</sup>	1.7 <sup>+4</sup>	8.0 <sup>+3</sup>	2.4 <sup>+5</sup>	NEG.	6.8 <sup>+3</sup>		3.7 <sup>+0</sup>	5.9 <sup>+3</sup>		1.0 <sup>+0</sup>					2.9 <sup>+5</sup>	2.9 <sup>+5</sup>
2	2.3 <sup>+1</sup>	6.5 <sup>+3</sup>	1.2 <sup>+4</sup>	5.4 <sup>+3</sup>	1.7 <sup>+5</sup>		4.6 <sup>+3</sup>		2.5 <sup>+0</sup>	4.2 <sup>+3</sup>		2.6 <sup>-1</sup>					2.0 <sup>+5</sup>	2.0 <sup>+5</sup>
8	6.8 <sup>+0</sup>	2.6 <sup>+3</sup>	3.3 <sup>+3</sup>	2.1 <sup>+3</sup>	7.2 <sup>+4</sup>		1.8 <sup>+3</sup>		1.0 <sup>+0</sup>	1.6 <sup>+3</sup>		NEG.					8.3 <sup>+4</sup>	8.3 <sup>+4</sup>
24	1.4 <sup>+0</sup>	1.1 <sup>+3</sup>	7.2 <sup>+2</sup>	7.0 <sup>+2</sup>	3.1 <sup>+4</sup>		6.2 <sup>+2</sup>		NEG.	6.1 <sup>+3</sup>							4.0 <sup>+4</sup>	4.0 <sup>+4</sup>
96	3.5 <sup>-1</sup>	3.7 <sup>+2</sup>	1.5 <sup>+2</sup>	1.9 <sup>+2</sup>	1.2 <sup>+4</sup>		1.7 <sup>+2</sup>			2.4 <sup>+2</sup>							1.3 <sup>+4</sup>	1.3 <sup>+4</sup>
192	NEG.	2.6 <sup>+2</sup>	1.3 <sup>+2</sup>	1.3 <sup>+2</sup>	8.1 <sup>+3</sup>		1.2 <sup>+2</sup>			1.5 <sup>+2</sup>							8.9 <sup>+3</sup>	8.9 <sup>+3</sup>
360		1.6 <sup>+2</sup>	9.1 <sup>+1</sup>	8.8 <sup>+1</sup>	5.0 <sup>+3</sup>		7.7 <sup>+1</sup>			8.2 <sup>+1</sup>							5.5 <sup>+3</sup>	5.5 <sup>+3</sup>
720		7.7 <sup>+1</sup>	4.3 <sup>+1</sup>	4.6 <sup>+1</sup>	2.4 <sup>+3</sup>		4.2 <sup>+1</sup>			3.6 <sup>+1</sup>							2.6 <sup>+3</sup>	2.6 <sup>+3</sup>
2160		2.2 <sup>+1</sup>	7.8 <sup>+0</sup>	1.6 <sup>+1</sup>	7.8 <sup>+2</sup>		1.4 <sup>+1</sup>			1.4 <sup>+1</sup>							8.5 <sup>+2</sup>	8.5 <sup>+2</sup>
4320		1.1 <sup>+2</sup>	2.1 <sup>+0</sup>	6.6 <sup>+0</sup>	3.4 <sup>+2</sup>		5.9 <sup>+0</sup>			4.8 <sup>+0</sup>							4.7 <sup>+2</sup>	4.7 <sup>+2</sup>

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NOTED FEB 14 1980

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SURRY AUXILIARY BLDG RADIATION ZONE AREA G @ EL. 2'

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $\mu R/hr$ ) FROM VARIOUS SOURCES DUE TO  
 LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 2 CONTAINMENT

PRELIMINARY

MITIGATION PHASE - NO LETDOWN

SOURCE TIME (HR)	(2)																(1) SUB TOTAL	TOTAL
	SI/CH LINES IN PEN AREA EL. 2' FP-10K	CHARGING PUMP CUB. EL. 2' & 15' FP-10C	AUX. BLDG SUMP EL. 2' FB-9A	DRAIN LINES IN SUMP AREA EL. 2' & 13' FP-19N	DRAIN LINES IN PVE TUN. EL. 2' FP-14, 7A	SAFEGUARDS SUMP DRAIN LINES IN PEN AREA EL. 2' FP-7A	SAFEGUARDS SUMP DRAIN LINES IN PVE TUN. EL. 2' FP-19C	DRAIN LINES INSIDE WASTE TANKS CUB. EL. 2' & 13' FP-19C	LOW LEVEL OR HIGH LEVEL WASTE DEGR. TANK EL. 2' & 13'	REACTOR COOLANT SAMPLING LINES EL. 2' & 13'	CONTAIN. LEAKAGE MONITORS FOR LINES EL. 2' & 13'	HYDROGEN ANALYZER DEAN TRAY EL. 13'	CONTAIN. ATMOSP. THRU PIPES PENETRATION EL. 2'	CONTAIN. SHINE THRU DOME	CONTAIN. SHINE THRU PORTS/HATCH	CONTAIN. DOME R.S. HEADERS		
0	4.1 <sup>+5</sup>	1.4 <sup>+8</sup>	3.2 <sup>+9</sup>	1.4 <sup>+4</sup>	5.6 <sup>+9</sup>	1.3 <sup>+4</sup>	9.0 <sup>+4</sup>	6.2 <sup>-1</sup>	3.8 <sup>+0</sup>	6.0 <sup>+4</sup>	2.8 <sup>+1</sup>	1.5 <sup>+4</sup>	9.6 <sup>+2</sup>	NEG.	NEG.	NEG.	1.1 <sup>+8</sup>	1.4 <sup>+8</sup>
1	2.1 <sup>+5</sup>	9.0 <sup>+7</sup>	9.9 <sup>+3</sup>	8.0 <sup>+3</sup>	3.1 <sup>+4</sup>	6.9 <sup>+3</sup>	5.3 <sup>+4</sup>	NEG.	2.2 <sup>+0</sup>	2.5 <sup>+4</sup>	6.8 <sup>+0</sup>	4.1 <sup>+3</sup>	2.4 <sup>+2</sup>				9.0 <sup>+7</sup>	9.0 <sup>+7</sup>
2	1.4 <sup>+5</sup>	6.5 <sup>+7</sup>	6.2 <sup>+3</sup>	5.4 <sup>+3</sup>	2.1 <sup>+6</sup>	4.8 <sup>+3</sup>	3.7 <sup>+6</sup>		1.6 <sup>+0</sup>	1.7 <sup>+4</sup>	5.0 <sup>+0</sup>	3.0 <sup>+3</sup>	1.8 <sup>+2</sup>				6.5 <sup>+7</sup>	6.5 <sup>+7</sup>
8	5.4 <sup>+4</sup>	2.6 <sup>+7</sup>	1.8 <sup>+3</sup>	2.1 <sup>+3</sup>	8.3 <sup>+3</sup>	1.9 <sup>+3</sup>	1.6 <sup>+6</sup>		6.5 <sup>-1</sup>	6.6 <sup>+3</sup>	1.8 <sup>+0</sup>	1.3 <sup>+3</sup>	6.8 <sup>+1</sup>				2.6 <sup>+7</sup>	2.6 <sup>+7</sup>
24	1.7 <sup>+4</sup>	1.2 <sup>+7</sup>	3.9 <sup>+2</sup>	7.0 <sup>+2</sup>	2.8 <sup>+3</sup>	6.2 <sup>+2</sup>	6.8 <sup>+3</sup>		NEG.	2.5 <sup>+3</sup>	6.8 <sup>-1</sup>	5.6 <sup>+2</sup>	2.7 <sup>+1</sup>				1.2 <sup>+7</sup>	1.2 <sup>+7</sup>
96	4.4 <sup>+3</sup>	4.5 <sup>+6</sup>	9.9 <sup>+1</sup>	1.9 <sup>+2</sup>	7.7 <sup>+2</sup>	1.7 <sup>+2</sup>	2.6 <sup>+3</sup>			1.0 <sup>+3</sup>	NEG.	1.8 <sup>+2</sup>	9.8 <sup>+0</sup>				4.5 <sup>+6</sup>	4.5 <sup>+6</sup>
192	3.1 <sup>+3</sup>	3.1 <sup>+6</sup>	7.3 <sup>+1</sup>	1.3 <sup>+2</sup>	5.4 <sup>+2</sup>	1.2 <sup>+2</sup>	1.8 <sup>+3</sup>			6.3 <sup>+2</sup>		1.1 <sup>+2</sup>	5.6 <sup>+0</sup>				3.1 <sup>+6</sup>	3.1 <sup>+6</sup>
360	2.1 <sup>+3</sup>	1.9 <sup>+6</sup>	5.0 <sup>+1</sup>	8.8 <sup>+1</sup>	3.5 <sup>+2</sup>	7.9 <sup>+1</sup>	1.1 <sup>+3</sup>			3.4 <sup>+2</sup>		5.8 <sup>+1</sup>	2.7 <sup>+0</sup>				1.9 <sup>+6</sup>	1.9 <sup>+6</sup>
720	1.1 <sup>+3</sup>	8.9 <sup>+5</sup>	2.3 <sup>+1</sup>	4.6 <sup>+1</sup>	1.9 <sup>+2</sup>	4.1 <sup>+1</sup>	5.3 <sup>+2</sup>			1.5 <sup>+2</sup>		1.6 <sup>+1</sup>	5.6 <sup>-1</sup>				8.9 <sup>+5</sup>	8.9 <sup>+5</sup>
2160	3.5 <sup>+2</sup>	2.9 <sup>+5</sup>	4.0 <sup>+0</sup>	1.6 <sup>+1</sup>	6.3 <sup>+1</sup>	1.4 <sup>+1</sup>	1.7 <sup>+2</sup>			6.0 <sup>+1</sup>		NEG.	NEG.				2.9 <sup>+5</sup>	2.9 <sup>+5</sup>
4320	1.5 <sup>+2</sup>	1.2 <sup>+5</sup>	9.7 <sup>-1</sup>	6.6 <sup>+0</sup>	2.7 <sup>+1</sup>	NEG.	7.5 <sup>+1</sup>	↓	↓	2.0 <sup>+1</sup>	↓	↓	↓	↓	↓	↓	1.2 <sup>+5</sup>	1.2 <sup>+5</sup>

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SURRY AUXILIARY BLDG RADIATION ZONE AREA H @ EL. 2'

PRELIMINARY

ESTIMATED HIGHEST DIRECT  $\Gamma$  DOSE RATES ( $\mu R/hr$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 2 CONTAINMENT

———— MITIGATION PHASE - NO LETDOWN ————

SOURCE TIME (HR)	SI/CH LINES IN PEN. AREA	CHARGING PUMP CUB.	AUX. BLDG SUMP	DRAIN LINES IN SUMP AREA	DRAIN LINES IN PPE TUN.	SAFEGUARDS SUMP DRAIN LINES IN PEN AREA EL. 2'	SAFEGUARDS SUMP DRAIN LINES IN PPE TUN. EL. 2'	DRAIN LINE INSIDE WASTE TANKS LUG. EL. 2' & 13'	LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK EL. 2' & 13'	REACTOR COOLANT SAMPLING LINES EL. 2' & 13'	CONTAIN. LEAKAGE MONITOR LINES EL. 2' & 13'	HYDROGEN ANALYZER DEAN TRAP EL. 13'	CONTAIN. ATMOSP. THRU PIPE PENETRATION EL. 2'	CONTAIN. SHINE W/IN DOME	CONTAIN. SHINE W/IN PERSONNEL HATCH	CONTAIN. DOME R.S. HEADERS	(1) SUB- TOTAL	TOTAL
	el. 2' FP-10K	el. 2' & 13' FP-10C	el. 2' FB-9A	el. 2' & 13' FP-19N	el. 2' FP-19L, 7A	FP-7A	FP-19C	FP-19C		19:27.5'								
0	4.1 <sup>+3</sup>	1.6 <sup>+6</sup>	3.6 <sup>+7</sup>	1.4 <sup>+6</sup>	4.1 <sup>+5</sup>	9.0 <sup>+1</sup>	9.0 <sup>+4</sup>	NEG.	3.8 <sup>+0</sup>	4.7 <sup>+6</sup>	NEG.	1.3 <sup>+2</sup>	NEG.	NEG.	NEG.	NEG.	3.9 <sup>+7</sup>	4.4 <sup>+7</sup>
1	1.2 <sup>+3</sup>	9.6 <sup>+5</sup>	2.1 <sup>+7</sup>	8.7 <sup>+5</sup>	2.4 <sup>+5</sup>	2.8 <sup>+1</sup>	5.3 <sup>+4</sup>		2.3 <sup>+0</sup>	1.9 <sup>+6</sup>		3.2 <sup>+1</sup>					2.3 <sup>+7</sup>	2.5 <sup>+7</sup>
2	7.5 <sup>+2</sup>	6.5 <sup>+5</sup>	1.5 <sup>+7</sup>	6.1 <sup>+5</sup>	1.7 <sup>+5</sup>	1.8 <sup>+1</sup>	3.7 <sup>+4</sup>		1.6 <sup>+0</sup>	1.4 <sup>+6</sup>		2.3 <sup>+1</sup>					1.7 <sup>+7</sup>	1.8 <sup>+7</sup>
8	2.2 <sup>+2</sup>	2.6 <sup>+5</sup>	5.9 <sup>+6</sup>	2.6 <sup>+5</sup>	7.2 <sup>+4</sup>	5.1 <sup>+0</sup>	1.6 <sup>+4</sup>		NEG.	5.1 <sup>+5</sup>		1.1 <sup>+1</sup>					6.5 <sup>+6</sup>	7.0 <sup>+6</sup>
24	4.4 <sup>+1</sup>	1.1 <sup>+5</sup>	2.3 <sup>+6</sup>	1.2 <sup>+5</sup>	3.1 <sup>+4</sup>	1.1 <sup>+0</sup>	6.8 <sup>+3</sup>			2.0 <sup>+5</sup>		4.5 <sup>+0</sup>					2.6 <sup>+6</sup>	2.8 <sup>+6</sup>
96	1.1 <sup>+1</sup>	3.7 <sup>+4</sup>	7.9 <sup>+5</sup>	4.3 <sup>+4</sup>	1.2 <sup>+4</sup>	NEG.	3.1 <sup>+7</sup>			7.8 <sup>+5</sup>		1.4 <sup>+0</sup>					8.8 <sup>+5</sup>	9.6 <sup>+5</sup>
192	8.6 <sup>+0</sup>	2.6 <sup>+6</sup>	5.3 <sup>+5</sup>	2.9 <sup>+4</sup>	8.1 <sup>+3</sup>		1.8 <sup>+3</sup>			4.9 <sup>+4</sup>		NEG.					3.2 <sup>+6</sup>	3.2 <sup>+6</sup>
360	5.8 <sup>+0</sup>	1.6 <sup>+4</sup>	3.4 <sup>+5</sup>	1.8 <sup>+4</sup>	5.0 <sup>+3</sup>		1.1 <sup>+3</sup>			2.7 <sup>+4</sup>							3.8 <sup>+5</sup>	4.1 <sup>+5</sup>
720	2.6 <sup>+0</sup>	7.7 <sup>+3</sup>	1.7 <sup>+5</sup>	8.5 <sup>+3</sup>	2.4 <sup>+3</sup>		5.3 <sup>+2</sup>			1.2 <sup>+4</sup>							1.9 <sup>+5</sup>	2.0 <sup>+5</sup>
2160	4.2 <sup>+1</sup>	2.2 <sup>+3</sup>	5.7 <sup>+4</sup>	2.8 <sup>+3</sup>	7.8 <sup>+2</sup>		1.7 <sup>+2</sup>			4.7 <sup>+3</sup>							6.3 <sup>+4</sup>	6.8 <sup>+4</sup>
4320	NEG.	1.1 <sup>+3</sup>	2.5 <sup>+4</sup>	1.2 <sup>+3</sup>	3.4 <sup>+2</sup>		7.5 <sup>+1</sup>			1.6 <sup>+3</sup>							2.8 <sup>+4</sup>	2.9 <sup>+4</sup>

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**SURRY AUXILIARY BLDG RADIATION ZONE AREA I @ EL. 2'**

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $\mu\text{R/hr}$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 2 CONTAINMENT

———— MITIGATION PHASE - NO LETDOWN ————

PRELIMINARY

SOURCE TIME (HR)	SI/CH LINES IN PEN AREA EL. 2'		AUX. BLDG SUMP EL. 2'	DRAIN LINES IN SUMP AREA EL. 2' & 13'		SAFEGUARDS SUMP DRAIN LINES IN PEN AREA EL. 2'		DRAIN LINE INSIDE WASTE TANKS CUB. TUN. EL. 2' & 13'	LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK EL. 2' & 13'	REACTOR COOLANT SAMPLING LINES EL. 2' & 13'	CONTAIN. LEAKAGE MONITOR LINES EL. 2' & 13'	HYDROGEN ANALYZER DRAIN TRAY EL. 13'	CONTAIN. ATMOSP. THRU PIPE PENETRATION EL. 2'	CONTAIN. SHINE TRAIL DOME	CONTAIN. SHINE TRAIL PERSONNEL HATCH	CONTAIN. DOME R.S. HEADERS	(1) SUB- TOTAL	TOTAL
	FP-10K	FP-10C		FB-9A	FP-19N	FP-19L.7A	FP-7A											
0	6.8 <sup>+6</sup>	1.1 <sup>+3</sup>	3.9 <sup>+1</sup>	4.3 <sup>+2</sup>	9.5 <sup>+3</sup>	9.5 <sup>+4</sup>	2.1 <sup>+3</sup>	1.8 <sup>+3</sup>	6.4 <sup>+3</sup>	2.8 <sup>+4</sup>	7.7 <sup>+2</sup>	5.7 <sup>+0</sup>	NEG.	NEG.	NEG.	NEG.	6.9 <sup>+6</sup>	6.9 <sup>+6</sup>
1	4.2 <sup>+6</sup>	6.6 <sup>+2</sup>	1.5 <sup>+1</sup>	4.1 <sup>+2</sup>	5.2 <sup>+3</sup>	5.7 <sup>+4</sup>	1.1 <sup>+3</sup>	1.0 <sup>+3</sup>	3.9 <sup>+3</sup>	1.1 <sup>+4</sup>	1.9 <sup>+2</sup>	NEG.					4.3 <sup>+6</sup>	4.3 <sup>+6</sup>
2	3.0 <sup>+6</sup>	4.4 <sup>+2</sup>	7.4 <sup>+0</sup>	2.7 <sup>+2</sup>	3.6 <sup>+3</sup>	4.1 <sup>+4</sup>	7.9 <sup>+2</sup>	7.1 <sup>+2</sup>	2.7 <sup>+3</sup>	8.0 <sup>+2</sup>	1.4 <sup>+2</sup>						3.0 <sup>+6</sup>	3.0 <sup>+6</sup>
8	1.2 <sup>+6</sup>	1.9 <sup>+2</sup>	3.1 <sup>+0</sup>	1.0 <sup>+2</sup>	1.4 <sup>+3</sup>	1.8 <sup>+4</sup>	3.1 <sup>+2</sup>	2.9 <sup>+2</sup>	1.1 <sup>+3</sup>	3.0 <sup>+2</sup>	5.0 <sup>+1</sup>						1.2 <sup>+6</sup>	1.2 <sup>+6</sup>
24	5.5 <sup>+5</sup>	7.5 <sup>+1</sup>	7.6 <sup>-1</sup>	2.1 <sup>+1</sup>	4.5 <sup>+2</sup>	7.6 <sup>+3</sup>	9.9 <sup>+1</sup>	1.2 <sup>+2</sup>	4.5 <sup>+2</sup>	1.2 <sup>+2</sup>	1.9 <sup>+1</sup>						5.6 <sup>+5</sup>	5.6 <sup>+5</sup>
96	2.0 <sup>+5</sup>	2.6 <sup>+1</sup>	NEG.	8.2 <sup>+0</sup>	1.2 <sup>+2</sup>	2.9 <sup>+3</sup>	2.6 <sup>+1</sup>	4.2 <sup>+1</sup>	1.5 <sup>+2</sup>	4.6 <sup>+2</sup>	7.0 <sup>+0</sup>						2.0 <sup>+5</sup>	2.0 <sup>+5</sup>
192	1.4 <sup>+5</sup>	1.4 <sup>+1</sup>		5.9 <sup>+0</sup>	8.6 <sup>+1</sup>	2.0 <sup>+3</sup>	1.9 <sup>+1</sup>	2.8 <sup>+1</sup>	1.0 <sup>+2</sup>	2.9 <sup>+2</sup>	4.0 <sup>+0</sup>						1.4 <sup>+5</sup>	1.4 <sup>+5</sup>
360	8.6 <sup>+4</sup>	1.1 <sup>+1</sup>		3.9 <sup>+0</sup>	5.7 <sup>+1</sup>	1.2 <sup>+3</sup>	1.3 <sup>+1</sup>	1.8 <sup>+1</sup>	6.4 <sup>+1</sup>	1.6 <sup>+2</sup>	1.8 <sup>+0</sup>						8.7 <sup>+4</sup>	8.7 <sup>+4</sup>
720	4.0 <sup>+4</sup>	5.4 <sup>+0</sup>		2.0 <sup>+0</sup>	3.0 <sup>+1</sup>	5.6 <sup>+2</sup>	6.6 <sup>+0</sup>	8.8 <sup>+0</sup>	3.1 <sup>+1</sup>	6.9 <sup>+1</sup>	3.8 <sup>-1</sup>						4.1 <sup>+4</sup>	4.1 <sup>+4</sup>
2160	1.3 <sup>+4</sup>	1.8 <sup>+0</sup>		6.2 <sup>-1</sup>	1.0 <sup>+1</sup>	1.9 <sup>+2</sup>	2.2 <sup>+0</sup>	2.9 <sup>+0</sup>	1.1 <sup>+1</sup>	2.8 <sup>+1</sup>	NEG.						1.3 <sup>+4</sup>	1.3 <sup>+4</sup>
4320	5.8 <sup>+3</sup>	7.5 <sup>-1</sup>	↓	NEG.	4.3 <sup>+0</sup>	8.0 <sup>+1</sup>	9.5 <sup>-1</sup>	1.2 <sup>+0</sup>	4.5 <sup>+0</sup>	7.3 <sup>+0</sup>	↓	↓	↓	↓	↓	↓	5.9 <sup>+3</sup>	5.9 <sup>+3</sup>

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SURRY AUXILIARY BLDG RADIATION ZONE AREA J @ EL. 2'

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $\mu R/hr$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 2 CONTAINMENT

MITIGATION PHASE - NO LETDOWN

PRELIMINARY

(2)

SOURCE TIME (HR)	SI/CH LINES IN PEN AREA el. 2' FP-10K	CHARGING PUMP CUB. el. 2' & 13' FP-10C	AUX. BLDG SUMP el. 2' FB-9A	DRAIN LINES IN SUMP AREA el. 2' & 13' FP-19N	DRAIN LINES IN PHE TUN. el. 2' FP-11L, 7A	SAFEGUARDS SUMP DRAIN LINE IN PEN AREA el. 2' FP-7A	SAFEGUARDS SUMP DRAIN LINE IN PHE TUN. el. 2' FP-19C	DRAIN LINES INSIDE WASTE TANKS CUB. el. 2' & 13' FP-19C	LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK el. 2' & 13'	REACTOR COOLANT SAMPLING LINES el. 2' & 13' & 27.5'	CONTAIN. LEAKAGE MONITOR LINES el. 2' & 13'	HYDROGEN ANALYZER DRAIN TRAY el. 13'	CONTAIN. ATMOSP. THRU PIPE PENETRATION el. 2'	CONTAIN. SHINE THRU DOME	CONTAIN. SHINE THRU PRESSURE MATCH	CONTAIN. DOME R.S. HEADERS	SUB-TOTAL	TOTAL
0	4.1 <sup>+3</sup>	1.6 <sup>+6</sup>	2.9 <sup>+4</sup>	3.3 <sup>+3</sup>	NEG.	9.0 <sup>++</sup>	NEG.	NEG.	NEG.	2.9 <sup>+6</sup>	NEG.	3.9 <sup>+0</sup>	NEG.	NEG.	NEG.	NEG.	1.6 <sup>+6</sup>	4.5 <sup>+6</sup>
1	1.2 <sup>+3</sup>	9.6 <sup>+5</sup>	1.1 <sup>+4</sup>	1.6 <sup>+3</sup>		2.8 <sup>+1</sup>				1.2 <sup>+6</sup>		1.0 <sup>+0</sup>					9.8 <sup>+6</sup>	1.1 <sup>+7</sup>
2	7.5 <sup>+2</sup>	6.5 <sup>+5</sup>	6.9 <sup>+3</sup>	1.1 <sup>+3</sup>		1.2 <sup>+1</sup>				8.4 <sup>+5</sup>		2.6 <sup>-1</sup>					6.6 <sup>+5</sup>	1.5 <sup>+6</sup>
8	2.2 <sup>+2</sup>	2.6 <sup>+5</sup>	2.2 <sup>+3</sup>	4.1 <sup>+2</sup>		5.1 <sup>+0</sup>				3.2 <sup>+5</sup>		NEG.					2.6 <sup>+5</sup>	5.8 <sup>+5</sup>
24	4.4 <sup>+1</sup>	1.1 <sup>+5</sup>	5.3 <sup>+2</sup>	1.2 <sup>+2</sup>		1.1 <sup>+0</sup>				1.2 <sup>+5</sup>							1.1 <sup>+5</sup>	2.3 <sup>+5</sup>
96	1.1 <sup>+1</sup>	3.7 <sup>+4</sup>	1.3 <sup>+2</sup>	3.3 <sup>+1</sup>		NEG.				4.8 <sup>+4</sup>							3.7 <sup>+4</sup>	8.5 <sup>+4</sup>
192	8.6 <sup>+0</sup>	2.6 <sup>+4</sup>	9.6 <sup>+1</sup>	2.3 <sup>+1</sup>						3.0 <sup>+4</sup>							2.6 <sup>+4</sup>	5.6 <sup>+4</sup>
360	5.8 <sup>+0</sup>	1.6 <sup>+4</sup>	6.6 <sup>+1</sup>	1.6 <sup>+1</sup>						1.7 <sup>+4</sup>							1.6 <sup>+4</sup>	3.3 <sup>+4</sup>
720	2.6 <sup>+0</sup>	7.7 <sup>+3</sup>	3.2 <sup>+1</sup>	7.9 <sup>+0</sup>						7.3 <sup>+3</sup>							7.7 <sup>+3</sup>	1.5 <sup>+4</sup>
2160	4.2 <sup>-1</sup>	2.2 <sup>+3</sup>	6.7 <sup>+0</sup>	2.5 <sup>+0</sup>						2.9 <sup>+3</sup>							2.2 <sup>+3</sup>	5.1 <sup>+3</sup>
4320	NEG.	1.1 <sup>+3</sup>	2.2 <sup>+0</sup>	1.0 <sup>+0</sup>						9.8 <sup>+2</sup>							1.1 <sup>+3</sup>	2.1 <sup>+3</sup>

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SURRY AUXILIARY BLDG RADIATION ZONE AREA K @ EL. 15'

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $\mu\text{R/hr}$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 2 CONTAINMENT

———— MITIGATION PHASE - NO LETDOWN ————

PRELIMINARY

SOURCE TIME (HR)	SI/CH LINES	CHARGING	AUX. BLDG	DRAIN LINES	DRAIN LINES	SAFEGUARDS	SAFEGUARDS	DRAIN LINES	LOW LEVEL	REACTOR	CONTAIN.	HYDROGEN	CONTAIN.	CONTAIN.	CONTAIN.	CONTAIN.	SUB-TOTAL	TOTAL
	IN PEN. AREA el. 2' FP-10R	PUMP COB. el. 2' & 13' FP-10C	SUMP el. 2' FB-9A	IN SUMP AREA el. 2' & 13' FP-19N	IN P4E TUN. el. 2' FP-14L, 7A	SUMP DRAIN LINE IN PEN AREA el. 2' FP-7A	SUMP DRAIN LINE IN P4E TUN. el. 2' FP-19C	INSIDE WARE TANKS LUB. el. 2' & 13' FP-19C	OR HIGH LEVEL WASTE DRAIN TANK el. 2' & 13'	COOLANT SAMPLING LINES el. 2' & 13' 13:27.5'	LEAKAGE MONITOR LINES el. 2' & 13'	ANALYZER MAN TRAP el. 13'	ATMOSP. THRU PIPE PENETRATION el. 2'	SHINE THRU DOME	SHINE THRU PERSONAL HATCH	DOME R.S. HEADERS		
0	4.6 <sup>+5</sup>	1.1 <sup>+3</sup>	NEG.	NEG.	NEG.	1.2 <sup>+4</sup>	3.7 <sup>+3</sup>	NEG.	1.8 <sup>+1</sup>	3.4 <sup>+4</sup>	1.2 <sup>+3</sup>	1.7 <sup>+4</sup>	NEG.	NEG.	NEG.	NEG.	5.3 <sup>+5</sup>	5.3 <sup>+5</sup>
1	2.1 <sup>+5</sup>	6.5 <sup>+2</sup>				5.7 <sup>+3</sup>	1.5 <sup>+3</sup>		9.6 <sup>+0</sup>	1.4 <sup>+6</sup>	3.0 <sup>+2</sup>	4.4 <sup>+3</sup>					2.4 <sup>+5</sup>	2.4 <sup>+5</sup>
2	1.4 <sup>+5</sup>	4.4 <sup>+2</sup>				4.0 <sup>+3</sup>	1.0 <sup>+3</sup>		6.6 <sup>+0</sup>	9.8 <sup>+3</sup>	2.2 <sup>+2</sup>	3.3 <sup>+3</sup>					1.6 <sup>+5</sup>	1.6 <sup>+5</sup>
8	5.2 <sup>+4</sup>	1.8 <sup>+2</sup>				1.4 <sup>+3</sup>	3.5 <sup>+2</sup>		2.5 <sup>+0</sup>	3.7 <sup>+3</sup>	7.8 <sup>+1</sup>	1.4 <sup>+3</sup>					5.9 <sup>+4</sup>	5.9 <sup>+4</sup>
24	1.5 <sup>+4</sup>	7.5 <sup>+1</sup>				4.2 <sup>+2</sup>	9.5 <sup>+1</sup>		NEG.	1.4 <sup>+3</sup>	3.0 <sup>+1</sup>	6.1 <sup>+2</sup>					1.7 <sup>+4</sup>	1.7 <sup>+4</sup>
96	3.8 <sup>+3</sup>	2.6 <sup>+1</sup>				1.0 <sup>+2</sup>	2.2 <sup>+1</sup>			5.6 <sup>+2</sup>	1.1 <sup>+1</sup>	2.0 <sup>+2</sup>					4.7 <sup>+3</sup>	4.7 <sup>+3</sup>
192	2.7 <sup>+3</sup>	1.8 <sup>+1</sup>				7.5 <sup>+1</sup>	1.7 <sup>+1</sup>			3.5 <sup>+2</sup>	6.3 <sup>+0</sup>	1.2 <sup>+2</sup>					3.2 <sup>+3</sup>	3.2 <sup>+3</sup>
360	1.8 <sup>+3</sup>	1.1 <sup>+1</sup>				5.0 <sup>+1</sup>	1.1 <sup>+1</sup>			1.9 <sup>+2</sup>	2.9 <sup>+0</sup>	6.4 <sup>+1</sup>					2.1 <sup>+3</sup>	2.1 <sup>+3</sup>
720	7.2 <sup>+2</sup>	5.4 <sup>+0</sup>				2.6 <sup>+1</sup>	5.7 <sup>+0</sup>			8.5 <sup>+1</sup>	5.9 <sup>-1</sup>	1.7 <sup>+2</sup>					1.2 <sup>+3</sup>	1.2 <sup>+3</sup>
2160	2.7 <sup>+2</sup>	1.8 <sup>+0</sup>				7.7 <sup>+0</sup>	1.5 <sup>+0</sup>			3.4 <sup>+1</sup>	NEG.	1.0 <sup>-1</sup>					3.1 <sup>+2</sup>	3.1 <sup>+2</sup>
4320	1.1 <sup>+2</sup>	7.5 <sup>-1</sup>	↓	↓	↓	3.2 <sup>+0</sup>	5.5 <sup>-1</sup>	↓	↓	1.1 <sup>+1</sup>	↓	NEG.	↓	↓	↓	↓	1.2 <sup>+2</sup>	1.2 <sup>+2</sup>

NOTED FEB 14 1980

SURRY AUXILIARY BLDG RADIATION ZONE AREA L @ EL. 13'

ESTIMATED HIGHEST DIRECT T DOSE RATES ( $mR/hr$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 2 CONTAINMENT

———— MITIGATION PHASE - NO LETDOWN ————

PRELIMINARY

(2)

TIME (HR)	SOURCE SI/CH LINES IN PEN AREA EL. 2' FP-10K	CHARGING PUMP CUB. EL. 2' & 13' FP-10C	AUX. BLDG SUMP EL. 2' FB-9A	DRAIN LINES IN SUMP AREA EL. 2' & 13' FP-19N	DRAIN LINES IN PVE TUN. EL. 2' FP-MC.7A	SAFEGUARDS SUMP DRAIN LINES IN PEN AREA EL. 2' FP-7A	SAFEGUARDS SUMP DRAIN LINES IN PVE TUN. EL. 2' FP-19C	DRAIN LINES INSIDE WASTE TANKS CUB. EL. 2' & 13' FP-19C	LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK EL. 2' & 13'	REACTOR COOLANT SAMPLING LINES EL. 2' 13' & 27.5'	CONTAIN. LEAKAGE MONITOR LINES EL. 2' & 13'	HYDROGEN ANALYZER MAN TRAY EL. 13'	CONTAIN. ATMOSP. THRU PIPE PENETRATION EL. 2'	CONTAIN. SHINE THRU DOME	CONTAIN. SHINE THRU PERSONNEL MATCH	CONTAIN. DOME R.S. HEADERS	(1) SUB- TOTAL	TOTAL
0	4.4 <sup>+4</sup>	NEG.	NEG.	3.4 <sup>+2</sup>	NEG.	2.0 <sup>+4</sup>	3.7 <sup>+3</sup>	4.2 <sup>+0</sup>	2.0 <sup>+1</sup>	1.9 <sup>+4</sup>	4.6 <sup>+1</sup>	6.0 <sup>+3</sup>	NEG.	NEG.	NEG.	NEG.	9.5 <sup>+4</sup>	9.3 <sup>+4</sup>
1	1.7 <sup>+4</sup>			1.9 <sup>+2</sup>		9.3 <sup>+5</sup>	1.5 <sup>+3</sup>	2.5 <sup>+0</sup>	1.1 <sup>+1</sup>	7.9 <sup>+3</sup>	1.1 <sup>+1</sup>	1.5 <sup>+3</sup>					3.7 <sup>+4</sup>	3.7 <sup>+4</sup>
2	1.1 <sup>+4</sup>			1.3 <sup>+2</sup>		6.1 <sup>+3</sup>	1.0 <sup>+3</sup>	1.7 <sup>+0</sup>	7.2 <sup>+0</sup>	5.6 <sup>+3</sup>	8.4 <sup>+0</sup>	1.1 <sup>+3</sup>					2.5 <sup>+4</sup>	2.5 <sup>+4</sup>
8	3.8 <sup>+3</sup>			5.0 <sup>+1</sup>		2.2 <sup>+3</sup>	3.5 <sup>+2</sup>	6.8 <sup>-1</sup>	2.8 <sup>+0</sup>	2.1 <sup>+3</sup>	3.0 <sup>+0</sup>	2.1 <sup>+2</sup>					8.7 <sup>+3</sup>	8.7 <sup>+3</sup>
24	9.6 <sup>+2</sup>			1.7 <sup>+1</sup>		6.3 <sup>+2</sup>	9.3 <sup>+1</sup>	NEG.	9.2 <sup>-1</sup>	8.2 <sup>+2</sup>	1.1 <sup>+0</sup>	6.9 <sup>+1</sup>					2.6 <sup>+3</sup>	2.6 <sup>+3</sup>
96	2.4 <sup>+2</sup>			4.6 <sup>+0</sup>		1.5 <sup>+2</sup>	2.2 <sup>+1</sup>		NEG.	3.2 <sup>+2</sup>	4.2 <sup>-1</sup>	4.2 <sup>+1</sup>					7.7 <sup>+2</sup>	7.7 <sup>+2</sup>
192	1.7 <sup>+2</sup>			3.2 <sup>+0</sup>		1.1 <sup>+2</sup>	1.7 <sup>+1</sup>			2.0 <sup>+2</sup>	NEG.	2.2 <sup>+1</sup>					5.2 <sup>+2</sup>	5.2 <sup>+2</sup>
360	1.2 <sup>+2</sup>			2.1 <sup>+0</sup>		7.5 <sup>+1</sup>	1.1 <sup>+1</sup>			1.1 <sup>+2</sup>		6.0 <sup>+0</sup>					3.2 <sup>+2</sup>	3.2 <sup>+2</sup>
720	5.8 <sup>+1</sup>			1.1 <sup>+0</sup>		3.8 <sup>+1</sup>	5.7 <sup>+0</sup>			4.9 <sup>+1</sup>		NEG.					1.5 <sup>+2</sup>	1.5 <sup>+2</sup>
2160	1.4 <sup>+1</sup>			3.8 <sup>-1</sup>		1.1 <sup>+1</sup>	1.5 <sup>+0</sup>			1.9 <sup>+1</sup>							4.6 <sup>+1</sup>	4.6 <sup>+1</sup>
4320	5.0 <sup>+0</sup>	↓	↓	NEG.	↓	4.4 <sup>+0</sup>	5.5 <sup>-1</sup>	↓	↓	6.5 <sup>+0</sup>	↓	↓	↓	↓	↓	↓	1.7 <sup>+1</sup>	1.7 <sup>+1</sup>

REGULATORY DCKET FILE COPY

NOTED FEB 14 1980

SURRY AUXILIARY BLDG RADIATION ZONE AREA M @ EL. 13'

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $\mu\text{R/hr}$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 2 CONTAINMENT

———— MITIGATION PHASE - NO LETDOWN ————

PRELIMINARY

(2)

TIME (HR)	SI/CH LINES IN PER. AREA el. 2' FP-10K	CHARGING PUMP CUB. el. 2' & 13' FP-10C	AUX. BLDG SUMP el. 2' FB-9A	DRAIN LINES IN SUMP AREA el. 2' & 13' FP-19N	DRAW LINES IN PVE TUN. el. 2' FP-14L, 7A	SAFEGUARDS SUMP DRAIN LINES IN PER. AREA el. 2' FP-7A	SAFEGUARDS SUMP DRAIN LINES IN PVE TUN. el. 2' FP-19C	DRAIN LINES INSIDE UNIT TRUNKS CUB. el. 2' & 13' FP-19C	LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK el. 2' & 13'	REACTOR COOLANT SAMPLING LINES el. 2' & 13' 13:27.5'	CONTAIN. LEAKAGE MONITOR LINES el. 2' & 13'	HYDROGEN ANALYZER MAIN TRAY el. 13'	CONTAIN. ATMOSP. THRU PIPE PENETRATION el. 2'	CONTAIN. SHINE THRU DOME	CONTAIN. SHINE THRU PERSONNEL HATCH	CONTAIN. DOME R.S. HEADERS	(1) SUB-TOTAL	TOTAL
0	1.1 <sup>+2</sup>	5.2 <sup>+3</sup>	4.1 <sup>+3</sup>	1.9 <sup>+6</sup>	2.1 <sup>+4</sup>	3.3 <sup>+0</sup>	4.6 <sup>+3</sup>	1.4 <sup>+4</sup>	6.6 <sup>+5</sup>	5.2 <sup>+3</sup>	6.2 <sup>+2</sup>	5.4 <sup>+5</sup>	NEG.	NEG.	NEG.	NEG.	2.1 <sup>+6</sup>	3.1 <sup>+6</sup>
1	2.5 <sup>+1</sup>	3.1 <sup>+3</sup>	1.9 <sup>+3</sup>	1.2 <sup>+6</sup>	1.1 <sup>+4</sup>	NEG.	2.4 <sup>+3</sup>	8.3 <sup>+3</sup>	4.0 <sup>+5</sup>	2.1 <sup>+3</sup>	1.5 <sup>+2</sup>	1.4 <sup>+5</sup>					1.4 <sup>+6</sup>	1.8 <sup>+6</sup>
2	1.5 <sup>+1</sup>	2.1 <sup>+3</sup>	8.2 <sup>+2</sup>	8.3 <sup>+5</sup>	7.2 <sup>+3</sup>		1.6 <sup>+3</sup>	5.7 <sup>+3</sup>	2.7 <sup>+5</sup>	1.5 <sup>+3</sup>	1.1 <sup>+2</sup>	1.0 <sup>+5</sup>					9.3 <sup>+5</sup>	1.2 <sup>+6</sup>
8	3.4 <sup>+0</sup>	8.5 <sup>+2</sup>	2.5 <sup>+2</sup>	3.5 <sup>+5</sup>	2.7 <sup>+3</sup>		5.9 <sup>+2</sup>	2.3 <sup>+3</sup>	1.1 <sup>+5</sup>	5.7 <sup>+2</sup>	4.0 <sup>+1</sup>	4.6 <sup>+4</sup>					3.9 <sup>+5</sup>	5.0 <sup>+5</sup>
24	5.0 <sup>-1</sup>	3.6 <sup>+2</sup>	5.4 <sup>+1</sup>	1.6 <sup>+5</sup>	8.2 <sup>+2</sup>		1.8 <sup>+2</sup>	9.6 <sup>+2</sup>	4.6 <sup>+4</sup>	2.2 <sup>+2</sup>	1.5 <sup>+1</sup>	2.0 <sup>+4</sup>					1.2 <sup>+5</sup>	1.7 <sup>+5</sup>
96	NEG.	1.2 <sup>+2</sup>	1.4 <sup>+1</sup>	5.8 <sup>+4</sup>	2.1 <sup>+2</sup>		4.6 <sup>+1</sup>	3.3 <sup>+2</sup>	1.5 <sup>+4</sup>	8.7 <sup>+1</sup>	5.6 <sup>+0</sup>	6.4 <sup>+3</sup>					6.5 <sup>+4</sup>	8.0 <sup>+4</sup>
192		8.3 <sup>+1</sup>	1.0 <sup>+1</sup>	4.0 <sup>+4</sup>	1.5 <sup>+2</sup>		3.3 <sup>+1</sup>	2.2 <sup>+2</sup>	1.1 <sup>+4</sup>	5.5 <sup>+1</sup>	3.2 <sup>+0</sup>	3.9 <sup>+3</sup>					4.4 <sup>+4</sup>	5.5 <sup>+4</sup>
360		5.2 <sup>+1</sup>	6.9 <sup>+0</sup>	2.5 <sup>+6</sup>	1.0 <sup>+2</sup>		2.2 <sup>+1</sup>	1.4 <sup>+2</sup>	6.6 <sup>+3</sup>	3.0 <sup>+1</sup>	1.5 <sup>+0</sup>	2.1 <sup>+3</sup>					2.7 <sup>+4</sup>	3.4 <sup>+4</sup>
720		2.5 <sup>+1</sup>	3.3 <sup>+0</sup>	1.2 <sup>+4</sup>	5.2 <sup>+1</sup>		1.1 <sup>+1</sup>	7.0 <sup>+1</sup>	3.2 <sup>+3</sup>	1.3 <sup>+1</sup>	3.0 <sup>-1</sup>	5.5 <sup>+2</sup>					1.3 <sup>+4</sup>	1.6 <sup>+4</sup>
2160		7.0 <sup>+0</sup>	NEG.	3.8 <sup>+3</sup>	1.7 <sup>+1</sup>		3.7 <sup>+0</sup>	2.3 <sup>+1</sup>	1.1 <sup>+3</sup>	5.2 <sup>+0</sup>	NEG.	3.2 <sup>+0</sup>					3.9 <sup>+3</sup>	5.0 <sup>+3</sup>
4320	↓	3.6 <sup>+0</sup>	↓	1.7 <sup>+3</sup>	6.9 <sup>+0</sup>	↓	1.5 <sup>+0</sup>	9.6 <sup>+0</sup>	4.6 <sup>+2</sup>	1.8 <sup>+0</sup>	↓	NEG.	↓	↓	↓	↓	1.7 <sup>+3</sup>	2.2 <sup>+3</sup>

SURRY AUXILIARY BLDG RADIATION ZONE AREA N @ EL. 13'

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $\mu R/hr$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 2 CONTAINMENT

PRELIMINARY

MITIGATION PHASE - NO LETDOWN

TIME (HR)	SI/CH LINES IN PER AREA el. 2' FP-10K	CHARGING PUMP CUB. el. 2' & 13' FP-10C	AUX. BLDG SUMP el. 2' FB-9A	DRAIN LINES IN SUMP AREA el. 2' & 13' FP-19N	DRAIN LINES IN PVE TUN. el. 2' FP-14L, 7A	SAFEGUARDS SUMP DRAIN LINES IN PER AREA el. 2' FP-7A	SAFEGUARDS SUMP DRAIN LINES IN PVE TUN. el. 2' FP-19C	DRAIN LINES INSIDE WASTE TANKS CUB. el. 2' & 13' FP-19C	LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK el. 2' & 13'	REACTOR COOLANT SAMPLING LINES el. 2' & 13' 15:27.5'	CONTAIN. LEAKAGE MONITOR LINES el. 2' & 13'	HYDROGEN ANALYZER el. 13'	CONTAIN. ATMOSP. THRU PIPE PENETRATIONS el. 2'	CONTAIN. SHINE THRU DOME	CONTAIN. SHINE THRU PERSONAL HATCH	CONTAIN. DOME R.S. HEADERS	(1) SUB-TOTAL	TOTAL
0	1.1 <sup>+6</sup>	1.1 <sup>+5</sup>	NEG.	3.4 <sup>+2</sup>	NEG.	3.3 <sup>+4</sup>	8.1 <sup>+3</sup>	1.5 <sup>+2</sup>	5.7 <sup>+2</sup>	1.1 <sup>+4</sup>	2.4 <sup>+4</sup>	1.1 <sup>+8</sup>	NEG.	NEG.	NEG.	NEG.	1.1 <sup>+8</sup>	1.1 <sup>+8</sup>
1	5.2 <sup>+5</sup>	6.6 <sup>+4</sup>		1.9 <sup>+2</sup>		1.5 <sup>+4</sup>	4.2 <sup>+3</sup>	8.8 <sup>+1</sup>	3.0 <sup>+2</sup>	4.4 <sup>+3</sup>	5.7 <sup>+3</sup>	2.9 <sup>+7</sup>					3.0 <sup>+7</sup>	3.0 <sup>+7</sup>
2	3.5 <sup>+5</sup>	4.4 <sup>+4</sup>		1.3 <sup>+2</sup>		1.0 <sup>+4</sup>	2.9 <sup>+3</sup>	6.1 <sup>+1</sup>	2.1 <sup>+2</sup>	3.1 <sup>+3</sup>	4.4 <sup>+3</sup>	2.1 <sup>+7</sup>					2.1 <sup>+7</sup>	2.1 <sup>+7</sup>
8	1.3 <sup>+5</sup>	1.8 <sup>+4</sup>		5.0 <sup>+1</sup>		4.0 <sup>+3</sup>	1.1 <sup>+3</sup>	2.4 <sup>+1</sup>	7.8 <sup>+1</sup>	1.2 <sup>+3</sup>	1.6 <sup>+3</sup>	9.4 <sup>+0</sup>					9.5 <sup>+6</sup>	9.5 <sup>+6</sup>
24	3.8 <sup>+4</sup>	7.5 <sup>+3</sup>		1.7 <sup>+1</sup>		1.2 <sup>+3</sup>	3.3 <sup>+2</sup>	1.0 <sup>+1</sup>	2.6	4.5 <sup>+2</sup>	5.9 <sup>+1</sup>	4.0 <sup>+6</sup>					4.0 <sup>+6</sup>	4.0 <sup>+6</sup>
96	9.6 <sup>+3</sup>	2.6 <sup>+3</sup>		4.6 <sup>+0</sup>		3.2 <sup>+2</sup>	8.4 <sup>+1</sup>	3.5 <sup>+0</sup>	7.1 <sup>+0</sup>	1.8 <sup>+2</sup>	2.2 <sup>+2</sup>	1.3 <sup>+6</sup>					1.3 <sup>+6</sup>	1.3 <sup>+6</sup>
192	6.8 <sup>+3</sup>	1.8 <sup>+3</sup>		3.2 <sup>+0</sup>		2.2 <sup>+2</sup>	6.2 <sup>+1</sup>	2.4 <sup>+0</sup>	5.0 <sup>+0</sup>	1.1 <sup>+2</sup>	1.3 <sup>+2</sup>	7.9 <sup>+5</sup>					8.0 <sup>+5</sup>	8.0 <sup>+5</sup>
360	4.6 <sup>+3</sup>	1.1 <sup>+3</sup>		2.1 <sup>+0</sup>		1.5 <sup>+2</sup>	4.0 <sup>+1</sup>	1.5 <sup>+0</sup>	3.3 <sup>+0</sup>	6.1 <sup>+1</sup>	5.7 <sup>+1</sup>	4.2 <sup>+5</sup>					4.3 <sup>+5</sup>	4.3 <sup>+5</sup>
720	2.4 <sup>+3</sup>	5.4 <sup>+2</sup>		1.1 <sup>+0</sup>		7.5 <sup>+1</sup>	3.0 <sup>+1</sup>	NEG.	1.7 <sup>+0</sup>	2.7 <sup>+1</sup>	1.2 <sup>+1</sup>	1.1 <sup>+5</sup>					1.1 <sup>+5</sup>	1.1 <sup>+5</sup>
2160	7.2 <sup>+2</sup>	1.8 <sup>+2</sup>		3.8 <sup>-1</sup>		2.4 <sup>+1</sup>	6.6 <sup>+0</sup>		NEG.	1.1 <sup>+1</sup>	NEG.	6.6 <sup>+2</sup>					1.6 <sup>+3</sup>	1.6 <sup>+3</sup>
4320	2.9 <sup>+2</sup>	7.5 <sup>+1</sup>		NEG.		9.9 <sup>+0</sup>	2.6 <sup>+0</sup>			3.6 <sup>+0</sup>		3.0 <sup>-1</sup>					3.3 <sup>+2</sup>	3.3 <sup>+2</sup>

REGULATORY DOCUMENT FILE COPY

NOTED FEB 14 1990

SURRY AUXILIARY BLDG RADIATION ZONE AREA 0 @ EL. 13'

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $\mu R/hr$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 2 CONTAINMENT

— MITIGATION PHASE - NO LETDOWN —

PRELIMINARY

SOURCE TIME (HR)	SI/CH LINES IN PEN AREA el. 2'	CHARGING PUMP CUB. el. 2' & 13'	AUX. BLDG SUMP el. 2'	DRAIN LINES IN SUMP AREA el. 2' & 13'	DRAIN LINES IN PYE TUN. el. 2'	SAFEGUARDS SUMP DRAIN LINE IN PEN AREA el. 2'	SAFEGUARDS SUMP DRAIN LINE IN PYE TUN. el. 2'	DRAIN LINE INSIDE WASTE TANK CUB. el. 2' & 13'	LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK el. 2' & 13'	REACTOR COOLANT SAMPLING LINES el. 2' & 13'	CONTAIN. LEAKAGE MONITOR LINES el. 2' & 13'	HYDROGEN ANALYZER MAN TRAP el. 13'	CONTAIN. ATMOSP. THRU PIPE PENETRATION el. 2'	CONTAIN. SHINE THRU DOME	CONTAIN. SHINE THRU PERSONNEL HATCH	CONTAIN. DOME R.S. HEADERS	(1) SUB- TOTAL	TOTAL
	FP-10K	FP-10C	FB-9A	FP-19N	FP-14L, 7A	FP-7A	FP-19C	FP-13C										
0	NEG.	1.9 <sup>+1</sup>	NEG.	3.4 <sup>+2</sup>	3.7 <sup>+4</sup>	NEG.	NEG.	4.8 <sup>+2</sup>	1.9 <sup>+4</sup>	4.4 <sup>+0</sup>	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	3.8 <sup>+4</sup>	5.7 <sup>+4</sup>
1		1.1 <sup>+1</sup>		1.9 <sup>+2</sup>	1.9 <sup>+4</sup>			2.9 <sup>+2</sup>	1.2 <sup>+4</sup>	1.8 <sup>+0</sup>							1.9 <sup>+4</sup>	3.1 <sup>+4</sup>
2		7.7 <sup>+0</sup>		1.3 <sup>+2</sup>	1.3 <sup>+4</sup>			2.0 <sup>+2</sup>	8.1 <sup>+3</sup>	1.3 <sup>+0</sup>							1.3 <sup>+4</sup>	2.1 <sup>+4</sup>
8		3.1 <sup>+0</sup>		5.0 <sup>+1</sup>	4.8 <sup>+3</sup>			7.9 <sup>+1</sup>	3.3 <sup>+3</sup>	4.8 <sup>-1</sup>							4.8 <sup>+3</sup>	8.2 <sup>+3</sup>
24		1.3 <sup>+0</sup>		1.7 <sup>+1</sup>	1.5 <sup>+3</sup>			3.3 <sup>+1</sup>	1.4 <sup>+3</sup>	NEG.							1.6 <sup>+3</sup>	3.0 <sup>+3</sup>
96		4.4 <sup>-1</sup>		4.6 <sup>+0</sup>	3.8 <sup>+2</sup>			1.1 <sup>+1</sup>	4.7 <sup>+2</sup>								3.9 <sup>+2</sup>	8.7 <sup>+2</sup>
192		NEG.		3.2 <sup>+0</sup>	2.8 <sup>+2</sup>			7.7 <sup>+0</sup>	3.1 <sup>+2</sup>								2.8 <sup>+2</sup>	6.0 <sup>+2</sup>
360				2.1 <sup>+0</sup>	1.8 <sup>+2</sup>			4.8 <sup>+0</sup>	1.9 <sup>+2</sup>								1.8 <sup>+2</sup>	3.8 <sup>+2</sup>
720				1.1 <sup>+0</sup>	9.3 <sup>+1</sup>			2.4 <sup>+0</sup>	9.3 <sup>+1</sup>								9.4 <sup>+1</sup>	1.9 <sup>+2</sup>
2160				3.8 <sup>-1</sup>	3.0 <sup>+1</sup>			7.9 <sup>-1</sup>	3.3 <sup>+1</sup>								3.0 <sup>+1</sup>	6.3 <sup>+1</sup>
4320					1.2 <sup>+1</sup>			NEG.	1.4 <sup>+1</sup>								1.2 <sup>+1</sup>	2.6 <sup>+1</sup>

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SURRY AUXILIARY BLDG RADIATION ZONE AREA P @ EL. 13'

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $\mu\text{R/hr}$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14944 SOURCE TERMS) INSIDE UNIT # 2 CONTAINMENT

MITIGATION PHASE - NO LETDOWN

PRELIMINARY

(2)

SOURCE TIME (HR)	SI/CH LINES IN PER AREA el. 2' FP-10K	CHARGING PUMP CUB. el. 2' & 13' FP-10C	AUX. BLDG SUMP el. 2' FB-9A	DRAIN LINES IN SUMP AREA el. 2' & 13' FP-19N	DRAIN LINES IN PPE TUN. el. 2' FP-HC.7A	SAFEGUARDS SUMP DRAIN LINES IN PER AREA el. 2' FP-7A	SAFEGUARDS SUMP DRAIN LINES IN PPE TUN. el. 2' FP-19C	DRAIN LINES INSIDE WASTE TANKS LUB. el. 2' & 13' FP-19C	LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK el. 2' & 13'	REACTOR COOLANT SAMPLING LINES el. 2' & 13'	CONTAIN. LEAKAGE MONITOR LINES el. 2' & 13'	HYDROGEN ANALYZER MAIN TRAY el. 13'	CONTAIN. ATMOSP. THRU PIPE PENETRATION el. 2'	CONTAIN. SHINE THRU DOME	CONTAIN. SHINE THRU PERSONNEL HATCH	CONTAIN. DOME R.S. HEADERS	(1) SUB- TOTAL	TOTAL
0	4.1 <sup>+5</sup>	1.1 <sup>+3</sup>	NEG	7.9 <sup>+1</sup>	NEG.	1.3 <sup>+0</sup>	NEG.	NEG.	1.1 <sup>+3</sup>	9.2 <sup>+2</sup>	8.0 <sup>+2</sup>	1.3 <sup>+5</sup>	NEG.	NEG.	NEG.	NEG.	5.4 <sup>+5</sup>	5.4 <sup>+5</sup>
1	2.0 <sup>+5</sup>	6.6 <sup>+2</sup>		3.9 <sup>+1</sup>		NEG.			6.7 <sup>+2</sup>	3.8 <sup>+2</sup>	1.0 <sup>+2</sup>	3.2 <sup>+1</sup>					2.3 <sup>+5</sup>	2.3 <sup>+5</sup>
2	1.4 <sup>+5</sup>	4.4 <sup>+2</sup>		2.6 <sup>+1</sup>					4.5 <sup>+2</sup>	2.7 <sup>+2</sup>	7.6 <sup>+1</sup>	2.3 <sup>+4</sup>					1.6 <sup>+5</sup>	1.6 <sup>+5</sup>
8	5.0 <sup>+4</sup>	1.8 <sup>+2</sup>		9.6 <sup>+0</sup>					1.9 <sup>+2</sup>	1.0 <sup>+2</sup>	2.7 <sup>+1</sup>	1.1 <sup>+4</sup>					6.1 <sup>+4</sup>	6.1 <sup>+4</sup>
24	1.5 <sup>+4</sup>	7.5 <sup>+1</sup>		2.9 <sup>+0</sup>					7.6 <sup>+1</sup>	3.9 <sup>+1</sup>	1.0 <sup>+1</sup>	4.5 <sup>+3</sup>					2.0 <sup>+4</sup>	2.0 <sup>+4</sup>
96	3.8 <sup>+3</sup>	2.6 <sup>+1</sup>		7.8 <sup>-1</sup>					2.6 <sup>+1</sup>	1.5 <sup>+1</sup>	3.8 <sup>+0</sup>	1.4 <sup>+3</sup>					5.2 <sup>+3</sup>	5.3 <sup>+3</sup>
192	2.7 <sup>+3</sup>	1.8 <sup>+1</sup>		NEG.					1.8 <sup>+1</sup>	9.7 <sup>+0</sup>	2.2 <sup>+0</sup>	8.7 <sup>+2</sup>					3.6 <sup>+3</sup>	3.6 <sup>+3</sup>
360	1.8 <sup>+3</sup>	1.1 <sup>+1</sup>							1.1 <sup>+1</sup>	5.3 <sup>+0</sup>	9.9 <sup>-1</sup>	4.7 <sup>+2</sup>					2.2 <sup>+3</sup>	2.3 <sup>+3</sup>
720	9.4 <sup>+2</sup>	5.4 <sup>+0</sup>							5.2 <sup>+0</sup>	2.3 <sup>+0</sup>	NEG.	1.3 <sup>+2</sup>					1.1 <sup>+3</sup>	1.1 <sup>+3</sup>
2160	2.8 <sup>+2</sup>	1.8 <sup>+0</sup>							1.9 <sup>+0</sup>	9.2 <sup>-1</sup>		NEG.					2.8 <sup>+2</sup>	2.8 <sup>+2</sup>
4320	1.2 <sup>+2</sup>	7.5 <sup>-1</sup>							7.6 <sup>-1</sup>	NEG.							1.2 <sup>+2</sup>	1.2 <sup>+2</sup>

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SURRY AUXILIARY BLDG RADIATION ZONE AREA Q @ EL. 13'

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $mR/hr$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 2 CONTAINMENT

———— MITIGATION PHASE - NO LETDOWN ————

PRELIMINARY

SOURCE TIME (HR)	SI/CH LINES IN PEN. AREA EL. 2' FP-10K	CHARGING PUMP CUB. EL. 2' & 13' FP-10C	AUX. BLDG SUMP EL. 2' FB-9A	DRAIN LINES IN SWAMP AREA EL. 2' & 13' FP-19N	DRAW LINES IN PPE TUN. EL. 2' FP-19L, 7A	SAFEGUARDS SUMP DRAIN LINES IN PEN AREA EL. 2' FP-7A	SAFEGUARDS SUMP DRAIN LINES IN PPE TUN. EL. 2' FP-19C	DRAIN LINES INSIDE WASTE TANKS CUB. EL. 2' & 13' FP-19C	LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK EL. 2' & 13'	REACTOR COOLANT SAMPLING LINES EL. 2' & 13'	CONTAIN. LEAKAGE MONITOR LINES EL. 2' & 13'	HYDROGEN ANALYZER DRAIN TRAY EL. 13'	CONTAIN. ATMOSP. THRU PIPE PENETRANT EL. 2'	CONTAIN. SHINE THRU DOME	CONTAIN. SHINE THRU PERSONAL HATCH	CONTAIN. DOME R.S. HEADERS	(1) SUB- TOTAL	TOTAL	
																			0
1				1.9 <sup>+2</sup>	6.6 <sup>+2</sup>			3.4 <sup>+6</sup>	2.5 <sup>+7</sup>			1.3 <sup>+2</sup>						6.9 <sup>+3</sup>	2.8 <sup>+7</sup>
2				1.3 <sup>+2</sup>	4.7 <sup>+2</sup>			2.3 <sup>+6</sup>	1.8 <sup>+7</sup>			9.9 <sup>+1</sup>						4.9 <sup>+3</sup>	2.0 <sup>+7</sup>
8				5.0 <sup>+1</sup>	1.6 <sup>+2</sup>			7.4 <sup>+5</sup>	6.9 <sup>+6</sup>			4.3 <sup>+1</sup>						1.7 <sup>+3</sup>	7.8 <sup>+6</sup>
24				1.7 <sup>+1</sup>	4.3 <sup>+2</sup>			3.9 <sup>+5</sup>	3.0 <sup>+6</sup>			1.9 <sup>+1</sup>						4.7 <sup>+2</sup>	3.4 <sup>+6</sup>
96				4.6 <sup>+0</sup>	1.0 <sup>+2</sup>			1.4 <sup>+5</sup>	9.9 <sup>+5</sup>			6.1 <sup>+0</sup>						1.1 <sup>+2</sup>	11 <sup>+6</sup>
192				3.2 <sup>+0</sup>	7.6 <sup>+1</sup>			9.1 <sup>+4</sup>	6.7 <sup>+5</sup>			3.7 <sup>+0</sup>						8.3 <sup>+1</sup>	7.6 <sup>+5</sup>
360				2.1 <sup>+0</sup>	5.2 <sup>+1</sup>			5.7 <sup>+4</sup>	4.2 <sup>+5</sup>			1.9 <sup>+0</sup>						5.6 <sup>+1</sup>	4.8 <sup>+5</sup>
720				1.1 <sup>+0</sup>	2.6 <sup>+1</sup>			2.9 <sup>+4</sup>	2.1 <sup>+5</sup>			5.2 <sup>-1</sup>						2.8 <sup>+1</sup>	2.4 <sup>+5</sup>
2160				3.8 <sup>-1</sup>	6.6 <sup>+0</sup>			9.4 <sup>+3</sup>	6.9 <sup>+4</sup>			NEG.						7.0 <sup>+0</sup>	7.8 <sup>+4</sup>
4320	↓	↓	↓	NEG.	2.5 <sup>+0</sup>	↓	↓	3.9 <sup>+3</sup>	3.0 <sup>+4</sup>	↓	↓	↓	↓	↓	↓	↓	↓	2.5 <sup>+0</sup>	3.4 <sup>+5</sup>

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SURRY AUXILIARY BLDG RADIATION ZONE AREA R @ EL. 15'

PRELIMINARY

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $\mu R/hr$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 2 CONTAINMENT

———— MITIGATION PHASE - NO LETDOWN ————

(2)

TIME (HR)	SI/CH LINES IN PEN. AREA el. 2' FP-10K	CHARGING PUMP CUB. el. 2' & 13' FP-10C	AUX. BLDG SUMP el. 2' FB-9A	DRAIN LINES IN SUMP AREA el. 2' & 13' FP-19N	DRAIN LINES IN PHE TUN. el. 2' FP-14, 7A	SAFEGUARDS SUMP DRAIN LINES IN PEN. AREA el. 2' FP-7A	SAFEGUARDS SUMP DRAIN LINES IN PIPE TUN. el. 2' FP-19C	DRAIN LINES INSIDE WASTE TANKS el. 2' & 13' FP-19C	LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK el. 2' & 13'	REACTOR COOLANT SAMPLING LINES el. 2' 13' 27.5'	CONTAIN. LEAKAGE MONITOR LINES el. 2' & 13'	HYDROGEN ANALYZER MAIN TRAY el. 13'	CONTAIN. ATMO. THRU PIPE PENETRATIONS el. 2'	CONTAIN. SHINE THRU DOME	CONTAIN. SHINE THRU PERSONNEL HATCH	CONTAIN. DOME R.S. HEADERS	(1) SUB-TOTAL	TOTAL
0	NEG.	NEG.	NEG.	NEG.	1.7 <sup>+4</sup>	NEG.	NEG.	1.5 <sup>+3</sup>	1.4 <sup>+5</sup>	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	1.7 <sup>+4</sup>	1.6 <sup>+5</sup>
1					6.6 <sup>+3</sup>			9.1 <sup>+2</sup>	8.4 <sup>+4</sup>								6.6 <sup>+3</sup>	9.2 <sup>+4</sup>
2					4.7 <sup>+3</sup>			6.2 <sup>+2</sup>	5.7 <sup>+4</sup>								4.7 <sup>+3</sup>	6.2 <sup>+4</sup>
8					1.6 <sup>+2</sup>			2.5 <sup>+2</sup>	2.3 <sup>+4</sup>								1.6 <sup>+3</sup>	2.5 <sup>+4</sup>
24					4.3 <sup>+2</sup>			1.1 <sup>+2</sup>	9.5 <sup>+3</sup>								4.3 <sup>+2</sup>	1.0 <sup>+4</sup>
96					1.0 <sup>+2</sup>			3.6 <sup>+1</sup>	3.3 <sup>+3</sup>								1.0 <sup>+2</sup>	3.4 <sup>+3</sup>
192					7.6 <sup>+1</sup>			2.5 <sup>+1</sup>	2.2 <sup>+3</sup>								7.6 <sup>+1</sup>	2.3 <sup>+3</sup>
360					5.2 <sup>+1</sup>			1.5 <sup>+1</sup>	1.4 <sup>+3</sup>								5.2 <sup>+1</sup>	1.5 <sup>+3</sup>
720					2.6 <sup>+1</sup>			7.7 <sup>+0</sup>	6.6 <sup>+2</sup>								2.6 <sup>+1</sup>	6.9 <sup>+2</sup>
2160					6.6 <sup>+0</sup>			2.5 <sup>+0</sup>	2.3 <sup>+2</sup>								6.6 <sup>+0</sup>	2.4 <sup>+2</sup>
4320	↓	↓	↓	↓	2.5 <sup>+0</sup>	↓	↓	1.1 <sup>+0</sup>	9.5 <sup>+1</sup>	↓	↓	↓	↓	↓	↓	↓	2.5 <sup>+0</sup>	9.9 <sup>+1</sup>

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SURRY AUXILIARY BLDG RADIATION ZONE AREA S @ EL. 19'

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $mR/hr$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 2 CONTAINMENT

———— MITIGATION PHASE - NO LETDOWN ————

PRELIMINARY

(2)

TIME (HR)	SE/CH LINES IN PEN AREA el. 2' FP-10K	CHARGING PUMP CUB. el. 2' & 13' FP-10C	AUX. BLDG SUMP el. 2' FB-9A	DRAIN LINES IN SUMP AREA el. 2' & 13' FP-19N	DRAW LINES IN PPE TUN. el. 2' FP-14.7A	SAFEGUARDS SUMP DRAIN LINES IN PEN AREA el. 2' FP-7A	SAFEGUARDS SUMP DRAIN LINES IN PPE TUN. el. 2' FP-19C	DRAIN LINES INSIDE WASTE TANKS CUB. el. 2' & 13' FP-19C	LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK el. 2' & 13'	REACTOR COOLANT SAMPLING LINES el. 2' 13' & 27.5'	CONTAIN. LEAKAGE MONITOR LINES el. 2' & 13'	HYDROGEN ANALYZER DRAIN TRAY el. 13'	CONTAIN. ATMOSP. THRU PIPE PENETRATION el. 2'	CONTAIN. SHINE THRU DOME	CONTAIN. SHINE THRU PERSONAL HATCH	CONTAIN. DOME R.S. HEADERS	(1) SUB-TOTAL	TOTAL
0	4.1 <sup>+5</sup>	9.6 <sup>+6</sup>	3.5 <sup>+0</sup>	4.4 <sup>+4</sup>	1.0 <sup>+2</sup>	1.3 <sup>+4</sup>	1.6 <sup>+4</sup>	NEG.	3.0 <sup>+0</sup>	1.2 <sup>+4</sup>	2.1 <sup>+1</sup>	1.7 <sup>+4</sup>	NEG.	NEG.	NEG.	NEG.	1.0 <sup>+7</sup>	1.0 <sup>+7</sup>
1	2.1 <sup>+5</sup>	5.8 <sup>+6</sup>	6.2 <sup>-1</sup>	2.4 <sup>+4</sup>	5.7 <sup>+2</sup>	6.9 <sup>+3</sup>	9.7 <sup>+3</sup>		2.3 <sup>+0</sup>	5.0 <sup>+3</sup>	5.1 <sup>+0</sup>	4.4 <sup>+3</sup>					6.1 <sup>+6</sup>	6.1 <sup>+6</sup>
2	1.4 <sup>+5</sup>	4.0 <sup>+6</sup>	NEG.	1.7 <sup>+4</sup>	3.9 <sup>+2</sup>	4.8 <sup>+3</sup>	6.8 <sup>+3</sup>		1.6 <sup>+0</sup>	3.5 <sup>+3</sup>	3.0 <sup>+0</sup>	3.3 <sup>+3</sup>					4.2 <sup>+6</sup>	4.2 <sup>+6</sup>
8	5.4 <sup>+4</sup>	1.6 <sup>+6</sup>		6.4 <sup>+3</sup>	1.5 <sup>+2</sup>	1.9 <sup>+2</sup>	2.9 <sup>+3</sup>		6.5 <sup>-1</sup>	1.3 <sup>+2</sup>	1.3 <sup>+0</sup>	1.4 <sup>+3</sup>					1.7 <sup>+6</sup>	1.7 <sup>+6</sup>
24	1.7 <sup>+4</sup>	6.8 <sup>+5</sup>		2.1 <sup>+3</sup>	5.1 <sup>+1</sup>	6.2 <sup>+2</sup>	1.3 <sup>+3</sup>		NEG.	5.2 <sup>+2</sup>	5.1 <sup>-1</sup>	6.1 <sup>+2</sup>					7.1 <sup>+5</sup>	7.1 <sup>+5</sup>
96	4.4 <sup>+3</sup>	2.2 <sup>+5</sup>		5.8 <sup>+2</sup>	1.4 <sup>+1</sup>	1.7 <sup>+2</sup>	4.8 <sup>+2</sup>			2.0 <sup>+2</sup>	NEG.	2.0 <sup>+2</sup>					2.3 <sup>+5</sup>	2.3 <sup>+5</sup>
192	3.1 <sup>+5</sup>	1.5 <sup>+5</sup>		4.0 <sup>+2</sup>	9.8 <sup>+0</sup>	1.2 <sup>+2</sup>	3.3 <sup>+2</sup>			1.3 <sup>+2</sup>		1.2 <sup>+2</sup>					1.5 <sup>+5</sup>	1.5 <sup>+5</sup>
360	2.1 <sup>+3</sup>	7.6 <sup>+4</sup>		2.7 <sup>+2</sup>	6.4 <sup>+0</sup>	7.9 <sup>+1</sup>	2.0 <sup>+2</sup>			7.0 <sup>+1</sup>		6.4 <sup>+1</sup>					1.0 <sup>+5</sup>	1.0 <sup>+5</sup>
720	1.1 <sup>+5</sup>	4.8 <sup>+4</sup>		1.4 <sup>+2</sup>	3.4 <sup>+0</sup>	4.1 <sup>+1</sup>	9.5 <sup>+2</sup>			3.1 <sup>+2</sup>		1.7 <sup>+2</sup>					5.1 <sup>+4</sup>	5.1 <sup>+4</sup>
2160	3.5 <sup>+2</sup>	1.3 <sup>+4</sup>		4.7 <sup>+1</sup>	1.2 <sup>+0</sup>	1.4 <sup>+1</sup>	3.1 <sup>+2</sup>			1.2 <sup>+1</sup>		1.0 <sup>-1</sup>					1.4 <sup>+4</sup>	1.4 <sup>+4</sup>
4320	1.5 <sup>+2</sup>	6.8 <sup>+3</sup>	√	2.0 <sup>+0</sup>	4.9 <sup>-1</sup>	NEG.	1.4 <sup>+1</sup>	√	√	4.1 <sup>+0</sup>	√	NEG.	√	√	√	√	7.0 <sup>+3</sup>	7.0 <sup>+3</sup>

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SURRY AUXILIARY BLDG RADIATION ZONE AREA T @ EL. 13'

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $\mu R/hr$ ) FROM VARIOUS SOURCES DUE TO  
LDCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 2 CONTAINMENT

———— MITIGATION PHASE - NO LETDOWN ————

PRELIMINARY

SOURCE TIME (HR)	SI/CH LINES IN PEN AREA	CHARGING PUMP CUB.	AUX. BLDG SUMP	DRAIN LINES IN SUMP AREA	DRAIN LINES IN PHE TUN.	SAFEGUARDS SUMP DRAIN LINE IN PEN AREA EL 2'	SAFEGUARDS SUMP DRAIN LINE IN PHE TUN. EL 2'	DRAIN LINES INSIDE WASTE TANKS CUB.	LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK EL 2' & 13'	REACTOR COOLANT SAMPLING LINES EL 2' 13' & 27.5'	CONTAIN. LEAKAGE MONS FOR LINES EL 2' & 13'	HYDROGEN ANALYZER MAN TRAP EL 13'	CONTAIN. ATMOSP. THRU PIPE PENETRAN EL 2'	CONTAIN. SHINE THRU DOME	CONTAIN. SHINE THRU PERSONAL MATCH	CONTAIN. DOME R.S. HEADERS	SUB- TOTAL <sup>(1)</sup>	TOTAL
	EL. 2' FP-10K	EL. 2' & 13' FP-10C	EL. 2' FB-9A	EL. 2' & 13' FP-19N	EL. 2' FP-14L, 7A	EL. 2' FP-7A	EL. 2' FP-19C	EL. 2' & 13' FP-13C										
0	1.3 <sup>+2</sup>	1.0 <sup>+4</sup>	3.5 <sup>+0</sup>	4.1 <sup>+4</sup>	7.2 <sup>+4</sup>	2.0 <sup>+1</sup>	2.2 <sup>+2</sup>	NEG.	6.1 <sup>+0</sup>	1.2 <sup>+4</sup>	NEG.	3.9 <sup>+0</sup>	NEG.	NEG.	NEG.	NEG.	1.3 <sup>+5</sup>	1.4 <sup>+5</sup>
1	3.8 <sup>+1</sup>	6.2 <sup>+3</sup>	6.2 <sup>-1</sup>	2.4 <sup>+4</sup>	4.4 <sup>+4</sup>	8.6 <sup>+0</sup>	1.3 <sup>+2</sup>		3.7 <sup>+0</sup>	4.8 <sup>+2</sup>		1.0 <sup>+0</sup>					7.4 <sup>+4</sup>	7.9 <sup>+4</sup>
2	2.3 <sup>+1</sup>	4.2 <sup>+3</sup>	NEG.	1.7 <sup>+4</sup>	3.1 <sup>+4</sup>	5.5 <sup>+0</sup>	8.6 <sup>+1</sup>		2.5 <sup>+0</sup>	3.9 <sup>+3</sup>		2.6 <sup>-1</sup>					5.2 <sup>+4</sup>	5.6 <sup>+4</sup>
8	6.9 <sup>+0</sup>	1.7 <sup>+3</sup>		6.4 <sup>+3</sup>	1.3 <sup>+4</sup>	1.6 <sup>+0</sup>	3.5 <sup>+1</sup>		1.0 <sup>+0</sup>	1.3 <sup>+3</sup>		NEG.					2.1 <sup>+4</sup>	2.2 <sup>+4</sup>
24	1.4 <sup>+0</sup>	7.2 <sup>+2</sup>		2.1 <sup>+3</sup>	5.9 <sup>+3</sup>	NEG.	1.1 <sup>+1</sup>		4.2 <sup>-1</sup>	5.0 <sup>+2</sup>							8.7 <sup>+3</sup>	9.2 <sup>+3</sup>
96	3.5 <sup>-1</sup>	2.4 <sup>+2</sup>		5.8 <sup>+2</sup>	2.2 <sup>+3</sup>		3.1 <sup>+0</sup>		NEG.	2.0 <sup>+2</sup>							3.0 <sup>+3</sup>	3.2 <sup>+3</sup>
192	NEG.	1.7 <sup>+2</sup>		4.0 <sup>+2</sup>	1.5 <sup>+3</sup>		2.2 <sup>+0</sup>			1.2 <sup>+2</sup>							2.1 <sup>+3</sup>	2.2 <sup>+3</sup>
360		1.0 <sup>+2</sup>		2.7 <sup>+2</sup>	9.3 <sup>+2</sup>		1.4 <sup>+0</sup>			6.7 <sup>+1</sup>							1.3 <sup>+3</sup>	1.4 <sup>+3</sup>
720		5.0 <sup>+1</sup>		1.4 <sup>+2</sup>	4.3 <sup>+2</sup>		7.5 <sup>-1</sup>			3.0 <sup>+1</sup>							6.2 <sup>+2</sup>	6.5 <sup>+2</sup>
2160		1.4 <sup>+1</sup>		4.7 <sup>+1</sup>	1.4 <sup>+2</sup>		NEG.			1.2 <sup>+1</sup>							2.0 <sup>+2</sup>	2.1 <sup>+2</sup>
4320	↓	7.2 <sup>+0</sup>	↓	2.0 <sup>+0</sup>	6.2 <sup>+1</sup>	↓	↓	↓	↓	4.0 <sup>+0</sup>	↓	↓	↓	↓	↓	↓	7.1 <sup>+1</sup>	7.5 <sup>+1</sup>

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SURRY AUXILIARY BLDG RADIATION ZONE AREA 11 @ EL. 13'

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $\mu\text{R/hr}$ ) FROM VARIOUS SOURCES DUE TO  
 LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 2 CONTAINMENT

PRELIMINARY

———— MITIGATION PHASE - NO LETDOWN ————

SOURCE TIME (HR)	SE/CH LINES IN PER. AREA el. 2' FP-10R	CHARGING PUMP CUB. el. 2' & 13' FP-10C	AUX. BLDG SUMP el. 2' FB-9A	DRAIN LINES IN SUMP AREA el. 2' & 13' FP-19N	DRAIN LINES IN PVE TUN. el. 2' FP-11L, 7A	SAFEGUARDS SUMP DRAIN LINE IN PER AREA el. 2' FP-7A	SAFEGUARDS SUMP DRAIN LINE IN PIPE TUN. el. 2' FP-19C	DRAIN LINES INSIDE WASTE TANKS CUB. el. 2' & 13' FP-19C	LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK el. 2' & 13'	REACTOR COOLANT SAMPLING LINES el. 2' & 13'	CONTAIN. LEAKAGE MONITOR LINES el. 2' & 13'	HYDROGEN ANALYZER DRAIN TRAY el. 13'	CONTAIN. ATMOSP. THRU PIPE PENETRATION el. 2'	CONTAIN. SHINE TRAIL DOME	CONTAIN. SHINE TRAIL PERSONAL MATCH	CONTAIN. DOME R.S. HEADERS	(1) SUB- TOTAL	TOTAL
0	1.3 <sup>+2</sup>	1.0 <sup>+4</sup>	1.9 <sup>+5</sup>	4.4 <sup>+6</sup>	2.3 <sup>+3</sup>	2.8 <sup>+0</sup>	6.1 <sup>+2</sup>	NEG.	9.8 <sup>+0</sup>	5.3 <sup>+4</sup>	NEG.	1.3 <sup>+2</sup>	NEG.	NEG.	NEG.	NEG.	4.6 <sup>+6</sup>	4.7 <sup>+6</sup>
1	3.8 <sup>+1</sup>	6.2 <sup>+3</sup>	8.2 <sup>+4</sup>	2.7 <sup>+6</sup>	1.4 <sup>+3</sup>	NEG.	3.1 <sup>+2</sup>		2.8 <sup>+0</sup>	2.2 <sup>+4</sup>		3.2 <sup>+1</sup>					2.8 <sup>+6</sup>	2.8 <sup>+6</sup>
2	2.3 <sup>+1</sup>	4.2 <sup>+3</sup>	5.4 <sup>+4</sup>	1.9 <sup>+6</sup>	1.0 <sup>+3</sup>		2.2 <sup>+2</sup>		1.6 <sup>+0</sup>	1.5 <sup>+4</sup>		2.3 <sup>+1</sup>					2.0 <sup>+6</sup>	2.0 <sup>+6</sup>
8	6.8 <sup>+0</sup>	1.7 <sup>+3</sup>	1.9 <sup>+4</sup>	8.0 <sup>+5</sup>	4.2 <sup>+2</sup>		9.2 <sup>+1</sup>		6.5 <sup>+1</sup>	5.8 <sup>+3</sup>		1.1 <sup>+1</sup>					8.2 <sup>+5</sup>	8.3 <sup>+5</sup>
24	1.4 <sup>+0</sup>	7.2 <sup>+2</sup>	4.8 <sup>+3</sup>	3.5 <sup>+5</sup>	1.9 <sup>+2</sup>		4.2 <sup>+1</sup>		NEG.	2.2 <sup>+3</sup>		4.5 <sup>+0</sup>					3.5 <sup>+5</sup>	3.6 <sup>+5</sup>
96	35 <sup>-1</sup>	2.4 <sup>+2</sup>	1.2 <sup>+3</sup>	1.3 <sup>+5</sup>	7.0 <sup>+1</sup>		1.5 <sup>+1</sup>			8.8 <sup>+2</sup>		1.4 <sup>+0</sup>					1.3 <sup>+5</sup>	1.3 <sup>+5</sup>
192	NEG.	1.7 <sup>+2</sup>	8.5 <sup>+2</sup>	8.9 <sup>+4</sup>	4.8 <sup>+1</sup>		1.1 <sup>+1</sup>			5.5 <sup>+2</sup>		8.7 <sup>-1</sup>					9.0 <sup>+4</sup>	9.1 <sup>+4</sup>
360		1.0 <sup>+2</sup>	5.9 <sup>+2</sup>	5.6 <sup>+4</sup>	2.98 <sup>+1</sup>		6.6 <sup>+0</sup>			3.0 <sup>+2</sup>							5.7 <sup>+4</sup>	5.7 <sup>+4</sup>
720		5.0 <sup>+1</sup>	3.0 <sup>+2</sup>	2.6 <sup>+4</sup>	1.4 <sup>+1</sup>		3.1 <sup>+0</sup>			1.3 <sup>+2</sup>							2.6 <sup>+4</sup>	2.6 <sup>+4</sup>
2160		1.4 <sup>+1</sup>	7.4 <sup>+1</sup>	8.5 <sup>+3</sup>	4.5 <sup>+0</sup>		9.9 <sup>-1</sup>			5.2 <sup>+1</sup>							8.6 <sup>+3</sup>	8.6 <sup>+3</sup>
4320	↓	7.2 <sup>+0</sup>	2.7 <sup>+1</sup>	3.7 <sup>+3</sup>	2.0 <sup>+0</sup>		NEG.			1.8 <sup>+1</sup>	↓	↓	↓	↓	↓	↓	2.7 <sup>+3</sup>	2.7 <sup>+3</sup>

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PRELIMINARY

SURRY AUXILIARY BLDG RADIATION ZONE AREA V @ EL. 13'

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $\mu R/hr$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 2 CONTAINMENT

———— MITIGATION PHASE - NO LETDOWN ————

(2)

SOURCE TIME (HR)	SI/CH LINES IN PEN AREA EL. 2' FP-10K	CHARGING PUMP CUB. EL. 2' & 13' FP-10C	AUX. BLDG SUMP EL. 3' FB-9A	DRAIN LINES IN SWAMP AREA EL. 2' & 13' FP-19N	DRAIN LINES IN PVE TUN. EL. 2' FP-14L, 7A	SAFEGUARDS SUMP DRAIN LINES IN PEN AREA EL. 2' FP-7A	SAFEGUARDS SUMP DRAIN LINES IN PVE TUN. EL. 2' FP-19C	DRAIN LINES INSIDE WASTE TANKS LUB. EL. 2' & 13' FP-19C	LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK EL. 2' & 13'	REACTOR COOLANT SAMPLING LINES EL. 2' & 13', 27.5'	CONTAIN. LEAKAGE MONS FOR LINES EL. 2' & 13'	HYDROGEN ANALYZER MAN TRAY EL. 13'	CONTAIN. ATMOSP. THRU PIPE PENETRATION EL. 2'	CONTAIN. SHINE THRU DOME	CONTAIN. SHINE THRU PERSONNEL MATCH	CONTAIN. DOME R.S. HEADERS	(1) SUB- TOTAL	TOTAL
0	4.1 <sup>+3</sup>	3.2 <sup>+5</sup>	1.1 <sup>+2</sup>	1.0 <sup>+4</sup>	NEG.	9.0 <sup>+1</sup>	NEG.	NEG.	NEG.	5.3 <sup>+6</sup>	NEG.	3.9 <sup>+0</sup>	NEG.	NEG.	NEG.	NEG.	3.3 <sup>+5</sup>	3.6 <sup>+6</sup>
1	1.2 <sup>+3</sup>	1.9 <sup>+5</sup>	2.1 <sup>+1</sup>	5.0 <sup>+3</sup>		2.8 <sup>+1</sup>				1.4 <sup>+6</sup>		1.0 <sup>+0</sup>					2.0 <sup>+5</sup>	1.6 <sup>+6</sup>
2	7.5 <sup>+2</sup>	1.3 <sup>+5</sup>	1.2 <sup>+1</sup>	3.3 <sup>+3</sup>		1.8 <sup>+1</sup>				9.7 <sup>+5</sup>		2.6 <sup>-1</sup>					1.3 <sup>+5</sup>	1.1 <sup>+6</sup>
8	2.2 <sup>+2</sup>	5.3 <sup>+4</sup>	2.6 <sup>+0</sup>	1.2 <sup>+3</sup>		5.1 <sup>+0</sup>				3.7 <sup>+5</sup>		NEG.					5.1 <sup>+4</sup>	4.2 <sup>+5</sup>
24	4.4 <sup>+1</sup>	2.2 <sup>+4</sup>	2.9 <sup>-1</sup>	3.8 <sup>+2</sup>		1.1 <sup>+0</sup>				1.4 <sup>+5</sup>							2.2 <sup>+4</sup>	1.6 <sup>+5</sup>
96	1.1 <sup>+1</sup>	7.4 <sup>+3</sup>	NEG.	1.0 <sup>+2</sup>		NEG.				5.6 <sup>+4</sup>							7.5 <sup>+3</sup>	6.4 <sup>+4</sup>
192	8.6 <sup>+0</sup>	5.1 <sup>+3</sup>		7.1 <sup>+1</sup>						3.5 <sup>+4</sup>							5.2 <sup>+3</sup>	4.0 <sup>+4</sup>
360	5.8 <sup>+0</sup>	3.2 <sup>+3</sup>		4.7 <sup>+1</sup>						1.9 <sup>+4</sup>							3.3 <sup>+3</sup>	2.2 <sup>+4</sup>
720	2.6 <sup>+0</sup>	1.5 <sup>+3</sup>		2.4 <sup>+1</sup>						8.4 <sup>+3</sup>							1.5 <sup>+3</sup>	9.9 <sup>+3</sup>
2160	4.2 <sup>-1</sup>	4.3 <sup>+2</sup>		7.5 <sup>+0</sup>						3.3 <sup>+3</sup>							4.4 <sup>+2</sup>	3.7 <sup>+3</sup>
4320	NEG.	2.2 <sup>+2</sup>		3.1 <sup>+0</sup>						1.1 <sup>+3</sup>	✓		✓	✓	✓	✓	2.2 <sup>+2</sup>	1.3 <sup>+3</sup>

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SURRY AUXILIARY BLDG RADIATION ZONE AREA W @ EL. 27'-6"

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $\mu\text{R/hr}$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 2 CONTAINMENT

PRELIMINARY

MITIGATION PHASE - NO LETDOWN

(2)

SOURCE TIME (HR)	SI/CH LINES IN PEN AREA el. 2' FP-10K	CHARGING PUMP CUB. el. 2' & 13' FP-10C	AUX. BLDG SUMP el. 2' FB-9A	DRAIN LINES IN SUMP AREA el. 2' & 13' FP-19N	DRAIN LINES IN PIPE TUN. el. 2' FP-14.7A	SAFEGUARDS SUMP DRAIN LINES IN PEN AREA el. 2' FP-7A	SAFEGUARDS SUMP DRAIN LINES IN PIPE TUN. el. 2' FP-19C	DRAIN LINES INSIDE WASTE TANKS CUB. el. 2' & 13' FP-19C	LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK el. 2' & 13'	REACTOR COOLANT SAMPLING LINES el. 2' & 13'	CONTAIN. LEAKAGE MONITOR LINES el. 2' & 13'	HYDROGEN ANALYZER MAN TRAY el. 13'	CONTAIN. ATMOSP. THRU PIPE PENETRATION el. 2'	CONTAIN. SHINE THRU DOME	CONTAIN. SHINE THRU PERSONAL HATCH	CONTAIN. DOME R.L. HEADERS	SUB-TOTAL	TOTAL
0	2.5 <sup>+2</sup>	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	1.5 <sup>+1</sup>	NEG.	2.1 <sup>+3</sup>	4.0 <sup>+2</sup>	4.3 <sup>-1</sup>	2.8 <sup>+3</sup>	2.8 <sup>+3</sup>
1	6.1 <sup>+1</sup>											NEG.		3.5 <sup>+2</sup>	1.1 <sup>+2</sup>	2.8 <sup>+0</sup>	5.2 <sup>+2</sup>	5.2 <sup>+2</sup>
2	3.6 <sup>+1</sup>													2.6 <sup>+2</sup>	8.0 <sup>+1</sup>	1.8 <sup>+0</sup>	3.8 <sup>+2</sup>	3.8 <sup>+2</sup>
8	9.2 <sup>+0</sup>													7.2 <sup>+1</sup>	3.0 <sup>+1</sup>	4.3 <sup>-1</sup>	9.2 <sup>+1</sup>	9.2 <sup>+1</sup>
24	1.4 <sup>+0</sup>													3.6 <sup>+0</sup>	1.6 <sup>+1</sup>	NEG.	2.1 <sup>+1</sup>	2.1 <sup>+1</sup>
96	4.1 <sup>-1</sup>													1.7 <sup>-1</sup>	6.0 <sup>+0</sup>		6.6 <sup>+0</sup>	6.6 <sup>+0</sup>
192	NEG.													NEG.	4.0 <sup>+0</sup>		4.0 <sup>+0</sup>	4.0 <sup>+0</sup>
360															2.0 <sup>+0</sup>		2.0 <sup>+0</sup>	2.0 <sup>+0</sup>
720															6.0 <sup>-1</sup>		6.0 <sup>-1</sup>	6.0 <sup>-1</sup>
2160															NEG.		NEG.	NEG.
4320	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓

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SURRY AUXILIARY BLDG. RADIATION ZONE AREA X @ EL. 27'-6"

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $\mu R/hr$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 2 CONTAINMENT

PRELIMINARY

MITIGATION PHASE - NO LETDOWN

SOURCE TIME (HR)	ST/CH LINES IN PEN AREA el. 2' FP-10R	CHARGING PUMP CUB. el. 2' & 13' FP-10C	AUX. BLDG SUMP el. 2' FB-9A	DRAIN LINES IN SUMP AREA el. 2' & 13' FP-19N	DRAW LINES IN P4E TUN. el. 2' FP-MC.7A	SAFEGUARDS SUMP DRAIN LINES IN PEN AREA el. 2' FP-7A	SAFEGUARDS SUMP DRAIN LINES IN P4E TUN. el. 2' FP-19C	DRAIN LINES INSIDE WHRT. TANKS L.O.B. el. 2' & 13' FP-19C	LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK el. 2' & 13'	REACTOR COOLANT SAMPLING LINES el. 2' & 13'	CONTAIN. LEAKAGE MONS FOR LINES el. 2' & 13'	HYDROGEN ANALYZER MAN TRAY el. 13'	CONTAIN. ATMOSP. THRU PIPE PENETRATION el. 2'	CONTAIN. SHINE THRU DOME	CONTAIN. SHINE THRU PRESSURE MATCH	CONTAIN. DOME R.S. HEADERS	(1)	
																	SUB-TOTAL	TOTAL
0	NEG.	4.7 <sup>+4</sup>	5.5 <sup>+2</sup>	2.2 <sup>+3</sup>	NEG.	NEG.	NEG.	NEG.	NEG.	6.1 <sup>+2</sup>	NEG.	2.4 <sup>+0</sup>	NEG.	1.4 <sup>+0</sup>	NEG.	4.3 <sup>-5</sup>	5.0 <sup>+4</sup>	5.0 <sup>+4</sup>
1		1.7 <sup>+4</sup>	2.3 <sup>+2</sup>	9.4 <sup>+2</sup>						2.5 <sup>+2</sup>		NEG.		1.9 <sup>-1</sup>		1.0 <sup>-3</sup>	1.8 <sup>+4</sup>	1.8 <sup>+4</sup>
2		1.2 <sup>+4</sup>	1.5 <sup>+2</sup>	6.2 <sup>+2</sup>						1.8 <sup>+2</sup>				NEG.		NEG.	1.3 <sup>+4</sup>	1.3 <sup>+4</sup>
8		4.7 <sup>+3</sup>	5.3 <sup>+1</sup>	2.2 <sup>+2</sup>						6.6 <sup>+1</sup>							5.0 <sup>+3</sup>	5.0 <sup>+3</sup>
24		2.0 <sup>+3</sup>	1.4 <sup>+1</sup>	5.7 <sup>+1</sup>						2.6 <sup>+1</sup>							2.1 <sup>+3</sup>	2.1 <sup>+3</sup>
96		6.7 <sup>+2</sup>	3.4 <sup>+0</sup>	1.4 <sup>+1</sup>						1.0 <sup>+1</sup>							6.9 <sup>+2</sup>	7.0 <sup>+2</sup>
192		4.5 <sup>+2</sup>	2.4 <sup>+0</sup>	1.0 <sup>+1</sup>						6.4 <sup>+0</sup>							4.6 <sup>+2</sup>	4.7 <sup>+2</sup>
360		2.9 <sup>+2</sup>	1.7 <sup>+0</sup>	6.9 <sup>+0</sup>						3.5 <sup>+0</sup>							2.9 <sup>+2</sup>	2.9 <sup>+2</sup>
720		1.4 <sup>+2</sup>	NEG.	3.4 <sup>+0</sup>						1.5 <sup>+0</sup>							1.4 <sup>+2</sup>	1.4 <sup>+2</sup>
2160		4.7 <sup>+1</sup>		88 <sup>-1</sup>						6.1 <sup>-1</sup>							4.8 <sup>+1</sup>	4.8 <sup>+1</sup>
4320		2.0 <sup>+1</sup>		NEG.						NEG.							2.0 <sup>+1</sup>	2.0 <sup>+1</sup>

(1) SUB-TOTALS ARE CONTROLS FROM 2100 HOURS INSIDE WHRT. TANKS C.O.B. LLWDY & HLWDY. REACTOR COOLANT LINES NOT IN PENETRATION AREA

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1

SURRY AUXILIARY BLDG RADIATION ZONE AREA Y @ EL. 27'-6"

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $mR/hr$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 2 CONTAINMENT

PRELIMINARY

———— MITIGATION PHASE - NO LETDOWN ————

SOURCE TIME (HR)	SI/CH LINES IN PEN AREA el. 2'	CHARGING PUMP CUB. el. 2' & 13'	AUX. BLDG SUMP el. 2'	DRAIN LINES IN SUMP AREA el. 2' & 13'	DRAIN LINES IN PVE TUN. el. 2'	SAFEGUARDS SUMP DRAIN LINES IN PEN AREA el. 2'	SAFEGUARDS SUMP DRAIN LINES IN PVE TUN. el. 2'	DRAIN LINES INSIDE WASTE TANKS LUB. el. 2' & 13'	LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK el. 2' & 13'	REACTOR COOLANT SAMPLING LINES el. 2' & 13'	CONTAIN. LEAKAGE MONITOR LINES el. 2' & 13'	HYDROGEN ANALYZER DEAN TRAY el. 13'	CONTAIN. ATMOSP. THRU PIPE PENETRAN el. 2'	CONTAIN. SHINE THRU DOME	CONTAIN. SHINE THRU PERSONAL HATCH	CONTAIN. DOME R.S. HEADERS	(1) SUB- TOTAL	TOTAL
	0	NEG.	4.7 <sup>+4</sup>	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	1.3 <sup>+7</sup>	NEG.	2.4 <sup>+0</sup>	NEG.	1.4 <sup>+0</sup>	NEG.	4.3 <sup>-5</sup>	4.7 <sup>+4</sup>
1		1.7 <sup>+4</sup>								5.3 <sup>+6</sup>				1.9 <sup>-1</sup>		1.0 <sup>-3</sup>	1.7 <sup>+4</sup>	5.3 <sup>+6</sup>
2		1.2 <sup>+4</sup>								3.7 <sup>+6</sup>				NEG.		NEG.	1.2 <sup>+4</sup>	3.7 <sup>+6</sup>
8		4.7 <sup>+3</sup>								1.4 <sup>+6</sup>							4.7 <sup>+3</sup>	1.4 <sup>+6</sup>
24		2.0 <sup>+3</sup>								5.4 <sup>+5</sup>							2.0 <sup>+3</sup>	5.4 <sup>+5</sup>
96		6.7 <sup>+2</sup>								2.1 <sup>+5</sup>							6.7 <sup>+2</sup>	2.1 <sup>+5</sup>
192		4.5 <sup>+2</sup>								1.3 <sup>+5</sup>							4.5 <sup>+2</sup>	1.3 <sup>+5</sup>
360		2.8 <sup>+2</sup>								7.3 <sup>+4</sup>							2.8 <sup>+2</sup>	7.3 <sup>+4</sup>
720		1.4 <sup>+2</sup>								3.2 <sup>+4</sup>							1.4 <sup>+2</sup>	3.2 <sup>+4</sup>
2160		4.7 <sup>+1</sup>								1.3 <sup>+4</sup>							4.7 <sup>+1</sup>	1.3 <sup>+4</sup>
4320	↓	2.0 <sup>+1</sup>	↓	↓	↓	↓	↓	↓	↓	4.3 <sup>+3</sup>	↓	↓	↓	↓	↓	↓	2.0 <sup>+1</sup>	4.3 <sup>+3</sup>

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NOTED FEB 14 1980

SURRY AUXILIARY BLDG RADIATION ZONE AREA Z @ EL. 27'-6"

ESTIMATED HIGHEST DIRECT T DOSE RATES ( $\mu$ R/hr) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 2 CONTAINMENT

PRELIMINARY

MITIGATION PHASE - NO LETDOWN

(2)

TIME (HR)	SOURCE	SI/CH LINES IN PEN AREA el. 2' FP-10K	CHARGING PUMP CUB. el. 2' & 13' FP-10C	AUX. BLDG SUMP el. 3' FB-9A	DRAIN LINES IN SUMP AREA el. 2' & 13' FP-19N	DRAIN LINES IN PIPE TUN. el. 2' FP-19L, 7A	SAFEGUARDS SUMP DRAIN LINES IN PEN AREA el. 2' FP-7A	SAFEGUARDS SUMP DRAIN LINES IN PIPE TUN. el. 2' FP-19C	DRAIN LINES INSIDE WASTE TANKS el. 2' & 13' FP-19C	LOW LEVEL WASTE DRAIN TANK el. 2' & 13'	REACTOR COOLANT SAMPLING LINES el. 2' & 13' 15' 27.5'	CONTAIN. LEAKAGE MONI FOR LINES el. 2' & 13'	HYDROGEN ANALYZER MAIN TRAY el. 13'	CONTAIN. ATMOSP. THRU PIPE PENETRATION el. 2'	CONTAIN. SHINE THRU DOME	CONTAIN. SHINE THRU PENETRATION HATCH	CONTAIN. DOME R.S. HEADERS	(1) SUB-TOTAL	TOTAL
0		7.7 <sup>+2</sup>	4.7 <sup>+4</sup>	NEG.	NEG.	NEG.	2.2 <sup>+1</sup>	9.7 <sup>+0</sup>	NEG.	NEG.	2.6 <sup>+3</sup>	1.3 <sup>+2</sup>	1.7 <sup>+4</sup>	NEG.	4.0 <sup>+2</sup>	4.0 <sup>+2</sup>	NEG.	6.6 <sup>+4</sup>	6.8 <sup>+4</sup>
1		1.7 <sup>+2</sup>	1.7 <sup>+4</sup>				5.9 <sup>+0</sup>	2.6 <sup>+0</sup>			1.1 <sup>+5</sup>	3.2 <sup>+1</sup>	2.1 <sup>+3</sup>		5.2 <sup>+1</sup>	1.1 <sup>+2</sup>		3.0 <sup>+4</sup>	3.1 <sup>+4</sup>
2		1.1 <sup>+2</sup>	1.2 <sup>+1</sup>				3.6 <sup>+0</sup>	1.7 <sup>+0</sup>			7.6 <sup>+2</sup>	2.7 <sup>+1</sup>	1.5 <sup>+3</sup>		3.8 <sup>+1</sup>	8.0 <sup>+1</sup>		1.2 <sup>+4</sup>	1.3 <sup>+4</sup>
8		3.0 <sup>+1</sup>	4.7 <sup>+3</sup>				NEG.	NEG.			2.9 <sup>+2</sup>	8.5 <sup>+0</sup>	6.4 <sup>+2</sup>		7.2 <sup>+0</sup>	3.0 <sup>+1</sup>		5.1 <sup>+3</sup>	5.7 <sup>+3</sup>
24		2.2 <sup>+1</sup>	2.0 <sup>+3</sup>								1.1 <sup>+2</sup>	3.2 <sup>+0</sup>	1.5 <sup>+2</sup>		NEG.	1.6 <sup>+1</sup>		2.2 <sup>+3</sup>	2.3 <sup>+3</sup>
96		1.3 <sup>+0</sup>	6.7 <sup>+2</sup>								4.4 <sup>+1</sup>	1.2 <sup>+0</sup>	1.2 <sup>+1</sup>			6.0 <sup>+0</sup>		6.9 <sup>+2</sup>	7.3 <sup>+2</sup>
192		1.1 <sup>+0</sup>	4.5 <sup>+2</sup>								2.8 <sup>+1</sup>	NEG.	4.9 <sup>+0</sup>			4.0 <sup>+0</sup>		4.5 <sup>+2</sup>	4.9 <sup>+2</sup>
360		NEG.	2.8 <sup>+2</sup>								1.5 <sup>+1</sup>		2.1 <sup>+0</sup>			2.0 <sup>+0</sup>		2.9 <sup>+2</sup>	3.0 <sup>+2</sup>
720			1.4 <sup>+2</sup>								6.6 <sup>+0</sup>		NEG.			NEG.		1.4 <sup>+2</sup>	1.5 <sup>+2</sup>
2160			4.7 <sup>+1</sup>								2.6 <sup>+0</sup>							4.7 <sup>+1</sup>	5.0 <sup>+1</sup>
4320			2.0 <sup>+1</sup>								NEG.							2.0 <sup>+1</sup>	2.1 <sup>+1</sup>

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NOTED FEB 14 1980

SURRY AUXILIARY BLDG RADIATION ZONE AREA AA @ EL. 27'-6"

ESTIMATED HIGHEST DIRECT T DOSE RATES ( $\mu\text{R/hr}$ ) FROM VARIOUS SOURCES DUE TO  
 LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 2 CONTAINMENT

PRELIMINARY

———— MITIGATION PHASE - NO LETDOWN ————

SOURCE TIME (HR)	SI/CH LINES IN PEN AREA EL. 2' FP-10K	CHARGING PUMP CUB. EL. 2' & 13' FP-10C	AUX. BLDG SUMP EL. 2' FB-9A	DRAIN LINES IN SUMP AREA EL. 2' & 13' FP-19N	DRAIN LINES IN PPE TUN. EL. 2' FP-14.7A	SAFEGUARDS SUMP DRAIN LINES IN PEN AREA EL. 2' FP-7A	SAFEGUARDS SUMP DRAIN LINES IN PPE TUN. EL. 2' FP-19C	DRAIN LINES INSIDE WASTE TANKS CUB. EL. 2' & 13' FP-19C	LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK EL. 2' & 13'	REACTOR COOLANT SAMPLING LINES EL. 2' & 13'	CONTAIN. LEAKAGE MONI FOR LINES EL. 2' & 13'	HYDROGEN ANALYZER DEAN TRAY EL. 13'	CONTAIN. ATMOSP. THRU PIPE PENETRATION EL. 2'	CONTAIN. SHINE THRU DOME	CONTAIN. SHINE THRU PERSONAL HATCH	CONTAIN. DOME R.S. HEADS	(1)	
																	SUB-TOTAL	TOTAL
0	NEG.	3.6 <sup>+1</sup>	NEG.	NEG.	4.4 <sup>+1</sup>	NEG.	NEG.	NEG.	NEG.	3.3 <sup>+3</sup>	NEG.	NEG.	NEG.	1.1 <sup>+3</sup>	4.2 <sup>+2</sup>	3.2 <sup>-2</sup>	1.6 <sup>+3</sup>	4.9 <sup>+3</sup>
1		2.1 <sup>+1</sup>			1.2 <sup>+1</sup>					1.4 <sup>+3</sup>				1.4 <sup>+2</sup>	1.1 <sup>+2</sup>	7.5 <sup>-1</sup>	2.7 <sup>+2</sup>	1.7 <sup>+3</sup>
2		1.4 <sup>+1</sup>			7.6 <sup>+0</sup>					9.7 <sup>+2</sup>				2.1 <sup>-1</sup>	8.0 <sup>+1</sup>	NEG.	1.9 <sup>+2</sup>	1.2 <sup>+3</sup>
8		5.8 <sup>+0</sup>			2.2 <sup>+0</sup>					3.7 <sup>+2</sup>				1.5 <sup>+0</sup>	3.0 <sup>+1</sup>		5.7 <sup>+1</sup>	4.3 <sup>+2</sup>
24		2.5 <sup>+0</sup>			4.2 <sup>-1</sup>					1.4 <sup>+2</sup>				NEG.	1.6 <sup>+1</sup>		2.0 <sup>+1</sup>	1.6 <sup>+2</sup>
96		NEG.			NEG.					5.6 <sup>+1</sup>					6.0 <sup>+0</sup>		6.8 <sup>+0</sup>	6.3 <sup>+1</sup>
192										3.5 <sup>+1</sup>					4.0 <sup>+0</sup>		4.0 <sup>+0</sup>	3.9 <sup>+1</sup>
360										1.7 <sup>+1</sup>					2.0 <sup>+0</sup>		2.0 <sup>+0</sup>	2.1 <sup>+1</sup>
720										8.4 <sup>+0</sup>					6.0 <sup>-1</sup>		6.0 <sup>-1</sup>	9.0 <sup>+0</sup>
2160										3.3 <sup>+0</sup>					NEG.			
4320										1.1 <sup>+0</sup>								

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SURRY AUXILIARY BLDG RADIATION ZONE AREA BB @ EL. 27'-6"

PRELIMINARY

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $mR/hr$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 2 CONTAINMENT

———— MITIGATION PHASE - NO LETDOWN ————

SOURCE TIME (HR)	SI/CH LINES IN PEN AREA el. 2' FP-10K	CHARGING PUMP CUB. el. 2' & 13' FP-10C	AUX. BLDG SUMP el. 2' FB-9A	DRAIN LINES IN SUMP AREA el. 2' & 13' FP-19N	DRAIN LINES IN PVE TUN. el. 2' FP-14L, 7A	SAFEGUARDS SUMP DRAIN LINES IN PEN AREA el. 2' FP-7A	SAFEGUARDS SUMP DRAIN LINES IN PVE TUN. el. 2' FP-19C	DRAIN LINES INSIDE WASTE TANKS CUB. el. 2' & 13' FP-19C	LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK el. 2' & 13'	REACTOR COOLANT SAMPLING LINES el. 2' & 13' 27.5'	CONTAIN. LEAKAGE MONITOR LINES el. 2' & 13'	HYDROGEN ANALYZER DEAN TRAY el. 13'	CONTAIN. ATMOSP. THRU PIPE PENETRATION el. 2'	CONTAIN. SHINE THRU DOVE	CONTAIN. SHINE THRU PERSONAL HATCH	CONTAIN. DOVE R.S. HEADERS	(1)	
																	SUB-TOTAL	TOTAL
0	2.3 <sup>+3</sup>	3.5 <sup>+3</sup>	NEG.	NEG.	NEG.	5.7 <sup>+1</sup>	9.9 <sup>+1</sup>	NEG.	NEG.	NEG.	2.3 <sup>+2</sup>	1.7 <sup>+4</sup>	NEG.	1.1 <sup>+3</sup>	4.0 <sup>+2</sup>	3.2 <sup>-2</sup>	2.4 <sup>+4</sup>	2.4 <sup>+4</sup>
1	5.8 <sup>+2</sup>	2.1 <sup>+3</sup>				1.5 <sup>+1</sup>	2.9 <sup>+1</sup>				5.7 <sup>+1</sup>	2.1 <sup>+3</sup>		1.4 <sup>+2</sup>	1.1 <sup>+2</sup>	7.5 <sup>-1</sup>	5.3 <sup>+3</sup>	5.3 <sup>+3</sup>
2	3.5 <sup>+2</sup>	1.4 <sup>+3</sup>				9.3 <sup>+3</sup>	1.7 <sup>+1</sup>				4.2 <sup>+1</sup>	1.5 <sup>+3</sup>		1.0 <sup>+2</sup>	8.0 <sup>+1</sup>	NEG.	3.6 <sup>+3</sup>	3.6 <sup>+3</sup>
8	9.2 <sup>+1</sup>	5.8 <sup>+2</sup>				2.6 <sup>+1</sup>	4.8 <sup>+0</sup>				1.5 <sup>+1</sup>	6.4 <sup>+2</sup>		2.1 <sup>+1</sup>	3.0 <sup>+1</sup>		1.4 <sup>+3</sup>	1.4 <sup>+3</sup>
24	1.6 <sup>+1</sup>	2.4 <sup>+2</sup>				NEG.	9.6 <sup>-1</sup>				5.7 <sup>+0</sup>	1.5 <sup>+2</sup>		1.5 <sup>+0</sup>	1.6 <sup>+1</sup>		4.3 <sup>+2</sup>	4.3 <sup>+2</sup>
96	4.3 <sup>+0</sup>	8.4 <sup>+1</sup>					NEG.				2.1 <sup>+0</sup>	1.2 <sup>+1</sup>		NEG.	6.0 <sup>+0</sup>		1.1 <sup>+2</sup>	1.1 <sup>+2</sup>
192	3.3 <sup>+0</sup>	5.8 <sup>+1</sup>									1.2 <sup>+0</sup>	4.9 <sup>+0</sup>			4.0 <sup>+0</sup>		7.4 <sup>+1</sup>	7.4 <sup>+1</sup>
360	2.2 <sup>+0</sup>	3.5 <sup>+1</sup>									5.5 <sup>-1</sup>	2.1 <sup>+0</sup>			2.0 <sup>+0</sup>		4.2 <sup>+1</sup>	4.2 <sup>+1</sup>
720	9.9 <sup>-1</sup>	1.7 <sup>+1</sup>									NEG.	NEG.			6.0 <sup>-1</sup>		1.9 <sup>+1</sup>	1.9 <sup>+1</sup>
2160	NEG.	5.8 <sup>+0</sup>													NEG.		5.8 <sup>+0</sup>	5.8 <sup>+0</sup>
4320	↓	2.4 <sup>+0</sup>	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	2.4 <sup>+0</sup>	2.4 <sup>+0</sup>

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NOTED FEB 14 1980

SURRY AUXILIARY BLDG RADIATION ZONE AREA CC @ EL. 27'-6"

PRELIMINARY

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $\mu R/hr$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 2 CONTAINMENT

———— MITIGATION PHASE - NO LETDOWN ————

(2)

SOURCE TIME (HR)	SI/CN LINES IN PEN AREA el. 2'	CHARGING PUMP CUB. el. 2' & 13'	AUX. BLDG SUMP el. 2'	DRAIN LINES IN SUMP AREA el. 2' & 13'	DRAIN LINES IN PVE TUN. el. 2'	SAFEGUARDS SUMP DRAIN LINE IN PEN AREA el. 2'	SAFEGUARDS SUMP DRAIN LINE IN PVE TUN. el. 2'	DRAIN LINES INSIDE WARE TUNKS LUB. el. 2' & 13'	LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK el. 2' & 13'	REACTOR COOLANT SAMPLING LINES el. 2' & 13'	CONTAIN. LEAKAGE MONITOR LINES el. 2' & 13'	HYDROGEN ANALYZER DRAIN TRAY el. 13'	CONTAIN. ATMOSP. THRU PIPE PENETRATION el. 2'	CONTAIN. SHINE TRAY DOME	CONTAIN. SHINE TRAY PERSONNEL MATCH	CONTAIN. DOME R.S. HEADERS	(1) SUB- TOTAL	TOTAL
	FP-10K	FP-10C	FB-9A	FP-19N	FP-19C, 7A	FP-7A	FP-19C	FP-19C										
0	NEG.	NEG.	NEG.	NEG.	4.5 <sup>+2</sup>	NEG.	NEG.	4.0 <sup>+3</sup>	3.9 <sup>+3</sup>	NEG.	NEG.	NEG.	NEG.	2.1 <sup>+3</sup>	4.0 <sup>+2</sup>	4.3 <sup>-1</sup>	3.0 <sup>+3</sup>	1.1 <sup>+4</sup>
1					1.3 <sup>+2</sup>			2.3 <sup>+3</sup>	1.0 <sup>+3</sup>					3.5 <sup>+2</sup>	1.1 <sup>+2</sup>	2.8 <sup>+0</sup>	5.9 <sup>+2</sup>	3.9 <sup>+3</sup>
2					7.8 <sup>+1</sup>			1.6 <sup>+3</sup>	6.2 <sup>+2</sup>					2.6 <sup>+2</sup>	8.0 <sup>+1</sup>	4.3 <sup>-1</sup>	4.2 <sup>+2</sup>	2.6 <sup>+3</sup>
8					2.2 <sup>+1</sup>			6.5 <sup>+2</sup>	1.7 <sup>+2</sup>					5.2 <sup>+1</sup>	3.0 <sup>+1</sup>	NEG.	1.0 <sup>+2</sup>	9.2 <sup>+2</sup>
24					4.4 <sup>+0</sup>			2.7 <sup>+2</sup>	3.1 <sup>+1</sup>					3.6 <sup>+0</sup>	1.6 <sup>+1</sup>		2.4 <sup>+1</sup>	3.3 <sup>+2</sup>
96					1.1 <sup>+0</sup>			9.4 <sup>+1</sup>	7.9 <sup>+0</sup>					1.7 <sup>-1</sup>	6.0 <sup>+0</sup>		7.3 <sup>+0</sup>	1.1 <sup>+2</sup>
192					8.5 <sup>-1</sup>			6.3 <sup>+1</sup>	6.1 <sup>+0</sup>					NEG.	4.0 <sup>+0</sup>		4.9 <sup>+0</sup>	7.4 <sup>+1</sup>
360					NEG.			4.0 <sup>+1</sup>	4.1 <sup>+0</sup>						2.0 <sup>+0</sup>		2.0 <sup>+0</sup>	4.6 <sup>+1</sup>
720								2.0 <sup>+1</sup>	1.8 <sup>+0</sup>						6.0 <sup>-1</sup>		6.0 <sup>-1</sup>	2.2 <sup>+1</sup>
2160								6.5 <sup>+0</sup>	2.9 <sup>-1</sup>						NEG.		NEG.	6.8 <sup>+0</sup>
4320								2.7 <sup>+0</sup>	NEG.								↓	2.7 <sup>+0</sup>

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NOTED FEB 14 1980

SURRY AUXILIARY BLDG RADIATION ZONE AREA DD @ EL. 27'-6"

PRELIMINARY

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $\mu R/hr$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 2 CONTAINMENT

MITIGATION PHASE - NO LETDOWN

SOURCE TIME (HR)	SI/CH LINES	CHARGING	AUX. BLDG	DRAIN LINES	DRAIN LINES	SAFEGUARDS	SAFEGUARDS	DRAIN LINES	LOW LEVEL	REACTOR	CONTAIN.	HYDROGEN	CONTAIN.	CONTAIN.	CONTAIN.	CONTAIN.	SUB- TOTAL	TOTAL
	IN PEN AREA EL. 2' FP-10K	PUMP CUB. EL. 2' & 15' FP-10C	SUMP EL. 2' FB-9A	IN SUMP AREA BL. 2' & 13' FP-19N	IN PHE TUN. EL. 2' FP-19L, 7A	SUMP DRAIN LINES IN PEN AREA EL. 2' FP-7A	SUMP DRAIN LINES IN PHE TUN. EL. 2' FP-19C	INSIDE WASTE TANKS CUB. EL. 2' & 13' FP-19C	OR HIGH LEVEL WASTE DRAIN TANK EL. 2' & 13'	COOLANT SAMPLING LINES EL. 2' & 13'	LEAKAGE MONITOR LINES EL. 2' & 13'	ANALYZER DRAW TRAP EL. 2'	ATMOSP. THRU PIPE PENETRATION EL. 2'	SHINE TWA DOME	SHINE TWA PERSONNEL MATCH	DOME R.S. HEADERS		
0	NEG.	1.8 <sup>+2</sup>	NEG.	2.2 <sup>+3</sup>	4.4 <sup>+1</sup>	NEG.	9.7 <sup>+0</sup>	NEG.	3.9 <sup>+3</sup>	NEG.	7.7 <sup>+1</sup>	1.7 <sup>+4</sup>	NEG.	2.1 <sup>+3</sup>	4.0 <sup>+2</sup>	4.3 <sup>-1</sup>	2.2 <sup>+4</sup>	2.6 <sup>+4</sup>
1		1.1 <sup>+2</sup>		9.4 <sup>+2</sup>	1.2 <sup>+1</sup>		2.6 <sup>+0</sup>		1.0 <sup>+3</sup>		1.9 <sup>+1</sup>	2.1 <sup>+3</sup>		3.5 <sup>+2</sup>	1.1 <sup>+2</sup>	2.8 <sup>+0</sup>	3.6 <sup>+3</sup>	4.6 <sup>+3</sup>
2		7.2 <sup>+1</sup>		6.2 <sup>+2</sup>	7.6 <sup>+0</sup>		1.7 <sup>+0</sup>		6.2 <sup>+2</sup>		1.4 <sup>+1</sup>	1.5 <sup>+3</sup>		2.6 <sup>+2</sup>	8.0 <sup>+1</sup>	1.8 <sup>+0</sup>	2.6 <sup>+3</sup>	3.2 <sup>+1</sup>
8		2.9 <sup>+1</sup>		2.2 <sup>+2</sup>	2.2 <sup>+0</sup>		4.8 <sup>-1</sup>		1.7 <sup>+2</sup>		5.0 <sup>+0</sup>	6.4 <sup>+2</sup>		5.2 <sup>+1</sup>	3.0 <sup>+1</sup>	4.3 <sup>-1</sup>	9.5 <sup>+2</sup>	1.1 <sup>+3</sup>
24		1.2 <sup>+1</sup>		5.7 <sup>+1</sup>	4.2 <sup>-1</sup>		NEG.		3.1 <sup>+1</sup>		1.9 <sup>+0</sup>	1.5 <sup>+2</sup>		3.6 <sup>+0</sup>	1.6 <sup>+1</sup>	NEG.	2.4 <sup>+2</sup>	5.5 <sup>+2</sup>
96		4.1 <sup>+0</sup>		1.4 <sup>+1</sup>	NEG.				7.9 <sup>+0</sup>		7.0 <sup>-1</sup>	1.2 <sup>+1</sup>		1.7 <sup>-1</sup>	6.0 <sup>+0</sup>		3.6 <sup>+1</sup>	4.4 <sup>+1</sup>
192		2.9 <sup>+0</sup>		1.0 <sup>+1</sup>					6.1 <sup>+0</sup>		NEG.	4.9 <sup>+0</sup>		NEG.	4.0 <sup>+0</sup>		2.2 <sup>+1</sup>	2.6 <sup>+1</sup>
360		1.8 <sup>+0</sup>		6.9 <sup>+0</sup>					4.1 <sup>+0</sup>			2.1 <sup>+0</sup>			2.0 <sup>+0</sup>		1.3 <sup>+1</sup>	1.7 <sup>+1</sup>
720		8.6 <sup>-1</sup>		3.4 <sup>+0</sup>					1.8 <sup>+0</sup>			NEG.			6.0 <sup>-1</sup>		5.0 <sup>+0</sup>	6.8 <sup>+0</sup>
2160		NEG.		8.8 <sup>-1</sup>					2.9 <sup>-1</sup>						NEG.		NEG.	1.2 <sup>+0</sup>
4320				NEG.					NEG.									NEG.

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NOTED FEB 14 1980

PRELIMINARY

SURRY AUXILIARY BLDG RADIATION ZONE AREA EE @ EL. 27'-6"

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $\mu R/hr$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 2 CONTAINMENT

— MITIGATION PHASE - NO LETDOWN —

SOURCE TIME (HR)	(2)																(1) SUB- TOTAL	TOTAL
	SI/CH LINES IN PEN AREA el. 2' FP-10K	CHARGING PUMP CUB. el. 2' & 13' FP-10C	AUX. BLDG SUMP el. 2' FB-9A	DRAIN LINES IN SUMP AREA el. 2' & 13' FP-19N	DRAIN LINES IN PVE TUN. el. 2' FP-14L, 7A	SAFEGUARDS SUMP DRAIN LINE IN PEN AREA el. 2' FP-7A	SAFEGUARDS SUMP DRAIN LINE IN PVE TUN. el. 2' FP-19C	DRAIN LINE INSIDE WARE TANKS LUB. el. 2' & 13' FP-19C	LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK el. 2' & 13'	REACTOR COOLANT SAMPLING LINES el. 2' 13' & 15'	CONTAIN. LEAKAGE MONIT FOR LINES el. 2' & 13'	HYDROGEN ANALYZER MAN TRAY el. 13'	CONTAIN. ATMOSP. THRU PIPE PENETRATION el. 2'	CONTAIN. SHINE THRU DOME	CONTAIN. SHINE THRU PERSONNEL MATCH	CONTAIN. DOME R.S. HEADERS		
0	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	4.0 <sup>+3</sup>	6.3 <sup>+4</sup>	NEG.	NEG.	1.5 <sup>+1</sup>	NEG.	2.1 <sup>+3</sup>	4.0 <sup>+2</sup>	4.3 <sup>-1</sup>	2.5 <sup>+3</sup>	7.0 <sup>+4</sup>
1								2.3 <sup>+3</sup>	2.1 <sup>+4</sup>			4.5 <sup>-1</sup>		3.5 <sup>+2</sup>	1.1 <sup>+2</sup>	2.8 <sup>+0</sup>	4.6 <sup>+2</sup>	2.4 <sup>+4</sup>
2								1.6 <sup>+3</sup>	1.3 <sup>+4</sup>			NEG.		2.6 <sup>+2</sup>	8.0 <sup>+1</sup>	1.8 <sup>+0</sup>	3.4 <sup>+2</sup>	1.5 <sup>+4</sup>
8								6.5 <sup>+2</sup>	4.2 <sup>+3</sup>					5.2 <sup>+1</sup>	3.0 <sup>+1</sup>	4.3 <sup>-1</sup>	8.2 <sup>+1</sup>	4.9 <sup>+3</sup>
24								2.7 <sup>+2</sup>	9.5 <sup>+2</sup>					3.6 <sup>+0</sup>	1.6 <sup>+1</sup>	NEG.	2.0 <sup>+1</sup>	1.2 <sup>+3</sup>
96								9.4 <sup>+1</sup>	2.4 <sup>+2</sup>					1.7 <sup>-1</sup>	6.0 <sup>+0</sup>		6.0 <sup>+0</sup>	3.4 <sup>+2</sup>
192								6.3 <sup>+1</sup>	1.8 <sup>+2</sup>					NEG.	4.0 <sup>+0</sup>		4.0 <sup>+0</sup>	2.5 <sup>+2</sup>
360								4.0 <sup>+1</sup>	1.2 <sup>+2</sup>						2.0 <sup>+0</sup>		2.0 <sup>+0</sup>	1.6 <sup>+2</sup>
720								2.0 <sup>+1</sup>	5.6 <sup>+1</sup>						6.0 <sup>-1</sup>		6.0 <sup>-1</sup>	5.9 <sup>+1</sup>
2160								6.5 <sup>+0</sup>	1.1 <sup>+1</sup>						NEG.		NEG.	1.75 <sup>+1</sup>
4320	↓	↓	↓	↓	↓	↓	↓	2.7 <sup>+0</sup>	3.1 <sup>+0</sup>	↓	↓			↓	↓	↓	↓	5.8 <sup>+0</sup>

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PRELIMINARY

SURRY AUXILIARY BLDG RADIATION ZONE AREA FF @ EL. 45'-10"

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $\mu$ R/hr) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 2 CONTAINMENT

———— MITIGATION PHASE - NO LETDOWN ————

SOURCE TIME (HR)	(4)																SUB-TOTAL	TOTAL
	SI/CH LINES IN PEN AREA EL. 2' FP-10R	CHARGING PUMP CUB. EL. 2' & 13' FP-10C	AUX. BLDG SUMP EL. 2' FB-9A	DRAIN LINES IN SUMP AREA EL. 2' & 13' FP-19N	DRAIN LINES IN PVE TUN. EL. 2' FP-14L, 7A	SAFEGUARDS SUMP DRAIN LINE IN PEN AREA EL. 2' FP-7A	SAFEGUARDS SUMP DRAIN LINE IN PVE TUN. EL. 2' FP-19C	DRAIN LINES INSIDE WASTE TANKS LUB. EL. 2' & 13' FP-19C	LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK EL. 2' & 13'	REACTOR COOLANT SAMPLING LINES EL. 2' & 13' & 27.5'	CONTAIN. LEAKAGE MONITOR LINES EL. 2' & 13'	HYDROGEN ANALYZER DOWN TRAY EL. 13'	CONTAIN. ATMOSP. THRU PIPE PENETRATION EL. 2'	CONTAIN. SHINE THRU DOME	CONTAIN. SHINE THRU DOME R.S. PERSONNEL HATCH	CONTAIN. DOME R.S. HEADERS		
0	5.5 <sup>+1</sup>	NEG.	NEG.	NEG.	NEG.	1.1 <sup>+0</sup>	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	1.6 <sup>+7</sup>	NEG.	1.6 <sup>+7</sup>	1.6 <sup>+7</sup>
1	1.4 <sup>+1</sup>					NEG.									3.8 <sup>+6</sup>		3.8 <sup>+6</sup>	3.8 <sup>+6</sup>
2	8.5 <sup>+0</sup>														2.8 <sup>+6</sup>		2.8 <sup>+6</sup>	2.8 <sup>+6</sup>
8	2.2 <sup>+0</sup>														9.8 <sup>+5</sup>		9.8 <sup>+5</sup>	9.8 <sup>+5</sup>
24	4.0 <sup>-1</sup>														3.5 <sup>+5</sup>		3.5 <sup>+5</sup>	3.5 <sup>+5</sup>
96	NEG.														1.1 <sup>+5</sup>		1.1 <sup>+5</sup>	1.1 <sup>+5</sup>
192															6.9 <sup>+4</sup>		6.9 <sup>+4</sup>	6.9 <sup>+4</sup>
360															3.1 <sup>+4</sup>		3.1 <sup>+4</sup>	3.1 <sup>+4</sup>
720															6.5 <sup>+3</sup>		6.5 <sup>+3</sup>	6.5 <sup>+3</sup>
2160															2.9 <sup>+1</sup>		2.9 <sup>+1</sup>	2.9 <sup>+1</sup>
4320															2.8 <sup>-2</sup>		2.8 <sup>-2</sup>	2.8 <sup>-2</sup>

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PRELIMINARY

SURRY AUXILIARY BLDG RADIATION ZONE AREA GG @ EL. 45'-10"

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $\mu R/hr$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 2 CONTAINMENT

— MITIGATION PHASE - NO LETDOWN —

SOURCE TIME (HR)	(2)																(1) SUB- TOTAL	TOTAL
	SI/CH LINES IN PEN AREA EL. 2' FP-10K	CHARGING PUMP CUB. EL. 2' & 13' FP-10C	AUX. BLDG SUMP EL. 2' FB-9A	DRAIN LINES IN SUMP AREA EL. 2' & 13' FP-19N	DRAIN LINES IN PPE TUN. EL. 2' FP-14L, 7A	SAFEGUARDS SUMP DRAIN LINE IN PEN AREA EL. 2' FP-7A	SAFEGUARDS SUMP DRAIN LINE IN PPE TUN. EL. 2' FP-19C	DRAIN LINES INSIDE WARD TANKS LUB. EL. 2' & 13' FP-19C	LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK EL. 2' & 13'	REACTOR COOLANT SAMPLING LINES EL. 2' & 13'	CONTAIN. LEAKAGE MONITOR LINES EL. 2' & 13'	HYDROGEN ANALYZER MAN TRAP EL. 143'	CONTAIN. ATMOSP. THRU PIPE PENETRATION EL. 2'	CONTAIN. SHINE THRU DOME	CONTAIN. SHINE THRU PERSONAL HATCH	CONTAIN. DOME R.S. HEADERS		
0	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	2.2 <sup>+9</sup>	1.0 <sup>+1</sup>	4.2 <sup>+0</sup>	2.2 <sup>+4</sup>	2.2 <sup>+4</sup>
1														3.5 <sup>+3</sup>	4.0 <sup>+0</sup>	2.8 <sup>+1</sup>	3.5 <sup>+3</sup>	3.5 <sup>+3</sup>
2														2.6 <sup>+3</sup>	2.9 <sup>+0</sup>	1.7 <sup>+1</sup>	2.6 <sup>+3</sup>	2.6 <sup>+3</sup>
8														5.3 <sup>+2</sup>	1.0 <sup>+0</sup>	4.2 <sup>+0</sup>	5.4 <sup>+2</sup>	5.4 <sup>+2</sup>
24														3.7 <sup>+1</sup>	5.0 <sup>-1</sup>	9.9 <sup>-1</sup>	3.9 <sup>+1</sup>	3.9 <sup>+1</sup>
96														1.7 <sup>+0</sup>	NEG.	NEG.	1.7 <sup>+0</sup>	1.7 <sup>+0</sup>
192														6.9 <sup>-1</sup>			6.9 <sup>-1</sup>	6.9 <sup>-1</sup>
360														NEG.			NEG.	NEG.
720																		
2160																		
4320																		

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PRELIMINARY

SURRY AUXILIARY BLDG RADIATION ZONE AREA HH @ EL. 45"-10"

ESTIMATED HIGHEST DIRECT T DOSE RATES ( $\mu\text{R/hr}$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 2 CONTAINMENT

MITIGATION PHASE - NO LETDOWN

(2)

SOURCE TIME (HR)	SI/CH LINES IN PEN AREA el. 2' FP-10K	CHARGING PUMP CUB. el. 2' & 13' FP-10C	AUX. BLDG SUMP el. 2' FB-9A	DRAIN LINES IN SUMP AREA el. 2' & 13' FP-19N	DRAIN LINES IN PYE TUN. el. 2' FP-19L, 7A	SAFEGUARDS SUMP DRAIN LINE IN PEN AREA el. 2' FP-7A	SAFEGUARDS SUMP DRAIN LINE IN PYE TUN. el. 2' FP-19C	DRAIN LINES INSIDE WASTE TANKS el. 2' & 13' FP-19C	LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK el. 2' & 13'	REACTOR COOLANT SAMPLING LINES el. 2' & 13' 19:27.5'	CONTAIN. LEAKAGE MONITOR LINES el. 2' & 13'	HYDROGEN ANALYZER DRAIN TRAP el. 13'	CONTAIN. ATMOSP. THRU PIPE PENETRATION el. 2'	CONTAIN. SHINE THRU DOME	CONTAIN. SHINE THRU PERSONNEL HATCH	CONTAIN. DOME R.S. HEADERS	(1) SUB-TOTAL	TOTAL
0	5.6 <sup>+2</sup>	NEG.	NEG.	NEG.	NEG.	1.3 <sup>+0</sup>	NEG.	NEG.	NEG.	5.5 <sup>+4</sup>	5.5 <sup>+0</sup>	8.1 <sup>+2</sup>	NEG.	5.3 <sup>+3</sup>	1.8 <sup>+4</sup>	1.8 <sup>+0</sup>	2.4 <sup>+4</sup>	7.9 <sup>+4</sup>
1	1.4 <sup>+2</sup>					NEG.				2.2 <sup>+4</sup>	1.4 <sup>+0</sup>	1.0 <sup>+2</sup>		6.9 <sup>+2</sup>	7.2 <sup>+3</sup>	1.2 <sup>+1</sup>	8.0 <sup>+3</sup>	3.0 <sup>+4</sup>
2	8.6 <sup>+1</sup>									1.6 <sup>+4</sup>	1.0 <sup>+0</sup>	7.5 <sup>+1</sup>		5.0 <sup>+2</sup>	5.3 <sup>+3</sup>	7.2 <sup>+0</sup>	6.0 <sup>+3</sup>	2.2 <sup>+4</sup>
8	2.3 <sup>+1</sup>									6.0 <sup>+3</sup>	3.6 <sup>-1</sup>	3.1 <sup>+1</sup>		9.7 <sup>+1</sup>	2.3 <sup>+3</sup>	1.7 <sup>+0</sup>	2.4 <sup>+3</sup>	8.4 <sup>+3</sup>
24	4.1 <sup>+0</sup>									2.3 <sup>+3</sup>	NEG.	7.3 <sup>+0</sup>		5.7 <sup>+0</sup>	8.0 <sup>+2</sup>	7.1 <sup>-1</sup>	8.2 <sup>+2</sup>	3.1 <sup>+3</sup>
96	1.1 <sup>+0</sup>									9.1 <sup>+2</sup>		NEG.		1.9 <sup>-1</sup>	3.0 <sup>+2</sup>	NEG.	3.0 <sup>+2</sup>	1.2 <sup>+3</sup>
192	7.4 <sup>-1</sup>									5.7 <sup>+2</sup>				NEG.	1.6 <sup>+2</sup>		1.6 <sup>+2</sup>	7.3 <sup>+2</sup>
360	NEG.									3.1 <sup>+2</sup>					7.0 <sup>+1</sup>		7.0 <sup>+1</sup>	3.8 <sup>+2</sup>
720										1.4 <sup>+2</sup>					1.6 <sup>+1</sup>		1.6 <sup>+1</sup>	1.6 <sup>+2</sup>
2160										5.5 <sup>+1</sup>					NEG.		NEG.	5.5 <sup>+1</sup>
4320										1.9 <sup>+1</sup>							NEG.	1.9 <sup>+1</sup>

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PRELIMINARY

SURRY AUXILIARY BLDG RADIATION ZONE AREA II @ EL. 45'-10"

ESTIMATED HIGHEST DIRECT P DOSE RATES ( $\mu\text{R/hr}$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 2 CONTAINMENT

———— MITIGATION PHASE - NO LETDOWN ————

(2)

SOURCE TIME (HR)	SI/CH LINES IN PEN. AREA el. 2'	CHARGING PUMP CUB. el. 2' & 15'	AUX. BLDG SUMP el. 2'	FB-9A	DRAIN LINES IN SUMP AREA el. 2' & 13'	FP-19N	DRAIN LINES IN P4E TUN. el. 2'	FP-14L, 7A	SAFEGUARDS SUMP DRAIN LINE IN PEN. AREA el. 2'	FP-7A	SAFEGUARDS SUMP DRAIN LINE IN P4E TUN. el. 2'	FP-19C	DRAIN LINES INSIDE UNIT TANKS LAB. el. 2' & 13'	FP-19C	LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK el. 2' & 13'	REACTOR COOLANT SAMPLING LINES el. 2' & 13'	CONTAIN. LEAKAGE MONITOR LINES el. 2' & 13'	HYDROGEN ANALYZER DOWN TRAY el. 13'	CONTAIN. ATMOSP. THRU PIPE PENETRATION el. 2'	CONTAIN. SHINE TR. DOME	CONTAIN. SHINE TR. PERSONNEL WATCH	CONTAIN. DOME R.S. HEADERS	SUB-TOTAL (1)	TOTAL
0	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	8.0 <sup>+6</sup>	NEG.	NEG.	NEG.	1.1 <sup>+4</sup>	2.5 <sup>+2</sup>	1.2 <sup>+0</sup>	1.1 <sup>+4</sup>	9.1 <sup>+4</sup>
1																3.3 <sup>+9</sup>				1.5 <sup>+3</sup>	6.5 <sup>+1</sup>	9.3 <sup>+0</sup>	1.6 <sup>+3</sup>	3.5 <sup>+4</sup>
2																2.3 <sup>+4</sup>				1.1 <sup>+3</sup>	4.7 <sup>+1</sup>	5.0 <sup>+0</sup>	1.2 <sup>+3</sup>	2.4 <sup>+4</sup>
8																8.8 <sup>+3</sup>				2.3 <sup>+2</sup>	1.9 <sup>+1</sup>	1.2 <sup>+0</sup>	2.5 <sup>+2</sup>	9.1 <sup>+3</sup>
24																3.4 <sup>+3</sup>				1.6 <sup>+1</sup>	7.6 <sup>+0</sup>	1.8 <sup>-1</sup>	2.4 <sup>+1</sup>	3.4 <sup>+3</sup>
96																1.3 <sup>+3</sup>				6.2 <sup>-1</sup>	2.8 <sup>+0</sup>	NEG.	3.2 <sup>+0</sup>	1.3 <sup>+3</sup>
192																8.4 <sup>+2</sup>				NEG.	1.6 <sup>+0</sup>		1.6 <sup>+0</sup>	8.4 <sup>+2</sup>
360																4.6 <sup>+2</sup>					7.9 <sup>-1</sup>		7.9 <sup>-1</sup>	4.6 <sup>+2</sup>
720																2.0 <sup>+2</sup>					NEG.	NEG.	NEG.	2.0 <sup>+2</sup>
2160																8.0 <sup>+1</sup>								8.0 <sup>+1</sup>
4320	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	2.7 <sup>+1</sup>	↓	↓	↓	↓	↓	↓	↓	2.7 <sup>+1</sup>

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PRELIMINARY

SURRY AUXILIARY BLDG RADIATION ZONE AREA JJ @ EL. 45'-10"

ESTIMATED HIGHEST DIRECT  $\dot{\gamma}$  DOSE RATES ( $\mu R/hr$ ) FROM VARIOUS SOURCES DUE TO  
LOCA (TID-14844 SOURCE TERMS) INSIDE UNIT # 2 CONTAINMENT

———— MITIGATION PHASE - NO LETDOWN ————

(2)

SOURCE TIME (HR)	SE/CH LINES IN PEN AREA el. 2' FP-10K	CHARGING PUMP CUB. el. 2' & 13' FP-10C	AUX. BLDG SUMP el. 2' FB-9A	DRAIN LINES IN SUMP AREA el. 2' & 13' FP-19N	DRAIN LINES IN PPE TUN. el. 2' FP-14L, 7A	SAFEGUARDS SUMP DRAIN LINES IN PEN AREA el. 2' FP-7A	SAFEGUARDS SUMP DRAIN LINES IN PPE TUN. el. 2' FP-19C	DRAIN LINES INSIDE WASTE TANKS CUB. el. 2' & 13' FP-19C	LOW LEVEL OR HIGH LEVEL WASTE DRAIN TANK el. 2' & 13'	REACTOR COOLANT SAMPLING LINES el. 2' & 13'	CONTAIN. LEAKAGE MONITOR LINES el. 2' & 13'	HYDROGEN ANALYZER DRAIN TRAY el. 13'	CONTAIN. ATMOSP. THRU PIPE PENETRATION el. 2'	CONTAIN. SHINE THRU DOME	CONTAIN. SHINE THRU PRESSURE HATCH	CONTAIN. DOME R.S. HEADERS	(1) SUB- TOTAL	TOTAL
0	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.	1.5 <sup>+0</sup>	5.5 <sup>+4</sup>	NEG.	NEG.	NEG.	2.2 <sup>+4</sup>	4.0 <sup>+0</sup>	4.2 <sup>+0</sup>	2.2 <sup>+4</sup>	7.7 <sup>+4</sup>
1									NEG.	2.2 <sup>+4</sup>				3.5 <sup>+3</sup>	1.1 <sup>+0</sup>	2.8 <sup>+1</sup>	3.5 <sup>+3</sup>	2.6 <sup>+4</sup>
2										1.6 <sup>+4</sup>				2.6 <sup>+3</sup>	8.0 <sup>-1</sup>	1.7 <sup>+1</sup>	2.6 <sup>+3</sup>	1.9 <sup>+4</sup>
8										6.0 <sup>+3</sup>				5.3 <sup>+2</sup>	NEG.	4.2 <sup>+0</sup>	5.3 <sup>+2</sup>	6.5 <sup>+3</sup>
24										2.3 <sup>+3</sup>				3.7 <sup>+1</sup>		9.9 <sup>-1</sup>	3.8 <sup>+1</sup>	2.3 <sup>+3</sup>
96										9.1 <sup>+2</sup>				1.7 <sup>+0</sup>		NEG.	1.7 <sup>+0</sup>	9.1 <sup>+2</sup>
192										5.7 <sup>+2</sup>				6.9 <sup>-1</sup>			6.9 <sup>-1</sup>	5.7 <sup>+2</sup>
360										3.1 <sup>+2</sup>				NEG.			NEG.	3.1 <sup>+2</sup>
720										1.4 <sup>+2</sup>							NEG.	1.4 <sup>+2</sup>
2160										5.5 <sup>+1</sup>							NEG.	5.5 <sup>+1</sup>
4320										1.9 <sup>+1</sup>							NEG.	1.9 <sup>+1</sup>

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